

S&W Seed Co  
Form 10-K  
September 15, 2016

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C.

\_\_\_\_\_  
  
FORM 10-K  
  
\_\_\_\_\_

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 30, 2016

or

**TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-34719

**S&W SEED COMPANY**

*(Exact Name of Registrant as Specified in Its Charter)*

Nevada

27-1275784

*(State or Other Jurisdiction of  
Incorporation or Organization)*

*(I.R.S. Employer  
Identification No.)*

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7108 North Fresno Street, Suite 380  
Fresno, CA

93720

*(Address of Principal Executive Offices)*

*(Zip Code)*

(559) 884-2535

*(Registrant's Telephone Number,  
Including Area Code)*

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class

Name of Each Exchange on Which Registered

Common Stock, \$0.001 Par Value

Nasdaq Capital Market

Securities Registered Pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 229.405 of this Chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

..

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

(Check one):

Large accelerated filer

Accelerated filer

..

..

Non-accelerated filer

Smaller reporting company

..

x

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

.. Yes x No

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter was \$47,353,679.

The number of shares outstanding of common stock of the Registrant as of September 15, 2016 was 17,168,952.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2016 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement is to be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended June 30, 2016.



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S&W SEED COMPANY  
FORM 10-K  
FOR THE FISCAL YEAR ENDED JUNE 30, 2016

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## FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this Annual Report on Form 10-K that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical fact are statements that could be deemed forward-looking statements, including but not limited to any projections of revenue, margins, expenses, tax provisions, earnings, cash flows and other financial items; any statements of the plans, strategies and objectives of management for future operations; any statements regarding our ability to raise capital in the future; any statements concerning expected development, performance or market acceptance relating to our products or services or our ability to expand our grower or customer bases or to diversify our product offerings; any statements regarding future economic conditions or performance; any statements of expectation or belief; any statements regarding our ability to retain key employees; and any statements of assumptions underlying any of the foregoing. These forward-looking statements are often identified by the use of words such as, but not limited to, "anticipate," "believe," "can," "continue," "could," "estimate," "expect," "intend," "may," "will," "plan," "project," "seek," "should," "target," "will," "would," and similar expressions or variations intended to identify forward-looking statements. We have based these forward-looking statements on our current expectations about future events. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Risks, uncertainties and assumptions include the following:

- whether we are successful in securing sufficient acreage to support the growth of our alfalfa seed business,
- our plans for expansion of our business (including through acquisitions) and our ability to successfully integrate acquisitions into our operations;
- the continued ability of our distributors and suppliers to have access to sufficient liquidity to fund their operations;
- trends and other factors affecting our financial condition or results of operations from period to period;
- the impact of crop disease, severe weather conditions, such as flooding, or natural disasters, such as earthquakes, on crop quality and yields and on our ability to grow, procure or export our products;
- the impact of pricing of other crops that may be influence what crops our growers elect to plant;
- whether we are successful in aligning expense levels to revenue changes;
- whether we are successful in monetizing our stevia business;

- the cost and other implications of pending or future legislation or court decisions and pending or future accounting pronouncements; and
- other risks that are described herein including but not limited to the items discussed in "Risk Factors" below, and that are otherwise described or updated from time to time in our filings with the SEC.

You are urged to carefully review the disclosures made concerning risks and uncertainties that may affect our business or operating results, which include, among others, those listed in Part I, Item 1A. "Risk Factors" of this Annual Report on Form 10-K.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance or achievements. Many factors discussed in this Annual Report on Form 10-K, some of which are beyond our control, will be important in determining our future performance. Consequently, actual results may differ materially from those that might be anticipated from the forward-looking statements. In light of these and other uncertainties, you should not regard the inclusion of a forward-looking statement in this Annual Report on Form 10-K as a representation by us that our plans and objectives will be achieved, and you should not place undue reliance on such forward-looking statements. All forward-looking statements included herein are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Furthermore, such forward-looking statements represent our views as of, and speak only as of, the date of this Annual Report on Form 10-K. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

When used in this Annual Report on Form 10-K, the terms "we," "us," "our," "the Company," "S&W" and "S&W Seed" refer to S&W Seed Company and its subsidiaries or, as the context may require, S&W Seed Company only. Our fiscal year ends on June 30, and accordingly, the terms "fiscal 2016," "fiscal 2015" and "fiscal 2014" in this Annual Report on Form 10-K refer to the respective fiscal year ended June 30, 2016, 2015 and 2014, respectively, with corresponding meanings to any fiscal year reference beyond such dates. Trademarks, service marks and trade names of other companies appearing in this report are the property of their respective holders.

## PART I

### Item 1. Business

#### Overview

Founded in 1980 and headquartered in the Central Valley of California, we are a global agricultural company. Grounded in our historical expertise and, what we believe is our present leading position in the breeding, production and sale of alfalfa seed, we continue to build towards our goal of being recognized as the world's preferred proprietary forage and specialty crop seed company. In addition to our primary activities in alfalfa seed, we have recently expanded our product portfolio by adding hybrid sorghum and sunflower seed germplasm, which complement our alfalfa seed offerings by allowing us to leverage our infrastructure, research and development expertise and our distribution channels. We believe that such diversification will allow us to enter new markets with historically higher margins.



Our alfalfa seed is produced under contract with growers in the Western United States, Canada and Australia, and we sell our alfalfa seed varieties in more than 30 countries across the globe. Historically, we have been recognized as the leading producer of non-dormant alfalfa seed varieties that have been bred for warm climates and high-yields, including varieties that can thrive in poor, saline soils. Our December 2014 acquisition of certain alfalfa research and production facility and conventional (non-GMO) alfalfa germplasm assets of DuPont Pioneer, a wholly-owned subsidiary of E.I. du Pont de Nemours and Company, has provided us with the opportunity to become a leading producer of dormant, high yield alfalfa seed varieties, which are the varieties suitable for cold weather conditions. We have licensing agreements with Forage Genetics International, LLC, a subsidiary of Land O' Lakes, Inc. ("FGI") to produce, breed and eventually sell Roundup Ready® alfalfa seed varieties. As a result, our alfalfa seed business now encompasses the production, breeding and sale of non-dormant and dormant conventional varieties and the potential for future production and sale of GMO (genetically modified organism) varieties.

Since our initial public offering in fiscal 2010, we have expanded certain pre-existing business initiatives and added new ones, including:

- diversifying our production geographically by expanding from solely producing alfalfa seed in the San Joaquin Valley of California to initially adding production capability in the Imperial Valley of California, then expanding into Australia (primarily South Australia) and, most recently, adding production in other western states and Canada;
- expanding from solely offering non-dormant varieties to now having a full range of both dormant and non-dormant alfalfa seed varieties;
- teaming with FGI to develop GMO alfalfa seeds;
- expanding the depth and breadth of our research and development capabilities in order to develop new varieties of both dormant and non-dormant alfalfa seed with traits sought after by our existing and future customers;
- diversifying into complementary proprietary crops by acquiring the assets of a Queensland, Australia company specializing in breeding and licensing of hybrid sorghum and sunflower seed germplasm;
- expanding our distribution channels and customer base, initially through the acquisition of the customer list of our then-largest international customer in the Middle East in July 2011, and thereafter, through certain strategic acquisitions;
- expanding our sales geographically both through the expansion of our product offerings to have product needed in regions we historically did not cover and through an expansion of our sales and marketing efforts generally; and
- implementing a stevia breeding program to develop new stevia varieties that incorporate the most desirable characteristics of this all-natural, zero calorie sweetener.

We have accomplished these expansion initiatives through a combination of organic growth and strategic acquisitions, foremost among them:

- the acquisition in July 2011 of certain intangible assets, including the customer information, related to the field seed and small grain business from Genetics International, Inc., which had previously operated in the Middle East and North Africa ("MENA"), and which began our transition into selling directly to MENA distributors;
- the acquisition of Imperial Valley Seeds, Inc. ("IVS") in October 2012, which enabled us to expand production of non-GMO seed into California's Imperial Valley, thereby ensuring a non-GMO uncontaminated source of seed due to the prohibition on growing GMO crops in the Imperial Valley, as well as enabling us to diversify our production areas and distribution channels;
- the acquisition of a portfolio of dormant germplasm in August 2012 to launch our entry into the dormant market;
- the acquisition of the leading local producer of non-dormant alfalfa seed in South Australia, Seed Genetics International Pty Ltd ("SGI") in April 2013, which greatly expanded our production capabilities and geographic diversity;
- the acquisition of the alfalfa production and research facility assets and conventional (non-GMO) alfalfa germplasm from DuPont Pioneer in December 2014, thereby substantially expanding upon our initial entrance into the dormant alfalfa seed market that began in 2012 and enabling us to greatly expand our production and research and product development capabilities; and
- the acquisition, in May 2016, of the assets and business of SV Genetics Pty Ltd ("SV Genetics"), a private Australian company specializing in the breeding and licensing of proprietary hybrid sorghum and sunflower seed germplasm, which represents our initial effort to diversify our product portfolio beyond alfalfa seed and stevia.

We believe our 2013 combination with SGI created the world's largest non-dormant alfalfa seed company and gave us the competitive advantages of year-round production in that market. With the acquisition of dormant alfalfa seed assets from DuPont Pioneer in December 2014, we believe we have become the largest alfalfa seed company worldwide (by volume), with industry-leading research and development, as well as production and distribution capabilities in both hemispheres and the ability to supply proprietary dormant and non-dormant alfalfa seed. Our operations span the world's alfalfa seed production regions, with operations in the San Joaquin and Imperial Valleys of California, five additional Western states, Australia and three provinces in Canada. We now sell our seed products in more than 30 countries worldwide. Our recent acquisition of the hybrid sorghum and sunflower seed assets of SV Genetics sets us on the road to begin to diversify into product offerings with historically higher margins.

