

Ceres, Inc.  
Form S-1/A  
November 10, 2011

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**As filed with the Securities and Exchange Commission on November 10, 2011**

**Registration No. 333-174405**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**Amendment No. 8  
to  
Form S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**CERES, INC.**

*(Exact name of registrant as specified in its charter)*

**Delaware**

*(State or other jurisdiction of  
incorporation or organization)*

**100**

*(Primary Standard Industrial  
Classification Code Number)*

**33-0727287**

*(I.R.S. Employer  
Identification Number)*

**1535 Rancho Conejo Boulevard  
Thousand Oaks, CA 91320  
(805) 376-6500**

*(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)*

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated November 10, 2011.

Shares

Common Stock

This is an initial public offering of shares of common stock of Ceres, Inc. All of the        shares of common stock are being sold by the Company.

Prior to this offering, there has been no public market for the common stock. It is currently estimated that the initial public offering price per share will be between \$        and \$        . We have applied to list our common stock on the Nasdaq Global Market under the symbol CERE .

*See Risk Factors on page 13 to read about factors you should consider before buying shares of the common stock.*

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

	Per Share	Total
Initial public offering price	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to Ceres	\$	\$

To the extent that the underwriters sell more than        shares of common stock, the underwriters have the option to purchase up to an additional        shares from Ceres at the initial public offering price less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on \_\_\_\_\_, 2011.

**Goldman, Sachs & Co.**

**Barclays Capital**

**Piper Jaffray**

**Raymond James**

**Simmons & Company  
International**

Prospectus dated \_\_\_\_\_, 2011.

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Ceres staff walk among sorghum plants near College Station, Texas. Ceres, Inc.

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**Through and including \_\_\_\_\_, 2011 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.**



We have not, and the underwriters and their affiliates have not, authorized anyone to provide you with any information or to make any representation not contained in this prospectus. We do not, and the underwriters and their affiliates do not, take any responsibility for, and can provide no assurance as to the reliability of, any information that others may provide to you. This prospectus is not an offer to sell or an offer to buy shares of our common stock in any jurisdiction where offers and sales are not permitted. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock.

Neither we nor any of the underwriters have done anything that would permit a public offering of the shares of our common stock or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

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**PROSPECTUS SUMMARY**

*This summary highlights information contained elsewhere in this prospectus and does not contain all of the information you should consider in making your investment decision. You should read this summary together with the more detailed information, including our financial statements and the related notes, contained in this prospectus. You should carefully consider, among other things, the matters discussed in Risk Factors, before making an investment decision. Unless otherwise indicated in this prospectus, Ceres, our company, the Company, we, us and our refer to Ceres, Inc. and our subsidiary, Ceres Sementes do Brasil Ltda.*

**Business Overview**

**Our Company**

We are an agricultural biotechnology company selling seeds to produce renewable bioenergy feedstocks that can enable the large-scale replacement of petroleum and other fossil fuels. We use a combination of advanced plant breeding and biotechnology to develop new crops, known as dedicated energy crops, that we believe address the limitations of first-generation bioenergy feedstocks, such as corn and sugarcane, increase biomass productivity, reduce crop inputs and improve cultivation on marginal land.

Our first large-scale commercial products are proprietary sweet sorghum varieties that can be used as a drop-in feedstock to extend the operating season of Brazilian sugarcane-to-ethanol mills, the operating days of which are currently limited due to the inherent limitations of sugarcane physiology and growth patterns. Our dedicated energy crops can also be used for the production of second-generation biofuels and bio-based chemicals, including cellulosic ethanol, butanol, jet fuel, diesel-like molecules and gasoline-like molecules, from non-food biomass. Finally, baseload utility-scale electric power can also be generated from the biomass feedstocks grown from our seeds.

The seed industry has historically required very little capital to manufacture seeds, and seeds have typically been priced based on a share of the value they create and thus have generated high gross margins. As a producer of proprietary seeds, we believe we are in the most attractive segment of the bioenergy value chain upstream from the capital intensive refining and conversion of biomass. For example, in 2009 corn seed providers maintained high margins when volatile commodity prices significantly impacted corn ethanol refining margins. Therefore, we believe our success is tied to adoption of our products rather than the relative profitability of downstream participants. Our upstream position in the value chain also allows us to be largely independent of the success of any particular conversion technology or end use.

**Our Technology**

We develop low-input dedicated energy crops capable of producing high yields per acre using innovative plant breeding and trait biotechnology. By developing these types of crops, we enable the scalable, sustainable and economic production of bioenergy. Our proprietary collection of energy crop parent lines, known as germplasm, in combination with our pipeline of biotechnology traits allows us to develop bioenergy feedstocks to meet the needs of both biomass refineries and growers of biomass, all while using less water and less fertilizer than row crops like corn or soybean, even if grown on marginal land. We believe that the strength of our technology has been validated by our receipt of multiple competitive grants and collaborations, including a United States Agency for International Development, or USAID, grant and one of the U.S. Department of Energy's first Advanced Research Project Agency for Energy, or ARPA-E, grants in 2009, as well as a \$137 million multi-year collaboration with Monsanto Company signed in 2002. We also have significant intellectual property rights to our technology platforms, traits and seed

products.

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### **Our Products**

We market and sell our sweet sorghum seeds in Brazil and our switchgrass and high biomass sorghum seeds in the United States under our brand, Blade Energy Crops, or Blade. Our largest immediate commercial opportunity is the Brazilian ethanol market, which currently uses sugarcane as its predominant feedstock. We began selling sweet sorghum seeds in this market in November 2011. Due to the inherent limitations of sugarcane physiology and growth patterns, Brazilian mill operators typically obtain sugarcane that makes mill operation economically feasible approximately 200 days per year, based on a report issued by the Brazilian Ministry of Agriculture's crop forecasting agency, Companhia Nacional de Abastecimento (Conab), dated May 2010. This results in an estimated 3.4 million metric tons per day of crushing capacity, according to our estimate, which we derive from a 2011 Brazil Agriannual report. Boa Vista / Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels, planted, harvested and processed in the last growing season a commercial-scale planting of our sweet sorghum products and produced both ethanol and power using the existing agricultural equipment and processing infrastructure. Similar activities have been completed with two other Brazilian ethanol producers, ADM do Brasil Ltda. and Usina Rio Pardo S.A. Our sweet sorghum harvested from the agronomy trial at ADM do Brasil Ltda. was used to produce table sugar at a neighboring mill using a blend of 14 parts sugarcane and one part sweet sorghum. We believe the success of our first commercial-scale planting at the mill owned by Boa Vista/Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels, demonstrates the drop-in nature of our sweet sorghum products, and along with the seed-based propagation, shorter growing cycle and lower water and fertilizer requirements of sweet sorghum relative to sugarcane, will serve as the basis for expanded adoption of this product line as a feedstock for ethanol and power production in Brazil and other markets. Based on our trial results to date and pipeline of products under development, we believe the adoption of our sweet sorghum hybrids could extend a mill's operations by approximately 60 days.

We also work with refining technology companies in the emerging cellulosic biofuels and bio-based chemicals markets. We believe that dedicated energy crops will enable both individual renewable energy projects and the industry as a whole to reach greater scale and sustainability, at lower costs, than other potential sources of biomass because of their yields, hardiness and relatively low input requirements. We believe our dedicated energy crop portfolio is compatible with a number of developing cellulosic biofuels conversion technologies and we are working with a number of companies to test our energy crops in their respective production processes.

Our dedicated energy crops also can be used to generate electricity in existing solid-fuel power facilities, such as coal-fired generating plants. We believe we will see a material increase in demand for biopower in the event that additional renewable energy legislation is passed in the United States, Europe or other countries that requires a higher percentage of generation from low-carbon sources or provides equal production incentives for the co-firing of biomass with coal, as are currently available for wind and solar power.

Finally, due to the nature of biotechnology, we believe other crops can benefit from many of the traits we are developing for dedicated energy crops, such as traits that improve water use efficiency and salt tolerance. By combining genes into a series of stacks, we believe, and our initial results indicate, that we can achieve step-change improvements to the productivity of many row crops, including corn, soybean, rice and wheat.

### **Market Opportunity**

The world continues to seek economically and environmentally sound alternatives to fossil fuel-based transportation fuels and power. We believe bioenergy is one of the few viable replacements for fossil fuels, particularly petroleum. Unlike other renewable technologies, biofuels are intended to utilize existing vehicles and transportation fuel infrastructure. Similarly, biopower, unlike wind and solar power, can provide baseload and dispatchable generation of renewable electricity. Despite the potential of biofuels, first-generation biofuel feedstocks have demonstrated their limitations in terms of scale, perceived competition with food production, net energy balance and dependence on

government subsidies. Similarly, current sources of biomass, such as forestry residues and

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agricultural wastes, are limited in scale and are not optimized for use in bioenergy. They are also by-products derived from other processes and therefore subject to supply disruptions. Our dedicated energy crops provide an attractive combination of high yield density, high net energy balances, low input requirements, the ability to grow on marginal land and, as a dedicated source of feedstock, the potential to be tailored for specific production and refining processes. As a result, we believe that dedicated energy crops will become a critical component for growth of the biofuel, bio-based chemicals and biopower markets.

### *Biofuels and Bio-Based Chemicals*

Modern lifestyles and economies are highly reliant on petroleum and its by-products across a wide variety of industries, including light-duty transportation, aviation, diesel, shipping, lubricants, polymers, resins and cosmetics. According to the Energy Outlook Report published in April 2011 by the U.S. Energy Information Administration, or EIA, global oil production averaged 87.9 million barrels per day in the first quarter of 2011. The transportation fuel component of petroleum is valued at over \$2 trillion per year, according to EIA. The vast majority of bio-based replacements for petroleum and petroleum-based chemicals are currently produced by fermentation of starch sources and free or soluble sugars primarily derived from corn and sugarcane, respectively. Commonly referred to as first-generation biofuels and bio-based chemicals, the production and conversion processes for these feedstocks are well-established. However, as the world looks to increase its consumption of biofuels and their derivatives, these first-generation feedstocks face challenges to meet increased demand.

In Brazil, which has recently been importing corn ethanol to meet its domestic demand, we believe that mill operators will seek alternatives that will allow them to increase production utilization of their existing mills beyond the average 200 days per year schedule in order to maximize their market opportunity. On a global basis, we expect petroleum consumption will be further replaced by products made from the conversion of non-food biomass into biofuels and bio-based chemicals. Today, there are more than 50 companies, including large multinational companies, such as BP p.l.c., Royal Dutch Shell plc, Total S.A. and Valero Energy Corporation, and independent companies, such as KiOR, Inc. and Coskata, Inc., focused on improving non-food biomass conversion technologies. According to a 2011 report published by International Energy Agency, or IEA, biofuel production could reach approximately 112 billion gallons per year by 2030, up from 26 billion gallons in 2010. To meet these targets, the IEA believes feedstock production would need to increase to 150 million acres in 2030, up from 75 million acres in 2010. We believe quadrupling the volume of biofuels while only doubling the feedstock production acres will require higher yielding second-generation feedstocks.

### *Biopower*

Globally, 7.92 trillion kilowatt-hours of electricity were generated from coal in 2007, or 42% of total global power generation, according to the EIA, which we estimate required 3.6 billion tons of coal. By comparison, a report released in May 2010 by EIA states that globally, approximately 235 billion kilowatt-hours of electricity were generated from biomass and wastes, or 57% of all renewable energy generation, excluding hydropower, which we estimate required 200 million dry tons of biomass. The conversion of biomass to power has traditionally been fueled by bio-based waste products and residues from the paper and timber industries. As is the case for biofuels, we believe this practice has limited the size, location, efficiency and scale of biomass power generation because power producers can not reliably secure long-term supplies and consistent quality feedstock. We believe we will see a material increase in demand for biopower in the event that additional renewable energy legislation is passed in the United States, Europe or other countries that requires a higher percentage of generation from low-carbon sources, or that incentivizes the co-firing of biomass.

### *Food and Feed Crops*

According to a 2010 report published by the International Service for the Acquisition of Agri-Biotech Applications, or ISAAA, approximately 366 million acres of biotechnology crops were planted globally in

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2010. The global market value of biotechnology crop seeds was \$11.2 billion, as reported in the same report by ISAAA. In order to continue the productivity gains made in many crops over the past 75 years, and to do so in a more sustainable manner, we believe that advanced breeding methods, and biotech traits, in particular, will be required to produce higher performance crops that make more productive use of cultivated land, as well as to develop more robust, stress-tolerant crops that can grow under more difficult conditions and on marginal land. Our belief is consistent with historical yield improvements achieved via plant breeding and the adoption of agricultural biotechnology.

### **Our Solutions**

We believe that nearly all bioenergy and bio-based chemical applications will ultimately depend on high yielding, low-cost, low-carbon, scalable, reliable and sustainable sources of feedstock. We believe biomass from our dedicated energy crops and traits have the potential to become the common denominator in a broad array of bio-based products, including ethanol, butanol, jet fuel, diesel-like molecules and gasoline-like molecules, as well as electric power and heat, and can enable the development of larger-scale processing facilities given the high yield density and conversion efficiency of dedicated energy crops. Specifically, our dedicated energy crops have the following characteristics, which we believe will make them a critical component in the large-scale production of these bio-based products:

#### *Drop-in Products*

Our products are drop-in solutions because they can be planted, harvested and processed using existing agricultural equipment with little or no modification and are being developed to be drop-in for all conversion technologies using sugarcane or biomass feedstocks, facilitating their rapid adoption.

#### *High Yield Density*

Our dedicated energy crops are developed to produce high biomass or sugar yields per acre. For cellulosic biofuels, bio-based chemicals and biopower, energy grasses can yield significantly more dry tons per acre per year compared to agricultural residues and woody biomass. This maximizes the productivity of available land and shortens the collection radius for a conversion facility of a particular size.

#### *Dedicated to Bioenergy*

Unlike many other bioenergy feedstocks, our dedicated energy crops are currently not intended for other uses and are typically grown exclusively to be harvested as part of the bioenergy value chain, creating a stable supply that will appeal to owners of conversion technologies who will have invested significant capital in their infrastructure and will therefore require reliable and cost-effective feedstocks.

#### *Suited to Marginal Land*

Our dedicated energy crops can grow in a broad range of environments, including those not well-suited for most food crops. We are developing biotech traits that provide salt tolerance, drought tolerance and greater nitrogen use efficiency.

#### *Scalable to Meet Demand*

Our energy crops are highly scalable, allowing us to match our production with growing demand for our seeds on relatively short notice compared to sugarcane, which can take several years to scale up commercially.





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### **Competitive Strengths**

We believe that we possess a number of competitive strengths that position us to become a leading provider of dedicated energy crop seeds and traits, including:

#### *Commercial Products Available Today*

We currently have a number of commercially available seed products, including sweet sorghum, switchgrass and high biomass sorghum. Our sweet sorghum hybrids have been successfully planted, harvested and processed into ethanol and power in Brazil in commercial-scale projects. We have received the necessary governmental variety registrations for the sweet sorghum varieties we are marketing in Brazil for planting in the 2011-2012 growing season and we began selling seeds in Brazil in November 2011. Since other sugarcane-to-ethanol mills face the same limits on production, we believe our demonstrated success in the 2010-2011 growing season through our commercial-scale trials will facilitate the rapid development of this market and enable the expansion of our market share in Brazil and in other geographies.

#### *Attractive Business Model*

Seed businesses traditionally incur significant research and development expenditures and have long product development time lines, but benefit from a combination of high gross margins, low capital expenditure requirements and intellectual property protection. We believe we can position our business to take advantage of low production costs relative to the high value of our products to our customers.

#### *Innovative R&D Technology Platforms*

In order to maintain the strong position we have established with our combined strengths in germplasm and field-validated traits, we use our research and development expertise to continually improve our product offerings. We believe that our innovative integrated breeding and biotechnology approach allows us to efficiently identify traits, effectively express these traits in crops, and more quickly commercialize new and improved seeds and traits for the market. We have both biotech traits and non-biotech traits and some of our biotech traits have been successfully evaluated in the field; however, they are still several years away from commercialization.

#### *Extensive Proprietary Portfolios of Germplasm and Traits*

While many companies have developed portfolios of germplasm or traits, we believe we are one of the only companies focused on dedicated energy crops with large portfolios of both germplasm and field-validated traits. We believe new market entrants would need to cultivate several generations of germplasm to achieve performance equivalent to our current product portfolio by which time we believe we will have further evolved our germplasm. Therefore, we believe our proprietary position would be difficult and time-consuming to replicate. We also believe that we have established a strong intellectual property position in plant genes, traits and energy crop germplasm.

#### *Management Team with Significant Industry Experience*

Our experienced management team possesses a deep understanding of a variety of agricultural, chemical and industrial biotechnology businesses, including the seed industry, as well as our regional markets of Brazil, the United States and Europe. Our management team also includes top scientists and industry experts, some of whom have served in leadership roles at large, multinational corporations, served on advisory committees for the U.S. Department of Energy, led ground-breaking research studies and published numerous scientific articles.

For a list of the challenges and risks we face, see Summary of Risk Factors.

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### **Our Strategy**

Our objective is to be the leading provider of dedicated energy crop seeds and traits to the renewable energy industry, including first-generation biofuels such as ethanol as well as cellulosic biofuels, biopower and bio-based chemicals by employing the following strategies:

#### *Expand Our Presence in Brazil*

We intend to use our recent success with leading ethanol producers, including Boa Vista / Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels, to promote brand awareness and expand our presence in Brazil.

#### *Expand Strategic Collaborations to Develop and Market Cellulosic Biofuels*

We plan to play a significant role in developing the second-generation biofuels and bio-based chemicals market, which we believe represents a significant opportunity. We intend to establish new collaborations and expand our current collaborations with leading cellulosic biorefining companies, technology providers and project developers to further validate our products across various downstream technologies and to produce optimized feedstocks that are tailored to meet the specifications of existing and new refining technologies.

#### *Expand Our Business into New Markets*

We intend to market our Blade Energy Crops brand as a symbol of quality, innovation and value across multiple biofuel, bio-based chemicals and biopower markets in a broad range of climates and geographies. We intend to use our large portfolios of field-validated traits and germplasm, combined with our advanced technology platforms, to develop products for a wide variety of niches and seize upon future market opportunities, regardless of the fuel or chemical molecule or engine choice.

#### *Build New Relationships and Enhance Established Collaborations in the Global Biopower Market*

We intend to cultivate collaborations with new parties, particularly those in Europe where we believe the market opportunity for biopower is more established today and the market need is more immediate in light of existing government regulations.

#### *Continue Innovation and New Product Development*

We are continuing to develop innovative solutions using a broad range of technological tools, including genomics, biotechnology and proprietary bioinformatics in order to produce crop varieties with improved yields and other performance characteristics. For example, we have identified traits that will help optimize results for growers located in geographies with varying day lengths, rainfall, temperatures and soil composition (e.g., salt, aluminum and nitrogen).

#### *Continue to Build Our Intellectual Property Portfolio*

We believe we have established a strong intellectual property position in plant genes, traits and energy crop germplasm, based on the nature, size and filing dates of our patent portfolio and plant variety protection certificates. We believe we are one of the few companies focused on dedicated energy crops that have this combination of intellectual property assets. We use our integrated technology platforms to continually improve our products and develop innovations that will further strengthen our intellectual property position.

**Summary of Risk Factors**

Our business is subject to a number of risks and uncertainties that you should understand before making an investment decision. These risks are discussed more fully in the section entitled

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Risk Factors following this prospectus summary. These risks include, but are not limited to, the following:

We have a history of net losses; we expect to continue to incur net losses and we may not achieve or maintain profitability.

Our products are in the early stages of commercialization.

The markets for some of our dedicated energy crops are not well established and may take years to develop or may never develop and our growth depends on customer adoption of our dedicated energy crops.

Our crops are new and most growers will require substantial instruction to successfully establish, grow and harvest crops grown from our seeds.

Our largest immediate commercial opportunity is the Brazilian ethanol market and we only recently completed our first commercial-scale plantings of our sweet sorghum products in Brazil.

The pricing for our products, including our sweet sorghum products, for the Brazilian market may be negatively affected by factors outside our control.

Our business will be adversely affected if the field trials being conducted by our collaborators or potential customers fail to perform as expected.

We face significant competition in all areas of our business, and if we do not compete effectively, our business will be harmed.

Our inability to adequately protect our proprietary technologies and products could harm our competitive position.

Litigation or other proceedings or third party claims of infringement could require us to spend time and money and could severely disrupt our business.

## **Corporate Information**

We were incorporated in the State of Delaware in March 1996 under the name Ceres, Inc. Our corporate headquarters are located at 1535 Rancho Conejo Boulevard, Thousand Oaks, California 91320, and our telephone number is +1(805) 376-6500. Our website address is [www.ceres.net](http://www.ceres.net). The information contained on our website or that can be accessed through our website is not part of this prospectus, and investors should not rely on any such information in deciding whether to purchase our common stock.

Our logos, Ceres®, The Energy Crop Company®, Blade Energy Crops®, Blade and Skyscraper and other trademarks or service marks of Ceres, Inc. appearing in this prospectus are the property of Ceres, Inc. This prospectus contains additional trade names, trademarks and service marks of other companies. We do not intend our use or display of other companies' trade names, trademarks or service marks to imply relationships with, or endorsement or sponsorship of us by, these other companies.

## **Conversion Metrics**

This prospectus contains references to acres, hectares, gallons, liters, wet tons, dry tons and kilograms. In the United States, blendstock fuels are typically measured and sold in gallons. In other parts of the world, the standard unit is

liters. The following table sets forth the conversion factor between metrics.

1 Hectare	=	2.471 Acres	
1 Gallon	=	3.785 Liters	
1 Wet Ton	=	1,000 Kilograms	<i>(Measurement commonly used to measure feedstock yields)</i>
1 Dry Ton	=	907 Kilograms	<i>(Measurement commonly used to measure dry biomass for cellulosic biofuels and biopower)</i>

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**THE OFFERING**

Common stock offered	shares.
Common stock to be outstanding after this offering	shares, or shares if the underwriters exercise their option to purchase additional shares in full.
Use of proceeds	We intend to use the net proceeds from this offering for research and development, capital expenditures, commercial activities, working capital and other general corporate purposes, which may include acquisitions of other companies, assets or technologies. See Use of Proceeds .
Proposed Nasdaq Global Market trading symbol	CERE

The number of shares of common stock that will be outstanding after this offering is based on 6,042,792 shares outstanding as of August 31, 2011, and excludes:

7,792,219 shares of common stock issuable upon exercise of options to purchase our common stock outstanding as of August 31, 2011, at a weighted average exercise price of \$2.02 per share;

5,296,845 shares of common stock issuable upon exercise of warrants to purchase our common stock outstanding as of August 31, 2011, at a weighted average exercise price of \$6.90 per share;

61,537 shares of common stock issuable upon exercise of warrants to purchase our preferred stock outstanding as of August 31, 2011, at a weighted average exercise price of \$6.50 per share; these preferred stock warrants will automatically convert to common stock warrants upon the completion of this offering;

32,251 shares of common stock reserved as of August 31, 2011 for future issuance under our 2010 Stock Option/Stock Issuance Plan as more fully described in Compensation Discussion and Analysis Executive Compensation Equity Compensation Plans ; and

4,000,000 shares of common stock reserved for future issuance under our 2011 Equity Incentive Plan, which will become effective on the day prior to the day upon which we become subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

Except as otherwise indicated, all information in this prospectus assumes:

a for stock split effective on ;

the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 46,059,819 shares of common stock effective immediately prior to the completion of this offering;



the issuance of \_\_\_\_\_ shares of common stock pursuant to the automatic conversion of our convertible subordinated notes, or the Convertible Notes, upon the consummation of this offering, as described in \_\_\_\_\_  
Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus;

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the issuance of \_\_\_\_\_ shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus;

the filing of our amended and restated certificate of incorporation immediately prior to the completion of this offering; and

no exercise by the underwriters of their right to purchase up to an additional \_\_\_\_\_ shares of common stock at the initial public offering price.

**Table of Contents****SUMMARY CONSOLIDATED FINANCIAL DATA**

The following table summarizes our consolidated financial data. In 2009, we changed our fiscal year end from December 31 to August 31. The change was effective for the eight-month period ended August 31, 2009. We have derived the following summary consolidated statement of operations data for the fiscal year ended December 31, 2008, the eight months ended August 31, 2009 and the fiscal years ended August 31, 2010 and 2011 from our audited consolidated financial statements appearing elsewhere in this prospectus. Historical results are not necessarily indicative of results for future periods. You should read the summary of our consolidated financial data set forth below together with the more detailed information contained in Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Year Ended August 31, 2011</b>
<b>(In thousands, except share and per share data)</b>				
<b>Consolidated Statement of Operations</b>				
Revenues				
Product sales	\$ 64	\$ 98	\$ 288	\$ 116
Collaborative research and government grants	3,880	2,328	6,326	6,500
Total revenue	3,944	2,426	6,614	6,616
Cost and operating expenses				
Cost of product sales	3,777	2,690	2,946	2,492
Research and development	20,309	12,397	16,697	19,014
Selling, general and administrative	8,784	6,645	9,207	10,008
Total cost and operating expenses	32,870	21,732	28,850	31,514
Loss from operations	(28,926)	(19,306)	(22,236)	(24,898)
Interest expense		(5)	(153)	(456)
Interest income	2,001	243	23	7
Other income (expense)		161	(152)	(11,020)
Loss before income taxes	(26,925)	(18,907)	(22,518)	(36,367)
Income tax benefit (expense)	148	211	(65)	31
Net loss	\$ (26,777)	\$ (18,696)	\$ (22,583)	\$ (36,336)
Basic and diluted net loss per share attributable to common stockholders(1)	\$ (4.89)	\$ (3.33)	\$ (3.90)	\$ (6.11)

Weighted average outstanding common shares used  
for net loss per share attributable to common  
stockholders:

Basic and diluted(1)	5,473,090	5,621,671	5,791,443	5,945,157
Pro forma net loss per share:				
Basic and diluted (unaudited)(2)			\$	\$

Weighted average outstanding common shares used  
in computing pro forma net loss per share:  
Basic and diluted (unaudited)(2)

(1) The basic and diluted loss per share are computed by dividing the net loss attributable to common stockholders by the weighted average number of common shares outstanding during the period. As we have losses in all periods presented, all

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potentially dilutive common shares comprising of stock options, warrants, Convertible Notes and convertible preferred stock are anti-dilutive.

- (2) The unaudited pro forma basic and diluted loss per common share have been computed as though the conversion had occurred as of September 1, 2010 to give effect to: (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 46,059,819 shares of common stock immediately prior to the completion of this offering using the if-converted method, (ii) the issuance of        shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus and (iii) the issuance of        shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon the completion of this offering, based upon an assumed initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus, using the treasury stock method.

Our consolidated balance sheet data as of August 31, 2011 is presented:

on an actual basis;

on a pro forma basis to give effect to (i) the conversion of all outstanding shares of our convertible preferred stock into 46,059,819 shares of our common stock, (ii) the issuance of        shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus, and (iii) the issuance of        shares of our common stock upon the assumed net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus; and

on a pro forma as adjusted basis to give effect to the pro forma adjustments and the sale of        shares of common stock by us in this offering at an assumed initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	<b>As of August 31, 2011</b>		
	<b>Actual</b>	<b>Pro Forma</b>	<b>Pro Forma as</b>
		<b>(In thousands)</b>	<b>Adjusted(1)</b>
			<b>(Unaudited)</b>
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 21,911	\$	\$
Total assets	36,797		
Total indebtedness (including short-term indebtedness)	17,811		
Common and preferred stock warrant liabilities	17,726		
Convertible preferred stock	197,502		
Total stockholders' (deficit) equity	(204,318)		

- (1) Each \$1.00 increase or decrease in the assumed initial public offering price of \$     per share, the midpoint of the price range set forth on the cover of this prospectus, would increase or decrease, as applicable, our cash and cash equivalents, total assets and total stockholders' equity (deficit) by approximately \$     million, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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**RISK FACTORS**

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including the consolidated financial statements and the related notes appearing elsewhere in this prospectus, before making an investment decision. If any of the following risks actually occurs, our business, financial condition, results of operations and future prospects could be materially and adversely affected. The trading price of our common stock could decline due to any of these risks, and, as a result, you may lose all or part of your investment in our common stock.*

**Risks Related to Our Business**

**We have a history of net losses; we expect to continue to incur net losses and we may not achieve or maintain profitability.**

With the exception of the fiscal years ended December 31, 2003, 2005 and 2006, we have incurred net losses each fiscal year since our inception. From our inception to August 31, 2011, we had an accumulated deficit of \$212.7 million. We expect to incur additional losses for at least the next several years as we continue to invest in our research and development programs, to develop new products and to move forward with our commercialization activities. The extent of our future net losses will depend, in part, on our product sales growth and revenue from collaborations and government grants, and on the level of our operating expenses. To date, substantially all of our revenue has been derived from collaboration agreements and government grants, and we have had very limited revenue from seed sales. Over the next several years, we expect our revenue will shift from being derived primarily from collaborations and government grants to product sales. Our ability to generate future revenue will depend upon our ability to meet our obligations under our collaborations and government grants, to enter into new collaborations or out-licensing agreements and to successfully commercialize our products. The market for seeds for dedicated energy crops is relatively new and still developing and our success in generating revenue from product sales depends in the near term in large part on the success of our sweet sorghum products in Brazil and in the future on the adoption of other dedicated energy crops as a biomass feedstock. Even if we do achieve profitability, we may not be able to sustain or increase our profitability on a quarterly or annual basis.

**Our products are in the early stages of commercialization.**

Our existing products are in the early stages of commercialization and our efforts to commercialize our products may not be successful. Our product sales for the year ended August 31, 2010 and 2011 were minimal and were derived mainly from sales to third parties that were field testing our products. We began selling seeds in the Brazilian market in November 2011.

The markets for our other products, mainly switchgrass and high biomass sorghum, are not fully developed. We completed our first sale of switchgrass seeds in 2009 and high biomass sorghum seeds in 2010 and to date have sold approximately \$0.5 million of these products in the aggregate. In addition, our seed-propagated miscanthus product is still under development and is not yet available for commercial sale.

Our business strategy going forward heavily relies on our ability to introduce crops with genetically engineered, or biotech traits. The commercial development of biotech traits in commercial crops is a multi-year process. Following transformation, when the optimized gene is inserted in a target crop, the resulting plants are evaluated in the greenhouse for one to two years, and then in the field to confirm results for two to four years. Following field trials, specific gene-trait combinations are selected and submitted for regulatory approval, or deregulation, a process that has

historically taken one to three years in the United States and Brazil. Assuming these averages, we believe that we could introduce our first biotech trait or traits to the market in 2016 at the earliest. By contrast, our existing sweet sorghum, switchgrass and high biomass sorghum products have all been created



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through the use of conventional breeding. As a result, even if these products are successfully sold and adopted by customers, they do not necessarily demonstrate our ability to successfully develop, market and sell biotechnology products. If we are not able to bring our existing products or new products with significant commercial potential to market in a timely manner, we will not be successful in building a sustainable or profitable business.

### **The markets for some of our dedicated energy crops are not well established and may take years to develop or may never develop and our growth depends on customer adoption of our dedicated energy crops.**

We sell proprietary seeds to produce dedicated energy crops for the renewable energy market, which is not well established and is evolving. Although our sweet sorghum products are targeted for use as a feedstock to produce ethanol, ethanol has historically been produced from corn in the United States and sugarcane in Brazil and we will need to demonstrate on a commercial scale that sweet sorghum can reliably be used as a cost-efficient feedstock for ethanol production. Cellulosic biofuels have been produced on a limited scale from woody biomass, such as wood chips, or agricultural residues, and we will need to demonstrate on a commercial scale that biomass grown from our seed products, including switchgrass and high biomass sorghum, can be used as cost-efficient feedstocks for the production of biofuels, biopower and other bio-based products.

Currently the market for dedicated energy crops is not well established, primarily because of the lack of infrastructure to support the development of this market, including the lack of commercial-scale production facilities capable of converting cellulosic feedstocks, referred to as cellulosic biorefineries. Existing first-generation ethanol biorefineries are not capable of using cellulosic feedstocks to produce ethanol. The development of this industry is also dependent, in large part, upon the efforts of many companies to improve conversion technologies which will play a significant role in enabling more cost-effective means of converting biomass into energy. A delay in the construction of cellulosic biorefineries or a failure to meaningfully improve conversion technologies could curtail one of our most significant market opportunities. Even if cellulosic biorefineries are established in the future, they may elect to use agricultural residues, waste material or woody biomass as feedstocks rather than dedicated energy crops, resulting in the lack of a robust market for our products.

Traditionally the market for biopower, which is the generation of electric power from combusting biomass, has been fueled mainly by bio-based waste products from the paper and timber industries. We believe that expansion of this market will be driven by governmental policies such as additional state and new federal mandates that require a certain percentage or absolute amount of electricity be generated from renewable sources by specified dates or production tax credits for co-firing biomass. We cannot predict the effect that existing legislation or the lack of legislation will have on the development of the biopower market in the United States or the European Union. To the extent that the market does not develop or biopower producers elect to continue to rely on bio-based waste products from the paper and timber industries, rather than dedicated energy crops, our market opportunity will be limited.

### **Our crops are new and most growers will require substantial instruction to successfully establish, grow and harvest crops grown from our seeds.**

As part of our product development activities and customer support, we provide agricultural producers and biomass procurers with information and protocols regarding the establishment, management, harvest, transportation and storage of our energy crops for use in bioenergy. In addition to seed selections, such crop management recommendations may include equipment selection, planting and harvest timing, application of crop protection chemicals or herbicides and storage systems. While some of our crops, such as sorghum and switchgrass, have been grown for other uses, the crop management practices required for energy crop production are still new and are still evolving. Our general or specific protocols may not apply to all circumstances, may not be sufficient, or may be incorrect, leading to reduced yields, crop failures or other production problems or losses by



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our customers or collaborators. Such failures may harm our customer or collaborator relationships, our reputation and our ability to successfully market our products, and may lead to liability claims against us. Further, the use of our seeds may require a change in current planting, rotation or agronomic practices.

**Our largest immediate commercial opportunity is the Brazilian ethanol market and, during the last growing season, we completed our first commercial-scale plantings of our sweet sorghum products in Brazil.**

We concluded our first commercial-scale plantings of sweet sorghum in Brazil during the last growing season. In general, the results from these plantings were successful. To the extent that these results wholly or in part did not meet our collaborators' expectations, we may experience a significant delay in commercializing our sweet sorghum products in Brazil. We also worked with a number of other mill owners in Brazil that have tested our sweet sorghum products. Certain of these plantings deliberately occurred on marginal land and the harvest was delayed beyond the ideal time in order to stress test the results and determine the level to which adverse conditions will affect the yield and other performance characteristics of our products. The results of these trials were therefore less than optimal and could create the perception that the planting was a failure. This could in turn discourage other mill owners from trying our sweet sorghum products. The future success of our drop-in sweet sorghum products in Brazil will depend on mill owners' ability or willingness to devote proper resources, including land, to our products and the timing of planting and harvesting of our sweet sorghum products. The decision to devote land and resources to a particular crop is dependent on many factors, some of which are outside of our control. To the extent that our sweet sorghum field trials do not result in expected yields or are not replicable on a larger scale, we may have difficulty convincing sugarcane-to-ethanol mill owners to field test our products or purchase our sweet sorghum products.

**The pricing for our products, including our sweet sorghum products, for the Brazilian market may be negatively affected.**

Our products are in the early stages of commercialization and there is no established market for them. We have based the pricing of our products on our assessment of the value that our products provide to the customer, rather than on the cost of production. We may include trait fees in our seed prices, but our potential customers may be unwilling to pay such fees. If our customers attribute a lower value to our products than we do, they may not be willing to pay the premium prices we expect to charge. Pricing levels may also be negatively affected if our products are unsuccessful in producing the yields we expect. In addition, if our competitors are able to develop competitive products and offer them at lower prices, we may be forced to lower our prices.

The customers we are targeting in Brazil are generally large mill owners with long operating histories in the sugarcane-to-ethanol market that will have significant leverage in negotiating commercial relationships with us. As a result, we do not know whether these pricing negotiations will result in adequate margins or accurately reflect our pricing strategies, which could have a material adverse effect on our results of operations.

**Our business will be adversely affected if the field trials being conducted by our collaborators or potential customers fail to perform as expected.**

We and our collaborators and potential customers are currently conducting field trials of our products in various geographies around the world. We have limited control over field trials that are conducted by third parties and are dependent on their ability to follow our suggested protocols. There are various reasons these trials may fail to succeed, including planting our seeds too late in the growing seasons or the incorrect use of fertilizers, and we have in the past conducted trials that we believe failed to fully meet the expectations of our collaborators. For example, in September 2009 NRG Energy, Inc. and Ceres began a pilot project at the Big Cajun II electrical generating station near



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New Roads, Louisiana to evaluate local conditions for growing our switchgrass and high biomass sorghum as renewable fuels for co-firing in this plant. In connection with this project, about 20 acres of energy crops were planted and managed for us by a local grower. NRG has publicly stated that this trial did not result in a usable crop and otherwise failed to produce biomass of sufficient quantity and quality for its purposes. Our investigations determined that this trial was adversely impacted by undisclosed herbicide residue in the soil and not by the quality of our products and that the portions of the field unaffected by these residues showed acceptable performance in line with our expectations. We also believe that this particular trial was ultimately cancelled more because of the lack of attractive U.S. government incentives than because of any failure of the crops. Nevertheless, these or other similar statements by our collaborators or potential customers could harm our reputation and the decision by these parties not to proceed with large-scale trials or seed purchases based on these results could harm our business, revenue and profitability.

### **Environmental factors, including weather, moisture, and plant infestations, may negatively affect the crops grown from our seeds or our seed inventories.**

The plants grown from our seeds are subject to the vagaries of the weather and the environment, either of which can reduce crop yields. Weather conditions and natural disasters, such as heavy rains, hurricanes, hail, floods, tornados, freezing conditions, drought, fire or other natural disasters, can affect the timing of planting or harvesting and the acreage planted, as well as yields. The effects of disease, pests, fungi, bacteria and insect infestations can also be unpredictable and devastating to crops, potentially rendering all or a substantial portion of the affected harvests unsuitable for use. In addition, our crops and harvests may be adversely affected by climate change resulting from global warming, including changes in precipitation patterns and the increased frequency of extreme weather events. Each of these weather and environmental factors affects geographic regions differently. Should these or other environmental factors adversely affect the crops grown from our products, growers may be unable or unwilling to purchase our seeds or they may choose to purchase other seeds deemed better adapted to the particular climatic or environmental conditions they are facing.

The quality of our seed inventory could deteriorate due to a variety of factors, including the passage of time, temperature variations, moisture, insects, fungi, bacteria, disease or pests. If the quality of our seed inventory were to deteriorate below an acceptable level, the value of our seed inventory would decrease significantly and we might not be able to meet product demand. Should a substantial portion of our seed inventory be damaged by moisture, insects, fungi, bacteria, disease or pests, our business and financial condition could be materially and adversely harmed.

### **Our seed business is highly seasonal and subject to weather conditions and other factors beyond our control, which may cause our sales and operating results to fluctuate significantly.**

The sale of seeds is dependent upon planting and growing seasons, which vary from year to year, and are expected to result in both highly seasonal patterns and substantial fluctuations in quarterly sales and profitability. Our product sales for the years ended August 31, 2010 and 2011 were minimal and, accordingly, we have not yet experienced the full nature or extent to which our business may be seasonal. We expect that sales of our seeds in Brazil will typically be higher in our first and fourth fiscal quarters, due to the timing of the planting decisions made by our customers. As we increase our sales in our current markets, and as we expand into new markets in different geographies, it is possible that we may experience different seasonality patterns in our business. Weather conditions and natural disasters, such as heavy rains, hurricanes, hail, floods, tornadoes, freezing conditions, drought or fire, also affect decisions by our customers about the types and amounts of seeds to plant and the timing of harvesting and planting such seeds. Disruptions that cause delays by our customers in harvesting or planting can result in the movement of orders to a future quarter, which would negatively affect the quarter and cause fluctuations in our operating results.

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**A decline in the price of petroleum-based products may reduce the demand for many of our products and adversely affect our business.**

We believe that some of the projected demand for renewable alternatives to fossil fuels is a result of the recent increase and volatility of oil prices that has occurred over the past few years. Oil and petroleum prices are currently at historically high levels. We anticipate that most of our product sales will be driven by the demand for alternatives to petroleum-based products. If the price of oil falls, and periods of lower oil prices are sustained, demand for biofuels or other bio-based products could also decline. Declining oil prices, or forecasts of a future decline in oil prices, may adversely affect the prices for renewable energy products and the prices we can obtain from our potential customers or cause potential customers to not buy our products, which could materially and adversely affect our operating results. We believe that our market opportunity to sell sweet sorghum seeds in Brazil is based, at least in part, on the recent shortages Brazil has encountered in producing sufficient quantities of sugarcane-based ethanol to satisfy local demand. We cannot predict whether these shortages will be sustained or whether the Brazilian market will experience periods of ethanol shortages in the future.

**A significant increase in the price of sugar relative to the price of ethanol may reduce demand for our sweet sorghum and may otherwise adversely affect our business.**

We are marketing our sweet sorghum varieties in Brazil as a drop-in feedstock to extend the operating season of Brazilian sugarcane-to-ethanol mills, the operating days of which are currently limited due to the inherent limitations of sugarcane physiology and growth patterns. For example, our proprietary varieties of sweet sorghum can be harvested from February to May while sugarcane, which is grown year-round, is typically harvested from April to December, depending on weather and market conditions. In addition, we may market our sweet sorghum seeds for planting on marginal land which would not otherwise be well suited for sugarcane. However, if the price of sugar, which is produced from sugarcane and which cannot be produced from sweet sorghum today, rises significantly relative to the price of ethanol, it may become more profitable for ethanol mill operators to grow sugarcane even in adverse conditions, such as through the expansion of sugarcane fields to marginal land or the extension of the sugarcane harvesting season. During sustained periods of significantly higher sugar prices, demand for our seeds may decrease, which could materially and adversely affect our operating results.

**Our failure to accurately forecast demand for our seeds could result in an unexpected shortfall or surplus that could negatively affect our results of operations or our brand.**

Because of the length of time it takes to produce commercial quantities of seeds, we must make seed production decisions well in advance of product bookings. For example, we must determine our expected demand for our sweet sorghum varieties approximately six months in advance of delivery, on average, while growers or mill operators make seed purchase decisions sometimes as late as 30 days in advance of planting. Our ability to accurately forecast demand can be adversely affected by a number of factors outside of our control, including changes in market conditions, environmental factors, such as pests and diseases, and adverse weather conditions. A shortfall in the supply of our products may reduce product sales revenue, damage our reputation in the market and adversely affect customer relationships. Any surplus in the amount of seed we have on hand, may negatively impact cash flows, reduce the quality of our inventory and ultimately result in write-offs of inventory. For example, in 2009, we produced an excess of switchgrass seeds because market demand for this product developed more slowly than anticipated. Any failure on our part to produce sufficient inventory or overproduction of a particular product could harm our business, results of operations and financial condition. Additionally, our customers may generally cancel an order or request a decrease in quantity at any time prior to delivery of the seed, which may lead to a surplus of our products. Even after delivery, a customer may occasionally return our seeds.



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**The performance of our sweet sorghum products in Brazil may be adversely affected by delays to the start of the Brazilian ethanol production season.**

Once a mill owner begins to crush sugarcane or other feedstock in its mill, it generally seeks a continuous supply of the feedstock to run its mill without interruption until the feedstock is depleted. Our sweet sorghum is intended to be used as a season-extending crop. Should the sugarcane harvest season be delayed due to weather or other factors, a mill may choose to delay the harvest of sweet sorghum to avoid the downtime caused by a supply gap between a season-extending crop like sweet sorghum and sugarcane. Since our sweet sorghum grows quickly and maintains its peak sugars for one to two weeks, depending on growing conditions, delays in harvesting beyond this time period may result in lower sugar volumes per acre as well as other potential production issues as mature plants begin to decline and may lodge. Such issues could impact growers' perception of the quality or usefulness of our products and, as a result, their willingness to purchase these products from us in the future.

**Our product development efforts use complex integrated technology platforms and require substantial time and resources to develop and our efforts may not be successful or the rate of product improvement may be slower than expected.**

The development of successful agricultural products using complex technology discovery platforms such as ours requires significant levels of investment in research and development, including field testing, to demonstrate their effectiveness and can take several years or more. For the fiscal year ended December 31, 2008, the eight months ended August 31, 2009 and the fiscal years ended August 31, 2010 and 2011, we spent \$20.3 million, \$12.4 million, \$16.7 million, and \$19.0 million, respectively, on research and development. We intend to continue to spend significant amounts on research and development in the future to continue to improve the performance of our products. Our substantial investment in research and development may not result in significant product revenues, particularly over the next several years. To date, companies have developed and commercialized relatively few dedicated energy crops, and no genetically engineered dedicated energy crops.

Development of new or improved agricultural products involves risks of failure inherent in the development of products based on innovative and complex technologies. These risks include the possibility that:

our products will fail to perform as expected in the field;

our products will not receive necessary regulatory permits and governmental clearances in the markets in which we intend to sell them;

our products will be viewed as too expensive by our potential customers compared to competitive products;

our products will be difficult to produce on a large scale or will not be economical to grow;

proprietary rights of third parties will prevent us, our collaborators, or our licensees from marketing our products; and

third parties may develop superior or equivalent products.

**Loss of or damage to our germplasm collection would significantly slow our product development efforts.**

We have access to a comprehensive collection of germplasm for sweet sorghum, high biomass sorghum, switchgrass and miscanthus through strategic collaborations with leading institutions. Germplasm comprises collections of genetic resources covering the diversity of a crop, the attributes of which are inherited from generation to generation.



Germplasm is a key strategic asset since it forms the basis of plant breeding programs. To the extent that we lose access to these germplasm

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collections because of the termination or breach of our collaboration agreements, our product development capabilities would be severely limited. In addition, loss of or damage to these germplasm collections would significantly impair our research and development activities. Although we restrict access to our germplasm at our research facilities to protect this valuable resource, we cannot guarantee that our efforts to protect our germplasm collection will be successful. The destruction or theft of a significant portion of our germplasm collection would adversely affect our business and results of operations.

**The successful commercialization of our products depends on our ability to produce high-quality seeds cost-effectively on a large scale.**

The production of commercial-scale quantities of seeds requires the multiplication of the seeds through a succession of plantings and seed harvests, and if the product is a hybrid, it must be produced from parental lines, which are mated under controlled conditions. The cost-effective production of high-quality high-volume quantities of some of our products depends on our ability to scale our production processes to produce seeds in sufficient quantity to meet demand. We cannot assure you that our existing or future seed production techniques will enable us to meet our large-scale production goals cost-effectively for the products in our pipeline. Even if we are successful in developing ways to increase seed yields and enhance seed quality, we may not be able to do so cost-effectively or on a timely basis, which could adversely affect our ability to achieve profitability. If we are unable to maintain or enhance the quality of our seeds as we increase our production capacity, including through the expected use of third parties, we may experience reductions in customer demand, higher costs and increased inventory write-offs.

**We depend, in part, on third parties to produce our seeds.**

We produce commercial seed either on leased land managed by us or with contract seed producers. Our current production sites are located in the United States and Puerto Rico as well as Argentina, Bolivia and Brazil. In order to meet increased demand for our seeds, we will need to enter into additional land leases or arrangements with contract seed producers. If we need to engage contract seed producers, we may not be able to identify suitable producers in a specific region and if we do, we do not know whether they will have available capacity when we need their production services, that they will be willing to dedicate a portion of their production capacity to our products or that we will be able to enter into an agreement with them on acceptable terms. If any contract seed producer that we engage fails to perform its obligations as expected or breaches or terminates their agreements with us, or if we are unable to secure the services of such third parties when and as needed, we may lose opportunities to generate revenue from product sales.

**We are at the beginning stages of developing our Blade brand and we have limited experience in marketing and selling our products and will need to expand our sales and marketing infrastructure.**

We are in the beginning phases of building brand awareness for our dedicated energy crops. To date, we have had limited experience selling our products. We currently have limited resources to market and sell our products on a commercial-scale across various geographic regions. As of August 31, 2011, our sales and marketing and business development departments together had seven full-time employees. Developing our sales and marketing infrastructure and gaining the necessary expertise will require that we hire additional sales and marketing personnel, which could take longer than we expect and may require significant resources. We may be unable to grow our sales and marketing or business development infrastructure to adequately cover the geographic regions where we see the most opportunity, which could slow the adoption of our products and the growth of product revenue.

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### **We face significant competition in all areas of our business, and if we do not compete effectively, our business will be harmed.**

The renewable energy industry is rapidly evolving and new competitors with competing technologies are regularly entering the market. We believe the primary competitive factors in the energy crop seed industry are yield, performance, scale, price, reliable supply and sustainability. We expect to face competitors on multiple fronts. First, we expect to compete with other providers of seed and vegetative propagation materials in the market for sweet sorghum, high biomass sorghum, switchgrass and miscanthus. While the competitive landscape in these crops is limited at this time, we anticipate that as our products gain market acceptance, other competitors will be attracted to this opportunity and produce their own seed varieties. Second, we believe that new as yet unannounced crops will be introduced into the renewable energy market and that existing energy crops will attempt to gain even greater market share. Existing crops, such as corn, sugarcane and oil palm trees, currently dominate the biofuels market. As new products enter the market, our products may become obsolete or our competitors' products may be more effective, or more effectively marketed and sold, than our products. Changes in technology and customer preferences may result in short product life cycles. To remain competitive, we will need to develop new products and enhance and improve our existing products in a timely manner. Our failure to maintain our competitive position could have a material adverse effect on our business and results of operations.

Our principal competitors may include major international agrochemical and agricultural biotechnology corporations, such as Advanta India Limited, The Dow Chemical Company, Monsanto Company, Pioneer Hi Bred (DuPont), KWS and Syngenta, all of which have substantially greater resources to dedicate to research and development, production, and marketing than we have. We also face direct competition from other seed companies and biotechnology companies, and from academic and government research institutions. New competitors may emerge, including through consolidation within the seed or renewable energy industry. We are unable to predict what effect evolution of the industry may have on price, selling strategies, intellectual property or our competitive position.

In the broader market for renewable energy, we expect to face competition from other potential feedstocks, such as biomass residues from food crops, forestry trimmings and municipal waste materials, other renewable alternatives, such as algae, solar and wind-generated electricity, and other energy crops. There are multiple technologies that process biomass into biofuels and we have yet to determine compatibility of our feedstocks with all of these processes. Our failure to develop new or enhanced products that are compatible with these alternative technologies, or a lack of market acceptance of our products as the common denominator in a broad array of bio-based products that are alternatives to petroleum based products, could have an adverse effect on our business. Significant developments in alternative technologies, such as the inexpensive and large-scale storage of solar or wind-generated energy, may materially and adversely affect our business in ways that we do not currently anticipate.

### **A significant portion of our revenue to date is generated from our collaboration agreements and we must meet our obligations under these agreements in order to be entitled to the revenue streams from these agreements.**

Historically, a significant portion of our revenue has been generated from payments to us under collaborative research agreements with third parties and we continue to opportunistically pursue new strategic collaborations. We are obligated under these agreements to perform research activities over a particular period of time. Certain of our agreements entitle us to milestone payments in the event the specified milestone is met. If we fail to perform our obligations under these agreements or any new collaborative research agreements we may enter into in the future, our revenues may decrease, or our collaborative partners may terminate or fail to renew the agreements. In addition, any of our collaborators may fail to perform their obligations as expected, which may hinder our research and development efforts. We and our collaborators may disagree as to which party had rights to intellectual property developed under the agreements. Disagreements with our collaborators could



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develop and any conflict with a collaborator may negatively affect our relationship with one or more existing collaborators or our ability to enter into future collaboration agreements.

**Our results of operations will be affected by the level of royalty payments that we are required to pay to third parties.**

We are a party to license agreements with third party collaborators, including The Texas A&M University System and The Samuel Roberts Noble Foundation, Inc., that require us to remit royalty payments to these third parties if we incorporate their licensed intellectual property into our products. While we are currently working on developing numerous products that incorporate aspects of this intellectual property, we have to date only sold small amounts of such products. The amount of royalties that we could owe under these license agreements is a function of our sales and the applicable royalty rates depend on a number of factors, including the portion of our third-party collaborator's intellectual property that is present in our products. For additional details regarding potential future royalty payments, see [Business](#) [Our Technology Platform](#).

Because of our historically limited volume of sales, we have little experience in calculating royalties under these license agreements and it is unclear exactly how much of this licensed intellectual property will be included in any final products we offer for commercial sale. As a result we cannot precisely predict the amount, if any, of royalties we will owe in the future. If, once we commence sales of these products, we determine that the products include more intellectual property of our third party collaborators than we had previously determined, or if our calculations of royalty payments are incorrect, we may owe more royalties, which could negatively affect our results of operations. As our product sales increase, we may, from time-to-time, disagree with our third party collaborators as to the appropriate royalty rate and the resolution of such disputes may be costly and may consume management's time. Furthermore, we may enter into additional license agreements in the future, which may also include royalty payments.

We are also a party to license agreements pursuant to which we have received licenses on certain intellectual property related to biotechnology products. When we commence sales of our biotechnology products in the future, or grant licenses to third parties to commercialize such products, we will be required to remit royalty payments to the parties from whom we have licensed intellectual property that covers such products.

**A significant portion of our revenue to date is generated from government grants and continued availability of government grant funding is uncertain and contingent on compliance with the requirements of the grant.**

Historically, a significant portion of our revenue has been generated from payments to us from government entities in the form of government grants whereby we are reimbursed for certain expenses incurred in connection with our research and development activities, subject to our compliance with the specific requirements of the applicable grant, including rigorous documentation requirements. To the extent that we do not comply with these requirements, our expenses incurred may not be reimbursed. Any of our existing grants or new grants that we may obtain in the future may be terminated or modified.

Our ability to obtain grants or incentives from government entities in the future is subject to the availability of funds under applicable government programs and approval of our applications to participate in such programs. The application process for these grants and other incentives is highly competitive. We may not be successful in obtaining any additional grants, loans or other incentives. The recent political focus on reducing spending at the U.S. federal and state levels may reduce the scope and amount of funds dedicated to renewable energy products, if such funds will continue to be available at all. To the extent that we are unsuccessful in being awarded any additional government grants in the future, we would lose a potential source of revenue.



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**Our government grants may subject us to government audits, which could expose us to penalties.**

We may be subject to audits by United States government agencies as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards and the terms and conditions of the grant. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed for such contract may have to be refunded. Accordingly, an audit could result in a material adjustment to our results of operations and financial condition. Moreover, if an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions. In addition, we devote substantial resources to our systems used to track expenditures funded by our government grants.

**The biofuel and biopower industries are highly dependent upon government subsidies and economic incentives, and any changes in such subsidies or incentives could materially and adversely affect the growth of the industry and our ability to sell dedicated energy crops.**

The market for renewable energy in the United States is heavily influenced by government subsidies, economic incentives and tax credits and other regulatory initiatives that impact the production, distribution and adoption of renewable energy products. For example, the United States Renewable Fuel Standard program, or RFS, currently calls for 14 billion gallons of the liquid transportation fuels sold in 2011 to come from renewable biofuels, with proposed volumes of renewable fuel for 2012 to rise to 15 billion gallons. The U.S. Energy Independence and Security Act of 2007 increases the volume of renewable fuel required to be blended into transportation fuel to 36 billion gallons per year by 2022. Of this amount, the RFS currently states that 16 billion gallons of renewable biofuels used annually by 2022 must be cellulosic biofuel, such as could be created by our switchgrass product. The RFS has been modified in the past and may be modified again in the future. In the United States, the administrator of the Environmental Protection Agency, or EPA, in consultation with the Secretary of Energy and the Secretary of Agriculture may waive certain renewable fuel standards to avert economic harm or in response to inadequate supply. The administrator of the EPA is also required to reduce the mandate for cellulosic biofuel use if projected supply for a given year falls below a minimum threshold for that year. For example, because the supply of cellulosic biofuel was projected to be very limited in 2011, the EPA determined that the final volume standard for cellulosic biofuel for 2011 would be six million gallons and the projected volume for cellulosic biofuel for 2012 is between three and 13 million gallons, well below the 250 million gallon volume requirement target specified in the Energy Independence and Security Act. Any reduction in, or waiver of, mandated requirements for fuel alternatives may cause demand for renewable biofuels to grow more slowly or decline. Our business strategy in the United States is based, in part, on these standards remaining in place. Waivers of, or reduction in, the RFS or similar mandates, could have a material adverse affect on our ability to successfully grow demand for our cellulosic feedstock products in the United States.

In biopower, the reduction of, or failure to implement, certain government mandates, such as Renewable Electricity Standards in the U.S. or taxes on carbon emissions, as well as incentives, subsidies and tax credits to generate electric power from low-carbon sources, may adversely affect the viability of the field trials we conduct with our collaborators. These collaborators may terminate existing field trials or elect not to progress with planned field trials absent the implementation of such incentives.

In addition, the United States Congress has passed legislation that extends tax credits or other economic incentives for, among other things, the production of certain renewable fuel products. For example, the United States adopted the Renewable Energy Production Tax Credit that provides federal tax incentives for renewable energy projects, and the Biomass Crop Assistance Program, or BCAP, which provides risk mitigation and production incentives to encourage growers to produce dedicated energy crops. We believe that BCAP will influence the growth of the switchgrass and miscanthus markets; however, unless extended, BCAP expires in 2012. We cannot provide assurances that these tax credits or other economic incentives will remain in place. Any reduction in





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or phasing out or elimination of existing tax credits, subsidies and other incentives in the United States and foreign markets for renewable biofuels, or any inability of us or our prospective customers to access such credits, subsidies and other incentives, may adversely affect demand for, and increase the overall cost of our renewable transportation fuels, which would adversely affect the prospects for our business.

We believe that government incentives and economic initiatives in Europe and other countries will also affect demand for our dedicated energy crops. For example, in the United Kingdom, which is a potential export market for U.S.-grown biomass, independent power providers are required to obtain a certain portion of their power from renewable resources. Any reduction or termination of government incentives or economic initiatives outside the United States could also have a material adverse effect on our business.

### **Compliance with applicable government regulations, particularly with respect to biotechnology products, is time-consuming and costly.**

There are certain regulatory requirements affecting the field testing and commercialization of our biotechnology products in each of the markets in which we operate. In the United States, the United States Department of Agriculture, or USDA, must review and deregulate our biotechnology products prior to commercial sale. The Biotechnology Regulatory Services, or BRS, within the USDA's Animal and Plant Health Inspection Service, or APHIS, has direct oversight of the field testing and deregulation of our biotechnology products. The deregulation process for biotechnology products is a costly, multi-year process, with no guarantee of success. The length of the deregulation process varies based on a number of factors, including the extent of the supporting information required, the nature and extent of review by the USDA, including the type and scope of the environmental review conducted, and the number and types of public comments received. For example, after the initial filing of a petition for deregulation, the USDA may ask for additional data, including data on new areas of inquiry that might require us to conduct additional field tests or analyses, which may cause delays in the deregulation process. Deregulation of a product is not a guaranteed outcome. The USDA or other regulators may also impose costly monitoring requirements on the planting of our biotechnology products.

In Brazil, the commercialization of biotechnology products is regulated by the National Technical Commission of Biosafety, Comissão Técnica Nacional de Biossegurança, or CTNBio under the Ministry of Science and Technology. The approval process involves data collection and analysis, environmental impact assessments and public hearings on certain products. We are not currently subject to CTNBio oversight as our current product offerings in Brazil do not include biotechnology products. However, we do anticipate introducing biotechnology products in Brazil in the future. At such time, we will be subject to the approval processes dictated by CTNBio.

We have not yet applied for deregulation for any of our biotech traits. Any delays in obtaining or failure to obtain deregulation or regulatory approval, as the case may be, for any of the biotechnology products in our pipeline could delay or prevent the commercialization of our products. Regulatory authorities can block the sale or import of our products or can impose conditions that delay production and sale of our products, or that make the sale of our products technically or commercially unfeasible.

Before the USDA will review and deregulate our products, the USDA requires us to obtain permits to plant and test our biotechnology products, and there are similar permitting requirements in Brazil. In determining whether to grant a field test permit and what conditions to impose, regulators consider any significant impacts that field tests may have on the environment and on endangered or threatened species. In the United States, the permitting process for the initial field tests typically ranges from two to four months, but this time period can be significantly longer for novel products or circumstances. While to date our permits for our field trial locations have been obtained with minimal delays, there can be no assurance that we will not encounter material delays in the future as we test new biotechnology products. If we are not able to obtain the necessary field test permits or if there



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are significant delays in the permitting process, the commercialization of our products may be delayed or prevented and our business and results of operations may be adversely affected. A prolonged delay in the regulatory process could adversely affect our ability to generate product revenues.

**Ethical, legal and social concerns about biotechnology products could limit or prevent the use of our products and technologies, which could negatively affect our ability to generate revenue.**

Some of our products in development contain biotech traits. The commercial success of our products that contain biotech traits may be adversely affected by claims that biotechnology plant products are unsafe for consumption or use, pose risks of damage to the environment and create legal, social and ethical dilemmas. For example, some countries, primarily in the European Union, have instituted a de facto moratorium on the planting of some genetically engineered seeds. The import of biomass grown from genetically engineered seeds may also be regulated by the European Union. While we are not currently selling seeds containing biotech traits into the European Union, we plan to do so in the future. In addition, Brazil's biosafety law prohibits the use, sale, registration, patenting and licensing of genetic use restriction technologies, which are a class of genetic engineering technologies that allow companies to introduce seeds whose sterile offspring cannot reproduce, preventing farmers from re-planting seeds from their harvest. While our current sweet sorghum products are not subject to this restriction, we may in the future introduce biotech traits that may be subject to such regulation. If we are not able to overcome these concerns and comply with these regulations, our products may not achieve market acceptance. Any of the risks discussed below could result in expenses, delays or other impediments to our development programs or the market acceptance and commercialization of our products that contain biotech traits. Our ability to develop and commercialize one or more of our technologies and products could be limited or prevented by the following factors:

Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and biotechnology products, which could influence public acceptance of our technologies and products;

Public attitudes regarding, and potential changes to laws governing, ownership of genetic material, which could weaken our intellectual property rights with respect to our genetic material and discourage collaborators from supporting, developing or commercializing our products and technologies;

Governmental reaction to negative publicity concerning genetically engineered plants, which could result in greater government regulation of genetic research and derivative products; and

Failure to maintain or secure consumer confidence in, or to maintain or receive governmental approvals for, our products.

We cannot predict whether or when any jurisdiction will change its regulations with respect to biotechnology products. Problems with any product could lead to increased scrutiny or regulation for our products. Limitations on the development of biotechnology products could be imposed that could delay, prevent or make more costly the development of such products, which would negatively affect our ability to commercialize products using our traits.

Advocacy groups have engaged in publicity campaigns and filed lawsuits in various countries against companies and regulatory authorities, seeking to halt biotechnology approval activities or influence public opinion against genetically engineered products. On occasion, there has been vandalism and destruction of property of companies in the biotechnology industry.

