

# EVOLVING BEYOND

S&W's ACQUISITION OF  
CHROMATIN SORGHUM ASSETS



**Chromatin**  
The Sorghum Company





# FORWARD LOOKING STATEMENTS



This presentation may contain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and such forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. "Forward-looking statements" describe future expectations, plans, results, or strategies and are generally preceded by words such as "may," "future," "plan" or "planned," "will" or "should," "expected," "anticipates," "draft," "eventually" or "projected." You are cautioned that such statements are subject to a multitude of risks and uncertainties that could cause future circumstances, events, or results to differ materially from those projected in the forward-looking statements, including the risks that actual results may differ materially from those projected in the forward-looking statements as a result of various factors, and other risks identified in the Company's 10-K for the fiscal year ended June 30, 2018 and other filings made by the Company with the Securities and Exchange Commission.





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# RECAP OF GO FORWARD STRATEGY



## ► Drive trait improvement

- Leverage strong asset base, including leadership position in alfalfa, through trait improvement of all current crops
- More value per pound attributed to traits than the seed itself



## ► Create customer centric organization

- Working in conjunction with our key distributors to highlight and communicate the attributes of our alfalfa, sorghum, sunflower, and stevia varieties, to our customers



## ► Expand Sorghum and Sunflower

- Look to establish market share through organic, and possibly acquisition growth, while developing traits that will allow us to become significant players in these crops going forward.



## ► Commercialize Stevia

- Ensure that resources are allocated to drive the commercial adoption and success in the years to come.



## ► Expand crop portfolio and sales synergies

- Pursue additional crop opportunities where we can drive value by incorporating technological advances.



# OVERVIEW OF CHROMATIN



► **Chromatin is a pure play fully integrated sorghum seed company with global production and distribution capabilities, providing competitive advantages and a platform for growth**

- Diverse sorghum product portfolio
- Market leading R&D platform
- Global sales network and operating platform
- Experienced operations team

► **Estimated 5-6% U.S. market share of hybrid sorghum**

- Estimated \$350 to \$400 million hybrid sorghum market
- 5% expected CAGR over coming – outperforming overall ag market









► **Financial Highlights**

- Revenue: \$17-20 million annualized in FY 2020
- Gross Margins: 30-40%
- EBITDA: Positive EBITDA contribution in FY 2020; minimal impact to EBITDA in FY 2019



# DIVERSE SORGHUM PRODUCT OFFERING



Sorghum Type	Description	Markets
 <p><b>Grain</b></p>	<ul style="list-style-type: none"> <li>▶ Produces large quantities of grain (up to 45% of total biomass)</li> <li>▶ Sorghum grain is rich in starch (70%) and is also a valued source of protein</li> <li>▶ Stalks provide nutritional value as forage</li> <li>▶ Stalks are excellent source of carbon in crop rotation schemes</li> </ul>	<ul style="list-style-type: none"> <li>▶ Livestock feed</li> <li>▶ Brewing and distilled beverages</li> <li>▶ Biofuel</li> </ul> 
 <p><b>Forage</b></p>	<ul style="list-style-type: none"> <li>▶ High value hybrids: Optimal palatability and digestibility as animal feed using new semi-dwarf and BMR traits</li> <li>▶ Silage sorghum: 12-15' tall, thick stalked with grain up to 25% of total biomass</li> <li>▶ Sorghum-sudangrass; thin-stalked leafy grass used for grazing or baled hay</li> </ul>	<ul style="list-style-type: none"> <li>▶ Livestock feed</li> <li>▶ Dairy operations</li> <li>▶ Hay</li> <li>▶ Pasture / grazing</li> </ul> 
 <p><b>Food grade</b></p>	<ul style="list-style-type: none"> <li>▶ Superfood: rich in antioxidants, vitamins, and complex carbohydrates</li> <li>▶ Gluten-free, GMO-free</li> <li>▶ Staple source of starch and calories</li> <li>▶ 5<sup>th</sup> most consumed cereal worldwide (Source: CGIAR)</li> </ul>	<ul style="list-style-type: none"> <li>▶ Milled flour</li> <li>▶ Whole grain cereals and flakes</li> <li>▶ Beverages</li> <li>▶ Sweetener</li> </ul> 
 <p><b>Sweet</b></p>	<ul style="list-style-type: none"> <li>▶ Accumulates high concentrations of soluble sugars, much like sugarcane</li> <li>▶ Traditionally grown for the stalk to produce molasses and sweeteners</li> <li>▶ Drop-in source of sugar for ethanol in sugarcane mills</li> </ul>	<ul style="list-style-type: none"> <li>▶ Syrup (molasses and sweeteners)</li> <li>▶ Biofuel</li> <li>▶ Bio-based chemicals</li> </ul> 

