Ceres, Inc.
Form S-1/A
January 25, 2012

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As filed with the Securities and Exchange Commission on January 25, 2012
Registration No. 333-174405

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

Amendment No. 11
to
Form S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

CERES, INC.
(Exact name of registrant as specified in its charter)

Delaware	**100**	**33-0727287**
(State or other jurisdiction of incorporation or organization)	*(Primary Standard Industrial Classification Code Number)*	*(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. o

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. o

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. o

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. o

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee(3)
Common Stock, par value $0.01 per share	$132,250,000	$15,306

(1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) Includes shares that may be purchased by the underwriters pursuant to an option granted to the underwriters.
(3) $11,610 has been previously paid with respect to a proposed maximum aggregate offering price of $100,000,000 at a rate of $116.10 per $1,000,000, which was the rate in effect at the time of payment. An additional $3,696 is being paid with respect to the additional $32,250,000 proposed maximum aggregate offering price at the rate currently in effect.

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 January 25, 2012.

5,000,000 Shares

Common Stock

This is an initial public offering of shares of common stock of Ceres, Inc. All of the 5,000,000 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 $21.00 and $23.00.

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 5,000,000 shares of common stock, the underwriters have the option to purchase up to an additional 750,000 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 , 2012.

Goldman, Sachs & Co. **Barclays Capital**

Piper Jaffray **Raymond James** **Simmons & Company International**

Prospectus dated , 2012.

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

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Through and including , 2012 (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 re 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 Agrianual report.

Boa Vista / Nova Fronteira, a joint venture of Grupo São Martinho S.A. and Petrobras Biofuels, planted, harvested and processed in the 2010-2011 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 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.

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Food and Feed Crops

In 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 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, and we have sold enough seed to plant greater than 3,000 hectares of our sweet sorghum hybrids for the 2011-2012 growing season. 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. Since our inception through November 30, 2011, we have invested more than $240 million in research and development. 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*. 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	*(Measurement commonly used to measure feedstock yields)*
1 Dry Ton	=	907 Kilograms	*(Measurement commonly used to measure dry biomass for cellulosic biofuels and biopower)*

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THE OFFERING

Common stock offered	5,000,000 shares.
Common stock to be outstanding after this offering	23,054,541 shares, or 23,804,541 shares if the underwriters exercise their option to purchase additional shares in full.
Use of proceeds	We expect to receive net proceeds from this offering of approximately $97.8 million, based on an assumed initial public offering price of $22.00 per share, which is the midpoint of the range set forth on the cover of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses. 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 18,054,541 shares outstanding as of January 10, 2012, and excludes:

2,556,988 shares of common stock issuable upon exercise of options to purchase our common stock outstanding as of January 10, 2012, at a weighted average exercise price of $6.06 per share;

1,765,611 shares of common stock issuable upon exercise of warrants to purchase our common stock outstanding as of January 10, 2012, at a weighted average exercise price of $20.70 per share;

66,666 shares of common stock issuable upon exercise of warrants to purchase our common stock outstanding as of January 10, 2012, at an exercise price equal to the per share offering price to the public of our common stock in this initial public offering plus an amount equal to 10% of such price;

20,511 shares of common stock issuable upon exercise of warrants to purchase our preferred stock outstanding as of January 10, 2012, at an exercise price of $19.50 per share, that do not expire upon the completion of this offering; these preferred stock warrants will automatically convert to warrants to purchase our common stock upon the completion of this offering;

39,103 shares of common stock reserved as of January 10, 2012 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

1,333,333 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.

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

a 1 for 3 reverse stock split effective on January 24, 2012;

the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 15,353,226 shares of common stock effective immediately prior to the completion of this offering;

the issuance of 649,155 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 $22.00 per share, the midpoint of the price range set forth on the cover of this prospectus; see Capitalization for a sensitivity analysis on the number of shares to be issued and outstanding upon the completion of this offering;

the issuance of 26,049 shares of common stock immediately prior to the completion of this offering upon the net exercise of warrants outstanding to purchase 229,257 shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of $22.00 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 750,000 shares of common stock at the initial public offering price.