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**Our non-biotechnology products, the products of third parties or the environment may be negatively affected by the unintended appearance of our transgenes.**

The development and commercial success of our non-biotechnology products may be delayed or negatively affected because of adverse public perception or regulatory concerns about the safety of our products and the potential effects of these products on other plants, animals, human health and the environment. The potential for unintended but unavoidable trace amounts, sometimes called adventitious presence, of transgenes in conventional seed, or in the grain or products produced from conventional or organic crops, is another factor that could affect general public acceptance of these traits. For example, our current sweet sorghum, high biomass sorghum and switchgrass products have been produced exclusively through conventional breeding and have not been genetically engineered by us. It is possible, however, that trace amounts of our transgenes are nevertheless in our conventional products. In addition, trace amounts of transgenes may unintentionally be found outside our containment area in the products of third parties, which may result in negative publicity and claims of liability brought by such third parties against us. Furthermore, in the event of an unintended dissemination of our genetically engineered materials to the environment, we could be subject to claims by multiple parties, including environmental advocacy groups, as well as governmental actions such as mandated crop destruction, product recalls or additional stewardship practices and environmental cleanup or monitoring.

**Ethical, legal and social concerns about land use could limit or prevent the widespread adoption of our products, which could negatively affect our ability to generate revenue.**

The commercial success of our products also may be adversely affected by claims that the production of bioenergy displaces land that would otherwise be used for food and feed production, leading to shortages and higher prices for food and feed commodities. These claims are based, in part, on the assumption that there is a scarcity of available land for crop production, productivity is uniform across the globe and that productivity will remain flat over time. While these assumptions are not universally accepted, their acceptance by legislatures or advocacy groups could harm our ability to sell our products. The increased use of land for bioenergy production may also lead to claims that the increased planting of other crops in other regions may cause land clearing, such as in the Brazilian rainforest, and subsequent greenhouse gas releases—a theory known as indirect land use change. This theory proposes that such indirect effects, and their related greenhouse gas emissions should be applied to the emissions life cycle of bioenergy feedstocks, including dedicated energy crops. The perception that our products are resulting in higher greenhouse gas emissions could disadvantage our products related to other potential energy sources, or make it more difficult for our products to meet regulatory requirements for reduced emissions.

**Development and commercialization, if any, of our products may incur scrutiny under the Convention on Biological Diversity Treaty.**

The Convention on Biological Diversity, or the Convention, is an international treaty that was adopted at the Earth Summit in Rio de Janeiro, Brazil in 1992. The treaty provides that if a company uses genetic resources, such as an indigenous plant, from a participating country to develop a product, then such company must obtain the prior informed consent of the participating country and owes fair and equitable compensation to such country. Although the United States is not a participating country, most countries where we currently obtain or may obtain germplasm in the future, have ratified the treaty and are currently participants in the Convention. We may fall under scrutiny of the Convention with respect to the development or commercialization of any of our products derived from the germplasm originating from any of the countries that are participants in the Convention. There can be no assurances that the government of a participating country will not assert that it is entitled to fair and equitable compensation from us. Such compensation, if demanded, may make commercialization of our products not feasible.



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**Our business is affected by changes in general economic conditions and a prolonged downturn could affect the demand for our products and our ability to fund our working capital.**

Economic conditions in the United States, Brazil and Europe could adversely affect our efforts to achieve profitability. The purchasing decisions of utilities, mill operators, growers and other potential customers, and their ability to timely pay for our products, are impacted by their economic health. We may have to regularly extend credit to our customers to enable them to acquire seeds at the beginning of the growing season on terms that permit payment following the sales of their products. These credit practices may expose us to credit risk of utilities, mill operators and growers and other potential customers, and combined with the seasonality of our sales, make us dependent on our ability to fund our working capital requirements through other means. If the current difficult economic conditions continue or worsen, the economic health of our customers and potential customers could further deteriorate.

**Our activities are currently conducted at limited number of locations, which makes us susceptible to damage or business disruptions caused by natural disasters.**

Our headquarters and certain research and development operations are located at a single facility in Thousand Oaks, California. Our main breeding station is located at our College Station Research Center near College Station, Texas, with additional breeding and agronomy trials situated in select locations across the world, including the Americas, Europe and Asia. Our seed production takes place primarily in the United States and Puerto Rico, as well as Argentina, Bolivia and Brazil. Warehousing for seed storage is located primarily in Texas and the state of São Paulo, Brazil. We take precautions to safeguard our facilities, including insurance, health and safety protocols, and off-site storage of critical research results and computer data. However, a natural disaster, such as a hurricane, fire, flood, tornado or earthquake, could cause substantial delays in our operations, damage or destroy our equipment, inventory or development projects, and cause us to incur additional expenses. The insurance we maintain against natural disasters may not be adequate to cover our losses in any particular case.

**We rely on the experience and expertise of our senior management team and other key personnel.**

We depend on the experience and expertise of our senior management team and other key personnel, many of whom have been with our company for more than a decade. Our senior management team and key personnel bring extensive experience in the seed industry, agricultural biotechnology and plant genetics. The loss or unavailability of key members of our senior management team or other key personnel could impact the execution of our business strategy and make it more difficult to maintain and expand our important relationships in the bioenergy industry. The replacement of key members of our senior management team or other key personnel likely would involve significant time and costs.

**If we are unable to recruit or retain qualified personnel, particularly in Brazil, our development and commercialization efforts may be significantly delayed.**

Competition for qualified personnel is intense among agricultural biotechnology and other technology-based businesses, particularly for personnel with the appropriate level of education, experience and training. We may not be able to recruit and retain such personnel at compensation levels consistent with our existing compensation structure. The continued appreciation of the Brazilian Real against the U.S. dollar will make it more difficult for us to meet compensation expectations of Brazilian personnel. In addition, in making employment decisions, job candidates often consider the value of equity they may receive in connection with their employment. Therefore, significant volatility in the price of our stock after this offering may adversely affect our ability to attract or retain personnel. Competition for qualified personnel in Brazil is particularly intense due to the importance of the



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agricultural industry in Brazil and the recent increased activity levels of U.S. agricultural or renewable energy companies in Brazil, including Amyris Biotechnologies, Inc. and Monsanto Company.

If we lose qualified personnel or are unable to attract, retain and integrate additional highly trained and motivated personnel, particularly for our research and development activities, our ability to advance our product development and continue our commercialization efforts may be delayed or unsuccessful.

**Unexpected fluctuations in our quarterly operating results may cause our stock price to fluctuate widely.**

A large proportion of our costs are fixed, due in part to our significant research and development and production costs and general and administrative expenses. Thus, even a small decline in revenue could disproportionately affect our quarterly operating results and could cause such results to differ materially from expectations. If this occurs, we may fail to meet analyst and investor expectations, which could cause our stock price to decline. Other factors that could affect our quarterly operating results or cause them to differ materially from expectations include:

- demand for and acceptance of our products;
- weather conditions or the occurrence of natural disasters;
- changes in government regulations and incentives;
- competitive pressures resulting in lower selling prices; and
- unanticipated delays or problems in the introduction of new products.

**We may require additional financing in the future and may not be able to obtain such financing on favorable terms, if at all, which could force us to delay, reduce or eliminate our research and development activities.**

We will continue to need capital to fund our research and development projects and to provide working capital to fund other aspects of our business. If our capital resources are insufficient to meet our capital requirements, we will have to raise additional funds. If future financings involve the issuance of equity securities, our existing stockholders would suffer dilution. If we are able to raise additional debt financing, we may be subject to restrictive covenants that limit our operating flexibility. We may not be able to raise sufficient additional funds on terms that are favorable to us, if at all. If we fail to raise sufficient funds and continue to incur losses, our ability to fund our operations, take advantage of strategic opportunities, develop and commercialize products or technologies, or otherwise respond to competitive pressures could be significantly limited. If this happens, we may be forced to delay or terminate research and development programs or the commercialization of products, curtail operations or obtain funds through collaborative and licensing arrangements that may require us to relinquish commercial rights, or grant licenses to our technology on terms that are not favorable to us. If adequate funds are not available, we will not be able to successfully execute on our business strategy or continue our business.

**We expect to derive a portion of our revenues from markets outside the United States, including Brazil, which will subject us to additional business risks.**

Changes in exchange rates between the U.S. dollar and other currencies will result in increases or decreases in our costs and earnings, and also may affect the book value of our assets outside the United States. To date, most of our contracts have been entered into in the United States and accordingly have been denominated in U.S. dollars. Going forward we anticipate that our sales will be denominated in the local currency of the country in which the sale occurs. In addition, most of our operating expenses to date have been denominated in the currencies of the countries in which



our operations are located, primarily the United States and Brazil. As a result, while our revenue and

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operating expenses are mostly hedged on a transactional basis, the translation of our operating results into U.S. dollars may be adversely impacted by strengthening U.S. currency.

In addition, international operations are subject to a number of other risks and uncertainties, including:

- changes in political, social or economic conditions;
- tariffs, trade protection measures and trade agreements;
- import or export licensing requirements;
- changes in regulatory requirements;
- reduced protection for intellectual property rights in some countries;
- economic downturns, civil disturbances or political instability;
- difficulties and costs of staffing and managing international operations;
- fluctuations in currency exchange rights;
- land reform movements;
- price controls;
- nationalization; and
- potentially burdensome taxation.

In the past, the Brazilian economy was characterized by frequent and occasionally extensive intervention by the Brazilian government and unstable economic cycles. The Brazilian government has changed in the past, and may change in the future, monetary, taxation, credit, tariff and other policies to influence the course of Brazil's economy. For example, the government's actions to control inflation have at times involved setting wage and price controls, adjusting interest rates, imposing taxes and exchange controls and limiting imports into Brazil. The Brazilian government has also in the past placed significant restrictions on the ability of foreign persons and companies to acquire property in Brazil. We have no control over, and cannot predict, what policies or actions the Brazilian government may take in the future. Any of these actions could adversely affect our international operations and, consequently, our results of operations.

**Our ability to use our net operating loss carry forwards to offset future taxable income may be subject to certain limitations.**

As of August 31, 2011, we had approximately \$173.0 million of federal and \$111.0 million of state operating loss carry-forwards available to offset future taxable income, which expire in varying amounts beginning in 2018 for federal and 2013 for state purposes if unused. It is possible that we will not generate taxable income in time to use these loss carry-forwards before their expiration. In addition, under Section 382 of the Internal Revenue Code, or Code, a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its pre-change net operating loss carry forwards, or NOLs, to offset future taxable income. We have not completed a Section 382 analysis to determine if an ownership change has occurred. Until such analysis is completed, we cannot be sure that

the full amount of the existing NOLs will be available to us, even if we do generate taxable income before their expiration.

**We use hazardous materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.**

Our research and development processes involve the controlled use of hazardous materials, including chemical and biological materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of these materials. Our operations also produce

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hazardous waste. We cannot eliminate entirely the risk of accidental contamination or discharge and any resultant injury from these materials. We may face liability for any injury or contamination that results from our use or the use by third parties of these materials, which depending on the severity of the injury or contamination could be significant. In addition, compliance with applicable environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development or production efforts.

### **We may suffer liabilities relating soil and/or groundwater contamination at current and former properties and at third-party sites to which we sent hazardous wastes for disposal.**

We are exposed to environmental risks associated with the ownership and operation of real property and the disposal of hazardous wastes. Environmental laws can require current owners and operators of real property to remediate soil and groundwater contamination even if such contamination was caused by another party, such as a former owner or operator. These laws can also require companies to clean up real property that they formerly owned or operated if releases of hazardous materials or wastes occurred during the period of their ownership or operation. Moreover, in certain circumstances these laws require companies to clean up third-party sites to which hazardous wastes were sent for disposal, notwithstanding that the original disposal activity accorded with all regulatory requirements. The discovery of previously unknown contamination at our current or former facilities, or at third-party sites to which we sent hazardous wastes for disposal, could require us to conduct or fund expensive cleanup efforts, which could materially and adversely affect our operating results.

### **We may be sued for product liability and if such lawsuits were determined adversely, we could be subject to substantial damages.**

We may be held liable if any product we develop, or any product that uses or incorporates, any of our technologies, causes injury or is found otherwise unsuitable during product testing, production, marketing or sale. For example, the detection of unintended biotechnology material in pre-commercial seed, commercial seed varieties or the crops and products produced may result in the inability to market the crops grown, resulting in potential liability for us as the seed producer or technology provider. In the event this was to occur, we could be subject to claims by multiple parties based not only on the cost of our products but also on their lost profits and business opportunities. In addition, the detection of unintended biotechnology material in our seeds or in the environment could result in governmental actions such as mandated crop destruction, product recalls or environmental cleanup or monitoring. Concerns about seed quality related to biotechnology could also lead to additional regulations being imposed on our business, such as regulations related to testing procedures, mandatory governmental reviews of biotechnology advances, or the integrity of the food supply chain from the farm to the finished product.

We currently have limited product liability insurance coverage and additional insurance may be prohibitively expensive, or may not fully cover potential liabilities. If we are unable to obtain sufficient insurance coverage at an acceptable cost or otherwise or if the amount of any claim against us exceeds the coverage under our policy, we may face significant expenses.

## **Risks Related to our Intellectual Property**

### **Our inability to adequately protect our proprietary technologies and products could harm our competitive position.**

Our success depends in part on our ability to obtain patents and maintain adequate protection of our other intellectual property for our technologies and products in the United States and other countries. The laws of some foreign countries do not protect proprietary rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting their proprietary rights in these foreign countries. These problems

can be caused by, for

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example, a lack of rules and methods for defending intellectual property rights. Many countries, including Brazil, do not allow patenting of plants, whether genetically engineered or traditionally bred. Accordingly, our proprietary position for our products in countries such as Brazil relies to a large extent on Plant Variety Protection certificates. This type of protection is more limited than patents in the United States. As a result, Plant Variety Protection certificates may provide only a limited competitive advantage in the marketplace. In many countries, including Brazil, patentability criteria are generally more restrictive and our filings more limited than in the United States, weakening our prospects of obtaining an equal scope of corresponding patent protection. Because Brazil is our initial target market, the lack of more robust patent protection for plant varieties in that country could expose us to the risk of misappropriation of our intellectual property. In addition, the legal systems of certain other countries do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology. This could make it difficult for us to stop the infringement of our patents or misappropriation of our other intellectual property rights. Proceedings to enforce our patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to enforce our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop. Even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property.

The patent positions of biotechnology companies, including our patent position, are generally uncertain and involve complex legal and factual questions. We will be able to protect our proprietary rights from unauthorized use by third parties only to the extent that our proprietary technologies are covered by valid and enforceable patents. We will apply for patents covering both our technologies and products as we deem appropriate. However, we cannot assure you that any pending or future patent applications held by us will result in an issued patent, or that if patents are issued to us, such patents will provide meaningful protection against competitors or against competitive technologies. Our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from practicing our technologies or from developing competing products. Furthermore, others may independently develop similar or alternative technologies or design around our patented technologies. In addition, our patents may be challenged, invalidated or fail to provide us with any competitive advantages.

### **The value of our intellectual property could diminish due to technological developments or challenges by competitors, making our products less competitive.**

Our intellectual property rights are important to the operation of our business and to our early mover advantage in crop biotechnology. We rely on a combination of patents, plant variety protection, plant breeders' rights, copyrights, trademarks, trade secret laws, confidentiality provisions, and licensing arrangements to establish and protect our intellectual property. However, the importance of technology development and intellectual property protection in the agricultural industry increases the risk that technological advances by others could render our products less competitive. Our business could be negatively affected by any of the following:

our issued patents, Plant Variety Protection certificates, plant breeders' rights and trademark registrations may be successfully challenged by our competitors;

our pending patent, Plant Variety Protection certificates, plant breeders' rights and trademark registration applications may not be allowed or may be challenged successfully by our competitors;

our products may inadvertently use the technology of others and, therefore, require us to obtain intellectual property licenses from other parties in order for us to sell our products;



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we may be unable to obtain intellectual property licenses that are necessary or useful to our business on favorable terms, or at all;

new technology that is independently developed by others may supersede our technology and make our products less desirable or more costly in the marketplace;

competitors may design around our patented technologies or may reverse engineer our trade secret technologies;

the scope of our plant variety protection certificates in Brazil is narrow and subject to a breeder's exemption, which allows breeders to use our varieties in a breeding program; as a result, these certificates may not provide a sustained competitive advantage in the marketplace; and

the eventual scope of our patents in Brazil is uncertain due to restrictions on plant claims under Brazilian patent laws and our limited filings in Brazil, and may not be sufficient to deter competition.

While we have exclusive rights to certain proprietary lines of switchgrass, miscanthus, high biomass sorghum and sweet sorghum through our collaborations with leading institutions, other parties may have access to certain lines of switchgrass, miscanthus, high biomass sorghum or sweet sorghum developed or released by such institutions, proprietary lines of such crops from other sources, and publicly available lines of such crops, from which they may develop products that compete with our products.

**Litigation or other proceedings or third party claims of infringement could require us to spend time and money and could severely disrupt our business.**

Our commercial success depends on not infringing patents or proprietary rights of third parties, nor breaching any licenses or other agreements that we have entered into with regard to our technologies, products and business. The patent positions of biotechnology and seed companies involve complex legal and factual questions and, therefore, enforceability cannot be predicted with certainty. Patents, if issued, may be challenged, invalidated or circumvented. We cannot be sure that relevant patents have not been issued that could block our ability to obtain patents or to operate as we would like without infringing patents or proprietary rights of other parties.

The biotechnology and seed industries have a history of litigation regarding patents and other intellectual property rights. Many biotechnology companies have employed intellectual property litigation as a way to gain a competitive advantage. We cannot assure you that we will not be sued by third parties for infringement of patents they may have relating to biotechnological traits or technologies in various crops.

Should any of our competitors have filed patent applications or obtain patents that claim inventions also claimed by us, we may have to participate in an interference proceeding declared by the U.S. Patent and Trademark Office to determine priority of invention and, thus, the right to a patent for these inventions in the United States. Such a proceeding could result in substantial cost to us even if the outcome is favorable. Even if successful on priority grounds, an interference proceeding may result in loss of claims based on patentability grounds raised in the proceeding. If we become involved in litigation or interference proceedings declared by the U.S. Patent and Trademark Office to defend our intellectual property rights or as a result of alleged infringement of the rights of others, or oppositions or other intellectual property proceedings outside of the United States, we might have to spend significant amounts of money to resolve such matters. We are aware of a significant number of pending patent applications relating to biotechnological traits or technologies in various crops filed by third parties.



Even if we prevail, litigation, interference proceedings or opposition proceedings could result in significant legal fees and other expenses, could divert our management time and efforts and could

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severely disrupt our business. Uncertainties resulting from initiation and continuation of any patent or related litigation could harm our ability to compete.

An adverse ruling arising out of any intellectual property dispute could undercut or minimize our intellectual property position. An adverse ruling that our operations violate a third party's intellectual property rights could also subject us to significant liability for damages, prevent us from using processes or products, or require us to license disputed rights from third parties. Claims of intellectual property infringement against us may require us to enter into costly royalty or license agreements, subject us to substantial damage claims or cause us to stop using such technology absent a license agreement. Although patent and intellectual property disputes in the biotechnology area are often settled through licensing or similar arrangements, costs associated with these arrangements may be substantial and could include ongoing royalties. Furthermore, necessary licenses may not be available to us on satisfactory terms, if at all.

### **Third parties may infringe on our intellectual property rights, and we may expend significant resources enforcing our rights or be competitively disadvantaged.**

If we fail to protect our intellectual property rights from infringement by third parties, our competitive position could suffer, which could make it more difficult to grow our business. We may not be able to detect or prevent infringement of our intellectual property or may lose our competitive position in the market before we do so.

### **Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information.**

In order to protect our proprietary technology and processes, we also rely in part on trade secret protection for our confidential and proprietary information. For example, we consider our genetic transformation methods, markers for marker-assisted breeding and sequence databases as trade secrets. We have taken security measures to protect our trade secrets and proprietary information. These measures may not provide adequate protection for our trade secrets or other proprietary information. We also seek to protect our proprietary information by entering into confidentiality agreements with employees, with potential and actual collaborators and licensees and with consultants and other advisors. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, others may independently develop substantially equivalent proprietary information or techniques and trade secret laws do not allow us to protect against such independent development. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

### **We have received funding from U.S. government agencies, which could negatively affect our intellectual property rights.**

Some of our research and development activities have been funded by grants from U.S. government agencies. For example, a portion of our research and development used to develop our nitrogen use efficiency trait was funded by a U.S. Department of Energy ARPA-E grant. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents and technical data, generally including, at a minimum, a non-exclusive, nontransferable license authorizing the government to use the invention or technical data for non-commercial purposes. U.S. government funding must be disclosed in any resulting patent applications, and our rights in such inventions will normally be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights.

March-in rights refer to the right of the U.S. government, under certain limited circumstances, to require us to grant a license to technology developed under a government grant to a responsible

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applicant, or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed, within a reasonable time, to take effective steps to achieve practical application of a technology or, if action is necessary to alleviate health or safety needs, to meet requirements for public use specified by federal regulations or to give preference to U.S. industry. We may also enter into collaborations with entities outside the United States that receive government funding or, in the future, we may apply for government funding from other countries. Regulations in these countries may provide for similar march-in rights. Any government's rights in our intellectual property may lessen its commercial value, which could adversely affect our business.

**Risks Related to this Offering and Ownership of our Common Stock**

**No public market for our common stock currently exists and an active trading market may not develop or be sustained following this offering.**

Prior to this offering, there has not been a public market for our common stock. An active and liquid trading market for our common stock may not develop following this offering or if it does develop, it may not be sustained. The lack of a liquid trading market may make it more difficult for you to sell your shares when you wish to sell them or at a price that you consider attractive. The lack of a liquid trading market may also reduce the fair market value of your shares. Also, an inactive trading market for our shares may negatively affect our ability to raise equity capital in the future by selling shares in a public offering or make it more difficult to acquire other companies by using our common stock as consideration.

**The price of our common stock may be volatile and you may not be able to sell your shares at or above the initial public offering price.**

The initial public offering price for our shares will be determined by negotiations between us and representatives of the underwriters and may not be indicative of prices that will prevail in the stock market following this offering. The market price for our common stock may decline below the initial public offering price and you may not be able to sell your shares at or above the initial public offering price. Our stock price may be subject to wide fluctuations in response to the factors listed in this section and others beyond our control, including:

actual or projected fluctuations in our financial condition and operating results;

our cash and cash equivalents position;

actual or projected changes in our growth rate relative to our competitors;

actual or projected fluctuations in our competitors' financial condition or operating results;

announcements of technological innovations by us, our collaborators or our competitors;

announcements by us, our collaborators or competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

the entry into, modification or termination of collaborative arrangements;

changes in our customer base;

additions or departures of key management or other key personnel;

competition from existing products or new products that may emerge;

issuances of new or updated research reports by securities or industry analysts;

fluctuations in the share prices of companies perceived by investors to be comparable to us;

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disputes or other developments related to proprietary rights, including patents, litigation matters, the countries in which we source our germplasm, and our ability to obtain patent protection for our technologies;

disputes or other developments relating to genetically engineered products, including claims of adventitious presence or environmental harm;

changes in existing laws, regulations and policies applicable to our business and products, including the United States Renewable Fuel Standard program, and the adoption or failure to adopt additional carbon emissions regulations;

announcements or the expectation of raising additional financing;

sales of our common stock by us, our insiders or other stockholders;

general market conditions in our industry; and

general economic conditions, including the impact of the recent financial crisis.

The stock markets in general, and the market for renewable energy stocks in particular, have experienced extreme volatility that have affected and continue to affect the trading prices of equity securities of many companies. These market fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of our common stock. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns.

**A significant portion of our total outstanding shares of common stock is restricted from immediate resale, but may be sold into the public market in the near future. If there are substantial sales of our common stock, or the perception that these sales could occur in the future, the trading price of our common stock could decline.**

The trading price of our common stock could decline as a result of sales of a large number of shares of our common stock in the public market after this offering. The perception that these sales could occur may also depress the trading price of our common stock. Based on the number of shares outstanding as of \_\_\_\_\_, 2011, we will have \_\_\_\_\_ shares of common stock outstanding after the completion of this offering. Of these shares, the \_\_\_\_\_ common stock sold in this offering will be freely tradable in the United States immediately after the offering, except for any shares purchased by our affiliates as defined in Rule 144 under the Securities Act of 1933, as amended, or the Securities Act.

The holders of \_\_\_\_\_ shares of common stock have agreed with the underwriters, subject to certain exceptions discussed under the section entitled "Underwriting", not to offer, sell, pledge or otherwise dispose of any of their common stock during the period beginning on the date of this prospectus and continuing through the date 180 days after the date of this prospectus (subject to extension under certain circumstances), except with the prior written consent of Goldman, Sachs & Co. and us.

However, Goldman, Sachs & Co. can waive the provisions of these lock-up agreements with our consent and allow these stockholders to sell their shares at any time. After the expiration of the 180-day restricted period (subject to extension under certain circumstances), these shares may be sold in the public market in the United States, subject to prior registration in the United States, if required, or reliance upon an exemption from U.S. registration under



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<b>Number of Shares and % of Total Outstanding</b>	<b>Date Available for Sale into Public Market</b>
or %	Immediately after this offering.
or %	90 days after the date of this prospectus.
or %	180 days after the date of this prospectus.
or %	From time to time after the date 180 days after the date of this prospectus.

In addition, as of \_\_\_\_\_, 2011, there were \_\_\_\_\_ shares of common stock issuable upon the exercise of outstanding options or warrants that will become eligible for sale in the public market to the extent permitted by applicable vesting requirements, the lock-up agreements discussed in Underwriting and Rules 144 and 701 of the Securities Act.

Holders owning an aggregate of \_\_\_\_\_ shares of common stock will be entitled, under contracts providing for registration rights, to require us to register shares of our common stock owned by them for public sale in the United States, subject to the restrictions of Rule 144. See Description of Capital Stock Registration Rights. In addition, we intend to file a registration statement to register approximately \_\_\_\_\_ shares previously issued or reserved for future issuance under our equity compensation plans and agreements. Upon effectiveness of such registration statement, subject to the satisfaction of applicable exercise periods and, in certain cases, the lock-up agreements discussed in Underwriting, the shares of common stock issued upon exercise of outstanding options will be available for immediate resale in the United States in the open market.

**If securities or industry analysts do not publish research or reports about our business or our industry, or publish negative reports about our business or our industry, our stock price and trading volume could decline.**

The trading market for our common stock will be influenced by the research and reports that securities or industry analysts publish about us, our business, our industry or our competitors. If one or more of the analysts who cover us change their recommendation regarding our stock adversely, change their opinion of the prospects for our company in a negative manner, or provide more favorable relative recommendations about our competitors, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

**Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.**

The initial public offering price will be substantially higher than the net tangible book value per share of our outstanding common stock immediately after this offering. Therefore, if you purchase shares of our common stock in this offering, you will experience immediate and substantial dilution of approximately \$ \_\_\_\_\_ per share in the price you pay for shares of our common stock as compared to its net tangible book value, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover page of this prospectus. If outstanding options and the outstanding warrants that do not expire upon completion of this offering are exercised or if more shares are issued upon conversion of the Convertible Notes than we have assumed, you will experience further dilution. In addition, following this offering, purchasers in this offering will have contributed \_\_\_\_\_ % of the total consideration paid by our stockholders to purchase shares of common stock, in exchange for acquiring approximately \_\_\_\_\_ % of our total outstanding shares as of \_\_\_\_\_, 2011, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus. To the extent that outstanding options and warrants to purchase shares of common stock are exercised or if more shares are issued upon conversion of the





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Convertible Notes than we have assumed, there will be further dilution. For further information on this calculation, see the Dilution section of this prospectus.

**We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to comply with the laws and regulations affecting public companies.**

We have never operated as a public company. As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting and corporate governance requirements, in order to comply with the rules and regulations imposed by the Sarbanes-Oxley Act, as well as rules implemented by the SEC and the Nasdaq Global Market. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives and our legal and accounting compliance costs will increase.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls over financial reporting and disclosure controls and procedures. In particular, commencing in 2012, we must perform system and process evaluations and testing of our internal control over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal control over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 will require that we incur substantial accounting expense and management time on compliance-related issues. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, we could lose investor confidence in the accuracy and completeness of our financial reports, which could cause our stock price to decline.

**Anti-takeover provisions in our certificate of incorporation and bylaws and under Delaware law could delay or prevent an acquisition of our company, even if the acquisition may be beneficial to our stockholders.**

Provisions in our amended and restated certificate of incorporation and our bylaws, both of which will become effective upon the completion of this offering, may delay or prevent an acquisition of our company deemed undesirable by our board of directors. Among other things, our amended and restated certificate of incorporation and bylaws will (i) provide for a board of directors that is divided into three classes, with staggered three-year terms, (ii) provide that all stockholder action must be effected at a duly called meeting of the stockholders and not by a consent in writing, (iii) provide that only our board of directors, the chairman of the board of directors, our chief executive officer (or president in the absence of a chief executive officer) may call a special meeting of the stockholders, (iv) provide for the ability of our board of directors to issue undesignated preferred stock, (v) require that any amendment to the amended and restated certificate of incorporation be approved by a 662/3 stockholder vote, and (vi) establish advance notice requirements for nominations for election to our board of directors and for proposing matters that can be acted upon at stockholders meetings. These provisions may also frustrate or prevent any attempt by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors who are responsible for appointing the members of our management team. As a Delaware corporation, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which prohibits, with some exceptions, stockholders owning in excess of 15% of our outstanding stock from merging or combining with us without board of directors or stockholder approval. Although we believe these provisions together provide for an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer to acquire



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our company may be considered beneficial by some stockholders and could limit the opportunity for our stockholders to receive a premium for their shares.

**Concentration of ownership among our existing officers, directors and principal stockholders may prevent other stockholders from influencing significant corporate decisions.**

Based on the number of shares outstanding as of August 31, 2011, when this offering is completed, our officers, directors and existing stockholders who hold at least 5% of our stock will together beneficially own approximately % of our outstanding common stock, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus, and if the underwriters' option to purchase additional shares is exercised in full, such persons will beneficially own, in the aggregate, approximately % of our outstanding common stock. If these officers, directors and principal stockholders or a group of our principal stockholders act together, they will be able to exert a significant degree of influence over our management and affairs and exercise a significant level of control over all matters requiring stockholder approval, including the election of directors and approval of mergers or other business combination transactions. This concentration of ownership may have the effect of delaying or preventing a change in control of our company or changes in management and will make the approval of certain transactions difficult or impossible without the support of these stockholders.

**After the completion of this offering, we do not expect to declare any dividends in the foreseeable future.**

After the completion of this offering, we do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Our existing loan agreement prohibits us from paying dividends on our capital stock. Consequently, investors may need to rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase our common stock.

**Our management may not apply the net proceeds from this offering in ways that increase the value of your investment.**

We currently intend to use the net proceeds from this offering as described in the Use of Proceeds section of this prospectus. However, our management may not apply the net proceeds in ways that ultimately increase the value of your investment. You will not have the opportunity to influence our decisions on how to use the net proceeds from this offering.

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**SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus, including the sections entitled Prospectus Summary , Risk Factors , Use of Proceeds , Management s Discussion and Analysis of Financial Condition and Results of Operations , and Business , contains forward-looking statements. All statements, other than statements of historical facts contained in this prospectus, including statements regarding our efforts to develop and commercialize our products, our short-term and long-term business strategies, market and industry expectations and future results of operations and financial position, are forward-looking statements. In many cases, you can identify forward-looking statements by terms such as may , will , should , expect , plan , anticipate , could , intend , target , project , contemplate , believe , estimate , potential , continue words.

We based these forward-looking statements largely on our current expectations and projections about future events or trends that we believe may affect our business and financial performance. These forward-looking statements involve known and unknown risks and uncertainties that may cause our actual results, performance or achievements to materially differ from any future results, performance or achievements expressed or implied by these forward-looking statements. We have described in the Risk Factors section and elsewhere in this prospectus the material risks and uncertainties that we believe could cause actual results to differ from these forward-looking statements. Because forward-looking statements are inherently subject to risks and uncertainties, some of which we cannot predict or quantify, you should not rely on these forward-looking statements as guarantees of future results, performance or achievements.

The forward looking statements in this prospectus represent our views as of the date of this prospectus. We undertake no obligation to update publicly, except to the extent required by law, any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations.

**MARKET AND INDUSTRY DATA**

Market data and certain industry data and forecasts included in this prospectus were obtained from internal company surveys, market research, consultant surveys, publicly available information, governmental agency reports and industry publications and surveys, including reports by the following authorities:

The U.S. Department of Energy;

The U.S. Energy Information Administration;

The International Energy Agency;

The International Service for the Acquisition of Agri-Biotech Applications;

The Renewable Fuels Association; and

Brazilian Sugarcane Industry Association.

This information involves a number of assumptions and limitations. These industry and government publications, surveys and forecasts generally indicate that the information has been obtained from sources believed to be reliable, but that the accuracy and completeness of such information is not guaranteed. Although we believe the third party market and industry data and forecasts included in the prospectus are generally reliable, we have not independently

verified any of the data from third party sources nor have we ascertained the underlying economic assumptions relied upon therein. Similarly, internally generated industry forecasts, which we believe to be reliable based on our management's knowledge of the industry, have not been independently verified by a third party. We are responsible for all of the disclosure in this prospectus.

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We estimate that the net proceeds from this offering will be approximately \$      million, assuming an initial public offering price of \$      per share, the midpoint of the price range set forth on the cover of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase or decrease in the assumed initial public offering price of \$      per share would increase or decrease the net proceeds from this offering by approximately \$      million, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional shares in full, we estimate that our net proceeds will be approximately \$      million, assuming an initial public offering price of \$      per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering for the following:

Research and development	\$
Capital expenditures primarily relating to breeding stations, production facilities, systems and agricultural equipment	\$
Commercial activities, including increasing the number of sales and marketing personnel, expanding our advertising and branding efforts and pursuing government approvals	\$
Working capital and other general corporate purposes, including seed production efforts and operating as a public company	\$

In addition, we may also use a portion of the net proceeds to expand our business through acquisitions of other companies, assets or technologies, which we expect would reduce the amount of net proceeds available for working capital and other general corporate purposes. However, we do not have any present understandings, commitments or agreements to enter into any potential agreements for any acquisitions. Pending the uses of the net proceeds of this offering, as described above, we intend to invest the net proceeds in short-term investment-grade, interest-bearing securities.

Some of the other principal purposes of this offering are to create a public market for our common stock, increase our visibility in the marketplace and provide liquidity to existing stockholders. Creating a public market for our common stock will facilitate our ability to raise additional equity in the future and to use our common stock as a means of attracting and retaining key employees and as consideration for acquisitions.

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**DIVIDEND POLICY**

We have never declared or paid cash dividends on our common or convertible preferred stock. We currently intend to retain any future earnings and do not expect to declare or pay any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, results of operations, capital requirements, general business conditions and other factors that our board of directors considers relevant. Our existing loan agreement prohibits us from paying dividends on our capital stock.



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**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and our capitalization as of August 31, 2011:

on an actual basis;

on a pro forma basis to give effect to:

- (1) the filing of our amended and restated certificate of incorporation immediately prior to the completion of this offering;
- (2) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 46,059,819 shares of common stock immediately prior to the completion of this offering;
- (3) the issuance of            additional shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in    Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$    per share, the midpoint of the price range set forth on the cover of this prospectus;
- (4) the issuance of            shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$    per share, the midpoint of the price range set forth on the cover of this prospectus; and
- (5) the reclassification of the common stock warrant liability and the convertible preferred stock warrant liability to stockholders' (deficit) equity upon the completion of this offering.

on a pro forma as adjusted basis to give effect to the pro forma adjustments and the sale of            shares of common stock by us in this offering at an assumed initial public offering price of \$    per share, the midpoint of the price range set forth on the cover of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with    Management's Discussion and Analysis of Financial Condition and Results of Operations    and our consolidated financial statements and the accompanying notes appearing elsewhere in this prospectus.

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	<b>As of August 31, 2011</b>		
		<b>Pro Forma as</b>	
	<b>Actual</b>	<b>Pro Forma</b>	<b>Adjusted(1)</b>
	<b>(Unaudited)</b>		
	<b>(In thousands, except per share data)</b>		
Cash and cash equivalents	\$ 21,911	\$	\$
Long-term debt, less current portion	\$ 2,013	\$	\$
Preferred stock warrant liabilities	276		
Common stock warrant liabilities	17,450		
Convertible Notes	13,630		
Convertible preferred stock, \$0.01 par value; 50,854,383 authorized, 46,059,819 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted	197,502		
Stockholders' (deficit) equity:			
Preferred Stock, \$0.01 par value; no shares authorized, issued and outstanding, actual; shares authorized, pro forma and pro forma as adjusted; no shares issued and outstanding, pro forma and pro forma as adjusted			
Common Stock, \$0.01 par value; 75,000,000 shares authorized; 6,042,792 shares issued and outstanding, actual; shares authorized, pro forma and pro forma as adjusted; shares issued and outstanding, pro forma; shares issued and outstanding pro forma as adjusted(2)	60		
Additional paid-in capital	8,312		
Accumulated other comprehensive loss	(27)		
Accumulated deficit	(212,663)		
Total stockholders' (deficit) equity	(204,318)		
Total capitalization	\$ 26,553	\$	\$

(1) A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus, would increase or decrease each of cash and cash equivalents, and total stockholders' (deficit) equity by \$ , assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Each increase of 1.0 million shares in the number of shares of common stock offered by us would increase each of cash and cash equivalents, and total stockholders' (deficit) equity by \$ , assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus. Similarly, each decrease of 1.0 million shares in the number of shares offered by us would decrease each of cash and cash equivalents, and total stockholders' equity (deficit) by \$ . If the underwriters' option to purchase additional shares was exercised in full, pro forma as adjusted cash, cash equivalents, common stock and additional paid-in capital, stockholders' equity (deficit), and

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shares issued and outstanding as of August 31, 2011, would be \$ , \$ , \$ and , respectively.

The table above does not include:

7,792,219 shares of common stock issuable upon exercise of options to purchase our common stock outstanding as of August 31, 2011 at a weighted average exercise price of \$2.02 per share;

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5,296,845 shares of common stock issuable upon the exercise of warrants to purchase our common stock outstanding as of August 31, 2011 at a weighted average exercise price of \$6.90 per share that do not expire on the completion of this offering;

61,537 shares of common stock issuable upon exercise of warrants to purchase our preferred stock outstanding as of August 31, 2011 at a weighted average exercise price of \$6.50 per share that do not expire on the completion of this offering; these preferred stock warrants will automatically convert to common stock warrants upon the completion of this offering;

32,251 shares of common stock reserved as of August 31, 2011 for future issuance under our 2010 Stock Option/Stock Issuance Plan as more fully described in Compensation Discussion and Analysis Executive Compensation Equity Compensation Plans ; and

4,000,000 shares of common stock reserved for future issuance under our 2011 Equity Incentive Plan, which will become effective on the day prior to the day upon which we become subject to the reporting requirements of the Exchange Act.

- (2) The number of shares of our common stock to be issued upon the conversion of our Convertible Notes depends on the initial offering price of our public offering. This is because, as further described in Certain Relationships and Related Party Transactions, the terms of the Convertible Notes provide that the Convertible Notes automatically convert into shares of our common stock in connection with a qualified initial public offering at a price per share equal to a 20% discount from the public offering price.

The pro forma and pro forma as adjusted share information in the table above includes the issuance of additional shares of common stock in connection with an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover of this prospectus. In addition:

A \$1.00 increase in the assumed initial public offering price would decrease the total number of shares issued in connection with the conversion of the Convertible Notes upon the closing of this offering by shares;

A \$1.00 decrease in the assumed initial public offering price would increase the total number of shares issued in connection with the conversion of the Convertible Notes upon the closing of this offering by shares; and

More than a \$1.00 decrease in the assumed initial public offering price would further increase the total number of shares issued in connection with the conversion of the Convertible Notes and more than a \$1.00 increase in the assumed initial public offering price would further decrease the total number of shares issued in connection with the conversion of the Convertible Notes.

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If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the net tangible book value per share of our common stock immediately after this offering. As of August 31, 2011, our pro forma net tangible book value was \$      million, or \$      per share of our common stock. Pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the total number of shares of our common stock outstanding, after giving effect to (i) the automatic conversion of all of our outstanding convertible preferred stock into shares of common stock upon the completion of this offering, (ii) the reclassification of preferred stock warrant liabilities to stockholders' (deficit) equity immediately prior to the completion of this offering, (iii) the issuance of      additional shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in greater detail in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$      per share, the midpoint of the price range set forth on the cover of this prospectus and (iv) the issuance of      shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon completion of this offering, assuming an initial offering price of \$      per share, the midpoint of the price range set forth on the cover of this prospectus.

After giving effect to the above referenced adjustment and the sale by us of      shares of our common stock in this offering at an assumed initial public offering price of \$      per share, the midpoint of the price range set forth on the cover of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of August 31, 2011, would have been approximately \$      million, or \$      per share of our common stock. This amount represents an immediate increase in our pro forma as adjusted net tangible book value of \$      per share to our existing stockholders and an immediate dilution of \$      per share to new investors purchasing shares of our common stock in this offering at the initial public offering price.

The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share	\$
Pro forma net tangible book value per share as of August 31, 2011, before giving effect to this offering	\$
Increase in pro forma net tangible book value per share attributable to new investors purchasing shares in this offering	
Pro forma as adjusted net tangible book value per share after giving effect to this offering	
Dilution per share to investors in this offering	\$

A \$1.00 increase or decrease in the initial public offering price of \$      per share, the midpoint of the price range set forth on the cover of this prospectus, would increase or decrease our pro forma as adjusted net tangible book value per share after this offering by approximately \$      and would increase or decrease dilution per share to new investors by approximately \$     , assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the same. In addition, to the extent any outstanding options or warrants are exercised, new investors will experience further dilution.

If the underwriters exercise their option to purchase additional shares in full, assuming an initial public offering price of \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus, the pro forma as adjusted net tangible book value will increase to \$ \_\_\_\_\_ per share, representing an immediate increase to existing stockholders of \$ \_\_\_\_\_ per share and an immediate dilution of \$ \_\_\_\_\_ per share to new investors.

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The number of shares of our common stock to be issued upon the conversion of the Convertible Notes, depends on the initial offering price of our public offering. This is because the terms of the Convertible Notes provide that the Convertible Notes automatically convert into shares of our common stock in connection with a qualified initial public offering at a price per share equal to a 20% discount from the public offering price, as further described in *Certain Relationships and Related Party Transactions*. In addition:

A \$1.00 increase in the assumed initial public offering price would increase our pro forma as adjusted net tangible book value by \$ per share, and increase the dilution to new investors by \$ per share, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us;

A \$1.00 decrease in the assumed initial public offering price would decrease our pro forma as adjusted net tangible book value by \$ per share, and decrease the dilution to new investors by \$ per share, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us;

More than a \$1.00 increase in the assumed initial public offering price would further increase our pro forma as adjusted net tangible book value, and further increase the dilution to new investors; and

More than a \$1.00 decrease in the assumed initial public offering price would further decrease our pro forma as adjusted net tangible book value, and further decrease the dilution to new investors.

The following table summarizes, as of August 31, 2011, on a pro forma as adjusted basis, the number of shares purchased or to be purchased from us, the total consideration paid or to be paid to us, and the average price per share paid or to be paid to us by existing stockholders and new investors purchasing shares of our common stock in this offering at an assumed initial public offering price of \$ per share, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, new investors purchasing shares of our common stock in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Share Purchased		Total Consideration		Average Price per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	\$	%	\$
New investors					
Total		100%	\$	100%	

A \$1.00 increase or decrease in the assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus, would increase or decrease the total consideration paid to us by new investors by \$ million and increase or decrease the percent of total consideration paid to us by new investors by %, assuming that the number of shares offered by us, as set forth on the cover of this prospectus, remains the

same.

As discussed above, the number of shares of our common stock to be issued upon the conversion of the Convertible Notes depends on the initial public offering price of this offering. Accordingly, upon completion of this offering:

A \$1.00 increase in the assumed public offering price would increase total consideration paid by new investors and total consideration paid by all stockholders by approximately \$      million, and result in our existing stockholders owning      % and new investors owning      % of the total number of shares of common stock outstanding;



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A \$1.00 decrease in the assumed initial public offering price would decrease total consideration paid by new investors and total consideration paid by all stockholders by approximately \$ million, and result in our existing stockholders owning % and new investors owning % of the total number of shares of common stock outstanding;

More than a \$1.00 increase in the assumed initial public offering price would further increase total consideration paid by new investors and total consideration paid by all stockholders; and

More than a \$1.00 decrease in the assumed initial public offering price would further decrease total consideration paid by new investors and total consideration paid by all stockholders, and result in our existing stockholders owning a larger percentage and new investors owning a smaller percentage of the total number of shares of common stock outstanding.

The above discussion and tables are based on our common stock outstanding as of August 31, 2011, after giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 46,059,819 shares of common stock immediately prior to the completion of this offering; (ii) the issuance of additional shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in greater detail in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus and (iii) the issuance of shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock which would otherwise expire upon completion of this offering, assuming an initial public offering price of \$ per share, the midpoint range set forth on the cover of this prospectus.

This number excludes:

7,792,219 shares of common stock issuable upon exercise of options to purchase our common stock outstanding as of August 31, 2011 at a weighted average exercise price of \$2.02 per share;

5,296,845 shares of common stock issuable upon exercise of warrants to purchase our common stock outstanding as of August 31, 2011 at a weighted average exercise price of \$6.90 per share that do not expire on the completion of this offering;

61,537 shares of common stock issuable upon exercise of warrants to purchase our preferred stock outstanding as of August 31, 2011 at a weighted average exercise price of \$6.50 per share that do not expire on the completion of this offering; these preferred stock warrants will automatically convert to common stock warrants upon the completion of this offering;

32,251 shares of common stock reserved as of August 31, 2011 for future issuance under our 2010 Stock Option/Stock Issuance Plan as more fully described in Compensation Discussion and Analysis Executive Compensation Equity Compensation Plans ; and

4,000,000 shares of common stock reserved for future issuance under our 2011 Equity Incentive Plan, which will become effective on the day prior to the day upon which we become subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

If all our outstanding stock options and warrants outstanding had been exercised as of August 31, 2011, our pro forma net tangible book value as of August 31, 2011, would have been approximately \$ million or \$ per share of our

common stock, and the pro forma net tangible book value after giving effect to this offering would have been \$      per share, representing dilution in our pro forma net tangible book value per share to new investors of \$      .



Net loss allocable to preferred stockholders

Net loss attributable to common stockholders	\$ (20,455)	\$ (26,777)	\$ (18,696)	\$ (22,583)	\$ (36,336)
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Basic and diluted net loss per share attributable to common

stockholders(1)	\$ (3.84)	\$ (4.89)	\$ (3.33)	\$ (3.90)	\$ (6.11)
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Weighted average outstanding common shares used for net loss per share attributable to common stockholders(1):

Basic and diluted	5,323,259	5,473,090	5,621,671	5,791,443	5,945,157
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Pro forma net loss per share:

Basic and diluted (unaudited)(2)			\$	\$	
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Weighted average outstanding common shares used in computing pro forma net loss per share: Basic and diluted (unaudited)(2)

- (1) The basic and diluted loss per share are computed by dividing the net loss attributable to common stockholders by the weighted average number of common shares outstanding during the period. For the periods where we presented losses, all potentially dilutive common shares comprising of stock options, warrants, Convertible Notes and convertible preferred stock are anti-dilutive.
- (2) The unaudited pro forma basic and diluted loss per common share have been computed as though the conversion had occurred as of September 1, 2010 to give effect to: (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 46,059,819 shares of common stock effective immediately prior to the completion of this offering using the if-converted method, (ii) the issuance of additional shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price

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of \$      per share, the midpoint of the price range set forth on the cover of this prospectus and (iii) the issuance of      shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$      per share, the midpoint of the price range set forth on the cover of this prospectus using the treasury stock method.

Our stock-based compensation expense is as follows (in thousands):

	<b>Year Ended</b>		<b>Eight</b>	<b>Year Ended</b>	
	<b>December 31,</b>		<b>Months</b>	<b>August 31,</b>	
	<b>2007</b>	<b>2008</b>	<b>Ended</b>	<b>2010</b>	<b>2011</b>
			<b>August 31,</b>		
			<b>2009</b>		
Research and development	\$ 389	467	345	409	\$ 1,895
Selling, general and administrative	338	705	737	891	815
Total stock-based compensation expense	\$ 727	\$ 1,172	\$ 1,082	\$ 1,300	\$ 2,710

	<b>As of December 31,</b>		<b>As of August 31,</b>		
	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
			<b>(In thousands)</b>		
<b>Consolidated Balance Sheet Data:</b>					
Cash and cash equivalents	\$ 13,863	\$ 12,145	\$ 14,960	\$ 33,055	\$ 21,911
Working capital	70,029	41,297	27,543	28,325	16,739
Total assets	84,500	57,718	41,094	46,648	36,797
Common and preferred stock warrant liabilities	13	13	2,944	8,911	17,726
Convertible Notes					13,630
Total long-term liabilities	358	290	3,197	13,310	33,518
Convertible preferred stock	183,079	183,079	183,079	197,502	197,502
Total stockholders' deficit	\$ (103,358)	\$ (128,905)	\$ (149,577)	\$ (170,829)	\$ (204,318)

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**MANAGEMENT'S DISCUSSION AND ANALYSIS  
OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

*The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements and the other financial information appearing elsewhere in this prospectus. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of various factors, including those discussed below and those discussed in the section entitled "Risk Factors" included elsewhere in this prospectus.*

**Overview**

We are an agricultural biotechnology company selling seeds to produce renewable bioenergy feedstocks that can enable the large-scale replacement of petroleum and other fossil fuels. We use a combination of advanced plant breeding and biotechnology to develop new crops, known as dedicated energy crops, that we believe address the limitations of first-generation bioenergy feedstocks, such as corn and sugarcane, increase biomass productivity, reduce crop inputs and improve cultivation on marginal land.

Our first large-scale commercial products are proprietary sweet sorghum varieties that can be used as a drop-in feedstock to extend the operating season of Brazilian sugarcane-to-ethanol mills, the operating days of which are currently limited due to the inherent limitations of sugarcane physiology and growth patterns. Our dedicated energy crops can also be used for the production of second-generation biofuels and bio-based chemicals, including cellulosic ethanol, butanol, jet fuel, diesel-like molecules and gasoline-like molecules, from non-food biomass. Finally, baseload utility-scale electric power can also be generated from the biomass feedstocks grown from our seeds.

We operate in one segment, and accordingly, our results of operations are presented on a consolidated basis. During 2009, we changed our fiscal year-end to August 31 from December 31 to better match the seasonality of the production and selling cycles related to the seeds and traits business. Therefore our results of operations for the period ended August 31, 2009 reflect an eight-month period and are not comparable to the prior twelve-month period.

To date the majority of our revenue and expense has been denominated in U.S. dollars and foreign currency fluctuations have not had a significant impact on our historical results of operations. As we pursue and enter markets outside the United States, we expect our product sales will be made in local currencies and accordingly, that foreign currency fluctuations will have a greater impact on our operating results.

We generate our revenues from government grants, research and development collaboration agreements and from product sales. We began selling products in 2008 and, while our product sales have been minimal to date, we expect product sales to eventually become the primary source of our revenues. We expect product revenues to include a combination of seed sales and technology fees, similar to current business models used for food crops incorporating biotech traits. As we continue to develop traits for our products, we expect that a significant portion of our product revenues will be generated from the sale of seeds that include our traits. We believe our largest immediate market opportunity is selling sweet sorghum into the Brazilian biofuel market. Our longer term strategies involve capitalizing on the development of the emerging cellulosic biofuel and biopower markets in the United States and Europe.

The sale of seeds is dependent upon planting and growing seasons, which vary from year to year, and are expected to result in both highly seasonal patterns and substantial fluctuations in our quarterly sales and profitability. Our product sales for the years ended August 31, 2010 and 2011 were minimal and, accordingly, we have not yet experienced the full nature or extent to which our business may be seasonal. We expect that the sale of our seeds in Brazil will

typically be higher in our first and fourth fiscal quarters, due to the timing of the planting decisions made by our customers.

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As we increase our sales in our current markets, and as we expand into new markets in different geographies, it is possible we may experience different seasonality patterns in our business. Weather conditions and natural disasters, such as heavy rains, hurricanes, hail, floods, tornadoes, freezing conditions, drought or fire, also affect decisions by our customers about the types and amounts of seeds to plant and the timing of harvesting and planting such seeds. Disruptions that cause delays by our customers in harvesting or planting can result in the movement of orders to a future quarter, which would negatively affect any given quarter and cause fluctuations in our operating results.

We have formed collaborations with major participants in the bioenergy value chain to evaluate yields and other performance or conversion characteristics of our products and the logistics related to the use of our products. Our collaborators include ethanol mills, utilities, independent power producers, cellulosic biofuel companies, growers, grower cooperatives, equipment manufacturers, enzyme or fermentation technology companies and other support technology providers.

In row crops, like corn, cotton and soybean, we have out-licensed a portion of our traits and gene technology and we continue to pursue opportunities to out-license these technologies in other crops. We have chosen to be a technology provider or trait provider in these markets and our collaborators and customers in this area consist primarily of multi-national seed companies.

We will market our seeds and traits directly to ethanol mills, utilities, independent power producers, cellulosic biofuel companies, individual growers and grower cooperatives and to date we have sold our seeds mainly to customers who are testing them in various technologies and environments. We also work with technology providers and other market participants such as equipment manufacturers and enzyme or fermentation technology companies, to encourage the use of our proprietary products. We market our products to biorefineries and biopower facilities, regardless of conversion technology, end-molecule or end-use. In Brazil, where we have completed commercial-scale trials with leading ethanol mills, we are marketing our sweet sorghum hybrid seeds for the 2011-2012 growing season and we began selling seeds in November 2011. In the United States and Europe, we have launched the first energy crops seed brand, Blade Energy Crops, under which we market proprietary switchgrass varieties and high biomass sorghum hybrids to the emerging biomass market.

We have invested significantly in research, development and technology and applied our proprietary technology platforms to energy crops. To develop high performing seeds and traits, we have integrated a suite of advanced research and development methods, which include conventional breeding, marker-assisted breeding, genomics and biotechnology, along with large, proprietary collections of germplasm (the collections of genetic resources covering the diversity of a crop, the attributes of which are inherited from generation to generation). We have utilized our existing germplasm assets along with our research and development methods to create improved seeds and traits. As a result, we believe that we have one of the leading pipelines of proprietary crop traits, based on the number and nature of our traits as well as the two-species approach we employ to validate and successfully select gene-trait combinations. Our research and development investments have been significant, amounting to \$20.3 million, \$12.4 million, \$16.7 million and \$19.0 million in the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011, respectively.

The remainder of our operating expenses are related to selling, general and administrative expenses incurred to establish and build our market presence and business infrastructure as well as seed production costs. For the periods prior to the commencement of sales of our seeds, we expensed our seed production costs as research and development. We began selling seeds in the United States in 2008, and since then, seed production costs have been computed on a first-in, first-out basis and valued at the lower of cost or market and are included as cost of product sales. Due to the early stage of commercialization of our seed products and lack of pricing data, a full valuation reserve has been recorded against our inventory value. Our sales and marketing expenses have not





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been significant to date but we expect such expenses to increase as we pursue, enter and expand our market opportunities.

Historically, we have funded our operations from the proceeds from equity sales, debt financing, payments from collaborators and government grants. We have experienced significant losses as we invested heavily in research and development, and those costs have exceeded revenues earned through collaboration agreements and government grants and were incurred prior to generating significant revenues through product sales. As of August 31, 2011, we had an accumulated deficit of \$212.7 million. We incurred net losses of \$26.8 million, \$18.7 million, \$22.6 million and \$36.3 million in the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011, respectively. We expect to incur additional losses related to the continued development and expansion of our business including research and development, seed production and operations, and sales and marketing. There is no assurance that profitable operations will be achieved, or if achieved, can be sustained on a continued basis.

## **Key Components of Our Results of Operations**

### *Revenues*

To date, our revenues have related to our product sales, collaborative research and government grants.

*Product Sales.* Product sales are primarily composed of sales of seeds. Going forward, we may include trait fees in our seed prices. We began selling products in 2008.

*Collaborative Research.* Collaborative research revenues generally consist of payments for research and development activities for specific projects. These arrangements may include a combination of non-refundable technology license fees, research and development fees, and/or fees for the achievement of contractually defined milestone events and royalties.

*Government Grants.* Government grant revenues consist of payments from government entities. The terms of these grants generally provide us with reimbursement for research and development services and certain types of capital expenditures over a contractually defined period.

### *Cost of Product Sales*

Cost of product sales consists principally of the cost of labor, raw materials and third-party services related to growing, harvesting, packaging and shipping our seeds. These costs are comprised of the direct costs of our seed production employees, as well as the temporary seasonal labor costs during planting and harvesting times. Third-party services include contract labor, grower payments, and other professional services related to the cost of product sales. Cost of product sales also consists of input costs such as chemicals and seed production costs. Costs associated with collaboration, research and government grants are not included in cost of product sales but instead are included as research and development expenses. Although historically not significant, future royalty expenses associated with collaboration and license agreements with third parties will be included in cost of product sales. The amount of royalties we owe under these agreements is a function of our sales and the applicable royalty rates depend on a number of factors, including the portion of our third-party collaborator's intellectual property that is present in our products. We believe that as we develop our agronomic production operations, we will be able to achieve lower cost of product sales. To date, we have relied principally on third parties for the production of our sweet sorghum seed for use in Brazil. We believe that as we increase seed production volumes, we will be able to achieve better economies of scale from these third parties. In addition, we intend to produce more of our own seeds in Brazil, which will allow us to further decrease our costs. For our switchgrass and high biomass sorghum products, we are currently producing

seeds at our own facility in Texas and believe that we will be able to decrease our costs over time by taking advantage of greater economies of scale.

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*Research and Development*

Research and development expenses principally consist of personnel costs related to our research and development staff in support of exploratory research, breeding, agronomy and technology development and protection. Research and development expenses also include costs incurred for laboratory supplies, reimbursable costs associated with government grants and our collaborative agreements, third-party contract payments, consultants and facility and related overhead costs. We expect to increase our investments in research and development by hiring additional research and development staff. As such, we expect that our research and development expenses will increase in absolute dollars. As a percentage of revenue, we expect our research and development expenses to increase in the near-term and eventually stabilize. Also included in research and development expenses are expenses in connection with warrants granted to The Texas A&M University System and The Samuel Roberts Noble Foundation, Inc. The warrants vest based on the achievement of certain research and commercialization milestones or the passage of time. The warrants are accounted for at fair value at each quarter end until the vesting targets are met using the Black Scholes option pricing model. Once our common stock is publicly traded, the volatility of our stock price could cause an increase in the warrant fair value and resulting expense charges to research and development.

We do not track our research and development expenditures by project. Our ongoing research and development activities are dedicated to expanding our integrated platforms which consist of a combination of genetic assets, specifically germplasm and traits, and competencies in genomics and biotechnology. Our research and development expenses consist principally of personnel costs and at August 31, 2011, we had 56 full-time employees primarily engaged in our research and development activities. Our employees' work time is spread across multiple research and development methods continuously focused on our technology platforms and to a much lesser extent areas for which we have received government grant awards and collaboration funding. We do not intend to provide forward-looking estimates of costs and time relating to our research and development activities due to the many uncertainties associated with genomics, conventional and marker-assisted breeding, agronomy and other genomics-based technologies. As we obtain data from our efforts, we may elect to reprioritize, delay or discontinue activities in order to focus our resources on more promising research and development methods. As a result of the nature of our activities and these uncertainties, we are unable to determine with any significant degree of certainty the duration and completion costs of our research and development activities. Additionally, when, and to what extent, we will generate future cash flows from products resulting from our research and development activities is dependent on market opportunities, the most immediate of which is the Brazilian biofuel market.

*Selling, General and Administrative*

Selling, general and administrative expenses consist primarily of personnel costs related to our executive, sales, legal, finance and human resources staff and professional fees including legal and accounting. Selling costs relate to business development and our sales and marketing programs to build brand awareness. We improve our brand awareness through programs including publication of crop management guides, speaking roles at industry events, trade show displays and local-level grower meetings. Costs related to these activities, including travel, are included in selling expenses. While we expect our selling expenses to increase in the near term, we believe that our focus on a relatively small number of customers, particularly in Brazil, where we are primarily marketing our products to mill operators, should allow us to operate with relatively modest overall selling expenses. We expect selling, general and administrative expenses to increase in absolute dollars in order to drive product sales and as we commence operations as a public company. Such increases may include increased insurance premiums, investor relations expenses, legal and accounting fees associated with the expansion of our business and corporate governance, financial reporting expenses, and expenses related to Sarbanes-Oxley and other regulatory compliance obligations. We expect to hire additional personnel, particularly in the area of general and administrative activities to



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support the growth of our business. As a percentage of revenue, we expect our selling, general and administrative expenses to increase in the near-term but to eventually decline.

### *Interest Expense*

We recognize interest expense on notes payable and other debt obligations. We expect interest expense to fluctuate in the future with changes in our debt obligations.

### *Interest Income*

Interest income consists primarily of interest earned on investments and cash balances. Our interest income will vary each reporting period depending on our average investment and cash balances during the period and market interest rates. We expect interest income to fluctuate in the future with changes in average investment and cash balances and market interest rates.

### *Other Income (Expense)*

Other income (expense) consists primarily of the change in the fair value of our convertible preferred warrants and certain of our common stock warrants. Our preferred stock warrants and certain of our common stock warrants that expire upon the consummation of a qualified initial public offering are classified as liabilities. Our preferred stock warrants convert to equity classified common stock warrants upon the consummation of this offering. We expect the impact to our results of operations from our preferred stock, Convertible Notes and certain of our common stock warrant liabilities to be eliminated from other income (expense) following our initial public offering.

### *Provision for Income Tax Benefits*

Since our inception, we have been subject to income taxes principally in the United States, and Brazil where we recently established a legal presence. We anticipate that as we expand our operations outside the United States, we will become subject to taxation based on the foreign statutory rates and our effective tax rate could fluctuate accordingly.

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

As of August 31, 2010 and 2011, based on the available information, it is more likely than not that our deferred tax assets will not be realized, and accordingly we have taken a full valuation allowance against all of our United States deferred tax assets. As of August 31, 2011, we had approximately \$173.0 million of federal and \$111.0 million of state operating loss carry-forwards available to offset future taxable income, which expire in varying amounts beginning in 2018 for federal and 2013 for state purposes if unused. Federal and state laws impose substantial restrictions on the utilization of net operating loss and tax credit carry-forwards in the event of an ownership change, as defined in Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Internal Revenue Code. We have not completed a 382 analysis to determine if a change in ownership has occurred. Until an analysis is completed, there can be no assurance that the existing net operating loss carryforwards or credits are not subject to significant limitation.

## **Critical Accounting Policies and Estimates**

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. We base our estimates and assumptions on historical

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experience and on various other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. The results of our analysis form the basis for making assumptions about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies involve significant areas of management's judgments and estimates in the preparation of our financial statements.