- ▶ Chromatin's diverse sorghum product offering is underpinned by industry-leading R&D capabilities.
- ▶ The product offering supports multiple end markets.



# MARKET-LEADING R&D PLATFORM



## Launching Market Leading Hybrid Seed

- ▶ Chromatin's hybrid seed pipeline is tailored to specific geographies and environments, and includes
  - ▶ Grain and food types with maturity profiles suited to a wide range of latitudes
  - ▶ Grain types that tolerate key pests
  - ▶ Forage types with improved animal digestibility
- ▶ Developed system to bring hybrids to market in seven years versus ten year cycle for traditional breeding

- ▶ Chromatin has valuable herbicide tolerant traits

## Impact of Product Pipeline

- ▶ **Chromatin's pipeline includes several products that are being launched in 2019-2020**
- ▶ These products are projected to result in:
  - ▶ Improved pricing power with new Sugarcane Aphid tolerant hybrids
  - ▶ Launching high value proprietary herbicide tolerance trait <sup>(1)</sup>
  - ▶ Increase in market share

(1) Patent pending



# INNOVATION AND R&D



## World Class R&D and Testing Programs

### Molecular Genetics

- ▶ Research and development (R&D) has been the foundation of Chromatin since inception. Technology development in mutation discovery, tissue culture, and transformation
- ▶ The development of molecular markers allows the breeding team to identify and breed desirable traits, especially recessive traits, into commercial hybrids with improved efficiencies. Trait-associated molecular markers are extremely valuable for improving seed qualities and developing value-added products

### Breeding Program

- ▶ Chromatin's breeding program is led by the best breeders in the sorghum industry, capitalizing on their years of industry experience and academic research
- ▶ Efficient trait development program driven by close knit, collaborative, multi-disciplinary team comprised of breeding, molecular genetics, and greenhouse teams

### Testing Capabilities

- ▶ USDA Accredited Seed Laboratory (ASL) is one of only 24 <sup>(1)</sup> accredited seed entities in the United States and serves to differentiate it from its smaller competitors
- ▶ Extensive global field testing of hybrids and technology through in-house testing expertise and third-party network globally

- ▶ Chromatin's differentiated R&D capabilities and distinguished personnel allow it to bring superior products to market faster than competitors