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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. The summary consolidated financial data for the three month periods ended November 30, 2010 and 2011 has been derived from our unaudited consolidated financial statements included elsewhere in this prospectus. The unaudited consolidated financial statements have been prepared on a basis consistent with our audited consolidated financial statements and include, in the opinion of management, all adjustments, consisting only of normal and recurring adjustments, necessary for a fair presentation of such consolidated financial data. Historical results are not necessarily indicative of results for future periods. Results for interim periods are not necessarily indicative of results for a full fiscal year. 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.

	Year Ended December 31, 2008	Eight Months Ended August 31, 2009	Year Ended August 31, 2010	Year Ended August 31, 2011	Three Months Ended November 30, 2010	Three Months Ended November 30, 2011
					(Unaudited)	
	(In thousands, except share and per share data)					
Consolidated Statement of Operations						
Revenues						
Product sales	$ 64	$ 98	$ 288	$ 116	$ 2	$ 276
Collaborative research and government grants	3,880	2,328	6,326	6,500	1,713	1,472
Total revenue	3,944	2,426	6,614	6,616	1,715	1,748
Cost and operating expenses						
Cost of product sales	3,777	2,690	2,946	2,492	1,058	763
Research and development	20,309	12,397	16,697	19,014	4,293	5,275
Selling, general and administrative	8,784	6,645	9,207	10,008	2,148	2,804
Total cost and operating expenses	32,870	21,732	28,850	31,514	7,499	8,842
Loss from operations	(28,926)	(19,306)	(22,236)	(24,898)	(5,784)	(7,094)
Interest expense		(5)	(153)	(456)	(127)	(111)
Interest income	2,001	243	23	7	1	4

Other income (expense)		161	(152)	(11,020)	1	(338)
Loss before income taxes	(26,925)	(18,907)	(22,518)	(36,367)	(5,909)	(7,539)
Income tax benefit (expense)	148	211	(65)	31	(1)	(1)
Net loss	$ (26,777)	$ (18,696)	$ (22,583)	$ (36,336)	$ (5,910)	$ (7,540)

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	Year Ended December 31, 2008	Eight Months Ended August 31, 2009	Year Ended August 31, 2010	Year Ended August 31, 2011	Three Months Ended November 30, 2010	Three Months Ended November 30, 2011
					(Unaudited)	
	(In thousands, except share and per share data)					
Basic and diluted net loss per share attributable to common stockholders(1)	$ (14.68)	$ (9.98)	$ (11.70)	$ (18.34)	$ (3.02)	$ (3.73)
Weighted average outstanding common shares used for net loss per share attributable to common stockholders: Basic and diluted(1)	1,824,284	1,873,808	1,930,395	1,981,627	1,957,554	2,018,939
Pro forma net loss per share: Basic and diluted (unaudited)(2)				$ (2.17)		$ (0.40)
Weighted average outstanding common shares used in computing pro forma net loss per share: Basic and diluted (unaudited)(2)				17,414,257		18,047,369

(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 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 to give effect to as of September 1, 2010: (i) the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 15,353,226 shares of common stock immediately prior to the completion of this offering using the if-converted method, (ii) the issuance of 649,155 shares of common stock pursuant to the automatic conversion of the Convertible Notes issued on August 1, 2011 upon the consummation of this offering, as

described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of $22.00 per share, the midpoint of the price range set forth on the cover of this prospectus and (iii) the issuance of 26,049 shares of common stock immediately prior to the completion of this offering upon the net exercise of warrants outstanding to purchase 229,257 shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of $22.00 per share, the midpoint of the price range set forth on the cover of this prospectus, using the treasury stock method. See Capitalization for a sensitivity analysis on the number of shares to be issued and outstanding upon the completion of this offering. Additionally, the net loss used to compute pro forma basic and diluted net loss per share includes: (i) mark-to-market adjustments related to changes in the fair value of common and preferred stock warrants and Convertible Notes, (ii) adjustment to reverse the fair value charge on the issuance of Convertible Notes and (iii) adjustment to reflect the assumed conversion of Convertible Notes to common stock at a 20% discount to the initial public offering price. See Note 1(f) to our consolidated financial statements.