### *Revenue Recognition*

Revenues are recognized when the following criteria are met: (1) persuasive evidence of an arrangement exists; (2) transfer of product or technology has been completed or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured. To date, our primary source of revenues is derived from research collaborations and government grants. As our business continues to grow, we expect product sales will be our primary source of revenue.

### *Product Sales*

Product sales are derived from sales of seeds and trait fees. Going forward, we may include trait fees in our seed prices. Product sales are recognized, net of discounts and allowances, once passage of title and risk of loss have occurred and contractually specified acceptance criteria have been met, provided all other revenue recognition criteria have also been met.

### *Collaborative Research and Government Grants*

From time to time, we have entered into research and development collaboration agreements with third parties including a large agriculture supplier, consumer goods conglomerate and several biofuel producers. In addition, we have received grants from government agencies such as the Department of Energy and the United States Department of Agriculture. The research and development collaboration agreements typically provide us with multiple revenue streams, which may include upfront, non-refundable fees for licensing certain of our technologies, fees for research and development activities, and contingent milestone payments upon achievement of contractual criteria.

*Technology License Fees.* For collaboration agreements in which we have continuing involvement, license fees are recognized on a straight-line basis over the term of the arrangement. Licensing fees are non-refundable and not subject to future performance.

*Government Grants.* We receive payments from government entities in the form of government grants. Government grants generally provide us with cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period, as well as an allocated portion of our overhead expenses. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that substantially all conditions under which the government grants were provided have been met and we only have perfunctory obligations outstanding.

*Research and Development Fees.* Generally, fees for research and development activities are recognized as the services are performed over the performance period, as specified in the respective agreements. Certain of our collaboration agreements require us to deliver research data by specific dates and that the collective program plan will result in reaching specific crop characteristics by certain dates. For such arrangements, we recognize revenues based on the approximate percentage of completion of services under the agreement, but the revenue recognized cannot exceed the payments that have accrued to us to date under the agreement. The



research and development period is estimated at the inception of each agreement and is periodically evaluated.

*Milestone Payments.* Fees that are contingent upon achievement of substantive performance milestones at inception of the agreement are recognized based on the achievement of the milestone, as defined in the respective agreements.

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We recognize deferred revenue to the extent that cash received under the collaboration agreement is in excess of the revenues recognized related to the agreement since the work under the agreement has not yet been performed at the time of cash receipt.

In April 2002, we entered into a multi-year discovery and development collaboration with Monsanto Company, focused on applying genomics technologies to identify genes that provide improvements in corn, soybean and certain row crops. Pursuant to this agreement, Monsanto licensed rights to a portion of our trait discovery pipeline in certain other row crops in exchange for license payments over several years. Monsanto also funded a research program with us. Substantially all of our revenues through December 31, 2007 were earned through this agreement. The research and collaboration portion of the agreement expired in April 2007. However, the license portion of the agreement entitles us to royalties for any products that Monsanto commercializes using our technology licensed under the agreement. In 2010, we and Monsanto agreed to amend the agreement. The amendment included an additional license fee pertaining to an expansion of the license grant. In connection with the collaboration agreement, Monsanto also purchased 3,333,333 shares of our Series E Preferred Stock.

In December 2007, we entered into a development and license agreement with Campbell Soup Company, or Campbell. The agreement provided that we would receive \$7.5 million in payments from Campbell over a five-year period provided milestones were met. In addition, the agreement provided that we would be entitled to receive a royalty based on the gross sales of crop varieties created under the agreement. We recognized revenue of \$1.0 million, \$1.2 million, \$1.9 million and \$1.7 million under this agreement in the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011, respectively.

We earn research funding revenues from several agreements with the Department of Energy, or the DOE, the USDA, and several leading biofuel producers whereby we perform research activities and receive revenues that partially reimburse our expenses incurred. Under such grants and agreements, we retain a proprietary interest in the products and technology we develop. These expense reimbursements primarily consist of direct expense sharing arrangements. We recorded revenue related to these grants of approximately \$2.0 million, \$0.9 million, \$2.8 million and \$3.1 million in the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011 respectively. The cumulative remaining amount to be claimed through December 2012 for all grants outstanding as of August 31, 2011 is approximately \$4.5 million.

On December 16, 2008, we and a major agro-chemical company entered into a software license and collaboration agreement pursuant to which we provide software, software development and customer support for certain research application-based software. The agreement was structured into three phases and under the agreement, we are entitled to receive \$1.5 million in payments over an approximate 4.5 year period. The software delivered is comprised of multiple elements, which include software, installation, training, customization of software, and software support. Software support is considered post-contract customer support, or PCS. We recognize revenues equal to the amount of expense recognized as services are rendered until the date that the PCS is the only undelivered element. Beginning on such date, the unrecognized revenue under the agreement will be recognized over the remaining PCS period. We recognized revenue and an equal amount of expenses totaling zero, \$0.2 million, \$0.3 million and \$0.2 million under this agreement in the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011, respectively.

For the fiscal year ended August 31, 2010, Campbell Soup Company, USAID and ARPA-E represented 28.5%, 13.5% and 12.7% of our revenues, respectively. For the fiscal year ended August 31, 2011, Campbell Soup Company, Amyris Biotechnologies, Inc., ARPA-E and USAID represented 25.4%, 20.9%, 20.5% and 16.6% of our revenues, respectively.

*Convertible Notes*

In August 2011, we completed the sale of \$11,425,232 aggregate principal amount of non-interest bearing convertible subordinated notes, or the Convertible Notes, to nine existing investors in

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the Company in a private placement, as more fully described in *Liquidity and Capital Resources*. In connection with our review of the accounting treatment of the Convertible Notes, we have identified the following embedded derivatives under Accounting Standards Codification (ASC) 815, Derivatives and Hedging, that would be subject to bifurcation and liability accounting:

- i) automatic conversion of the Convertible Notes to common stock at a 20% discount to the initial public offering price,
- ii) automatic conversion of the Convertible Notes to a combination of convertible preferred stock and liability-classified derivative common stock warrants if an initial public offering is not consummated within six months of the issuance date of the Convertible Notes, and
- iii) repayment of an amount equal to two times the outstanding principal amount of the Convertible Notes, if prior to the automatic conversion of the Convertible Notes, a change of control transaction is consummated.

Until such time as the conversion features are triggered, we will account for the Convertible Notes and various embedded derivatives in accordance with ASC 825-10, the Fair Value Option for Financial Liabilities, whereby we will initially and subsequently measure this financial instrument in its entirety at fair value, with the changes in fair value recorded each quarterly reporting period in other income/expense.

In connection with the issuance of the Convertible Notes, so long as any investors who held existing warrants to purchase shares of our common stock in connection with the original issuances of the Company Series F and G preferred stock purchased at least their respective full pro rata portion of the Convertible Notes being offered, the termination provisions of such investors existing warrants were amended such that those warrants will no longer expire upon a qualified initial public offering.

Such existing warrants are accounted for as liabilities and marked to market at each quarterly reporting period in other income/expense until the earlier of the exercise or expiration of the warrants as they are not considered indexed to our common stock. We have calculated the fair value of the modified warrants immediately prior to and subsequent to the modification and determined that the incremental increase in the fair value of these liability classified warrants associated with this modification was \$9.6 million. Given that the modification occurred in conjunction with the issuance of the Convertible Notes, the incremental increase in fair value associated with the modified warrants and the initial fair value of the Convertible Notes compared to the \$11.4 million of the proceeds received, was recognized as other expense in our statement of operations. Accordingly, for the quarter and year ended August 31, 2011, we recorded other expense of \$9.6 million related to the warrant modification and additional income/expense of \$2.2 million recognizing the difference between the \$11.4 million proceeds received and the fair value of the Convertible Notes.

### *Stock-based Compensation*

We account for stock-based awards granted to employees and directors by recording compensation expense based on the awards grant date estimated fair values. Stock options or warrants granted to our non-employees are re-measured as they vest. The fair value and the resulting change in value, if any, is recognized in our consolidated statements of operations during the period the related services are rendered. We expect that our expense related to stock-based compensation will increase over time.

We estimate the fair value of our stock-based awards as of the date of grant using Black-Scholes option-pricing model. Determining the fair value of stock-based awards under this model requires judgment, including estimating the value per share of our common stock adjusted for our status as a private company, estimated volatility, expected term

of the awards, estimated dividend yield and the risk-free interest rate. The assumptions used in calculating the fair value of stock-based awards represent our best estimates, based on management's judgment and subjective future expectations. These estimates involve inherent uncertainties. If any of the assumptions used in the

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model change significantly, stock-based compensation recorded for future awards may differ materially from that recorded for awards granted previously.

The determination of the estimated value per share of our common stock is discussed below. We use the historical volatility of a group of comparative companies as an estimate for our estimated volatility. For purposes of determining the expected term of the awards in the absence of sufficient historical data relating to stock-option exercises for our company, we apply a simplified approach in which the expected term of an award is presumed to be the midpoint between the vesting date and the expiration date of the award. We base the risk-free rate used in the model on the United States Treasury zero coupon issues with remaining terms similar to the expected term of the stock options. Our estimated dividend yield is zero, as we have not and do not currently intend to declare dividends in the foreseeable future.

Once we have determined the estimated fair value of our employee stock-based awards, we recognize the portion of that value that corresponds to the portion of the award that is ultimately expected to vest, taking estimated forfeitures into account. This amount is recognized as an expense over the vesting period of the award using the straight-line method. We estimate forfeitures based upon our historical experience and, at each period, review the estimated forfeiture rate and make changes as factors affecting the forfeiture rate calculations and assumptions change.

Information related to our stock-based compensation activity, including weighted average grant date fair values and associated Black-Scholes option-pricing model assumptions related to employee stock options, is as follows:

	<b>Year Ended, December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>2011</b>
Stock options granted (in thousands)	996	94	972	1,635
Weighted average exercise price	\$2.25	\$2.25	\$2.25	\$3.92
Weighted average grant date fair value per share of stock options granted	\$1.59	\$1.57	\$1.51	\$1.65
Weighted average Black-Scholes model assumptions:				
Weighted average grant date fair value of common stock	\$2.17	\$2.16	\$2.32	\$3.99
Estimated volatility	85%	85%	70%	70%-78%
Estimated dividend yield	0%	0%	0%	0%
Expected term (years)	6.25	6.25	6.25	6.08-6.46%
Risk-free rates	1.92%-3.41%	2.10%-3.18%	2.29%-2.69%	1.48%-2.44%

In 2006, we granted a warrant to purchase 400,000 shares of our common stock at an exercise price of \$10 per share to The Samuel Roberts Noble Foundation, Inc. Pursuant to the original terms of the warrant, the warrant vests in four equal installments on each of May 2009, May 2011, May 2013 and May 2015 and was to remain exercisable for a period of two years from the respective vesting date. On June 20, 2011, we agreed to amend this warrant such that the warrant will remain exercisable until the earliest of a period of five years from the respective vesting date, or May 18, 2017. These warrants are accounted for at fair value and re-measured until vested. The fair value, including the resulting change in value as a result of re-measurement is recognized as research and development expense including

a modification charge of approximately \$0.5 million.

In 2007, we granted a warrant to purchase 200,000 shares of our common stock at an exercise price of \$10 per share to The Texas A&M University System. The warrant vests in various installments based on achievement of certain research and commercialization milestones and expires in August 2017. These warrants are accounted for at fair value and remeasured until the vesting targets are met. The fair value, including the resulting change in value as a result of re-measurement is recognized as research and development expense. No warrants had vested under this arrangement as of August 31, 2011.

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Our stock-based compensation expense, including employee awards and non-employee stock options and equity classified warrants, is as follows (in thousands):

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Year Ended August 31, 2011</b>
Research and development	\$ 467	\$ 345	\$ 409	\$ 1,895
Selling, general and administrative	705	737	891	815
Total stock-based compensation expense	\$ 1,172	\$ 1,082	\$ 1,300	\$ 2,710

**Significant Factors, Assumptions and Methodologies Used in Determining Fair Value of Common Stock**

We estimated the fair value of our common stock utilizing methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, or the AICPA Practice Aid.

Given the absence of public market for our common stock, the fair values of our common stock underlying stock option grants were estimated by our board of directors, which intended all stock options granted to be exercisable at a price per share not less than the per share fair market value of our common stock underlying those options on the date of grant. To assist our board of directors in this determination and in order to set the exercise price of each stock option grant, our management informed them of the most recent available valuation analysis prior to the dates of grant.

In these valuations, we first estimated enterprise value and then allocated this value to the underlying classes of equity. In estimating the enterprise value, we used a combination of an income approach, which incorporated a discounted cash flow valuation, and a market approach. To allocate the enterprise value to the underlying classes of equity for all valuations through February 28, 2011, we used the option-pricing method as an initial public offering was not anticipated in the near term. The allocation was performed because the convertible preferred stockholders are entitled to certain preferences over common stockholders, including noncumulative dividends and liquidation preferences, which resulted in more of the enterprise value being allocated to the convertible preferred stockholders than common stockholders. The allocation model also considered time until liquidity event, risk-free rate, expected volatility and adjustment for the lack of marketability of our common stock.

In April 2011, our board of directors approved plans to move forward with an initial public offering of our common stock. Accordingly, beginning with the May 31, 2011 common stock valuation, we have used a probability-weighted expected return method to allocate our enterprise value to the underlying classes of equity. This probability-weighted expected return method included the following steps:

We estimated the timing and likelihood of an IPO liquidity event and continuing as a private company.

For the IPO scenario, we estimated our common stock value based in part on information provided by our underwriters as to their view of the possible estimated initial public offering price range for a potential near term IPO offering.



For the continuing as a private company scenario, we determined our enterprise value using a combination of an income approach and a market approach. We determined the appropriate allocation of value to the common stockholders based on the rights and preferences of each class and series of our stock at that time.

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We then multiplied the value of our common stock under each scenario by an estimated relative probability of each scenario occurring determined by our management and board of directors; and

We then calculated the probability-weighted value per share of our common stock.

In order to determine the fair value of our common stock, we then applied a discount for lack of marketability of our common stock to the value derived from the probability-weighted expected return method.

The most recent valuations were performed as of December 31, 2008, August 31, 2009, August 31, 2010, February 28, 2011, May 31, 2011 and August 31, 2011. The valuations as of August 31, 2010, February 28, 2011, May 31, 2011 and August 31, 2011 were performed with the assistance of a third-party valuation firm. Prior to each grant date, the board of directors considered the most recent valuation along with other relevant objective and subjective factors it deemed important in each valuation, exercising significant judgment and reflecting the board of directors' best estimates at the time. These factors included:

the nature and history of our business;

our operating and financial performance;

general economic conditions and the specific outlook for our industry;

the lack of liquidity for our common stock;

the market price of companies engaged in the same or similar businesses with equity securities that are publicly traded;

the differences between the terms of our preferred and common stock related to liquidation preferences, conversion rights, dividend rights, voting rights and other features; and

the likelihood of achieving different liquidity events or remaining a private company.

We believe that we have used reasonable methodologies, approaches and assumptions in determining the fair value of our common stock. If we had made different assumptions and estimates, the amount of our recognized and to be recognized stock-based compensation expense could have been materially different.

The table below sets forth information regarding stock options for grants between January 1, 2009 and August 31, 2011:

<b>Grants by month</b>	<b>Number of Shares</b>	<b>Exercise Price</b>	<b>Estimated Fair Value of Common Stock</b>	<b>Intrinsic Value per Share</b>
March 2009	82,000	\$ 2.25	\$ 2.17	
June 2009	12,000	\$ 2.25	\$ 2.17	
September 2009	234,000	\$ 2.25	\$ 2.16	
December 2009	17,000	\$ 2.25	\$ 2.24	
June 2010	721,000	\$ 2.25	\$ 2.37	\$ 0.12

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October 2010	41,000	\$ 2.25	\$ 2.46	\$ 0.21
December 2010	554,500	\$ 2.44	\$ 2.48	\$ 0.04
January 2011	280,000	\$ 2.44	\$ 2.50	\$ 0.06
June 2011	500,000	\$ 5.59	\$ 5.72	\$ 0.13
July 2011	259,599	\$ 5.72	\$ 5.72	

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The table below sets forth the estimated fair value of our common stock at each valuation date since December 31, 2008:

<b>Date</b>	<b>Estimated Fair Value of Common Stock</b>
December 31, 2008	\$ 2.17
August 31, 2009	\$ 2.16
August 31, 2010	\$ 2.44
February 28, 2011	\$ 2.52
May 31, 2011	\$ 5.72
August 31, 2011	\$ 5.23

*Valuation as of December 31, 2008*

We estimated the fair market value of \$2.17 per share of our common stock as of December 31, 2008 using an option-pricing method. We first estimated our enterprise value of \$210 million and then allocated this value to the underlying classes of equity using the option-pricing method as outlined in the AICPA Practice Aid. In estimating the enterprise value, we used a combination of an income approach which incorporated a discounted cash flow valuation, and a market approach. To allocate the enterprise value to the underlying classes of equity, we used the option-pricing method. Within the allocation model, we estimated a time until liquidity event of 3 years, a risk-free rate of 1.34%, a volatility input of 85% and a 25% adjustment for the lack of marketability of our common stock.

*Valuation as of August 31, 2009*

We estimated the fair market value of \$2.16 per share of our common stock as of August 31, 2009 using an option-pricing method. We first estimated our enterprise value of \$209 million and then allocated this value to the underlying classes of equity. In estimating the enterprise value, we used a combination of an income approach, which incorporated a discounted cash flow valuation and a market approach. To allocate the enterprise value to the underlying classes of equity, we used the option-pricing method. Within the allocation model, we estimated a time until liquidity event of 3 years, a risk-free rate of 1.49% a volatility input of 85% and a 25% adjustment for the lack of marketability of our common stock.

*Valuation as of August 31, 2010*

We obtained the assistance of a third-party valuation firm in estimating the fair market value of our common stock as of August 31, 2010 using an option-pricing method. We first estimated our enterprise value of \$264 million and then used the option-pricing method to allocate the estimated enterprise value between common and preferred stockholders. In estimating the enterprise value, we used a combination of an income approach, which incorporated a discounted cash flow valuation and a market approach. Within the allocation model, we used a volatility input of 70% based on the historically observed volatilities of selected public guideline companies and estimated a time until liquidity event of 3 years. Applying an appropriate risk free interest rate of 0.72% and a 25% adjustment for the lack of marketability of our common stock, we estimated a fair market value at August 31, 2010 of \$2.44 per share of our common stock.

*Valuation as of February 28, 2011*

We obtained the assistance of a third-party valuation firm in estimating the fair market value of \$2.52 per share of our common stock as of February 28, 2011 using an option-pricing method. We first estimated our enterprise value of \$270 million and then allocated this value between common and preferred stockholders using the option-pricing method. In estimating the enterprise value, we used a combination of an income approach, which incorporated a discounted cash flow valuation and a market approach. Within the allocation model, we estimated a time until liquidity event of 2.5 years, a risk-free

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rate of 0.94% a volatility input of 70% based on the historically observed volatilities of selected public guideline companies, and a 25% adjustment for the lack of marketability of our common stock.

As of February 28, 2011, we were considering a variety of financing alternatives, including financing from existing investors, debt financing and an initial public offering. As of February 28, 2011, an initial public offering was not anticipated in the near term.

*Valuation as of May 31, 2011*

We obtained the assistance of a third-party valuation firm in estimating the fair market value of our common stock as of May 31, 2011. In April 2011, our board of directors approved plans to move forward with an initial public offering of our common stock. This determination was based in part on macroeconomic events and the anticipated success of our Brazilian sweet sorghum cultivation. Our Brazilian sweet sorghum trials consisted of planting sweet sorghum in November and December and, after waiting for 90 to 120 days until the crop matured, harvesting the crop, transporting it to the mill, crushing the biomass and fermenting the resulting juice into ethanol, with the remaining bagasse or stalks being burned for production of electricity. By April 2011 we had reasonable evidence to conclude that the crop would mature into healthy biomass. The only steps remaining at that point involved industrial processing. We had previously achieved positive fermentation results with sweet sorghum at a laboratory scale. Consequently, we had reason to assume that the larger scale industrial processing and fermentation of the crop would be successful. In addition to the large scale industrial processing, we also needed to obtain the necessary governmental variety registrations before we could make commercial deliveries of our sweet sorghum seeds that we are marketing to potential customers in Brazil for planting in the 2011-2012 growing season, which we had not received as of May 31, 2011. We have since received such necessary governmental variety registrations. Because our sweet sorghum seeds do not contain biotech traits, they are not subject to a lengthy government regulatory process that can take up to three years. Accordingly, for purposes of the May 31, 2011 common stock valuation, we used a probability-weighted expected return method to allocate our enterprise value to the underlying classes of equity. This probability-weighted expected return method considered a 70% probability of an IPO scenario and a 30% probability of continuing as a private company scenario. For the IPO scenario, we estimated our common stock value based in part on initial price indications provided by the investment banking firms we were considering as underwriters of a potential initial public offering as to their view of an estimated price range for a near term initial public offering. This initial price indication was received prior to engaging the underwriters for this offering. For the private company scenario, we first estimated our enterprise equity value to be \$446 million and then allocated this value to the underlying classes of equity. In estimating the enterprise value, we used a combination of an income approach, which incorporated a discounted cash flow valuation, and a market approach. We then applied a 20% discount for lack of marketability to the value derived from the probability-weighted expected return method to arrive at an estimated fair market value of \$5.72 per share of our common stock as of May 31, 2011. The increase in our enterprise equity value from \$270 million as of February 28, 2011 to \$446 million as of May 31, 2011 was primarily driven by increased long-term revenue and cash flow projections as compared to our prior forecasts. The higher projections were primarily driven by increasing our long-term growth plan following a more favorable macroeconomic environment for biofuels and anticipated higher demand for alternatives to petroleum-based products due to higher oil prices, as evidenced by a favorable IPO market for renewable fuel offerings. Additionally, we concluded our first commercial-scale trials of sweet sorghum in Brazil near the end of May and had received results indicating that the trials were successful. We view the successful completion of our sweet sorghum cultivation in Brazil in May 2011 as a significant driver of near term value. In addition, the filing of our registration statement with the SEC on May 23, 2011 increased the likelihood of a near term liquidity event, resulting in an increase in our common stock value due to a lower lack of marketability discount as compared to the February 28, 2011 valuation.

**Table of Contents*****Valuation as of August 31, 2011***

We obtained the assistance of a third-party valuation firm in estimating the fair market value of our common stock as of August 31, 2011. For purposes of this common stock valuation, we used a probability-weighted expected return method to allocate our enterprise value to the underlying classes of equity. This probability-weighted expected return method considered a 60% probability of a near term IPO and a 40% probability of a private company scenario using the income and market approach. For the IPO scenario, we estimated our common stock value based in part on an updated price range provided by the investment banking firms we are using as underwriters for this offering. The expected IPO price range was lower than that used in the valuation as of May 31, 2011 based primarily on increased market volatility in the months preceding the valuation date. For the private company scenario, we first estimated our enterprise equity value to be \$454 million and then allocated this value to the underlying classes of equity. In estimating the enterprise value, we used a combination of an income approach, which incorporated a discounted cash flow valuation, and a market approach. We then applied a 20% discount for lack of marketability to the value derived from the probability-weighted expected return method to arrive at an estimated fair market value of \$5.23 per share of our common stock as of August 31, 2011. The slight increase in estimated enterprise equity value to \$454 million as of August 31, 2011 compared to \$446 million as of May 31, 2011 using the income and market approach was offset by the decrease in the IPO scenario value which was primarily driven by our view that an IPO in the near term was less likely than it was at the prior valuation date due to the volatility in the equity markets and the slow down of initial public offerings as well as our estimates of the IPO range.

***Option Grants in June and July 2011***

On June 23, 2011, our board of directors approved the grant of 500,000 stock options at an exercise price of \$5.59 per share. On July 20, 2011, our board of directors approved the grant of 259,599 stock options at an exercise price of \$5.72 per share. In order to estimate the fair value of our common stock for the purposes of establishing the exercise price, our board of directors considered an initial draft of the May 31, 2011 third-party valuation report that indicated an estimated fair value of our common stock of \$5.59 as of May 31, 2011. Subsequent to the grant date, the May 31, 2011 third-party valuation report was finalized, resulting in an estimated fair value of our common stock of \$5.72 as of May 31, 2011. As a result, for the financial reporting purpose of determining the estimated fair value of the options granted, we used this \$5.72 estimated fair value of our common stock as an input to the Black-Scholes option-pricing model for both the June and July grants.

***Fair Value of Warrants******Liability Classified Warrants to Purchase Common Stock***

We issued warrants to purchase our common stock in connection with the issuances of our Series F and Series G preferred stock. We have accounted for these warrants as liabilities as the warrants are not considered indexed to our common stock. We estimate the fair value of our liability classified warrants to purchase common stock using an option-pricing model, which incorporates several estimates and assumptions that are subject to significant management judgment. Changes in fair value at each period-end are recorded in other income (expense) in our consolidated statement of operations until the earlier of the exercise or expiration of the warrants, or the completion of this offering.

Warrants to purchase the following shares of common stock were outstanding as follows:

**As of**

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<b>Series</b>	<b>2009</b>	<b>August 31, 2010</b>	<b>2011</b>	<b>Exercise Price</b>
Series F	2,307,697	2,307,697	2,307,697	\$ 6.50
Series G		3,076,923	3,076,923	\$ 6.50

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In connection with the issuance of the Convertible Notes, 1,619,922 of the warrants issued in connection with the Series F Preferred Stock offering and all of the warrants issued in connection with the Series G Preferred Stock offering were amended such that they no longer expire upon the completion of a qualified initial public offering. The expense associated with the modification was \$9.6 million.

Upon the completion of a qualified initial public offering, the 687,775 of the warrants to purchase common stock issued in connection with the Series F Preferred Stock offering that were not amended will either expire or be exercised for shares of common stock, and at that time, we will no longer record any changes in the fair value for those warrants in our consolidated statement of operations.

The fair value of the Series F warrants was calculated using the following assumptions:

<b>Non-Modified F warrants</b>	<b>As of August 31,</b>		
	<b>2009</b>	<b>2010</b>	<b>2011</b>
Expected term (in years)	6.0	5.0	1.9
Expected volatility	85%	90%	86%
Risk free interest rate	3.21%	1.47%	0.41%
Expected dividend yield	0%	0%	0%

<b>Modified F warrants</b>	<b>August 31,</b>		<b>Pre-</b>	<b>Post-</b>	<b>August 31,</b>
	<b>2009</b>	<b>2010</b>	<b>Modification</b>	<b>Modification</b>	
			<b>8/1/2011</b>	<b>8/1/2011</b>	<b>2011</b>
Expected term (in years)	6.0	5.0	1.6	4.1	4.0
Expected volatility	85%	90%	84%	97%	98%
Risk free interest rate	3.21%	1.47%	0.51%	1.32%	0.96%
Expected dividend yield	0%	0%	0%	0%	0%

	<b>Number of shares</b>	<b>August 31,</b>		<b>Pre-</b>	<b>Post-</b>	<b>August 31,</b>
		<b>2009</b>	<b>2010</b>	<b>Modification</b>	<b>Modification</b>	
				<b>8/1/2011</b>	<b>8/1/2011</b>	<b>2011</b>
<b>Estimated fair value (in thousands)</b>						
F warrants: modified	1,619,922	\$ 2,057	\$ 2,102	\$ 2,942	\$ 6,128	\$ 5,454
F warrants: non-modified	687,775	874	892			1,229
<b>Total F warrants</b>	<b>2,307,697</b>	<b>\$ 2,931</b>	<b>\$ 2,994</b>	<b>\$ 2,942</b>	<b>\$ 6,128</b>	<b>\$ 6,683</b>

The fair value of the Series G warrants was calculated using the following assumptions:

	<b>August 31,</b>	<b>Pre-</b>	<b>Post-</b>	<b>August 31,</b>
		<b>Modification</b>	<b>Modification</b>	
		<b>8/1/2011</b>	<b>8/1/2011</b>	

	2010	8/1/2011	8/1/2011	2011
Expected term (in years)	9.8	3.0	8.9	8.8
Expected volatility	85%	74%	66%	66%
Risk free interest rate	2.70%	0.94%	2.77%	2.23%
Expected dividend yield	0%	0%	0%	0%
Estimated fair value (in thousands)	\$5,584	5,759	12,207	\$10,767

***Liability Classified Warrants to Purchase Convertible Preferred Stock***

We have issued warrants to purchase our convertible preferred stock in connection with certain financing arrangements. We have accounted for these warrants as liabilities because the underlying shares of convertible preferred stock are redeemable in the case of a deemed liquidation. We estimate the fair value of our convertible preferred stock warrants using an option-pricing model, which incorporates several estimates and assumptions that are subject to significant management judgment. Changes in fair

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value at each period end are recorded in other income (expense) in our consolidated statement of operations until the earlier of the exercise or expiration of the warrants, or the completion of this offering.

Upon the completion of this offering, our warrants to purchase convertible preferred stock will convert to warrants to purchase common stock, and at that time, we will no longer record any changes in the fair value of these liabilities in our statement of operations.

### ***Seed Inventory***

Seed inventory costs are computed on a first-in, first-out basis and valued at the lower of cost or market and are included as cost of product sales. Due to the early stage of commercialization of our seed products and with no established market for our seed products, a full valuation reserve has been recorded against our inventory.

### ***Income Taxes***

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. We record a valuation allowance when it is more likely than not that some of our net deferred tax assets will not be realized. In determining the need for valuation allowances, we consider our projected future taxable income and the availability of tax planning strategies. We have recorded a full valuation allowance to reduce our net deferred tax assets to zero except to the extent of federal credits refundable in 2009 and 2010 because we have determined that it is not more likely than not that any of our net deferred tax assets will be realized. If in the future we determine that we will be able to realize any of our net deferred tax assets, we will make an adjustment to the allowance, which would increase our income in the period that the determination is made.

We operate in various tax jurisdictions and are subject to audit by various tax authorities. We recognize the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

### ***Impairment of Long-Lived Assets***

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Our long-lived assets comprise a single asset group for evaluation purposes. We evaluate whether an impairment indicator occurs primarily based on progress achieved against our business plans. To the extent that an impairment indicator has occurred, recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. For all periods presented herein, no impairment indicators have occurred and therefore no impairment charges have been recognized.

**Table of Contents****Results of Operations**

The following table sets forth our consolidated results of operations for the periods shown:

	Year Ended December 31, 2008	Eight Months		Year Ended August 31, 2011
		Ended August 31, 2009	Year Ended August 31, 2010	
	(In thousands)			
Revenues				
Product sales	\$ 64	\$ 98	\$ 288	\$ 116
Collaborative research and government grants	3,880	2,328	6,326	6,500
Total revenue	3,944	2,426	6,614	6,616
Cost and operating expenses				
Cost of product sales	3,777	2,690	2,946	2,492
Research and development	20,309	12,397	16,697	19,014
Selling, general and administrative	8,784	6,645	9,207	10,008
Total cost and operating expenses	32,870	21,732	28,850	31,514
Loss from operations	(28,926)	(19,306)	(22,236)	(24,898)
Interest expense		(5)	(153)	(456)
Interest income	2,001	243	23	7
Other income (expense)		161	(152)	(11,020)
Loss before income taxes	(26,925)	(18,907)	(22,518)	(36,367)
Income tax benefit (expense)	148	211	(65)	31
Net loss	\$ (26,777)	\$ (18,696)	\$ (22,583)	\$ (36,336)

**Comparison of Year Ended August 31, 2010 and 2011***Revenues*

	Year Ended August 31,		Change
	2010	2011	
	(In thousands)		
Product sales	\$ 288	\$ 116	\$ (172)

Collaborative research and government grants	6,326	6,500	174
Total revenue	\$ 6,614	\$ 6,616	\$ 2

Our total revenues were \$6.6 million in the year ended August 31, 2011 and 2010. In 2011, revenue for collaborative research and government grants increased by \$0.2 million which was offset by a \$0.2 million decrease in product sales. Product sales in the years ended August 31, 2011 and 2010 reflect seed sales in the U.S. and were primarily related to our relationships with our collaborators. The decline in product sales in the year ended August 31, 2011 was primarily a result of fluctuations in the amount of seed testing performed by our U.S. collaborators.

*Cost and Operating Expenses*

	<b>Year Ended</b>		<b>Change</b>
	<b>2010</b>	<b>2011</b>	
		<b>August 31,</b>	
		<b>(In thousands)</b>	
Cost of product sales	\$ 2,946	\$ 2,492	\$ (454)
Research and development	16,697	19,014	2,317
Selling, general and administrative	9,207	10,008	801
Total cost and operating expenses	\$ 28,850	\$ 31,514	\$ 2,664

**Table of Contents***Cost of Product Sales*

Our cost of product sales decreased by \$0.5 million to \$2.5 million in the year ended August 31, 2011 compared to the year ended August 31, 2010. Cost of grower contracts and associated agricultural supplies decreased by \$0.5 million as we reduced our production and related costs of production for our switchgrass product during 2011.

*Research and Development Expenses*

Our research and development expense increased by \$2.3 million for the year ended August 31, 2011 compared to the year ended August 31, 2010. Of the \$2.3 million increase, \$1.5 million was related to the mark to market valuation of our warrants and stock option expense which resulted from an increase in value of our common stock for the comparative periods and a \$0.4 million increase in personnel expense. The remaining increase is attributable to an increase in our licensing fees by \$0.1 million and an increase in our consulting and travel expense by \$0.3 million.

*Selling, General and Administrative Expenses*

Our selling, general and administrative expenses increased by \$0.8 million to \$10.0 million in the year ended August 31, 2011 compared to the prior year. This increase is attributable to an increase in legal and accounting fees of \$0.8 million resulting from increased expense for our audits, interim reviews and other accounting, administrative and legal related expenses.

*Interest Expense, Interest Income and Other Income (Expense)*

	<b>Year Ended August 31,</b>		
	<b>2010</b>	<b>2011</b>	<b>Change</b>
	<b>(In thousands)</b>		
Interest expense	\$ (153)	\$ (456)	\$ (303)
Interest income	23	7	(16)
Other income (expense)	(152)	(11,020)	(10,868)
Total	\$ (282)	\$ (11,469)	\$ (11,187)

Interest expense, interest income and other income (expense) increased by \$11.2 million in the year ended August 31, 2011 compared to the prior year. The increase was primarily the result of a charge of \$9.6 million related to the modification of liability classified warrants and a charge of \$2.2 million upon issuance of the Convertible Notes, and higher interest expense of \$0.3 million partially offset by the fair value changes associated with our warrant valuations and Convertible Notes.

*Interest Expense*

Interest expense increased by \$0.3 million in the year ended August 31, 2011 compared to the prior year. The increase was primarily related to borrowings in February and August 2010 under our new Loan and Security Agreement with a commercial bank.

*Interest Income*

Interest income decreased by \$16,000 in the year ended August 31, 2011 compared to the prior year. The decrease was primarily the result of lower average cash invested balances.

*Other Income (Expense)*

Other income (expense) increased by \$10.9 million to \$11.0 million for the year ended August 31, 2011 compared to \$0.1 million for the year ended August 31, 2010. The increase is the result of a charge of \$9.6 million related to the modification of liability classified warrants and a charge

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of \$2.2 million upon issuance of the Convertible Notes. The remaining change was the result of the fair value changes associated with our warrant valuations and Convertible Notes.

***Comparison of Eight Months Ended August 31, 2009 and Year Ended August 31, 2010***

During 2009 we changed our fiscal year-end from December 31 to August 31 for financial reporting purposes. The change was effective for the eight-month period ended August 31, 2009. The discussion below compares the eight months ended August 31, 2009 to the twelve months ended August 31, 2010.

***Revenues***

	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Change</b>
	<b>(In thousands)</b>		
Product sales	\$ 98	\$ 288	\$ 190
Collaborative research and government grants	2,328	6,326	3,998
Total revenue	\$ 2,426	\$ 6,614	\$ 4,188

Our total revenues increased by \$4.2 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. Although the increase was largely due to non-comparable periods (twelve months in 2010 as compared to eight months in 2009), the period-to-period increase was also due to higher billings related to our collaborative research agreements of \$2.3 million and an increase in revenue for our grants including the two new government grants from USAID and ARPA-E, which in the aggregate contributed \$1.7 million to the 2010 period, and an increase of product sales of \$0.2 million.

***Cost and Operating Expenses***

	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Change</b>
	<b>(In thousands)</b>		
Cost of product sales	\$ 2,690	\$ 2,946	\$ 256
Research and development	12,397	16,697	4,300
Selling, general and administrative	6,645	9,207	2,562
Total cost and operating expenses	\$ 21,732	\$ 28,850	\$ 7,118



*Cost of Product Sales*

Our cost of product sales increased by \$0.3 million to \$2.9 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. The increase was due to non-comparable periods (twelve months in 2010 as compared to eight months in 2009). On a comparable period basis, our cost of product sales decreased because we decreased our production and related costs for our switchgrass products during 2010 as we determined we had produced adequate supply to meet existing demand at that time. This cost reduction was partially offset by higher production costs associated with our high biomass sorghum products in the United States during 2010.

*Research and Development Expenses*

Our research and development expenses increased by \$4.3 million to \$16.7 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. Personnel and related expense increased by \$2.2 million, external research and development expense increased by \$1.4 million, and depreciation expense increased by \$0.7 million for the full year ended August 31, 2010 as compared to the eight month period ended August 31, 2009. These increases were due to

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non-comparable periods (twelve months in 2010 as compared to eight months in 2009). On a comparable period basis, our research and development expenses decreased primarily as a result of a reduction of personnel in 2010 as compared to 2009 along with a reduction in associated external research and development activities, and reduced office expenses associate with less full time employees. There were 54 fulltime research and development employees at the end of fiscal year 2010 versus 63 at the end of fiscal year 2009.

*Selling, General and Administrative Expenses*

Our selling, general and administrative expenses increased by \$2.6 million to \$9.2 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. Personnel and related expenses including travel, office expense and depreciation increased by \$2.2 million and professional fees for legal, accounting and marketing increased by \$0.4 million for the full year ended August 31, 2010 as compared to the eight month period ended August 31, 2009. Although the increase was largely due to non-comparable periods (twelve months in 2010 as compared to eight months in 2009), the period-to-period increase was partially due to increased spending related to the start up of our operations in Brazil, and also higher administrative costs in support of our research and operations in Texas. On a comparable period basis, our selling, general and administrative expenses decreased as a result of a reduction of personnel in 2010 to 25 full time administrative employees as compared to 27 full time employees in 2009.

*Interest Expense, Interest Income and Other Income (Expense)*

	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010 (In thousands)</b>	<b>Change</b>
Interest expense	\$ (5)	\$ (153)	\$ (148)
Interest income	243	23	(220)
Other income (expense)	161	(152)	(313)
Total	\$ 399	\$ (282)	\$ (681)

Interest Expense, Interest Income and Other Income (Expense) increased by \$0.7 million to \$(0.3) million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. The increase in other (expense) was largely due to non-comparable periods (twelve months in 2010 as compared to eight months in 2009) and an increase in fair value of our warrants, by \$0.3 million, a decrease in interest income from cash investments \$0.2 million, and an increase in interest expense related to our debt financing during 2010 by \$0.1 million.

*Interest Expense*

Interest expense increased by \$0.1 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. The increase was primarily due to higher outstanding principal balances on our bank debt in 2010 as compared to 2009 primarily because we entered into a loan agreement with Silicon Valley Bank in 2010.

*Interest Income*

Interest income decreased by \$0.2 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. The decrease in interest income was primarily due to a more conservative investment of available cash, which more than offset the impact of the non-comparable periods.

*Other Income (Expense)*

Other income (expense) increased by \$0.3 million in the year ended August 31, 2010 compared to the eight months ended August 31, 2009. The increase was primarily due to higher expense related to the increase in the fair value of our warrants in fiscal 2010.

**Table of Contents*****Comparison of Year Ended December 31, 2008 and Eight Months Ended August 31, 2009***

During 2009 we changed our fiscal year-end from December 31 to August 31 for financial reporting purposes. The change was effective for the eight-month period ended August 31, 2009. The discussion below compares the year ended December 31, 2008 to the eight months ended August 31, 2009.

*Revenues*

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009 (In thousands)</b>	<b>Change</b>
Product sales	\$ 64	\$ 98	\$ 34
Collaborative research and government grants	3,880	2,328	(1,552)
Total revenue	\$ 3,944	\$ 2,426	\$ (1,518)

Our total revenues decreased by \$1.5 million to \$2.4 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. Although the decrease was largely due to non-comparable periods (eight months in 2009 as compared to twelve months in 2008), the period-to-period decrease was also due to lower revenue from our grants and collaborative agreements by \$1.3 million and the completion of one of our grants in August 2008, which resulted in \$0.2 million of reduced billings.

*Cost and Operating Expenses*

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009 (In thousands)</b>	<b>Change</b>
Cost of product sales	\$ 3,777	\$ 2,690	\$ (1,087)
Research and development	20,309	12,397	(7,912)
Selling, general and administrative	8,784	6,645	(2,139)
Total cost and operating expenses	\$ 32,870	\$ 21,732	\$ (11,138)

*Cost of Product Sales*

Our cost of product sales decreased by \$1.1 million to \$2.7 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. The decrease was due to non-comparable periods (eight months in 2009 as compared to twelve months in 2008). On a comparable period basis, expenses increased partially as a result of higher expense related to the operations of our seed facility in Amarillo, Texas, and increased capital expenditures

which increased depreciation expense by \$0.1 million.

*Research and Development Expenses*

Our research and development expenses decreased by \$7.9 million to \$12.4 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. The decrease was largely due to non-comparable periods (eight months in 2009 as compared to twelve months in 2008). Personnel and related expense decreased by \$5.3 million of which \$1.1 million related to the annual savings in personnel reductions that occurred in January 2009 as we transitioned our efforts from exploratory trait research to agronomy, plant breeding, and field research in support of our transition to a commercial seed business. Additionally, laboratory and agricultural supply expense decreased by \$1.5 million, and external research and development and licensing expense decreased by \$1.1 million.

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On a comparable period basis, our research and development expenses decreased primarily as a result of a reduction of personnel in 2009 as compared to 2008, along with reductions in expense for lab supplies and licensing fees. These reductions were partially offset by increases in external research and development and office expense in 2009 as compared to 2008. There were 63 fulltime research and development employees at the end of fiscal year 2009 versus 84 at the end of fiscal year 2008.

*Selling, General and Administrative Expenses*

Our selling, general and administrative expenses decreased by \$2.1 million to \$6.6 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. Personnel and related expenses including travel, office expense and depreciation decreased by \$1.1 million and professional fees for legal, accounting and marketing decreased by \$1.0 million. The lower selling, general and administrative expenses were primarily due to non-comparable periods (eight months in 2009 as compared to twelve months in 2008). On a comparable period basis, our selling, general and administrative expenses increased primarily as a result of an increase in personnel and related expense in 2009 as compared to 2008.

*Interest Expense, Interest Income and Other Income (Expense)*

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Change</b>
	<b>(In thousands)</b>		
Interest expense	\$	\$ (5)	\$ (5)
Interest income	2,001	243	(1,758)
Other income		161	161
Total	\$ 2,001	\$ 399	\$ (1,602)

Interest Expense, Interest Income and Other Income (Expense), increased by \$1.6 million to \$0.4 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. This was largely due to the \$1.8 million reduction of interest income earned on investments, which was offset by the \$0.2 million increase in other income due to the change in fair value of our warrants.

*Interest Expense*

Interest expense increased by \$5,000 in the eight months ended August 31, 2009 compared to the year ended December 31, 2008.

*Interest Income*

Interest income decreased by \$1.8 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. The decrease was primarily due to a more conservative investment of available cash and the impact of non-comparable periods (eight months in 2009 as compared to twelve months in 2008).

*Other Income*

Other income increased by \$0.2 million in the eight months ended August 31, 2009 compared to the year ended December 31, 2008. The increase in other income was due to the change in the fair value of our warrants.

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### **Liquidity and Capital Resources**

Since inception, we have funded our operations through the sale of preferred stock, warrants, Convertible Notes, collaborative research and government grant revenues, and borrowings under financing arrangements. As of August 31, 2011, our cash and cash equivalents totaled \$21.9 million.

Since our inception, we have incurred significant net losses, and, as of August 31, 2011, we had an accumulated deficit of \$212.7 million. We expect to incur additional losses related to the continued development and expansion of our business including research and development, seed production and operations, and sales and marketing. There is also no assurance that profitable operations will be achieved, or if achieved, can be sustained on a continued basis.

In 2010, we entered into a Loan and Security Agreement, or the Loan Agreement with Silicon Valley Bank. The Loan Agreement provides financing for qualified equipment purchases. We borrowed a total of \$7.0 million in two tranches at interest rates of Bank Prime plus 2.75% (6.75% as of August 31, 2011). Monthly principal repayments on the first tranche are \$75,000 per month through the maturity date of June 2013. Monthly principal repayments on the second tranche total \$111,000 per month through the maturity date of August 2013. Currently, we make monthly principal payments of approximately \$186,000 and interest payments of approximately \$26,000 per month based on the 6.75% borrowing rate. On September 14, 2011, we entered into an amended Loan Agreement with Silicon Valley Bank that provided for an additional \$3.5 million term loan consisting of (i) a \$2.5 million immediately available term loan advance and (ii) a \$1.0 million term loan advance available upon satisfaction of additional term loan advance conditions. The interest rate for the amended term loan is a fixed rate which is determined based on the Bank Prime Rate at the time of each loan advance. We will pay interest only until April 1, 2012 and then repay principal plus interest in equal installments over 36 months commencing April 1, 2012. The Loan Agreement is secured by all goods, accounts, equipment, inventory, contract rights or rights to the payment of money, leases, license agreements, franchise agreements, general intangibles (excluding any intellectual property, other than related account receivables and proceeds from intellectual property), commercial tort claims, documents, instruments, chattel paper, cash, deposit accounts, fixtures, letters of credit rights, securities and all other investment property, supporting obligations and financial assets. The Loan Agreement requires compliance with covenants that require certain reporting obligations, the maintenance of \$3.0 million in restricted cash and a minimum quick ratio, which is defined in the Loan Agreement as a ratio of consolidated, unrestricted cash and cash equivalents, net billed accounts receivable and investments with maturities of fewer than 12 months determined according to GAAP together with the aggregate balance of a cash collateral account (with a minimum balance of \$1.5 million) to current liabilities, excluding the Convertible Notes, of at least 1.50 to 1.0. At August 31, 2011, the quick ratio was 2.59 and we were in compliance with all covenants in the Loan Agreement.

In August 2011, we completed the sale of \$11,425,232 aggregate principal amount of non-interest bearing convertible subordinated notes, or the Convertible Notes, to nine existing investors in the Company in a private placement. Purchasers of the Convertible Notes included holders of more than 5% of our outstanding capital stock and affiliates of certain of our directors. The Convertible Notes are convertible, subject to the terms and conditions set forth therein, into shares of our common stock upon the consummation of a qualified initial public offering of our common stock at a price per share equal to a 20% discount from the initial public offering price. In the event that we do not consummate a qualified initial public offering on or prior to the six month anniversary of the issuance date of the Convertible Notes, (i) the Convertible Notes will automatically convert, subject to the terms and conditions set forth therein, into shares of our Series G Convertible Preferred Stock, at a conversion price per share equal to \$6.50 and (ii) the holders will receive warrants exercisable for that number of shares of our common stock, at an initial exercise price of \$6.50 per share, equal to the number of shares of Series G Convertible Preferred Stock into which such holder's Convertible Notes convert. Additionally, so long as any investors who held warrants to purchase shares of our common stock issued in connection with the purchase of the our Series F Preferred Stock or Series G Preferred Stock



purchased at least their respective full pro rata portion of the Convertible Notes being

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offered, we agreed to amend the termination provisions of such investors existing warrants such that the warrants will no longer expire upon an initial public offering.

We believe that our existing cash and cash equivalents, the net proceeds of the Convertible Note offering, and the net proceeds of this offering will provide adequate resources to fund our operations, including research and development expenses, planned capital expenditures and working capital requirements for at least the next 18 months. In order to fund our operations beyond that time, we may need to raise additional funds through the issuance of equity, equity-related or debt securities or through obtaining credit from government or financial institutions. We cannot be certain that additional funds will be available to us on favorable terms when required, or at all.

**Capital Expenditures**

For the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011, we used \$3.8 million, \$1.6 million, \$2.1 million, and \$0.5 million, respectively, in cash to fund capital expenditures. We currently anticipate making aggregate capital expenditures between \$1.0 million and \$2.5 million for the year ended August 31, 2012.

The following table sets forth a summary of our cash flows for the periods indicated:

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010      2011</b>	
	<b>(In thousands)</b>			
Net cash used in operating activities	\$ (24,899)	\$ (13,508)	\$ (18,846)	\$ (20,007)
Net cash (used in) provided by investing activities	23,433	16,329	10,372	(436)
Net cash provided by (used in) financing activities	(252)	(6)	26,569	9,326

**Cash Flows from Operating Activities**

For all periods presented, we have incurred net losses and net cash used in operating activities. The net cash used in operating activities primarily resulted from significant research and development expenses and seed production costs to develop and produce our improved seeds and traits. Such expenses and costs have exceeded our revenues, which have primarily been generated from collaborative research and government grants and, to a much lesser extent, product sales.

Net cash outflows of \$20.0 million from operating activities during the year ended August 31, 2011 primarily resulted from our net loss of \$36.3 million and an increase of \$2.8 million in deferred costs associated with our initial public offering. These were partially offset by an increase of \$3.2 million in our accounts payable and \$0.2 million in deferred revenue. These uses of cash were partially offset by non-cash items, including \$11.0 million associated with the modification and changes in fair value of warrants and debt, \$2.7 million of stock based compensation expense and \$2.1 million of depreciation expense.

Net cash outflows of \$18.8 million from operating activities during the year ended August 31, 2010 primarily resulted from our net loss of \$22.6 million, an increase in accounts receivables of \$0.7 million and a decrease in accounts payable and accrued expenses of \$0.3 million. These uses of cash were partially offset by non-cash items, including \$2.4 million in depreciation expense and \$1.3 million in stock-based compensation expense, and a \$0.4 million increase in deferred revenue.

Net cash outflows of \$13.5 million from operating activities during the eight months ended August 31, 2009 primarily resulted from our net loss of \$18.7 million which included non-cash items of \$1.5 million in depreciation expense and \$1.1 million in stock-based compensation expense. These cash outflows were partially offset by a decrease of \$1.3 million in accounts receivable and an increase of \$0.9 million in accounts payable and accrued expenses.

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Net cash outflows of \$24.9 million from operating activities during the year ended December 31, 2008 primarily resulted from our net loss of \$26.8 million, an increase in accounts receivables of \$1.5 million, and a decrease in accounts payable and accrued expenses of \$0.8 million. These uses of cash were partially offset by non-cash items, including \$2.2 million in depreciation expense and \$1.2 million in stock-based compensation expense, and a decrease of \$0.5 million in other assets.

**Cash Flows from Investing Activities**

Our investing activities consisted primarily of net investment purchases, maturities of investments and capital expenditures.

Net cash used by investing activities of \$0.4 million during the year ended August 31, 2011 was attributable to purchases of property and equipment totaling \$0.5 million, partially offset by proceeds from the sale of assets of \$0.1 million.

Net cash provided by investing activities of \$10.4 million during the year ended August 31, 2010 primarily resulted from \$15.4 million in maturities of investments, partially offset by a \$2.9 million increase in restricted cash and investments and \$2.1 million in purchases of property and equipment.

Net cash provided by investing activities of \$16.3 million during the eight months ended August 31, 2009 primarily resulted from \$48.2 million in maturities of investments, partially offset by \$30.3 million in purchases of investments, and \$1.6 million in purchases of property and equipment.

Net cash provided by investing activities of \$23.4 million during the year ended December 31, 2008 primarily resulted from \$74.0 million in maturities of investments and a \$2.6 million decrease in restricted cash and investments, partially offset by \$49.4 million in purchases of investments, and \$3.8 million in purchases of property and equipment.

**Cash Flows from Financing Activities**

Net cash provided by financing activities of \$9.3 million during the year ended August 31, 2011 was primarily a result of the issuance of \$11.4 million in Convertible Notes, partially offset by \$2.2 million in principal repayments under our Loan Agreement with Silicon Valley Bank.

Net cash provided by financing activities of \$26.6 million during the year-ended August 31, 2010 was primarily due to \$20.0 million in proceeds from the issuance of Series G Preferred stock and common stock warrants and \$7 million in amounts received under a loan agreement with a bank, partially offset by loan repayments totaling \$0.5 million.

Net cash used in financing activities was \$6,000 during the eight months ended August 31, 2009.

Net cash used in financing activities of \$0.3 million during the year ended December 31, 2008 was primarily due to repayments on borrowings.

**Table of Contents****Contractual Obligations**

The following is a summary of our contractual obligations as of August 31, 2011:

Contractual Obligations	Total	Year Ended August 31,				Year Ended August 31, 2016 and Beyond
		2012	2013	2014	2015	
			(In thousands)			
Operating Lease Obligations	\$ 2,236	\$ 1,053	\$ 654	\$ 399	\$ 23	\$ 107
Interest Payments Relating to Long-Term Debt	294	222	72	0		
Research Collaboration Agreements	5,183	3,645	795	450	293	
Long-Term Debt	4,181	2,168	2,013			
Total	\$ 11,894	\$ 7,088	\$ 3,534	\$ 849	\$ 316	\$ 107

**Off-Balance Sheet Arrangements**

We did not have during the periods presented, and we do not currently have, any off-balance sheet arrangements, as defined under SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our consolidated balance sheets.

**Seasonality**

The sale of seeds is dependent upon planting and growing seasons, which vary from year to year, and are expected to result in both highly seasonal patterns and substantial fluctuations in quarterly sales and profitability. Our product sales for the years ended August 31, 2010 and 2011 were minimal and, accordingly, we have not yet experienced the full nature or extent to which our business may be seasonal. We expect that the sale of our seeds in Brazil will typically be higher in our first and fourth fiscal quarters, due to the timing of the planting decisions made by our customers. As we increase our sales in our current markets, and as we expand into new markets in different geographies, it is possible we may experience different seasonality patterns in our business. Weather conditions and natural disasters, such as heavy rains, hurricanes, hail, floods, tornadoes, freezing conditions, drought or fire, also affect decisions by our customers about the types and amounts of seeds to plant and the timing of harvesting and planting such seeds. Disruptions that cause delays by our customers in harvesting or planting can result in the movement of orders to a future quarter, which would negatively affect the quarter and cause fluctuations in our operating results.

**Inflation**

We believe that inflation has not had a material impact on our results of operations for the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011. There can be no assurance that future inflation will not have an adverse impact on our operating results and financial condition.

**Quantitative and Qualitative Disclosures about Market Risk**

We are exposed to the effect of interest rate changes, foreign currency fluctuations and changes in commodity prices. We are also exposed to changes in the general economic conditions in the countries where we conduct business, which currently is substantially all in the United States and Brazil. As of August 31, 2010 and 2011 we had only cash, cash equivalents and restricted cash, and therefore we were not exposed to changes in equity or debt prices. Our current investment strategy is to invest in financial instruments that are highly liquid, readily convertible into cash and which mature within three months from the date of purchase. To date, we have not used derivative financial instruments to manage

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any of our market risks or entered into transactions using derivative financial instruments for trading purposes. All of the potential changes noted below are based on sensitivity analyses performed on our financial position as of August 31, 2011. Actual changes may prove to be greater or less than those hypothesized.

We do not believe our cash equivalents have significant risk of default or illiquidity. While we believe our cash equivalents do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits. We cannot be assured that we will not experience losses on these deposits.

### *Interest Rate Risk*

Our exposure to market risk for changes in interest rates primarily relates to our equipment loans, which are variable-rate debt obligations. As of August 31, 2011, we had two tranches of equipment loans outstanding amounting to \$4.2 million at an interest rate of 6.75% (Prime Rate plus 2.75%). If interest rates increase by 100 basis points related to the outstanding amounts as of August 31, 2011, our interest expense would change by approximately \$42,000 on an annual basis prior to considering monthly principal repayment.

### *Foreign Currency Risk*

We have foreign currency risks related to our operating expenses denominated in currencies other than the U.S. Dollar. Changes in exchange rates between the U.S. Dollar and other currencies will result in increases or decreases in our costs and earnings, and also may affect the book value of our assets outside the United States. To date, most of our contracts have been entered into in the United States and accordingly have been denominated in U.S. Dollars. Going forward we anticipate that our sales will be denominated in the local currency of the country in which the sale occurs. In addition, our operating expenses to date have been denominated in the currencies of the countries in which our operations are located, primarily the United States and Brazil. As a result, while our revenue and operating expenses are mostly hedged on a transactional basis, the translation of our operating results into U.S. Dollars may be adversely impacted by strengthening U.S. currency.

Through August 31, 2011, our operations in Brazil have not been significant and therefore fluctuations in the Brazil Real have had a minimal impact on our results of operations. As our international operations in Brazil grow, the risks associated with fluctuations in the Brazil Real will become greater, and we will continue to reassess our approach to managing this risk.

### *Commodity Risk*

Our exposure to market risk for changes in commodity prices currently is minimal. As our commercial operations grow, our exposure will relate mostly to the demand side as our customers are highly exposed to fluctuations in prices of sugar and crude oil and somewhat exposed to fluctuations in agricultural commodities, especially soybean. For example, if the price of sugar, which is produced from sugarcane and which cannot be produced from sweet sorghum today, rises significantly relative to the price of ethanol, it may become more profitable for ethanol mill operators to grow sugarcane even in adverse conditions, such as through the expansion of sugarcane fields to marginal land or the extension of the sugarcane harvesting season. During sustained periods of significantly higher sugar prices, demand for our seeds may decrease, which could materially and adversely affect our operating results. We are also indirectly exposed to fluctuations in soft commodities prices like soybean when we negotiate production contracts with seed producers. We currently do not use derivative financial instruments to hedge any price volatility of agricultural commodities.





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**Recent Accounting Pronouncements**

In May 2011, the FASB issued ASU 2011-04, *Amendments to Achieve Common Fair Value Measurements and Disclosure Requirements in U.S. GAAP and IFRSs*, to provide largely identical guidance about fair value measurement and disclosure requirements with the International Accounting Standards Board (IASB) IFRS 13, *Fair Value Measurement*. The new standard does not extend the use of fair value but, rather, provides guidance about how fair value should be applied where it already is required or permitted under U.S. GAAP. ASU 2011-04 is effective prospectively for interim and annual periods beginning after December 15, 2011. Early adoption is not permitted. The Company is currently evaluating the impact of adoption of this standard, if any, on its consolidated financial statements.

In June 2011 the FASB issued ASU 2011-05 *Presentation of Comprehensive Income* which provides two options for presenting the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The amendments in this update do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. The amendments do not change the option for an entity to present components of other comprehensive income either net of related tax effects or before related tax effects. The amendments do not affect how earnings per share is calculated or presented. The amendments in this update will be applied retrospectively and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company expects that, if adopted, this standard will not have a material impact on its consolidated financial statements.

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**BUSINESS**

**Our Company**

We are an agricultural biotechnology company selling seeds to produce renewable bioenergy feedstocks that can enable the large-scale replacement of petroleum and other fossil fuels. We use a combination of advanced plant breeding and biotechnology to develop new crops, known as dedicated energy crops, that we believe address the limitations of first-generation bioenergy feedstocks, such as corn and sugarcane, increase biomass productivity, reduce crop inputs and improve cultivation on marginal land.

Our first large-scale commercial products are proprietary sweet sorghum varieties that can be used as a drop-in feedstock to extend the operating season of Brazilian sugarcane-to-ethanol mills, the operating days of which are currently limited due to the inherent limitations of sugarcane physiology and growth patterns. Our dedicated energy crops can also be used for the production of second-generation biofuels and bio-based chemicals, including cellulosic ethanol, butanol, jet fuel, diesel-like molecules and gasoline-like molecules, from non-food biomass. Finally, baseload utility-scale electric power can also be generated from the biomass feedstocks grown from our seeds.

The seed industry has historically required very little capital to manufacture seeds, and seeds have typically been priced based on a share of the value they create and thus have generated high gross margins. As a producer of proprietary seeds, we believe we are in the most attractive segment of the bioenergy value chain upstream from the capital intensive refining and conversion of biomass. For example, in 2009 corn seed providers maintained high margins when volatile commodity prices significantly impacted corn ethanol refining margins. Therefore, we believe our success is tied to adoption of our products rather than the relative profitability of downstream participants. Our upstream position in the value chain also allows us to be largely independent of the success of any particular conversion technology or end use.

We develop low-input dedicated energy crops capable of producing high yields per acre using innovative plant breeding and trait biotechnology. By developing these types of crops, we enable the scalable, sustainable and economic production of bioenergy. Our proprietary collection of energy crop parent lines, known as germplasm, in combination with our pipeline of biotechnology traits allows us to develop bioenergy feedstocks to meet the needs of both biomass refineries and growers of biomass, all while using less water and less fertilizer than row crops like corn or soybean, even if grown on marginal land. We believe that the strength of our technology has been validated by our receipt of multiple competitive grants and collaborations, including a United States Agency for International Development, or USAID, grant and one of the U.S. Department of Energy's first Advanced Research Project Agency for Energy, or ARPA-E, grants in 2009, as well as a \$137 million multi-year collaboration with Monsanto Company signed in 2002. We also have significant intellectual property rights to our technology platforms, traits and seed products.

We market and sell our sweet sorghum seeds in Brazil and our switchgrass and high biomass sorghum seeds in the United States under our brand, Blade Energy Crops, or Blade. Our largest immediate commercial opportunity is the Brazilian ethanol market, which currently uses sugarcane as its predominant feedstock. Due to the inherent limitations of sugarcane physiology and growth patterns, Brazilian mill operators typically obtain sugarcane that makes mill operation economically feasible approximately 200 days per year, based on a report issued by the Brazilian Ministry of Agriculture's crop forecasting agency, Companhia Nacional de Abastecimento (Conab), dated May 2010. This results in an estimated 3.4 million metric tons per day of crushing capacity, according to our estimate, which we derive from a 2011 Brazil Agriannual report. Boa Vista / Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels, planted, harvested and processed in the last growing season a commercial-scale planting of

our sweet sorghum products and produced both ethanol and power using the existing agricultural equipment and processing infrastructure. Similar activities have been completed with two other Brazilian ethanol producers, ADM do Brasil Ltda, and

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Usina Rio Pardo S.A. We believe the success of our first commercial-scale planting at the mill owned by Boa Vista/Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels, demonstrates the drop-in nature of our sweet sorghum products, and along with seed-based propagation, shorter growing cycles and lower water and fertilizer requirements of sweet sorghum relative to sugarcane, will serve as the basis for expanded adoption of this product line as a feedstock for ethanol and power production in Brazil and other markets. Based on our trial results to date and pipeline of products under development, we believe the adoption of our sweet sorghum hybrids could extend a mill's operations by approximately 60 days.