(1) Source: USDA Approved Accredited Seed Entities Official Listing

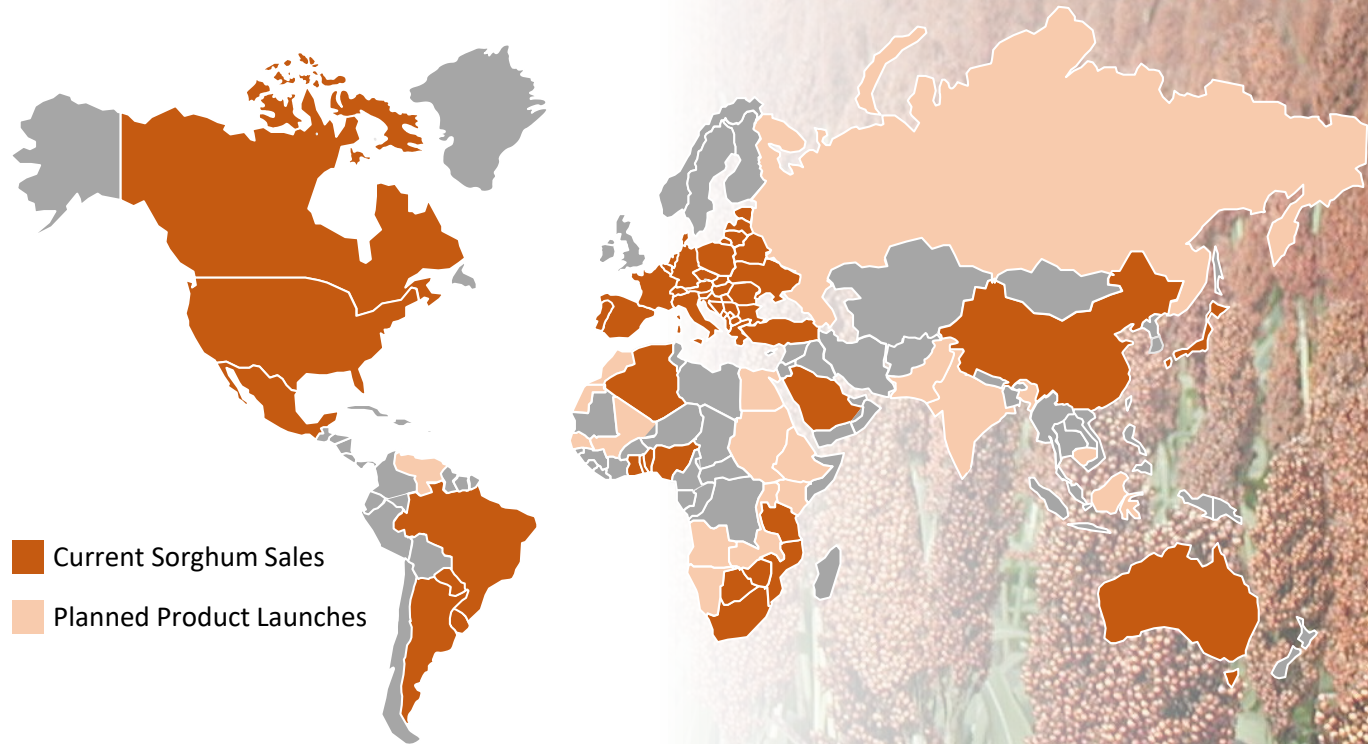


# GLOBAL SALES NETWORK



## Channels to Market

- ▶ **Domestic market brands:**
  - ▶ Chromatin-owned:
  - ▶ Unique distribution channel of approximately 500 farmer-dealers
  - ▶ Five major ag retailers covering major sorghum growing areas
  - ▶ Partner:
    - ▶ Private label customers
- ▶ **International market brands:**
  - ▶ Partner:
    - ▶ Private label customers
    - ▶ Joint venture partner brands