We also own and operate seed-cleaning and processing facilities in Five Points, California and Nampa, Idaho and a seed processing facility in Keith, South Australia.

### World Agriculture

We believe that one of the biggest challenges of the 21st century will be to expand agricultural production so that it can meet the food and nutritional demands of the world's growing population. According to *World Population Prospects: The 2015 Revision, Key Findings and Advance Tables*, published by the United Nations, Department of Economic and Social Affairs, Population Division, the world population is estimated to reach 8.5 billion in 2030 and to surpass 9.7 billion by 2050.

Improvements in farm productivity have allowed agriculture to keep pace with growing food demand. Yield-enhancing technologies such as mechanization, hybrid seed and crop protection chemicals have enabled farmers to meet the ever-growing demand for food. Because of decreases in the amount of arable land and shrinking worldwide fresh water resources, further increases in agricultural production must come from improvements in agricultural productivity. We address this need by breeding high-yielding alfalfa seed that is tolerant to inferior, saline soils, thereby allowing farmers to make marginal soils with inferior water quality potentially as productive as superior soils.

### Alfalfa Seed Industry

Alfalfa seed is primarily used for growing alfalfa hay, which is grown throughout the world as "forage" for livestock, including dairy and beef cattle, horses and sheep. It is most often harvested as hay, but can also be made into silage, grazed or fed as greenchop to ruminant livestock. The alfalfa industry (and therefore the alfalfa seed industry) is highly dependent on the dairy industry, which is the largest consumer of alfalfa hay. As markets around the world continue to expand to a more westernized diet with high-protein consumption, the demands for alfalfa production around the world continue to increase.

Alfalfa is indigenous to the Middle East where it is considered a "non-dormant" plant, meaning it grows year round. "Dormant" varieties of alfalfa have adapted to cold climates by going dormant during periods when frost or snow conditions would otherwise kill them. Dormancy is rated using a numerical system under which "dormant" varieties are rated toward the lower end of a 1 through 11 scale, such as 2 through 4, while "non-dormant" varieties are rated toward the upper end of the scale, such as 8 through 11. The number typically identifies the number of cuttings that a farmer might be able to obtain each year.

While exact production estimates worldwide are difficult to obtain, approximately 150 million pounds of alfalfa seed are produced worldwide each year, roughly divided evenly between non-dormant and dormant production. Alfalfa seed for the non-dormant marketplace is primarily grown in just a few key regions of the world, including the San Joaquin Valley of California, the Imperial Valley of California, and Southern Australia. However, the growing regions for "non-dormant" alfalfa hay include the Southwestern U.S., the Middle East, North Africa, Latin America and other hot, arid regions of the world. "Dormant" alfalfa seed, by contrast, is grown in the western United States and Canada for production of alfalfa hay in colder climates, including the northern regions of the United States, Canada, Europe and China.

Alfalfa seed production is demanding for even the most experienced farmers. Farming practices must be tailored to the climatic conditions of each area. Irrigation must be carefully controlled and timed to stress the plants to cause maximum flowering and seed production. Weed control is essential in order to pass inspections for purity needed for certification. Insect pests, especially lygus bugs, must be managed throughout the season, using strategies that protect pollinators, such as honey bees, leafcutter bees and alkali bees. Fields are desiccated using chemicals that remove moisture and then are harvested as quickly thereafter as possible to limit or avoid rain damage.

#### Stevia and the Sweetener Industry

Stevia is a relative newcomer in the estimated over \$50 billion global sweetener market. According to a report released by analysts at Technavio on May 26, 2016, this market is forecasted to grow at a compound annual growth rate of 4.78% during the period between 2016 and 2020. Although this market is still dominated by sugar, sugar substitutes continue to increase in market share as consumer concern over sugar intake continues to increase. Stevia leaf and its refined products constitute a natural, non-caloric high intensity sweetener, estimated to be 200 to 300 times sweeter than sugar. Its taste has a slower onset and longer duration than that of sugar. It has the advantage of not breaking down with heat, making it more stable for cooking than other sugar alternatives. In the U.S., approximately 70% of all new products formulated with stevia are beverages, with the remainder split between diverse categories, including dairy products and baked goods.

The stevia plant is indigenous to the rain forests of Paraguay and has been used as a sweetener in its raw, unprocessed form for hundreds of years. In recent years, it has been grown commercially in Brazil, Paraguay, Uruguay, parts of Central America, Thailand, China and the U.S. Currently, the majority of global commercial stevia production occurs in China.

The incorporation of stevia-derived extracts into foods and beverages in the U.S. has seen a rapid increase since the beginning of 2009, when stevia was first introduced as a sweetener alternative to sugar in food and beverages. According to a Mintel and Leatherhead Food Research report released in 2014, the use of intense sweeteners, such as stevia, in food and beverage products has grown from being used in approximately 3.5% of all launches globally in 2009 to approximately 5.5% in 2012. The value of stevia as an additive for use in food and beverage manufacture in 2013 totaled approximately \$110 million, and Mintel and Leatherhead Food Research estimates that this total will grow to approximately \$275 million by 2017. Their report further states that, while sales of artificial sweeteners, such as aspartame, acesulfame K and sucralose still dominate the market for sugar substitutes, consumer demand for artificial sweeteners has seen a decline since the introduction of stevia. Mintel and Leatherhead Food Research expects this trend to continue, with plant-derived sweeteners, such as stevia, providing the main area of growth in the sweetener market in the future.

### Sorghum Industry

Sorghum comes in two types, forage and grain, and is considered one of the indispensable crops in the world. It has traditionally been used for livestock feed, as well as ethanol, but is gaining increasingly in popularity in food products in the U.S. due to its gluten-free characteristics, as well as its antioxidant, high protein, lower fat, high fiber and non-GMO properties. Consequently, sorghum is becoming a desired substitute for wheat, rye and barley. Additionally, the pet food industry increasingly utilizes sorghum for its nutritional benefits and enhanced digestibility.

The U.S. Department of Agriculture (the "USDA") estimates the world sorghum production for 2016/2017 will be approximately 64 million metric tons. Industry experts estimate the 2016 U.S. sorghum crop to encompass between 7 million and 8 million acres with the majority of the world's sorghum grown in developing countries, primarily in Africa and Asia. Similar to alfalfa, sorghum grows well in poor soil and drought conditions, thanks to its hardiness, market versatility and high-quality seed. Sorghum requires less water to grow than many other crops and is generally used as a replacement for corn and other grains in areas where water is scarce. In Africa, sorghum can be a food staple for human consumption.

### Sunflower Industry

Sunflowers have multiple specialty uses including oil, birdseed and human consumption. Our current sunflower seed focus is on the oil market. Sunflower oil is light in taste and appearance and supplies more Vitamin E than any other vegetable oil. It is a combination of monounsaturated and polyunsaturated fats with low saturated fat levels. The versatility of this healthy oil is recognized by cooks internationally, valued for its frying performance and health benefits. With multiple types of sunflower oils available, it meets the needs of consumer and food manufacturers alike for a healthy and high performance non-transgenic vegetable oil. Global sunflower seed production in 2016-2017 is projected at 41.2 million tons, up 5 percent from the current season and above the recent 10-year average. The sunflower seed oil trade is forecast to rise, supported by demand in India, the EU, North Africa, and the Middle East.

### Business Strategy

Over the years, we have built our business upon four pillars that serve as our foundation and drive our future plans and direction. These include:

- a strong product portfolio;
- leading edge research and development expertise;
- a large and diversified production base; and
- global distribution.

We strive to enhance our growth potential and improve gross margins by expanding our alfalfa seed business, by leveraging our expertise in plant discovery and development and by continually assessing opportunities to expand into the development, production and sale of other, higher margin crops.

We continue to pursue our strategy to be recognized as the world's preferred provider of seed for forage, grain and specialty crops by:

- increasing the number of acres under contract with alfalfa seed growers in the Central and Imperial Valleys of California, in other western states and Canada and in Australia;
- increasing distribution into foreign markets through sales in the Middle East, North Africa, Mexico, other Latin American locations and Eastern Europe;
- expanding and improving our domestic distribution channels;
- promoting worldwide the economic advantages of our high-yielding alfalfa seed varieties and our salt-tolerant alfalfa seed varieties;
- expanding our breeding program, both in classical breeding and transgenic breeding, in order to develop new varieties with those characteristics most needed or desired by farmers, and most recently, expanding our breeding program into crops with historically higher margins, in particular, hybrid sorghum and sunflower seed germplasm; and
- increasing our assortment of available non-dormant and dormant, conventional and GMO alfalfa seed varieties.

These goals are being accomplished both through organic growth of our legacy business and through strategic acquisitions. We will continue to look for additional acquisition or internal opportunities that will expand our existing business or provide us with a gateway to entering new markets that complement our existing business.

We also are continuing to exploit the emerging market for stevia through our stevia breeding program. The goal of this program is to leverage our research, development and breeding expertise to invent stevia varieties with flavor characteristics that best complement the food and beverages into which stevia is increasingly being incorporated or that can be consumed on its own.

#### Our Current Alfalfa Seed Products

We have a history of innovation in alfalfa breeding, dating back to the early 1980s when our non-dormant varieties ("S&W varieties") were first introduced to the market. Starting in 2001, our Australian subsidiary, SGI, began a breeding program targeted at creating varieties that maximize seed yields, thereby reducing the cost of seed production. Historically, we differentiated our products by optimizing our varieties for geographical regions that have hot climates and, in the case of S&W varieties, challenging soil conditions such as high-salt content, while maximizing crop yield. Our December 2014 acquisition of DuPont Pioneer's conventional, dormant alfalfa seed varieties built upon our initial 2012 launch into dormant alfalfa seed markets by adding a wide selection of dormant alfalfa seed varieties that are suited for higher elevation and cooler climate conditions. Our current portfolio of alfalfa seed products includes varieties that, depending upon the particular variety, exhibit traits including high yield, muscle (strength in the field), salt tolerance, drought tolerance, leafhopper resistance and stem nematode resistance, among other traits sought by farmers who grow forage hay.