We also work with refining technology companies in the emerging cellulosic biofuels and bio-based chemicals markets. We believe that dedicated energy crops will enable both individual renewable energy projects and the industry as a whole to reach greater scale and sustainability, at lower costs, than other potential sources of biomass because of their yields, hardiness and relatively low input requirements. We believe our dedicated energy crop portfolio is compatible with a number of developing cellulosic biofuels conversion technologies and we are working with companies focusing on petroleum-refining technologies, such as UOP, LLC, as well as chemical companies, such as Europe-based Gruppo Mossi & Ghisolfi, or Gruppo M&G, to test our energy crops in their respective production processes. We have also conducted joint trials with, or sold seed to, AGCO Corporation, EdeniQ, Inc. and Hawai'i BioEnergy, LLC, among others. We recently began a collaboration with Valero Services, Inc. to further evaluate feedstock supply strategies with dedicated energy crops.

Our dedicated energy crops also can be used to generate electricity in existing solid-fuel power facilities, such as coal-fired generating plants. We believe we will see a material increase in demand for biopower in the event that additional renewable energy legislation is passed in the United States, Europe or other countries that requires a higher percentage of generation from low-carbon sources or provides equal production incentives for the co-firing of biomass with coal, as are currently available for wind and solar power. Based on feedback from customers, partners and industry participants, we believe that our products can be used by existing growers, pellet mills and utilities, and can be cost competitive with existing biopower feedstocks, such as wood pellets.

Finally, due to the nature of biotechnology, we believe other crops can benefit from many of the traits we are developing for dedicated energy crops, such as traits that improve water use efficiency and salt tolerance. By combining genes into a series of stacks, we believe, and our initial results indicate, that we can achieve step-change improvements to the productivity of many row crops, including corn, soybean, rice and wheat. We have also generated many biotech traits specifically for cereal crops, such as rice, that increase grain yields and provide greater yield stability across different environments. We are inserting these and other traits into commercial rice varieties and plan to trial them in multiple locations in Asia this year.

## **Market Opportunity**

The world continues to seek economically and environmentally sound alternatives to fossil fuel-based transportation fuels and power. We believe bioenergy is one of the few viable replacements for fossil fuels, particularly petroleum. Unlike other renewable technologies, biofuels are intended to utilize existing vehicles and transportation fuel infrastructure. Similarly, biopower, unlike wind and solar power, can provide baseload and dispatchable generation of renewable electricity. Despite the potential of biofuels, first-generation biofuel feedstocks have demonstrated their limitations in terms of scale, perceived competition with food production, net energy balance and dependence on government subsidies. Similarly, current sources of biomass, such as forestry residues and agricultural wastes, are limited in scale and are not optimized for use in bioenergy. They are also by-products derived from other processes and therefore subject to supply disruptions. Our dedicated energy crops provide an attractive combination of high yield density, high net energy balances, low input requirements, the ability to grow on marginal land and, as a dedicated source of feedstock, the potential to be tailored for specific production and refining processes. As a result, we believe that



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dedicated energy crops will become a critical component for growth of the biofuel, bio-based chemicals and biopower markets.

*Biofuels and Bio-Based Chemicals*

Modern lifestyles and economies are highly reliant on petroleum and its by-products across a wide variety of industries, including light-duty transportation, aviation, diesel, shipping, lubricants, polymers, resins and cosmetics. According to the Energy Outlook Report published in April 2011 by the U.S. Energy Information Administration, or EIA, global oil production averaged 87.9 million barrels per day in the first quarter of 2011. The transportation fuel component of petroleum is valued at over \$2 trillion per year, according to EIA. The vast majority of bio-based replacements for petroleum and petroleum-based chemicals are currently produced by fermentation of starch sources and free or soluble sugars primarily derived from corn and sugarcane, respectively. Commonly referred to as first-generation biofuels and bio-based chemicals, the production and conversion processes for these feedstocks are well-established. However, as the world looks to increase its consumption of biofuels and their derivatives, these first-generation feedstocks face challenges to meet increased demand.

In Brazil, which has recently been importing corn ethanol to meet its domestic demand, we believe that mill operators will seek alternatives that will allow them to increase production utilization of their existing mills beyond the average 200 days per year schedule in order to maximize their market opportunity. On a global basis, we expect petroleum consumption will be further replaced by products made from the conversion of non-food biomass into biofuels and bio-based chemicals. Today, there are more than 50 companies, including large multinational companies, such as BP p.l.c., Royal Dutch Shell plc, Total S.A. and Valero Energy Corporation, and independent companies, such as KiOR, Inc. and Coskata, Inc., focused on improving non-food biomass conversion technologies. According to a 2011 report published by International Energy Agency, or IEA, biofuel production could reach approximately 112 billion gallons per year by 2030, up from 26 billion gallons in 2010. To meet these targets, the IEA believes feedstock production would need to increase to 150 million acres in 2030, up from 75 million acres in 2010. We believe quadrupling the volume of biofuels while only doubling the feedstock production acres will require higher yielding second-generation feedstocks. Moreover, in the United States, the U.S. Department of Energy, or DOE, projects that biomass energy crops will represent the largest potential source of biomass feedstock in its August 2011 report titled, *U.S. Billion-Ton Update: Biomass Supply for a Bioenergy and Bioproducts Industry*. The DOE projects that acreage of perennial energy grasses and annual energy crops could reach from 35 to 46 million acres in 2022, depending on productivity gains.

*Biopower*

Globally, 7.92 trillion kilowatt-hours of electricity were generated from coal in 2007, or 42% of total global power generation, according to the EIA, which we estimate required 3.6 billion tons of coal. By comparison, a report released in May 2010 by EIA states that globally, approximately 235 billion kilowatt-hours of electricity were generated from biomass and wastes, or 57% of all renewable energy generation, excluding hydropower, which we estimate required 200 million dry tons of biomass. The conversion of biomass to power has traditionally been fueled by bio-based waste products and residues from the paper and timber industries. As is the case for biofuels, we believe this practice has limited the size, location, efficiency and scale of biomass power generation because power producers can not reliably secure long-term supplies of consistent quality feedstock. We believe we will see a material increase in demand for biopower in the event that additional renewable energy legislation is passed in the United States, Europe or other countries that requires a higher percentage of generation from low-carbon sources, or that incentivizes the co-firing of biomass. In comparison to other renewable energy sources, co-firing with biomass is an economical alternative on a levelized cost of energy, or LCOE, basis, taking into account capital cost, operating and maintenance and fuel costs. A 2008 report from Black & Veatch estimates co-fired biomass has a LCOE of \$(1) to \$22 per megawatt hour, versus wind with a LCOE of \$59 to 128 per megawatt hour and solar photovoltaic with a LCOE of

\$201 to \$276 per megawatt hour.

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### *Food and Feed Crops*

According to a 2010 report published by the International Service for the Acquisition of Agri-Biotech Applications, or ISAAA, approximately 366 million acres of biotechnology crops were planted globally in 2010. The global market value of biotechnology crop seeds was \$11.2 billion, as reported in the same report by ISAAA. In the United States, we estimate, based on the price differential between conventional seed varieties and similar varieties with a trait, that retail premiums for traits and stacked trait combinations in row crops range from approximately \$10 to \$50 per acre, depending on crop and geography. As people in many countries become more affluent, they tend to consume more of their dietary protein in the form of meat and dairy products, driving the demand for animal feed grains higher. Therefore, greater production of food, feed, fiber and fuel will require higher crop productivity levels among all crops over time. In order to continue the productivity gains made in many crops over the past 75 years, and to do so in a more sustainable manner, we believe that advanced breeding methods, and biotech traits, in particular, will be required to produce higher performance crops that make more productive use of cultivated land, as well as to develop more robust, stress-tolerant crops that can grow under more difficult conditions and on marginal land. Our belief is consistent with historical yield improvements achieved via plant breeding and the adoption of agricultural biotechnology.

### **Our Solutions**

We believe that nearly all bioenergy and bio-based chemical applications will ultimately depend on high yielding, low-cost, low-carbon, scalable, reliable and sustainable sources of feedstock. We believe biomass from our dedicated energy crops and traits have the potential to become the common denominator in a broad array of bio-based products, including ethanol, butanol, jet fuel, diesel-like molecules and gasoline-like molecules, as well as electric power and heat, and can enable the development of larger-scale processing facilities given the high yield density and conversion efficiency of dedicated energy crops. Specifically, our dedicated energy crops have the following characteristics, which we believe will make them a critical component in the large-scale production of these bio-based products:

#### *Drop-in Products*

In Brazil, there is a well-established biomass-to-biofuel industry. Our products are drop-in solutions because they can be planted, harvested and processed using existing agricultural equipment with little or no modification and are being developed to be drop-in for all conversion technologies using sugarcane or biomass feedstocks, facilitating their rapid adoption. In collaboration with Boa Vista/Nova Fronteira, a joint venture of leading ethanol producers Grupo São Martinho S.A. and Petrobras Biofuels, we completed a commercial-scale trial on approximately 250 hectares of our sweet sorghum, which was planted and harvested using existing planting and harvesting equipment, fermented into ethanol without retrofitting or altering the existing mill and the remaining biomass combusted for electricity production, using existing boilers in the last growing season.

In other countries, there are a wide range of cellulosic to biofuel conversion technologies currently being developed; however none have any appreciable market share at this time. To explore this opportunity, we have conducted smaller trials using our other energy crops with numerous industry participants involved in cellulosic biofuels and biopower production. For example, our products have been tested in the respective conversion processes of Amyris Biotechnologies, Inc., Choren USA LLC, EdeniQ, Inc., Gruppo M&G, ICM, Inc., Novozymes North America, Inc., ThermoChem Recovery International, Inc. and UOP, LLC (a Honeywell company), among others. These tests have confirmed that biomass from our energy grasses can be converted and processed into various fuels or bio-based products, and have provided data we have used to further enhance our energy crops for use with these conversion technologies. For similar purposes, DuPont Danisco Cellulosic Ethanol LLC, or DDCE, also plans to validate our products in their conversion process in 2011 as part of a publicly announced project with the University of Tennessee.





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### *High Yield Density*

Our dedicated energy crops are developed to produce high biomass or sugar yields per acre. For cellulosic biofuels, bio-based chemicals and biopower, energy grasses can yield significantly more dry tons per acre per year compared to agricultural residues and woody biomass. This maximizes the productivity of available land and shortens the collection radius for a conversion facility of a particular size. As transportation costs can be a significant element in the total cost of biomass, we believe our high yield density crops will facilitate the construction of larger processing facilities because more biomass could be collected from a defined area of land around the facility. In turn, these larger facilities will benefit from economies of scale, resulting in lower production and capital cost per gallon produced.

### *Dedicated to Bioenergy*

Unlike many other bioenergy feedstocks, our dedicated energy crops are currently not intended for other uses and are typically grown exclusively to be harvested as part of the bioenergy value chain, creating a stable supply that will appeal to owners of conversion technologies who will have invested significant capital in their infrastructure and will therefore require reliable and cost-effective feedstocks. Additionally, we are working to tailor our products to improve the efficiency and reduce the cost of certain conversion technologies. For example, we are developing a trait that reduces enzyme requirements to convert biomass into certain bio-based products. As high enzyme costs continue to be an issue for some biochemical cellulosic conversion technologies, this trait could be very valuable to refineries employing those technologies. We believe that our ability to deliver products such as these to our customers will facilitate adoption of dedicated energy crops over other forms of biomass.

### *Suited to Marginal Land*

Our dedicated energy crops can grow in a broad range of environments, including those not well-suited for most food crops. For example, our sweet sorghum hybrids need substantially less water and fertilizer than sugarcane to grow to harvestable maturity. We are developing biotech traits that provide salt tolerance, drought tolerance and greater nitrogen use efficiency. We believe that by facilitating the use of marginal land, our crops will create opportunities for landowners who previously could not use their land as productively.

### *Scalable to Meet Demand*

Our energy crops are highly scalable, allowing us to match our production with growing demand for our seeds on relatively short notice compared to sugarcane, which can take several years to scale up commercially. Our products are generally seed-propagated, similar to row crops such as corn and soybean, which makes them cost-effective to plant on a large scale using existing seed planting equipment. Several of our products also have shorter growing cycles and can be rapidly cultivated as compared to other feedstocks, such as trees or sugarcane. For example, sweet sorghum has growth cycles ranging from 90 to 140 days, while sugarcane has a 12 to 18 month growth cycle and a more laborious planting process because it is vegetatively propagated.

## **Competitive Strengths**

We believe that we possess a number of competitive strengths that position us to become a leading provider of dedicated energy crop seeds and traits, including:

### *Commercial Products Available Today*

We currently have a number of commercially available seed products, including sweet sorghum, switchgrass and high biomass sorghum. Our sweet sorghum hybrids have been successfully planted, harvested and processed into ethanol

and power in Brazil in commercial-scale projects. We have received the necessary governmental variety registrations for the sweet sorghum varieties we are marketing in Brazil for planting in the 2011-2012 growing season and began selling seeds in Brazil in November 2011. Since other sugarcane-to-ethanol mills face the same limits on production, we believe

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our demonstrated success in the 2010-2011 growing season will facilitate the rapid development of this market and enable the expansion of our market share in Brazil and in other geographies.

### *Attractive Business Model*

Seed businesses traditionally incur significant research and development expenditures and have long product development time lines, but benefit from a combination of high gross margins, low capital expenditure requirements and intellectual property protection. Once developed, seeds require little physical infrastructure or production cost to be replicated for sale. Seeds are typically priced, however, based on a share of the value created to the customer as opposed to their cost of production. In general, seed costs to a grower are a relatively small percentage of their total production cost, but the performance of those seeds are critical to the growers' economics. We believe we can position our business to take advantage of low production costs relative to the high value of our products to our customers.

### *Innovative R&D Technology Platforms*

In order to maintain the strong position we have established with our combined strengths in germplasm and field-validated traits, we use our research and development expertise to continually improve our product offerings. To develop higher performing varieties and traits, we use several advanced research and development methods, including biotechnology, marker-assisted breeding and genomics. We believe that our innovative integrated breeding and biotechnology approach allows us to efficiently identify traits, effectively express these traits in crops, and more quickly commercialize new and improved seeds and traits for the market. We have both biotech traits and non-biotech traits. Our biotech traits for high biomass yield, nitrogen use efficiency, water use efficiency, drought tolerance and altered flower development, among others, have been successfully evaluated in the field; however, they are still several years away from commercialization. We believe we were one of the first companies to implement the practice of developing biotech traits using two test species, rather than just one, which allows us to more successfully select gene-trait combinations that enhance commercial crops. In order to capitalize upon our internal catalog of genetic information as well as information in the public realm, we developed our own proprietary software, including our Persephone genome viewer software, which serves as an important tool for locating, mapping and annotating genetic information in plants. This software program was recently licensed by a major agro-chemical company. We believe that our ability to continue to apply our advanced research and development methods will enable us to further enhance our proprietary germplasm and traits portfolios going forward.

### *Extensive Proprietary Portfolios of Germplasm and Traits*

While many companies have developed portfolios of germplasm or traits, we believe we are one of the only companies focused on dedicated energy crops with large portfolios of both germplasm and field-validated traits, which includes thousands of specimens and breeding lines, as well as multiple pools of regionally adapted germplasm spanning northern temperate to tropical climates. From our field evaluations in rice of genes selected for their ability to promote enhanced traits in Arabidopsis, we have identified to date 35 genes and their relatives that significantly enhance agriculturally relevant traits. Having both germplasm and field-validated trait portfolios allows us to leverage the synergies created by combining the two and facilitates innovation in a way that would not be possible with germplasm or traits alone. We have leveraged our access to leading germplasm for sweet sorghum, high biomass sorghum, switchgrass and miscanthus through strategic collaborations with leading institutions and established in-house programs. We believe new market entrants would need to cultivate several generations of germplasm to achieve performance equivalent to our current product portfolio, by which time we believe we will have further evolved our germplasm. Therefore, we believe our proprietary position would be difficult and time-consuming to replicate. We also believe that we have established a strong intellectual property position in plant genes, traits and energy crop germplasm. As of August 31, 2011, we owned or had exclusive licensed rights to approximately 112 issued patents and approximately 209 pending patent applications in the United States and in various foreign

jurisdictions.

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### *Management Team with Significant Industry Experience*

Our Chairman, Walter De Logi, is one of the founders of Ceres. Dr. De Logi and Richard Hamilton, our Chief Executive Officer, have been with Ceres for 15 and 13 years, respectively, and have extensive experience in the field of agricultural biotechnology. Our experienced management team possesses a deep understanding of a variety of agricultural, chemical and industrial biotechnology businesses, including the seed industry, as well as our regional markets of Brazil, the United States and Europe. Our management team also includes top scientists and industry experts, some of whom have served in leadership roles at large, multinational corporations, served on advisory committees for the U.S. Department of Energy, led ground-breaking research studies and published numerous scientific articles.

### **Our Strategy**

Our objective is to be the leading provider of dedicated energy crop seeds and traits to the renewable energy industry, including first-generation biofuels such as ethanol as well as cellulosic biofuels, biopower and bio-based chemicals by employing the following strategies:

#### *Expand Our Presence in Brazil*

Boa Vista/Nova Fronteira, a joint venture of leading ethanol producers Grupo São Martinho S.A. and Petrobras Biofuels, planted, harvested and processed in the last growing season a commercial-scale planting of our sweet sorghum products and produced both ethanol and power using existing agricultural equipment and processing infrastructure. We intend to use this success to promote brand awareness and expand our presence in Brazil by partnering with additional ethanol mills and other industry participants to conduct field trials and larger-scale commercial plantings as well as introduce new products into the Brazilian market. We will continue to position our seeds in the Brazilian market as a premium brand that incorporates the latest technology in energy crops. We began selling sweet sorghum seeds in Brazil in November 2011 and are in active discussions with a number of other Brazilian ethanol producers for use of our sweet sorghum seeds for the 2011-2012 growing season. We believe the adoption of sweet sorghum in Brazil can follow similar rapid adoption curves seen for other seed and agricultural innovations such as hybrid corn in the United States and herbicide-tolerant soybean in the Americas. Our belief is based on the drop-in nature of our sweet sorghum products.

#### *Expand Strategic Collaborations to Develop and Market Cellulosic Biofuels*

We plan to play a significant role in developing the second-generation biofuels and bio-based chemicals market, which we believe represents a significant opportunity. Our switchgrass and high biomass sorghum products are specifically targeted at this market. We intend to establish new collaborations and expand upon our current collaborations with leading cellulosic biorefining companies, technology providers and project developers to further validate our products across various downstream technologies and to produce optimized feedstocks that are tailored to meet the specifications of existing and new refining technologies. Our products have been tested in the respective conversion processes of several companies, including Choren USA LLC, EdeniQ, Inc., Gruppo M&G, ICM, Inc., Novozymes North America, Inc., ThermoChem Recovery International, Inc. and UOP, LLC. DDCE also plans to validate our products in their conversion process. We have also conducted joint trials, or sold seed to, AGCO Corporation, BP Biofuels North America LLC, EdeniQ, Inc. and Hawai i BioEnergy, LLC, among others. We recently began collaborating with Valero Services, Inc. to further evaluate feedstock supply strategies with dedicated energy crops.

#### *Expand Our Business into New Markets*

We intend to market our Blade Energy Crops brand as a symbol of quality, innovation and value across multiple biofuel, bio-based chemicals and biopower markets in a broad range of climates and geographies. We intend to use our large portfolios of field-validated traits and germplasm, combined with our advanced technology platforms, to develop products for a wide variety of niches and seize upon future market opportunities, regardless of the fuel or chemical molecule (e.g., ethanol, butanol,

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farnesene, biogasoline, biodiesel, biocrude), biochemical (e.g., bioplastics, lubricants) or engine choice (e.g., all electric, E85, E15, diesel, hybrid, plug-in hybrid).

### *Build New Relationships and Enhance Established Collaborations in the Global Biopower Market*

Our switchgrass, high biomass sorghum and miscanthus crops can be used in power generation generally, and in particular, for co-firing with coal using the existing power generation infrastructure. To date, we have engaged in field trials of our energy crops with utility companies and independent power producers. We intend to cultivate collaborations with new parties, particularly those in Europe where we believe the market opportunity for biopower is more established today and the market need is more immediate in light of existing government regulations. We will work with utility companies and independent power producers to drive demand for our dedicated energy crops in the biopower market.

### *Continue Innovation and New Product Development*

We are continuing to develop innovative solutions using a broad range of technological tools, including genomics, biotechnology and proprietary bioinformatics in order to produce crop varieties with improved yields and other performance characteristics. We believe we can accomplish these goals by finding innovative ways to utilize and combine traits and germplasm to further enhance our products. In addition, we will continue to develop varieties of seeds to meet the specific needs of growers in different geographic regions. For example, we have identified traits that will help optimize results for growers located in geographies with varying day lengths, rainfall, temperatures and soil composition (e.g., salt, aluminum and nitrogen).

### *Continue to Build Our Intellectual Property Portfolio*

We believe we have established a strong intellectual property position in plant genes, traits and energy crop germplasm, based on the nature, size and filing dates of our patent portfolio and plant variety protection certificates. We believe we are one of the few companies focused on dedicated energy crops that have this combination of intellectual property assets. We use our integrated technology platforms to continually improve our products and develop innovations that will further strengthen our intellectual property position.

## **Our Technology Platforms**

Our integrated technology platforms are a combination of existing genetic assets, specifically germplasm and traits, and competences in genomics, biotechnology and bioinformatics. Integration of these platforms allows us to improve our existing genetic assets as well as develop and commercialize new products from them. This combination of assets and research and development capability has resulted in one of the largest licensing transactions in the agricultural biotechnology industry, multiple competitive grants and collaborations, including a USAID grant to develop several traits in rice and one of the U.S. Department of Energy's first ARPA-E grants in 2009. For the year ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010 and 2011, we spent \$20.3 million, \$12.4 million, \$16.7 million, and \$19.0 million, respectively, on research and development, with the main emphasis on traits and breeding.

### *Germplasm*

We believe we have access to the most comprehensive germplasm collections for our dedicated energy crops, and have assembled a leading germplasm portfolio for dedicated energy crops. Our belief is based on the diversity and nature of the entries we have and how well they are characterized, which is the method by which different characteristics are evaluated and measured, and cataloged. Germplasm comprises collections of parental lines and



other genetic resources representing the diversity of a crop, the attributes of which are inherited from generation to generation. Germplasm is a key strategic asset since it forms the basis of plant breeding programs.

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Our early entry into the energy crop industry has allowed us to acquire access to valuable germplasm through strategic collaborations with leading institutions. We believe our competitors would need to cultivate several generations of germplasm to achieve performance equivalent to our current product portfolio, by which time we will have further evolved our germplasm. Therefore, we believe that we have a strong proprietary position that would be difficult and time-consuming to replicate. We are currently involved in three major germplasm development collaborations, each with a history of successful research and germplasm development in an energy crop. When we sell varieties developed during such collaborations, or based on the results of such collaborations, we will typically pay our collaborators royalties on net sales of such varieties.

*Switchgrass The Samuel Roberts Noble Foundation, Inc.* In May 2006, we entered into an agreement with The Samuel Roberts Noble Foundation, Inc., or the Noble Foundation, a non-profit agricultural institute, for the development and commercialization of switchgrass. This relationship provides us access to extensive breeding infrastructure and exclusive licenses to elite switchgrass varieties, breeding lines and advanced cultivars. We have entered into exclusive license agreements with the Noble Foundation for three switchgrass varieties, which the Noble Foundation has licensed on an exclusive basis from the University of Georgia Research Foundation, or UGARF. Such agreements provide that we will file for intellectual property protection on such varieties at our expense in the joint names of the Noble Foundation and UGARF. The term of each such exclusive license agreement is, on a jurisdiction-by-jurisdiction basis, the longer of the duration of the intellectual property rights covering the licensed variety or 15 years from the first sale of the licensed variety in such jurisdiction. Pursuant to one agreement, we pay the Noble Foundation a royalty on sales that ranges from mid single digits to low double digits as a percentage of sales and a royalty on license income in low double digits as a percentage of license income if we grant sublicenses and minimum royalties creditable against royalties on sales and license income. Pursuant to the second agreement, we pay the Noble Foundation a royalty on sales in mid single digits as a percentage of sales, a royalty on license income in the low double digits as a percentage of license income if we grant sublicenses and minimum royalties creditable against royalties on sales and license income. The minimum royalties payable to the Noble Foundation under these agreements escalate on a yearly basis and range from \$2,500 to \$20,000 per year, per variety.

In addition, we have an outstanding exclusive option to enter into an exclusive license to two switchgrass varieties, which the Noble Foundation has the exclusive option to license, or to the extent exercised, an exclusive license from UGARF. Such option is exercisable at any time, by Ceres providing written notice to Noble, but no later than twelve months from the respective release date of the subject switchgrass variety. The respective release dates have not been set yet. The royalty rates on such varieties are not yet determined.

Further, pursuant to our Master Research Agreement, the Noble Foundation has agreed to grant us an exclusive world-wide license with the right to grant sublicenses to exploit commercially the results of our joint collaboration program, subject to paying the Noble Foundation a reasonable remuneration to be negotiated in good faith. There are no upfront license fees or milestone payments payable under any of our agreements with the Noble Foundation.

*Miscanthus Institute of Biological, Environmental and Rural Sciences of Aberystwyth University.* In April 2007, we entered into an agreement with the Institute of Biological, Environmental, and Rural Sciences of Aberystwyth University in Wales, U.K., or IBERS, for morphological characterization, genetic evaluation, and the development and commercialization of miscanthus species as an energy crop. This relationship provides us access to an extensive scientific research infrastructure. Pursuant to our Collaboration Agreement, IBERS has agreed to grant us an exclusive world-wide license with the right to grant sublicenses to exploit commercially the results of our joint collaboration program, subject to paying IBERS a reasonable remuneration to be negotiated in good faith, including exclusive licenses to miscanthus germplasm, breeding lines and varieties produced by IBERS, except that IBERS has a non-exclusive license in the United Kingdom to varieties resulting from the joint program. Unless otherwise agreed, license agreements for released varieties will be based on a model license agreement, the



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duration of which will be until the expiration of the intellectual property rights covering the variety in a given jurisdiction, or in those jurisdictions in which the licensed variety is sold but no such intellectual property rights are obtained, until the tenth anniversary of the first sale of such variety in such jurisdiction. Pursuant to the model license agreement, we have agreed to pay royalties based on sales that range from low to mid single digits as a percentage of sales and royalties on license income at rate to be negotiated. To date, we have not entered into any specific license agreements with IBERS. There are no upfront license fees, milestone payments or minimum royalties payable under our agreement with IBERS.

*Sorghum Texas A&M University.* In August 2007, we entered into an agreement with The Texas A&M University System, or Texas A&M, for the development and commercialization of high biomass sorghum, sweet sorghum and selected related crops as energy crops, together with the discovery of molecular markers for certain traits. The agreement was amended and restated in September 2011. This relationship provides us with access to a highly regarded sorghum breeding program and the extensive sorghum genetics, breeding and genomics infrastructure of Texas A&M. This agreement provides exclusive options and licenses to defined sorghum germplasm, elite sorghum breeding lines, parental lines, advanced hybrids and genomic markers. We have entered into two exclusive world-wide license agreements with Texas A&M for sorghum lines. The terms of such exclusive license agreements provide that the licenses expire on a country-by-country basis upon the expiration of all registered or patented intellectual property rights of Texas A&M covering the licensed line. Pursuant to such agreements, we pay Texas A&M a royalty on sales of varieties developed using the licensed line at a rate that decreases from low double digits to low single digit rates as a percentage of sales when the licensed line is combined with lines from other sources to develop a variety. We also pay Texas A&M a royalty in the low double digits as a percentage of license income if we grant sublicenses and minimum royalties creditable against royalties on sales. Royalty rates for our current commercial varieties developed using lines licensed from Texas A&M are in the mid single digits as a percentage of sales. Minimum royalties payable to Texas A&M under these agreements escalate on a yearly basis and range from zero to \$5,000 per year. We also bear reasonable expenses for intellectual property protection. Further, pursuant to our Amended and Restated Sponsored Research Agreement and Amended and Restated Intellectual Property Rights Agreement, we have an option to obtain an exclusive world-wide commercial license with the right to grant sublicenses to the inventions and sorghum lines resulting from our sponsored program. To date, aggregate upfront license fees that have been paid or have become due to Texas A&M under these agreements have been \$4,000. There are no milestone payments payable under our agreements with Texas A&M.

**Our Traits**

We are able to further improve the quality of our future product offerings by adding our proprietary traits to our germplasm collections. This can provide additional yield increases, greater water use efficiency, increased nitrogen use efficiency, salt tolerance, enhanced biomass-to-sugar conversion profiles and other improved characteristics. We believe, and our results have confirmed, that our integrated breeding and biotechnology approach allows us to efficiently identify traits, effectively express these traits in crops and more quickly commercialize new and improved seeds and traits for the market. We target traits with the greatest commercial potential in energy crops. We believe these traits will enable the bioenergy industry to scale more rapidly, by improving production and delivery economics, making greater use of marginal land, providing greater yield stability and increasing energy yield per acre.

We have both genetically engineered traits, or biotech traits, and non-biotech traits. In some instances, a gene introduced through biotechnology may confer more than one beneficial trait, such as salt tolerance and drought tolerance, or increased biomass yields through greater nitrogen use efficiency. Our strategy is to focus on genes and gene stacks that have shown large, step increases in performance, and whose benefits are largely maintained across multiple species.

Biotechnology allows us to precisely add traits not readily feasible through conventional breeding methods. In many cases, the same trait can be added to multiple crops with similar effect. For example, our genomics capabilities and proprietary gene expression system have enabled us to expand from single genes and traits to groups of genes and traits, or stacks. We also have control

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over how, when and where genes are expressed in plants. This system includes using recombinant DNA, cell culture, and related technology as well as gene transfer systems needed to create plants with biotech traits and optimized gene-trait combinations identified by our trait pipeline.

To develop biotech traits, we have utilized a novel research and development methodology. Similar to other companies, we use test or model plant systems to speed discoveries and reduce risk and technical uncertainty in the development of biotech traits. This includes evaluating gene function, regulation, interaction and potential usefulness. However, we typically utilize two test species, rather than just one, as is more customary in the industry. Our test or model plants represent the two principal evolutionary branches of flowering plants commonly known as dicots and monocots. This two-species approach allows us to more successfully select gene-trait combinations which enhance commercial crops. The small, fast-growing test plant called Arabidopsis is our model dicot, and rice is our model monocot. Rice is a grass species and a close relative of energy grasses. Our evaluations in Arabidopsis are completed at our headquarters in Thousand Oaks, California. Our high-throughput field evaluations of rice are conducted in China by the Institute of Crop Sciences of the Chinese Academy of Agricultural Sciences, or ICS. Pursuant to our Collaboration Agreement for rice, ICS performs transformation of rice with our genes, evaluates the transformed rice plants in the field according to detailed protocols, and reports results and observations to us. We own all results and intellectual property resulting from such activities. We pay ICS for the services pursuant to an agreed upon budget. The program is due to expire on December 31, 2015. We believe, and our results have confirmed, that by selecting genes that perform similarly in both our model plant species, we can readily identify superior genes among thousands of candidates. We believe that, given the large evolutionary distance between our model species, genes that function similarly in both will likely have application in a broad range of flowering crop plants. We have also identified superior genes by utilizing rice and Arabidopsis alone.

We also intend to stack gene-trait combinations, such as those conferring greater nitrogen or water use efficiency, together to amplify the benefits. We describe the combination of such complementary genes as synergistic trait stacks. This differs from many current approaches which produce incremental yield increases through the introduction of a single novel gene.

The commercial development of biotech traits in commercial crops is a multi-year process. Following transformation, when the optimized gene is inserted in a target crop, the resulting plants are evaluated in the greenhouse for one to two years, and then in the field to confirm results for two to four years. Following field trials, specific gene-trait combinations are selected and submitted for regulatory approval, or deregulation, a process that has historically taken one to three years in the United States and Brazil. Assuming these averages, we believe that we could introduce our first biotech trait or traits to the market in 2016 at the earliest.

We intend to price our traits based on the added value they create, which can vary by crop and geography. For our biotech traits, we are considering various pricing models, including separate annual trait fees per acre as well as blended seed and trait prices. For our commercial Skyscraper trait, a per-bag trait fee is included in the seed price. In row crops, we have licensed and intend to license our traits to existing market participants. These licensing agreements are expected to vary by crop, geography, the nature and economic benefit of the trait, and how well advanced the trait is within our pipeline. Future payments to us may be based on a percentage of sales or other performance metrics or milestones.

The following traits have been commercialized or are at various stages of development in our trait development pipeline. Individual commercialization timelines vary based on results of evaluations and the de-regulation or approval process. Skyscraper is a non-biotech trait and the remainder of the traits discussed below are biotech traits.

### *Skyscraper*

Skyscraper is a commercial trait that provides a significant increase in biomass yields and is included in our proprietary high biomass hybrids ES 5200 and ES 5201. Developed through our collaboration with Texas A&M University, the Skyscraper trait delays flowering and extends the growth phase of the sorghum plant's lifecycle. Plants with the Skyscraper trait put more of their energy into

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growing rather than reproducing (making seeds). Since Skyscraper was identified and developed using molecular marker technology, we have been able to rapidly incorporate it into our elite breeding lines.

### *High Biomass*

We have a number of genes that have been shown to substantially increase biomass growth per plant. We are currently field-trialing four of these genes in switchgrass in four states in the United States. Second-year results have shown significant yield increases over experimental control plants. We plan to field test these genes in miscanthus and sorghum and then breed them into elite varieties. We are also creating synergistic trait stacks with these genes with the goal of achieving even greater biomass yields per plant. Yield per acre can also be increased through higher plant populations per acre. We are evaluating biotech traits that make plants grow more upright, allowing greater light capture at higher densities. We anticipate that this trait could allow growers to greatly increase the number of plants they sow per acre.

### *Nitrogen Use Efficiency*

We have genes that increase biomass under normal and reduced nitrogen fertilizer conditions. In field trials, we have recorded steady yields on significantly less nitrogen fertilizer than normally used. In addition to greater efficiency in terms of tons of biomass per unit of nitrogen, reducing nitrogen fertilizer inputs would reduce greenhouse gas emissions, increase lifecycle energy ratios, reduce run-offs and water pollution, and lower production costs. We are currently field-testing four nitrogen use efficiency genes in switchgrass in four states in the United States. We also plan to field test these genes in miscanthus and sorghum. We are also developing synergistic trait stacks with these genes with the goal of increasing efficiency and yields.

### *Water Use Efficiency and Drought Tolerance*

We have several genes that allow plants to use water more efficiently and/or recover from water deficits more readily. We are currently field-testing water use efficiency and drought tolerance genes in switchgrass that have resulted in the production of steady yields on less water in greenhouse tests. In addition to producing more tons of biomass per unit of water, we believe that in seasons of intermittent drought, this trait could provide greater yield stability for rain-fed crops as well as expand the geographic range where economic yields can be obtained.

### *Salt Tolerance*

We have genes that have been shown in our greenhouse to provide tolerance and enhanced recovery to both acute and prolonged salt stress. If results are confirmed in the field, we believe that this trait could return salt-damaged acres to productivity and open more marginal land to bioenergy production. We also believe that salt tolerance is complementary to drought tolerance since salt stress tends to induce drought symptoms in plants. We are currently evaluating these and other salt tolerance genes in energy crops and rice in the greenhouse.

### *Aluminum Tolerance*

We are developing genes that allow plants to withstand toxic levels of aluminum in the soil, a consequence of highly acidic soils, such as those found in Brazil. We believe that this trait could bring high aluminum soils into cultivation and open more marginal land to bioenergy production. We are currently evaluating these genes in multiple crops in the greenhouse.

### *Enhanced Conversion of Biomass to Fermentable Sugars*



We have developed genes that enable multi-fold decreases in the cellulase enzyme cocktails required to release fermentable sugars from plant biomass. Reducing the recalcitrance of biomass to conversion could significantly reduce enzyme costs in certain biochemical conversion processes, and could further reduce both capital and operating costs for the biorefinery. For instance, a more easily converted feedstock would impact installation costs for biorefineries since smaller holding tanks would be required for a given capacity. We believe therefore that this trait could be a key enabler of the

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large-scale use of biochemical processes and fermentation to produce biofuels and bio-based chemicals from cellulosic biomass.

### *Altered Flower Development*

We are pursuing multiple approaches to regulate flower development for the purpose of increasing biomass and sugar accumulation, as well as rendering plants resistant to fungal diseases that infect flowers. Similar to the impact of our Skyscraper trait, preventing flowering or reproduction allows plants to put more of their energy into biomass growth. We are currently field-testing genes that impact different aspects of flowering, pollen production and seed development. We believe that by creating synergistic stacks of these traits we can amplify such effects. In addition, when stacked with our other traits, we believe these genes provide a stewardship advantage. In the unlikely event of an unintended outcross of a biotech trait to a wild plant, for instance, the presence of a stack that included genes that disrupt floral development and reproduction should put the resulting plant at a severe reproductive disadvantage, thereby limiting the spread of unintended progeny plants.

### *Enabling Technologies*

We have developed or acquired licenses to certain technologies that we deem necessary or useful for the development of biotech traits, which while under development remain several years away from commercialization. Such licenses include a non-exclusive license from Monsanto to a transformation technology and certain other technologies, pursuant to which we will pay Monsanto a royalty on sales in the low single digits as a percentage of sales of products covered by the licensed patents. This agreement with Monsanto will terminate upon the expiration of the last patent under certain patent rights listed in the agreement. Such licenses further include an exclusive license with Cambridge University Technical Services Ltd., or CUTS, to a technology developed at the University of Cambridge (United Kingdom) to regulate gene activity, pursuant to which we will pay a royalty on sales in the low single digits as a percentage of sales of products covered by the licensed patents and a royalty in the low single digits as a percentage of license income. Pursuant to the agreement, the maximum milestone payments payable by us are \$250,000. To date, we have made milestone payments of \$75,000 under the agreement and expect an additional \$100,000 to be paid in fiscal 2012. The agreement with CUTS will expire on the date of the expiration of the last-to-expire patent licensed under the agreement. We expect that the presently issued U.S. patent under this agreement will expire in 2023.

## **Research and Development Programs**

In order to maintain the lead we have established through our combination of superior germplasm and field-validated traits, we have developed research and development expertise that we believe will allow us to continue to improve our offerings over time. Our research and development investments have been significant, amounting to \$20.3 million, \$12.4 million, \$16.7 million and \$19.0 million in the years ended December 31, 2008, the eight months ended August 31, 2009 and the years ended August 31, 2010, and 2011, respectively. To develop higher performing seeds and traits, we deploy a variety of research and development methods and tools, including genomics, conventional and marker-assisted breeding, agronomy and other genomics-based technologies.

### *Genomics*

Plant genomics involves the large-scale, simultaneous study of large numbers of genes, their effects and their interactions. One of our strengths in genomics involves our ability to organize the genetic data we amass into actionable information via proprietary relational databases, software and algorithms. We believe that both our technological capabilities and proprietary knowledge base in this area are highly advanced, and their application to both our breeding program, through the development of trait-linked molecular markers, and our trait development program provides us a substantial competitive advantage.



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In general, we have focused our research efforts on determining gene function, gene regulation and finding which genes enhance desirable traits. In addition to identifying novel gene-trait combinations, our genomics tools allow us to work with large groups of genes and complex biological processes controlled by multiple genes. To date, we have sequenced more than 100,000 full-length copies of DNA, called cDNA, from a variety of plant species. We have also identified and characterized hundreds of promoters that can be important for achieving the optimum expression of traits. We believe we are one of the few companies focused on dedicated energy crops with large portfolios of both germplasm and field-validated traits. Having both germplasm and trait portfolios allows us to leverage the synergies created by combining the two and facilitates innovation in a way that would not be possible with germplasm or traits alone.

### *Conventional and Marker-Assisted Breeding*

Plant breeding is the act of bringing together specific parent plants to produce a new offspring plant. This cross, as plant breeders call it, creates a new plant that will contain a mixture of the characteristics of its parents. The offspring are tested under various conditions to determine which has the superior combination of desired attributes. Further improvements are made by mating and continuing selection of superior parents and offspring through additional generations. Plant breeding allows researchers to identify plants with the most favorable combination of desired characteristics to serve as both parental lines and products.

In addition to conventional plant breeding, we believe that our genomics expertise makes the identification of proprietary molecular markers more direct and more comprehensive, which allows us to select key crop characteristics more rapidly and accurately than conventional plant breeding alone. Marker-assisted breeding integrates molecular biology and information systems with plant breeding to identify important genetic sequences and flags them so that they can be readily found in seeds or plant tissue at any stage of plant development. This platform allows us to track and select the most effective combination of genes, increase the number of progenies and breeding lines created at early stages in the breeding program, cull them using marker-based selection and, hence, make greater gains per breeding cycle. Markers are especially useful when seeking to combine multiple non-biotech traits into elite commercial lines.

We have developed thousands of SNP-based (single nucleotide polymorphism) molecular markers, which allow us to differentiate individual plants based on variations detected at the level of a single nucleotide base in the genome. SNPs allow us to automate many processes and are especially useful for hybrid breeding systems. Most importantly, we precisely map these SNPs onto the chromosomes of switchgrass, sorghum and miscanthus, and then link them to important traits by genetic analyses and then deploy them in our breeding programs using proprietary computational biology software systems. Furthermore, when an important gene is developed in one crop, we can often find the equivalent gene in another related crop using our genomics and molecular marker platforms to gain breeding advantages across crops. Our platform has also been shown to provide breeding advantages in food crops. For example, we have applied our proprietary technology to improve the quality and yield of food products since 2007 under a development and license agreement with Campbell Soup Company.

### *Agronomy*

The performance of plant varieties and traits is influenced by the growing environment, which includes climate, day length, soil quality, pests, length of the growing season and crop management practices. We have established what we believe is one of the industry's largest network of field trials for energy grasses, based on the number of trials and geographic diversity. Extending across numerous hardiness zones and regions, including Europe, the Americas and Asia, this network provides regional performance data and market fit information to support our research and commercialization efforts.



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We believe that a portfolio of energy crops will be required to produce biofuel, biopower and bio-based chemicals at greater scale than today. The mix of crops will be heavily dependent upon geographic and climatic considerations, soil quality, storage characteristics and harvest timing, among other considerations.

The following table summarizes our current products:

<b>Crop</b>	<b>Status</b>	<b>Seed Varieties</b>	<b>Initial Market</b>	<b>Key Advantages</b>
Sweet Sorghum	Commercial (2011-2012)	5 products registered*	Brazil	Season extension; fast growing; quick scale up; low water usage
High Biomass Sorghum	Commercial (2009)	ES 5200 with Skyscraper	U.S.	High yields; fast growing; low water usage
Switchgrass	Commercial (2009)	ES 5201 with Skyscraper ES 5140 ES 5150 ES 5155 EG 1101 EG 1102 EG 2101	U.S. and Europe	High yields; low water usage; perennial crop

\* We selected five varieties for registration among more than ten varieties in our registration trials based on anticipated customer demand.

In addition, we have seed-propagated varieties of miscanthus under development as detailed in the following table:

<b>Crop</b>	<b>Status</b>	<b>Seed Varieties</b>	<b>Initial Market</b>	<b>Key Advantages</b>
Miscanthus	Under development	Seed-propagated varieties under development	U.S. and Europe	High yields; highly efficient, perennial crop

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The following table summarizes our lead biotech traits under development:

<b>Target Crop</b>	<b>Traits</b>	<b>Status</b>	<b>Initial Market</b>	<b>Field Evaluations</b>
Sweet Sorghum	High soluble sugars; high biomass/NUE <sup>+</sup> , WUE <sup>+</sup> , aluminum tolerance and insect resistance	Under development	Brazil	Greenhouse evaluations under way in 2011 in the U.S. We plan to apply for field evaluation permits for some traits in the U.S. and Brazil following the expected completion of greenhouse evaluations in 2012
High Biomass Sorghum	High biomass/NUE <sup>+</sup> , WUE <sup>+</sup> , enhanced biochemical conversion of biomass	Under development	U.S. and Brazil	Field evaluations to follow field validation in sweet sorghum
Switchgrass	High biomass/NUE <sup>+</sup> , WUE <sup>+</sup> , enhanced biochemical conversion of biomass	Under development	U.S.	Field evaluation permits granted in the U.S. Field validation ongoing in AZ, GA, TN and TX for high biomass/NUE <sup>+</sup> , WUE <sup>+</sup> , and to begin in 2011 (in TX) for conversion
Miscanthus	High biomass/NUE <sup>+</sup>	Under development	U.S.	Field evaluation scheduled for 2011 in U.S.; permits for field validation in AZ, GA, TN and TX pending
Row Crops	High grain yield, NUE <sup>+</sup>	Under development	U.S.	Greenhouse evaluations under way in 2011 and field observations scheduled for 2011 and 2012, in China.
Rice	High grain yield, NUE <sup>+</sup> , WUE <sup>+</sup> , salt tolerance	Under development	Asia	Field evaluations under way in 2011 in China, and scheduled for India in 2012

+ NUE = nitrogen use efficiency; WUE = water use efficiency

## Sweet Sorghum

Sweet sorghum is a type of sorghum that accumulates free sugars in its stalk much like sugarcane. It is sown by seed, grows faster than sugarcane, and typically requires substantially less water and nitrogen fertilizer than sugarcane to grow to harvestable maturity. Sweet sorghum plants can be harvested in 90 to 140 days after sowing compared to 12 to 18 months for sugarcane. Because sweet sorghum is an annual crop, multiple harvests or crop rotations may be possible during the season compared to sugarcane, a perennial crop. This flexibility allows mill operators to use existing land more efficiently. In general, yields of fermentable sugars from improved sweet sorghum hybrids are comparable to sugarcane during our targeted harvesting period; however, the sugary juice is not well-suited to crystalline table sugar production today on a standalone basis. We believe that, based on our internal results and data from Brazil's Ministério da Agricultura, Pecuária e Abastecimento, sweet sorghum yields in Brazil can range from 25 to 100 wet metric tons per hectare with sugar content, or juice Brix values, from 10% to 20% today. This compares to typical values for sugarcane of 50 to 90 wet tons per hectare on average, and juice Brix values ranging from 14% to over 20%.



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In Brazil, sweet sorghum can be planted from October through January, and harvested from February to May, or later if conditions permit. This complements sugarcane, which is grown year-round, but harvested from April to December depending on weather and market conditions. In practice, sweet sorghum juice is extracted through crushing in existing sugarcane equipment, and then fermented to fuel. The leftover biomass, called bagasse, is combusted for biopower like sugarcane bagasse. Because sweet sorghum plants mature more quickly than sugarcane, and reach optimal sugar levels at different times of the year, existing sugar-to-ethanol mills can extend their operational season through the use of our sweet sorghum product by approximately 60 days. We also believe that sweet sorghum will facilitate the geographic expansion of sugar-based ethanol production into areas where sugarcane is not well adapted; for instance, where there is insufficient rainfall for sugarcane. Sweet sorghum is also advantageous during the scale up of new facilities because its seeds can be planted quickly and it has a shorter growing cycle than sugarcane. In contrast, sugarcane requires a laborious process to plant cuttings and, due to a low multiplication factor, typically requires years to provide sufficient feedstock for a mill to operate at full capacity. Therefore, we believe that sweet sorghum can enable new or expanded mill facilities to avoid long lead times or operate at their designed capacity during their first few years of operation.

Historically, sweet sorghum has received less improvement through modern breeding or biotechnology compared to commodity crops such as corn or soybean. Existing varieties were not developed for bioenergy, and generally have low-to-moderate sugar levels, are slower growing and have lower biomass than high biomass types. We are developing a number of improved sweet sorghum hybrids with high sugar content for immediate use in both existing markets in Brazil as well as new markets in the United States and elsewhere. In Brazil, we established agronomy trials throughout major ethanol production areas with mills, including ADM do Brasil Ltda., Usina Rio Pardo S.A. and Boa Vista/Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels. Most notably, Boa Vista/Nova Fronteira planted, harvested and processed in the last growing season a large-scale planting of our sweet sorghum products, and produced both ethanol and power. Our sweet sorghum harvested from the agronomy trial at ADM do Brasil Ltda. was used to produce table sugar at a neighboring mill using a blend of 14 parts sugar cane and one part sweet sorghum. These trials help us identify the best varieties and traits for different local conditions. They also allow us to better understand how different cultivation practices impact harvest, transportation and processing parameters. Based on the results of these trials, we have selected our best performing seed varieties for sale during the 2011-2012 season in Brazil.

Concurrently, we are developing, through marker-assisted breeding and biotechnology, a succession of improved hybrids and traits that offer producers increased yields, better pest management and greater tolerance to environmental stress, among other features. Since sweet sorghum is a fast-growing annual crop, with multiple breeding cycles possible each year, we believe that product development cycles will outpace improvements that can be made in sugarcane. It is much more efficient to breed sweet sorghum varieties and hybrids than commercial sugarcane varieties and hybrids, which suffer from chromosomal instability and other factors that slow the pace and increase the complexity of making improvements through plant breeding and biotechnology. In addition, we are currently working to develop lines of sweet sorghum with sucrose levels that are high enough to produce crystallized table sugar on a standalone basis.

### *High Biomass Sorghum*

High biomass sorghum is a type of sorghum which is primarily developed for enhanced biomass yield potential as opposed to sugar content. As such, high biomass sorghum is ideally suited for the generation of renewable electric power and the creation of cellulosic biofuels. Like other types of sorghum, high biomass types are seed propagated, and generally require less water and nitrogen fertilizer than corn. As an annual crop, sorghum is harvested the year it is planted. This provides bioenergy facilities with a quick growing and flexible source of biomass, and a complementary feedstock to perennials, such as sugarcane, which may require 12 to 18 months before the first harvest, or switchgrass, which may require 12 to 24 months before the first harvest.



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In 2009, we introduced our ES 5200 and ES 5201 products that contain our Skyscraper trait. These hybrids, developed through our partnership with Texas A&M University, are designed for single-cut production systems that endeavor to maximize per-acre yields while minimizing crop input and management expenditures. Using marker-assisted breeding, we expect to develop and commercialize sorghum hybrids that offer additional increases in biomass. We are also developing hybrids with biotech traits that offer increased yield, greater tolerance to environmental stress and enhanced processing characteristics. We expect to field trial our nitrogen use efficiency and high biomass biotech traits in sorghum under our ARPA-E grant project in 2012.

### *Switchgrass*

Switchgrass is a perennial grass indigenous to North America that tolerates a wide range of environmental conditions and offers high biomass yield potential compared to many other perennial grasses and crop plants. It generally requires substantially less water and nitrogen fertilizer than corn, and can grow under semi-arid conditions. Like sorghum, switchgrass is seed propagated. As a perennial, switchgrass is generally not harvested for sale during the first year when the crop is being established. A properly managed stand of switchgrass may persist for a decade. However, we believe that producers will likely choose to upgrade to a new variety in approximately 5 to 7 years as new generations of switchgrass seeds with even higher yields or more desirable characteristics become available.

From 2009 to 2010, we introduced three proprietary products: EG 1101, EG 1102 and EG 2101. These high-yielding varieties, developed through our partnership with The Samuel Roberts Noble Foundation, Inc., have demonstrated higher biomass yields on average over comparable varieties depending on the variety and trial location. EG 1101 and EG 1102 have also shown improved establishment characteristics and better disease resistance when compared to the next best public varieties. Since switchgrass has been subjected to fewer breeding efforts than most commodity crops, we believe that rapid and significant improvements can be made through advanced plant breeding and biotechnology. Current yield increases observed in our breeding program support this view. We plan to introduce a succession of enhancements to our product portfolio, including additional increases in biomass yield and other agronomic and compositional improvements. We are currently field-testing biotech traits that improve nitrogen use efficiency and biomass yields. We are also field-testing drought-tolerance traits and traits that regulate floral development. We believe that switchgrass revenue will ultimately consist of both seed sales as well as annual trait fees.

### *Miscanthus*

*Miscanthus x giganteus* is a tall perennial grass that grows well in cooler climates. Unlike switchgrass and sorghum, it is vegetatively propagated. It has been used as an energy crop on a small scale across Europe for two decades. The *Miscanthus* genus includes several perennial species that have potential as dedicated energy crops. The variety adopted in the United States and Europe to date, *miscanthus x giganteus*, is a sterile hybrid of *M. sinensis* and *M. sacchariflorus*. While biomass yields for this variety may exceed those of switchgrass within its region of adaptation, we estimate that, due to its vegetative propagation system, very large-scale production is not commercially feasible at this time since establishment costs are as much as 10 times higher than seed-sown switchgrass or sorghum.

In general, this *miscanthus* hybrid requires about the same water as corn, but up to two-thirds less nitrogen depending on crop management practices. As a perennial crop, *miscanthus* is generally not harvested for sale during the first year when the crop is being established. The focus of our work in *miscanthus* is to develop seed-propagated varieties that have the same high-yielding attributes of giant *miscanthus*, yet with establishment costs more comparable to other energy crops. We are also working on extending the region of adaptation. To these ends, we are collaborating with the Institute of Biological, Environmental, and Rural Sciences of Aberystwyth University in Wales, U.K. Under this collaboration, we have characterized *miscanthus* accessions across the native range of these species. These accessions are currently under evaluation for plant performance in multiple locations. The highest performing lines have been entered into our breeding program. As with switchgrass, we



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believe that continued germplasm improvement through marker-assisted breeding will increase biomass yield, bioenergy conversion yield and agronomic performance. We are also developing miscanthus with biotech traits that have been validated in switchgrass, rice and a model test plant. We are establishing field trials of our nitrogen use efficiency and high biomass traits in miscanthus in four states under our ARPA-E grant project, and also a joint U.S. Department of Energy and U.S. Department of Agriculture Biomass R&D Initiative, or BRDI, grant.

### **Row Crops**

Due to the conservation across species of mechanisms underlying traits, other crops can benefit from many of the biotech traits developed for energy crops. This provides us with an additional outlet for our technology and genes, and mitigates the cost and risk of trait development. By combining these genes into a series of stacks, which can amplify the effects, we believe we may be able to make gains in the productivity in many row crops, such as corn, soybean, rice and wheat. Given the number of entrenched competitors in these markets and the high barriers to entry, we have chosen to be a technology provider or a trait provider to companies in this sector, rather than a direct producer of seeds.

We have already generated many biotech traits specifically for cereal crops such as rice that increase grain yields and provide greater yield stability across environments. We have genes that increase the number of seeds in a panicle (flower head), increase the filling of the seeds, and increase the seed yield per unit shoot mass (harvest index). Some of these have demonstrated double-digit yield increases, relative to average annual yield improvements for grain of approximately 1% as reported by Economic Botany. We also have a number of genes that make rice plants early flowering and smaller, or later flowering and larger. These flowering-time genes can increase grain yields as well. Flowering-time traits are important for rice breeders since growing season lengths vary widely among different rice cultivation regions. We have also identified genes in rice that reduce lodging, or the bending or breaking of the stalk, and provide more efficient hybrid production systems. We are moving these and other traits into commercial rice varieties and plan to trial them in multiple locations in Asia this year.

### **Seed Production and Operations**

Seed companies typically develop and produce three types of commercial seed and plant lines: inbred, open-pollinated and hybrid. Inbred lines maintain the characteristics indigenous to the specific parent line over many generations. Open-pollinated products are reproduced from a group of plants. These are often populations of plants that are significantly different and vary over generations. Hybrid seeds, called the F1 generation, are the first-generation progeny of two different and distinct parental lines. These seeds often possess the hereditary characteristics of the parent lines as well as enhanced performance characteristics over the parent lines due to a genetic phenomenon called hybrid vigor. However, subsequent generations from hybrid seeds will not inherit equivalent enhanced performance characteristics of the hybrid F1 seed. Therefore, growers of hybrid crops generally purchase new seed from seed companies for each new planting.

The production of commercial-scale quantities of seeds requires the multiplication of seeds through a succession of plantings and seed harvests, and if the product is a hybrid, it is produced from parent lines that are mated under controlled conditions to produce commercial hybrid seeds. For perennials, like switchgrass, an established stand can produce saleable seed for multiple years. Annual seed crops like sorghum are planted for each seed harvest. In our experience, one acre of sorghum seed production has yielded saleable seed for 500 acres of commercial production, depending on the hybrid parents, and growing conditions. In our experience, one acre of switchgrass seed production has yielded saleable seed to plant approximately 80 acres of commercial production, depending on the variety and growing conditions. We are developing ways to increase seed yields and enhance seed quality, and have already made significant gains. In addition, in switchgrass, we have developed agronomic practices that allow us to harvest seed during the same planting year, thus making it possible to produce seed up to 12 months sooner than with common

production techniques.

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We believe that these improvements provide us with a competitive advantage in terms of both quality and also lower costs per unit than other seed and vegetative propagation systems.

We produce commercial seed either on leased land managed by us or with contract seed producers. Our current production sites are located in the United States and Puerto Rico as well as Argentina, Bolivia and Brazil. Seed production sites in both the northern and southern hemispheres allow us to schedule planting on a year round basis and reduce inventory requirements. This capability also enables us to scale up inventory to meet demand for a new product in the opposing hemisphere. During the season, we inspect seed fields for quality and anticipated seed yields. When ready, seeds are harvested using specialized techniques, cleaned, quality tested and packaged prior to sale to the customer. Healthy seed can remain saleable for several years if stored under optimal conditions.

In 2009, we purchased a 46,000 sq. ft. facility on a 32-acre parcel in Amarillo, Texas to serve as a seed warehouse and order fulfillment center. This site is used to receive, condition, treat, package, and warehouse our high biomass sorghum, switchgrass and sweet sorghum seed grown in the northern hemisphere. The capacity of this site is 200 to 250 units per hour of sweet sorghum or high biomass sorghum seed. This translates into more than 2,000 acre sales per hour or more than 80,000 acre sales of sweet sorghum or high biomass sorghum per weekly shift. Switchgrass capacity is 50 to 100 units per hour. This translates into more than 500 acre sales per hour or more than 20,000 acre sales of switchgrass per weekly shift. The seasonality of the seed business would allow the plant to operate at those capacities about six months a year. We currently warehouse and process 300,000 pounds of seed annually which is currently made up of 50% switchgrass, 35% high biomass sorghum and 15% sweet sorghum. We anticipate that we will be able to warehouse and process up to 10 million pounds of seed annually at this facility.

Due to the scalability described above, 300,000 pounds of switchgrass can plant approximately 50,000 to 60,000 acres of commercial switchgrass and 10,000,000 pounds of switchgrass can plant 1,500,000 to 2,000,000 acres of commercial switchgrass. For sorghum, those quantities of seed can plant approximately the same number of acres. As our seed sales increase, we believe we can rely on relationships with several providers who are capable of supplying additional quantities of seed based on market projections.

In Brazil, we have contracted with farmers to produce our seeds on irrigated acres. In addition, we are working with several third parties who have complete production and packaging capabilities to complement our own production capabilities. All of these seeds will be processed, packaged and warehoused by third parties who are experienced in these functions. This method of production is able to supply enough seeds to plant up to 250,000 hectares of commercial sweet sorghum. In the event we are able to generate orders in this range, we will plan to invest in our own facilities to be able to handle production amounts capable of planting 2,000,000 or more hectares of commercial sweet sorghum.

## **Sales and Marketing**

We market our seed varieties and traits under the trade name Blade Energy Crops, or Blade. We are positioning Blade in the marketplace as a premium brand that represents the latest technology in energy crops. As a result, we price our proprietary products based on their added value, and not on production costs. Our seed prices are determined based on a series of complex considerations, including the best alternative use of land and perceived added value to growers and mill owners. Our pricing philosophy is to share a portion of the added value we create with our customers.

To gain greater brand awareness, we actively promote our products, capabilities and brand to the bioenergy and agricultural industries. In the United States, in addition to our direct relationship with bioenergy companies and project developers, we take a leading role in teaching the grower community about energy crops and related agronomic systems through the publication of crop management guides, speaking roles at industry events, trade show displays and local-level grower meetings. We also use these opportunities to build brand awareness and loyalty.





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We sell and distribute our seed products directly to our customers, which include ethanol mills, utilities, independent power producers, cellulosic biofuel companies, individual growers and grower cooperatives. We also work with technology providers and other industry participants such as equipment manufacturers, enzyme or fermentation technology companies, to encourage the use of our products. We believe that, compared to the corn or soybean seed industry, our sales force can be significantly smaller due to the more consolidated nature and more vertically integrated business models of the bioenergy industry.

We are building our customer base primarily by forming collaborations with biorefineries, power generators and biomass users at their existing, planned and future facility locations. We are in active discussions with a number of Brazilian ethanol producers for the 2011-2012 season in Brazil. The expected price range for our sweet sorghum seed in the Brazilian market is between \$100 to \$150 per hectare. In the United States, our seed sales to date have been driven primarily by pilot and demonstration-scale projects with advanced biofuel and biopower companies as well as growers and grower associations. Typically these multi-year collaborations include agronomy trials, harvest and handling evaluations, test conversions or burns, and various post-harvest assays. We conduct similar activities in Europe, although to a lesser extent than in the United States or Brazil at this time. In addition to informing our market development and research efforts, these trials allow participants in the value chain to gain confidence with the yields and other performance characteristics they should expect to see from our products. Given the emerging nature of energy crop production and the lack of publicly available energy crop data for many potential growing regions, we believe that our expertise in feedstock performance and production practices across many growing regions, combined with our extensive relationships throughout the bioenergy value chain, is a key competitive advantage.

In Brazil, we market and expect to sell our sweet sorghum products directly to ethanol mills, rather than to growers, which is the prevailing practice in the seed industry, as mill operators typically manage all major aspects of feedstock selection and production. According to the U.S. Department of Agriculture, there are over 400 sugar and ethanol mills in Brazil, which make up the country's over 600 million metric tons of crushing capacity per year. In the 2010 growing season, Anuario Da Cana 2010 estimated that the top 20 mill groups accounted for approximately 40% of the total crushing capacity. We believe this concentration creates an advantage to us as our focused sales and marketing team will be able to target a large amount of the Brazilian mill capacity by reaching out to the top mill groups. In addition, given the close-knit nature of the ethanol industry in Brazil, we believe that successful trials with several large mills will encourage other operators to evaluate and adopt our sweet sorghum products. We have completed trials with a number of large mill operators, including ADM do Brasil Ltda., Usina Rio Pardo S.A. and Boa Vista/Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels. We also have collaborations with international companies active in Brazil, including Amyris Biotechnologies, Inc. and Novozymes North America, Inc.

In the biopower market, our current activities encompass field trials, test burns and sales of commercial seed to project developers and growers who sell or intend to sell biomass to power plants or pellet mills. In the United States, we have worked on a trial basis with major utilities and large industrial producers of heat and power. We are also helping European utilities identify U.S. suppliers of biomass produced from our dedicated energy crops.

In Europe, we are also working with local institutions to build brand recognition and to advance our research, especially in miscanthus, through our collaboration with the Institute of Biological, Environmental and Rural Sciences of Aberystwyth University, or IBERS. Specifically, we are developing miscanthus crops through a research and development program that incorporates trials for germplasm covering hot, dry climates in the south through the colder, more northerly areas. This strategy is based on both scientific research and potential business opportunities. In addition to our collaboration with IBERS, we are a member of the Sustainable Bioenergy Centre of the UK's Biotechnology and Biological Sciences Research Council (BBSRC).