## Chromatin's Product Brands



## Select Partners' Product Brands





# GLOBAL OPERATING PLATFORM OVER TIME AS CHROMATIN INTEGRATED INTO S&W

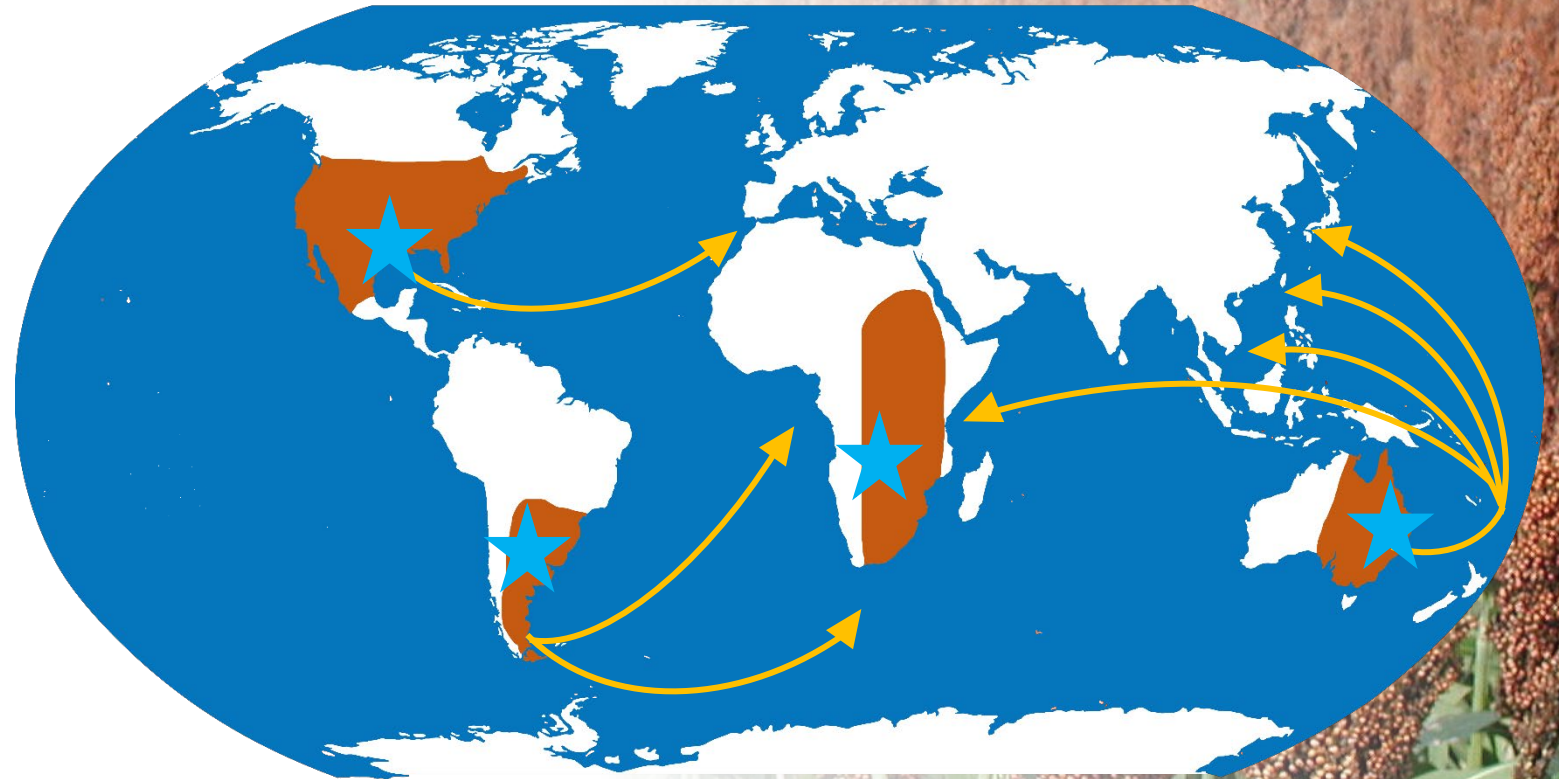


## Overview

- ▶ Chromatin and S&W have sorghum production capabilities on four continents, providing both a competitive advantage and an incredible platform for growth
- ▶ Combined companies have a unique operating footprint for global markets
- ▶ Production and testing capabilities on four continents allow combined companies to:
  - ▶ Optimize freight cost savings
  - ▶ Produce in counter-season
  - ▶ Increase customer focus and expedite time-to-market

