Ceres, Inc.
Form S-1/A
January 17, 2012

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As filed with the Securities and Exchange Commission on January 17, 2012
Registration No. 333-174405

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

Amendment No. 10
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)

Richard Hamilton
President and Chief Executive Officer
Ceres, Inc.
1535 Rancho Conejo Boulevard
Thousand Oaks, CA 91320

Telephone: (805) 376-6500
Facsimile: (805) 498-1002
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Danielle Carbone, Esq.
Shearman & Sterling LLP
599 Lexington Avenue
New York, New York 10022
Telephone: (212) 848-4000
Facsimile: (212) 848-7179

Kevin P. Kennedy, Esq.
Simpson Thacher & Bartlett LLP
2550 Hanover Street
Palo Alto, California 94304
Telephone: (650) 251-5130
Facsimile: (650) 251-5002

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)

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 17, 2012.

Shares

Common Stock

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

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

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

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

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

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

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

The number of shares of common stock that will be outstanding after this offering is based on 6,078,625 shares outstanding as of January 10, 2012, and excludes:

- 7,671,326 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 $2.02 per share;
- 5,296,845 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 $6.90 per share;
- 200,000 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 ten percent (10%) of such price;
- 61,537 shares of common stock issuable upon exercise of warrants to purchase our preferred stock outstanding as of January 10, 2012, at a weighted average exercise price of $6.50 per share; these preferred stock warrants will automatically convert to common stock warrants upon the completion of this offering;
- 117,311 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
- 4,000,000 shares of common stock reserved for future issuance under our 2011 Equity Incentive Plan, which will become effective on the day prior to the day upon which we become subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

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

a for stock split effective on , 2012;

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

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

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

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

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

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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 (Unaudited)	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)	$ (4.89)	$ (3.33)	$ (3.90)	$ (6.11)	$ (1.00)	$ (1.24)
Weighted average outstanding common shares used for net loss per share attributable to common stockholders:						
Basic and diluted(1)	5,473,090	5,621,671	5,791,443	5,945,157	5,899,933	6,064,310
Pro forma net loss per share:						
Basic and diluted (unaudited)(2)				$		$
Weighted average outstanding common shares used in computing pro forma net loss per share:						
Basic and diluted (unaudited)(2)						

(1) The basic and diluted loss per share are computed by dividing the net loss attributable to common stockholders by the weighted average number of common shares outstanding during the period. As we have losses in all periods presented, all 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 46,059,819 shares of common stock immediately prior to the completion of this offering using the if-converted method, (ii) the issuance of shares of common stock pursuant to the automatic conversion of the Convertible Notes upon the consummation of this offering, as described in Certain Relationships and Related Party Transactions, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover of this prospectus and (iii) the issuance of shares of common stock immediately prior to the completion of this offering upon the net exercise of 687,775 warrants outstanding to

purchase shares of common stock, which would otherwise expire upon the completion of this offering, based upon an assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover of this prospectus, using the treasury stock method.

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

on an actual basis;

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

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

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	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	$	$
Total assets	33,125		
Total indebtedness (including short-term indebtedness)	20,319		
Common and preferred stock warrant liabilities	17,514		
Convertible preferred stock	197,502		
Total stockholders (deficit) equity	(211,158)		

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

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RISK FACTORS

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

Risks Related to Our Business

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

With the exception of the fiscal years ended December 31, 2003, 2005 and 2006, we have incurred net losses each fiscal year since our inception. From our inception to 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 absen