Our consolidated balance sheet data as of November 30, 2011 is presented:

on an actual basis;

on a pro forma basis to give effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 15,353,226 shares of our common stock, (ii) the issuance of 649,155 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 $22.00 per share, the midpoint of the price range set forth on the cover of this prospectus, (iii) the issuance of 26,049 shares of our common stock upon the assumed net exercise of warrants outstanding to purchase 229,257 shares of common stock, which would otherwise expire upon the completion of this offering, assuming an initial public offering price of $22.00 per share, the midpoint of the price range set forth on the cover of this prospectus and (iv) the reclassification of the common and the preferred stock warrant liabilities to stockholders (deficit) equity upon the completion of this offering; and

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on a pro forma as adjusted basis to give effect to the pro forma adjustments and the sale of 5,000,000 shares of common stock by us in this offering at an assumed initial public offering price of $22.00 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.

	As of November 30, 2011		
	Actual	Pro Forma	Pro Forma as Adjusted(1)
		(In thousands) (Unaudited)	
Consolidated Balance Sheet Data:			
Cash and cash equivalents	$ 17,532	$ 17,532	$ 115,332
Total assets	33,125	33,125	130,925
Total indebtedness (including short-term indebtedness)	20,319	20,319	20,319
Common and preferred stock warrant liabilities	17,514		
Convertible preferred stock	197,502		
Total stockholders (deficit) equity	(211,158)	18,038	115,838

(1) Each $1.00 increase or decrease in the assumed initial public offering price of $22.00 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 (deficit) equity by approximately $4.65 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 November 30, 2011, we had an accumulated deficit of $220.2 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 and we have sold enough seed to plant greater than 3,000 hectares of our sweet sorghum hybrids for the 2011-2012 growing season.

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 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

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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 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 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 2010-2011 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

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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 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

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future quarter, which would negatively affect the quarter and cause fluctuations in our operating results.

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 alone 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

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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.

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, the fiscal years ended August 31, 2010 and 2011 and the three months ended November 30, 2010 and 2011, we spent $20.3 million, $12.4 million, $16.7 million, $19.0 million, $4.3 million and $5.3 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.

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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 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 January 10, 2012, our sales and marketing and business development departments together had eight 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.

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 and some of which are selling or have announced plans to sell competitive products in our markets. 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 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.

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 15 billion gallons of the liquid transportation fuels sold in 2012 to come from renewable biofuels, with estimated proposed volumes of renewable fuel for 2013 to rise to 17 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 was six million gallons and the final volume for cellulosic biofuel for 2012 is nine 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 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 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 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. Appreciation of the Brazilian Real against the U.S. dollar would 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

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, 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

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

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

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

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 January 10, 2012, we will have 23,054,541 shares of common stock outstanding after the completion of this offering, assuming an initial public offering price of $22.00, the midpoint of the price range set forth on the cover of this prospectus and no exercise of the underwriters right to purchase additional shares. Of these shares, the 5,000,000 shares of 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 approximately 17,956,000 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

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required, or reliance upon an exemption from U.S. registration under Rule 144 or Rule 701 under the Securities Act. See Shares Eligible for Future Sale .

Number of Shares and % of Total Outstanding	Date Available for Sale into Public Market
5,098,541 or 22.1%	Immediately after this offering.
17,956,000 or 77.9%	180 days after the date of this prospectus.

In addition, as of January 10, 2012, there were 4,409,776 shares of common stock issuable upon the exercise of outstanding options and 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 (including applicable holding periods) and 701 of the Securities Act.

Holders owning an aggregate of 17,305,877 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 3,890,000 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 $16.98 per share in the price you pay for shares of our common stock as compared to its net tangible book value as of November 30, 2011, assuming an initial public offering price of $22.00 per share, the midpoint of the price range set forth on the cover page of this prospectus. In addition, following this offering, purchasers in this offering will have contributed 34.3% of the total consideration paid by our stockholders to purchase shares of common stock, in exchange for acquiring approximately 21.7% of our total outstanding shares as of November 30, 2011, assuming an initial public offering price of $22.00 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 Convertible Notes than we have assumed, there will be further dilution. For further information on this calculation, see the Dilution section of this prospectus.

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

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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 January 10, 2012, when this offering is completed, our officers, directors and existing stockholders who hold at least 5% of our stock will together beneficially own approximately 62.7% of our outstanding common stock, assuming an initial public offering price of $22.00 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 60.9% 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; and

Empresa de Pesquisa Energética.

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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USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately $97.8 million, assuming an initial public offering price of $22.00 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 $22.00 per share would increase or decrease the net proceeds from this offering by approximately $4.65 million, assuming that the number of s