## Production

- ▶ Field production in the Texas panhandle with seed processing in New Deal, TX



■ Production Sites ■ Regional Supply ■ Shipping Lanes

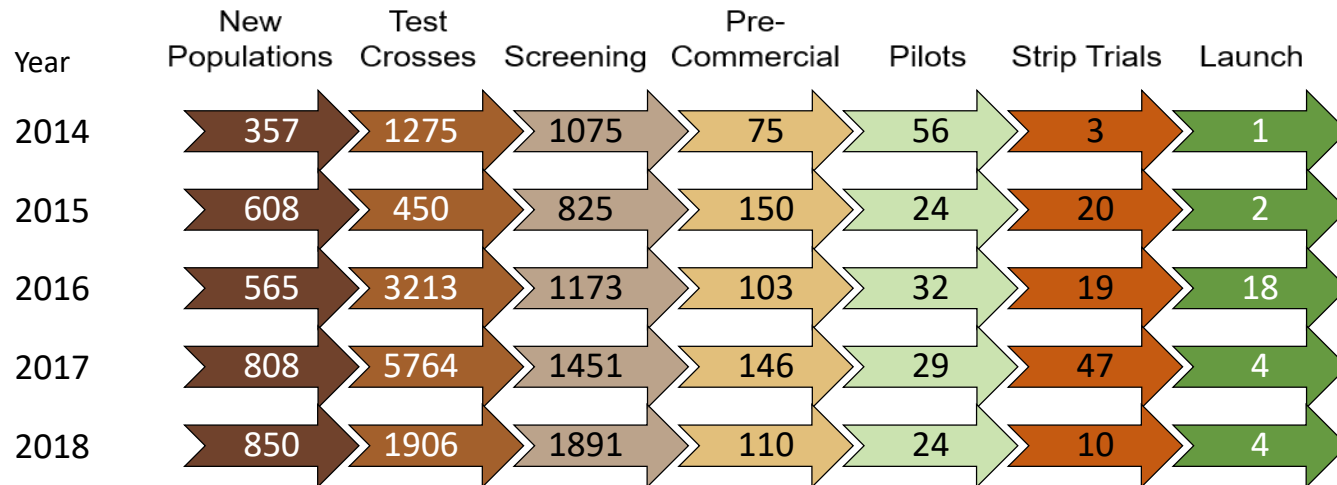


# NEW PRODUCT PIPELINE



## Extensive Product Pipeline

- ▶ Chromatin's eight years of investment in R&D has produced a mature breeding pipeline that will continue to yield high-value products over the course of the next several years
- ▶ Chromatin's breeding pipeline continues to develop new traits that protect and drive up yield
  - ▶ Pipeline supports four to eight annual product launches
  - ▶ Numerous new parent lines already developed and under development
  - ▶ Creates the ability to secure and lead market share, in both domestic and international markets



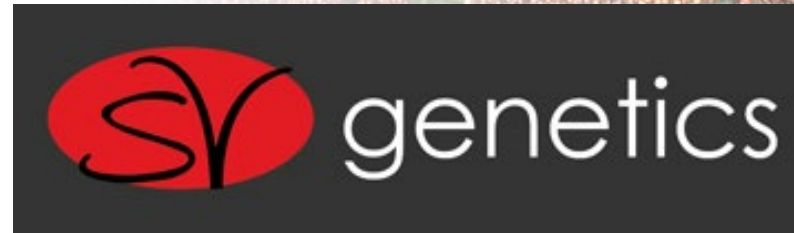
Number of items at each stage in pipeline



# INTEGRATION WITH EXISTING S&W SORGHUM PROGRAM



- ▶ S&W will leverage Chromatin's sales, production, and R&D infrastructure to accelerate its hybrid development of SVG and NexSteppe hybrids



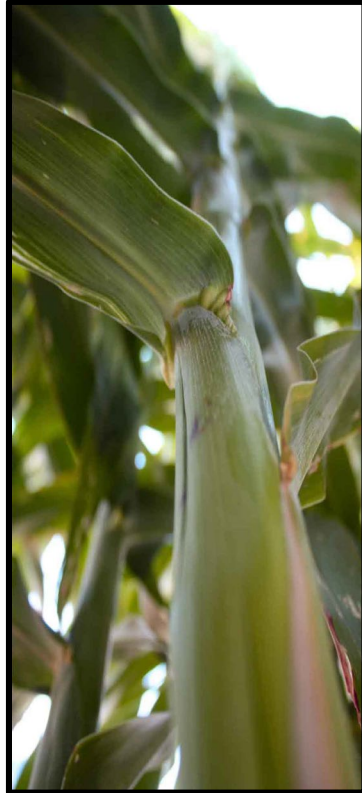


# SORGHUM ADVANTAGES



## Sorghum Facts

- ▶ The 5<sup>th</sup> most produced grain in the world (after corn, rice, wheat and barley)
- ▶ From seed to harvest in four months
- ▶ Adapted to grow on a high percent of the world's arable land, including land with limited water and salt contamination
- ▶ Produces higher yields than sugar cane and corn under limited- water conditions
- ▶ Yields can exceed 200 bushels / acre