### **Fall Dormancy Ratings of Our Varieties**

Fall dormancy is a key characteristic that can vary among alfalfa varieties. Fall Dormancy (FD) ratings are assigned to varieties based on their performance in standardized tests for the onset of dormancy in the fall. Standard check varieties span an FD rating continuum from FD 1 to FD 11, where the onset of dormancy is measured as fall height relative to standard check varieties. FD1 represents the earliest onset of fall dormancy, whereas FD 11 represents a completely non-dormant growth habit. Early FD ratings are generally most suited to cold winter climates where plants must cease fall growth early allowing individual plants to survive cold winters and frozen soils conditions for lengthy periods. FD 2 and FD 3 ratings are typically associated with early onset fall dormancy, when grown in the upper Midwest for example. FD 9 and FD 10 ratings are typically non-dormant, are characterized as having relatively little slowdown in fall growth and are more suited for continuing forage yield production and improved yield potential in warm winter climates where soils do not freeze.

Our current commercial product line-up includes alfalfa seed varieties that span from FD 3 (our earliest onset of fall-dormancy) to FD 10 (our most non-dormant, most winter active). The legacy S&W product development efforts were focused on FD 8, FD 9 and FD 10, with some breeding effort devoted to FD 4, FD 6 and FD7.

#### **S&W Varieties**

S&W varieties are all bred and developed to meet the guidelines for certification by the National Alfalfa Variety Review Board and/or the Association of Official Seed Certifying Agencies.

In February 2012, we announced the certification of our first proprietary dormant alfalfa seed variety, which was specifically bred to thrive in high altitude and cooler climates. In August 2012, we purchased the rights to a portfolio of alfalfa varieties suited for higher elevations and colder climate conditions, marking our commitment to expand more aggressively into the dormant variety market. The colder climate or higher elevation varieties that we acquired are in the range of FD 3, FD 4 and FD 5. In December 2014, we acquired from DuPont Pioneer one of the alfalfa industry's largest portfolios of dormant alfalfa germplasm, along with their active breeding program. The Pioneer breeding program amassed a significant germplasm base that spans from FD 3 through FD 9. The primary focus of the Pioneer breeding program was FD 4 and FD 5 for the North America market. These acquisitions of dormant germplasm significantly expand the range of geographic and climatic growing regions where we can offer adapted varieties.

Our non-dormant varieties (FD 8, FD 9 and FD 10) still represent a large proportion of our business and are best suited to hot, arid climates. Our salt tolerant non-dormant varieties do well in salty irrigation waters and salty soils. Our leading non-dormant varieties include SW 10, SW 9720, SW 9215, SW 9628, and SW 8421S.

Of these varieties, SW 9720, SW 9215 and SW 8421S are bred to perform very well in highly saline conditions that would stunt or kill ordinary alfalfa.

Our FD 3, FD 4 and FD 5 S&W varieties are adapted to the winter-hardy intermountain west and the northern half of the United States and Canada. These include Rhino, SW4328, and SW5909. Some of these varieties are derived from the DuPont Pioneer germplasm base for commercial introduction as S&W brand varieties. Other dormant varieties from the DuPont Pioneer germplasm have been selected as potential varieties for licensing to third party brands. Our breeding and genetics experts continue the multi-year process of developing improved varieties over much of the dormancy spectrum, but concentrating primarily on high salt- and heat-tolerant, non-dormant alfalfa seed, where we have established ourselves as a leading provider. We also create blends of seed varieties.

#### IVS Varieties

IVS markets both common and certified alfalfa seeds, sourced from growers located in the Imperial Valley of Southeast California. Portions of the alfalfa seed sold by IVS in fiscal 2016 and 2015 were common varieties (*i.e.*, uncertified seed) while the balance consisted of certified CUF (a public variety) and proprietary varieties. The primary proprietary varieties we acquired in the IVS acquisition are LaJolla, Catalina and Saltana. Because GMO alfalfa is not permitted in the Imperial Valley, we are able to rely upon the seed grown in the Imperial Valley, along with seed grown in Australia, to supply customers in regions such as the Middle East and Europe, where GMO products are strictly prohibited.

#### S&W Varieties

S&W has developed well-known proprietary varieties of alfalfa, such as SuperSonic, SuperNova, SuperStar, SuperCharge, SuperAurora, SuperSequel and SuperSiriver. Since 2002, the varieties developed by S&W have attracted an expanding grower base, and in 2016, S&W accounted for more than 60% of the total Australian certified proprietary alfalfa seed production. S&W's alfalfa seed varieties are bred to resist disease, exhibit persistence in the field and produce higher yields of both the alfalfa hay forage and alfalfa seed production for our seed growers. S&W's proprietary varieties exhibit superior seed yield capability compared to traditional non-proprietary alfalfa varieties in Australia, with the most recent varieties showing the highest seed yields. Forage yields of the older S&W proprietary varieties are at least equivalent to traditional non-proprietary varieties, and the forage yields of the more recent S&W varieties are even better. All of S&W's proprietary alfalfa varieties, excluding SuperAurora, have FD ratings of 8-9 and therefore achieve optimum growth and forage production in Mediterranean to desert climates.

S&W's breeding program includes a number of initiatives addressing semi-dormant and highly non-dormant alfalfa varieties and tropical alfalfa seed varieties.

Additionally, S&W has a breeding and production platform of proprietary white clover varieties, including SuperHuia, SuperLadino, SuperHaifa and SuperHaifa II. In fiscal 2016, clover sales represented approximately 6% of S&W's total seed sales and a nominal amount of our total consolidated sales. S&W's white clover varieties are used for forage and ornamentation.



## Genetically Modified Organism Alfalfa

Currently, Europe, the Middle East and certain other parts of the world prohibit the sale of genetically modified organism (GMO) alfalfa. Therefore, historically, we have not employed genetic engineering in the breeding of our current commercial seed varieties for these markets, and consequently, we have products that can be sold throughout the world. As a result of the January 2011 deregulation by the USDA of Roundup Ready® alfalfa, a GMO product, Roundup Ready® alfalfa is currently being grown in the United States without any federal or state regulations governing field isolation and other protections.

Collaborative stewardship programs have been developed to facilitate the coexistence of GMO and non-GMO seed. For example, in 2010, the AOSCA launched its Alfalfa Seed Stewardship Program (the "ASSP"). The ASSP is a voluntary, fee-based certification program for the production of alfalfa seed to be sold into markets that prohibit the sale of GMO alfalfa. ASSP certification of seed fields includes testing for GMO material and observance of a minimum stated isolation distance of five miles from any GMO alfalfa seed production field. Also in 2010, the California Crop Improvement Association (the "CCIA") developed a web-based alfalfa seed field isolation "pinning" map for alfalfa seed production in the Western U.S. This map is intended to pin both GMO and non-GMO seed fields. Although beneficial to growers and customers alike, these stewardship programs do not afford legal protection to non-GMO growers.

We continue to evaluate our options with respect to incorporating biotechnology into our alfalfa seed traits and the resulting impact on our business strategy and operations. In April 2013, we entered into a license agreement with FGI to develop and commercialize seed varieties that incorporate proprietary traits, including the Roundup Ready® trait. This agreement further documented and formalized our previously announced collaboration with FGI and Monsanto to develop genetically modified versions of certain of our proprietary alfalfa varieties. This development of biotech seed varieties consists of several phases including lab work and field trials to confirm agronomic performance and trait efficiency of each developed variety. Upon completion of the field trials and demonstration of minimum performance standards, we may elect to commercialize the variety and enter into a variety-specific license agreement with FGI pursuant to which we would pay certain royalties and access fees.

In December 2014, we entered into a Contract Alfalfa Production Services Agreement with DuPont Pioneer, whereby we produce alfalfa seed of commercial DuPont Pioneer varieties containing the Roundup Ready® gene. These varieties are exclusive to DuPont Pioneer and accordingly, we do not produce them for or sell them to any other customer.

In connection with the DuPont Pioneer acquisition, we only acquired conventional alfalfa varieties. However, the parties agreed to the terms of a second asset purchase agreement relating to the purchase of DuPont Pioneer's GMO alfalfa assets, to be entered into under certain circumstances: Assuming FGI provides its required consent to this transaction prior to November 30, 2017, and subject to the satisfaction of certain other specified conditions, either we or DuPont Pioneer have the right to enter into (and require the other party to enter into) the second asset purchase agreement on or before December 29, 2017, pursuant to which we would acquire DuPont Pioneer's GMO germplasm varieties and other related assets for a purchase price of \$7,000,000. There is no assurance that we will purchase the DuPont Pioneer GMO assets, however, we are actively working to satisfy the requisite conditions and are hopeful that the purchase will be consummated.

As a result of the increasing use of Roundup Ready® alfalfa by traditional hay farmers and the lack of federal or state rules requiring adequate isolation of Roundup Ready® alfalfa fields from conventional fields to prevent cross-pollination of GMO plants with non-GMO plants, we have experienced an increase in the number of seeds in recent harvests that have tested positive for the adventitious presence of GMO. To date, the low percentage of seeds that have tested positive has not undermined our ability to meet international demand, and we expect to be able to sell these seeds domestically and in other jurisdictions that permit the importation of GMO alfalfa at our customary prices for certified seed. Nevertheless, we are taking proactive steps to protect our seed crops to ensure we have sufficient seed to meet the demand for our varieties in international markets. These steps include seeking collaborative agreements, regulations or other measures to ensure neighboring farms that grow GMO limit the extent to which they allow the flowering and cross-pollination of their GMO-based crops with our conventional non-GMO crops to occur; and expanding our contracted grower base in areas that have less GMO alfalfa present including the Imperial Valley of California and the Canadian provinces of Alberta, Manitoba and Saskatchewan. We also have begun to grow S&W varieties in South Australia, where there is no GMO activity in alfalfa, and intend to increase that production in future growing seasons.