Our activities in cellulosic biofuels encompass a wide range of activities including field trials, co-evolution agreements, and commercial sales. Our products have been tested in the respective



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conversion processes of EdeniQ, Inc., Choren USA LLC, Europe-based Gruppo M&G, ICM, Inc., and UOP, LLC (a Honeywell company), among others. DDCE also plans to validate our products in their conversion process. We have also conducted joint trials with, or sold seed to, AGCO Corporation, BP Biofuels North America LLC, EdeniQ, Inc. and Hawai i BioEnergy, LLC, among others. We recently began a collaboration with Valero Services, Inc. to further evaluate feedstock supply strategies with dedicated energy crops. We also work with refining technology companies to optimize feedstock for their refining processes. These collaborators include Novozymes North America, Inc. and ThermoChem Recovery International, Inc.

For the fiscal year ended August 31, 2010, Campbell Soup Company, USAID and ARPA-E represented 28.5%, 13.5% and 12.7% of our revenues, respectively. For the fiscal year ended August 31, 2011, Campbell Soup Company, Amyris Biotechnologies, Inc., ARPA-E and USAID represented 25.4%, 20.9%, 20.5% and 16.6% of our revenues, respectively.

## **Major Research Collaborations**

### *Monsanto Company*

In April 2002, we entered into a multi-year discovery and development collaboration with Monsanto Company focused on applying genomics technologies to identify genes that provide improvements in corn, soybean and certain other row crops. Pursuant to this agreement, Monsanto licensed rights to a portion of our trait discovery pipeline in certain row crops in exchange for license payments over several years. Monsanto also funded a research program with us, which was completed in 2007. The term of this agreement continues for the life of the last patent licensed pursuant to the agreement. The licenses granted to Monsanto are royalty-bearing, subject to patent protection. The intellectual property rights on inventions conceived by us pursuant to the collaboration vest in us and Monsanto has certain exclusive and non-exclusive licenses to the results of the collaboration activities for certain row crops. We believe the \$137 million transaction with Monsanto, a market leader in crop biotechnology, validated our technology platforms and provided us a channel to begin to deploy our traits into corn, soybean and other commodity crops. We remain free under this agreement to develop and commercialize the genes and traits developed under this collaboration for deployment in our energy crops and certain other crops such as rice. With respect to corn, soybean and other row crops, we are free to license some of the genes discovered during this collaboration on a non-exclusive basis to third parties. We can also develop and exclusively license to third parties genes not covered under this agreement and which we have subsequently developed for use in corn, soybean and other row crops.

In connection with entering into the collaboration agreement, Monsanto also purchased 3,333,333 shares of our Series E Preferred Stock.

### *The Samuel Roberts Noble Foundation, Inc.*

In May 2006, we entered into an agreement with the Samuel Roberts Noble Foundation, Inc., or the Noble Foundation, a non-profit agricultural institute, for the development and commercialization of switchgrass. This relationship provides us access to extensive breeding infrastructure and exclusive licenses to elite switchgrass varieties, breeding lines and advanced cultivars. We use our markers and other genomics technologies to expand the conventional and molecular breeding program in switchgrass at the Noble Foundation. The collaboration further encompasses the development of agronomic systems and management practices for switchgrass. Our funding commitments under this agreement are determined jointly with the Noble Foundation on a three-year project basis. All germplasm and plant varieties resulting from the joint program are jointly owned by us and the Noble Foundation, while the ownership of other intellectual property rights is allocated based on inventorship, except that Noble Foundation inventions resulting from projects to which we provide a financial contribution are jointly owned. We have exclusive rights to commercialize the results of the joint program. The Noble Foundation has agreed not to

collaborate with or perform any activities for the benefit of or grant any rights to third parties in the field of switchgrass without our prior written consent, subject to certain exceptions. This agreement expires in May 2026, unless terminated earlier

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pursuant to customary contract termination provisions or under certain circumstances, for example if either party ceases substantially all activities in switchgrass, if the institutional mission, purpose or structure of the Noble Foundation changes substantially and adversely affects the Noble Foundation's ability to satisfy its obligations under the agreement, or if no active collaborative research projects exist for more than two years.

### *Institute of Biological, Environmental and Rural Sciences of Aberystwyth University*

In April 2007, we entered into an agreement with the Institute of Biological, Environmental, and Rural Sciences of Aberystwyth University in Wales, U.K., or IBERS, for morphological characterization, genetic evaluation, and the development and commercialization of miscanthus species as an energy crop. This relationship provides us access to an extensive scientific research infrastructure and includes exclusive licenses to miscanthus germplasm, breeding lines and varieties produced by IBERS, except that IBERS has a non-exclusive license in the United Kingdom to varieties resulting from the joint program. We use our expertise in genomics-based technologies and plant breeding to expand the miscanthus breeding program at IBERS.

Our funding commitments under this agreement are determined jointly with IBERS on a project basis. All germplasm and plant varieties resulting from the joint program are jointly owned by us and IBERS, while the ownership of other intellectual property rights is allocated based on inventorship, except that IBERS inventions resulting from projects to which we provide a certain financial contribution are jointly owned. We have exclusive rights to commercialize the results of the joint program, except that IBERS has a non-exclusive license in the United Kingdom to varieties resulting from the joint program. IBERS has agreed not to collaborate with or perform any activities for the benefit of or grant any rights to third parties in the field of miscanthus without our prior written consent, subject to certain exceptions. This agreement expires on March 31, 2022, unless terminated earlier pursuant to customary contract termination provisions or under certain circumstances, for example if either party ceases substantially all activities in miscanthus, or if no active collaborative research projects exist for more than two years.

### *Texas A&M University*

In August 2007, we entered into an agreement with The Texas A&M University System for the development and commercialization of high biomass sorghum, sweet sorghum and selected related crops as energy crops, together with the discovery of molecular markers for certain traits. The agreement was amended and restated in September 2011. This relationship provides us with access to a highly regarded sorghum breeding program and the extensive sorghum genetics, breeding and genomics infrastructure of Texas A&M. This agreement provides exclusive options and licenses to defined sorghum germplasm, elite sorghum breeding lines, parental lines, advanced hybrids and genomic markers. We fund the majority of the activities performed by Texas A&M pursuant to our Amended and Restated Sponsored Research Agreement (the "Sponsored Research Agreement"). The specific research projects and budgets undertaken pursuant to such agreement will be determined by an Executive Committee comprised of two members from each of Texas A&M and us as set forth in the Sponsored Research Agreement. Ownership of intellectual property rights on results from the program work are allocated based on inventorship. Pursuant to our Sponsored Research Agreement and Amended and Restated Intellectual Property Rights Agreement (the "IP Rights Agreement"), we have an option to obtain an exclusive world-wide commercial license to results of the program. Texas A&M has agreed not to conduct any activities in the field of our collaboration under an agreement which would grant rights to a third party during the term of our Sponsored Research Agreement. Our Sponsored Research Agreement expires in September 2026, unless terminated earlier pursuant to customary contract termination provisions or program inactivity. Our licenses on results of the joint program survive termination of the Sponsored Research Agreement and survive until, on a country-by-country basis, the expiration of all registered or patented intellectual property rights of Texas A&M covering the licensed line. Under the Sponsored Research Agreement, we are obligated to enter into good faith negotiations regarding our provision to Texas



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A&M of certain in-kind research support for Texas A&M's use in performing project activities under the agreement.

Subject to board and shareholder approval, we expect to issue to Texas A&M in fiscal 2012 warrants to purchase up to 200,000 shares of our common stock at an exercise price of (A) the per share offering price to the public of our common stock in this initial public offering plus (B) an amount equal to ten percent (10%) of such price. The warrants would have a maximum term of fifteen years and, subject to certain conditions, would vest in equal installments on the fifth, tenth and fifteenth anniversary of the IP Rights Agreement.

*Research Activity Costs*

At August 31, 2011, the future minimum payments for our budgeted costs of research activities under our collaboration agreements are as follows:

	<b>(in thousands)</b>
2012	\$ 3,645
2013	795
2014	450
2015	293
	\$ 5,183

**Government Grant Awards**

Grant awards help mitigate the costs and risks of developing new products and have historically allowed us to broaden the scope and speed of our research and development activities. Over the past five years, we have received several grants from the DOE, the USDA, the USAID, and BRDI program as well as state-level grants. These have allowed us to investigate the use of our biotech traits for increased yield, nitrogen use efficiency, flowering regulation, improved carbon sequestration and manipulation of cell wall composition in crops. Our grant funding totaled \$3.1 million in the fiscal year ended August 31, 2011.

Our projects funded in whole or in part by grants during fiscal year 2011-12 include:

A \$5.1 million U.S. Department of Energy ARPA-E grant to develop high biomass, low-input energy crops;

A \$3.0 million USAID grant to develop several traits in rice for Asia;

A subcontract award of \$2.2 million under a \$25 million DOE Integrated Biorefinery grant awarded to Amyris Biotechnologies, Inc. to conduct multi-site trials of sweet sorghum;

A \$491,000 subcontract award from the DOE's BioEnergy Science Center to field trial traits to reduce recalcitrance and improve conversion of switchgrass to biofuels;

A subcontract award of \$86,000 under a \$4.7 million BRDI grant to the University of Tennessee together with DuPont Danisco Cellulosic Ethanol LLC to plant 1,000 acres of switchgrass to investigate agronomy and biomass supply chain logistics;

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A \$883,000 BRDI grant with Choren USA, LLC, a biorefining company, to investigate desirable biomass compositional characteristics for biomass gasification;

A contract of \$22,000 under a \$25 million DOE Integrated Bio-Refinery, or IBR, grant to UOP, LCC, a Honeywell company, to build a demonstration unit in Hawaii to convert cellulosic biomass into renewable transportation fuels; and

A subcontract of \$521,000 under a \$1.1 million BRDI grant to Exelus, Inc. to develop drought and salt tolerant traits in switchgrass and miscanthus.



**Table of Contents****Intellectual Property**

Our success depends in large part on our proprietary products and technology for which we seek protection under patent, plant variety protection, plant breeders' rights, copyright, trademark and trade secret laws. Protection of products, technology and trade secrets is also maintained using confidential disclosure agreements entered into by our employees, consultants and potential and actual third party collaborators. Protection of our technologies enables us to offer our customers and partners proprietary products unavailable from our competitors, and to exclude our competitors from practicing technology that we have developed or exclusively licensed from other parties. If competitors in our industry have access to the same technology, our competitive position may be adversely affected.

We believe that we have established a broad intellectual property position in plant genes, traits and energy crop germplasm. As of August 31, 2011, we owned or had exclusive licensed rights to approximately 112 issued patents and approximately 209 pending patent applications in the United States and in various foreign jurisdictions. The patents for Ceres-developed inventions are set to expire beginning in 2020. Our patents or patent applications generally relate to compositions of matter for DNA and protein sequences, plants and plant parts, and methods of improving plants. Our patents and applications encompass more than 100,000 full-length, functionally annotated cDNA sequences from several species, hundreds of gene-trait associations, and hundreds of characterized promoters with specialized expression patterns. In addition, we hold dozens of applications for patents, Plant Variety Protection certificates and plant breeders' rights for our commercial varieties, hybrids and inbreds, as well as for methods for the improvement, propagation, production, and use of dedicated energy crops. Our filings in foreign jurisdictions, such as Europe (approximately 25 pending patent applications, pending plant breeder's rights applications, and patents registered in specific countries) and Brazil (approximately 17 pending patent and plant variety protection certificate applications), are generally targeted to the products we plan to offer in those respective markets. We continue to file new patent applications, for which terms generally extend 20 years from the filing date in the United States. The duration of plant variety protection and plant breeder's rights protection varies among jurisdictions, e.g., the duration is 20 years from issue in the United States, 25 years from filing in Europe, and 15 years from grant of a Provisional Certificate of Protection in Brazil. Our registered and pending trademarks in the United States and in selected foreign countries include Ceres, The Energy Crop Company, Blade Energy Crops, Blade and Skyscraper.

We will continue to file and prosecute patent, plant variety protection certificate, plant breeders' rights, and trademark applications in the United States and foreign jurisdictions, as well as maintain trade secrets as is consistent with our business plan in an ongoing effort to protect our intellectual property.

**Significant Customers**

For the fiscal year ended August 31, 2010, Campbell Soup Company, USAID and ARPA-E represented 28.5%, 13.5% and 12.7% of our revenues, respectively. For the fiscal year ended August 31, 2011, Campbell Soup Company, Amyris Biotechnologies, Inc., ARPA-E and USAID represented 25.4%, 20.9%, 20.5% and 16.6% of our revenues, respectively.

**Competition**

The renewable energy industry is rapidly evolving and new competitors with competing technologies are regularly entering the market. We expect to face competitors on multiple fronts. First, we expect to compete with other providers of seed and vegetative propagation materials in the market for sweet sorghum, high biomass sorghum, switchgrass and miscanthus. While the competitive landscape in these crops is limited at this time, we anticipate that as our products gain market acceptance, other competitors will be attracted to this opportunity and produce their own seed varieties. Second, we believe that new as yet unannounced crops will be introduced into the renewable energy

market and that existing energy crops will attempt to gain even greater market share. Existing crops, such as corn, sugarcane and oil palm trees, currently dominate the biofuels market. Based on our experience with current and potential customers, we believe the primary competitive factors in the energy crop seed industry are yield,

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performance, scale, price, reliable supply and sustainability. As new products enter the market, our products may become obsolete or our competitors' products may be more effective, or more effectively marketed and sold, than our products. Changes in technology and customer preferences may result in short product life cycles. To remain competitive, we will need to develop new products and enhance and improve our existing products in a timely manner. Our failure to maintain our competitive position could have a material adverse effect on our business and results of operations.

Our principal competitors may include major international agrochemical and agricultural biotechnology corporations, such as Advanta India Limited, The Dow Chemical Company, Monsanto Company, Pioneer Hi-Bred (DuPont), KWS and Syngenta, all of which have substantially greater resources to dedicate to research and development, production or marketing than we have. We also face direct competition from other seed companies and biotechnology companies, and from academic and government research institutions. New competitors may emerge, including through consolidation within the seed or renewable energy industry. We are unable to predict what effect evolution of the industry may have on price, selling strategies, intellectual property or our competitive position.

In the broader market for renewable energy, we expect to face competition from other potential feedstocks, including biomass residues from food crops, forestry trimmings and municipal waste materials as well as other energy crops. There are multiple technologies that process biomass into biofuels and we have yet to determine compatibility of our feedstocks with all of these processes. Our failure to develop new or enhanced products that are compatible with these alternative technologies, or a lack of market acceptance of our products as the common denominator in a broad array of bio-based products that are alternatives to petroleum based products, could have an adverse effect on our business. Significant developments in alternative technologies, such as the inexpensive and large-scale storage of solar or wind-generated energy, may materially and adversely affect our business in ways that we do not currently anticipate.

## **Government Policies and Incentives**

There are numerous mandates, incentive programs, tax credits, support schemes and pending legislation that impact the establishment and growth of bioenergy markets. Some of the most relevant to our near term business opportunities are highlighted below:

*Renewable Fuel Standard 2* The U.S. Energy Independence and Security Act of 2007, or EISA, increased the volume of renewable fuel required to be blended into transportation fuel to 36 billion gallons per year by 2022, representing an increase of 27 billion gallons from the 2008 target level of 9 billion gallons. EISA also established new categories of renewable fuel and set separate volume requirements for each one, including a 16 billion gallon per year target by 2022 for cellulosic biofuels. While these targets have been adjusted periodically to take into account cellulosic production capabilities, we believe this target demonstrates the U.S. commitment to significantly expand its use of cellulosic fuels. EISA required the Environmental Protection Agency to apply lifecycle greenhouse gas performance threshold standards to ensure that each category of renewable fuel emits fewer greenhouse gases than the petroleum fuel it replaces.

*Biomass Crop Assistance Program* Established by the 2008 U.S. Farm Bill, the Biomass Crop Assistance Program, or BCAP, provides risk mitigation and production incentives to encourage growers to produce dedicated energy crops. BCAP provides two categories of assistance: (i) matching payments at a rate of \$1 for each \$1 per dry ton paid by a qualified biomass conversion facility, in an amount up to \$45 per dry ton, for a period of 2 years, and (ii) establishment payments up to 75% of costs of establishing a qualified perennial crop, including the cost of seed and stock, to growers who enter into contracts with the Commodity Credit Corporation, or CCC, to produce eligible biomass crops on contract acres within BCAP project areas. Annual payments, which are determined by CCC and based on local land rental rates, are also available for both annuals and perennials. Such payments are reduced if the biomass is sold to a conversion facility. We believe



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that BCAP will be advantageous to the growth of the switchgrass and miscanthus markets, in particular. The program will expire in 2012, unless extended as part of the next Farm Bill.

*Renewable Electricity Standard* Twenty-nine states plus the District of Columbia have Renewable Electricity Standards (also known as Renewable Portfolio Standards or RPS); seven additional states have voluntary goals. There is no federal standard currently. States with renewable portfolio standards require that a certain percentage (or absolute amount) of electricity be generated from renewable sources by a specified date. Under existing state regulations, these standards range from 8% to 40% of electricity production. To comply, companies must typically own a qualified facility and its output, purchase renewable energy credits or purchase bundled renewable electricity. Contracted, closed-loop biomass is an eligible renewable feedstock in all states with RPS.

*Renewable Energy Production Tax Credit* Originally enacted by the U.S. Energy Policy Act of 1992, and updated by the American Recovery and Reinvestment Act of 2009, the Renewable Energy Production Tax Credit, or PTC, provides federal tax incentives for renewable energy projects. In general, the PTC reduces the federal income taxes of qualified tax-paying owners of renewable energy projects based on output. In 2010 the credit ranged from 1.1 to 2.2 cents per kilowatt-hour. Currently, a full PTC is available to dedicated biomass-fired facilities utilizing 100% closed-loop biomass, which is biomass grown exclusively for energy. A half-PTC is available for dedicated biomass-fired facilities utilizing open-loop biomass and other biomass sources, usually waste materials. The PTC is not available for co-firing coal with open-loop biomass, but it is technically available for co-firing closed-loop biomass with coal or open-loop biomass. We believe our customers can utilize our products to produce closed-loop biomass, thereby taking advantage of these tax credits to improve the economics of their operations. However, due to a legislative error, new PTC applications for co-firing with closed-loop biomass, whether with coal or in a dedicated biopower facility with open-loop biomass, cannot be approved since the approving agencies no longer exist despite multiple extensions of the biomass option by Congress and an existing federal budget line item for the program. We have joined utility industry representatives in lobbying Congress for new legislation to correct the error.

*Renewables Obligation Certificates* The United Kingdom, which is a potential export market for U.S.-grown biomass, favors biomass from energy grasses in its renewable electricity mandates. Renewables Obligation Certificates, or ROCs, are issued for each megawatt hour, or MWh, of renewable electricity generated. These ROCs are tradable. Compliance can be achieved by acquiring ROCs from generation or purchase, or paying a buy-out price. On August 31, 2011, the average price for ROCs was £45.37. ROCs are earned at various rates, with different categories of generation receiving a different number of ROCs per MWh generated. Co-firing of non-energy crop biomass, for instance, currently receives 0.5 ROCs/MWh, while a full ROC/MWh is earned from co-firing of contracted, closed-loop sources of biomass as well as open-loop sources of pre-approved crops, such as miscanthus. Switchgrass and high biomass sorghum are currently under review as possible pre-approved feedstocks. These rates and categories are subject to ongoing review by regulators. We believe that this regulatory scheme, especially when paired with U.S. incentive programs, provides attractive economics for U.S. growers with nearby access to seaports.

## **Regulatory Matters**

Some of our products and operations are subject to complex regulations.

### *U.S. Regulatory Process for Our Biotechnology Products*

Under the Plant Protection Act of 2000, regulatory approval is required before the introduction, including the environmental release, interstate movement, and importation, of certain genetically engineered organisms, including our biotechnology products. The primary U.S. regulatory agency overseeing field testing and deregulation for commercialization of our biotechnology products is the



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United States Department of Agriculture, or USDA. Currently, our products do not include pesticide or herbicide tolerant traits and, consequently, do not require the involvement of the Environmental Protection Agency. Moreover, our products are not intended for food or animal feed uses and, consequently, do not require the involvement of the Food and Drug Administration. The Biotechnology Regulatory Services, or BRS, within the USDA's Animal and Plant Health Inspection Service, or APHIS, has direct oversight of the field testing and deregulation of our biotechnology products.

In the typical product development process for our biotechnology products, approval by APHIS initially is required for field testing of a new product. Field testing of our biotechnology products is subject to a rigorous permit process that, if successful, results in authorization by APHIS for a defined field testing period in a specific location. As of August 31, 2011, we have been granted permits for field trials of certain of our biotechnology products in development in four field test locations, located in Arizona, Georgia, Tennessee and Texas. We are currently trialing, or intend to trial, several traits in switchgrass, miscanthus and sorghum.

The permit application must contain detailed information about the product, including a description of the inserted genes, their origin, the purpose of the test, how it will be conducted and any actions taken to prevent the release of pollen or seed from the test site. In determining whether to grant a permit and what conditions to impose, APHIS considers any possible impacts of the field test on the environment and any endangered or threatened species. The permitting process for the establishment of initial field tests typically ranges from two to four months, but can be significantly longer for novel products or circumstances.

We must petition APHIS to deregulate any of our biotechnology products before being able to commercialize the product. The petition process is a multi-year process that varies based on a number of factors, including the extent of the supporting information required, the nature and extent of review by APHIS, including the type and scope of the environmental review conducted, and the number and types of public comments received. Deregulation of a product is not a guaranteed outcome when a petition to deregulate a biotechnology plant is submitted to APHIS.

The process for obtaining favorable action on petitions for non-regulated status, as well as permits for field testing, has become more complex and time consuming in recent years. In October 2008, APHIS issued proposed regulations that would significantly revise the permitting process; however whether or when APHIS will issue final regulations is not known.

We are a founding member of the Excellence Through Stewardship, or ETS, organization, which encourages implementation of biotechnology-derived product stewardship practices, including third-party audits of members to verify that stewardship programs and quality management systems are in place and consistent with ETS initiative. We successfully completed our initial ETS third-party audit in December 2009. We continue to conduct yearly internal audits and a third-party audit every three years.

### *Brazilian Regulatory Process for Our Biotechnology Products*

In Brazil, the approval of biotechnology products is regulated by the National Technical Commission of Biosafety, Comissão Técnica Nacional de Biossegurança, or CTNBio, under the Ministry of Science and Technology. CTNBio is composed of 27 members with specialists with scientific and technical knowledge from four different areas, including specialists in animal, plant, environment and health (12 members), ministerial representatives of the federal government (9 members) and specialists from other areas such as consumer defense and family farming (6 members) that meet once per month to review applications. CTNBio has developed guidance describing the information required as part of an application for commercial approval of a biotechnology product. Once an application is submitted it is analyzed by a team of reviewers who then present the application to the broader committee for a decision. The review team or the committee can request additional information from the applicant. The application process is generally an

iterative process with the applicant providing additional data for review and consideration at subsequent monthly meetings until all the reviewers and the committee's questions have been resolved. During the review process, CTNBio will evaluate the need for further environmental



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impact assessments. CTNBio may conduct public hearings on certain products to seek additional input. CTNBio may refer applications to, among others, the National Biosafety Council, or CNBS, to review any socio-economic aspects or national interests that may be implicated. We are not currently subject to CTNBio oversight as our current product offerings in Brazil do not include biotechnology products. However, we do anticipate introducing biotechnology products in Brazil in the future. At such time, we will be subject to the approval processes dictated by CTNBio and a Certificate of Quality in Biosafety, or CQBs, must be obtained from CTNBio prior to the commencement of field trials.

### *European Regulatory Process for Our Biotechnology Products*

The European Union, or EU, has established a legal framework for activities with genetically modified organisms, or GMOs, and some of our biotechnology products will fall within the scope of this legislation. The GMO framework aims to provide guarantees for the safety of human health and the environment during research, development and commercial deployment of GMOs, to allow consumers to make an informed choice and to secure the availability of differentiated agronomic options.

Development field trials and commercial introduction are governed by European Directive 2001/18/EC on the introduction into the environment of GMOs. This Directive requires activities with GMOs in the open environment to obtain a mandatory approval before the activity can be initiated and provides principles for environmental risk assessment and evaluation of the risk assessment by independent expert panels.

The procedure for field trials requires submission of an application substantiated with scientific information to the national authority of the Member State within whose territory the experimental release is to take place. This authority will typically request the advice of a national expert panel and decide whether the trial can proceed, possibly with additional conditions. While the procedure is harmonized, there are differences between Member States.

Under Directive 2001/18/EC, a company intending to market a GMO must first obtain a written authorization to this end. In this case, the authorization procedure for placing the GMO on the market involves all Member States as an authorization implies the free movement throughout the EU territory. The application is first submitted to the competent national authority of an EU Member State. The notification must include a full evaluation of the environmental risks. Having received the notification, the national authority must issue an opinion which will take the form of an assessment report. In the event of a favorable opinion, the Member State that produced the assessment report, informs the other Member States via the European Commission. The other Member States and the Commission examine the assessment report and may issue observations and objections.

If there are no objections by other Member States or by the European Commission, the competent authority that carried out the original assessment authorizes the placing on the market of the product. The authorized product may then be placed on the market throughout the European Union in conformity with any conditions set out in the authorization. The authorization has a maximum duration of ten years and may be renewed.

If objections are raised, the procedure provides for a conciliation phase among the Member States, the Commission and the notifier. The objective of this phase is to resolve the outstanding questions. If at the end of the conciliation phase the objections are maintained, a decision must be taken at European level. The Commission first asks for the opinion of the European Food Safety Authority (EFSA), composed of independent scientists, highly qualified in the fields associated with medicine, nutrition, toxicology, biology, chemistry and other similar disciplines. The Commission then presents a draft decision to the Regulatory Committee composed of representatives of the Member States for an opinion. If the Committee gives a favorable opinion, the Commission adopts the decision. If not, the draft Decision is submitted to the Council of Ministers for adoption or rejection by qualified majority. If the Council does not act within three months, the Commission shall adopt the decision.

We do not currently target any use as or inclusion in food or feed products. While systems will be in place to direct production to the intended uses, unintended as well as unavoidable uses will be taken into account when seeking regulatory approvals for our products. In case our products or

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derivates thereof could end up in food or feed, then additional legal requirements will have to be considered, in particular Regulation (EC) No 1829/2003 on genetically modified food and feed that applies for the placing on the market of GMOs for food and feed use and food and feed containing GMOs, consisting of such organisms or produced from GMOs.

The Regulation puts in place a centralized, uniform and transparent EU procedure for all applications for placing on the market, whether they concern the GMO itself or the food and feed products derived therefrom. This means that business operators may file a single application for the GMO and all its uses: a single risk assessment is performed and a single authorization is granted for a GMO and all its uses (cultivation, importation, processing into food/feed or industrial products). If one of these uses concerns food or feed, all the uses may be treated under Regulation 1829/2003.

The European regulatory framework for GMOs has been developing since its introduction in 1990. The European Commission and Member States review and adapt the framework regularly. Several scientific advisory bodies, most prominently the EFSA, update their guidance notes and recommendations on data requirements. Finally, the political acceptance of biotechnology crops is known to differ considerably between Member States and between consecutive governments in a Member State. Therefore, it is not possible to predict the outcome of any application made in the EU.

We are not currently subject to the GMO oversight as our current product offerings in the EU do not include biotechnology products. However, we do anticipate introducing biotechnology products in the EU in the future.

### *Other Regulation*

*Phytosanitary Certification.* Nearly all countries, including the United States and Brazil, and many local jurisdictions, require phytosanitary certificates to import seed or plant materials. These certificates, issued by government agricultural inspectors where seeds or plants are produced or packaged, attest that seeds or plants are clean, free of prohibited impurities and have been tested for the presence of various pathogens that can be carried in or on the seeds or plant tissue. We obtain such certificates when necessary, including in connection with the use of our seeds for research or sample testing.

*Seed and Plant Variety Registration.* Seed and plant variety registration provides an organized system for protecting seed and plant variety owners as well as growers from misleading marketing practices. Registration of seed and plant varieties is voluntary in the United States under the Federal Seed Act. Applicants must attest that their product is phenotypically unique; that is, verifiably different from varieties that currently exist in the market. A similar system exists in Brazil, the European Union and many other countries; however, the registration process itself may be more regulated, and is sometimes required prior to the commencement of seed sales. In Brazil, sweet sorghum requires two seasons of trial data to be registered, which must be completed prior to the commencement of sales. We have completed our first season of trial data and are substantially complete with the second season of trial data. We have received the necessary governmental variety registrations for the sweet sorghum varieties we are marketing in Brazil in the 2011-2012 growing season. Similarly, in the European Union, two years of field trials with a national authority are required to receive registration for all member states. Registration is required prior to the commencement of sales for new high biomass sorghum and sweet sorghum seed varieties; there is no registration requirement for switchgrass or miscanthus at this time.

*Regulation of Laboratory and Greenhouse Facilities.* The use of genetically engineered organisms in laboratory and greenhouse facilities is subject to rules intended to ensure that such organisms are handled safely and do not pose an unacceptable risk to human health or the environment. The National Institute of Health's Guidelines for Research Involving Recombinant DNA Molecules, or the NIH Guidelines, describe methods for the safe handling of transgenic

materials in laboratory settings. Appendix P (Physical and Biological Containment for Recombinant DNA Research Involving Plants) of the NIH Guidelines describes specific requirements for facilities and practices to meet containment standards for each of the different biosafety levels from lowest containment (designated BL1-P) through the highest containment (designated BL4-P). Appendix P is also used as a guideline for practices relating to conducting experiments to construct, develop, and propagate

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genetically engineered plants. Our current biosafety level is BL1-P, which requires a low level of containment for experiments involving our biotechnology plants.

*Hazardous Materials.* Our laboratory and field activities inherently involve the use of potentially hazardous materials, which are subject to health, safety and environmental regulations. Our infrastructure, procedures and equipment are designed to meet our obligations under these regulations. We perform recurring internal and third-party audits and provide employees ongoing training and support, as required. All employees must comply with safety instructions and procedures, which are codified in our employment policies.

## **Employees**

As of August 31, 2011, we had approximately 90 full-time employees. Of these employees, approximately 56 were engaged in research and development. Our employees are located in the United States and Brazil. We consider our employee relations to be good. None of our employees are represented by a labor union or collective bargaining agreement.

## **Facilities**

### *Headquarters*

Our headquarters is located in Thousand Oaks, California, where we lease approximately 49,000 square feet of office, laboratory and greenhouse space. The lease expires on March 31, 2014. We have one option to extend the lease for an additional term of five years, provided that we give notice to the landlord at least six months prior to the expiration of the initial term of the lease.

### *College Station Research Center*

Our plant breeding and field research center is located in Burleson County near College Station, Texas. Completed in 2009, the site consists of approximately 12,000 square feet of office, laboratory, warehouse and greenhouse space. The research center sits on approximately five acres of leased land, which we hold the option to purchase. Adjacent to our facility, we also lease approximately 200 acres of farmland under a five-year lease expiring in 2013, with two options to extend this lease by five years each.

### *Amarillo Operations*

Our primary U.S. seed warehousing, conditioning, packaging and order fulfillment facility is located in Amarillo, Texas. Purchased in 2009, the site consists of approximately 46,000 square feet of office and warehouse space on a 32-acre parcel. We currently warehouse and process 300,000 pounds of seed annually and anticipate that we will be able to warehouse and process up to 10 million pounds of seed annually at this facility.

### *Brazil*

We lease an office located in the Municipality of Piracicaba, São Paulo, Brazil. We have an option to extend the lease for an additional term of five years. We also have an option to purchase the property. The lease expires on December 31, 2011. Our plant breeding facility is located in the Municipality of Centralina, State of Minas Gerais, Brazil. The site consists of approximately 450 square meters of office and warehouse space on an approximately 3,876-square-meter parcel. The lease expires in August 2014. We have a right of first refusal in the acquisition of the property. In addition, as part of our plant breeding facility, we lease approximately 58 hectares of farmland under a three-year lease expiring in 2014, which we hold an option to purchase. While we currently contract seed

warehousing, conditioning, packaging and fulfillment services to support our trialing and commercialization activities, we expect to add a dedicated Ceres seed production facility in South America.

We believe that our facilities in California, Texas and Brazil, including our planned seed production facility in South America, will adequately meet our needs in the near term.

**Legal Proceedings**

We are not currently a party to any material litigation or other material legal proceedings.

**Table of Contents****MANAGEMENT****Executive Officers and Directors**

The following table sets forth information regarding our executive officers, directors and key employees as of August 31, 2011.

<b>Name</b>	<b>Age</b>	<b>Position</b>
<b>Board of Directors:</b>		
Walter De Logi, Ph.D.(1)(2)	60	Chairman of the Board
Pascal Brandys(2)	52	Director
Raymond Debbane	56	Director
Richard Flavell, Ph.D.	67	Director, Chief Scientific Officer
Robert Goldberg, Ph.D.(2)	67	Director
Richard Hamilton, Ph.D.	49	Director, President and Chief Executive Officer
Thomas Kiley(1)	68	Director
Cheryl Morley	56	Director
David B. Krieger	38	Director
Edmund Olivier(1)(2)	73	Director
<b>Other Executive Officers and Key Employees:</b>		
Paul M. Kuc	49	Chief Financial Officer
Wilfriede van Assche	56	Senior Vice President, General Counsel and Secretary
J. Jefferson Gwyn, Ph.D.	52	Vice President of Breeding and Genomics
Michael Stephenson	69	Vice President of Operations
Roger Pennell, Ph.D.	52	Vice President of Trait Development

(1) Member of Audit Committee

(2) Member of Compensation Committee

(3) Member of the Nominating and Corporate Governance Committee

Our executive officers are elected by, and serve at the discretion of, our board of directors. There are no family relationships among any of our directors and executive officers.

**Board of Directors**

*Walter De Logi, Ph.D., Chairman of the Board*

Dr. De Logi is one of the founders of Ceres and served as our President and Chief Executive Officer from the founding of the Company in 1996 until September 2002. Dr. De Logi has served on our board of directors since our inception and as Chairman of the Board since 2002 to present. From 1986 to 1996, he was the Chief Executive Officer of Plant Genetic Systems, an eminent first-generation plant biotechnology company that was sold to Hoechst Schering AgrEvo GmbH, now part of Bayer AG in 1996. He holds an M.B.A. from Harvard University and a Ph.D. from the California Institute of Technology. Dr. De Logi was nominated to serve on our board of directors pursuant to the

terms of the Voting Agreement. Dr. De Logi brings extensive experience in the plant biotechnology business to the board of directors.

*Pascal Brandys, Director*

Mr. Brandys has served on our board of directors since December 1997. Mr. Brandys is the President and managing member of Biobank Technology Ventures, LLC, an early-stage life sciences investment company which he co-founded in 2001. He was previously a co-founder of the genomics company Genset S.A., and also served as its Chairman and Chief Executive Officer from 1989 to 2000. Mr. Brandys is currently a director of several private companies and previously served as a



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director of Ilog S.A and Innogenetics N.V. He holds an M.S. in Economic Systems from Stanford University and is a graduate of the Ecole Polytechnique of Paris. Mr. Brandys brings extensive business experience in the genomics field and experience as an executive and an investment professional to our board of directors.

*Raymond Debbane, Director*

Mr. Debbane has served on our board of directors since March 1998. Mr. Debbane has served as President and Chief Executive Officer of The Invus Group, LLC, a New York based multi-billion dollar investment firm which is the exclusive investment advisor of Artal Luxembourg S.A., a shareholder of Ceres, since 1985. Prior to forming The Invus Group in 1985, Mr. Debbane was a manager and consultant for The Boston Consulting Group in Paris, France from 1979 to 1985. He is currently a director of Artal Group S.A. and Lexicon Pharmaceuticals, Inc., as well as a number of private companies in which Artal or Invus, L.P. is an investor. Mr. Debbane is also the Chairman of the board of directors of Weight Watchers International. He holds an M.B.A. from Stanford Graduate School of Business, an M.S. in Food Science and Technology from the University of California, Davis and a B.S. in Agricultural Sciences and Agricultural Engineering from American University of Beirut. Mr. Debbane was nominated to serve on our board of directors by Artal Luxembourg S.A. pursuant to the terms of the Voting Agreement. Mr. Debbane brings extensive business and finance experience to our board of directors, as well as experience as a director of a number of companies.

*Richard Flavell, Ph.D., FRS, CBE, Chief Scientific Officer and Director*

Dr. Flavell joined Ceres in 1998 as Chief Scientific Officer and has served on our board of directors since June 2009. Since 2001, Dr. Flavell has been an Adjunct Professor in the Department of Molecular, Cellular and Developmental Biology at the University of California, Los Angeles. From 1987 to 1998, Dr. Flavell was the Director of the John Innes Centre in Norwich, England, a premier plant and microbial research institute. He has published over 200 scientific articles, lectured widely and contributed significantly to the development of modern biotechnology in agriculture. Dr. Flavell is an expert in cereal plant genomics, having produced the first molecular maps of plant chromosomes to reveal the constituent sequences. In 1999, Dr. Flavell was named a Commander of the British Empire for his contributions to plant and microbial sciences. Dr. Flavell received his Ph.D. from the University of East Anglia and has been a Fellow of European Molecular Biology Organization since 1990 and of The Royal Society of London since 1998. Dr. Flavell brings extensive experience and knowledge of plant biotechnology to our board of directors.

*Robert Goldberg, Ph.D., Director*

Dr. Goldberg is a Distinguished Professor of Molecular, Cell and Developmental Biology at the University of California, Los Angeles and a founder of Ceres. He has been a Professor at the University of California, Los Angeles since 1976, teaching genetic engineering and studying the genes that are required for seed formation. Dr. Goldberg is a member of the National Academy of Sciences and has consulted extensively in the agriculture and biotechnology industries. Dr. Goldberg has served as a director of Ceres since 1996. Dr. Goldberg received his Bachelor's Degree in botany from Ohio University, his Ph.D. in plant genetics from the University of Arizona, and was a Postdoctoral Fellow in developmental biology at the California Institute of Technology. Dr. Goldberg brings extensive experience in the agriculture and biotechnology industries to our board of directors.

*Richard Hamilton, Ph.D., President, Chief Executive Officer and Director*

Dr. Hamilton joined Ceres in 1998. He served as our Chief Financial Officer until September 2002, at which time he was appointed President and Chief Executive Officer. He has served on our board of directors since 2002. In addition to his leadership role at Ceres, Dr. Hamilton sits on the Keck Graduate Institute Advisory Council and he is a founding member of the Council for Sustainable Biomass Production. He has served on the U.S. Department of

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Development Technical Advisory Committee and has been active in the Biotechnology Industry Organization where he has served as Vice Chairman of the organization, chaired its Food and Agriculture Governing Board and served in other leadership roles. From 1992 to 1997, Dr. Hamilton was a principal at Oxford Bioscience Partners, one of the leading investors in the genomics field and a founder of Ceres. From 1990 to 1991, he was a Howard Hughes Medical Institute Research Fellow at Harvard Medical School. Dr. Hamilton holds a Ph.D. in molecular biology from Vanderbilt University. Dr. Hamilton brings extensive management experience and renewable energy industry expertise to our board of directors.

*Thomas Kiley, Director*

Mr. Kiley has served as a director of Ceres since May 2003. He became the first general counsel of Genentech in February 1980 and later served as its vice president for corporate development until 1988. Previously, Mr. Kiley practiced intellectual property litigation as a partner of Lyon & Lyon from June 1969 until January 1980. Mr. Kiley has served as a director of Geron, Inc., a publicly traded biopharmaceutical company since July 1996 and Transcept Pharmaceuticals, Inc., a publicly traded pharmaceutical company since February 2004, and several privately-held development stage companies. He received his B.S. in chemical engineering from The Pennsylvania State University and his J.D. from The George Washington University School of Law. He is a member of the State Bar of California. Mr. Kiley brings extensive experience as an intellectual property attorney and director of other public companies to our board of directors.

*David B. Krieger, Director*

Mr. Krieger has served as a director of Ceres since February 2011. Mr. Krieger has been a managing director at Warburg Pincus LLC since 2006, which through its affiliates is a shareholder of Ceres, and has been with Warburg Pincus since 2000. Prior to joining Warburg Pincus, he worked at McKinsey & Company in Atlanta and Europe from September 1995 to May 1998. He is currently a board member of Black Swan Energy Ltd., Canbriam Energy Inc., Fairfield Energy Limited, Kosmos Energy Ltd., MEG Energy Corp. and Osum Oil Sands Corp. He received a B.S. in Economics from the Wharton School of the University of Pennsylvania, an M.S. from the Georgia Institute of Technology and an M.B.A. from Harvard Business School. Mr. Krieger was nominated to serve on our board of directors by Warburg Pincus pursuant to the terms of the Voting Agreement and brings extensive experience in business and finance and the energy industry to our board of directors.

*Cheryl P. Morley, Director*

Ms. Morley has served on our board of directors since August 2011. She was Senior Vice President of Corporate Strategy with Monsanto Company from 2003 to 2009, president of the Animal Agricultural Group from 1997 to 2003 and held a number of other leadership positions at Monsanto and its subsidiaries from 1983 to 1997. She also led the marketing and business development efforts for Monsanto's NutraSweet product. Ms. Morley has served as a board member of Fleming Pharmaceuticals since March 2010, Mercy Health Systems since June 2011, and the Missouri Botanical Gardens since June 2006. In addition, since January 2010 she has served as chairman of the strategic advisory board to Joule Biotechnologies, Inc., and since November 2010 as a member of the business development advisory board of Essentient, Inc. Ms. Morley was chairman of the board and a member of the audit and compensation committees of the Nidus Center for Scientific Enterprise from September 2003 to October 2010. She was presiding director, chairman of the nominating and governance committee and a member of the audit committee for Indevus Pharmaceuticals from June 2002 to March 2009. She holds a B.S. degree from the University of Arizona and is a Certified Public Accountant. Ms. Morley brings extensive experience in finance, service on numerous boards and an understanding of the seed business to our board of directors.



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*Edmund Olivier, Director*

Mr. Olivier has served on our board of directors since our inception in 1996. Mr. Olivier is a founding general partner of Oxford Bioscience Partners, one of the founders of Ceres. Mr. Olivier has been with Oxford Bioscience Partners since 1995. He has overseen investments in numerous life science companies in the United States, Europe, India and Japan. He has also served on the board of directors of a number of Oxford Bioscience's portfolio companies. Mr. Olivier received an M.B.A. from Harvard Business School and a B.S. in Chemical Engineering from Rice University. He is a Life Fellow and member of the International Council of the Salk Institute and a Regent of Harris Manchester College, Oxford University. Mr. Olivier was nominated to serve on our board of directors by entities affiliated with Oxford Bioscience Partners pursuant to the terms of the Voting Agreement and brings extensive experience in business and finance, as well as an understanding of the life sciences industry, to our board of directors.

**Executive Officers**

*Paul M. Kuc, Chief Financial Officer*

Mr. Kuc joined Ceres in 2008 as Chief Financial Officer, following a 12-year career with Monsanto Company, where he held various regional and global finance positions, including posts in Argentina, Brazil, Canada, Mexico and the United States, with his last position, beginning April 2007, as Lead Worldwide Manufacturing Finance at Seminis, Inc., which was purchased by Monsanto in 2005. At Monsanto, among other responsibilities, he developed and implemented international costing and financial systems for the seed and agricultural biotechnology company. Mr. Kuc began his career, from June 1994 to June 1996 at the pharmaceutical company Eli Lilly and Company. He holds a Master's of Science degree in Economics from the University of Lodz, Poland and an M.B.A. from the Ivey Business School, University of Western Ontario, Canada.

*Wilfriede van Assche, Senior Vice President & General Counsel and Secretary*

Ms. van Assche joined Ceres in 2000. She has more than 20 years of legal experience in the plant biotechnology and seed industry. From 1996 until 2000, Ms. van Assche was the General Counsel of the plant biotechnology and seed divisions of Hoechst Schering AgrEvo GmbH and following the merger of Hoechst and Rhone Poulenc, of the same divisions of Aventis, a leading life sciences company that is now part of Bayer AG. Previously, she was the General Counsel of Plant Genetic Systems N.V. from 1988 until its acquisition by Hoechst Schering AgrEvo GmbH in 1996. She began her career with the law firm De Bandt van Hecke (now Linklaters) in Belgium from 1979 until 1982, and was counsel in the legal department of GTE Atea (now Siemens), a telecommunications company, from 1982 until 1988. Ms. van Assche holds a law degree from the University of Leuven and a postgraduate degree from the College of Europe. She is a member of the State Bar of California.

*J. Jefferson Gwyn, Ph.D., Vice President of Breeding and Genomics*

Dr. Gwyn joined Ceres in 2008 as Director of Breeding and was promoted in August 2009 to Vice President of Breeding and Genomics. He oversees crop improvement in switchgrass, sorghum and other energy crops. He also manages our field research center near College Station, Texas. Prior to joining Ceres, Dr. Gwyn was head of soybean trait development at Syngenta Seeds, Inc. from July 2007 to August 2008 and station manager from September 2005 to July 2007. Earlier in his career, Dr. Gwyn established and managed cotton breeding and trait programs stations in the United States and Brazil for Bayer Cotton Seed International as Director of Breeding from March 1998 to July 2005. He was also a project director and program manager in corn trait breeding for DeKalb Genetics from March 1996 to February 1998. Dr. Gwyn began his career as a cotton breeder and plant geneticist with Chembred, Inc. (American Cyanamid) from May 1989 to October 1995. He holds a Ph.D. in genetics from Texas A&M University and a Master's Degree in genetics and plant breeding from Iowa State University. He completed his undergraduate

studies at the University of Arkansas.

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### *Michael Stephenson, Vice President of Operations*

Mr. Stephenson joined Ceres in 2008. Prior to joining Ceres, Mr. Stephenson was a general manager for one of the brands of AgReliant Genetics, the fifth largest corn seed company in the United States, from 2000 to 2008. In addition to his commercial experience, Mr. Stephenson has chaired the American Seed Trade Association's corn and sorghum division, and served as President of the Soybean Research Foundation and Regional Vice President of American Seed Trade Association. Mr. Stephenson holds a B.S. in Business Administration from the University of Kansas.

### *Roger Pennell, Ph.D., Vice President of Trait Development*

Dr. Pennell joined Ceres in 1998 and held various research management positions, including Director, Trait Development from 2006 until 2009 when he assumed his current role as Vice President of Trait Development. Dr. Pennell has been an Adjunct Professor in the Department of Molecular, Cellular and Developmental Biology at the University of California, Los Angeles since 2001 and a frequent reviewer for the scientific press. Dr. Pennell holds a Ph.D. from University College London. He performed post-doctoral research at the John Innes Institute and Wageningen Agricultural University, and in 1990 was the recipient of a prestigious Royal Society University Research Fellowship, which he used at University College London and, from 1995, at the Salk Institute. During this time, Dr. Pennell studied cellular and molecular aspects of plant growth, development and disease resistance, and has published more than 40 scientific papers on these subjects.

## **Board of Directors**

Our board of directors currently consists of ten members. Our amended and restated certificate of incorporation and bylaws, which will become effective immediately prior to the completion of this offering, will permit our board of directors to establish by resolution the authorized number of directors.

Our amended and restated certificate of incorporation and our amended and restated bylaws will provide for a classified board of directors consisting of three classes, with staggered three-year terms as follows:

Class I directors, whose initial term will expire at the annual meeting of stockholders to be held in 2012;

Class II directors, whose initial term will expire at the annual meeting of stockholders to be held in 2013; and

Class III directors, whose initial term will expire at the annual meeting of stockholders to be held in 2014.

At each annual meeting of stockholders after the initial classification, upon expiration of the term of a class of directors, directors in that class will be elected for three-year terms at the annual meeting of stockholders held in the year in which that term expires. Each director's term continues until the election and qualification of his or her successor, or his or her earlier death, resignation or removal. Any increase or decrease in the number of directors will be distributed among three classes so that, as nearly as possible, each class will consist of one-third of the total number of directors.

Upon the completion of this offering, the Class I directors will consist of Mr. Debbane, Dr. Goldberg and Mr. Kiley; the Class II directors will consist of Mr. Brandys, Dr. Flavell, Dr. Hamilton and Mr. Olivier; and the Class III directors will consist of Dr. De Logi, Mr. Krieger and Ms. Morley.

The classification of our board of directors and provisions described above may have the effect of delaying or preventing changes in our control or management. See [Description of Capital Stock](#) [Anti-Takeover Provisions to be in Effect Upon the Completion of this Offering](#) [Amended and Restated Certificate of Incorporation and Bylaw](#)

Provisions .

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### **Risk Oversight**

The board of directors is responsible for general oversight of company risk and risk management, and reviews management's strategies for adequately mitigating and managing the identified risks. Although our board of directors administers this risk management oversight function, our Audit Committee supports our board of directors in discharging its oversight duties and address risks. Our board of directors expects company management to consider risk and risk management in its business decisions, to develop and monitor risk management strategies and processes for day-to-day activities and to implement risk management strategies adopted by the committees and the board of directors.

### **Director Independence**

Upon the completion of this offering, we expect that our common stock will be listed on the Nasdaq Global Market. Under the rules of the Nasdaq Global Market, independent directors must comprise a majority of a listed company's board of directors within a specified period of the completion of this offering. In addition, the rules of the Nasdaq Global Market require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. Under the rules of the Nasdaq Global Market, a director will only qualify as an independent director if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered to be independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

In September 2011, our board of directors undertook a review of its composition, the composition of its committees and the independence of each director. Based upon information requested from and provided by each director concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that none of Messrs. De Logi, Brandys, Debbane, Goldberg, Kiley, Krieger and Olivier and Ms. Morley, representing eight of our ten directors, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is independent as that term is defined under the rules of the Nasdaq Global Market.

Our board of directors also determined that Messrs. Brandys and Kiley and Ms. Morley, who will comprise our Audit Committee upon the listing of our common stock on the Nasdaq Global Market, and Messrs. De Logi and Olivier and Ms. Morley, who will comprise our Compensation Committee upon the listing of our common stock on the Nasdaq Global Market, satisfy the independence standards for those committees established by applicable SEC rules and the rules of The Nasdaq Stock Market. In making this determination, our board of directors considered the relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock held by each non-employee director.

### **Committees of the Board of Directors**

Our board of directors has established an Audit Committee and a Compensation Committee and has established a Nominating and Corporate Governance Committee that will become effective prior to the completion of this offering. Each committee will have the composition and responsibilities described below.



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*Audit Committee*

Our Audit Committee will be comprised of Messrs. Brandys and Kiley and Ms. Morley, who will be chair of the Audit Committee. The composition of our Audit Committee will meet the requirements for independence under the current Nasdaq Global Market and SEC rules and regulations. Each member of our Audit Committee possesses financial sophistication as defined under the rules of the Nasdaq Global Market. Ms. Morley will be our Audit Committee financial expert as that term is defined in Item 407(d)(5)(ii) of Regulation S-K promulgated under the Securities Act. Being an Audit Committee financial expert does not impose on Ms. Morley any duties, obligations or liabilities that are greater than are generally imposed on her as a member of our Audit Committee and our board of directors. Our board of directors will adopt a new charter for our Audit Committee, which provides, among other things, that our Audit Committee will:

oversee our accounting and financial reporting processes and audits of our financial statements;

be directly responsible for the appointment, retention, compensation and oversight of the work of the independent registered public accounting firm;

have the sole authority to preapprove any non-audit services to be provided by the independent registered public accounting firm and to review with the lead audit partner whether any of the audit team members receive any discretionary compensation from the audit firm with respect to non-audit services performed by the independent registered public accounting firm;

actively engage in dialogue with the independent registered public accounting firm with respect to any disclosed relationships or services that may impact the objectivity and independence of the independent registered public accounting firm and recommending that the board of directors take, appropriate action to oversee the independence of the independent auditor; and

discuss the adequacy of the Company's internal control over financial reporting with the independent registered public accounting firm and management and review and discuss any changes implemented by management to address control deficiencies or to make controls more effective.

*Compensation Committee*

Our Compensation Committee will be comprised of Ms. Morley and Messrs. De Logi and Olivier, who will be the chair of the Compensation Committee. The composition of our Compensation Committee will meet the requirements for independence under the current Nasdaq Global Market and SEC rules and regulations. The purpose of our Compensation Committee is to set compensation policy, administer compensation plans and recommend compensation for executive officers to the board of directors. Our board of directors has adopted a new charter for our Compensation Committee to become effective upon the listing of our common stock on the Nasdaq Global Market. Under this new charter, our Compensation Committee will discharge the responsibilities of our board of directors relating to compensation of our executive officers, and will, among other things:

establish the Company's general compensation philosophy;

review and recommend that our board of directors approve the compensation of our executive officers;

review and recommend that our board of directors approve the compensation of our directors;

review and recommend that our board of directors approve compensation for our new or prospective hires;

review and approve, or recommend that the board of directors approve, payouts under annual bonus and other performance-based compensation programs;

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review and recommend that our board of directors approve new or existing long-term or equity-based compensation plans or arrangements and administer those plans or arrangements;

assist in developing succession and continuity plans for the CEO and other executive officers;

review and consult with the board of directors on our compensation and benefit plans to determine whether they create risks that are reasonably likely to have a material adverse effect on the company; and

review, discuss with management, and approve the compensation, discussion and analysis for our public filings.

In May 2011, our Compensation Committee retained Compensia, Inc., or Compensia, a compensation advisory firm, to serve as an independent advisor to the Compensation Committee on executive, equity, and board compensation matters. Compensia assisted our Compensation Committee to identify a peer group of public companies, to conduct an executive compensation market assessment and to develop a non-employee director compensation program, which will be applicable following this offering. More information regarding the decisions that the Compensation Committee has made based on Compensia's recommendations is included below under Compensation Discussion and Analysis.

### *Nominating and Corporate Governance Committee*

Our board of directors has established a Nominating and Corporate Governance Committee which will become effective upon the listing of our common stock on the Nasdaq Global Market. Our Nominating and Corporate Governance Committee will be comprised of Messrs. De Logi, Debbane, Krieger and Kiley, who will be the chair of the Nominating and Corporate Governance Committee. The composition of our Nominating and Corporate Governance Committee will meet the requirements for independence under the current Nasdaq Global Market and SEC rules and regulations. Our Nominating and Corporate Governance Committee will, among other things:

identify and recommend director nominees;

recommend directors to serve on our various committees; and

implement our corporate governance guidelines.

We intend to post the charters of our Audit, Compensation and Nominating and Corporate Governance Committees, and any amendments that may be adopted from time to time, on our website.

### **Compensation Committee Interlocks and Insider Participation**

During fiscal 2011, our Compensation Committee was comprised of Messrs. Brandys, De Logi, Goldberg and Olivier. None of them has at any time during the last fiscal year been one of our officers or employees, nor have any of our executive officers served as a member of the board of directors, or as a member of the compensation or similar committee, of an entity that has one or more executive officers who served on our board of directors or Compensation Committee during fiscal 2011. The Edmund and Ellen Olivier Revocable Family Trust purchased Convertible Notes in the Convertible Note offering more fully described in Certain Relationships and Related Party Transactions below. Mr. Olivier is a trustee of such trust. The Ambergate Trust purchased Convertible Notes from us in the Convertible Note offering more fully described in Certain Relationships and Related Party Transactions below. Dr. De Logi is a beneficiary of such trust.

**Code of Business Conduct and Ethics**

Our board of directors will adopt a code of business conduct and ethics. The code of business conduct and ethics will apply to all of our employees, officers and directors, including those officers

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responsible for financial reporting. The full text of our code of business conduct and ethics will be posted on our website at [www.ceres.net](http://www.ceres.net). We intend to disclose future amendments to our code of business conduct and ethics, or waivers of these provisions, on our website and also in our periodic filings with the SEC.

### **Limitation of Liability and Indemnification of Officers and Directors**

Our amended and restated certificate of incorporation and bylaws, which will become effective upon the completion of this offering, limit the liability of our directors, officers, employees and other agents to the fullest extent permitted by Delaware law. Section 145 of the Delaware General Corporation Law permits indemnification of officers, directors and other agents under certain circumstances and subject to certain limitations. Delaware law also permits a corporation to not hold its directors personally liable for monetary damages for breach of their fiduciary duties as directors, except for liability for:

breach of their duty of loyalty to us or our stockholders;

acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;

unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; and

any transaction from which the director derived an improper personal benefit.

These limitations of liability do not apply to liabilities arising under the federal or state securities laws and do not affect the availability of equitable remedies such as injunctive relief or rescission. Our amended and restated certificate of incorporation will also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity. We have obtained directors and officers liability insurance to cover certain liabilities described above. We plan to enter into separate indemnity agreements with each of our directors and executive officers that require us to indemnify such persons against any and all expenses (including attorneys fees), witness fees, judgments, fines, settlements and other amounts incurred (including expenses of a derivative action) in connection with any action, suit or proceeding or alternative dispute resolution mechanism, inquiry hearing or investigation, whether threatened, pending or completed, to which any such person may be made a party by reason of the fact that such person is or was a director, an officer or an employee of us or any of our affiliated enterprises, provided that such person must follow the procedures for determining entitlement to indemnification set out in the indemnity agreements. The indemnity agreements will also set forth other procedures that will apply in the event of a claim for indemnification thereunder. We believe that these provisions and agreements are necessary to attract and retain qualified persons as executive officers and directors of our company.

At present, there is no pending litigation or proceeding involving any of our directors or executive officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might provide a benefit to us and our stockholders. Our results of operations and financial conditions may be negatively affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, executive officers or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.



**Table of Contents****Director Compensation***Director Compensation Prior to this Offering*

Prior to this offering, we have not paid our directors any cash compensation or directors' fees for their service on the board of directors. It has been our policy, however, to provide annual stock option grants to Messrs. Brandys and Kiley to purchase 15,000 shares of our common stock as compensation for their service on our board of directors. These option grants generally vest over four years, with 25 percent vesting after the first year and the remainder vesting ratably each month thereafter over the next three years. In June 2011, Messrs. Brandys and Kiley each received his grant of 15,000 stock options for fiscal 2011. We also have a consulting agreement with Dr. Goldberg pursuant to which we reimburse him for reasonable out of pocket business expenses incurred in the performance of his consulting duties of up to \$40,000 per year. In addition, pursuant to the consulting agreement, prior to fiscal 2011, Dr. Goldberg received four stock option grants, each covering 15,000 shares of common stock. In July 2011, Dr. Goldberg received a grant of stock options to purchase 15,000 shares of our common stock as compensation for his continued consulting services pursuant to an amendment of his consulting agreement. Each of the stock option grants to our non-employee directors in fiscal 2011 was made pursuant to our standard four-year vesting schedule described above. The following table shows, for the year ended August 31, 2011, information with respect to the compensation of our non-employee directors:

Name	Option Awards \$(1)(2)	Total (\$)
Pascal Brandys	58,800	58,800
Robert Goldberg	63,300	63,300
Thomas Kiley	58,800	58,800

- (1) The amounts in the Option Awards column reflect the aggregate grant date fair value of stock options granted during fiscal 2011, computed in accordance with ASC Topic 718, consisting of a grant of options to purchase 15,000 shares to each of Mr. Brandys, Dr. Goldberg and Mr. Kiley. The assumptions used by us in determining the grant date fair value of option awards and our general approach to our valuation methodology are set forth in the Management's Discussion and Analysis of Financial Condition and Results of Operations Stock-based Compensation section of this prospectus. These amounts do not correspond to the actual value that may be recognized by the directors.
- (2) As of August 31, 2011, members of our board of directors held outstanding stock option awards as follows: Dr. De Logi held 250,000 outstanding stock option awards, Mr. Brandys held 90,000 outstanding stock option awards, Dr. Goldberg held 95,000 outstanding stock option awards and Mr. Kiley held 185,000 outstanding stock option awards.

Our employee directors, Richard Hamilton and Richard Flavell, do not receive any compensation for their service as directors. The compensation that we pay to Dr. Hamilton and Dr. Flavell is discussed in the Executive Compensation section of this prospectus.

*Director Compensation After this Offering*

Based on the recommendation of Compensia and our Compensation Committee, our board of directors has adopted a compensation policy that will become applicable to all of our non-employee directors after this offering. Under this

policy, each non-employee director will receive an annual cash retainer and an annual stock option grant. In addition, upon initial appointment to the board of directors, each non-employee director will receive an initial stock option grant. Committee members and committee chairpersons will receive additional committee retainers, and if we elect a lead/non-

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executive chairman of the board of directors, he or she will also receive an additional lead director retainer. The retainer and stock option amounts that we will provide are as follows:

an annual retainer of \$30,000;

an initial stock option grant to purchase 35,000 shares, to vest annually over three years;

an annual stock option grant to purchase 17,500 shares, to vest 100% after one year;

an annual retainer for committee members as follows: \$7,500 for members of the audit and compensation committees, and \$3,500 for members of the nominating and governance committee;

an annual retainer for committee chairs as follows: \$15,000 for the chairs of the audit and compensation committees, and \$6,000 for the chair of the nominating and governance committee;

an annual retainer of \$30,000 for any non-employee director appointed as lead/non-executive chairman of the board of directors; and

reimbursement for reasonable out-of-pocket business expenses.

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**COMPENSATION DISCUSSION AND ANALYSIS**

**Executive Compensation**

The following discussion describes and analyzes the compensation of our named executive officers for fiscal 2011, who are Richard Hamilton, our President and Chief Executive Officer, or CEO, Paul Kuc, our Chief Financial Officer, or CFO, and Richard Flavell, our Chief Scientific Officer, or CSO, Wilfriede van Assche, our Senior Vice President, General Counsel and Secretary and Michael Stephenson, our Vice President of Operations, our three most highly compensated executive officers during fiscal 2011, other than the CEO and CFO.

We were formed in 1996 and became operational in 1997. While our founders continue to serve us in key roles, we have added a number of executive officers since our formation, including our CEO, CFO and other executives. These additional executives have joined us at various times since 1996. We are building a fully integrated seed company capable of serving the commercial-scale needs of the emerging renewable energy industry. Our success depends, among other things, on attracting and retaining executive officers with experience and skills in a number of different areas as we continue to develop new products and seek to commercialize them.

**Executive Compensation Procedures**

Annually, we review the compensation of our management and employees, including our named executive officers. We follow an annual review process, which consists primarily of individual evaluations and scoring of employee performance, based on meeting personal, departmental and overall company goals. Potential compensation changes are based on the rank and distribution of these scores within the individual employee's level, department and the overall company, as well as budgetary goals.

Our Compensation Committee has historically reviewed and recommended, and our board of directors has approved, the compensation of our CEO, CFO and other named executive officers. Our Compensation Committee has taken into consideration the input and recommendations of our CEO regarding the performance and compensation of named executive officers other than himself. Upon completion of this offering, we expect that our Compensation Committee will continue to review and recommend to the board of directors for approval the compensation of all of our named executive officers and oversee and administer our executive compensation programs and initiatives, and will also be responsible for the evaluation of the performance of our named executive officers. The Compensation Committee will continue to take into consideration input and recommendations from our CEO with respect to the performance and compensation of executive officers other than himself; however, the Compensation Committee will retain the authority to make the final recommendation to the board for approval. Furthermore, the Compensation Committee will meet outside the presence of the CEO when determining his compensation.