- ▶ *More efficient use of water and nitrogen fertilizer than corn*
- ▶ *Global footprint with diversified end-use markets*
- ▶ *Efficient use of water and land resources*
- ▶ *Strong macro drivers for growth*
- ▶ *Due to limited focus from big-ag, opportunity to:*
  - ▶ *Consolidate highly fragmented seed market*
  - ▶ *Bring step changes in yield and quality through R&D investment*
- ▶ *Hybrid breeding system protects IP and enables value capture*

- ▶ Sorghum's advantageous biological and economic characteristics will support sustained market growth

### Resource Efficiency

Conserves water;  
naturally tolerant to  
heat and drought

### Environmental Impact

Adds organic material  
to soil; provides  
natural pest control

### Product Diversity

Hybrids optimized for  
food, fuel & feed, and  
across geographies

### Macro Drivers

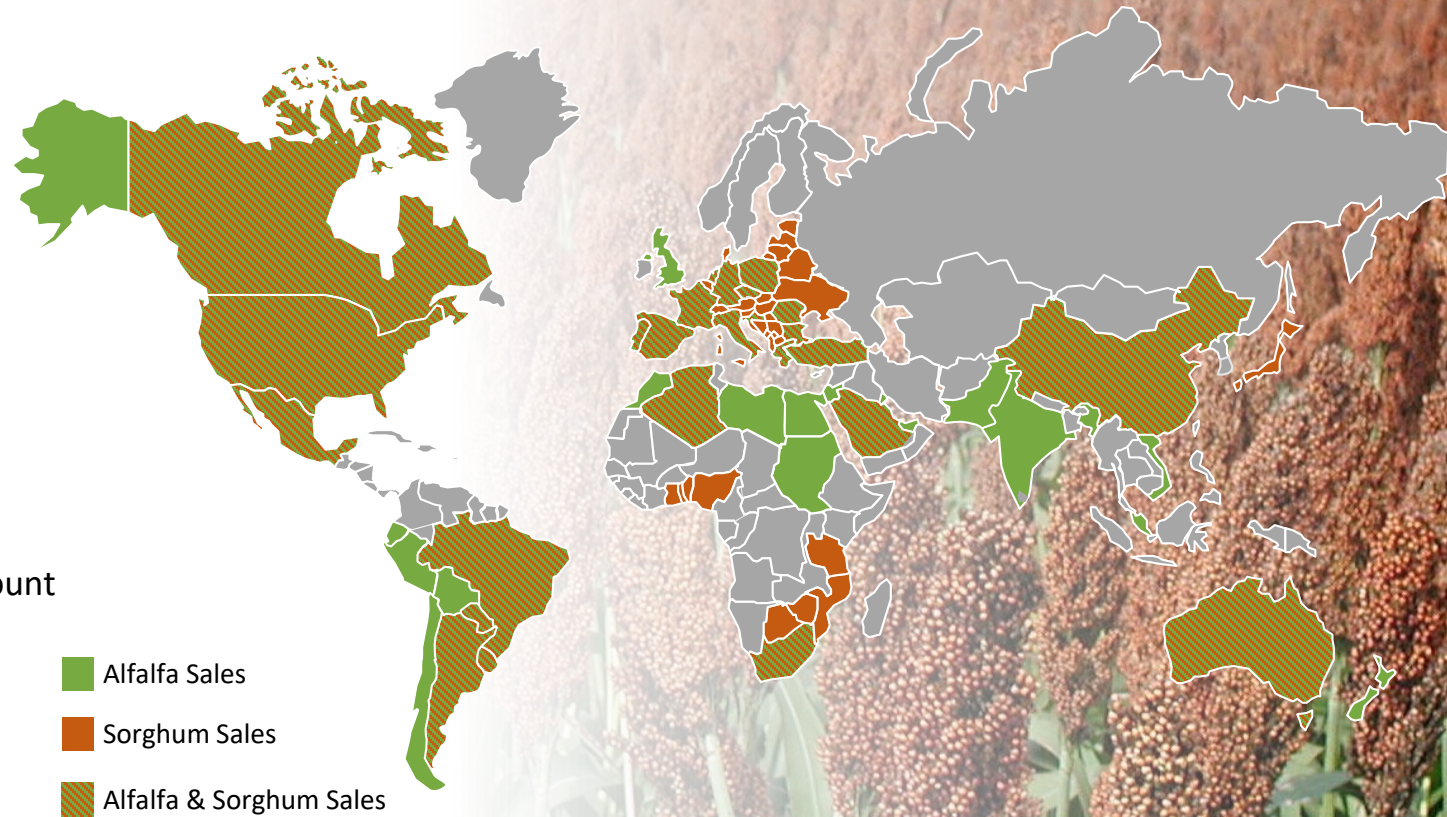
Grows well in regions  
with rising food and  
feed demand