#### Alfalfa Seed Cleaning and Processing

Alfalfa seed processing is similar in all of our growing regions and begins with the harvest. Each field is harvested and identified separately with unique information such as variety, lot number, grower name, field name, acres and certification number. During harvest, our growers load field run harvested seed separately for each field out of the combine into bulk containers for transport to the processing facility. When the containers arrive at the facility, each container is weighed, labeled with the unique field information and a sample is taken.

Harvested seed is then sent to seed-cleaning lines where it is cleaned and foreign matter such as weeds, inert matter and other crop seed is removed. Clean seed samples are taken and tested for purity and germination to meet company quality standards. The clean seed is then stored in bulk until needed to fulfill a sales order. Upon receipt of a sales order, the clean seed is pulled from inventory and processed through our packaging equipment to meet specific customer requirements such as treatment, package size and unique bag and labeling.

We have processing facilities in Nampa, Idaho and Five Points (San Joaquin Valley), California and handle processing of our Imperial Valley seed under a long-term service agreement. The facility in Nampa, Idaho gives us exclusive access to the use of patented coating technology that, among other things, allows for the extension of rhizobium (seed treatment) lifespan.

### S&W Processing

S&W proprietary seed is packaged into an S&W branded seed bag as well as unique customer-specific branded seed bags. Final packaging for customers includes attaching a label with variety name and physical quality data, and attaching a State Certification tag (also known as a "blue tag") to each individual bag. When the seed is treated with any type of seed treatment, a treatment tag must also be attached to each individual bag.

S&W proprietary seed production is produced under a state seed certification program. As part of the DuPont Pioneer acquisition, we acquired a CCIA certified lab that enables us to collect, analyze and submit to the state all of the data needed for certification of our seed varieties so that we no longer are required to outsource that function. Certification by these programs ensures both physical and genetic quality standards for individual lots of seed. Additional testing may be required, dependent on the market to which the shipment is destined, such as Saudi Arabia or Mexico. Samples may be sent to the Federal Seed Laboratory (part of the USDA) or a State Department of Agriculture laboratory for further physical quality testing and/or market specific phytosanitary testing.

Unlike many other plant species, the physiological characteristics of alfalfa seed allow for longer term storage without losing physical quality of the seed. When we have unsold inventory at the end of a sales season, these seed characteristics ensure the ability to store and sell the inventory in subsequent years.

As our alfalfa seed business grows, processing facility utilization will be increased by implementing process improvements such as autonomous maintenance and quicker material changeovers to reduce downtime. In addition, we will increase throughput by sequencing operations to remove bottlenecks and by adding work shifts. Finally, we may make capital improvements to our facilities when business opportunities exist to create a strong return on investment.

### S&W Processing

S&W's growers contract directly with independent mills in the southeast region of Southern Australia for the cleaning and preparation of S&W's varieties. Four milling facilities are used by S&W's growers to clean and process the majority of S&W alfalfa seed, and one company, Tatiara Seeds Pty Ltd ("Tatiara"), which owns two of the four milling facilities, processes approximately 70% of seed grown for S&W. One other milling facility cleans the majority of S&W's white clover. Although most of S&W's milling requirements are processed through Tatiara-owned mills, we are aware of other mills that would serve our purposes were we no longer able or willing to process the S&W seed through Tatiara-owned mills.

The S&W growers are required to deliver seed that meets S&W's processing specifications, based on international and domestic certification standards. In a typical year, approximately 90-95% of product received from the growers meets S&W's specifications.

In June 2016, S&W's new packaging facility in Keith, South Australia gained final accreditation to become fully operational. In this state-of-the-art facility, S&W bags and labels its seed varieties and stores the inventory pending sale. We expect to pack approximately half of the S&W seed at the Keith facility and consequently, we will be less reliant on third party processors to provide this function.

## Alfalfa Seed Product Development

### Classical Breeding

Our alfalfa breeding program is designed to make steady genetic improvements in our germplasm base that is used to create better performing varieties for our customer. A typical alfalfa variety can take as little as five years or as long as 18 years to be developed, depending on methodology and the desired agronomic traits. Because of the many years required to develop a new alfalfa variety, we believe our successful breeding program allows us to offer seed varieties incorporating a combination of characteristics desired by farmers that are not available from any other source, thereby providing us with a competitive advantage.

In connection with the breeding of our non-GMO varieties, we conduct tests to ensure that we have no adventitious presence (AP) of GMO contamination. Both field and greenhouse breeding locations are used in our breeding program.

### Biotechnology Breeding

We are also looking to build on our research and development expertise and expand our biotechnology initiatives. As such, we look for opportunities to collaborate with other companies that have technologies that we believe complement our proprietary products and/or our research and development breeding expertise to develop as yet unavailable specialized alfalfa seed products and potentially, other seed products.

We currently are collaborating with Calyxt, Inc. (a wholly-owned subsidiary of Celectis Plant Sciences) to research, develop, produce and commercialize alfalfa seed products involving next generation gene editing technology on our elite alfalfa seed genetics. The goal of this collaboration is to create novel traits that are currently classified as non-GMO, which ultimately can be incorporated into our seed varieties. This relationship is in its infancy, and we do not expect to see a material impact on our revenue for at least two years, if ever. However, this biotech initiative demonstrates our willingness and ability to expand our research and development efforts beyond our classically-bred proprietary alfalfa seed breeding program.

## Sales, Marketing and Distribution

### S&W Sales and Marketing

Historically, we primarily sold high quality proprietary "non-dormant" seed varieties to those parts of the world with hot, arid climates. Our primary geographical focus for non-dormant seed is the Middle East and North Africa, although we currently sell to customers in a broad range of areas, including the Western U.S., Mexico, South America, Middle East and Africa, as well as other countries with Mediterranean climates.

Unlike cooler climates, the geographic areas on which we have historically concentrated are able to sustain long growing seasons and therefore alfalfa growers can benefit from our high-yielding, non-dormant varieties. In recent periods, we have expanded geographically into colder climates where our more recently-acquired dormant varieties thrive. Our customers are primarily our distributors and dealers. Our distributors and dealers, in turn, sell to farmers, consisting primarily of dairy farmers, livestock producers and merchant hay growers.

Although we have a sales team, we primarily sell our seed through our network of distributors and dealers, as well as through the services of seed brokers. We do not have formal distribution agreements with most of our distributors, but instead operate on the basis of purchase orders and invoices. We believe that selling through dealers and distributors enables our products to reach hay growers in areas where there are geographic or other constraints on direct sales efforts. We select dealers and distributors based on shared vision, technical expertise, local market knowledge and financial stability. Over the years, we have built dealer/distributor loyalty through an emphasis on service, access to breeders, ongoing training and promotional material support. We limit the number of dealers and distributors with whom we have relationships in any particular area in order to provide adequate support and opportunity to those with whom we choose to do business.

Through our distributors, our primary export market historically had been Saudi Arabia and to a lesser extent, certain other Middle Eastern and North African countries. The overall international sales mix changed beginning in fiscal 2013 with our acquisition of SGI in South Australia. In recent years, in addition to sales to Saudi Arabia and Australia, we have been selling to customers in Sudan, Morocco, Egypt and Libya, and to customers in other regions of the world, including Latin America, (Argentina and Mexico) and South Asia (Pakistan), both of which we view as important regions for potential expansion. In total, we sell our alfalfa seed varieties in approximately 30 countries throughout the world.

Domestic seed marketing is based primarily upon the dormancy attributes of our varieties as suited to climates in target markets. Prior to the DuPont Pioneer acquisition, we marketed our alfalfa seed, which consisted primarily of non-dormant varieties, in California, Arizona, New Mexico, Texas and Nevada. We slowly began broadening our domestic geographic reach beginning in fiscal 2013, with our first sales of dormant alfalfa seed, and significantly expanded in fiscal 2015 following the acquisition of DuPont Pioneer's dormant alfalfa seed assets. In connection with that acquisition, we entered into a distribution agreement with DuPont Pioneer pursuant to which we became the sole supplier, subject to certain exceptions, of certain alfalfa seed products for sale to customers by DuPont Pioneer through September 2024. In fiscal 2016, DuPont Pioneer accounted for approximately 40% of our revenue. Given its historical market share in the sale of dormant alfalfa seed, we expect sales to DuPont Pioneer to be a significant portion of our annual sales throughout the term of the distribution agreement. A disruption in this relationship could have a material adverse impact on our results of operations and financial condition.

The price, terms of sale, trade credit and payment terms are negotiated on a customer-by-customer basis. Our arrangements with our distributors do not include a right of return. Typical terms for domestic customers require payment in full within 60 days of the date of shipment. Our credit terms with DuPont Pioneer are governed by the distribution agreement, as amended, and provide that we receive equal installment payments in September, January and April of each year.

Sales to our international customers are paid in advance of shipment or typically within 120 days of shipment and may also be accomplished through use of letters of credit, cash against documents and installment payment arrangements. Our credit policies are determined based upon the long-term nature of the relationship with our customers. Credit limits are established for individual customers based on historical collection experience, current economic and market conditions and a review of the current status of each customer's trade accounts receivable.

In fiscal 2016, DuPont Pioneer, a domestic customer, and Sorouh Agricultural Company, an international customer, collectively accounted for approximately 53% of our alfalfa seed revenue. In fiscal 2016, sales to domestic customers increased as a percentage of our total sales, primarily as a result of the agreements we entered into with DuPont Pioneer. Sales into international customers accounted for 54% in fiscal 2016 versus 59% in fiscal 2015.

Both farmers (dairy farmers and hay growers) and dealers use pest-control advisors who recommend the varieties of alfalfa that will produce the best results in a particular location. Therefore, a key part of our marketing strategy is to educate the consultants, as well as the farmers, as to benefits of our seed varieties.

