Zacks Small-Cap Research

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# S&W Seed Co. (SANW-NASDAQ)

SANW : As expected the rights issue was over-subscribed. The company raised $8.8 million.

| | |
|---|---|
| **Current Recommendation** | **BUY** |
| Prior Recommendation | Neutral |
| Date of Last Change | 07/11/2011 |
| Current Price (02/26/16) | $4.22 |
| **Target Price** | **$8.00** |

## OUTLOOK

S&W Seed is the world's largest supplier of alfalfa seeds following its acquisitions over the past few years. Potential earnings leverage include the introduction of Round-Up Ready alfalfa seeds and new non-GMO herbicide resistance varieties, the expansion of the marketing of dormant varieties into a wider geographical area in the USA and the production of stevia plants and seeds based on the company's ongoing research. The replacement of commodity seeds by proprietary varieties is an ongoing market strategy. The company has several patent application for stevia plants.

## SUMMARY DATA

| | |
|---|---|
| **52-Week High** | **$5.27** |
| **52-Week Low** | **$4.08** |
| **One-Year Return (%)** | **-12.2** |
| **Beta** | **-0.5** |
| **Average Daily Volume (sh)** | **42,696** |
| **Shares Outstanding (mil)** | **14.7** |
| **Market Capitalization ($mil)** | **$61** |
| **Short Interest Ratio (days)** | **22.8** |
| **Institutional Ownership (%)** | **41.1** |
| **Insider Ownership (%)** | **9.5** |
| **Annual Cash Dividend** | **$0.0** |
| **Dividend Yield (%)** | **N/M** |
| **5-Yr. Historical Growth Rates** | |
| **Sales (%)** | **90.3** |
| **Earnings Per Share (%)** | **N/A** |
| **Dividend (%)** | **N/M** |
| **P/E using TTM EPS** | **N/M** |
| **P/E using 2016 Estimate** | **N/M** |
| **P/E using 2017 Estimate** | **N/M** |

| | |
|---|---|
| **Risk Level** | **Average,** |
| **Type of Stock** | **Small-Blend** |
| **Industry** | **Agri. Ops.** |

## ZACKS ESTIMATES

**Revenue**
(in millions of $)

| | Q1 (Sep) | Q2 (Dec) | Q3 (Mar) | Q4 (Jun) | Year (Jun) |
|---|---|---|---|---|---|
| **2014** | **$12.4A** | **$11.5A** | **$8.1A** | **$19.6A** | **$51.5A** |
| **2015** | **$8.2A** | **$13.8A** | **$30.5A** | **$28.7A** | **$81.2A** |
| **2016** | **$12.3A** | **$24.1A** | **$24.0E** | **$36.0E** | **$96.4E** |
| **2017** | **$13.0E** | **$28.0E** | **$28.0E** | **$42.0E** | **$111.0E** |

**Earnings per Share**
(EPS data for 2009 and 2010 do not add due to accounting changes)

| | Q1 (Sep) | Q2 (Dec) | Q3 (Mar) | Q4 (Jun) | Year (Jun) |
|---|---|---|---|---|---|
| **2014** | **$0.00A** | **$0.01A** | **-$0.03A** | **$0.05A** | **$0.03A** |
| **2015** | **-$0.08A** | **-$0.03A** | **-$0.04A** | **-$0.02A** | **-$0.15A** |
| **2016** | **-$0.14A** | **$0.10A** | **-$0.03E** | **$0.10E** | **$0.04E** |
| **2017** | **-$0.08E** | **$0.02E** | **$0.03E** | **$0.15E** | **$0.10E** |

Zacks estimated 5 year CAGR EPS % **35**

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## RECENT NEWS

The recent rights and stock offering were taken down and the company raised $8.8 million gross. The company issued 2.125 million new shares, slightly less than the 2.5 million we had expected. The new share count is 16.813666 million shares outstanding. We presume part of this cash will be used to buy back some of the 8% convertible debentures.

Second quarter revenue was far higher than our forecast because DuPont/Pioneer Seed had requested that seed be delivered in December 2015 rather than January 2016 and S&W Seed was able to do this. Since the guidance for the full year was not changed we have adjusted the third quarter to reflect the change.

The company has made two moves that will significantly impact revenue and margins going forward. Significant increases in available acreage, amounting to at least a 45% gain from 2015 calendar levels to generate more seed for Pioneer and an overall companywide increase of 15%, will allow S&W Seed to expand into more markets where it has been limited in the past. Much of this new acreage will be available in the third quarter of fiscal 2016. S&W Seed has also ended many contracts the company absorbed the farmer and yield risk and all contracts are now based on straight purchase of seeds. This should have a marked increase in gross margins in future years, possibly as much as 3% or 4% additional margin.