Our approach to structuring and determining compensation for our named executive officers is related to our stage of development. Prior to this offering, we have been a privately held company. In determining executive compensation, we informally considered a wide variety of factors in arriving at our compensation decisions, including the competitive market for corresponding positions within comparable geographic areas, and compensation arrangements at companies of similar size and stages of development in the biotechnology and renewable energy industries. Information about these corresponding positions was based on the general and personal knowledge of our Compensation Committee members and board of directors and their experiences with other companies, as well as consultations with our CEO and human resources staff and their prior experience and personal knowledge from contacts with other professionals in the industry. In addition, our Compensation Committee and board of directors consulted publicly available compensation surveys to understand our compensation practices as compared to those of

other companies with similar employee numbers, revenues, market capitalization, and other measures within our industry. In fiscal 2011, we reviewed

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the Radford Global Life Sciences Survey (Southern California), which aggregated survey results from 130 biotechnology, pharmaceutical and medical device companies with revenues of less than \$1 billion (though the survey does not identify the names of these companies). We targeted the 60<sup>th</sup> percentile of the survey in setting base salary levels for our named executive officers, but for setting other components of compensation, we did not target a benchmark but rather considered the survey as one of many factors.

In addition to the foregoing factors, our Compensation Committee also considered the experience levels and past performance of our named executive officers in determining their compensation levels.

In May 2011, our Compensation Committee retained Compensia, who assisted our Compensation Committee to select a peer group with whom the Company can compare its compensation levels and practices. The peer group that was selected includes the following twenty public companies:

Amyris, Inc.	Halozyme Therapeutics, Inc.	Rentech, Inc.
ArborGen Inc.	Inspire Pharmaceuticals, Inc.	Sangamo Biosciences, Inc.
Array BioPharma Inc.	Isis Pharmaceuticals, Inc.	Solazyme, Inc.
Codexis, Inc.	Kior, Inc.	Synta Pharmaceuticals Corp.
FutureFuel Corp.	Lexicon Pharmaceuticals, Inc.	Targacept, Inc.
Genron Corporation	Metabolix, Inc.	Verenium Corporation
Gevo, Inc.	Myriant Corporation	

**Compensation Philosophy and Objectives**

We favor a pay-for-performance compensation philosophy that is driven by individual and corporate performance, while balancing short-term and long-term company goals. We use a combination of cash payments and equity awards that we believe to be appropriate for motivating our executive officers. In addition, we believe that internal pay equity is an important consideration in determining executive compensation. However, we do not use a formulaic approach to determine pay components or amounts. As we gain experience as a public company, we expect that the specific direction, emphasis and components of our executive compensation program will continue to evolve. Our executive compensation program is currently designed to:

align the interests of our executive officers with stockholders by motivating executive officers to meet our long-term objectives and increase stockholder value by rewarding executive officers when stockholder value increases;

attract and retain talented and experienced executives who will strategically address our short-term and long-term needs;

reward executives whose knowledge, skills and performance are critical to our success;

ensure fairness among the executive management team by recognizing the contributions each executive makes to our success; and

foster a shared commitment among executives by aligning their individual goals with the goals of the executive management team and our stockholders.

Our executive compensation program rewards corporate achievement, as well as team and individual accomplishments, by emphasizing a combination of corporate results and individual accountability. To help achieve

these objectives, the Compensation Committee determines a portion of the executives' overall compensation based on the Company's key business, financial and operational achievements, such as revenue, product development, manufacturing metrics, business development and innovation, and the Compensation Committee's assessment of each executive's individual contributions to these achievements. The Compensation Committee also considers each executive

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officer's individual performance, including contributions to the Company's organizational development and management; technological, scientific, budgetary and other business goals; and other qualitative factors as determined by the Compensation Committee.

We also seek to promote a long-term commitment to us by our executives. We believe that there is great value to us in having a team of long-tenured, seasoned managers. Our team-focused culture and management processes are designed to foster this commitment. In addition, our equity compensation program and the vesting schedule attached to equity awards is generally based upon the requirement of continued employment for four years for the executive to fully vest in the equity award, and is intended to retain our executives and reinforce this long-term commitment.

## **Elements of Compensation and Pay Mix**

For fiscal 2011, our executive compensation consisted of the following elements (discussed in detail below) to promote our pay-for-performance philosophy and other compensation goals and objectives:

base salary;

annual cash bonuses linked to our overall performance and individual performance;

grants of long-term equity-based compensation;

health and retirement benefits generally available to employees;

limited severance payments for certain of our executives; and

limited personal benefits for certain of our executives.

We combine these elements to form compensation packages that provide competitive pay, reward the achievement of financial, operational and strategic objectives, align the interests of our executive officers and other senior personnel with those of our stockholders, and balance short-term and long-term incentives.

We believe this combination of elements provides a well-proportioned mix of secure compensation, and at-risk compensation. By following this approach, we motivate our executives to focus on business results that will produce a high level of short-term and long-term performance for us and potential long-term value creation for our executives, as well as reducing the risk of recruitment of top executive talent by competitors.

## **Short-Term Incentives**

*Base Salary.* Base salary is designed to provide our executive officers with steady cash flow during the course of the year that is not contingent on short-term variations in our corporate performance. The base salaries for each of our named executive officers are intended to reflect wages that we believe are competitive for positions in companies of similar size and stage of development and are generally targeted at the 60<sup>th</sup> percentile of the Radford Survey described above. The setting of salaries also includes a subjective judgment as to appropriate levels taking into account each individual's job duties, responsibilities and experience and comparisons to the salaries of our other named executive officers. Base salaries are reviewed at least annually (or more frequently in specific circumstances) and may be recommended for adjustment from time to time based on the results of this review. Following our initial public offering, we expect that salary increases will continue to be determined using a combination of relevant competitive market data and assessment of individual performance. As part of our annual review, in 2011, we increased the base salaries of our named executive officers by between 2% and 5%. With the exception of Dr. Flavell and



Mr. Stephenson, the base salaries of each of our named executive officers in fiscal 2011 was between 10% and 13% lower than the Radford Survey's 60th percentile. Dr. Flavell's fiscal 2011 base salary was approximately 2% lower than the Radford Survey's 60th percentile. Mr. Stephenson's base salary was approximately 7% higher than the Radford Survey's 60th percentile. The lower levels of the base salaries of our named

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executive officers (other than Mr. Stephenson) in fiscal 2011 as compared with the Radford Survey's 60th percentile were due to current economic conditions and budgetary concerns. Mr. Stephenson's base salary exceeded the 60th percentile target because the Compensation Committee determined that his job description and responsibilities were broader than those described for his comparable position in the survey.

The Compensation Committee has also recommended, and the board of directors has approved, a post-offering salary increase for certain of our named executive officers, which salary levels will take effect upon the effective date of this offering, as follows:

Name	Post-Offering Salary (\$)
Richard Hamilton	466,000
Paul Kuc	323,000
Richard Flavell	306,000
Wilfriede van Assche	300,000
Michael Stephenson	300,000

The Compensation Committee (and the board of directors) determined that these base salaries would be appropriate for our named executive officers once we are a publicly traded company, based on a number of considerations, including anticipated individual duties and responsibilities after this offering and information provided by Compensia.

*Cash Bonuses.* Historically, we have awarded cash bonuses to our named executive officers shortly after the end of each calendar year based on performance during the prior fiscal year. The Compensation Committee evaluates company and individual performance throughout the year and, after the end of the fiscal year, recommends bonus payout levels to the board of directors for approval.

The Compensation Committee recommended, and the board of directors approved, 2011 bonus guidelines under which each named executive officer was assigned a target bonus amount as a percentage of his or her base salary (as shown below). The target amounts as a percentage of each named executive officer's base salary are as follows:

Name	Target Bonus as a Percent of Base Salary (%)
Richard Hamilton	50
Paul Kuc	40
Richard Flavell	40
Wilfriede van Assche	40
Michael Stephenson	40

Under the 2011 bonus guidelines, the amount of each named executive officer's target bonus that will be paid will not be determined by applying a specific formula, but will be determined based upon the following: (i) the achievement of company milestones; (ii) the achievement of individual milestones; and (iii) such other factors as the board of directors may determine at its discretion. Our corporate milestones are a combination of business, operating, financial and technology based goals that are evaluated throughout the year by the board of directors. The corporate milestones under the 2011 bonus guidelines consist of several key corporate objectives, including:

Achievement of agronomy and industrial processing milestones and results;

Achievement of the Company's 2011 finance and budgetary goals;

Achievement of research and development milestones and results; and

Raising the profile of the Company and its products.

The individual milestones under the 2011 bonus guidelines are unique to each named executive officer. For Richard Hamilton (our CEO), the individual milestones include managing and developing direct

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reports, the senior management team, and key employees; creating and maintaining a cohesive team and developing the Company's management structure as a public company; and developing and managing relations with the board of directors, investors, partners and service providers, as well as serving as the Company's key spokesperson and favorably raising its profile. For Paul Kuc (our CFO), the individual milestones include contributing to the achievement of key finance, audit and budgetary goals; building Company business and contributing to the completion of key licensing agreements; and managing and developing direct reports and key employees. For Richard Flavell (our CSO), the individual milestones include raising the Company's profile through scientific research and publications; overseeing the execution of product development plans and contributing to agronomy and breeding operations; and managing and developing direct reports and key employees. For Wilfriede van Assche (our Senior Vice President, General Counsel and Secretary), the individual milestones include preparing documentation for the initial public offering; facilitating relationships with external collaborators; contributing to the completion of key licensing agreements and grants; and managing and developing direct reports and key employees. For Michael Stephenson (our Vice President of Operations), the individual milestones include contributing to the achievement of successful agronomy and industrial milestones; selecting and producing seed for future commercial plans; and managing and developing direct reports and key employees.

After the end of the fiscal year, the Compensation Committee will analyze the corporate and individual milestones and will present its analysis and recommendations to the board of directors. The board of directors will then consider the Compensation Committee's analysis and recommendation, as well as any other factors that the board of directors has decided to consider at its discretion, and will determine final bonus amounts. The corporate and individual milestones will be used to conduct a qualitative assessment of corporate and individual performance in the foregoing areas. Our named executive officers' 2011 bonus amounts have not yet been determined as of the date of this offering, but are expected to be determined during the second quarter of fiscal 2012.

## **Long-Term Incentives**

*Long-Term Equity Compensation.* Our equity incentive program is intended to reward longer-term performance and to help align the interests of our executive officers with those of our stockholders. We believe that long-term performance is achieved through an ownership culture that rewards such performance by our executive officers through the use of equity incentives. Prior to this offering, our long-term incentives to date have generally consisted of stock option grants. Our stock option grants generally have a four-year vesting schedule with 25 percent vesting on the first anniversary of the vesting commencement date and the remainder vesting ratably each month thereafter over the next three years. We believe that our equity incentive program is an important retention tool for our employees, including our named executive officers.

Initial equity compensation awards for our named executive officers are individually negotiated with each executive officer at the time they are hired and subsequent grants are made at the discretion of our Compensation Committee and our board of directors. Equity awards to executive officers have not historically been based upon a formula, but rather are determined on a case-by-case basis considering the executive's current share ownership, his or her current overall compensation levels, the Company's need to incentivize the executive in the long term, and retention needs.

In January 2011, we granted stock options to Dr. Flavell and Ms. van Assche in order to better align their equity compensation with that of our other executive officers. We granted Ms. van Assche options to purchase 50,000 shares of our common stock and Dr. Flavell options to purchase 100,000 shares of our common stock, each with an exercise price of \$2.44 per share, which was the fair market value of our common stock on January 20, 2011, the grant date. Upon making the grant to Dr. Flavell, we also cancelled a prior option grant to him from June 8, 2010, that had an exercise price of \$2.25 per share, in furtherance of the equity compensation alignment objective described above. Dr. Flavell's January 2011 grant has a three-year vesting period in recognition of the fact that a portion of his cancelled June 2010 award would have vested prior to the first anniversary of his January 2011 grant. Under this three-year

vesting schedule, 25 percent of the options vested on the

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grant date and the remainder vest in equal monthly installments over the next three years. Ms. van Assche's January 2011 grant has our standard four-year vesting schedule.

In June 2011, we granted additional stock options under our 2010 Stock Option/Stock Issuance Plan to certain key employees, including each of our named executive officers. These stock options are each subject to a five-year vesting schedule with a two-year cliff, with 40 percent of the options vesting on the second anniversary of grant and the remainder vesting ratably each month over the next three years. Our board of directors determined that this five-year vesting schedule was appropriate, rather than our standard four-year schedule, in order to retain and motivate these key employees in light of this offering. All of the stock options awarded in fiscal 2011 (as with our previous stock option grants) were granted with an exercise price equal to the fair market value of our common stock on the date of grant.

Our board of directors also adopted a new 2011 Equity Incentive Plan, which becomes effective immediately prior to the completion of this offering. In order to further motivate and retain our key employees through and after the completion of this offering, our board of directors also approved a grant of stock options under the 2011 Equity Incentive Plan to certain key employees, including our named executive officers, contingent upon and effective on the effective date of this offering, which stock options will have an exercise price equal to the initial public offering price per share of this offering. These stock options will also vest over five years, with 40 percent vesting on the second anniversary of the grant, and the remainder vesting in equal monthly installments over the next three years. The stock options to be awarded to our named executive officers under the 2011 Equity Incentive Plan are as follows:

<b>Name</b>	<b>Number of Shares Subject to the Option</b>
Richard Hamilton	400,000
Paul Kuc	140,000
Richard Flavell	60,000
Wilfriede van Assche	90,000
Michael Stephenson	90,000

In connection with our transition to a publicly-traded company, we expect to continue to grant stock options to our executive officers, and we may also utilize other types of equity awards.

**Other Compensation and Benefits**

*Other Employee Benefits.* We maintain a 401(k) plan in which substantially all of our employees are entitled to participate, under which we provide matching contributions of 50 percent of the employee's contributions up to a maximum of 4 percent of the employee's income (or 50 percent of employee contributions of up to 8 percent of the employee's base salary). We provide health care, dental, vision, life insurance, disability and other welfare benefits to all full-time employees, including our executive officers. These benefits are available to substantially all employees, subject to applicable laws. We generally do not provide other personal benefits to our named executive officers that are not available to other full-time employees on the same terms, though we occasionally provide reimbursement of moving expenses and associated tax gross ups for those amounts as a recruitment tool. We have also provided our CEO with a reimbursement of \$4,451 for personal legal fees and \$800 for associated taxes as provided for in his offer letter in effect at the time such expenses were incurred.

*Severance and Change of Control Benefits.* Other than with respect to our CEO, CFO and CSO, in fiscal 2011, our named executive officers were not entitled to contractual severance or change in control benefits. Our arrangements

with our CEO, CFO and CSO were individually negotiated in connection with their hire. Under those arrangements, each of our CEO and CSO was entitled to limited salary continuation in the event his employment was terminated by us without cause. Our CFO was entitled to a severance payment in the event his employment was terminated in connection with an acquisition of the Company. We have, however, entered into new employment agreements, effective as of September 1, 2011, under which our named executive officers will be entitled to certain payments upon their termination without cause, or their resignation for good reason,

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both in the absence of and in connection with a change in control transaction. Under our 2010 Stock Option/Stock Issuance Plan, or the 2010 Plan, and under our newly adopted 2011 Equity Incentive Plan, vesting of equity awards will accelerate under certain circumstances as described in detail below in the section captioned *Executive Compensation Potential Severance Payments upon Termination and upon Termination Following a Change in Control*. We believe these severance benefits and double trigger change in control benefits are appropriate in order to provide our named executive officers with a certain amount of certainty and security in the event of a change in control so they can focus on their duties. For more detail on our severance and change in control arrangements, please see *Potential Severance Payments upon Termination and upon Termination Following a Change in Control* and *Executive Employment Agreements*.

*Tax Considerations.* Section 162(m) of the Internal Revenue Code disallows a tax deduction for any publicly held corporation for individual compensation exceeding \$1.0 million in any taxable year for our named executive officers (other than our chief financial officer), unless compensation is performance-based. As we are not currently publicly-traded, our board of directors has not previously taken the deductibility limit imposed by Section 162(m) into consideration in setting compensation. We expect that our Compensation Committee may in the future, where reasonably practicable, take steps to ensure that the variable compensation paid to our executive officers is deductible by the Company. However, our Compensation Committee may, in its judgment, authorize compensation payments that do not meet the deductibility requirements imposed by Section 162(m) when it believes that such payments are appropriate to attract and retain executive talent.

**Summary Compensation Table**

The following table sets forth information regarding compensation earned by our named executive officers during fiscal 2011.

<b>Name and Principal Position</b>	<b>Year</b>	<b>Salary (\$)</b>	<b>Bonus (\$)(1)(2)</b>	<b>Option Awards (\$)(3)</b>	<b>All Other Compensation (\$)</b>	<b>Total (\$)</b>
Richard Hamilton <i>President and Chief Executive Officer</i>	2011	386,538		802,000	13,219(5)	1,201,757
	2010	380,000	66,500		7,616	454,116
Paul Kuc <i>Chief Financial Officer</i>	2011	268,500		160,400	5,418(6)	434,318
	2010	260,000	65,000	155,133	65,021	545,154
Richard Flavell <i>Chief Scientific Officer</i>	2011	303,923		323,400(4)	10,258(7)	637,581
	2010	300,000	45,000	23,270	9,992	378,262
Wilfriede van Assche <i>Senior Vice President, General Counsel and Secretary</i>	2011	270,231		241,900	10,312(8)	522,443
	2010	265,000	39,750	38,783	10,051	353,584
Michael Stephenson <i>Vice President of Operations</i>	2011	254,577		160,400	8,630(9)	423,607
	2010	250,000	50,000	155,133	6,744	461,877



- (1) For fiscal 2010 and fiscal 2011, bonuses for our named executive officers have been determined on a discretionary basis by our Compensation Committee and our board of directors. Accordingly, we are disclosing bonus amounts in the Bonus column.
- (2) Annual bonus amounts for fiscal 2011 have not yet been determined as of the last practicable date prior to this offering. We expect that our Compensation Committee and our board of directors will determine and approve our named executive officers' bonus amounts during the second quarter of fiscal 2012.
- (3) The amounts in the Option Awards column reflect the aggregate grant date fair value of stock options granted during fiscal 2011, computed in accordance with ASC Topic 718. The assumptions used by us in determining the grant date fair value of option awards and our general approach to our valuation methodology are set forth in the Management's Discussion and Analysis of Financial Condition and Results of Operations Stock-based Compensation section of this prospectus. See the Grants of Plan-Based Awards table for more information on stock option grants made in fiscal 2011. These amounts do not correspond to the actual value that may be recognized by the named executive officers.

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- (4) The portion of this amount relating to Dr. Flavell's January 20, 2011 option grant represents the incremental fair value of a replacement award granted in connection with the cancellation of a previous option award, computed as of the replacement date, which is equal to the grant date fair value of such replacement award.
- (5) This amount includes a company matching contribution to our 401(k) plan in the amount of \$7,650, company-paid life insurance premiums in the amount of \$318 and reimbursement of \$4,451 for personal legal expenses and \$800 for associated taxes.
- (6) This amount includes a company matching contribution to our 401(k) plan in the amount of \$5,100 and company-paid life insurance premiums in the amount of \$318.
- (7) This amount includes a company matching contribution to our 401(k) plan in the amount of \$9,957 and company-paid life insurance premiums in the amount of \$301.
- (8) This amount includes a company matching contribution to our 401(k) plan in the amount of \$9,994 and company-paid life insurance premiums in the amount of \$318.
- (9) This amount includes a company matching contribution to our 401(k) plan in the amount of \$8,329 and company-paid life insurance premiums in the amount of \$301.

**Grants of Plan-Based Awards**

The following table sets forth information regarding grants of compensation in the form of plan-based awards made during fiscal 2011 to our named executive officers.

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options #(1)	Exercise or Base Price of Option Awards (\$/Sh)(2)	Grant Date Fair Value of Option Awards \$(3)
Richard Hamilton	6/23/11	200,000	5.59	802,000
Paul Kuc	6/23/11	40,000	5.59	160,400
Richard Flavell	1/20/11(4)	100,000	2.44	163,000
	6/23/11	40,000	5.59	160,400
Wilfriede van Assche	1/20/11(5)	50,000	2.44	81,500
	6/23/11	40,000	5.59	160,400
Michael Stephenson	6/23/11	40,000	5.59	160,400

- (1) Unless otherwise specified, the stock option awards listed in this table are subject to a five-year vesting schedule with a two-year cliff, with 40% of the options vesting on the second anniversary of the grant date and the remainder vesting ratably each month thereafter until the fifth anniversary of the grant date. Notwithstanding the foregoing, awards may be subject to acceleration of vesting upon a change in control of our company and/or a termination of employment following a change in control, as further described below in Executive Compensation Potential Severance Payments upon Termination and upon Termination Following a Change in

Control . All options were granted under our 2010 Stock Option/Stock Issuance Plan, which are described below under Compensation Discussion and Analysis Executive Compensation Equity Compensation Plans .

- (2) Represents the fair market value of a share of our common stock, as determined by our board of directors, on the respective option grant date. For a discussion of our methodology for determining the fair market value of our common stock, see the Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates section of this prospectus.
- (3) Reflects the grant date fair value of each stock option granted computed in accordance with ASC Topic 718. The assumptions used by us in determining the grant date fair value of option awards and our general approach to our valuation methodology are set forth in the Management's Discussion and Analysis of Financial Condition and Results of Operations Stock-based Compensation section of this prospectus. These amounts do not correspond to the actual value that may be recognized by the named executive officers.
- (4) The grant to Dr. Flavell on January 20, 2011 is a replacement award granted in connection with the cancellation of a previous option award that had been granted on June 8, 2010. The replacement award is

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subject to a three-year vesting schedule, with 25% of the options vesting on the vesting commencement date, which is a date fixed by our board of directors when granting options, and the remainder vesting ratably each month thereafter until the third anniversary of the grant date. The grant date fair value amount represents incremental fair value of the replacement award, computed as of the replacement date, which is equal to the grant date value of such replacement award.

- (5) The grant to Wilfriede van Assche on January 20, 2011, is subject to a four-year vesting schedule, with 25% of the options vesting on the first anniversary of the vesting commencement date and the remainder vesting ratably each month thereafter until the fourth anniversary of the grant date.

**Outstanding Equity Awards at Fiscal 2011 Year-End**

The following table itemizes outstanding options held by the named executive officers as of August 31, 2011.

Name	Option Grant Date	Option Awards				
		Securities Underlying Unexercised Options Exercisable (#)(1)*	Securities Underlying Unexercised Options (#)(1)	Total Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)(2)	Option Expiration Date
Richard Hamilton	12/19/2002	1,200,000		1,200,000(5)	0.65	12/18/2012
	1/16/2006	205,000		205,000(6)	1.30	1/15/2016
	12/21/2007	562,000		562,000(7)	2.25	12/20/2017
	6/23/2011	200,000(3)		200,000(8)	5.59	6/22/2021
Paul Kuc	9/3/2008	330,000		330,000(9)	2.25	9/2/2018
	6/8/2010	100,000		100,000(10)	2.25	6/7/2020
	6/23/2011	40,000(3)		40,000(8)	5.59	6/22/2021
Richard Flavell	4/4/2002	150,000		150,000(11)	0.60	4/3/2012
	1/16/2006	205,000		205,000(6)	1.30	1/15/2016
	1/20/2011	100,000(4)		100,000(12)	2.44	1/19/2021
	6/23/2011	40,000(3)		40,000(8)	5.59	6/22/2021
Wilfriede van Assche	4/4/2002	65,000		65,000(11)	0.60	4/3/2012
	1/16/2006	102,500		102,500(6)	1.30	1/15/2016
	6/8/2010	25,000		25,000(10)	2.25	6/7/2020
	1/20/2011	50,000		50,000(12)	2.44	1/19/2021
	6/23/2011	40,000(3)		40,000(8)	5.59	6/22/2021
Michael Stephenson	6/4/2008	300,000		300,000(13)	2.25	6/3/2018
	6/8/2010	100,000		100,000(10)	2.25	6/7/2020
	6/23/2011	40,000(3)		40,000(8)	5.59	6/22/2021

\* Stock options may be exercised prior to vesting, subject to repurchase rights that expire over the vesting periods indicated in the footnotes below. Accordingly, all stock options outstanding as of August 31, 2011, were exercisable in full.

- (1) Unless otherwise specified, options granted before 2011 vest as to 25% of the original number of shares on the first anniversary of the vesting commencement date and the remainder of the shares vest ratably each month

thereafter until the fourth anniversary of the vesting commencement date. Notwithstanding the foregoing, awards may be accelerated upon a change in control of our company, and/or a termination of employment following a change in control, as further described below in Executive Compensation Potential Severance Payments upon Termination and upon Termination Following a Change in Control . Unvested options are subject to early exercise, in which case, until they vest, the shares acquired pursuant to such exercise will be restricted and subject to repurchase by the Company at the exercise price upon the participant termination of employment.

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- (2) The option exercise price represents the fair market value of our common stock as of the date of grant, as determined by our board of directors. For a discussion of our methodology for determining the fair market value of our common stock, see the Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates section of this prospectus.
- (3) All options granted on June 23, 2011, are subject to a five-year vesting schedule with a two-year cliff, with 40% of the options vesting on the second anniversary of the grant date and the remainder vesting ratably each month thereafter until the fifth anniversary of the grant date.
- (4) The options granted to Dr. Flavell on January 20, 2011, are subject to a three-year vesting schedule, with 25% of the options vesting immediately on the vesting commencement date and the remainder vesting ratably each month thereafter until the third anniversary of the vesting commencement date.
- (5) The vesting commencement date of this grant is September 23, 2002.
- (6) The vesting commencement date of this grant is January 16, 2006.
- (7) The vesting commencement date of this grant is December 21, 2007.
- (8) The vesting commencement date of this grant is June 23, 2011.
- (9) The vesting commencement date of this grant is September 3, 2008.
- (10) The vesting commencement date of this grant is June 8, 2010.
- (11) The vesting commencement date of this grant is April 1, 2002.
- (12) The vesting commencement date of this grant is January 1, 2011.
- (13) The vesting commencement date of this grant is June 1, 2008.

**Option Exercises and Stock Vested in Fiscal 2011**

The following table contains information about stock options that were exercised by our named executive officers during fiscal 2011. None of our named executive officers held any shares of restricted stock during fiscal 2011.

Name	Option Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise \$(1)
Wilfriede van Assche	81,000	149,850

- (1) The aggregate dollar value realized upon the exercise of stock options represents the product of the number of options exercised and the excess of the fair market value of our common stock on November 29, 2010, the exercise date, determined by our board of directors to be approximately \$2.25 per share, over the exercise price per share of the stock options exercised. For a discussion of our methodology for determining the fair market

value of our common stock, see the Management's Discussion and Analysis of Financial Condition and Results of Operations Critical Accounting Policies and Estimates section of this prospectus.

**Pension Benefits and Non-Qualified Deferred Compensation**

None of our named executive officers participates in, or has an account balance in, a qualified or non-qualified pension plan or deferred compensation plan sponsored by us.

**Potential Payments Upon Termination and Upon Termination in Connection with a Change in Control**

We entered into employment agreements with each of our named executive officers that became effective on September 1, 2011, and which are described in more detail under Executive Employment Agreements below. Assuming these employment agreements had been in effect as of August 31,

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2011, our named executive officers would have been entitled to certain severance payments and benefits in the event of their termination of employment under certain circumstances, including (i) termination without cause, (ii) resignation for good reason, (iii) termination without cause or resignation for good reason in connection with a change in control of the Company or (iv) termination due to death or disability. In addition, under our 2010 Plan and 2000 Plan, the named executive officers would have been entitled to accelerated vesting of outstanding equity awards in the event of their involuntary termination of employment within 12 months after a change in control or other corporate transaction.

The following table summarizes the potential severance payments and benefits payable to each of our named executive officers under each of the following circumstances: (i) termination of employment without cause or resignation for good reason in the absence of a change in control; (ii) termination of employment without cause or resignation for good reason in connection with a change in control; and (iii) termination of employment due to death or disability. This table assumes that: (a) the named executive officers' employment was terminated on August 31, 2011; (b) the executive employment agreements (described below) were in effect on August 31, 2011; and (c) the post-offering salaries (described above) were in effect on August 31, 2011.

Name	Termination Without Cause or Resignation for Good Reason in the Absence of a Change in Control		Termination Without Cause or Resignation for Good Reason in Connection with a Change in Control		Termination Due to Death or Disability	
	Value of		Value of		Value of	
	Lump Sum Severance Payment (\$)(1)	Accelerated Options or Restricted Shares (\$)	Lump Sum Severance Payment (\$)(2)	Accelerated Options or Restricted Shares (\$)(3)	Lump Sum Severance Payment (\$)	Accelerated Options or Restricted Shares (\$)
Richard Hamilton	466,000		932,000	188,514	466,000	
Paul Kuc	323,000		646,000	561,132	323,000	
Richard Flavell	306,000		612,000	203,371	306,000	
Wilfriede van Assche	300,000		600,000	230,650	300,000	
Michael Stephenson	300,000		600,000	467,876	300,000	

- (1) This column assumes that the named executive officer is terminated without cause or resigns for good reason more than six months prior to or more than twelve months following a change in control (as each term is defined in the executive's employment agreement and described below).
- (2) This column assumes that the named executive officer is terminated without cause or resigns for good reason within six months prior to or within twelve months following a change in control (as each term is defined in the executive's employment agreement and described below).
- (3) This column assumes that the named executive officer suffers an involuntary termination (as defined in the 2010 Plan and described below) within twelve months after an acquisition of the Company, merger or other similar



corporate transaction (as each term is defined in the 2010 Plan and the 2000 Plan and described below). The amounts represent, in respect of each unvested stock option outstanding as of August 31, 2011, the number of shares underlying such stock option, multiplied by the excess of the fair market value of our common stock as determined by our board of directors on July 20, 2011 (which was the most recent valuation of our common stock before the close of the fiscal year on August 31, 2011) of \$5.72 per share over the exercise price of the option. For a discussion of our methodology for determining the fair market value of our common stock, see the Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Estimates section of this prospectus.

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### **Executive Employment Agreements**

We entered into executive employment agreements with each of our named executive officers effective as of September 1, 2011. The terms of each of these agreements are substantially similar, except with respect to each named executive officer's initial base salary, which is described below.

Each of the executive employment agreements has an initial term of one year, starting on September 1, 2011, with an automatic renewal for additional one-year periods, unless either party gives 90 days' notice of nonrenewal. The employment agreements provide for an initial annual base salary (to be reviewed by the Compensation Committee annually), a performance bonus and long-term incentive award opportunity as determined by the Compensation Committee, and participation in the Company's savings, retirement and other welfare benefit plans that the Company may have in place from time to time.

Under the executive employment agreements, if the Company terminates the named executive officer's employment or does not renew the term of the employment agreement for reasons other than for cause or if the named executive officer resigns his or her employment for good reason, then he will be entitled to (i) a lump sum severance payment equal to one year's base salary; (ii) to the extent the termination occurs on or after the midpoint of the Company's fiscal year, a pro-rated annual bonus and (iii) any other compensation and benefits accrued on or prior to the termination date. The named executive officer (or his or her estate if applicable) will also receive the foregoing amounts if his or her employment is terminated due to death or disability.

If the named executive officer's employment is terminated or not renewed by the Company for reasons other than for cause or if he resigns from his or her employment for good reason, in each case, within six months prior to, or within twelve months after, a change in control, then he is entitled to a lump sum severance payment equal to two times his or her base salary and any other accrued compensation and benefits. If the named executive officer's employment is terminated or the term of the employment agreement is not renewed for cause or if the named executive officer resigns from his or her employment or does not renew the term for any reason other than good reason, then he will be entitled only to compensation and benefits that have accrued on or prior to the termination date.

The named executive officers are obligated to comply with a confidentiality, proprietary information and inventions assignment agreement previously entered into with the Company and non-disparagement covenants under the executive employment agreements. In addition, payments under the agreements will be subject to any clawback or recoupment policies as required under applicable law.

Under the executive employment agreements, the following definitions apply:

Cause is defined as (i) a material breach of the employment agreement or any other written agreement with the Company to the extent the breach is not cured within 30 days; (ii) the named executive officer's conviction or plea of *nolo contendere* to a felony or another crime involving dishonesty or moral turpitude or which could reflect negatively on or otherwise impair or impede the Company's operations; (iii) the named executive officer's engaging in misconduct, negligence, dishonesty, violence or threat of violence that is injurious to the Company; (iv) a material breach of a written policy of the Company or the rules of any governmental or regulatory body applicable to the Company that could result in an adverse effect on the Company or could reflect negatively on or impair the operations of the Company or (v) any other willful misconduct that is materially injurious to the financial condition or business reputation of the Company.

Good reason is defined as any of the following: (i) an adverse change in the named executive officer's position with the Company that materially reduces his or her level of authority, duties or responsibility; (ii) a reduction

of base salary by more than five percent (except a reduction of 15% or less if the reduction is similarly applied to all executives); (iii) a relocation of place of

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employment by more than 50 miles without the executive's consent or (iv) a substantial change in the nature or orientation of the Company's core business such that the Company is no longer substantially engaged in the agricultural biotechnology business.

A change in control means the occurrence of any of the following events: (i) any person or group becomes the beneficial owner of greater than 50% of the Company's total voting power; (ii) the sale of substantially all of the Company's assets; or (iii) the consummation of a merger or consolidation of the Company, after which the voting securities of the Company outstanding immediately prior to the event no longer represent 50% or more of the voting power represented by the voting securities of the Company or surviving entity immediately after the event.

The initial base salaries set forth in each of our named executive officers' employment agreements are such named executive officers' current rate of annual base salary on September 1, 2011. Upon the effective date of this offering, however, certain of our named executive officers' base salary will be increased as described in Compensation Discussion and Analysis Executive Compensation Short-Term Incentives above.

## **Equity Compensation Plans**

### *Ceres, Inc. 2011 Equity Incentive Plan*

The following is a summary of the Ceres, Inc. 2011 Equity Incentive Plan, which was adopted by our board of directors on July 20, 2011, and approved by the Company's shareholders on \_\_\_\_\_, 2011. This summary is not intended to be a complete description of all provisions of the Plan and is qualified in its entirety by reference to the 2011 Equity Incentive Plan, which will be filed as an exhibit to this registration statement.

*Purpose.* The purpose of the 2011 Equity Incentive Plan is to promote the success and enhance the value of the Company by linking the personal interests of directors, employees and consultants to those interests of our stockholders.

*Eligibility.* Incentive stock options may only be granted to employees of the Company. All other awards under the 2011 Equity Incentive Plan may be granted to employees, consultant or non-employee directors of the Company.

*Stock Subject to Plan.* Subject to any recapitalization adjustments, the maximum aggregate number of shares of common stock that may be issued under the 2011 Equity Incentive Plan is 4 million shares. Any shares not issued due to net settlement of an award, shares used to pay the exercise price or withholding taxes for an award and shares repurchased on the open market with the proceeds of a stock option exercise will not be made available again for granting awards under the plan. If any award under the plan, or under any predecessor equity-based plan of the Company, is forfeited or cancelled, the associated shares will be available again for grant under the 2011 Equity Incentive Plan.

*Administration.* The 2011 Equity Incentive Plan is to be administered by the Compensation Committee, but the full Board of Directors has final authority to approve awards made under the 2011 Equity Incentive Plan (except to the extent such awards must be granted by a committee of independent directors under applicable law) and the full Board of Directors is the administrator for awards granted to non-employee directors. The Board of Directors may also assume administrative authority to the extent permitted by applicable law, and both the Board of Directors and the Compensation Committee may delegate their administrative functions to one or more members of the Board of Directors or to one or more officers of the Company to the extent permitted by applicable law.

The administrator of the 2011 Equity Incentive Plan has the authority to designate eligible individuals to receive awards; determine the type and number of awards to be granted and the terms

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and conditions of any award; determine whether awards may be settled in cash, common stock, other awards, or other property; decide all other matters relating to any award, establish any rules and regulations as it may deem necessary or advisable to administer the plan and make all other decisions and determinations as necessary or advisable to administer the 2011 Equity Incentive Plan.

*Performance-Based Awards.* The Compensation Committee may grant performance-based awards that will be based upon the Company's achievement of objective performance criteria as selected by the Compensation Committee within 90 days following the beginning of the applicable performance period. The performance criteria will be one or more of the following measures: earnings (either before or after interest, taxes, depreciation and amortization), sales or revenue, net income (either before or after taxes), operating earnings or profit, cash flow, return on assets or net assets, return on capital, return on sales, profit or operating margin, costs, funds from operations, expenses, working capital, earnings per share, price per share of common stock, regulatory body approval for commercialization of a product, implementation or completion of critical projects, market share, billings, operating income or profit, operating expenses, total stockholder return, cash conversion cycle, economic value added, contract awards or backlog, overhead or other expense reduction, credit rating, acquisitions or strategic transactions, strategic plan development and implementation, succession plan development and implementation, customer surveys, new product invention or innovation, attainment of research and development milestones, improvements in productivity and the attainment of objective operating goals and employee metrics. The maximum number of shares in respect of any one or more awards that may be granted to any individual in any calendar year is two million shares.

*Stock Options.* The plan administrator may grant incentive stock options (intended to qualify under Section 422 of the Internal Revenue Code) or nonqualified stock options under the 2011 Equity Incentive Plan. The exercise price of any stock option granted may not be less than 100% of the fair market value of the Company's common stock on the date of grant (or, for incentive stock options, 110% of fair market value if the grantee is a ten percent stockholder). The term of any stock option granted may not exceed ten years (or, for incentive stock options, five years for any grantee who is a ten percent stockholder). The plan administrator will determine the vesting conditions and schedule for each stock option granted, which may be based upon the participant's service with the Company, the achievement of performance criteria, or any other criteria.

*Restricted Stock.* The plan administrator may grant restricted stock under the 2011 Equity Incentive Plan. The plan administrator will determine the restrictions and vesting conditions and schedule for each grant of restricted stock, which may be based upon the participant's service with the Company, the achievement of performance criteria, or any other criteria.

*Stock Appreciation Rights.* The plan administrator may grant stock appreciation rights. The exercise price of any stock appreciation right granted may not be less than 100% of the fair market value of the Company's common stock on the date of grant. The plan administrator will determine the vesting conditions and schedule for each stock appreciation right, which may be based upon the participant's service with the Company, the achievement of performance criteria, or any other criteria.

*Performance Awards, Dividend Equivalents, Stock Payments, Restricted Stock Units and Other Awards.* The plan administrator may also grant performance awards that are linked to the performance criteria set forth in the 2011 Equity Incentive Plan or other criteria. Performance awards may be paid in common stock, cash or a combination thereof, as determined by the plan administrator. The plan administrator may also make grants of dividend equivalents, stock payments, deferred stock, restricted stock units (settled in cash, common stock or a combination thereof) and other equity or equity based awards. The term, exercise or purchase price, vesting conditions and other terms and conditions of performance awards will be determined by the plan administrator.

*Recoupment and Repricing.* Any awards granted under the 2011 Equity Incentive Plan will be subject to any clawback or recoupment policies and procedures as required under applicable law. The administrator has the authority to amend any outstanding award to increase or reduce the price per

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share or cancel and replace any award with the grant of a new award, in each case without the approval of the stockholders of the Company.

*Corporate Events.* The number, type and kind of shares authorized for issuance will be equitably adjusted in the event of a stock split, reverse stock split, subdivision, bonus issue, stock dividend, recapitalization, reorganization, merger, amalgamation, consolidation, division, extraordinary dividend, split-up, spin-off, combination, exchange of shares, warrants or rights offering to purchase common stock at a price substantially below fair market value, or other similar corporate event affecting the common stock in order to preserve the benefits intended to be made available under the 2011 Equity Incentive Plan. In addition, in the event of such a corporate event, the number of outstanding awards and the number, type and kind of securities subject to any outstanding award and the exercise or purchase price per share, if any, under any outstanding award will also be equitably adjusted in order to preserve the benefits intended to be made available to participants.

In the event of a change in control, the administrator may take any one or more of the following actions in order to prevent the dilution or enlargement of benefits intended to be made available to participants under the plan or to facilitate the change in control transaction: (i) terminate or cancel outstanding awards in exchange for a cash payment; (ii) provide for the assumption, substitution, replacement, or continuation of any award by the successor or surviving company; (iii) make any other adjustments in the number, type and kind of securities or other consideration and the terms and conditions of outstanding awards; (iv) to provide for the acceleration of any awards, or any portion thereof and (v) to provide that an award cannot vest, be exercised or become payable after the event. Also, if upon a change of control, any outstanding award is not continued, assumed, replaced or substituted, or if the participant experiences a qualifying termination in connection with the change in control, any affected unvested award or awards will accelerate.

*Definitions.* Under the 2011 Equity Incentive Plan, the following definitions apply:

A change in control means the occurrence of any of the following events: (i) any person or group becomes the beneficial owner of greater than 50% of the Company's total voting power; (ii) the sale of substantially all of the Company's assets; or (iii) the consummation of a merger or consolidation of the Company, after which the voting securities of the Company outstanding immediately prior to the event no longer represent 50% or more of the voting power represented by the voting securities of the Company or surviving entity immediately after the event.

A qualifying termination is deemed to have occurred if a participant's employment is terminated within six months prior to or twelve months following a change in control either by reason of his or her dismissal or discharge for misconduct or his or her voluntary resignation for good reason as defined in an employment agreement with the participant, or if there is no employment agreement or good reason definition, for any of the following reasons: (i) a material adverse change in the participant's position with the Company that materially reduces his or her level of responsibility; (ii) a material adverse reduction in the participant's level of base salary by more than 15 percent (unless the reduction is applied in a consistent manner to substantially all of the Company's other employees) or (iii) a relocation of the participant's place of employment by more than 50 miles without the Participant's consent.

Misconduct is defined as cause as defined in an employment agreement with the participant, or if there is no employment agreement or cause definition, the following: (i) the participant's breach of an agreement with the Company; (ii) the participant's failure or refusal to satisfactorily perform the duties reasonably required of him or her; (iii) the participant's commission of any act of fraud, embezzlement, dishonesty or insubordination; (iv) the participant's unauthorized use or disclosure of confidential information or trade secrets of the Company; (v) the participant's breach of a Company policy or the rules of any governmental or regulatory



body or (vi) any other misconduct by the participant that, or could have, an adverse impact on the business, reputation or affairs of the Company.

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*Amendment and Termination.* The 2011 Equity Incentive Plan may be amended, suspended or terminated by the board of directors; however, any material amendments are subject to shareholder approval.

*Certain Federal Income Tax Consequences.* The following is a brief summary of certain significant United States Federal income tax consequences under the Internal Revenue Code, as in effect on the date of this summary, applicable to the Company and plan participants in connection with awards under the 2011 Equity Incentive Plan. This summary assumes that all awards will be exempt from, or comply with, the rules under Section 409A of the Internal Revenue Code regarding nonqualified deferred compensation. If an award constitutes nonqualified deferred compensation and fails to comply with Section 409A, the award will be subject to immediate taxation and tax penalties in the year the award vests. This summary is not intended to be exhaustive, and, among other things, does not describe state, local or non-United States tax consequences, or the effect of gift, estate or inheritance taxes. References to the Company in this summary of tax consequences mean Ceres, Inc., or any affiliate of Ceres, Inc. that employs or receives the services of a recipient of an award under the 2011 Equity Incentive Plan, as the case may be.

The grant of stock options under the 2011 Equity Incentive Plan will not result in taxable income to the recipient of the options or an income tax deduction for the Company. However, the transfer of our common stock to an option holder upon exercise of his or her option may or may not give rise to taxable income to the option holder and a tax deduction for the Company depending upon whether such option is a nonqualified stock option or an incentive stock option.

The exercise of a nonqualified stock option by an option holder generally results in immediate recognition of taxable ordinary income by the option holder and a corresponding tax deduction for the Company in the amount by which the fair market value of the shares of our common stock purchased, on the date of such exercise, exceeds the aggregate exercise price paid. Any appreciation or depreciation in the fair market value of those shares after the exercise date will generally result in a capital gain or loss to the holder at the time he or she disposes of those shares.

The exercise of an incentive stock option by the option holder is exempt from income tax, although not from the alternative minimum tax, and does not result in a tax deduction for the Company if the holder has been an employee of the Company at all times beginning with the option grant date and ending three months before the date the holder exercises the option (or twelve months in the case of termination of employment due to disability). If the option holder has not been so employed during that time, the holder will be taxed as described above for nonqualified stock options. If the option holder disposes of the shares purchased more than two years after the option was granted and more than one year after the option was exercised, then the option holder will recognize any gain or loss upon disposition of those shares as capital gain or loss. However, if the option holder disposes of the shares prior to satisfying these holding periods (known as a disqualifying disposition), the option holder will be obligated to report, as taxable ordinary income for the year in which that disposition occurs, the excess, with certain adjustments, of the fair market value of the shares disposed of, on the date the incentive stock option was exercised, over the exercise price paid for those shares. The Company would be entitled to a tax deduction equal to that amount of ordinary income reported by the option holder. Any additional gain realized by the option holder on the disqualifying disposition would be capital gain. If the total amount realized in a disqualifying disposition is less than the exercise price of the incentive stock option, the difference would be a capital loss for the holder.

The grant of stock appreciation rights does not result in taxable income to the recipient of a stock appreciation right or a tax deduction for the Company. Upon exercise of a stock appreciation right, the amount of any cash the participant receives (before applicable tax withholdings) and the fair market value as of the exercise date of any common stock received are taxable to the participant as ordinary income and deductible by the Company.



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A participant will not recognize any taxable income upon the award of shares of restricted stock which are not transferable and are subject to a substantial risk of forfeiture. Dividends paid with respect to restricted stock prior to the lapse of restrictions applicable to that stock will be taxable as compensation income to the participant. Generally, the participant will recognize taxable ordinary income at the first time those shares become transferable or are no longer subject to a substantial risk of forfeiture, in an amount equal to the fair market value of those shares when the restrictions lapse. However, a participant may elect to recognize taxable ordinary income upon the award date of restricted stock based on the fair market value of the shares of common stock subject to the award on the award date. If a participant makes that election, any dividends paid with respect to that restricted stock will not be treated as compensation income, but rather as dividend income, and the participant will not recognize additional taxable income when the restrictions applicable to his or her restricted stock award lapse. Assuming compliance with the applicable tax withholding and reporting requirements, the Company will be entitled to a tax deduction equal to the amount of ordinary income recognized by a participant in connection with his or her restricted stock award in the Company's taxable year in which that participant recognizes that ordinary income.

The grant of restricted stock units does not result in taxable income to the recipient of a restricted stock unit or a tax deduction for the Company. The amount of cash paid (before applicable tax withholdings) or the then-current fair market value of the common stock received upon settlement of the restricted stock units is taxable to the recipient as ordinary income and deductible by the Company.

The grant of a cash-based award, other stock-based award or dividend equivalent right generally should not result in the recognition of taxable income by the recipient or a tax deduction by the Company. The payment or settlement of a cash-based award, other stock-based award or dividend equivalent right should generally result in immediate recognition of taxable ordinary income by the recipient equal to the amount of any cash paid (before applicable tax withholding) or the then-current fair market value of the shares of common stock received, and a corresponding tax deduction by the Company. If the shares covered by the award are not transferable and subject to a substantial risk of forfeiture, the tax consequences to the participant and the Company will be similar to the tax consequences of restricted stock awards, described above. If an other stock-based award consists of unrestricted shares of common stock, the recipient of those shares will immediately recognize as taxable ordinary income the fair market value of those shares on the date of the award, and the Company will be entitled to a corresponding tax deduction.

Under section 162(m) of the Internal Revenue Code, the Company may be limited as to federal income tax deductions to the extent that total annual compensation in excess of \$1 million is paid to our CEO or any one of our three highest paid executive officers, other than the CEO or CFO, who are employed by us on the last day of our taxable year. However, certain performance-based compensation the material terms of which are disclosed to and approved by our stockholders is not subject to this deduction limitation. The 2011 Equity Incentive Plan has been structured with the intention that compensation resulting from stock options and stock appreciation rights granted under the 2011 Equity Incentive Plan will be qualified performance-based compensation and, assuming the plan is approved by the stockholders, deductible without regard to the limitations otherwise imposed by section 162(m) of the Internal Revenue Code. The 2011 Equity Incentive Plan allows the Compensation Committee discretion to award restricted stock, restricted stock units, cash-based awards and other stock-based awards in the form of performance compensation awards that are intended to be qualified performance-based compensation, as described under Performance-Based Awards above.

*New Plan Benefits.* As of August 31, 2011, there were approximately 8 non-employee directors, approximately 91 employees and approximately 11 consultants who would be eligible to receive awards under the 2011 Equity Incentive Plan. Because it will be within the plan administrator's discretion to determine which directors, employees and consultants will receive awards under the 2011 Equity Incentive Plan and the types and amounts of those awards, it is not possible at present to



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specify the benefits that would be received under the 2011 Equity Incentive Plan by directors, employees and consultants. Information regarding our recent practices with respect to equity-based compensation under existing plans is presented in the Summary Compensation Table and Outstanding Equity Awards at 2010 Fiscal Year-End table contained elsewhere in this Registration Statement.

*Ceres, Inc. 2010 Stock Option/Stock Issuance Plan*

*General.* Our board of directors adopted, and our stockholders approved, the 2010 Plan on June 7, 2010. The 2010 Plan provides for the grant of incentive stock options, nonstatutory stock options, and shares of restricted or unrestricted common stock. Upon the signing of the underwriting agreement for this offering, no further awards will be granted under the 2010 Plan. However, all outstanding awards will continue to be governed by their existing terms.

*Share Reserve.* The maximum number of shares of common stock issuable under the 2010 Plan is 1,757,400, increased by the number of shares underlying awards granted under the 2010 Plan and predecessor plans that were expired or were otherwise forfeited; provided that no more than 8,029,345 shares may be issued under the plan. As of August 31, 2011, 32,251 shares of common stock remained available for future issuance.

*Administration.* The 2010 Plan is administered by our board of directors, but administrative functions may be delegated to the Compensation Committee.

*Eligibility.* Employees, non-employee members of the board of directors and consultants and other independent service providers are eligible to participate in the 2010 Plan. The plan administrator determines which eligible individuals will receive grants and the terms of their awards. Incentive stock options, however, may be granted only to employees.

*Stock Options.* With respect to stock options granted under the 2010 Plan, the exercise price may not be less than 100% of the fair market value of our common stock on the date of grant (or for incentive stock options, 110% of fair market value if the grantee is a ten percent stockholder). In general, the maximum term of stock options granted under the 2010 Plan may not exceed ten years from the date of grant (or in the case of incentive stock options granted to any 10% stockholder, the term may not exceed five years from the date of grant). Unless otherwise provided by a participant's stock option agreement, if a participant's service relationship with us ceases for any reason other than disability or death, the participant may exercise the vested portion of any options for three months following the cessation of service. If a participant's service relationship with us terminates by reason of disability or death, the participant or a personal representative may generally exercise the vested portion of any options for 12 months after the date of such termination. In no event, however, may an option be exercised beyond the expiration of its original term. The plan administrator may allow a participant to exercise unvested stock options, upon which such participant will receive restricted shares that will vest in accordance with the stock option's existing vesting schedule. These restricted shares are subject to repurchase by us if the participant terminates service with us.

*Stock Issuance.* Restricted or unrestricted stock may be issued for a purchase price of not less than 85% of fair market value of our common stock (or 110% of fair market value if the grantee is a ten percent stockholder). The purchase price consideration may be provided in the form of cash or check, or provision of past services to the Company. If the participant terminates employment for any reason, any unvested shares will be forfeited, and any cash consideration paid will be repaid to the participant. The plan administrator may waive these forfeiture provisions. To the extent shares issued are restricted, they may vest in accordance with terms determined by the administrator, including performance or time-based vesting. Shares of common stock acquired under such awards may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule to be determined by our board of directors. If a participant's service relationship with us terminates, we may repurchase or otherwise reacquire any or all of the shares of common stock subject to the award that have not vested as of the date of termination.



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*Repurchase Rights.* The Company has a right of first refusal over any stock issued under the 2010 Plan until the common stock is first registered. The Company also has the right to repurchase any unvested shares at the exercise or purchase price of such shares upon a participant's termination of employment.

*Corporate Transactions.* In the event of an acquisition of the Company, a merger, or other significant corporate transaction, (as defined in the 2010 Plan) all outstanding stock options and restricted shares will vest in full, unless the successor company assumes or replaces such stock options or restricted shares. In addition, all repurchase rights of the Company will terminate unless those rights are assigned to the successor company. Alternatively, in the case of stock options, the plan administrator may provide, either at grant or thereafter, that upon the occurrence of a corporate transaction, (1) all or a portion of outstanding stock options will automatically accelerate and repurchase rights will terminate, or (2) all or a portion of outstanding stock options will automatically accelerate and repurchase rights will terminate if the participant suffers an involuntary termination (as defined in the 2010 Plan and described below) within up to 12 months after the corporate transaction. With respect to stock issued under the plan, in the event of a significant corporate transaction, all repurchase rights will terminate and all restricted shares will vest in full, unless the successor corporation is assigned the repurchase rights. The plan administrator may alternatively provide either at grant or thereafter that upon a corporate transaction, the repurchase rights relating to outstanding shares will terminate and vesting will accelerate if the participant suffers an involuntary termination within up to 18 months after the corporate transaction. Under our current outstanding stock option agreements and restricted stock agreement, if a participant's employment is terminated due to an involuntary termination within 12 months following a corporate transaction all outstanding awards will automatically vest. Under the 2010 Plan and the outstanding award agreements, corporate transaction means any person becoming the beneficial owner of 20% or more of our outstanding securities, a change in the majority of the members of our board of directors, our consummation of a merger or consolidation, our shareholders' approval of a plan of complete liquidation or dissolution of Ceres or our sale of all or substantially all of our assets. Involuntary termination means a participant's involuntary dismissal by us other than for misconduct, or his or her voluntary resignation following a change in position that results in a material reduction in responsibility level, a reduction in compensation by more than 15 percent or a relocation of more than 50 miles. Misconduct means the commission of an act of fraud, embezzlement or dishonesty, an unauthorized use of confidential information or trade secrets or any other intentional misconduct that materially adversely affects our business or affairs.

### **Ceres, Inc. 2000 Stock Option/Stock Issuance Plan**

We have also granted equity awards (and awards remain outstanding) under the Company's 2000 Stock Option/Stock Issuance Plan, as amended, the terms of which are substantially the same as the 2010 Plan. No further awards will be granted under the 2000 Stock Option/Stock Issuance Plan.

### **Ceres, Inc. Performance Incentive Plan**

The following is a summary of the Ceres, Inc. 2011 Performance Incentive Plan, or the PIP, which was adopted by our board of directors on July 20, 2011. This summary is not intended to be a complete description of all provisions of the Plan and is qualified in its entirety by reference to the PIP, which will be filed as an exhibit to this registration statement.

*Purpose.* The purpose of the PIP is to enable the Company to attract, retain, motivate and reward Participants by providing them with the opportunity to earn incentive compensation under the Plan related to the Company's performance, and to facilitate certain awards that will qualify as performance-based compensation within the meaning of Section 162(m) of the Internal Revenue Code.





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*Administration.* The PIP is to be administered by the Compensation Committee, which has the power and authority to designate participants to receive awards; determine all the terms and conditions of the awards and final payouts; delegate its authorities under the PIP to the extent permitted by applicable law and decide all other matters and establish any rules or regulations and make all other decisions as necessary or advisable to administer the PIP. Other than with respect to awards intended to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code, the Board of Directors has final authority to approve all awards under the PIP.

*Eligibility.* All employees who are actively employed at the start of a performance period are eligible to be selected to participate in the PIP. In addition, the Compensation Committee may also grant an award to individuals hired during a performance period, subject to proration or any other terms the Compensation Committee deems appropriate. The Compensation Committee selects those eligible individuals who will participate in the PIP.

*Awards.* In general, prior to each performance period, or as soon as practicable thereafter, the Compensation Committee will designate participants who will receive awards, and the terms and conditions of those awards, including the applicable performance criteria and performance goals, the amount of an award that may be earned based on performance goals (including any minimum, target or maximum payout levels), the methodology to be used to determine the final award and any other conditions, such as vesting, forfeiture and payment terms. The Compensation Committee will determine the final payout levels after the end of the performance period and has the discretion to increase or decrease final payout amounts (unless an increase is prohibited as described below). Upon granting an award or prior to any grant, the Compensation Committee may specify the treatment of an award in the event a participant terminates employment in the middle of a performance period. In the absence of such a provision, if a participant terminates employment in the middle of a performance period, he or she will not receive any payment in respect of his or her award for that performance period. If a participant terminates employment after the end of a performance period, but before the awards are paid out, then he or she will receive payment for that performance period in accordance with the terms of the PIP. All awards will be paid in cash on or before March 15 of the calendar year following the calendar year of the last day of the applicable performance period.

*Qualified Performance Based Compensation.* If the Compensation Committee designates an award to qualify as performance-based compensation under Section 162(m) of the Internal Revenue Code, then the following procedures and provisions will apply. The Compensation Committee will establish in writing the terms of the award, including the relevant performance criteria and performance goals, by no later than 90 days after the beginning of the applicable performance period, or if earlier, the end of the first 25% of the applicable performance period. The award will be based on the achievement of performance goals as established by the Compensation Committee, which will be based on one or more of those performance criteria described above under Performance-Based Awards in the description of the 2011 Equity Incentive Plan. After the end of the performance period, the Compensation Committee will certify in writing whether and the extent to which the performance goals were achieved. The Compensation Committee may exercise discretion to reduce the actual payout amount of any award, but it may not increase the payout amount. The maximum amount that may be paid to any individual in any performance period under the PIP is \$5 million.

*Recoupment.* Any payments made under the PIP will be subject to any clawback or recoupment policies that are required under applicable law.

*Effectiveness, Termination and Amendments.* The PIP will be approved or re-approved by the shareholders of the Company on or before such times as the Compensation Committee determines is required under applicable law. The Board of Directors may amend the PIP at any time and may alter, amend, suspend or terminate the PIP, but no such amendment or other action that requires shareholder approval may become effective until shareholder approval is obtained.



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*New Plan Benefits.* As of August 31, 2011, there were approximately 91 employees and who would be eligible to receive awards under the PIP. Because it will be within the Compensation Committee's discretion to determine which employees will receive awards under the PIP and the amounts of those awards, it is not possible at present to specify the benefits that would be received under the PIP by employees. Information regarding our recent practices with respect to annual incentive compensation under existing plans is presented in the Compensation Discussion and Analysis and the Summary Compensation Table contained elsewhere in this Registration Statement.

**Table of Contents****EQUITY COMPENSATION PLAN INFORMATION**

The following table provides information as of August 31, 2011 regarding compensation plans under which our equity securities are authorized for issuance:

<b>Plan Category</b>	<b>Number of Securities to be Issued Upon Exercise of Outstanding Options</b>	<b>Weighted Average Exercise Price of Outstanding Options</b>	<b>Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans</b>
Equity compensation plans approved by stockholders	7,792,219(1)	\$ 2.02	32,251(2)
Equity compensation plans not approved by stockholders			
<b>Total</b>	<b>7,792,219</b>	<b>\$ 2.02</b>	<b>32,251</b>

(1) Consists of shares underlying stock options granted under the 2010 Plan and the 2000 Plan.

(2) Consists of shares issuable under the 2010 Plan. No additional shares are available for future issuance under the 2000 Plan other than in respect of shares underlying outstanding stock options. The shares issuable under the 2010 Plan may be increased by the number of shares that would have been issuable under any stock option granted under the 2010 Plan or the 2000 Plan that were forfeited or that expired without being exercised. Upon the completion of this offering and the approval of the 2011 Equity Incentive Plan, no future grants will be made under the 2010 Plan.

**Table of Contents****CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS**

In addition to the compensation arrangements, including employment, termination of employment and change-in-control and indemnification arrangements, discussed above under *Management*, *Compensation Discussion and Analysis* and the registration rights described below under *Description of Capital Stock* *Registration Rights*, the following is a description of each transaction since January 1, 2008, and each currently proposed transaction in which:

we have been or are to be a participant;

the amount involved exceeds or will exceed \$120,000; and

any of our directors, executive officers or holders of more than 5% of any class of our capital stock at the time of the transactions in issue, or any immediate family member of or person sharing the household with any of these individuals, had or will have a direct or indirect material interest.

**Preferred Stock Financing***Series G Convertible Preferred Stock Financing*

In June 2010, we sold an aggregate of 3,076,923 shares of Series G convertible preferred stock in a private placement at a per share purchase price of \$6.50 pursuant to a stock purchase agreement. Purchasers of the Series G convertible preferred stock also received, for each share purchased, a warrant to purchase one share of our common stock at an exercise price of \$6.50 per share. Purchasers of the Series G convertible preferred stock included holders of more than 5% of our outstanding capital stock and affiliates of certain of our directors. The following table summarizes purchases of Series G convertible preferred stock:

Name	Number of Shares	Aggregate Purchase Price	Shares of Common Stock Underlying Warrants
Artal Luxembourg S.A.	1,361,538	\$ 8,849,997.00	1,361,538
Rothschild Trust Guernsey Limited as Trustee F/B/O the Ambergate Trust	1,300,000	\$ 8,450,000.00	1,300,000
Gimv N.V.	340,000	\$ 2,210,000.00	340,000
Adviesbeheer Gimv Life Sciences 2004 N.V.	60,000	\$ 390,000.00	60,000
The Kiley Revocable Trust	15,385	\$ 100,002.50	15,385

**Convertible Note Financing**

In August 2011, we completed the sale of \$11,425,232 aggregate principal amount of non-interest bearing convertible subordinated notes, or the Convertible Notes, to nine existing investors in the Company in a private placement. The Convertible Notes are convertible, subject to the terms and conditions set forth therein, into shares of our common stock upon the consummation of a qualified initial public offering of our common stock at a price per share equal to 20% discount from the public offering price. In the event that we do not consummate a qualified initial public offering on or prior to the six month anniversary of the issuance date of the Convertible Notes, (i) the Convertible Notes will automatically convert, subject to the terms and conditions set forth therein, into shares of our Series G Convertible

Preferred Stock, at a conversion price per share equal to \$6.50 and (ii) the holders will receive warrants exercisable for that number of shares of our common stock, at an initial exercise price of \$6.50 per share, equal to the number of shares of Series G Convertible Preferred Stock into which such holder's Convertible Notes convert. Pursuant to the terms of the Convertible Notes, a qualified initial public offering means an initial public offering of our common stock resulting in aggregate proceeds to the Company and any selling security holders \$40 million or more. Purchasers of the Convertible Notes included holders of more than 5% of our outstanding capital stock and affiliates of certain of our directors. Additionally, so long as any investors who held warrants to

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purchase shares of our common stock issued in connection with the purchase of the our Series F Preferred Stock or Series G Preferred Stock purchased at least their respective full pro rata portion of the Convertible Notes being offered, we agreed to amend the termination provisions of such investors existing warrants such that the warrants will no longer expire upon an initial public offering. The following table summarizes purchases of the Convertible Notes:

<b>Name of Purchaser</b>	<b>Principal Amount</b>
Artal Luxembourg S.A.	\$ 5,000,000
Rothschild Trust Guernsey Limited as Trustee F/B/O the Ambergate Trust	\$ 3,350,000
Warburg Pincus Private Equity IX, L.P.	\$ 1,592,400
Gimv N.V.	\$ 772,813
Edmund and Ellen Olivier Revocable Family Trust	\$ 200,000
H&Q Healthcare Investors	\$ 165,554
Adviesbeheer Gimv Life Sciences 2004 N.V.	\$ 136,379
H&Q Life Sciences Investors	\$ 108,086
The Kiley Revocable Trust	\$ 100,000

**Indemnification Arrangements**

We have entered, or will enter, into an indemnity agreement with each of our directors and officers. The indemnity agreements and our amended and restated certificate of incorporation and amended and restated bylaws will require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. Please see [Management Limitation of Liability and Indemnification of Officers and Directors](#) .