We believe that our best marketing tool is the dissemination of information regarding the quality and characteristics of our proprietary seed varieties to those persons who make the hay growing decisions. We continue to place advertisements in trade journals, participate in seed industry conferences and trade shows and engage in various other educational and outreach programs as we deem appropriate.

Most of our international marketing efforts are accomplished through face-to-face meetings with our existing and potential customers and their end users. In addition, we participate in international trade shows to boost our international presence and sales efforts.

#### S&W Seed Sales and Marketing

S&W Seed sells a majority of its proprietary alfalfa seed (approximately 70-90% of its total sales per year) into Saudi Arabia, the United States and Argentina. S&W Seed sells the bulk of its proprietary clover seed to China, Europe and the U.S. Similar to S&W Seed, SGI has historically relied upon a network of distributors to market and sell its products.

In marketing its products, SGI's initial impetus was to gain market penetration through the sale of improved versions of proven varieties (*e.g.*, SuperSiriver and SuperAurora) in the market place at competitive pricing. Subsequently, SGI launched additional varieties such as SuperSonic. SGI utilizes a variety of distribution strategies. Through distribution arrangements, SGI's proprietary varieties are marketed directly as SGI brands or under customer brand labels, and strategic allocations of full and partial exclusivity rights are made in specific countries and geographical regions to incentivize distributors to establish markets for SGI products.

## Alfalfa Seed Production

As of the end of our 2016 fiscal year, we have alfalfa seed production capabilities in California and most of the other states in the Western United States, including higher elevations and colder climatic regions where dormant alfalfa seed is produced, the Canadian provinces of Alberta, Manitoba and Saskatchewan and in the Australian States of South Australia, Victoria, and New South Wales.

### S&W and IVS Alfalfa Seed Production

Historically, we fulfilled all of our alfalfa seed requirements under contracts with farmers primarily located in the San Joaquin Valley of California. For a brief period, beginning in fiscal 2013, we were engaged in our own internal farming operations and acquired, through purchase and lease, acreage on which to grow our seed directly. However, in fiscal 2015, we made a strategic decision to move away from internal farming, and we began selling some of the farmland acreage we had been using for that purpose. After completion of the fall 2015 harvest, we shut down our internal farming operations as a source of our alfalfa seed, and instead, returned to sourcing all of our production from third party growers.

As of June 30, 2016, we had contracts with several hundred growers in the Western United States and Canada. Generally, we enter into contracts to produce alfalfa seed, which is typical industry practice. Our normal contracts with U.S. growers range from one to three years, include a price for the seed that is determined annually and that generally do not vary from grower to grower or variety to variety. Under these contracts, we pay our growers based on the weight of cleaned and processed seed. The growers' contracts that we acquired in connection with the DuPont Pioneer acquisition were primarily for production in the Pacific Northwest and Canada. The terms of these contracts are similar in substance to the contracts we have historically entered into with the S&W grower base. Because a key to our success as a business is to have the product mix required by our customers, aligning the growers' production plan to the anticipated purchase needs of our customers is a challenge on which management has focused considerable efforts in recent periods, with increasing success.

Alfalfa seed is an extremely demanding crop. Our network of growers has the expertise needed to successfully grow high quality alfalfa seed. We have worked with many of the same growers for much of the past 35 years, and we believe that we have strong relationships with them. We allocate our seed production among our growers so that we can purchase the proper mix of seed varieties each year. The growers incur the greatest cost in the first year of production, when they plant seed, eradicate weeds and pests and manage the pollination process; they then may be able to harvest seed from the same stands for several additional years, with the average alfalfa seed field producing for three years. With the added resources of the DuPont Pioneer alfalfa business, we believe we have expanded our production capabilities in the Western United States and Canada with both existing growers and by recruiting new growers in these regions.

Alfalfa seed is harvested annually in the Northern Hemisphere beginning in July for the southwest region of the United States and concluding in October in the Canadian provinces.

## SGI Production

As of June 30, 2016, SGI had contracts with approximately 150 individual growers in Western Victoria, South Australia and New South Wales to grow its alfalfa seed varieties on a total of approximately 20,000 irrigated and 8,000 non-irrigated acres. In the Southern Hemisphere, alfalfa seed is grown counter seasonally to the Northern Hemisphere and is harvested annually, in March through early May.

Under its current form of SGI alfalfa seed production agreement, SGI provides foundation seed to each grower and grants each grower a license to use its seed for the purpose of production of seed for sale to SGI. Each grower is responsible for all costs of the crop production. Title in the produced seed passes to SGI upon it being certified compliant; and, if the seed is not compliant, title will only pass to SGI upon SGI's further agreement to purchase the non-compliant seed. SGI uses a staggered payment system with the growers of its alfalfa and white clover seed, and the payment amounts are based upon an estimated budget price ("EBP") for compliant seed. EBP is a forecast of the final price that SGI believes will be achieved taking into account prevailing and predicted market conditions at the time the estimate is made. Following the grower's delivery of uncleaned seed to a milling facility, SGI typically pays 40% of the EBP to the grower based on a percentage of the pre-cleaning weight. Following this initial payment and prior to the final payment, SGI will make a series of scheduled progress payments and, if applicable, a bonus payment for "first grade" (high quality) alfalfa seed. The final price payable to each grower (and therefore the total price) is dependent upon and subject to adjustment based upon the clean weight of the seed grown, on the average price at which SGI sells the pooled seed and other costs incurred by SGI. Accordingly, the total price paid by SGI to its grower may be more or less than the EBP. SGI's seed production agreements for alfalfa provide for an initial term of seven years and an optional renewal term of three years. SGI's seed production agreements for white clover provide for an initial term of two years and an optional renewal term of one year. Historically, SGI has not required its growers to harvest seed in every year under the seed production agreement. Some growers have elected to have non-harvest years, and their alfalfa is cut for hay or used for grazing instead of being harvested for seed production.

## Seasonality

We contract with growers based upon our anticipated market demand; we mill, clean and stock the seed during the harvest season and ship from inventory throughout the year.

However, our alfalfa seed business is seasonal, with our highest concentration of sales falling in the third and fourth fiscal quarters (January through June). This differs from our historical operations in which sales were concentrated in the first six months of our fiscal year (July through December). Since fiscal 2013, we have had operations and customers in both the Northern and Southern hemispheres. It was the acquisition of SGI in fiscal 2013, with its operations in South Australia, that initially had the greatest impact on the shift in seasonal sales, as the fourth quarter is typically a significant sales quarter for SGI. Even more significant is the distribution agreement with DuPont Pioneer whereby our highest concentration of sales revenue to this particular customer falls in the third and fourth fiscal quarters.



Tests show that seed that has been held in inventory for over one year improves in quality. Therefore, provided that we have sufficient capital to carry additional inventory, we may increase our seed purchases and planned season end inventory if, in our judgment, we can generate increased margins and revenue with the aged seed. This will also reduce the potential for inventory shortages in the event that we have higher than anticipated demand or other factors, such as growers electing to plant alternative, higher priced crops, reducing our available seed supply in a particular year.

#### Clover Production and Distribution

In addition to its core business of producing and selling alfalfa seed, SGI also operates a small white clover and annual clover production and distribution business. SGI's white clover varieties are bred for winter activity, while the annual clover is particularly adapted to a variety of soil types ranging from sandy to heavy clays, which can be farmed under irrigation or under dry conditions. SGI leverages its production, processing and distribution channels to also make available a total of five clover seed varieties. SGI's clover seed is sold primarily in Europe, China, Argentina and Australia.

#### SV Genetics Crops and Licensing - Expansion into Complementary Crops

In May 2016, we acquired the assets and business operations of SV Genetics, based in Queensland, Australia. Since 2006, SV Genetics has been in the business of breeding and licensing hybrid sorghum and sunflower seed germplasm. We see this acquisition as an opportunity to leverage the worldwide research, production and distribution platforms we have built over the decades in alfalfa seed with the addition of complementary new crops that are consistent with our strategy to be the world's preferred provider of proprietary seed for forage, grain and specialty crops. As a result of the acquisition, we currently license proprietary seed genetics and sell parent seed to local-market production/distribution partners. The licensees produce hybrid seed using the SV Genetics genetics and pay a royalty on the seed produced and sold. We acquired licensing agreements with 14 different partners under which we provide grain sorghum, forage sorghum and sunflower genetics in approximately ten locations throughout the world, including Australia, Argentina, Brazil, Bolivia, China, Europe, Pakistan, South Africa, Ukraine and the United States. SV Genetics is also actively testing products through agreements in 20 countries with 57 potential commercialization partners.

#### Stevia Breeding, Research and Development

Since we began our stevia business in 2010, our stevia activities have evolved from exploring on a small scale the potential commercial production of stevia in California to focusing on developing varieties we believe can add value at the front end of the supply chain through breeding of unique plant varieties. Since fiscal 2013 when we ceased pursuing the commercial production of stevia, we have leveraged our breeding research and development expertise in order to develop new varieties of stevia that embody specifically targeted characteristics, focusing in particular on increased yields and strong plant vigor, which are of value to farmers, and taste preferences of consumers, including sweet taste combined with little or no bitterness and aftertaste.

In our breeding program, we have identified stevia plant lines that we believe grow to heights and plant mass that compare favorably to the results for stevia plants grown in China and Paraguay, which have historically been the primary regions for growing stevia. Our lines contain high overall steviol glycosides, including Reb A, Reb B and Reb C. We anticipate breeding these new lines with their higher overall steviol glycosides. We conduct extensive high-pressure liquid chromatography ("HPLC") sample testing of stevia plants under development and make further selections and crosses of these plants based upon test results. The goal is to develop a stevia plant with an inherently pleasant taste profile, a large and hardy plant mass and high Reb A content.