## ► S&W Action Items to Drive Efficiencies and Growth

- Cross-selling opportunities between S&W and Chromatin sales force to expand both sorghum and alfalfa sales opportunities, as well as sunflower
- Consolidation of product offering (# of hybrids) to allow better inventory management
- Improved demand planning
- Better quality control, particularly with parent seed production and seed processing
- Consolidation of seed processing facilities
- Integration into S&W will allow rationalization of head count
- More attention to improving gross margin generation
- Development of expanded distribution strategies
- Better resourcing of the international opportunities
- Integration of breeding programs will generate improved genetic gains

## ► S&W anticipates recognizing significant cost synergies and restructuring of Chromatin operations that will transition the company to being profitable in FY 2020





# GROWTH DRIVERS



## Key Growth Drivers

### Continued Growth in Hybrid Seed Program

- ▶ Chromatin recently introduced a sugarcane aphid (“SCA”) insect-resistant trait into ~80% of its new product pipeline, which is already driving a significant market advantage in Mexico and U.S.
- ▶ In the next two years Chromatin will be testing herbicide-tolerant (“HT”) hybrid sorghum on farmers’ fields which will bolster sales growth (patent pending)

### Capitalize on Rapid Growth in Global Sorghum Adoption

- ▶ Global consumption of sorghum is expanding primarily directed at the dairy, poultry, and distilled beverage industries
- ▶ Increased use of hybrid seed technology allows brewers to use sorghum malt with more concentrated levels of desirable characteristics <sup>(1)</sup>
- ▶ Continued US sorghum adoption / crop conversion

(1) Ovvuama



# FINANCIALS



- ▶ **Revenue**
    - ▶ \$17-20 million annualized
    - ▶ \$14-15 million expected in remaining 8 months of FY 2019
  - ▶ **Gross Margins**
    - ▶ 30-40% gross margins
  - ▶ **EBITDA**
    - ▶ Positive EBITDA contribution in FY 2020
    - ▶ Minimal impact to EBITDA in FY 2019
- 
- ▶ **Purchase Price**
    - ▶ \$26.5 million in cash
  - ▶ **Funding**
    - ▶ \$5 million common stock issuance at \$3.11 per share
    - ▶ \$22.5 million 0% coupon Series A preferred stock issuance to MFP Investors; automatically converts to common stock at \$3.11 per share upon shareholder approval in November 2018
  - ▶ **Tangible Assets**
    - ▶ Approximately \$9 million in property, plant, equipment (modernized production plants and storage)
    - ▶ Approximately \$11 million in accounts receivable and inventory
    - ▶ Tangible assets of \$20 million represents approximately 75% of the \$26.5 million purchase price
  - ▶ **Intangible Assets**
    - ▶ Diverse hybrid sorghum product portfolio
    - ▶ World class R&D, breeding and testing program including molecular markers
    - ▶ Pipeline of high value traits including herbicide tolerance and Sugar Cane Aphid resistant
    - ▶ Unique domestic distribution channel including 500+ farmer-dealers
    - ▶ Product registrations across the globe
  - ▶ **Liabilities**
    - ▶ Assuming minimal liabilities



# SUMMARY



- ▶ **International distributor and product registrations**
- ▶ **Domestic farmer dealer network**
- ▶ **Worldwide production capabilities on 3 continents**
  - ▶ North America, Australia, Africa
- ▶ **Breeding program in all major sorghum segments**
  - ▶ Grain, forage, food grade, sweet
- ▶ **Technology pipeline**
  - ▶ Sugarcane Aphid
  - ▶ Herbicide resistance