In the second quarter inventories peaked and the company has had to purchase and blend seed to fill existing contracts. Prices have increased in many markets, more so at the lower end. The spread between commodity and special varieties has narrowed making the more productive varieties sold by S&W Seed more attractive to the farmer.

Gross margins year to year increased from14.2% to 16.1% and were 0.5% above first quarter levels. As more of the seed grown in Australia (currently being harvested) is sold in the third quarter gross margins should improve again. The harvest last year in Australia was significantly below average but hopefully this year will be back to normal. This could amount to an increase in availability of seed of over 40% or more.

The company expects to file another stevia patent application this year but significant income from stevia is unlikely in 2016 and 2017.

On a comparable basis operating income before impairment charges improved form a loss a year ago of $1.5 million to a profit of $0.2 million. However, many non-cash charges related to the amortization of the debt discount and derivative warrant liabilities had a significant impact on pretax income in Q2, resulting in a pretax loss in the quarter. The company has changed its accounting for taxes, resulting in a tax credit of $1.53 million in the quarter. There may be some more benefits in Q3.

| | 1Q12 | 2Q12 | 3Q12 | 4Q12 | 1Q13 | 2Q13 | 3Q13 | 4Q13 | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 1Q16 | 2Q16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alfalfa seed revenue | $5.89 | $4.07 | $2.53 | $0.77 | $11.23 | $13.69 | $4.21 | $12.72 | $12.38 | $11.46 | $8.13 | $19.56 | $8.16 | $13.79 | $30.53 | $28.72 | $12.25 | $24.14 |
| Other revenue | $0.23 | $0.65 | $0.02 | -$0.01 | $0.89 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| | | | | | | | | | | | | | | | | | | |
| Gross margins | 28.6% | 32.2% | 31.4% | 14.6% | 14.1% | 13.8% | -34.9% | 18.9% | 18.6% | 20.7% | 20.3% | 18.6% | 16.1% | 14.2% | 23.3% | 21.6% | 16.1% | 16.7% |
| | | | | | | | | | | | | | | | | | | |
| Pretax income | $0.88 | $0.61 | $0.06 | ($0.96) | $0.49 | $0.25 | ($2.98) | ($1.28) | $0.06 | $0.20 | ($0.69) | $0.89 | ($1.31) | ($2.29) | ($0.22) | ($0.19) | ($3.12) | ($0.17) |
| Net income | $0.52 | $0.44 | $0.02 | ($0.61) | $0.30 | $0.15 | ($0.07) | ($0.88) | $0.04 | $0.11 | ($0.40) | $0.62 | ($0.87) | ($1.55) | $2.63 | ($0.27) | ($1.88) | $1.36 |
| | | | | | | | | | | | | | | | | | | |
| EPS | $0.09 | $0.08 | $0.00 | ($0.10) | $0.04 | $0.05 | ($0.07) | ($0.05) | $0.00 | $0.01 | ($0.03) | $0.05 | ($0.08) | ($0.03) | ($0.04) | ($0.02) | ($0.14) | $0.10 |
| Million # seed sold | 1.60 | 1.05 | 0.65 | 0.13 | 1.491 | 2.9 | 0.85 | 3.9 | 3.5 | N/A | | | | | | | | |
| ASP | $3.48 | $3.58 | $3.76 | $3.84 | $3.89 | $4.68 | $4.95 | $3.26 | $3.54 | N/A | | | | | | | | |

S&W Seed is in the process of distributing non-transferable subscription rights to buy shares of stock for $4.15. The subscription rights may be exercised from today until 5:00 pm, EST February 22, 2016, unless the company decides to extend the period. At the same time S&W Seed will sell 576,923 shares of stock for a total number of 2.5 million shares and $10.375 million. Since two major shareholders, MFP Partners, L.P. and Mr. M. Harvey, Chairman of the Board of SANW have stated they will participate to the fullest in the offering we are assuming the full amount of stock will be sold.

The company has filed its third patent application for a stevia plant derivative. This variety, SW 129, is aimed at commercial use because of its high Reb-A content. SW129 produces leaves with high levels of desired glycosides without the bitterness and aftertaste that is common in current plants grown in India and Asia. This variety has almost twice the Reb-A content and nearly five times the ratio of Reb-A to stevioside than normal. This variety is a vigorous plant that winters well, is late flowering and produces an abundance of leaves. The yield is over 2,500 pounds of leaf per acre for each crop. SW129 was harvested twice a year but many commercial growers crop three to four times a year. This variety would be ideal for planting in moderate climates such as the North Western United States or central Europe.