We are focused on developing our proprietary stevia germplasm into commercial varieties. Towards that end, we have filed four patent applications with the U.S. Patent and Trademark Office for unique stevia plant varieties. As our breeding program produces new lines, we plan to file additional patent applications in the future.

One of the filed patent applications cover lines that have been developed with a pleasing taste profile, thereby enabling the resulting dried leaf to be consumed directly. At the present time, farmers are conducting trials with this variety. If these trials yield satisfactory results, we expect to be paid a royalty calculated as a percent of the gross sales made by these farmers.

We also have developed lines that have been bred for processing in order to produce a stevia extract suitable for use in foods and beverages. These lines are high in sweetener content, have large plant mass and generally offer a superior source of stevia leaf for the extraction market.

#### Proprietary Rights

Ownership of and access to intellectual property rights are important to us and our competitors. We sell only our proprietary alfalfa seed varieties that have been specially selected to manifest the traits we deem best suited to particular regions in which our seed is planted for alfalfa hay. Our ability to compete effectively is dependent upon the proprietary nature of the seeds, seedlings, processes, technologies and materials owned by or used by us or our growers. If any competitors independently develop any technologies that substantially equal or surpass our process technology, it will adversely affect our competitive position.

In addition to patent protection for some of our alfalfa seed varieties that we acquired from DuPont Pioneer, we guard our proprietary varieties by exercising a high degree of control over the supply chain. As part of this control process, we require our growers to deliver back to us all seed derived from our proprietary varieties. Historically, we have found that this control mechanism has been an effective means to protect our proprietary seed. However, because we do not have more formal proprietary rights protections in place with our growers, it would be possible for persons with access to our seed or plants grown from our seed to potentially reproduce proprietary seed varieties, which could significantly harm our business and our reputation. In the future, we may deem it appropriate to implement more formal proprietary rights protections.

S&W registers its varieties under the Australian Plant Breeder's Rights Act 1994 (Cth) (the "PBR Act"). Currently the varieties SuperSequel, SuperSiriver, SuperAurora, SuperSonic, SuperStar, SuperSiriver II, SuperNova, SuperLadino, SuperHuia and SuperHaifa are protected under the PBR Act. Seed from varieties with plant breeder's rights ("PBR") protection can only be bought from the PBR registrant, commercial partner, licensee or an agent authorized by the registrant. Exceptions exist for use of a PBR variety, including for private and non-commercial purposes, for experimental purposes, and for breeding other plant varieties. PBR protections last for 20 years in Australia in respect of registered plant varieties, and generally for 20 years in other member countries of the International Union for the Protection of New Varieties of Plants ("UPOV"), an international convention concerning plant breeder's rights. There are currently more than 70 countries that are members of the UPOV.

S&W has licensed production and marketing rights of several of its varieties in exchange for royalties.

In addition to PBR and licensing arrangements, S&W controls dissemination of its proprietary lines by including a demand right in its form of seed production agreement for the return of unused foundation seed if a grower fails to propagate the seed within 60 days after the grower's acquires it.

We are also continuing to develop proprietary stevia lines for which we have filed four patent applications with the U.S. Patent and Trademark Office. It is our intention to build a patent portfolio of proprietary stevia lines developed through the efforts of our stevia breeding program.

The SV Genetics proprietary products are protected via hybrid production systems. Male and female parent seed is provided to licensees for production of F1 Hybrid seed for sale to customers. Production of F1 Hybrid seed is only possible using the correct parents and it is not possible to produce parent seed from parent seed so the licensee is reliant on ongoing supply of parent seed from SV Genetics.

## Competition

Competition in the alfalfa seed industry both domestically and internationally is intense. We face direct competition by other seed companies, including small family-owned businesses, as well as subsidiaries or other affiliates of chemical, pharmaceutical and biotechnology companies, many of which have substantially greater resources than we do.

Our principal competitors in our alfalfa seed business are Forage Genetics International (a subsidiary of Land O' Lakes, Inc.), Alforex Seeds (owned by Dow AgroSciences LLC, a wholly owned subsidiary of The Dow Chemical Company), Seed Services, Inc. and Pacific International Seed Company, Inc. We believe that the key competitive drivers in the industry are proven performance, customer support in the field and value, which takes into account not simply the price of the seed but also yield in the field.

Breeding a new variety of alfalfa seed takes many years and considerable expertise and skill. We believe that our reputation for breeding and producing high-quality proprietary varieties of alfalfa seed that manifest the traits the farmers need provide us with a competitive advantage, not only in the niche market for high salt- and heat-tolerant, non-dormant alfalfa seed, which has been our core business for several

decades, but also, with the December 2014 acquisition of the research and development assets of DuPont Pioneer, in the full range of dormant varieties suited for colder climates as well. We believe our research and development capabilities are unmatched in the industry and provide us with a distinct competitive advantage.

In addition to our competitors, SGI's principal regional competitors in the proprietary alfalfa seed market are Heritage Seeds Pty. Ltd. Blue Ribbon Seeds Pty. Ltd., PGG Wrightson Seeds Ltd, Naracoorte Seeds Pty. Ltd., Seed Distributors Pty. Ltd. and various other minor companies compete with SGI through sales of Siriver, a common alfalfa variety. SGI also faces competition from lower value alfalfa seed produced in the European Union and, to a lesser extent, Argentina. With the exception of Blue Ribbon Seeds, SGI faces similar competitors in its proprietary white clover business. These companies compete with SGI for acres and in sales by selling Haifa, a common white clover variety. Competitively priced white clover is also produced and sold from the European Union and New Zealand.

In relation to the SV Genetics business, sorghum and sunflower genetics tend to be concentrated globally amongst a few large international companies, resulting in a significant barrier to entry for many intermediate and regionally based seed companies and their reliance on just a few suppliers for elite genetics.

Despite the advantages we perceive we have over many of our competitors, many of our existing and potential competitors have substantially greater research and product development capabilities and financial, marketing and human resources than we do. As a result, these competitors may:

- succeed in developing products that are equal to or superior to our products or potential products or that achieve greater market acceptance than our products or potential products;
- devote greater resources to developing, marketing or selling their products;
- respond more quickly to new or emerging technologies or scientific advances and changes in customer requirements, which could render our products or potential products obsolete or less preferable;
- obtain patents that block or otherwise inhibit our ability to develop and commercialize potential products we might otherwise develop;
- withstand price competition more successfully than we can;
- establish cooperative relationships among themselves or with third parties that enhance their ability to address the needs of our customers or prospective customers;
- take advantage of acquisition or other opportunities more readily than we can; and
- control acreage and growers located in zones where GMO seed production is forbidden, thereby lessening the risks of GMO traits contaminating seed produced for overseas markets.

We are not aware of any significant domestic or international persons or companies engaged in ongoing stevia breeding activities similar to or that could be considered competitive with our stevia breeding program.

#### Environmental and Regulatory Matters

Our agricultural operations are subject to a broad range of evolving environmental laws and regulations. These laws and regulations include the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Federal Insecticide, Fungicide and Rodenticide Act and the Comprehensive Environmental Response, Compensation and Liability Act.

These environmental laws and regulations are intended to address concerns related to air quality, storm water discharge and management and disposal of agricultural chemicals relating to seed treatment both for domestic and overseas varieties. We maintain particulate matter air emissions from our milling activities below annual tonnage limits through cyclone air handling systems. We maintain storm water onsite, which eliminates the risk of waterway or tributary contamination. Pesticide and agricultural chemicals are managed by trained individuals, certified and licensed through the California Department of Pesticide Regulation. County agricultural commissioners monitor all seed-treating activity for compliance.

Compliance with these laws and related regulations is an ongoing process that does not, and is not expected to, have a material effect on our capital expenditures, earnings or competitive position. Environmental concerns are, however, inherent in most major agricultural operations, including those conducted by us, and there can be no assurance that the cost of compliance with environmental laws and regulations will not be material. Moreover, it is possible that future developments, such as increasingly strict environmental laws and enforcement policies thereunder, and further restrictions on the use of agricultural chemicals, could result in increased compliance costs.

We also are subject to the Federal Seed Act (the "FSA"), which regulates the interstate shipment of agricultural and vegetable seed. The FSA requires that seed shipped in interstate commerce be labeled with information that allows seed buyers to make informed choices and mandates that seed labeling information and advertisements pertaining to seed must be truthful. The FSA also helps to promote uniformity among state laws and fair competition within the seed industry.

Because, under our existing business plan, we are acting as a breeder of stevia leaf and will not be extracting Reb-A or other derivatives from the leaves or adding such derivatives to any food or beverages, we believe that we do not need to apply to the U.S. Food and Drug Administration ("FDA") for a Generally Recognized as Safe ("GRAS") no-objections determination or any other FDA approval in connection with our stevia business. However, should our plans with respect to stevia cultivation and processing expand in future years, we will then reexamine the advisability of seeking a GRAS determination or other FDA approval. We do not believe that our current stevia operations are subject to any special regulatory oversight.

Internationally, we are subject to various government laws and regulations (including the U.S. Foreign Corrupt Practices Act and similar non-U.S. laws and regulations) and local government regulations. To help ensure compliance with these laws and regulations, we have adopted specific risk management and compliance practices and policies, including a specific policy addressing the U.S. Foreign Corrupt Practices Act.

We are also subject to numerous other laws and regulations applicable to businesses operating in California and other states, including, without limitation, health and safety regulations.

Our Australian operations are subject to a number of laws that regulate the conduct of business in Australia, and more specifically, SGI's agricultural activities. Laws regulating the operation of companies in Australia, including in particular the Corporations Act 2001 (Cth) are central to SGI's corporate actions and corporate governance issues in Australia. Competition laws and laws relating to employment and occupational health and safety matters are also of fundamental importance in the Australian regulatory environment. These include the Competition and Consumer Act 2010 (Cth), the Fair Work Act 2009 (Cth), the Work Health and Safety Act 2012 (SA) and related regulations. Notably Australian employment laws are much more favorable to the employee than U.S. employment laws.