**Executive Compensation and Employment Arrangements**

Please see [Compensation Discussion and Analysis](#) [Executive Compensation](#) for information on compensation arrangements with our executive officers, including option grants and agreements with executive officers.

**Investors Rights Agreement**

We have entered into an investors rights agreement with certain holders of our common stock and preferred stock that provides for certain rights relating to the registration of their shares of common stock, including those issued upon conversion of their preferred stock. See [Description of Capital Stock](#) [Registration Rights](#) below for additional information.

**Offer Letters**

We have entered into offer letters and other agreements containing compensation, termination and change of control provisions, among others, with certain of our executive officers as described under the caption [Compensation Discussion and Analysis](#) [Executive Compensation](#) [Executive Employment Agreements](#) above.

**Related Person Transaction Policy**

As provided in our current Audit Committee charter, our Audit Committee is responsible for reviewing and approving all related party transactions on an ongoing basis and must review any potential conflict of interest situations where appropriate.



**Director Independence**

For a discussion of the independence of our directors, please see [Management](#) [Director Independence](#) above.

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**PRINCIPAL STOCKHOLDERS**

The following table sets forth information with respect to the beneficial ownership of our common stock, as of August 31, 2011, by:

each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our voting securities;

each of our directors;

each of our named executive officers; and

all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC and generally includes any shares over which the individual or entity has sole or shared voting power or investment power. The information does not necessarily indicate beneficial ownership for any other purpose. Except as indicated in the footnotes to this table and pursuant to applicable community property laws, to our knowledge the persons named in the table below have sole voting and investment power with respect to all shares of common stock beneficially owned.

Percentage ownership of our common stock in the table prior to the offering is based on \_\_\_\_\_ shares of our common stock outstanding on August 31, 2011, after giving effect to (i) the automatic conversion of all of our outstanding convertible preferred stock into 46,059,819 shares of common stock upon the completion of this offering, (ii) the issuance of \_\_\_\_\_ additional shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the mid point of the range set forth on the cover of this prospectus and (iii) the issuance of \_\_\_\_\_ shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock, which would otherwise expire upon completion of this offering, assuming an initial offering price of \$ \_\_\_\_\_ per share, the midpoint of the range set forth on the cover of this prospectus. Percentage ownership of our common stock after this offering also assumes our sale of the \_\_\_\_\_ shares in this offering.

The number of shares beneficially owned by each person or group as of August 31, 2011 includes shares of common stock that such person or group had the right to acquire on or within 60 days after August 31, 2011, upon the exercise of options and warrants. References to options and warrants in the footnotes of the table below include only options and warrants outstanding as of August 31, 2011 that were exercisable on or within 60 days after August 31, 2011. For the purposes of calculating each person's or group's percentage ownership, stock options and warrants exercisable within 60 days after August 31, 2011 are included for that person or group but not the stock options or warrants of any other person or group.

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Except as otherwise set forth below, the address of the beneficial owner is c/o Ceres, Inc., 1535 Rancho Conejo Blvd., Thousand Oaks, CA 91320.

Name and Address of Beneficial Owner	Shares Beneficially Owned Prior to Offering		Shares Beneficially Owned After Offering	
	Number (#)	Percentage (%)	Number (#)	Percentage (%)
<b>5% Stockholders</b>				
Artal Luxembourg S.A.(1)				
Warburg Pincus Private Equity IX, L.P.(2)				
Ambergate Trust(3)				
Oxford Bioscience entities(4)	5,535,609			
Gimv entities(5)				
Oppenheimer Growth entities(6)				
Quantum Industrial Partners LDC(7)(9)				
SFM Domestic Investments LLC(8)(9)		*		
Monsanto Company(10)	3,333,333			
<b>Directors and Named Executive Officers</b>				
Walter De Logi(11)	1,600,000			
Pascal Brandys(12)	265,707	*		
Raymond Debbane(1)(13)	50,000	*		
Richard Flavell(14)	765,000			
Robert Goldberg(15)	639,083			
Richard Hamilton(16)	2,437,000			
Thomas Kiley(17)	215,770	*		
David B. Krieger(2)(18)				
Cheryl Morley		*		
Edmund Olivier(4)(19)				
Paul M. Kuc(20)	470,000	*		
Michael Stephenson(21)	440,000	*		
Wilfriede van Assche(22)	282,500	*		
<b>All directors and executive officers as (15 persons)</b>				

\* Represents beneficial ownership of less than 1%.

- (1) Includes 1,475,242 shares of common stock that may be acquired pursuant to the exercise of warrants held by Artal Luxembourg S.A. Also includes additional shares of common stock issuable to Artal Luxembourg S.A. pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the mid-point of the price range set forth on the cover of this prospectus. Raymond Debbane, one of our directors, is a director of Artal Group S.A. Artal Group S.A. is the parent entity of Artal International S.C.A., which is the parent entity of Artal Luxembourg S.A. Mr. Debbane disclaims beneficial ownership of the shares and shares underlying warrants held by Artal Luxembourg S.A., except to the extent of his pecuniary interest therein. The address for Artal Luxembourg S.A. is 105 Grand-Rue, L-1661, Luxembourg.
- (2) Includes 1,384,616 shares of common stock that may be acquired pursuant to the exercise of warrants held by Warburg Pincus Private Equity IX, L.P., a Delaware partnership, or WP IX. Also includes additional

shares of common stock issuable to WP IX pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus. The sole general partner of WP IX is Warburg Pincus IX LLC, a New York limited

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liability company, or WP IX LLC. Warburg Pincus Partners, LLC, a New York limited liability company, or WP Partners, is the sole member of WP IX LLC. Warburg Pincus & Co., a New York general partnership, or WP, is the managing member of WP Partners. WP IX is managed by Warburg Pincus LLC, a New York limited liability company, or WP LLC. David B. Krieger, one of our directors, is a Managing Director of WP LLC and a General Partner of WP. The shares and shares underlying warrants acquired by WP IX are reflected as indirectly owned by Mr. Krieger because of his affiliation with the Warburg Pincus entities. Mr. Krieger disclaims beneficial ownership of the shares and shares underlying warrants held by WP IX, except to the extent of his pecuniary interests therein. Charles R. Kaye and Joseph P. Landy are Managing General Partners of Warburg Pincus and Managing Members and Co-Presidents of WP and may be deemed to control the Warburg Pincus entities. Messrs. Kaye and Landy disclaim beneficial ownership of all shares held by the Warburg Pincus entities. The address for WP IX, WP IX LLC, WP Partners, WP, WP LLC, and Messrs. Kaye, Krieger and Landy is 450 Lexington Avenue, New York, NY 10017.

- (3) Represents 7,467,824 shares of common stock held by Rothschild Trust Guernsey Limited as Trustee F/B/O the Ambergate Trust or Rothschild. Includes 1,361,600 shares of common stock that may be acquired pursuant to the exercise of warrants held by Rothschild. Also includes additional shares of common stock issuable to Rothschild pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus. Mr. De Logi is the settlor of the Ambergate Trust and one of the beneficiaries. Mr. De Logi disclaims beneficial ownership of the shares held by the Ambergate Trust. The address for Rothschild is PO Box 472, St. Peter's House, Le Bordinge, St. Peter Port GY1 6AX, Guernsey.
- (4) Represents 2,380,010 shares of common stock held by Oxford Bioscience Partners II, L.P., 309,695 shares of common stock held by Oxford Bioscience Partners (GS-Adjunct) II, L.P., 663,333 shares of common stock held by Oxford Bioscience Management Partners II, 487,227 shares of common stock held by Oxford Bioscience Partners (Adjunct) II, L.P. and 1,695,344 shares of common stock held by Oxford Bioscience Partners (Bermuda) II, Limited Partnership. OBP Management II L.P. is the general partner of Oxford Bioscience Partners II L.P., Oxford Bioscience Partners (Adjunct) II L.P. and Oxford Bioscience Partners (GS-Adjunct) II L.P. Edmund Olivier, Alan Walton, Cornelius Ryan and Jonathan Fleming are the general partners of OBP Management II L.P. OBP Management (Bermuda) II Limited Partnership is the general partner of Oxford Bioscience Partners (Bermuda) II Limited Partnership. Edmund Olivier, Alan Walton, Cornelius Ryan and Jonathan Fleming are the general partners of Oxford Bioscience Partners (Bermuda) II Limited Partnership. Messrs. Olivier, Walton, Ryan and Fleming all disclaim beneficial ownership of the shares except to the extent of their pecuniary interests therein. The shares acquired by the Oxford Bioscience entities are reflected as indirectly owned by Mr. Olivier because of his affiliation with the Oxford Bioscience entities. The address for Oxford Bioscience Partners is 222 Berkeley St. Suite 1960, Boston, MA 02116.
- (5) Represents 254,007 shares of common stock held by Adviesbeheer Gimv Life Sciences 2004 N.V. and 4,190,971 shares of common stock held by Gimv N.V. Includes 66,924 shares of common stock that may be acquired pursuant to the exercise of warrants held by Adviesbeheer Gimv Life Sciences 2004 N.V. and 379,231 shares of common stock that may be acquired pursuant to the exercise of warrants held by Gimv N.V. Also includes additional shares of common stock issuable to Adviesbeheer Gimv Life Sciences 2004 N.V. and additional shares of common stock issuable to Gimv N.V. pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus. The address



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for Adviesbeheer Gimv Life Sciences 2004 N.V. and Gimv N.V. is Karel Oomsstraat 37, B-2018, Antwerpen, Belgium.

- (6) Represents 3,024,347 shares of common stock held by Oppenheimer International Growth Fund and 1,026,520 shares of common stock held by Oppenheimer MassMutual International Equity Fund. Includes        shares of common stock issuable upon the net exercise of warrants that would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus, held prior to this offering by Oppenheimer International Growth Fund. The address for Oppenheimer International Growth Fund is 2 World Financial Center, 225 Liberty Street, New York, NY 10281.
- (7) Represents 2,944,735 shares of common stock held by Quantum Industrial Partners LDC, an exempted limited duration company formed under the laws of the Cayman Islands, or QIP, and        shares of common stock issuable upon the net exercise of warrants that would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus, held prior to this offering by QIP. The principal address of QIP is Kaya Flamboyan 9, Willemstad, Curacao. QIH Management Investor, L.P., or QIHMI, an investment advisory firm organized as a Delaware limited partnership, is a minority stockholder of, and is vested with investment discretion with respect to portfolio assets held for the account of QIP. The sole general partner of QIHMI is QIH Management LLC, a Delaware limited liability company, or QIH Management.
- (8) Represents 327,193 shares of common stock held by SFM Domestic Investments LLC, a Delaware limited liability company, or SFMD, and        shares of common stock issuable upon the net exercise of warrants that would otherwise expire upon the completion of this offering, assuming an initial public offering price of \$        per share, the midpoint of the price range set forth on the cover of this prospectus, held prior to this offering by SFMD. The principal address of SFMD is at 888 Seventh Avenue, 33rd Floor, New York, New York 10106.
- (9) Soros Fund Management LLC, or SFM LLC, a Delaware limited liability company, may be deemed the beneficial owner of the shares held for the account of SFMD and QIP. SFM is the manager of SFMD and the sole managing member of QIH Management. George Soros serves as Chairman of SFM LLC, Robert Soros serves as Deputy Chairman of SFM LLC, and Jonathan Soros serves as President and Deputy Chairman of SFM LLC.
- (10) The address for Monsanto Company is 800 North Lindbergh Boulevard, St. Louis, Missouri 63167. Pursuant to the terms of the Investors' Rights Agreement, Monsanto agreed that, subject to certain exceptions, it would not increase its ownership position to more than 15% of our then outstanding voting stock.
- (11) Includes 160,000 shares of common stock held by Lynda De Logi, Walter De Logi's spouse, and 250,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011.
- (12) Includes 90,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 30,626 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Mr. Brandys's cessation of service with us prior to vesting.
- (13) Includes 20,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011.
- (14) Includes 495,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 96,250 of which are unvested and early exercisable and would be subject to a right of

repurchase in our favor upon Dr. Flavell's cessation of service with us prior to vesting.



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- (15) Includes 544,083 shares of common stock held by The Robert Goldberg Revocable Living Trust and 95,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 20,626 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Dr. Goldberg's cessation of service with us prior to vesting.
- (16) Includes 100,000 shares of common stock held by Dr. Richard Hamilton 2011-Ceres GRAT and 2,167,000 shares of common stock issuable pursuant to stock options exercisable within 60 days August 31, 2011, 223,417 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Dr. Hamilton's cessation of service with us prior to vesting.
- (17) Includes 185,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 39,063 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Mr. Kiley's cessation of service with us prior to vesting. Includes 15,385 shares of common stock held by The Kiley Revocable Trust and 15,385 shares of common stock held by The Kiley Revocable Trust. Also includes additional shares of common stock issuable to The Kiley Revocable Trust pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus.
- (18) Consists of 8,307,694 shares of common stock held by WP IX, including the shares identified in footnote 2.
- (19) Consists of 5,535,609 shares of common stock identified in footnote 4 and 20,000 shares held by Mr. Olivier. Also includes additional shares of common stock issuable to The Edmund and Ellen Olivier Revocable Family Trust pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus.
- (20) Consists of 470,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 182,294 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Mr. Kuc's cessation of service with us prior to vesting.
- (21) Represents 440,000 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 156,669 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Mr. Stephenson's cessation of service with us prior to vesting.
- (22) Includes 282,500 shares of common stock issuable pursuant to stock options exercisable within 60 days of August 31, 2011, 106,667 of which are unvested and early exercisable and would be subject to a right of repurchase in our favor upon Ms. van Assche's cessation of service with us prior to vesting.

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**DESCRIPTION OF CAPITAL STOCK**

**General**

The following is a summary of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, as they will be in effect upon the completion of this offering. This summary does not purport to be complete and is qualified in its entirety by the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, copies of which will be filed with the SEC as exhibits to the registration statement of which this prospectus is a part.

Immediately following the completion of this offering, our authorized capital stock will consist of \_\_\_\_\_ shares, with a par value of \$0.01 per share, of which:

\_\_\_\_\_ shares are designated as common stock; and

\_\_\_\_\_ shares are designated as preferred stock.

As of August 31, 2011, we had outstanding \_\_\_\_\_ shares of common stock, held of record by 170 stockholders, and no shares of preferred stock, assuming (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 46,059,819 shares of common stock immediately prior to the completion of this offering; (ii) the issuance of \_\_\_\_\_ additional shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in greater detail in Certain Relationships and Related Party Transactions, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus and (iii) the issuance of \_\_\_\_\_ shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to purchase shares of common stock which would otherwise expire upon completion of this offering, assuming an initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the cover of this prospectus. In addition, as of August 31, 2011, we also had outstanding options to acquire 7,792,219 shares of common stock.

**Common Stock**

The holders of common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders and do not have cumulative voting rights. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive ratably any dividends declared by our board of directors out of assets legally available. See the section entitled Dividend Policy . Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock.

**Preferred Stock**

After the completion of this offering, no shares of preferred stock will be outstanding. Pursuant to our amended and restated certificate of incorporation, our board of directors will have the authority, without further action by our stockholders, to issue from time to time up to \_\_\_\_\_ shares of preferred stock in one or more series. Our board of directors may designate the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference, sinking fund terms and the

number of shares constituting any series or the designation of any series. The issuance of preferred stock or even the ability to issue preferred stock could have the effect of delaying, deterring or preventing a change in control.

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### **Warrants**

At August 31, 2011, we had warrants outstanding to purchase 6,046,157 shares of our common stock, assuming the automatic conversion of our preferred stock warrants into common stock. Except for The Samuel Roberts Noble Foundation, Inc. and Texas A&M University warrants of 400,000 and 200,000, respectively, each warrant contains provisions for the adjustment of the exercise price and the number of shares issuable upon exercise upon the occurrence of certain events, including stock dividends, reorganizations, reclassifications and consolidations.

In August 2011, we completed the sale of \$11,425,232 aggregate principal amount of non-interest bearing convertible subordinated notes, or the Convertible Notes, to nine existing investors in the Company in a private placement. The Convertible Notes are convertible, subject to the terms and conditions set forth therein, into shares of our common stock upon the consummation of a qualified initial public offering of our common stock at a price per share equal to a 20% discount from the public offering price. In the event that we do not consummate a qualified public offering on or prior to the six month anniversary of the issuance date of the Convertible Notes, (i) the Convertible Notes will automatically convert, subject to the terms and conditions set forth therein, into shares of our Series G Convertible Preferred Stock, at a conversion price per share equal to \$6.50 and (ii) the holders will receive warrants exercisable for that number of shares of our common stock, at an initial exercise price of \$6.50 per share, equal to the number of shares of Series G Convertible Preferred Stock into which such holder's Convertible Notes convert.

In connection with the issuance of the Convertible Notes, so long as any investors who held existing warrants to purchase shares of our common stock in connection with the original issuances of the Company Series F and G preferred stock purchased at least their respective full pro rata portion of the Convertible Notes being offered, the termination provisions of such investors' existing warrants were amended such that those warrants will no longer expire upon a qualified initial public offering.

In June 2010, we sold an aggregate of 3,076,923 shares of Series G convertible preferred stock in a private placement pursuant to a stock purchase agreement. Purchasers of the Series G convertible preferred stock also received, for each share purchased, a warrant to purchase one share of our common stock at an exercise price of \$6.50 per share. In connection with the offering of the Convertible Notes, these warrants were amended such that they no longer expire upon the completion of a qualified initial public offering.

In January 2010, we entered into a Loan and Security Agreement with Silicon Valley Bank, or SVB, to finance qualified equipment purchases, pursuant to which we granted SVB warrants to purchase 43,076 shares of our Series F convertible preferred stock at a price of \$6.50 per share. The warrants expire on the later of February 29, 2020 or five years subsequent to the completion of our initial public offering.

In September 2007, we sold an aggregate of 11,538,462 shares of Series F convertible preferred stock in a private placement pursuant to a stock purchase agreement. Purchasers of the Series F convertible preferred stock also received, for each share purchased, a warrant to purchase 0.20 shares of our common stock at an exercise price of \$6.50 per share. In connection with the offering of the Convertible Notes, 1,619,922 of these warrants were amended such that they no longer expire upon the completion of a qualified initial public offering. The remaining 687,775 will expire upon the completion of a qualified initial public offering. Pursuant to the terms of these warrants, a qualified initial public offering means an initial public offering of our common stock at a price per share greater than or equal to \$6.50 per share (subject to certain adjustments) resulting in aggregate gross proceeds to the Company and any selling security holders of \$40 million or more.

In August 2007, we entered into an agreement with Texas A&M University, pursuant to which we granted Texas A&M University a warrant to purchase 200,000 shares of our common stock for an exercise price of \$10.00 per share. The warrant vests in various installments based on certain



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research and commercialization milestones being met and will remain exercisable until August 28, 2017.

In May 2006, we entered into an agreement with The Samuel Roberts Noble Foundation, Inc., pursuant to which we granted the Noble Foundation a warrant to purchase 400,000 shares of our common stock for an exercise price of \$10.00 per share. On June 20, 2011, we agreed to amend this warrant such that the warrant vests in equal installments of 100,000 shares on May 19, 2009, May 19, 2011, May 19, 2013 and May 19, 2015, respectively, and shall remain exercisable until the earliest of a period of five years from the respective vesting date, or May 18, 2017.

In July 2004, we entered into a borrowing agreement with SVB to finance construction of a greenhouse and tenant improvements at our Thousand Oaks, California facility, pursuant to which we granted SVB warrants to purchase 18,461 shares of our Series E preferred stock at a price of \$6.50 per share, which were set to expire on the later of July 31, 2014 or five years after an initial public offering. During 2010, the warrants were extended and now expire on February 29, 2020 or five years subsequent to the completion of our initial public offering.

Subject to board and shareholder approval, we expect to issue to Texas A&M in fiscal 2012 warrants to purchase up to 200,000 shares of our common stock at an exercise price of (A) the per share offering price to the public of our common stock in this initial public offering plus (B) an amount equal to ten percent (10%) of such price. The warrants would have a maximum term of fifteen years and, subject to certain conditions, would vest in equal installments on the fifth, tenth and fifteenth anniversary of the IP Rights Agreement.

## **Registration Rights**

### *Stockholder Registration Rights*

In June 2010, we entered into an Amended and Restated Investors Rights Agreement, or the Investors Rights Agreement, with our major stockholders pursuant to which we agreed to provide certain rights to those stockholders that are a party to the Investors Rights Agreement to register the shares of our common stock (i) issuable upon conversion of outstanding convertible preferred stock, (ii) issued as a dividend or other distribution related to the convertible preferred stock, (iii) currently held or later acquired, and (iv) issuable upon the exercise of warrants held by any stockholder that is party to the agreement. We will bear all expenses incurred in connection with any underwritten registration, including, without limitation, all registration, filing and qualification fees, printers and accounting fees and the reasonable fees of counsel for the selling holders, but excluding underwriting discounts and commissions.

The registration rights provided for under the Investors Rights Agreement terminate after the earlier of five years following the consummation of an initial public offering, or any such time as the holder would be able to dispose of all of its registrable securities in any three month period under SEC Rule 144.

### *Demand Registration Rights*

Pursuant to the Investors Rights Agreement, if, at any time after six months after the effective date of the first registration statement for a public offering of our securities (other than a registration statement relating either to the sale of securities to our employees pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction), upon the written request of the holders of at least 15% of the securities covered by the Investors Rights Agreement that we file a registration statement under the Securities Act covering the registration of at least 15% of the securities covered by the Investors Rights Agreement, then we are required to file a registration statement covering the resale of the common stock requested to be registered. We are not obligated to file a registration statement after we have effected five registration statements pursuant to the Investors Rights Agreement or during certain periods prior to and after a registration statement has been filed by the



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company or, for a period of 90 days in the event the board of directors, in its judgment, makes the determination that it would be seriously detrimental to the Company and its shareholders for such registration statement to be filed and is therefore essential to defer the filing of such registration statement.

If an underwriter selected for an underwritten offering advises the holders demanding registration that marketing factors require a limitation on the number of shares to be underwritten, then, subject to certain limitations, the number of shares of registrable securities that may be included in the underwriting will be allocated among all holders of registrable securities in proportion to the amount of our registrable securities owned by each holder.

### *Piggyback Registration Rights*

Pursuant to the Investors Rights Agreement, if, subject to certain exceptions, we propose to register any of our stock or other securities under the Securities Act in connection with the public offering of such securities solely for cash, we are required to promptly give such holders written notice of such registration. Upon the written request of each eligible holder, we will, subject to certain limitations, cause to be registered under the Securities Act all such securities that each such holder has requested to be registered.

Stockholders with registration rights will sign agreements with the representatives of the underwriters prohibiting the exercise of their registration rights for 180 days, subject to extension under certain circumstances, following the date of this prospectus. These agreements are described below under Underwriting .

### **Anti-Takeover Provisions to be in Effect Upon the Completion of this Offering**

Certain provisions of the Delaware General Corporation Law, or DGCL, and our amended and restated certificate of incorporation and bylaws that will become effective upon the completion of this offering may have the effect of delaying, deferring or discouraging another party from acquiring control of our company. These provisions, which are summarized below, may discourage certain types of coercive takeover practices and inadequate takeover bids and encourage anyone seeking to acquire control of our company to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management and could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, because, among other reasons, the negotiation of such proposals could result in improving their terms.

### **Amended and Restated Certificate of Incorporation and Bylaw Provisions**

Upon the completion of this offering, our amended and restated certificate of incorporation and bylaws will include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of our company or preventing changes in our management, including the following:

*Issuance of Undesignated Preferred Stock.* Upon the completion of this offering and the filing of our amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to \_\_\_\_\_ shares of undesignated preferred stock with rights, preferences and privileges designated from time to time by our board of directors without further action by stockholders. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and sinking fund terms, any or all of which may be greater than the rights of common stock.





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*Size of the Board of Directors and Filling Vacancies.* The number of directors constituting our board of directors may be set only by resolution adopted by a majority vote of our entire board of directors. Any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of the board of directors, may only be filled by the affirmative vote of a majority of our directors then in office, even if less than a quorum.

*Classified Board.* Our board of directors will be divided into three classes of directors, with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

*No Cumulative Voting.* Our amended and restated certificate of incorporation and amended and restated bylaws do not permit cumulative voting in the election of directors. Cumulative voting allows a stockholder to vote a portion, or all of its shares for one or more candidates. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat.

*Removal of Directors.* Directors can only be removed by our stockholders for cause and removal of a director will require a 662/3 stockholder vote.

*No Written Consent of Stockholders.* All stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting. Stockholders may not take action by written consent in lieu of a meeting. The inability of stockholders to take action by written consent means that a stockholder would need to wait until the next annual or special meeting to bring business before the stockholders for a vote.

*Special Meetings of Stockholders.* Special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, our chief executive officer, or president (in the absence of a chief executive officer). Only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of our stockholders.

*Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our amended and restated bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. These procedures provide that notice must be timely given in writing prior to the meeting at which the action is to be taken and the form and content of such notice must comply with the applicable provisions of our amended and restated bylaws. These procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of us.

*Amendment to Amended and Restated Certificate of Incorporation and Bylaws.* Any amendment, repeal or modification of certain provisions of our amended and restated certificate of incorporation and bylaws will require a 662/3 stockholder vote. Provisions requiring such supermajority vote include, among other things, any amendment, repeal or modification of the provisions relating to the classification of our board of directors, the requirement that stockholder actions be effected at a duly called annual or special meeting of our stockholders and the designated parties entitled to call a special meeting of our stockholders.

**Section 203 of the DGCL**

Upon the completion of this offering, we will be subject to Section 203 of the DGCL. In general, Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a business

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combination with an interested stockholder for a three-year period following the time that this stockholder becomes an interested stockholder, unless it satisfies one of the following conditions:

the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;

upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or

at or subsequent to such time that the stockholder became an interested stockholder, the business combination was approved by the board of directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, lease, exchange, mortgage, pledge, transfer or other disposition of the assets of the corporation with an aggregate market value of 10% or more of either the aggregate market value of all assets of the corporation on a consolidated basis or the aggregate market value of all of the outstanding stock of the corporation involving the interested stockholder;

subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an interested stockholder as an entity or person who, together with the stockholder's affiliates and associates (as defined in Section 203), beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

## **Transfer Agent and Registrar**

The transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company, LLC. The transfer agent's telephone number is (800) 937-5449.

## **Stock Exchange Listing**

We have applied to have our common stock listed on the Nasdaq Global Market under the symbol CERE.

**Table of Contents****SHARES ELIGIBLE FOR FUTURE SALE**

Prior to this offering, there has been no public market for our common stock and we cannot assure you that a market for our common stock will develop or be sustained after this offering. Future sales of our common stock in the public market, including shares issued upon exercise of outstanding or options, or the availability of such shares for sale in the public market, could adversely affect the trading price of our common stock. As described below, only a limited number of shares will be available for sale by our existing stockholders shortly after this offering due to contractual and legal restrictions on resale. Sales of our common stock in the public market after such restrictions lapse, or the perception that those sales may occur, could adversely affect the trading price of our common stock at such time and our ability to raise equity capital in the future.

Based on \_\_\_\_\_ shares of common stock outstanding as of \_\_\_\_\_, 2011, upon completion of this offering, shares of common stock will be outstanding, reflecting \_\_\_\_\_ shares of common stock sold in this offering and assuming no exercise of the underwriters' option to purchase additional shares of common stock. All of the shares sold in this offering (including any shares sold upon the underwriters' exercise of their option to purchase additional shares) will be freely tradable, except that any shares purchased in this offering by our affiliates, as that term is defined in Rule 144 under the Securities Act, generally may be sold in the public market only in compliance with Rule 144 under the Securities Act. The remaining \_\_\_\_\_ shares of common stock will be deemed restricted securities as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which are summarized below. In addition, substantially all of these restricted securities will be subject to the lock-up agreements described below.

Subject to the lock-up agreements described below and the provisions of Rules 144 and 701 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

<b>Date</b>	<b>Number of Shares</b>
On the date of this prospectus	
Between 90 and 180 days (subject to extension) after the date of this prospectus	
At various times beginning more than 180 days (subject to extension) after the date of this prospectus	

In addition, of the \_\_\_\_\_ shares of our common stock that were subject to stock options outstanding as of \_\_\_\_\_, 2011, options to purchase \_\_\_\_\_ shares of common stock were vested as of \_\_\_\_\_, 2011 and will be eligible for sale 180 days following the effective date of this offering, subject to extension as described in the section entitled "Underwriting".

**Rule 144**

In general, under Rule 144 under the Securities Act, as in effect on the date of this prospectus, a person who is one of our affiliates and has beneficially owned shares of our common stock for at least six months would be entitled to sell within any three-month period, beginning on the date 90 days after the date of this prospectus, a number of shares that does not exceed the greater of:

one percent of the number of shares of common stock then outstanding, which will equal approximately \_\_\_\_\_ shares immediately after the completion of this offering; or

the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 by our affiliates or persons selling shares on behalf of our affiliates are also subject to a certain manner of sale provisions and notice requirements and to the availability of current public information about us.

In general, under Rule 144 under the Securities Act, as in effect on the date of this prospectus, a person who is not deemed to have been one of our affiliates at any time during the three months

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preceding a sale, and who has beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than an affiliate, is entitled to sell the shares beginning on the 91st day after the date of this prospectus without complying with the manner of sale, volume limitation or notice provisions of Rule 144, and will be subject only to the public information requirements of Rule 144. If such person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144.

## **Rule 701**

Any of our employees, officers, directors or consultants who purchased shares under a written compensatory plan or contract may be entitled to sell them in reliance on Rule 701. Rule 701 permits affiliates to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. Rule 701 further provides that non-affiliates may sell these shares in reliance on Rule 144 without complying with the holding period, public information, volume limitation or notice provisions of Rule 144. All holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling those shares. However, substantially all of the shares issued under Rule 701 are subject to the lock-up agreements described below and will only become eligible for sale when the lock-up period expires.

As of \_\_\_\_\_, 2011, shares of our outstanding common stock had been issued in reliance on Rule 701 as a result of exercise of stock options. These shares will be eligible for resale in reliance on this rule upon expiration of the lock-up agreements described below.

## **Lock-Up Agreements**

In connection with this offering, we and each of our directors and officers and holders of substantially all of our outstanding common stock and holders of securities exercisable for or convertible into our common stock outstanding immediately prior to the completion of this offering, will agree that, without the prior written consent of Goldman, Sachs & Co. and us we and they will not offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of common stock, options or warrants to purchase shares of common stock or securities convertible into, exchangeable for or that represent the right to receive shares of common stock, whether now owned or hereafter acquired, during the period from the date of this prospectus and ending on the date 180 days after the date of this prospectus (as such period may be extended under certain circumstances). These restrictions are subject to certain exceptions, as described in more detail under **Underwriting** in this prospectus.

## **Registration Rights**

We are party to an investor rights agreement which provides that certain stockholders have the right to demand that we file a registration statement or request that their shares of our common stock be covered by a registration statement that we are otherwise filing. See **Description of Capital Stock** **Registration Rights** in this prospectus. Registration of their shares under the Securities Act would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon effectiveness of the registration statement, subject to the expiration of the lock-up period described above and under **Underwriting** in this prospectus.

## **Stock Plans**

As soon as practicable after the completion of this offering, we intend to file a Form S-8 registration statement under the Securities Act to register shares of our common stock reserved for issuance under our stock plan. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will

thereupon be eligible for sale in the public market, subject to Rule 144 limitations applicable to affiliates and any lock-up agreements. For a more complete discussion of our stock plans, see Compensation Discussion and Analysis Executive Compensation Equity Compensation Plans .



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**MATERIAL UNITED STATES FEDERAL TAX CONSEQUENCES FOR NON-U.S. HOLDERS**

The following discussion is a summary of the material U.S. federal tax consequences relating to the acquisition, ownership and disposition of our common stock by non-U.S. holders (as defined below). This discussion is based upon the provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, U.S. Treasury regulations, rulings and judicial decisions, all as in effect on the date hereof. Those authorities may be changed, perhaps retroactively, so as to result in U.S. federal income and estate tax consequences different from those discussed below. There can be no assurance that the U.S. Internal Revenue Service, or the IRS, will agree with the statements herein.

A U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

a citizen or individual resident of the United States;

a corporation or other entity treated as a corporation created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. federal income taxation regardless of its source; or

a trust, if (1) a court within the United States is able to exercise primary supervision over the trust's administration and one or more U.S. persons (within the meaning of section 7701(a)(30) of the Code) have the authority to control all of its substantial decisions, or (2) a valid election to be treated as a U.S. person is in effect under the relevant Treasury regulations with respect to such trust.

A non-U.S. holder means a beneficial owner of our common stock that is neither a U.S. holder nor a partnership (including an entity that is treated as a partnership for U.S. federal income tax purposes).

This discussion deals only with our common stock held as capital assets within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all of the U.S. federal income and estate tax consequences that may be relevant to a non-U.S. holder in light of such holder's own particular circumstances, nor does it deal with special situations, such as:

tax consequences to non-U.S. holders who may be subject to special tax treatment, such as banks and other financial institutions, insurance companies, partnerships or other entities treated as pass-through entities for U.S. federal income tax purposes, certain former citizens or residents of the United States, controlled foreign corporations, passive foreign investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt entities, common trust funds, certain trusts, hybrid entities, foreign governments, international organizations and dealers or traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;

tax consequences to persons holding our common stock as part of a hedging, integrated, constructive sale or conversion transaction or a straddle;

any gift tax consequences;

alternative minimum tax consequences, if any; or

any U.S. state or local or foreign tax consequences.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership generally will depend upon the status of the partner and the activities of the partnership. Prospective investors that are entities treated as partnerships for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income and estate tax considerations to them and their partners of holding our common stock.

**THIS DISCUSSION IS FOR GENERAL PURPOSES ONLY. IF YOU ARE CONSIDERING THE ACQUISITION OF OUR COMMON STOCK, YOU SHOULD CONSULT YOUR OWN TAX ADVISORS CONCERNING THE U.S. FEDERAL INCOME AND ESTATE TAX CONSEQUENCES TO YOU IN**

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LIGHT OF YOUR OWN PARTICULAR CIRCUMSTANCES, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER THE LAWS OF ANY OTHER TAXING JURISDICTION, THE EFFECT OF ANY CHANGES IN APPLICABLE TAX LAW, AND YOUR ENTITLEMENT TO BENEFITS UNDER AN APPLICABLE INCOME TAX TREATY.

**Dividends on Common Stock**

We do not expect to declare or pay any dividends on our common stock in the foreseeable future. If we make a distribution of cash or other property (other than certain pro rata distributions of our common stock) in respect of our common stock, the distribution will be treated as a dividend to the extent it is paid from our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). If the amount of a distribution exceeds our current and accumulated earnings and profits, such excess first will be treated as a tax-free return of capital to the extent of the non-U.S. holder's adjusted tax basis in our common stock, and thereafter will be treated as capital gain. Distributions treated as dividends on our common stock held by a non-U.S. holder generally will be subject to U.S. federal withholding tax at a rate of 30%, or at a lower rate if provided by an applicable income tax treaty and the non-U.S. holder has provided the documentation required to claim benefits under such treaty. Generally, to claim the benefits of an income tax treaty, a non-U.S. holder will be required to provide a properly executed IRS Form W-8BEN (or appropriate substitute or successor form) certifying its entitlement to benefits under the treaty.

If, however, a dividend is effectively connected with the conduct of a trade or business in the United States by the non-U.S. holder (and, if an applicable tax treaty so provides, is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States), the dividend will not be subject to U.S. federal withholding tax (so long as the non-U.S. holder has provided the appropriate documentation, generally an IRS Form W-8ECI (or appropriate substitute or successor form), to the withholding agent), but the non-U.S. holder generally will be subject to U.S. federal income tax in respect of the dividend on a net income basis at regular U.S. federal income tax rates in substantially the same manner as U.S. persons. Dividends received by a non-U.S. holder that is a corporation for U.S. federal income tax purposes and which are effectively connected with the conduct of a U.S. trade or business (and, if an applicable tax treaty so provides, is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States) may also be subject to a branch profits tax at the rate of 30% (or a lower rate if provided by an applicable tax treaty).

A non-U.S. holder that is eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund together with the required information with the IRS.

**Sale, Exchange or Other Disposition of Common Stock**

Subject to the discussion of backup withholding below, a non-U.S. holder generally will not be subject to U.S. federal income tax (including withholding tax) on gain realized on the sale, exchange or other disposition of our common stock unless:

such non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of such sale, exchange or disposition, and certain other conditions are met;

such gain is effectively connected with the conduct by the non-U.S. holder of a trade or business in the United States (and, if an applicable tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder in the United States); or

we are or have been a United States real property holding corporation , or a USRPHC, for U.S. federal income tax purposes at any time during the shorter of the five-year testing period ending on the date of such disposition and the non-U.S. holder s holding period of our common stock, and certain other conditions are met.

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Gain realized by a non-U.S. holder that is effectively connected with such non-U.S. holder's conduct of a trade or business in the United States generally will be subject to U.S. federal income tax on a net income basis at regular U.S. federal income tax rates in substantially the same manner as a U.S. person (except as provided by an applicable tax treaty). In addition, if such non-U.S. holder is a corporation for U.S. federal income tax purposes, it may also be subject to a branch profits tax at the rate of 30% (or a lower rate if provided by an applicable tax treaty).

Generally, a corporation is a USRPHC if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide (domestic and foreign) real property interests and its other assets used or held for use in a trade or business (all as determined for U.S. federal income tax purposes). For this purpose, real property interests include land, improvements and associated personal property. We believe that we are not currently a USRPHC for this purpose. If we were a USRPHC during the applicable testing period, non-U.S. holders owning (directly or indirectly) more than 5% of our common stock generally would be subject to U.S. federal income tax on the gain realized on the sale, exchange or disposition of our common stock, which would be treated as income effectively connected with a U.S. trade or business (and taxable as discussed above). Even if we were a USRPHC during the testing period, U.S. federal income tax would not apply to gain realized on the sale, exchange or disposition of our common stock by a non-U.S. holder that owns (directly or indirectly) 5% or less of our common stock so long as our common stock is regularly traded on an established securities market within the meaning of the applicable U.S. Treasury regulations. Prospective investors should be aware that no assurance can be provided that our common stock will be so regularly traded when a non-U.S. holder sells our common stock.

## **Information Reporting and Backup Withholding**

Dividends and proceeds from the sale, exchange or other disposition of our common stock are potentially subject to backup withholding at the applicable rate. In general, backup withholding will not apply to dividends on our common stock paid by us or our paying agents, in their capacities as such, to a non-U.S. holder if the holder has provided the required certification that it is a non-U.S. holder, such as by providing an IRS Form W-8BEN or IRS Form W-8ECI (or appropriate substitute or successor form) and neither we nor our paying agent has actual knowledge (or reason to know) that the holder is a U.S. holder that is not an exempt recipient.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability, provided the required information is furnished on a timely basis to the IRS.

Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them.

## **Additional Disclosure Requirements on Holders that are Foreign Entities**

A 30% withholding tax will be imposed on (i) dividends in respect of our common stock paid after December 31, 2013 and (ii) gross proceeds from the sale, exchange or other disposition of our common stock after December 31, 2014 to certain foreign entities unless such foreign entity satisfies certain disclosure requirements and certain other specified requirements. These withholding rules are subject to various requirements and exceptions and additional requirements and exceptions may be provided in subsequent guidance. **Non-U.S. holders should consult their own tax advisors regarding the potential application and impact of these requirements based upon their particular circumstances.**

## **U.S. Federal Estate Tax**

Common stock owned or treated as owned by an individual who is not a citizen or resident of the United States (as specifically defined for U.S. federal estate tax purposes) at the time of death will be included in the individual's gross estate for U.S. federal estate tax purposes and may be subject to U.S. federal estate tax unless an applicable estate tax treaty provides otherwise.

**Table of Contents****UNDERWRITING**

We and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman, Sachs & Co. and Barclays Capital Inc. are the representatives of the underwriters.

<b>Underwriters</b>	<b>Number of Shares</b>
Goldman, Sachs & Co.	
Barclays Capital Inc.	
Piper Jaffray & Co.	
Raymond James & Associates, Inc.	
Simmons & Company International	
Total	

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional \_\_\_\_\_ shares from us to cover such sales. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by us. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase \_\_\_\_\_ additional shares.

	<b>Paid by the Company</b>	
	<b>No Exercise</b>	<b>Full Exercise</b>
Per Share	\$	\$
Total	\$	\$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to \$ \_\_\_\_\_ per share from the initial public offering price. If all the shares are not sold at the initial public offering price, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

The Company and its officers, directors, and holders of substantially all of our common stock and holder of securities exercisable for or convertible into our common stock will agree with the underwriters, subject to certain exceptions, not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Goldman, Sachs & Co. and us. With respect to the Company, this agreement does not apply to (a) any existing employee equity plans; (b) securities issued upon the exercise of any outstanding options, warrants or other convertible securities, or conversion of shares of preferred stock; or (c) the issuance of common stock or warrants to purchase common stock in connection with mergers, acquisitions of securities, businesses, property or other assets, or joint ventures, strategic alliances, partnerships with third party collaborators, in each case consistent with the Company's business, provided, however, that with respect to clause (c), (1) the aggregate number of shares of common stock (including any securities issued that represent the right to acquire common stock) issued pursuant to this clause during the 180-day restricted period does not exceed 5% of the common stock issued and outstanding immediately following this offering and (2) any recipient of such securities execute and deliver a lock-up



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agreement. With respect to the Company's officers, directors and holders of its securities, this agreement does not apply to certain customary transactions, transfers, sales or other dispositions of securities to satisfy tax obligations resulting from the exercise of any stock options that otherwise would expire during the 180-day restricted period; transfers of securities following the commencement of a tender or exchange offer for securities by an unaffiliated third party of the Company that is subject to the provisions of the Exchange Act; transfers of securities pursuant to the consummation of a business combination or similar transaction; or transfers of securities following the execution of an agreement by the Company contemplating a business combination or similar transaction, in each case with an unaffiliated third party of the Company. See "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

The 180-day restricted period described in the preceding paragraph will be automatically extended if: (1) during the last 17 days of the 180-day restricted period we issue an earnings release or announce material news or a material event; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 15-day period following the last day of the 180-day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or material event.

Prior to the offering, there has been no public market for the shares. The initial public offering price has been negotiated among us and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be our historical performance, estimates of the business potential and earnings prospects of our company, an assessment of our management and the consideration of the above factors in relation to market valuation of companies in related businesses.

We have applied to list our common stock on the Nasdaq Global Market under the symbol "CERE".

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares from us in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option granted to them. Naked short sales are any sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of our stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of our common stock. As a result, the price of our common stock may be higher than the price that otherwise might exist in the open market. If these activities are



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commenced, they may be discontinued at any time. These transactions may be effected on the Nasdaq Global Market, in the over-the-counter market or otherwise.

The underwriters do not expect sales to discretionary accounts to exceed five percent of the total number of shares offered.

We estimate that our share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately \$ .

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for the issuer, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and such investment and securities activities may involve securities and instruments of the issuer. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

## **Selling Restrictions**

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than 43,000,000 and (3) an annual net turnover of more than 50,000,000, as shown in its last annual or consolidated accounts;

to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the representatives for any such offer; or

in any other circumstances which do not require the publication by the Issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer of shares to the public in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an

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investor to decide to purchase or subscribe the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Each underwriter has represented and agreed that:

it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

The shares may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore, or the SFA, (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries' rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan, or the Financial Instruments and Exchange Law, and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein

means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from

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the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

**Electronic Distribution**

A prospectus in electronic format may be made available on the Internet sites or through other online services maintained by one or more of the underwriters and/or selling group members participating in this offering, or by their affiliates. In those cases, prospective investors may view offering terms online and, depending upon the particular underwriter or selling group member, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares for sale to online brokerage account holders. Any such allocation for online distributions will be made by the representatives on the same basis as other allocations.

Other than the prospectus in electronic format, the information on any underwriter's or selling group member's web site and any information contained in any other web site maintained by an underwriter or selling group member is not part of the prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or any underwriter or selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

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**LEGAL MATTERS**

The validity of the shares of common stock offered hereby will be passed upon for us by Shearman & Sterling LLP, New York, New York. Simpson Thacher & Bartlett LLP, Palo Alto, California is acting as counsel to the underwriters.

**EXPERTS**

The consolidated financial statements as of August 31, 2009, August 31, 2010 and August 31, 2011 and for the year ended December 31, 2008, the eight months ended August 31, 2009, and the years ended August 31, 2010 and August 31, 2011, included in this prospectus have been included herein in reliance on the report of KPMG LLP, an independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in auditing and accounting.

**WHERE YOU CAN FIND ADDITIONAL INFORMATION**

We have filed a registration statement on Form S-1 with the SEC covering the shares of our common stock we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete and you should refer to the exhibits filed as part of the registration statement for copies of the actual contract, agreement or other document. After this offering, we will file annual, quarterly and special reports, proxy statements and other information with the SEC.

You can obtain copies of our SEC filings, including the registration statement, over the Internet at the SEC's web site at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, N.E. Room 1580, Washington, D.C. 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.



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**CERES, INC.**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders  
Ceres, Inc.:

We have audited the accompanying consolidated balance sheets of Ceres, Inc. and subsidiaries as of August 31, 2009, August 31, 2010, and August 31, 2011 and the related consolidated statements of operations, stockholders' deficit and comprehensive loss and cash flows for the year ended December 31, 2008, the eight months ended August 31, 2009, and the years ended August 31, 2010 and August 31, 2011. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Ceres, Inc. and subsidiaries as of August 31, 2009, August 31, 2010 and August 31, 2011 and the results of their operations and their cash flows for the year ended December 31, 2008, the eight months ended August 31, 2009, and the years ended August 31, 2010 and August 31, 2011, in conformity with U.S. generally accepted accounting principles.

As discussed in note 1(m) to the consolidated financial statements, effective January 1, 2009, the Company changed the accounting treatment for certain warrants upon adoption of a new accounting standard. As discussed in note 1(n) to the consolidated financial statements, effective for all periods presented, the Company changed the manner in which it accounted for convertible preferred stock.

/s/ KPMG LLP

Los Angeles, California  
November 10, 2011

**Table of Contents****CERES, INC.****Consolidated Balance Sheets**  
**(In thousands, except share and per share amounts)**

	2009	August 31, 2010	2011	Pro Forma August 31, 2011 (unaudited)
<b>Assets</b>				
Current assets:				
Cash and cash equivalents	\$ 14,960	\$ 33,055	\$ 21,911	\$ 21,911
Restricted investment	100			
Investments	15,384			
Prepaid expenses	992	675	631	631
Accounts receivable	449	1,196	1,292	1,292
Deferred offering costs			2,775	2,775
Other current assets	53	64	225	225
Total current assets	31,938	34,990	26,834	26,834
Property and equipment, net	8,884	8,452	6,780	6,780
Restricted cash and investment		3,000	3,000	3,000
Investments				
Other assets	272	206	183	183
Total long-term assets	9,156	11,658	9,963	9,963
Total assets	\$ 41,094	\$ 46,648	\$ 36,797	\$ 36,797
<b>Liabilities, Convertible Preferred Stock and Stockholders (Deficit) Equity</b>				
Current liabilities:				
Accounts payable and accrued expenses	\$ 4,072	\$ 3,774	\$ 6,972	\$ 6,972
Deferred revenue	257	678	924	924
Deferred rent	31	31	31	31
Current portion of long-term debt	35	2,182	2,168	2,168
Total current liabilities	4,395	6,665	10,095	10,095
Deferred rent	241	201	149	149
Long-term debt, net of current portion	12	4,198	2,013	2,013
Convertible notes			13,630	13,630
Preferred Stock warrant liabilities	13	333	276	
Common Stock warrant liabilities	2,931	8,578	17,450	
Total liabilities	7,592	19,975	43,613	25,887

## Commitments and contingencies

## Convertible preferred stock

Series A Convertible Preferred Stock, \$0.01 par value;  
6,733,875 shares authorized, issued, and outstanding  
at August 31, 2009, 2010 and 2011; aggregate liquidation  
preference of \$6,734

6,734 6,734 6,734

Series B Convertible Preferred Stock, \$0.01 par value;  
4,755,313 shares authorized; 3,640,000 shares issued and  
outstanding at August 31, 2009, 2010 and 2011;  
aggregate liquidation preference of \$7,280

7,280 7,280 7,280

Series C Convertible Preferred Stock, \$0.01 par value;  
14,550,000 shares authorized; 12,405,418 shares issued  
and outstanding at August 31, 2009, 2010 and 2011;  
aggregate liquidation preference of \$49,622

49,622 49,622 49,622

Series C-1 Convertible Preferred Stock, \$0.01 par value;  
2,264,681 shares authorized; 2,181,796 shares issued and  
outstanding at August 31, 2009, 2010 and 2011;  
aggregate liquidation preference of \$8,727

8,520 8,520 8,520

Series D Convertible Preferred Stock, \$0.01 par value;  
4,583,335 shares authorized; 3,150,012 shares issued and  
outstanding at August 31, 2009, 2010 and 2011;  
aggregate liquidation preference of \$18,900

18,563 18,563 18,563

Series E Convertible Preferred Stock, \$0.01 par value;  
3,351,794 shares authorized; 3,333,333 shares issued and  
outstanding at August 31, 2009, 2010 and 2011;  
aggregate liquidation preference of \$21,667

21,667 21,667 21,667

Series F Convertible Preferred Stock, \$0.01 par value;  
11,538,462 shares authorized, issued, and outstanding  
at August 31, 2009, 2010 and 2011; aggregate liquidation  
preference of \$75,000

70,693 70,693 70,693

Series G Convertible Preferred Stock, \$0.01 par value;  
3,076,923 shares authorized, issued, and outstanding  
at August 31, 2010 and 2011; aggregate liquidation  
preference of \$20,000

14,423 14,423

Total convertible preferred stock

183,079 197,502 197,502

## Stockholders (deficit) equity:

Common Stock, \$0.01 par value; 75,000,000 shares  
authorized; 5,698,417, 5,844,417, and 6,042,792 shares  
issued and outstanding at August 31, 2009, 2010, 2011,  
respectively, 52,102,611 shares issued and outstanding  
pro forma at August 31, 2011.

57 58 60 521

Additional paid-in capital

4,110 5,440 8,312 223,079

Accumulated other comprehensive loss

(27) (27)

Accumulated deficit

(153,744) (176,327) (212,663) (212,663)

Total stockholders (deficit) equity

(149,577) (170,829) (204,318) 10,910

\$ 41,094 \$ 46,648 \$ 36,797 \$ 36,797

Total liabilities, convertible preferred stock and  
stockholders' (deficit) equity

See accompanying notes to the consolidated financial statements.

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**Table of Contents****CERES, INC.****Consolidated Statements of Operations**  
**(In thousands, except share and per share amounts)**

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Year Ended August 31, 2011</b>
<b>Revenues:</b>				
Product sales	\$ 64	\$ 98	\$ 288	\$ 116
Collaborative research and government grants	3,880	2,328	6,326	6,500
<b>Total revenues</b>	<b>3,944</b>	<b>2,426</b>	<b>6,614</b>	<b>6,616</b>
<b>Cost and operating expenses:</b>				
Cost of product sales	3,777	2,690	2,946	2,492
Research and development	20,309	12,397	16,697	19,014
Selling, general and administrative	8,784	6,645	9,207	10,008
<b>Total cost and operating expenses</b>	<b>32,870</b>	<b>21,732</b>	<b>28,850</b>	<b>31,514</b>
<b>Loss from operations</b>	<b>(28,926)</b>	<b>(19,306)</b>	<b>(22,236)</b>	<b>(24,898)</b>
Interest expense		(5)	(153)	(456)
Interest income	2,001	243	23	7
Other income (expense)		161	(152)	(11,020)
<b>Loss before income taxes</b>	<b>(26,925)</b>	<b>(18,907)</b>	<b>(22,518)</b>	<b>(36,367)</b>
Income tax benefit (expense)	148	211	(65)	31
<b>Net Loss</b>	<b>\$ (26,777)</b>	<b>\$ (18,696)</b>	<b>\$ (22,583)</b>	<b>\$ (36,336)</b>
<b>Basic and diluted net loss per share attributable to common stockholders</b>	<b>\$ (4.89)</b>	<b>\$ (3.33)</b>	<b>\$ (3.90)</b>	<b>\$ (6.11)</b>
<b>Weighted average outstanding common shares used for net loss per share attributable to common stockholders:</b>				
Basic and diluted	5,473,090	5,621,671	5,791,443	5,945,157
<b>Pro forma net loss per share:</b>				
Basic and diluted (unaudited)			\$ (0.46)	\$ (0.70)
<b>Weighted average outstanding common shares used in computing pro forma net loss per share:</b>				
Basic and diluted (unaudited)			49,339,144	52,004,576

See accompanying notes to the consolidated financial statements.

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**Table of Contents****CERES, INC.****Consolidated Statements of Stockholders Deficit and Comprehensive Loss  
(In thousands, except share amounts)**

	<b>Common Stock Number of Shares</b>	<b>Common Stock Amount</b>	<b>Additional Paid-in Capital</b>	<b>Accumulated Other Comprehensive Loss</b>	<b>Accumulated Deficit</b>	<b>Total Stockholders Deficit</b>	<b>Comprehensive Loss</b>
Balance at December 31, 2007	5,370,620	\$ 54	\$ 5,256		\$ (108,668)	\$ (103,358)	
Exercise of common stock options	212,297	2	56			58	
Stock compensation expense			1,172			1,172	
Restricted stock award issuance	10,000						
Net loss					(26,777)	(26,777)	(26,777)
Total comprehensive loss							\$ (26,777)
Balance at December 31, 2008	5,592,917	56	6,484		(135,445)	(128,905)	
Cumulative effect of change in accounting principle (see Note 1(m))			(3,489)		397	(3,092)	
Adjusted balance January 1, 2009	5,592,917	56	2,995		(135,048)	(131,997)	
Exercise of common stock options	105,500	1	33			34	
Stock compensation expense			1,082			1,082	
Net loss					(18,696)	(18,696)	(18,696)
Total comprehensive loss							\$ (18,696)
Balance at August 31, 2009	5,698,417	57	4,110		(153,744)	(149,577)	
Exercise of common stock options	146,000	1	30			31	
Stock compensation expense			1,300			1,300	



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Net loss				(22,583)	(22,583)	(22,583)
Total comprehensive loss						\$ (22,583)
Balance at August 31, 2010	5,844,417	58	5,440	(176,327)	(170,829)	
Exercise of common stock options	198,375	2	162		164	
Stock compensation expense			2,710		2,710	
Foreign currency translation adjustment				(27)	(27)	(27)
Net loss				(36,336)	(36,336)	(36,336)
Total comprehensive loss						\$ (36,363)
Balance at August 31, 2011	6,042,792	\$ 60	\$ 8,312	(27)	\$ (212,663)	\$ (204,318)

See accompanying notes to the consolidated financial statements.

**Table of Contents****CERES, INC.****Consolidated Statements of Cash Flows**  
**(In thousands)**

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010      2011</b>	
Cash flows from operating activities:				
Net loss	\$ (26,777)	\$ (18,696)	\$ (22,583)	\$ (36,336)
Adjustments to reconcile net loss to net cash used in operating activities:				
Change in fair value of common and preferred stock warrants		(162)	152	(818)
Charge on issuance of convertible notes				2,205
Charge for modification of liability classified warrants				9,633
Net gain on disposal of assets			106	42
Depreciation	2,167	1,548	2,420	2,075
Stock compensation	1,172	1,082	1,300	2,710
Discount on matured investments	12	(111)	19	
Changes in operating assets and liabilities:				
Prepaid expenses	342	(107)	316	44
Accounts receivable	(1,521)	1,286	(745)	(96)
Deferred offering costs				(2,775)
Other assets	544	495	86	(83)
Accounts payables and accrued expenses	(808)	920	(298)	3,197
Deferred revenue	(5)	257	420	247
Deferred rent	(25)	(20)	(39)	(52)
Net cash used in operating activities	(24,899)	(13,508)	(18,846)	(20,007)
Cash flows from investing activities:				
Purchases of property and equipment	(3,812)	(1,585)	(2,093)	(548)
Proceeds from sale of property and equipment				112
Change in restricted cash and investments	2,600	100	(2,900)	
Purchased investments (at cost)	(49,443)	(30,341)		
Unrealized gains from investments	111	(19)		
Maturities of investments	73,977	48,174	15,365	
Net cash (used in) provided by investing activities	23,433	16,329	10,372	(436)
Cash flows from financing activities:				
Principal payments on other long term debt	(311)	(40)	(12)	(30)

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Principal payments on line of credit	(79)				
Principal payments on debt			(450)		(2,233)
Proceeds from issuance of convertible notes					11,425
Proceeds from issuance of debt and preferred stock warrants			7,000		
Proceeds from issuance of convertible preferred stock and common stock warrants			20,000		
Proceeds from issuance of common stock	59	34	31		164
Net cash provided by (used in) financing activities	(252)	(6)	26,569		9,326
Effect of foreign currency translation on cash					(27)
Net increase (decrease) in cash and cash equivalents	(1,718)	2,815	18,095		(11,144)
Cash and cash equivalents at beginning of period	13,863	12,145	14,960		33,055
Cash and cash equivalents at end of period	\$ 12,145	\$ 14,960	\$ 33,055	\$	21,911
Supplemental disclosure of cash flow information:					
Cash paid during the year for interest	\$ 17	\$ 5	\$ 110	\$	373
Cash paid during the year for income taxes	1	1	1		1

See accompanying notes to the consolidated financial statements

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**CERES, INC.**

**Notes to Consolidated Financial Statements  
(In thousands, except share and per share data)**

**(1) Summary of Significant Accounting Policies**

**(a) Description of Business**

Ceres, Inc. (the Company) is an agricultural biotechnology company selling seeds to produce renewable bioenergy feedstocks that can enable the large-scale replacement of petroleum and other fossil fuels. The Company uses a combination of advanced plant breeding and biotechnology to develop dedicated energy crops.

In January 2010, the Company incorporated a subsidiary, Ceres Sementes do Brasil Ltda. The Company's ownership in this subsidiary is 99.9% and the Company's Chief Executive Officer owns the remaining interest.

**(b) Liquidity**

The Company has incurred substantial net losses since its inception, including net losses of \$26,777, \$18,696, \$22,583 and \$36,336 for the year ended December 31, 2008, eight months ended August 31, 2009, and the years ended August 31, 2010 and 2011, respectively. As of August 31, 2011, the Company had an accumulated deficit of \$212,663.

The Company expects to incur additional losses related to the continued development and expansion of its business including research and development, seed production and operations, and sales and marketing. The Company is dependent on raising additional funding in the near term. While the Company raised \$11,425 from the sale of convertible notes in August 2011 and \$20,000 from the sale of convertible preferred stock and warrants to purchase common stock and borrowed \$7,000 from a bank in 2010, there is no assurance that the Company will be successful in raising any additional necessary financing in the future. There is also no assurance that profitable operations will be achieved, or if achieved, can be sustained on a continued basis.

Management believes that the current assets at August 31, 2011 are sufficient to fund operations at the current normalized spend rate into the second quarter of the Company's fiscal year ending August 31, 2012. The Company has plans to raise additional financing which could come from a variety of potential sources including existing investors, collaborations, government grants, public and private debt or equity financings. To the extent the Company is unable to raise additional funds in the near term, the Company has contingency plans in place to moderate the pace of planned expansion and reduce expenses related to the Company's operations. These contingency plans would enable the Company to continue to operate its core business through the first quarter of fiscal 2013.

**(c) Principles of Consolidation**

The consolidated financial statements include the financial statements of the Company and its subsidiary. All significant intercompany balances and transactions have been eliminated in consolidation.

**(d) Change in Fiscal Year-End**

During 2009, the Company changed its fiscal year-end to August 31 from December 31 to better match the seasonality of the production and selling cycles related to the seed and traits business.

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Any reference in the footnotes to the 2008 , 2009 , 2010 and 2011 periods represents consolidated statements of operations, stockholders' deficit and comprehensive loss or cash flow activity for the year ended December 31, 2008, eight months ended August 31, 2009 and the years

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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

ended August 31, 2010 and 2011 or consolidated balance sheets as of August 31, 2009, 2010 and 2011 respectively.

***(e) Unaudited Pro Forma Balance Sheet and Net Loss Per Share***

In May 2011, the Company's board of directors approved the filing of a registration statement with the Securities and Exchange Commission for an initial public offering (IPO) of the Company's common stock. If the initial public offering is consummated, (i) all of the convertible preferred stock outstanding will automatically convert into 46,059,819 shares of common stock, based on the shares of convertible preferred stock outstanding as of August 31, 2011, (ii) 687,775 of liability classified warrants to purchase common stock are assumed to net exercise to shares of common stock, (iii) 4,696,845 liability classified warrants to purchase common stock will be equity classified, (iv) warrants to purchase convertible preferred stock will become warrants to purchase common stock and (v) all of the Convertible Notes will automatically convert to common stock.

The unaudited pro forma balance sheet gives effect to the conversion of (i) 46,059,819 shares of convertible preferred stock and (ii) reclassification of the common and preferred stock warrant liabilities to additional paid-in capital as of August 31, 2011. The conversion of the Convertible Notes to common stock has not been reflected as a pro forma adjustment as the conversion is based on the IPO price which is not yet known.

The unaudited pro forma basic and diluted net loss per common share for the years ended August 31, 2010 and 2011 have been computed to give effect to the conversion of the Company's convertible preferred stock (using the if-converted method) into common stock as though the conversion had occurred as of September 1, 2009.

***(f) Cash Equivalents***

The Company considers all highly liquid investments, with an original maturity of three months or less when purchased, to be cash equivalents. Cash equivalents totaled \$14,130, \$13,019, and \$10,018 at August 31, 2009, 2010 and 2011, respectively.

***(g) Restricted Cash and Restricted Investments***

Cash and investment accounts that are restricted as to withdrawal or usage are presented as restricted cash and investments.

***(h) Investments***

Investment securities primarily consisted of U.S. Treasury securities with maturities of 365 days or less. The securities were classified as held to maturity as the Company has the ability and intent to hold the securities until maturity. The securities were recorded at amortized cost, and adjusted for the amortization or accretion of premiums or discounts. All investment securities matured by August 31, 2010.

***(i) Financial Instruments***

The carrying value of financial instruments such as cash and cash equivalents, receivables, accounts payable, and accrued expenses approximate their fair value due to the short-term nature of these instruments. At each period end,

the fair value of the long-term debt approximated carrying value based on interest rates currently available to the Company.