The time between filing for and the granting of a patent varies but is often about 12 months after the receipt of the application by the patent office.

The use of stevia in soft drinks has resulted in many companies such as Coca-Cola (KO, NYSE, $43.20), Cargill, and PepsiCo (PEP, NYSE $100.67) in filing for patents on modified glycosides, including Reb-M for example, that reduce the bitter aftertaste but there are few companies other than S&W Seed that are working on developing plant varieties that optimize the desired amount of the best artificial sweetener.

S&W Seed has announced it has closed a private placement of 1.180722 million shares for about $4.9 million with a private investment fund controlled by a member of its board and existing large shareholder, Michael F. Price.

The company expects to use the proceeds to pay down part of the 8% Convertible Debentures, of which the current portion was $9.6 million after applying the debt discount as of the end of the first fiscal quarter. This would save about $.02 a share a quarter in reduced interest expense.

The company also intends to distribute a rights offering in early 2016. This will give existing shareholders the right to buy equity at $4.15 a share and is expected to raise $10.4 million. This equates to an additional 2.5 million shares if there is full participation. We would expect some existing shareholders to short their stock against the rights offering.

Second quarter earnings were announced on November 12, 2015 followed up by the conference call. Revenue exceeded our estimates. Demand exceeded the inventory of S&W Seed's proprietary seed and the company was able to blend other non-dormant seeds to meet the demand. This increased revenue but reduced gross margins below our estimates. Pretax income was in line with our estimates, as shown below. The revenue, and loss, was from USA operations so the tax impact was greater than expected (40% effective tax rate). All-in-all this was a very good quarter.

As expected net inventories and account payable increased substantially. Cash also increased from $3.5 million to $8.4 million despite paying down debt and lines of credit. As the convertible debt is paid off the interest expense will decline.

Including the three major areas of cultivation it is not unusual for one, or even two, areas to have decline in yields. This may be due to lack of water at certain times, low levels of pollination or other environmental factors. Using a 30 year average yield per acre S&W Seed thinks that yields are down, possibly as much as 20%, in all three areas. This is causing price increases, especially at the lower end of the price structure, as farmers scramble for seed to meet their forage requirements.

| Revenue by Country: | 2013A | 1Q14 | 2Q14 | 3Q14 | 4Q14 | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 1Q16 |
|---|---|---|---|---|---|---|---|---|---|---|
| As reported | | | | | | | | | | |
| Saudi Arabia | $17.67 | $4.24 | $1.19 | $1.83 | $5.76 | $2.44 | $4.70 | $1.86 | $12.65 | $3.69 |
| United States | $8.95 | $1.69 | $2.98 | $1.71 | $3.17 | $1.03 | $1.80 | $23.58 | $6.73 | $1.95 |
| Libya | $3.13 | $1.13 | $1.69 | $0.98 | $1.54 | $0.00 | $0.00 | $0.17 | $2.83 | $0.00 |
| Australia | $0.60 | $1.26 | $0.05 | $0.03 | $3.20 | $0.63 | $1.87 | $0.30 | ($0.71) | $0.78 |
| Argentina | $0.00 | $0.00 | $0.40 | $0.41 | $0.00 | $0.13 | $0.68 | $0.52 | $1.59 | $0.59 |
| Germany | $0.00 | $0.10 | $0.10 | $0.49 | $0.00 | $0.16 | $0.49 | $1.30 | $0.08 | $0.40 |
| France | $0.36 | $0.01 | $0.00 | $0.57 | $0.92 | $0.41 | $0.39 | $0.32 | $0.61 | $0.00 |
| Mexico | $0.00 | $1.09 | $1.41 | $0.52 | ($3.02) | $2.00 | $1.28 | $0.79 | $0.84 | $1.54 |
| Other inc. Sudan | $6.63 | $2.87 | $3.75 | $1.60 | $9.38 | $1.36 | $0.00 | $2.59 | $1.69 | $3.31 |
| | $37.34 | $12.38 | $11.56 | $8.13 | $19.46 | $8.16 | $13.79 | $30.53 | $28.72 | $12.26 |

The company expects to increase its acreage by 8% over the next year. This is comprised of an 18% increase in owned acres in dormant varieties and a 6% increase in acres for non-dormant varieties. As yields move back to the 30 year averages (as they always do over time) in one or two areas we expect revenue growth in excess of 10%.