SGI's intellectual property rights in Australia are protected and governed by laws relating to plant breeder's rights, copyright, trademarks, the protection of confidential information, trade secrets and know-how. These include the PBR Act, the Copyright Act 1968 (Cth), the Trade Marks Act 1995 (Cth) and related regulations.

Our Australian operations are also subject to a number of environmental laws, regulations and policies, including in particular the Environment Protection Act 1993 (SA), the Agricultural and Veterinary Products (Control of Use) Act 2002 (SA), the Genetically Modified Crops Management Act 2004 (SA), the Dangerous Substances Act 1979 (SA), the Controlled Substances Act 1984 (SA) and related regulations and policies. These laws regulate matters including air quality, water quality and the use and disposal of agricultural chemicals.

#### Research and Development

R&D for the year ended June 30, 2016 totaled \$2,764,358 compared to \$1,890,234 in the year ended June 30, 2015.

#### Employees

As of September 15, 2016, S&W had 69 full-time employees, of which 10 are employed by SGI. We also employ 8 part-time employees, of which 6 are SGI employees. We also retain consultants for specific purposes when the need arises. None of our employees are represented by a labor union. We consider our relations with our employees to be good.

## Corporate History

From 1980 until 2009, our business was operated as a general partnership. We bought out the former partners beginning in June 2008, incorporated in October 2009 in Delaware, and completed the buyout of the general partners in May 2010. We reincorporated in Nevada in December 2011. SGI, our wholly owned subsidiary, was incorporated as a limited proprietary corporation in South Australia in 1993, as Harkness Group, changed its name to Seed Genetics Australia Pty Ltd in 2002, and in 2011, changed its name to Seed Genetics International Pty Ltd.

## Our Contact Information

Our principal business office is located at 7108 North Fresno Street, Suite 380, Fresno, CA 93720, and our telephone number is (559) 884-2535. Our website address is [www.swseedco.com](http://www.swseedco.com). Information contained on our website or any other website does not constitute part of this Annual Report on Form 10-K, and the inclusion of our website address in this report is an inactive textual reference only.

## Item 1A. Risk Factors

### Risks Relating to Our Business and Industry

Our earnings can be negatively impacted by declining demand brought on by varying factors, many of which are out of our control.

A variety of factors, notably a severe downturn in the dairy industry, could have a negative effect on sales of alfalfa hay, and as a result, the demand for our alfalfa seed in the domestic market. At times, including as recently as fiscal 2014, the demand for our seed has also declined in the Middle East as the result of common, uncertified seed flooding the market at lower prices than those at which we were willing to sell our certified seed. Beginning in fiscal 2015 and continuing in fiscal 2016, these factors were in the process of correcting themselves, but these circumstances could continue or reoccur, and our earnings could be negatively impacted. In addition, demand for our products could decline because of other supply and quality issues or for any other reason, including products of competitors that might be considered superior by end users. A decline in demand for our products could have a material adverse effect on our business, results of operations and financial condition.

Our earnings may also be sensitive to fluctuations in market prices for seed.

Market prices for our alfalfa seed can be impacted by factors such as the quality of the seed and the available supply, including whether lower quality, uncertified seed is available. Growing conditions, particularly weather conditions such as windstorms, floods, droughts and freezes, as well as diseases and pests and the adventitious presence of GMO, are primary factors influencing the quality and quantity of the seed and, therefore, the market price at which we can sell our seed to our customers. A decrease in the prices received for our products could have a material adverse effect on our business, results of operations and financial condition.

Our earnings are vulnerable to cost increases.

Future increase in costs, such as the costs of growing seed, could cause our margins and earnings to decline unless we are able to pass along the increased price of production to our customers. We may not be able to increase the price of our seed sufficiently to maintain our margins and earnings in the future.

Our inventory of seed can be adversely affected by the market price being paid for other crops.

Our seed production, whether in the U.S., Australia or Canada, relies entirely on unaffiliated growers to grow our proprietary seed and to sell it to us at negotiated prices each year. Growers have a choice of what crops to plant. If a particular crop is paying a materially higher price than has been paid in the past, growers may decide to not grow alfalfa seed in favor of receiving a higher return from an alternative crop planted on the same acreage. If our growers decline to a significant degree to plant the acreage on which we rely, and if we cannot find other growers to plant the lost acreage, our inventory of seed could be insufficient to satisfy the needs of our customers unless we are able to procure the necessary additional seed in the market at prices we cannot control. If these circumstances occur, our business, results of operations and financial condition could materially decline. In addition, our customers could look to other suppliers for their seed if we cannot satisfy their requirements, and we may not be able to regain them as customers once our inventory levels have returned to normal.

Adverse weather conditions, natural disasters, crop disease, pests and other natural conditions can impose significant costs and losses on our business.

Alfalfa seed, our primary product, is vulnerable to adverse weather conditions, including windstorms, floods, drought and temperature extremes, which are common but difficult to predict. In addition, alfalfa seed is vulnerable to crop disease and to pests, which may vary in severity and effect, depending on the stage of production at the time of infection or infestation, the type of treatment applied and climatic conditions. Unfavorable growing conditions can reduce both crop size and quality. Although we no longer grow any of our seed directly, these factors can still impact us by potentially decreasing the quality and yields of our seed and reducing our available inventory. These factors can increase costs, decrease revenue and lead to additional charges to earnings, which may have a material adverse effect on our business, results of operations and financial condition.

Because our alfalfa seed business is highly seasonal, our revenue, cash flows from operations and operating results may fluctuate on a seasonal and quarterly basis.

We expect that the majority of our revenue will continue to be generated from our alfalfa seed business for the foreseeable future. Our alfalfa seed business is highly seasonal, with the highest concentration of sales occurring during the third and fourth fiscal quarters. The seasonal nature of our operations results in significant fluctuations in our working capital during the growing and selling cycles. We have experienced, and expect to continue to experience, significant variability in net sales, operating cash flows and net income on a quarterly basis.



We have had a material concentration of revenue from a small group of customers that fluctuates, and the loss of any of these customers in any quarter could have a material adverse effect on our revenue.

On a historical basis, we have experienced a material concentration of revenue from a small group of customers. This concentration fluctuates from quarter to quarter, depending on our customer's specific requirements, which are themselves cyclical. However, in any particular quarter, we generally have a small group of customers that accounts for a substantial portion of that quarter's revenue. Most of these customers are not contractually obligated to purchase seed from us. The loss of one or more of these customers on a quarterly basis, when taken year over year, could have a material adverse impact on our business, financial position, results of operations and operating cash flows. We could also suffer a material adverse effect from any losses arising from a major customer's disputes regarding shipments, product quality or related matters, or from our inability to collect accounts receivable from any major customer. There are no assurances that we will be able to maintain our current customer relationships or that they will continue to purchase our seed in the current projected quantities. Any failure to do so may materially adversely impact our business.

Because we depend on a core group of significant customers, our sales, cash flows from operations and results of operations may be negatively affected if our key customers reduce the amount of products they purchase from us.

We rely upon a small group of customers for a large percentage of our net revenue. Overall, two customers accounted for 53% of our fiscal 2016 revenue. We expect that a small number of customers will continue to account for a substantial portion of our net revenue for the foreseeable future. There is no assurance that we will be able to maintain the relationships with our major customers or that they will continue to purchase our seed in the quantities that we expect and rely upon. If we cannot do so, our results of operations could suffer.

Because we do not grow the alfalfa seed that we sell, we are completely dependent on our network of growers, and our sales, cash flows from operations and results of operations may be negatively affected if we are unable to maintain an adequate network of contract growers to supply our seed requirements.

Since the completion of the fall 2015 harvest, we no longer directly grow any of the alfalfa seed that we sell, and therefore, we are entirely dependent upon our network of growers. While we have some supply contracts with our growers of two or three years in duration, many of our grower contracts cover only one year, which makes us particularly vulnerable to factors beyond our control. Events such as a shift in pricing caused by an increase in the value of commodity crops other than seed crops, increase in land prices, unexpected competition or reduced water availability could disrupt our supply chain. Any of these disruptions could limit the supply of seed that we obtain in any given year, adversely affecting supply and thereby lowering revenue. Such disruption could also damage our customer relationships and loyalty to us if we cannot supply the quantity of seed expected by them. In recent years, we have had some of our California growers decide to not grow alfalfa seed due to drought conditions. This situation could reoccur and could negatively impact our revenue if we do not otherwise have sufficient seed inventory available for sale.

S&W Seed Co. (S&W) relies on a pool of approximately 150 Australian growers to produce its proprietary seeds. Each grower arrangement is typically made for a term of seven to ten harvests. Although S&W's grower pool is diversified, it is not without risks. Adverse agronomic, climatic or other factors could lead to grower exodus and negatively impact S&W's revenue if S&W does not otherwise have sufficient seed inventory available for sale.

Our ability to contract for sufficient acreage presents challenges.

In order to increase revenue and earnings, we continue to need more production acreage. As we continue to increase the number of acres under contract and/or to move production into new geographical locations, we face challenges that can impede our ability to produce as much seed inventory as we have budgeted. For example, when we move production into new geographical locations, we may find it difficult to identify growers with the expertise to grow alfalfa seed, and we may not have sufficient company personnel available in such new locations to provide production advice on a timely basis. We also face increased competition for conventional seed acreage as the need for technology acres grows, which is further complicated by the field isolation issue relating to GMO crops that can reduce the amount of acreage available for conventional alfalfa seed crops. If we are unable to secure the acreage we need to meet our planned production for the crop year and are unable to purchase seed in the market, our results of operations could suffer, as would our reputation.

A lack of availability of water in the U.S., Australia or Canada could impact our business.