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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

**(j) Fair Value Measurements**

The Company adopted Financial Accounting Standards Board (FASB) ASC Topic 820, *Fair Value Measurements and Disclosures*, on January 1, 2008 for fair value measurements of financial assets and financial liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis. On January 1, 2009, the Company adopted the provisions of ASC Topic 820 for fair value measurements of nonfinancial assets and nonfinancial liabilities that are recognized or disclosed at fair value in the financial statements on a nonrecurring basis. ASC Topic 820 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are as follows:

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which a fair value measurement in its entirety falls is based on the lowest level input that is significant to the fair value measurement in its entirety.

In 2009 and 2010, upon the adoption of ASC Topic 815-40, *Derivatives and Hedging-Contracts in Entity's Own Equity*, certain financial instruments did fall within the requirements of ASC Topic 820 and are included in the disclosure below.

The Company has utilized an option pricing valuation model to determine the fair value of its outstanding common and convertible preferred stock warrant liabilities. The inputs to the model include fair value of the stock related to the warrant, exercise price of the warrant, expected term, expected volatility, risk-free interest rate and dividend yield. As several significant inputs are not observable, the overall fair value measurement of the warrants is classified as Level 3.

The following tables summarize the Company's common and convertible preferred stock warrant liabilities and convertible notes measured at fair value on a recurring basis as of August 31, 2009, 2010 and 2011.

As of August 31, 2009, the fair value of the Company's common and convertible preferred stock warrant liabilities were as follows:

**Fair value measurements  
at reporting date using  
Quoted  
prices**



	<b>Total fair value as of August 31, 2009</b>	<b>in active markets for identical assets (Level 1)</b>	<b>Significant other observable inputs (Level 2)</b>	<b>Significant other unobservable inputs (Level 3)</b>
Common stock warrants	\$ 2,931	\$	\$	\$ 2,931
Convertible preferred stock warrants	13			13
Total	\$ 2,944	\$	\$	\$ 2,944

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Table of Contents**CERES, INC.****Notes to Consolidated Financial Statements (Continued)****(In thousands, except share and per share data)**

As of August 31, 2010, the fair value of the Company's common and convertible preferred stock warrant liabilities were as follows:

	Total fair value as of August 31, 2010	Fair value measurements at reporting date using		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant other unobservable inputs (Level 3)
Common stock warrants	\$ 8,578	\$	\$	\$ 8,578
Convertible preferred stock warrants	333			333
Total	\$ 8,911	\$	\$	\$ 8,911

As of August 31, 2011, the fair value of the Company's common and convertible preferred stock warrant liabilities and convertible notes were as follows:

	Total fair value as of August 31, 2011	Fair value measurements at reporting date using		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant other unobservable inputs (Level 3)
Common stock warrants	\$ 17,450	\$	\$	\$ 17,450
Convertible preferred stock warrants	276			276
Convertible notes	13,630			13,630
Total	\$ 31,356	\$	\$	\$ 31,356

**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

Prior to December 31, 2008, the changes in fair value of the Company's Level 3 warrant liabilities were not significant. The changes in fair value of the Company's Level 3 warrants from December 31, 2008 through August 31, 2011 were as follows:

	<b>Common Stock Warrant Liabilities</b>	<b>Preferred Stock Warrant Liabilities</b>	<b>Convertible Notes</b>
Fair value, December 31, 2008	\$	\$ 13	\$
Fair value upon change in accounting principle	3,092		
Fair value, Adjusted balance January 1, 2009	3,092	13	
Fair value adjustments	(161)		
Fair value, August 31, 2009	2,931	13	
Fair value adjustments	70	81	
Issuance of warrants	5,577	239	
Fair value, August 31, 2010	8,578	333	
Issuance of convertible notes			13,640
Fair value adjustments	(761)	(57)	(10)
Warrant modification adjustment	9,633		
Fair value, August 31, 2011	\$ 17,450	\$ 276	\$ 13,630

*Fair Value of Convertible Notes as of August 31, 2011*

Until such time as the conversion features are triggered, the Company will account for its Convertible Subordinated Notes (Convertible Notes) and various embedded derivatives in accordance with ASC 825-10, the Fair Value Option for Financial Liabilities, whereby it will initially and subsequently measure this financial instrument in its entirety at fair value, with the changes in fair value recorded each quarterly reporting period in other income/expense.

**(k) Accounts Receivable**

Accounts receivable represents amounts owed to the Company from product sales and collaborative research and government grants. The Company had no amounts reserved for doubtful accounts at August 31, 2009, 2010 and 2011, as the Company expected full collection of the accounts receivable balances.

Customers representing greater than 10% of accounts receivable were as follows (in percentages):

Customers	As of		
	2009	August 31, 2010	2011
Customer A	*	*	20.0
Customer B	*	*	21.3
Customer C	*	31.4	30.4
Customer D	65.0	27.2	20.0
Customer E	13.1	*	*
Customer H	16.9	37.4	*

\* Less than 10%

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

Customers representing greater than 10% of revenues were as follows (in percentages):

Customers	Year Ended	Eight Months	Year Ended	
	December 31, 2008	Ended August 31, 2009	August 31, 2010	2011
Customer A	*	*	12.7	20.5
Customer B	*	*	13.5	16.6
Customer C	*	*	9.8	20.9
Customer D	25.4	48.1	28.5	25.4
Customer E	43.5	27.6	*	*
Customer F	20.3	*	*	*

\* Less than 10%

**(l) Property and Equipment**

Property and equipment is stated at cost. Depreciation is provided using the straight-line method over the shorter of the estimated useful lives or the remaining life of the lease. Depreciation periods for the Company's property and equipment are as follows:

Automobiles and trucks	3-5 years
Office, laboratory, farm and warehouse equipment and furniture	3-5 years
Leasehold improvements	3-10 years
Buildings	14-39 years

**(m) Common and Convertible Preferred Stock Warrant Liabilities**

Effective January 1, 2009, the Company adopted the guidance in ASC Topic 815-40 *Derivatives and Hedging Contracts in Entity's Own Equity*. In connection with the adoption, the Company determined that common stock warrants issued to the holders of Series F Convertible Preferred Stock were not considered indexed to the Company's common stock and therefore require liability classification. On January 1, 2009, the Company recorded warrant liabilities of \$3,092 and recorded a cumulative effect of change in accounting principle of \$397 as a reduction of accumulated deficit representing the decline in fair value between the warrant issuance date and the adoption date.

The Company accounts for its warrants to purchase shares of the Company's convertible preferred stock that are contingently redeemable as liabilities at fair value on the consolidated balance sheets.

These common and convertible preferred stock warrants are subject to re-measurement at each balance sheet date and the changes in fair value, if any, are recognized as other income (expense) until they expire or are exercised.

**(n) Convertible Preferred Stock**

In connection with the Company's decision to file a registration statement with the Securities Exchange Commission for an initial public offering of the Company's common stock, the Company adopted the provisions of ASC Topic 480-10-S99-3A, *Classification and Measurement of Redeemable Securities*.

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)  
(In thousands, except share and per share data)**

The convertible preferred stock is not redeemable by the Company or at the option of the preferred stockholders. The holders of the Company's outstanding convertible preferred stock, voting or consenting together as a separate class, control the vote of the Company's stockholders. As a result, the holders of all series of the Company's convertible preferred stock can vote to approve a change in control under circumstances that would trigger a deemed liquidation under the Company's certificate of incorporation. As redemption of the convertible preferred stock through a deemed liquidation is outside the control of the Company, all shares of convertible preferred stock, previously classified in stockholders' (deficit) equity, have been classified as temporary equity rather than as a component of stockholders' (deficit) equity in the Company's consolidated balance sheets for all periods presented. All series of convertible preferred stock are collectively referred to in the consolidated financial statements as convertible preferred stock.

The carrying value of convertible preferred stock was recorded at its fair value at the date of issue. The convertible preferred stock is not currently redeemable as the contingency (sale or merger of the Company) has not been met and is not probable. Subsequent adjustment will be made when it is probable that the security will become redeemable. There was no impact of adopting this accounting principle on the consolidated statements of operations or cash flows for all periods presented.

***(o) Stock-Based Compensation***

The Company accounts for stock-based compensation arrangements with employees using a fair value method which requires the recognition of compensation expense for costs related to all stock-based payments including stock options. The fair value method requires the Company to estimate the fair value of stock-based payment awards on the date of grant using an option pricing model. The Company uses an option pricing model to estimate the fair value of options granted that are expensed on a straight-line basis over the vesting period. The Company accounts for stock options issued to non-employees based on the estimated fair value of the awards using the option pricing model. The measurement of stock-based compensation to non-employees is subject to periodic adjustments as the underlying equity instruments vest, and the resulting change in value, if any, is recognized in the Company's consolidated statements of operations during the period the related services are rendered.

***(p) Revenue Recognition***

Revenues are recognized when the following criteria are met: (1) persuasive evidence of an arrangement exists; (2) transfer of product or technology has been completed or services have been rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured. To date, the Company's primary source of revenues is derived from collaborative research agreements and government grants.

***Product Sales***

Product sales are derived from sales of seeds. Product sales are recognized, net of discounts and allowances, once passage of title and risk of loss have occurred and contractually specified acceptance criteria have been met, provided all other revenue recognition criteria have also been met. Shipping and handling costs charged to customers are recorded as revenues and included in cost of product sales. To date, product sales have not been significant.





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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

*Collaborative Research and Government Grants*

From time to time, the Company enters into research and development collaboration agreements with third parties including several biofuel producers and government agencies such as the Department of Energy (DOE) and the United States Department of Agriculture (USDA). The research and development collaboration agreements typically provide the Company with multiple revenue streams, which may include up-front, non-refundable fees for licensing certain of the Company's technologies, government grants and fees for research and development activities, and contingent milestone payments based upon achievement of contractual criteria.

*Technology License Fees* For collaboration agreements in which the Company has continuing involvement, license fees are recognized on a straight-line basis over the term of the arrangement. Licensing fees are non-refundable and not subject to future performance.

*Government Grants* The Company receives payments from government entities in the form of government grants. Government grants generally provide the Company with partial cost reimbursement for certain types of expenditures in return for research and development activities over a contractually defined period. Revenues from government grants are recognized in the period during which the related costs are incurred, provided that the conditions under which the government grants were provided have been met and the Company has only perfunctory obligations outstanding.

*Research and Development Fees* Generally, fees for research and development activities are recognized as the services are performed over the performance period, as specified in the respective agreements. Certain of the Company's collaboration agreements require the Company to deliver research data by specific dates and that the collective program plan will result in reaching specific crop characteristics by certain dates. For such arrangements, the Company recognizes revenues based on the approximate percentage of completion of services under the agreement, but the revenue recognized cannot exceed payments received by the Company to date under the agreement. The research and development period is estimated at the inception of each agreement and is periodically evaluated.

*Milestone Fees* Fees that are contingent based on achievement of substantive performance milestones at inception of the agreement are recognized based on the achievement of the milestone, as defined in the respective agreements.

*Deferred Revenue*

The Company recognizes deferred revenue to the extent that cash received under the collaboration agreement is in excess of the revenues recognized related to the agreement since the work under the agreement has not yet been performed at the time of cash receipt.

In April 2002, the Company entered into a multi-year discovery and development collaboration with Monsanto Company, focused on applying genomics technologies to identify genes that provide improvements in corn, soybean and certain other row crops. Pursuant to this agreement, Monsanto licensed rights to a portion of the Company's trait discovery pipeline in certain row crops in exchange for license payments over several years. Monsanto also funded a

research program with the Company. Payments for such licenses were nonrefundable and were not subject to future performance. The Company had no milestone fees for any periods presented herein. In 2010, the Company and Monsanto agreed to amend the agreement. The amendment included an additional license fee of \$450 pertaining to an expansion of the license grant. This amount was recorded in revenues for collaborative research and government grants in 2010. In connection with the

**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

collaboration agreement, Monsanto also purchased 3,333,333 shares of the Company's Series E Preferred Stock.

On December 20, 2007, the Company and a major consumer products company entered into a development and license agreement under which the Company is working to improve yields of a food product. The agreement provided that the Company would receive \$7,500 in payments from this company over a five-year period provided milestones were met. In addition, the agreement provided that the Company would be entitled to receive a royalty based on the gross sales of crop varieties created under the agreement. The Company recognized revenue of \$1,000, \$1,166, \$1,883 and \$1,683 under this agreement in 2008, 2009, 2010, and 2011, respectively.

The Company earns research funding revenues from several agreements with the DOE, the USDA, and several leading bio-fuels producers whereby the Company performs research activities and receives revenues that partially reimburse its expenses incurred. Under such grants and agreements, the Company retains a proprietary interest in the products and technology it develops. These expense reimbursements primarily consist of direct expense sharing arrangements. The Company recorded revenue related to these grants of approximately \$2,000, \$900, \$2,800 and \$3,120 in 2008, 2009, 2010, and 2011, respectively. The cumulative remaining amount to be claimed for all grants outstanding as of August 31, 2011 is approximately \$4,516.

On December 16, 2008, the Company and a major agro-chemical company entered into a software license and collaboration agreement pursuant to which the Company provides software, software development and customer support for certain research application-based software. The agreement was structured into three phases and under the agreement, the Company is entitled to receive \$1,500 in payments over an approximate 4.5 year period. The software delivered is comprised of multiple elements, which include software, installation, training, customization of software, and software support. Software support is considered post-contract customer support, or PCS. The Company does not have vendor specific objective evidence of fair value for its PCS. Accordingly, the Company recognizes revenues equal to the amount of expense recognized as services are rendered until the date that the PCS is the only undelivered element. Beginning on such date, the unrecognized revenue under the agreement will be recognized over the remaining PCS period. The Company recognized revenue and an equal amount of costs totaling \$0, \$180, \$268 and \$243 under this agreement in 2008, 2009, 2010, and 2011, respectively.

***(q) Research and Development***

Research and development expenses principally consist of personnel costs related to the Company's research and development staff as well as depreciation of research and development assets. Research and development expenses also include costs incurred for laboratory supplies, reimbursable costs associated with government grants and collaborative agreements, third-party contract payments, consultants, facility and related overhead costs.

***(r) Seed Inventory***

Seed inventory costs are computed on a first-in, first-out basis and valued at the lower of cost or market with any excess cost recognized during the period within cost of product sales. Due to the early stage of commercialization of the Company's seed products and with no established market for these products, a full valuation reserve has been recorded against seed inventory for all periods presented.



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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

**(s) *Income Taxes***

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

Beginning with the adoption of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, included in FASB ASC Subtopic 740-10 Income Taxes Overall*, as of January 1, 2009, the Company recognizes the effect of income tax positions only if those positions are more likely than not of being sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely of being realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. Prior to the adoption of Interpretation 48, the Company recognized the effect of income tax positions only if such positions were probable of being sustained. Effective upon adoption of ASC 740, the Company recognizes interest and penalties accrued related to unrecognized tax benefits and penalties within its provision for income taxes. The Company had no such interest and penalties accrued at August 31, 2009, 2010 and 2011.

For all periods presented the Company had no material unrecognized tax benefits or expenses that, if recognized, would affect the Company's effective income tax rate in future periods. The Company is currently unaware of any issues under review that could result in significant payments, accruals, or material deviations from its recognized tax positions.

The major jurisdictions in which the Company files income tax returns include the United States federal jurisdiction as well as a state jurisdiction within the United States. All tax years from 1997 to present are subject to examination by the United States federal jurisdiction and by a state tax authority.

**(t) *Foreign Currency Translation and Comprehensive Loss***

The financial statements of the Brazilian subsidiary use the local currency, the Brazilian Real, as their functional currency. Assets and liabilities of the foreign operations are translated at the rate of exchange at the balance sheet date. Revenues and expenses are translated at the weighted average rate of exchange during the reporting period. Translation gains or losses are included in accumulated other comprehensive loss in the stockholders' deficit section of the consolidated balance sheets.

**(u) *Impairment of Long-Lived Assets***

Long-lived assets, such as property and equipment, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company's long-lived assets comprise a single asset group for evaluation purposes. The Company evaluates whether an impairment indicator occurs primarily based on progress achieved against the Company's business plans. To the extent that an impairment indicator has occurred, recoverability of assets to be held and used is measured by a comparison of the carrying

amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset. For all periods presented herein, no impairment indicators have occurred and therefore no impairment charges have been recognized.

**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)****(v) Basic and Diluted Net Loss Per Share**

The Company's Certificate of Incorporation provides that dividends in amounts specified in the Company's Certificate of Incorporation must be paid to holders of the Company's convertible preferred stock prior to and in preference of any declaration or payment of any cash dividend to common stockholders.

Because the holders of the Company's convertible preferred stock are entitled to participate in dividends and earnings of the Company, the Company applies the two-class method in calculating its earnings per share for periods when the Company generates net income. The two-class method requires net income to be allocated between the common and convertible preferred stockholders based on their respective rights to receive dividends, whether or not declared. Because the convertible preferred stock is not contractually obligated to share in the Company's losses, no such allocation was made for any period presented given the Company's net losses.

Basic net loss per common share is computed by dividing net loss attributable to common stockholders by the weighted average number of common shares outstanding. Diluted loss per common share is computed by dividing net loss available to common stockholders by the weighted average number of common shares and dilutive potential common share equivalents then outstanding, to the extent they are dilutive. Potential common shares consist of shares issuable upon the exercise of stock options and warrants (using the treasury stock method), and the weighted average conversion of the convertible preferred stock into shares of common stock (using the if-converted method). Dilutive loss per share is the same as basic loss per share for all periods presented because the effects of potentially dilutive items were anti-dilutive.

The following sets forth the computation of basic and diluted net loss per common share:

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>2011</b>
Basic and diluted net loss per common share:				
Net loss attributable to common stockholders	\$ (26,777)	\$ (18,696)	\$ (22,583)	\$ (36,336)
Less minimum dividend available to preferred stockholders				
Net loss attributable to common stockholders	\$ (26,777)	\$ (18,696)	\$ (22,583)	\$ (36,336)
Basic and diluted net loss per common share	\$ (4.89)	\$ (3.33)	\$ (3.90)	\$ (6.11)
Weighted average outstanding common shares used for net loss attributable to common stockholders:				
Basic and diluted	5,473,090	5,621,671	5,791,443	5,945,157

The following potentially dilutive, common share equivalents were excluded from the calculation of diluted net loss per common share because their effect was antidilutive for each of the periods presented:

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Year Ended August 31, 2011</b>
Options to purchase common stock	6,714,652	6,396,700	6,874,588	7,792,219
Warrants to purchase common stock	2,907,697	2,907,697	5,984,620	5,984,620
Warrants to purchase convertible preferred stock	18,461	18,461	61,537	61,537
Convertible preferred stock	42,982,896	42,982,896	46,059,819	46,059,819
Convertible notes				3,515,456
<b>Total</b>	<b>52,623,706</b>	<b>52,305,754</b>	<b>58,980,564</b>	<b>63,413,651</b>

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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

Potential dilutive common share equivalents for the convertible notes (Note 9) were determined based on the automatic conversion of the convertible notes to a combination of convertible preferred stock and liability classified derivative common stock warrants.

***(w) Segment and geographic information***

Management has determined that it has one business activity and operates in one segment as it only reports financial information on an aggregate and consolidated basis to its Chief Executive Officer, who is the Company's chief operating decision maker. Geographic information regarding the Company's operations outside of North America is not significant for any periods presented.

***(x) Use of Estimates***

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions. This affects the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Significant items subject to such estimates and assumptions include the valuation of property and equipment, inventory, deferred tax assets, common stock, convertible preferred stock, stock options, warrant liabilities and convertible notes. Actual results could differ from those estimates.

***(y) Recent Accounting Pronouncements***

In May 2011, the FASB issued ASU 2011-04, *Amendments to Achieve Common Fair Value Measurements and Disclosure Requirements in U.S. GAAP and IFRSs*, to provide largely identical guidance about fair value measurement and disclosure requirements with the International Accounting Standards Board (IASB) IFRS 13, *Fair Value Measurement*. The new standard does not extend the use of fair value but, rather, provides guidance about how fair value should be applied where it already is required or permitted under U.S. GAAP. ASU 2011-04 is effective prospectively for interim and annual periods beginning after December 15, 2011. Early adoption is not permitted. The Company is currently evaluating the impact of adoption of this standard, if any, on its consolidated financial statements.

In June 2011 the FASB issued ASU 2011-05 *Presentation of Comprehensive Income* which provides two options for presenting the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. The amendments in this update do not change the items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income. The amendments do not change the option for an entity to present components of other comprehensive income either net of related tax effects or before related tax effects. The amendments do not affect how earnings per share is calculated or presented. The amendments in this update will be applied retrospectively and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company expects that, if adopted, this standard will not have a material impact on its consolidated financial statements.



**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)****(2) Investments Held to Maturity**

The Company held investments in marketable debt securities that were classified as held to maturity as follows:

	<b>As of</b>		
	<b>August 31,</b>		
	<b>2009</b>	<b>2010</b>	<b>2011</b>
Restricted certificates of deposit	\$ 100	\$	\$
U.S. Treasury and federal agency securities	15,384		
Total	\$ 15,484	\$	\$

The fair value of the securities was substantially the same as the carrying value.

**(3) Property and Equipment**

Property and equipment are summarized as follows:

	<b>As of</b>		
	<b>August 31,</b>		
	<b>2009</b>	<b>2010</b>	<b>2011</b>
Land	\$	\$ 43	\$ 43
Automobiles and trucks	298	361	373
Buildings	2,435	3,391	3,391
Office, laboratory, farm and warehouse equipment and furniture	16,845	16,794	16,346
Leasehold improvements	5,719	5,719	5,759
	25,297	26,308	25,912
Less accumulated depreciation	(16,413)	(17,856)	(19,132)
Property and equipment, net	\$ 8,884	\$ 8,452	\$ 6,780

**(4) Accounts Payable and Accrued Expenses**

Accounts payable and accrued expenses consisted of the following:

**As of**

	<b>2009</b>	<b>August 31, 2010</b>	<b>2011</b>
Accounts payable	\$ 920	\$ 1,049	\$ 3,790
Accrued payroll and related expenses	1,249	1,490	1,505
Research and development contracts	1,021	834	1,099
Accrued grower commitments	755	185	90
Other	127	216	488
	<b>\$ 4,072</b>	<b>\$ 3,774</b>	<b>\$ 6,972</b>

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)****(5) Long-Term Debt**

Long-term debt is summarized as follows:

	<b>2009</b>	<b>As of August 31, 2010</b>	<b>2011</b>
Equipment Loan			
Tranche 1 matures June, 2013, net of discount of \$60	\$	\$ 2,462	\$ 1,590
Tranche 2 matures August, 2013, net of discount of \$81		3,883	2,586
Other	47	35	5
	47	6,380	4,181
Less current portion	(35)	(2,182)	(2,168)
	\$ 12	\$ 4,198	\$ 2,013

***Equipment Loan***

In January 2010, the Company entered into a Loan and Security Agreement (the Loan Agreement) with a commercial bank (the Bank). The Loan Agreement provides financing for qualified equipment purchases. The Company borrowed a total of \$7,000 in two tranches at interest rates of Prime Rate plus 2.75% (6.75% as of August 31, 2011), which is to be repaid over 36 to 40 months. In connection with the Loan Agreement, the Company issued the Bank warrants to purchase 43,076 shares of the Company's Series F Convertible Preferred Stock at an exercise price of \$6.50 per share. The fair value of the warrants at the inception of the Loan Agreement was \$239. The fair value was recorded as a discount on the equipment loan and is being recognized over the term of the equipment loan as interest expense (see Note 8). At August 31, 2010 and 2011, the Company also held restricted cash of \$3,000 in the form of a deposit related to the Loan Agreement.

The Loan Agreement is secured by certain of the Company's assets, excluding intellectual property, and requires compliance with covenants that require certain reporting and maintenance of certain specified ratios. At August 31, 2011, the Company was in compliance with the Loan Agreement debt covenants.

***Borrowing Agreement***

In July 2004, the Company entered into a borrowing agreement (Borrowing Agreement) to finance the construction of a greenhouse located in the United States. The Company borrowed \$4,000 at an interest rate of 7% from the Bank. Final payment on the borrowings was made on February 1, 2008. In conjunction with the borrowing agreement, the Company issued the Bank warrants to purchase 18,461 shares of the Company's Series E Convertible Preferred Stock at an exercise price of \$6.50 per share (see Note 8).

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The aggregated maturities of debt as of August 31, 2011 are as follows:

2012	\$ 2,168
2013	2,013
	\$ 4,181

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)****(6) Stock-Based Compensation*****Stock Option and Stock Issuance Plans***

The Company has established two stock option and stock issuance plans: the Ceres, Inc. 2000 Stock Option/Stock Issuance Plan, as restated and the Ceres, Inc. 2010 Stock Option/Stock Issuance Plan (collectively the Option Plans). The Option Plans provide for grants of Incentive Stock Options (ISOs) to employees and Nonstatutory Stock Options (NSOs) and restricted stock to employees, directors, and consultants. The option term, as determined by the Company's Board of Directors, may not exceed ten years. Vesting, also determined by the Company's Board of Directors, generally occurs ratably over four years. ISOs and NSOs may be granted at a price per share not less than the fair market value at the date of grant.

The Company has issued restricted stock awards under the Option Plans. Vesting of restricted stock awards is determined at the discretion of the Board of Directors. As of August 31, 2010 and 2011, there were 2,500 unvested restricted stock awards outstanding.

The total number of shares reserved for issuance under the Option Plans is 11,765,000. As of August 31, 2010 and 2011, the Company had 1,148,257 and 32,251 shares available, respectively, under the Option Plans for future grant.

***Stock Option Valuation and Compensation***

The Company uses a Black Scholes option pricing model to determine the fair value of stock options. The weighted average grant date fair value of stock option awards was \$1.59, \$1.57, and \$1.51 and \$1.65 per option share for 2008, 2009, 2010, and 2011, respectively.

The determination of the fair value of stock option awards on the date of grant using an option-pricing model is affected by the Company's common stock valuation as well as assumptions regarding a number of complex and subjective variables. The fair value of the Company's common stock underlying the stock options has historically been determined by the Company's Board of Directors with input from management. In the absence of a public trading market for the Company's common stock, the Board has determined the fair value of the common stock utilizing methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately Held Company Equity Securities Issued as Compensation*.

The weighted average grant date estimated fair value of the Company's common stock was \$2.17, \$2.16, \$2.32 and \$3.99 per share for 2008, 2009, 2010, and 2011, respectively.

The fair value of employee stock options was estimated using the following weighted-average assumptions:

<b>Year ended December 31, 2008</b>	<b>Eight months ended August 31, 2009</b>	<b>Year ended August 31, 2010</b>	<b>2011</b>
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Expected term (in years)	6.25	6.25	6.25	6.08-6.46
Expected volatility	85%	85%	70%	70%-78%
Risk free interest rate	1.92%-3.41%	2.10%-3.18%	2.29%-2.69%	1.48%-2.44%
Expected dividend yield	0%	0%	0%	0%

*Expected Term* Because of limited employee share option exercises, the Company uses a simplified method in which the expected term of an award is presumed to be mid-point between the vesting date and the expiration date of the award. The expected term for all employee option grants is an average of 6.26 years.

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

*Expected Volatility* The Company estimates the volatility of its common stock by using the historical volatility of a group of comparable companies over the option's expected term. The decision to use historical volatility of comparable companies was based upon the fact that the Company's stock is not actively traded.

*Risk-Free Interest Rate* The Company bases the risk-free interest rate used in the option valuation model on U.S. Treasury zero-coupon issues with remaining terms similar to the expected term on the options.

*Expected Dividend Yield* The Company does not anticipate paying any cash dividends in the foreseeable future.

Stock-based compensation costs included in operating expenses and total intrinsic value of options exercised are as follows:

	<b>Year ended December 31, 2008</b>	<b>Eight months ended August 31, 2009</b>	<b>Year ended August 31, 2010</b>	<b>2011</b>
Stock-based compensation costs included in operating expenses	\$ 1,172	\$ 1,082	\$ 1,300	\$ 2,710
Intrinsic value of stock options exercised	402	194	298	632

**Stock Option Activity**

The following summarizes the stock option transactions under the Option Plans during the periods presented:

	<b>Shares</b>	<b>Weighted Average Exercise Price</b>
Options outstanding at December 31, 2008	6,714,652	\$ 1.35
Options granted	94,000	2.25
Options exercised	(105,500)	0.32
Options forfeited	(306,452)	1.61
Options outstanding at August 31, 2009	6,396,700	\$ 1.36
Options granted	972,000	2.25
Options exercised	(146,000)	0.22
Options forfeited	(348,112)	2.03
Options outstanding at August 31, 2010	6,874,588	\$ 1.48
Options granted	1,635,099	3.92
Options exercised	(198,375)	0.83

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Options forfeited	(519,093)	1.38
Options outstanding at August 31, 2011	7,792,219	\$ 2.02

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)****(In thousands, except share and per share data)**

The following table summarizes information about stock options outstanding and exercisable at August 31, 2011:

<b>Range of Exercise Price</b>	<b>Number Outstanding and Exercisable</b>	<b>Average Remaining Contractual Life</b>	<b>Weighted- Average Exercise Price</b>	<b>Number Vested and Exercisable</b>	<b>Weighted- Average Exercise Price</b>	<b>Average Remaining Contractual Life</b>
\$0.60 to \$0.65	2,088,500	1.03	\$ 0.63	2,088,500	\$ 0.63	1.03
\$1.30 to \$1.35	1,240,583	4.46	1.30	1,237,583	1.30	4.46
\$2.25	2,895,037	7.20	2.25	1,936,260	2.25	6.77
\$2.44	808,500	9.29	2.44	114,929	2.44	9.29
\$5.59	500,000	9.77	5.59	22,812	5.59	9.71
\$5.72	259,599	9.88	5.72	5,969	5.72	9.88
	7,792,219			5,406,053		

No tax benefits have been recorded on compensation costs recognized for options exercised. As of August 31, 2011, there was \$4,665 of total unrecognized compensation cost related to stock options. That cost is expected to be recognized over a weighted average of 3.88 years. The Company's policy is to issue new shares for options exercised.

**(7) Convertible Preferred Stock**

In September 2007, the Company raised \$74,182 from various investors by issuing Series F Convertible Preferred Stock at \$6.50 per share. In conjunction with the purchase of the Series F convertible preferred stock, a total of 2,307,697 warrants to purchase common stock at \$6.50 per share were issued to the holders of Series F Convertible Preferred Stock.

In June 2010, the Company raised \$20,000 from various investors by issuing Series G Convertible Preferred Stock at \$6.50 per share. In conjunction with the purchase of the Series G Convertible Preferred Stock, a total of 3,076,923 warrants to purchase common stock at \$6.50 per share were issued to the holders of Series G Convertible Preferred Stock.

Holders of the convertible preferred stock are entitled to certain preferences over common stock and are entitled to receive, in preference to any dividend on the common stock, noncumulative dividends at the per annum per share rate as follows:

	<b>Series A</b>	<b>Series B</b>	<b>Series C</b>	<b>Series C-1</b>	<b>Series D</b>	<b>Series E</b>	<b>Series F</b>	<b>Series G</b>
Liquidation preference per share	\$ 1.00	\$ 2.00	\$ 4.00	\$ 4.00	\$ 6.00	\$ 6.50	\$ 6.50	\$ 6.50

Noncumulative dividends per share	0.10	0.20	0.40	0.40	0.60	0.65	0.65	0.65
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Such dividends are payable when, as and if declared by the Board of Directors. No dividends have been declared to date. Each share of convertible preferred stock is convertible at the holder's option at any time into one share of common stock, subject to adjustments. All of the outstanding shares of convertible preferred stock will automatically convert to common stock on a one-for-one basis immediately upon the closing of an initial public offering of the common stock of the Company if the price per share of the offering is not less than \$6.50 per share and with aggregate proceeds raised of not less than \$40,000. The holders of the convertible preferred stock are entitled to the

**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

number of votes equal to the number of shares of common stock into which their preferred shares are convertible.

**Shares of Common Stock Reserved for Future Issuance**

At August 31, 2011, the Company had reserved shares of common stock for future issuance as follows:

Conversion of outstanding convertible preferred stock	46,059,819
Stock options outstanding	7,792,219
Stock options available for grant	32,251
Preferred stock warrants	61,537
Common stock warrants	5,984,620
Convertible Notes	3,515,456
	63,445,902

**(8) Warrants****Liability Classified Common Stock Warrants**

Warrants to purchase the following shares of common stock were outstanding as follows:

Series	Number of shares			Exercise Price
	2009	As of August 31, 2010	2011	
F	2,307,697	2,307,697	2,307,697	\$ 6.50
G		3,076,923	3,076,923	\$ 6.50

**Warrants issued in connection with Series F Convertible Preferred Stock**

In connection with the issuance of the Series F Convertible Preferred Stock in September 2007, the Company issued 2,307,697 warrants to purchase common stock. The Company estimated the fair value upon issuance of the warrants to be \$3,489 based on a risk-free rate of 4.29%, volatility of 85%, expected term of 8 years and 0% dividend yield. The warrants are immediately exercisable and prior to the modification described in Note 9, were to expire on the eighth anniversary of the issuance date or at the time of a merger, acquisition, or qualified underwritten public offering of the Company's common stock.

As discussed in Note 1(m), effective January 1, 2009, the common stock warrants issued to the holders of Series F Convertible Preferred Stock and previously recorded as a component of additional paid-in capital, were reported as a liability at fair value as of January 1, 2009 and for each subsequent balance sheet date.

The fair value of these warrants was estimated using the following assumptions:

<b>Non-Modified F warrants</b>	<b>2009</b>	<b>August 31, 2010</b>	<b>2011</b>
Expected term (in years)	6.0	5.0	1.9
Expected volatility	85%	90%	86%
Risk free interest rate	3.21%	1.47%	0.41%
Expected dividend yield	0%	0%	0%

**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

	<b>August 31, 2009</b>	<b>August 31, 2010</b>	<b>Pre- Modification 8/1/2011</b>	<b>Post- Modification 8/1/2011</b>	<b>August 31, 2011</b>
<b>Modified F warrants</b>					
Expected term (in years)	6.0	5.0	1.6	4.1	4.0
Expected volatility	85%	90%	84%	97%	98%
Risk free interest rate	3.21%	1.47%	0.51%	1.32%	0.96%
Expected dividend yield	0%	0%	0%	0%	0%

**Estimated fair value (in thousands)**

	<b>Number of shares</b>	<b>August 31, 2009</b>	<b>August 31, 2010</b>	<b>Pre- Modification 8/1/2011</b>	<b>Post- Modification 8/1/2011</b>	<b>August 31, 2011</b>
Modified F warrants	1,619,922	\$ 2,057	2,102	2,942	6,128	\$ 5,454
Non-modified F warrants	687,775	874	892			1,229
<b>Total F warrants</b>	<b>2,307,697</b>	<b>\$ 2,931</b>	<b>2,994</b>	<b>2,942</b>	<b>6,128</b>	<b>\$ 6,683</b>

*Warrants issued in connection with Series G Convertible Preferred Stock*

In connection with the issuance of the Series G Convertible Preferred Stock in June 2010, the Company issued 3,076,923 warrants to purchase common stock. The Company estimated the fair value upon issuance of the warrants to be \$5,577 based on a risk-free rate of 3.72%, expected volatility of 85%, expected term of 10 years and 0% dividend yield. The warrants are immediately exercisable and prior to the modification described in Note 9, were to expire on the tenth anniversary of the issuance date or at the time of a merger, acquisition, or qualified underwritten public offering of the Company's common stock.

The fair value of these warrants was estimated using the following assumptions:

	<b>August 31, 2010</b>	<b>Pre- Modification 8/1/2011</b>	<b>Post- Modification 8/1/2011</b>	<b>August 31, 2011</b>
Expected term (in years)	9.8	3.0	8.9	8.8
Expected volatility	85%	74%	66%	66%
Risk free interest rate	2.70%	0.94%	2.77%	2.23%
Expected dividend yield	0%	0%	0%	0%
Estimated fair value (in thousands)	\$ 5,584	5,759	12,207	\$ 10,767

*Liability Classified Convertible Preferred Stock Warrants*

Warrants to purchase the following shares of convertible preferred stock were outstanding as follows:

Series	Number of shares As of August 31,			Exercise Price
	2009	2010	2011	
E	18,461	18,461	18,461	\$ 6.50
F		43,076	43,076	\$ 6.50
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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

**(In thousands, except share and per share data)**

*Warrants issued in connection with Borrowing and Loan Agreements*

In July 2004, in conjunction with the Borrowing Agreement (see Note 5) the Company issued the Bank warrants to purchase 18,461 shares of the Company's Series E Convertible Preferred Stock at a price of \$6.50 per share expiring on the later of July 31, 2014 or five years subsequent to the closing of an initial public offering of the common stock of the Company. During 2010 the warrants were modified to extend the expiration date to the later of February 29, 2020 or five years subsequent to the closing of an initial public offering of the common stock of the Company. The incremental value of the modification was expensed during 2010.

In February 2010, in connection with the Loan Agreement (see Note 5), the Company issued the Bank warrants to purchase 43,076 shares of the Company's Series F Convertible Preferred Stock at a price of \$6.50 per share. The Company estimated the fair value of the warrants to be \$239 based on a risk-free interest rate of 3.73%, volatility of 85%, expected term of 10 years and 0% dividend yield. The warrants expire the later of February 29, 2020 or five years subsequent to the closing of an initial public offering of the common stock of the Company.

The Company estimated the fair value of the Series E and F warrants to be \$83 and \$193, respectively, based on a risk-free interest rate of 1.90%, volatility of 66%, expected term of 8.5 years, and 0% dividend yield at August 31, 2011.

*Equity Classified Common Stock Warrants*

*Warrants issued in connection with Noble Agreement*

In May 2006, the Company entered into a collaboration agreement with The Samuel Roberts Noble Foundation, Inc. (Noble Agreement) to establish a research program. In connection with this collaboration, the Company granted Noble a warrant to purchase 400,000 shares of the Company's common stock for an exercise price of \$10.00 per share. The original terms were as follows: the warrant vests in equal installments of 100,000 shares on May 19, 2009, May 19, 2011, May 19, 2013, and May 19, 2015, respectively, and shall remain exercisable for a period of two years from the respective vesting dates. These warrants are accounted for at fair value and remeasured until vested. The fair value, including the resulting change in value as a result of remeasurement is being recognized as research and development expense. The inception to date expense recognized with respect to this warrant totals \$977 as of August 31, 2011 including a modification charge of \$450 described below. At August 31, 2011, 200,000 warrants had vested under this arrangement. The fair value of the warrants not yet vested at August 31, 2011 was \$623 using a risk-free rate of 1.26% based on the respective exercise periods of each installment, expected volatility of 85%, expected term of 5.72 years based on the respective exercise periods of each installment, and 0% dividend yield.

On June 20, 2011 the Company and Noble agreed to modify the warrants issued to Noble as follows: the warrant vests in equal installments of 100,000 shares on May 19, 2013 and May 19, 2015, respectively and shall remain exercisable until the earliest of a period of five years from the respective vesting dates and May 18, 2017. A modification charge of \$450 was recorded in June 2011.

*Warrants issued in connection with TAMU Agreement*

In August 2007, the Company entered into a sponsored research and intellectual property rights agreement with The Texas A&M University System (TAMU) (TAMU Agreement) to establish a research program. In connection with this collaboration, the Company granted TAMU a warrant to purchase 200,000 shares of the Company's common stock for an exercise price of \$10.00 per share. The warrant

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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**

**(In thousands, except share and per share data)**

vests based on certain research and commercialization milestones being met and shall remain exercisable until August 28, 2017. This warrant is accounted for at fair value and remeasured until the vesting targets are met. The fair value, including the resulting change in value as a result of remeasurement is being recognized as research and development expense. The inception to date expense recognized with respect to this warrant totals \$483 as of August 31, 2011. The fair value of the warrant at August 31, 2011 was \$639, using a risk-free rate of 1.26%, expected volatility of 85%, expected term of 6.0 years and 0% dividend yield. No warrants had vested under this arrangement as of August 31, 2011.

***(9) Convertible Notes and Warrant Modification***

On August 1, 2011, the Company raised \$11,425 from nine existing investors in the Company in a private placement by issuing noninterest bearing convertible subordinated notes. The conversion features of these notes are as follows: (i) the Convertible Notes automatically convert into common stock at a 20% discount to the initial public offering price and (ii) in the event that an initial public offering is not consummated within six months of the issuance date of the Convertible Notes, the Convertible Notes will convert into shares of Series G convertible preferred stock and the Convertible Note holders will receive common stock warrants. In addition holders will receive repayment of an amount equal to two times the outstanding principal amount of the Convertible Notes, if prior to the automatic conversion of the Convertible Notes, a change of control transaction is consummated.

In connection with the issuance of the Convertible Notes, so long as any investors who held existing warrants to purchase shares of our common stock in connection with the original issuances of the Company Series F and G preferred stock purchased at least their respective full pro rata portion of the Convertible Notes being offered, the termination provisions of such investors existing warrants were amended such that those warrants will no longer expire upon a qualified initial public offering. Such existing warrants are accounted for as liabilities and marked to market at each quarterly reporting period in other income/expense until the earlier of the exercise or expiration of the warrants as they are not considered indexed to our common stock.

In connection with the offering of the Convertible Notes, 1,619,922 of the warrants issued in connection with the Series F Preferred Stock offering and all of the warrants issued in connection with the Series G Preferred Stock offering were amended such that they no longer expire upon the completion of a qualified initial public offering.

Upon the completion of a qualified initial public offering, the 687,775 of the warrants to purchase common stock issued in connection with the Series F Preferred Stock offering that were not amended will either expire or be exercised for shares of common stock, and at that time, the Company will no longer record any changes in the fair value for those warrants in its consolidated statement of operations.

The Company has calculated the fair value of the modified warrants immediately prior to and subsequent to the modification and determined that the cumulative incremental increase in the fair value of these liability classified warrants associated with this modification to be \$9,633. Accordingly, the Company recorded the change in value to other expense in August, 2011.

Until such time as the conversion features are triggered, the Company will account for the Convertible Notes and various embedded derivatives in accordance with ASC 825-10, the Fair Value Option for Financial Liabilities, whereby the Company will initially and subsequently measure this financial instrument in its entirety at fair value,

with the changes in fair value recorded each quarterly reporting period in other income/expense.

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

The Company obtained the assistance of a third-party valuation firm in estimating the fair market value of the Convertible Notes as of August 31, 2011. The Company estimated the fair value of the Convertible Notes as of August 31, 2011 to be \$13,630. For purposes of this valuation the Company used the probability-weighted expected return method and assigned probabilities to the key features of the notes and related likelihood of occurrence as follows:

<b>Feature</b>	<b>Weight (probability)</b>
Automatic conversion of the Convertible Notes to common stock at a 20% discount to the initial public offering price ( IPO Scenario )	60%
Automatic conversion of the Convertible Notes to a combination of convertible preferred stock and liability-classified derivative common stock warrants if an initial public offering is not consummated within six months ( Stay Private Scenario )	40%
Repayment of an amount equal to two times the outstanding principal amount of the Convertible Notes, if prior to the automatic conversion of the Convertible Notes, a change of control transaction is consummated	0%

The weighting of 60% to the IPO Scenario and 40% to the Stay Private Scenario are consistent with the approach and assumptions used to determine the common stock value as of August 31, 2011. No amounts were assigned to the change in control feature since a change in control within six months of the issuance date of the Convertible Notes is remote.

In the IPO Scenario, the total value of the common stock was estimated by dividing the face amount of the convertible notes by 80%, to reflect the IPO price discount feature and applying a discount for lack of marketability of 5%. In the Stay Private Scenario the Convertible Notes convert to Series G convertible preferred stock with a conversion price of \$6.50 and 10 year warrants with an exercise price of \$6.50 per share. The value of the Series G convertible preferred stock fell within a range between the fair value of the common stock price of \$5.23 as of August 31, 2011 and the stated conversion price of the convertible preferred stock of \$6.50. The value of the warrants was determined utilizing the Black Scholes option pricing model which included the following inputs: (i) term: 10 years, (ii) volatility: 60%, (iii) risk free interest rate: 2.8%, and (iv) dividend yield: 0% and a discount for lack of marketability of 5%.

**(10) Income Taxes**

Deferred tax benefits associated with deferred tax assets are offset by a corresponding valuation allowance except to the extent of federal credits refundable in 2009. Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and amounts used for income tax purposes.

Income tax expense (benefit) attributable to income (loss) before income taxes consisted of the following:

<b>Current</b>	<b>Deferred</b>	<b>Total</b>
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Year ended December 31, 2008

U.S. federal	\$	(149)	\$	\$	(149)
State and local		1			1
	\$	(148)	\$	\$	(148)

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**(In thousands, except share and per share data)**

	<b>Current</b>	<b>Deferred</b>	<b>Total</b>
Eight Months ended August 31, 2009			
U.S. federal	\$ (115)	\$ (97)	\$ (212)
State and local	1		1
	\$ (114)	\$ (97)	\$ (211)
	<b>Current</b>	<b>Deferred</b>	<b>Total</b>
Year ended August 31, 2010			
U.S. federal	\$	\$ 64	\$ 64
State and local	1		1
	\$ 1	\$ 64	\$ 65
	<b>Current</b>	<b>Deferred</b>	<b>Total</b>
Year ended August 31, 2011			
U.S. federal	\$ (30)		\$ (30)
State and local	(1)		(1)
	\$ (31)		\$ (31)

Income tax expense differs from the amount computed by applying the federal corporate income tax rate of 34% to the loss before income taxes due to the following:

	<b>Year Ended December 31, 2008</b>	<b>Eight Months Ended August 31, 2009</b>	<b>Year Ended August 31, 2010</b>	<b>Year Ended August 31, 2011</b>
Computed expected tax expense (benefit)	\$ (9,155)	\$ (6,428)	\$ (7,656)	\$ (12,365)
Increase (reduction) in income taxes resulting from:				

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Stock-based compensation	350	269	435	893
State and local income taxes, net of federal income tax benefit	1	1	1	(1)
Foreign rate differential				512
Domestic R&D Credits	(2,287)	(162)		
Convertible note changes and change in fair value				750
Warrants modification and changes in fair value				2,997
Other	15	10	69	7
Change in valuation allowance	10,928	6,099	7,216	7,176
Income tax expense (benefit)	\$ (148)	\$ (211)	\$ 65	\$ (31)

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

The following table summarizes the tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities at each period end:

	<b>As of August 31, 2009</b>	<b>As of August 31, 2010</b>	<b>As of August 31, 2011</b>
Deferred tax assets:			
Accrued liabilities	\$ 146	\$ 384	\$ 491
Other assets	14	14	5
Inventory capitalization	67	59	126
Deferred revenue		270	368
Total current deferred tax assets	227	727	990
Noncurrent assets:			
Depreciation	1,482	1,480	1,574
Inventory reserves	1,674	1,451	1,984
Deferred rent	51	48	40
Other assets	72	153	136
Net operating loss carryforward	52,358	60,211	65,857
Federal and state tax credit carryforward	8,576	8,921	8,919
Total noncurrent deferred tax assets	64,213	72,264	78,510
Total deferred tax assets	64,440	72,991	79,500
Less valuation allowance	(64,343)	(72,991)	(79,500)
Net deferred tax assets	\$ 97	\$	\$

As of August 31, 2011, the Company has a net operating loss (NOL) carryforward for federal and state income tax purposes of approximately \$173,088 and \$111,035, respectively. The federal NOL is available to offset future taxable income, if any, and will expire from 2018 through 2031. The state NOL will expire from 2013 through 2031. The Company also has alternative minimum tax (AMT) for state income tax purposes of approximately \$17 and research and development tax credit carryforwards for federal income tax purposes of approximately \$8,907, which are available to offset future tax liabilities, if any, through 2028.

In accordance with Internal Revenue Code (IRC) Sections 382 and 383, the annual utilization of net operating loss carryforwards and credits is limited if a change in control occurs, including a change resulting from an initial public offering. The Company has not completed a Section 382 analysis to determine if a change in ownership has occurred. Until such analysis is completed, there are no assurances that the existing net operating loss carryforwards or credits

are not subject to significant limitation.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. Based upon the historical taxable income (loss) and projections for future taxable income (loss) over the periods in which the deferred tax assets are deductible, management believes it is more likely that the Company will not realize the benefits of these

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

deductible differences. Accordingly, full valuation allowances have been provided except to the extent of federal credits refundable in 2009.

**(11) 401(k) Benefit Plan**

The Company has a 401(k) profit sharing plan (the Plan) which covers substantially all employees of the Company. Plan participants may make voluntary contributions up to 60% of their earnings up to the statutory limitation. The Company will match 50% of each employee contribution up to a maximum of 4% of the employee's salary in matching funds per pay period. The matching contribution vests over a three-year service period; 25% vests immediately and an additional 25% vests for each year of service to the Company thereafter over the next three years. The Company recorded expense of \$222, \$287, \$218 and \$279 in 2008, 2009, 2010, and 2011, respectively. The Company made no discretionary contributions in any year.

**(12) Commitments and Contingencies**

The Company leases certain of its facilities and equipment under various noncancelable operating leases expiring through 2023. The lease on the facilities contains provisions for future rent increases. The Company records monthly rent expense equal to the total of the payments due over the lease term, divided by the number of months of the lease term. The difference between rent expense recorded and the amount paid is credited or charged to deferred rent, which is reflected as a separate line item in the accompanying consolidated balance sheets as of December 31, 2008, August 31, 2009, August 31, 2010 and 2011.

In connection with one of its facilities leases, the Company received a reimbursement for leasehold improvements of \$270. This reimbursement is a lease incentive which has been recognized as a liability in deferred rent and is being amortized to rent expense on a straight-line basis over the lease term. Total rental expense recognized during each period was \$460, \$343, \$477 and \$645 for 2008, 2009, 2010, and 2011, respectively.

Future minimum payments under noncancelable operating leases as of August 31, 2011 are as follows:

	<b>Operating leases</b>
2012	\$ 1,053
2013	654
2014	399
2015	23
2016	16
Thereafter	91
Total minimum lease payments	\$ 2,236

**(13) Research Collaboration Agreements**

The Company has a number of research agreements with academic collaborators, including among others, Texas A&M University, The Samuel Roberts Noble Foundation, Inc. (Noble), and the Institute of Crop Sciences of the Chinese Academy of Agricultural Sciences. In conjunction with these agreements, the Company receives certain exclusive options or licensing rights to technology and

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**Table of Contents****CERES, INC.****Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

intellectual property developed under these agreements. The Company expenses the services received under these agreements to research and development in the period in which the services are rendered. The Company also licenses technology from third parties. Initial payments under these license agreements are expensed on a straight-line basis over the license term.

*Noble Agreement*

In May 2006, the Company entered into a collaboration agreement with Noble to establish a research program. Under the Noble Agreement, the Company agreed to fund certain research activities undertaken by Noble in an amount up to \$3,800 through 2012 and granted Noble a warrant to purchase 400,000 shares of the Company's common stock for an exercise price of \$10.00 per share (see Note 8). Additional projects may be added under the agreement, if agreed to by both parties.

*TAMU Agreement*

In August 2007, the Company entered into a sponsored research and intellectual property rights agreement with Texas A&M University to establish a research program. Under the agreement, the Company agreed to fund certain research activities undertaken by TAMU in an amount up to \$5,100 through 2012 and granted TAMU a warrant to purchase 200,000 shares of the Company's common stock for an exercise price of \$10.00 per share (see Note 8).

At August 31, 2011, the future minimum payments under the Company's research collaboration agreements are as follows:

2012	\$ 3,645
2013	795
2014	450
2015	293
	\$ 5,183

**(14) Subsequent Events**

In connection with the issuance of the consolidated financial statements for the year ended August 31, 2011, the Company evaluated subsequent events through November 10, 2011, the date the consolidated financial statements were available to be issued.

On September 14, 2011, the Company entered into an Amended Loan and Security Agreement (the Loan Agreement) with Silicon Valley Bank that provided for an additional \$3.5 million term loan consisting of (i) a \$2.5 million immediately available term loan advance and (ii) a \$1.0 million term loan advance available upon satisfaction of additional term loan advance conditions. The proceeds will be used for working capital and other general corporate purposes. The Loan Agreement is secured by certain of the Company's assets, excluding intellectual property, and requires compliance with covenants that require certain reporting and maintenance of certain specified ratios. The

interest rate for the amended term loan is a fixed rate which is determined based on the Bank Prime Rate at the time of each loan advance. The Company will pay interest only until April 1, 2012 and then repay principal plus interest in equal installments over 36 months commencing April 1, 2012. The Company will continue to maintain restricted cash of \$3.0 million in the form of deposit related to the Loan Agreement.

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**CERES, INC.**

**Notes to Consolidated Financial Statements (Continued)**  
**(In thousands, except share and per share data)**

On September 23, 2011, the Company entered into an Amended and Restated Sponsored Research Agreement and an Amended and Restated Intellectual Property Rights Agreement with TAMU which both expire on September 23, 2026. The specific research projects and budgets undertaken pursuant to such agreement will be determined by an Executive Committee comprised of two members from each of Texas A&M and the Company as set forth in the Amended and Restated Sponsored Research Agreement.

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Commercial harvest of a Ceres sweet sorghum evaluation field in Brazil during April 2011.

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Shares  
**Ceres, Inc.**  
Common Stock

**Goldman, Sachs & Co.**

**Barclays Capital  
Piper Jaffray  
Raymond James  
Simmons & Company  
International**

**Through and including           , 2011 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.**

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**Table of Contents****PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. *Other Expenses of Issuance and Distribution***

The actual and estimated expenses in connection with this offering are as follows:

SEC Registration Fee	\$ 11,610	
Printing and Engraving Expense		*
Legal Fees		*
Accounting Fees		*
Nasdaq Listing Fee		*
Financial Industry Regulatory Authority, Inc. Filing Fee	10,500	
Transfer Agent Fee	3,500	
Miscellaneous Expenses		*
 Total	 \$	 *

\* To be filed by amendment.

**Item 14. *Indemnification of Directors and Officers***

Section 102(b)(7) of the Delaware General Corporation Law, or DGCL, provides that a corporation may, in its original certificate of incorporation or an amendment thereto, eliminate or limit the personal liability of a director for violations of the director's fiduciary duty, except (1) for any breach of the director's duty of loyalty to the corporation or its stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) pursuant to Section 174 of the DGCL, which provides for liability of directors for unlawful payments of dividends or unlawful stock purchases or redemptions or (4) for any transaction from which a director derived an improper personal benefit.

Section 145 of the DGCL provides that a corporation may indemnify any person, including an officer or director, who is, or is threatened to be made, party to any threatened, pending or completed legal action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of such corporation, by reason of the fact that such person was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as an officer, director, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such officer, director, employee or agent acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the corporation's best interest and, for criminal proceedings, had no reasonable cause to believe that his conduct was unlawful. A Delaware corporation may indemnify any officer or director in an action by or in the right of the corporation under the same conditions, except that no indemnification is permitted without judicial approval if the officer or director is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him against the expenses that such officer or director actually and reasonably incurred.

Our bylaws provide for indemnification of the officers and directors to the full extent permitted by the DGCL.

The proposed form of Underwriting Agreement to be filed as Exhibit 1.1 to this registration statement provides for indemnification by the underwriters of the registrant and its directors and certain officers for certain liabilities arising under the Securities Act.

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**Item 15. *Recent Sale of Unregistered Securities***

Since April 1, 2008, we have issued the following securities that were not registered under the Securities Act:

(1) In August 2011, we completed the sale of \$11,425,232 aggregate principal amount of non-interest bearing convertible subordinated notes, or the Convertible Notes, to nine existing investors in the Company in a private placement. The Convertible Notes are convertible, subject to the terms and conditions set forth therein, into shares of our common stock upon the consummation of a qualified initial public offering of our common stock at a price per share equal to a 20% discount from the public offering price. In the event that we do not consummate a qualified public offering on or prior to the six month anniversary of the issuance date of the Convertible Notes, (i) the Convertible Notes will automatically convert, subject to the terms and conditions set forth therein, into shares of our Series G Convertible Preferred Stock, at a conversion price per share equal to \$6.50 and (ii) the holders will receive warrants exercisable for that number of shares of our common stock, at an initial exercise price of \$6.50 per share, equal to the number of shares of Series G Convertible Preferred Stock into which such holder's Convertible Notes convert. Purchasers of the Convertible Notes included holders of more than 5% of our outstanding capital stock and affiliates of certain of our directors. The purchasers of the Convertible Notes were accredited investors under Regulation D.

(2) In June 2010, we sold an aggregate of 3,076,923 shares of Series G convertible preferred stock to five existing stockholders at a per share purchase price of \$6.50 pursuant to a stock purchase agreement. Purchasers of the Series G convertible preferred stock also received, for each share purchased, a warrant to purchase one share of our common stock at an exercise price of \$6.50 per share. The purchasers of the Series G convertible preferred stock were accredited investors under Regulation D.

(3) In February 2010, we issued warrants to purchase 43,076 shares of our Series F convertible preferred stock to Silicon Valley Bank at a price of \$6.50 per share.

(4) Since April 1, 2008, we have granted options to employees and directors to purchase an aggregate of 3,674,599 shares of our common stock under our equity incentive plans at exercise prices ranging from \$2.25 to \$5.72. During this period, options to purchase 641,172 shares of our common stock were exercised with an average per share exercise price of \$0.44 for cash consideration to us in the aggregate amount of \$280,729.60.

The issuances of preferred stock and warrants described in items (1), (2) and (3) above were deemed exempt from registration under Section 4(2) or Regulation D of the Securities Act. The issuances of options and shares in item (4) above was deemed exempt from registration in reliance on Rule 701 promulgated under the Securities Act as transactions pursuant to compensatory benefit plans and contracts relating to compensation. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act. The recipients of securities in the transactions exempt under Section 4(2) or Regulation D of the Securities Act represented their intention to acquire the securities for investment purposes only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the stock certificates and instruments issued in such transactions.

**Item 16. *Exhibits and Financial Data Schedules***

(A) Exhibits

**Exhibit  
No.**

**Description of Exhibit**

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- \*1.1 Form of Underwriting Agreement
- 3.1 Restated Certificate of Incorporation of Ceres, Inc.
- \*3.2 Form of Amended and Restated Certificate of Incorporation of Ceres, Inc. to be in effect immediately prior to the consummation of this offering

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**Table of Contents**

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*3.4	Form of Amended and Restated Bylaws of Ceres, Inc. to be in effect immediately prior to the consummation of this offering
3.5	Amendment to the Amended and Restated Bylaws of Ceres, Inc., as currently in effect
3.6	Amendment to the Restated Certificate of Incorporation of Ceres, Inc., as currently in effect
*4.1	Form of Stock Certificate
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4.5	Warrants to Purchase Shares of Series F Preferred Stock issued to Silicon Valley Bank, dated March 1, 2010
4.6	Amended and Restated Investors Rights Agreement, dated June 25, 2010, by and among Ceres, Inc. and the stockholders named therein
4.7	Form of Series F Original Warrant, as amended
4.8	Form of Series G Original Warrant, as amended
4.9	Form of Convertible Note
***5.1	Form of Opinion of Shearman & Sterling LLP
10.1	Ceres, Inc. 2000 Stock Option/Stock Issuance Plan, as amended
10.2	Form of Stock Option Agreement under the Ceres, Inc. 2000 Stock Option/Stock Issuance Plan
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**10.12	Amended and Restated Sponsored Research Agreement between Texas AgriLife Research (f/k/a The Texas Agricultural Experiment Station of The Texas A&M University System) and Ceres, Inc., dated September 24, 2011
**10.13	Amended and Restated Intellectual Property Rights Agreement between The Texas Agricultural Experiment Station of The Texas A&M University System and Ceres, Inc., dated September 24, 2011
**10.14	Material Transfer and Evaluation Agreements between The Texas A&M University System and Ceres, Inc., dated April 23, 2008

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**10.18	License Agreement for NF/GA992 and NF/GA993 between The Samuel Roberts Noble Foundation, Inc. and Ceres, Inc., dated December 1, 2008
**10.19	License Agreement for NF/GA002 between The Samuel Roberts Noble Foundation, Inc. and Ceres, Inc., dated September 1, 2009
**10.20	Collaboration Agreement between the Institute of Biological, Environmental and Rural Sciences of Aberystwyth University and Ceres, Inc., dated April 1, 2007, as amended
**10.21	Collaboration Agreement between Institute of Crop Sciences of the Chinese Academy of Agricultural Sciences and Ceres, Inc., dated November 15, 2007, as amended
10.22	Loan and Security Agreement between Silicon Valley Bank and Ceres, Inc., dated January 29, 2010 and amendments thereto dated March 17, 2010, August 10, 2010 and September 14, 2011
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10.27	Employment Agreement between Ceres, Inc. and Richard Flavell, dated September 1, 2011
10.28	Exclusive Consulting Agreement between Ceres, Inc. and Robert Goldberg, dated January 1, 2006, and the amendments thereto dated November 17, 2006, December 31, 2010 and July 20, 2011
**10.29	Enabling Technology License Agreement between Ceres, Inc. and Monsanto Company, dated April 1, 2002
**10.30	Line License Agreement between Ceres, Inc. and The Texas A&M University System, dated July 12, 2011.
10.31	Ceres, Inc. Performance Incentive Plan
*10.32	Form of Stock Option Grant Notice and Option Award Agreement under the Ceres, Inc. 2011 Equity Incentive Plan
***10.33	Convertible Note Purchase Agreement among Ceres, Inc. and the investors named therein, dated August 1, 2011
21.1	List of Subsidiaries
***23.1	Consent of KPMG LLP
*23.2	Consent of Shearman & Sterling LLP (included in Exhibit 5.1)
24.1	Power of Attorney (included on signature page).

Previously filed.

\* To be filed by amendment.

\*\* Certain provisions of this exhibit have been omitted pursuant to a request for confidential treatment.

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\*\*\* Filed herewith.

(B) Financial Statement Schedules

All schedules have been omitted because the information required to be presented in them is not applicable or is shown in the consolidated financial statements or related notes.

**Item 17. *Undertakings***

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.



**Table of Contents****SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this amendment to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Thousand Oaks, State of California, on November 9, 2011.

CERES, INC.

By: /s/ Paul M. Kuc

Paul M. Kuc  
Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this amendment to the Registration Statement has been signed by the following persons in the capacities and on dates indicated.

Signature	Title	Date
/s/ Richard Hamilton, Ph.D. Richard Hamilton, Ph.D.	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	November 9, 2011
/s/ Paul M. Kuc Paul M. Kuc	Chief Financial Officer <i>(Principal Financial and Accounting Officer)</i>	November 9, 2011
* Walter De Logi, Ph.D.	Chairman of the Board of Directors	November 9, 2011
* Pascal Brandys	Director	November 9, 2011
* Raymond Debbane	Director	November 9, 2011
* Richard Flavell, Ph.D.	Director	November 9, 2011
* Robert Goldberg, Ph.D.	Director	November 9, 2011
* Thomas Kiley	Director	November 9, 2011
* David B. Krieger	Director	November 9, 2011



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	<b>Signature</b>	<b>Title</b>	<b>Date</b>
*	Cheryl Morley	Director	November 9, 2011
*	Edmund Olivier	Director	November 9, 2011
*By:	/s/ Paul M. Kuc Paul M. Kuc Attorney-in-Fact		

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