Adequate quantities and correct timing of the application of water are vital for most agriculture to thrive. Whether particular farms are experiencing water shortages depends, in large part, on their location. However, continuing drought conditions can threaten all farmland other than those properties with their own water sources. Although alfalfa seed is not a water-intensive crop, the availability or the cost of water is a factor in the planting of the alfalfa hay grown from our seed. Moreover, if the dairy farmers and others who purchase our alfalfa seed to grow hay cannot get an adequate supply of water, or if the cost of water makes it uneconomical for the farmers to grow alfalfa, we may not be able to sell our seed, which could have an adverse impact on our results of operations. We cannot predict if water shortages will impact our business in the future, but if alfalfa hay growers are impacted by water shortages, our business could also materially decline.

We face intense competition, and our inability to compete effectively for any reason could adversely affect our business.

The alfalfa seed market is highly competitive, and our products face competition from a number of small seed companies, as well as large agricultural and biotechnology companies. We compete primarily on the basis of consistency of product quality and traits, product availability, customer service and price. Many of our competitors are, or are affiliated with, large diversified companies that have substantially greater marketing and financial resources than we have. These resources give our competitors greater operating flexibility that, in certain cases, may permit them to respond better or more quickly to changes in the industry or to introduce new products more quickly and with greater marketing support.

Increased competition could result in lower profit margins, substantial pricing pressure, reduced market share and lower operating cash flows. Price competition, together with other forms of competition, could have a material adverse effect on our business, financial position, results of operations and operating cash flows.

If we are unable to estimate our customers' future needs accurately and to match our production to the demand of our customers, our business, financial condition and results of operations may be adversely affected.

We sell our seed primarily to dealers and distributors who, in turn, sell primarily to hay and dairy farmers who grow hay for dairy cattle and other livestock. Due to the nature of the alfalfa seed industry, we normally produce seed according to our production plan before we sell and deliver seed to distributors and dealers. Our dealers and distributors generally make purchasing decisions for our products based on market prices, economic and weather conditions and other factors that we and our dealers and distributors may not be able to anticipate accurately in advance. If we fail to accurately estimate the volume and types of products sought by the end users and otherwise adequately manage production amounts, we may produce more seed than our dealers and distributors want, resulting in excess inventory levels. On the other hand, if we underestimate demand, which has happened in the past, we may not be able to satisfy our dealers and distributors' demand for alfalfa seed, and thus damage our customer relations and end-user loyalty. Our failure to estimate end users' future needs and to match our production to the demand of our customers may adversely affect our business, financial condition and results of operations.

Our third-party distributors may not effectively distribute our products.

We depend in part on third-party distributors and strategic relationships for the marketing and selling of our products. We depend on these distributors' efforts to market our products, yet we are unable to control their efforts completely. In addition, we are unable to ensure that our distributors comply with all applicable laws regarding the sale of our products, including the United States Foreign Corrupt Practices Act of 1977, as amended. If our distributors fail to effectively market and sell our products, and in full compliance with applicable laws, our operating results and business may suffer.

We extend credit to our largest international customer and to certain of our other international customers, which exposes us to the difficulties of collecting our receivables in foreign jurisdictions if those customers fail to pay us.

Although payment terms for our seed sales generally are 90 to 120 days, we regularly extend credit to our largest international customer, Sorouh Agricultural Company, and to other international customers. Sales of our alfalfa seed varieties to Sorouh and to other international customers represented a material portion of our revenue in fiscal 2016, and we expect that we will continue to extend credit in connection with future sales. Because these customers are located in foreign countries, collection efforts, were they to become necessary, could be much more difficult and expensive than pursuing similar claims in the United States. Moreover, future political and/or economic factors, as well as future unanticipated trade regulations, could negatively impact our ability to timely collect outstanding receivables from these important customers. The extension of credit to our international customers exposes us to the risk that our seed will be delivered but that we may not receive all or a portion of the payment therefor.

If these customers are unable or unwilling to fully pay for the seed they purchase on credit, our results of operations and financial condition could be materially negatively impacted. Moreover, our internal forecasts on which we make business decisions throughout the year could be severely compromised, which could, in turn, mean that we spend capital for operations, investment or otherwise that we would not have spent had we been aware that the customer would not honor its credit extension obligation.

The future demand for our non-dormant alfalfa seed varieties in Saudi Arabia is uncertain.

Historically, sales to customers in Saudi Arabia have represented a significant portion of our revenue, and one Saudi Arabia based customer still ranks among our largest two customers. The outlook for demand for our non-dormant varieties in Saudi Arabia over the next two to four years is currently uncertain because of potential regulations from the Saudi Arabian government on water usage. If there is a significant decrease in demand from our customers in Saudi Arabia, we could experience a material decline in revenue and earnings in the absence of growth in other regions and other products.

Our current reliance on the seed development and production business does not permit us to spread our business risks among different business segments, and thus a disruption in our seed production or the industry would harm us more immediately and directly than if we were more diversified.

We currently operate primarily in the alfalfa seed business, and we do not expect this to change materially in the foreseeable future, despite recent diversification efforts into hybrid sorghum and sunflower seeds. Without business line diversity, we will not be able to spread the risk of our operations. Therefore, our business opportunities, revenue and income could be more immediately and directly affected by disruptions from such things as drought and disease or widespread problems affecting the alfalfa industry, payment disruptions and customer rejection of our varieties of alfalfa seed. If there is a disruption as described above, our revenue and earnings could be reduced, and our business operations might have to be scaled back.

If we fail to introduce and commercialize new alfalfa seed varieties, we may not be able to maintain market share, and our future sales may be harmed.

The performance of our new alfalfa seed varieties may not meet our customers' expectations, or we may not be able to introduce and commercialize specific seed varieties. Reorder rates are uncertain due to several factors, many of which are beyond our control. These include changing customer preferences, which could be further complicated by competitive price pressures, our failure to develop new products to meet the evolving demands of the end users, the development of higher-demand products by our competitors and general economic conditions. The process for new products to gain market recognition and acceptance is long and has uncertainties. If we fail to introduce and commercialize a new seed variety that meets the demand of the end user, if our competitors develop products that are favored by the end users, or if we are unable to produce our existing products in sufficient quantities, our growth prospects may be materially and adversely affected, and our revenue may decline. In addition, sales of our new products could replace sales of some of our current similar products, offsetting the benefit of a successful product introduction.

The presence of GMO alfalfa in Australia or California could impact our sales.

GMO crops currently are prohibited in most of the international markets in which our proprietary seed is currently sold. There are regions in the United States, including the Pacific Northwest, where even small quantities of GMO material inadvertently interspersed with conventional (non-GMO) seed make the seed undesirable, which causes customers to look elsewhere for their alfalfa seed requirements. The greater the use of GMO seed in California and other alfalfa seed growing regions, the greater the risk that the adventitious presence of GMO material in our seed production will occur due to pollination from hay fields or other seed fields. We regularly test for the adventitious presence of GMO in our conventional seed, and we have seen a slight increase in the percentage of GMO presence in conventional seed over the past several years. Our seed containing GMO material can only be sold domestically or in other jurisdictions that permit the importation of GMO alfalfa. If we are unable to isolate our conventional seed from inadvertently being contaminated by GMO seed, we may find it more difficult to sell that seed in our key markets and we may have insufficient quantities of seed to sell internationally, either of which could materially adversely impact our revenue over time.

We have limited experience in the hybrid sorghum and sunflower markets

In May 2016, we acquired the assets and business operations of SV Genetic's hybrid sorghum and sunflower seed germplasm business in Queensland, South Australia. Having spent over 35 years focused almost exclusively on the alfalfa seed market, these are new markets for us. If we are unable to successfully draw upon the research, development and distribution expertise we have perfected in the alfalfa seed industry and apply it to the new crops into which we have recently diversified, we may not be able to attain the revenue and margins improvements we hope to achieve within our currently budgeted time frame, if at all.

The stevia market may not develop as we anticipate, and therefore our continued research and development activities with respect to stevia may never become profitable to us.

There are a number of challenges to market acceptance of stevia as a natural, non-caloric sweetener. Stevia has its own unique flavor, which can affect the taste of some foods and beverages. A common complaint about stevia is that some of its extracts and derivatives have a bitter aftertaste, and its taste does not uniformly correspond to all regional taste preferences or combine well with some food flavors. Other factors that could impact market acceptance include the price structure compared to other sugar substitutes and availability. If the high-intensity, non-caloric sweetener market declines or if stevia fails to achieve substantially greater market acceptance than it currently enjoys, we might never be able to profit from our continued research and development activities relating to stevia or any commercial applications that we derive therefrom. Even if products conform to applicable safety and quality standards, sales could be adversely affected if consumers in target markets lose confidence in the safety, efficacy and quality of stevia. Adverse publicity about stevia or stevia-based products may discourage consumers from buying products that contain stevia. Any of these developments could adversely impact the future amount of dry leaf stevia, processed stevia leaves or extract we are able to sell, which could adversely impact our results of operations.

The loss of key employees or the failure to attract qualified personnel could have a material adverse effect on our ability to run our business.

The loss of any of our current executives, key employees or key advisors, or the failure to attract, integrate, motivate and retain additional key employees, could have a material adverse effect on our business. Although we have employment agreements with our Chief Executive Officer, our Chief Financial Officer, our Chief Operating Officer, and our Chief Marketing and Technology Officer, as well as certain other employees, any employee could leave our employ at any time if he chose to do so. We do not carry "key person" insurance on the lives of any of our management team. As we develop additional capabilities, we may require more skilled personnel who must be highly skilled and have a sound understanding of our industry, business or processing requirements. Recruiting skilled personnel is highly competitive. Although to date we have been successful in recruiting and retaining qualified personnel, there can be no assurance that we will continue to attract and retain the personnel needed for our business. The failure to attract or retain qualified personnel could have a material adverse effect on our business.

We may not be able to manage expansion of our operations effectively.

We expect our operations to continue to grow in the near future, both as we expand our historical alfalfa seed business both domestically and internati