S&W Seed's Round-ready alfalfa is currently being harvested. This crop will be checked to ensure that the gene insertion has been achieved and future generations will reproduce the traits. The company is selling Roundup-Ready seeds produced through the Pioneer acquisition and expects to add its own proprietary products for sale next year.

The data for the third stevia patent is complete and data for a fourth patent is being worked on. The first plant patent should be granted in about a year, at which time S&W Seed will finalize its strategy for development of stevia and generation of revenue.

At this time there are three companies in the Stevia market. Two of these are not profitable and Stevia Corp. and Stevia First have minimal revenue with substantial losses. However, Sunwin Stevia is profitable and expects $25 million in Stevia extract sales with a 24% gross margin in the coming year. Sunwin's market cap is $25 million, or one time future revenue. Since SANW's price to sales is 0.76 times we would expect an improvement in valuation as stevia revenue materializes.

On Sept. 23, 2015 the company announced that it has negotiated a new line of credit for $20 million with KeyBank National Association to replace the current line with the Export-Import Bank. The new line has a variable rate based on short term market rates. This will save about 75 basis points from the prior loan rate. It is backed by eligible accounts receivable and inventory. The commitment extends through Sept. 22, 2017. Lines of credit are used when current cash accounts do not cover other working capital requirements and it is not possible for us to calculate how much would be needed. At the end of fiscal 2015 accounts receivable and inventory totaled $52 million, accounts payable was $15 million and cash was $3.5 million.

S&W Seed has completed the building of a new seed packaging facility in Keith, South Australia. This facility is expected meet the needs of expanding seed production in Australia at a lower cost than current facilities.

O**n** Sept. 16, 2015 S&W Seed announced its fourth quarter and full year 2015 results. Revenue and gross margins were very close to our published forecasts. However, operating expenses and other expenses, together with a negative tax rate, were much higher than expected, resulting in a reported loss rather than a profit. Most of the increases in expenses were due to the addition of the Pioneer alfalfa operations, including acquisition expenses, plus foreign currency losses and the amortization of the debt discount. Overall non-GAAP Adjusted EBITDA increased dramatically, from $1.6 million a year ago to $3.0 million in 4Q15. For the full fiscal year non-GAAP EBITDA doubled as compared to a year ago. Non-GAAP earnings were $0.05 a share and GAAP losses were $0.02 a share.

The Australian bumper alfalfa crop of two years ago has now been absorbed and inventories of lower priced seeds are very low. The net result is that the spread between higher priced proprietary seeds and lower priced seeds has narrowed. Last year was an average crop and this

year has been well below average. S&W Seed expected seed production to be in the order of 8 million pounds but actual production will be closer to 6 million. The shortfall should be made up by selling seed from US inventory plus higher prices.

The net result will be a drop in volume offsetting an increase in selling prices. The company is forecasting 2016 revenue at $95 million, as compared to our estimate of $96 million.

S&W Seed expects to file another patent on a stevia derivative this year. Down the road we would expect some royalty income from licensing the patented varieties.

Now that we have a better picture of the seasonal fluctuations in revenue (remember that winter in N. America is summer in Australia) we have adjusted our revenue and earnings forecasts. The 1Q16 had been reduced, since it will comprise of N. California sales (currently being harvested) and both the 3Q16 and 4Q16 have been increased. The net result is a slight increase for annual revenue in our 2016 forecast.

The original purchase agreement of Pioneer Hi-Breed's alfalfa operations included cash transfers of $4 million in 4Q15 (April 2015), $13 million in November 2015 (2Q16), $13 million in January 2016 (3Q16) and $14 million in April 2016 (4Q16). The payment due in 2Q16 will now be received in September 2015 (1Q16). This will have a positive impact on cash flow at a time that S&W Seed will be building inventory for sale later this year.

S&W Seed and Calyxt announced on June 09, 2015 that they will research and develop new varieties of alfalfa based on S&W Seed's products and Calyxt's proprietary gene editing technology. Genome editing technology has been applied to plants, especially wheat and rice, and Calyxt has produced gluten reduced wheat and canola oil with lower saturated fatty acid content as well as a non GM variety of soybean that has reduced levels of linoleic acid, which produces trans fat when soybean oil is treated for human consumption. Calyxt will produce the modified seeds and the two companies will commercialize products through their own distribution channels. Under current regulations the products would not be considered as GMO since no gene insertion occurs.

On May 14, 2015 S&W Seed reported its third quarter results, the first quarter after acquiring the Pioneer alfalfa operations. Earnings were impacted by over $3 million of non cash charges resulting from the acquisition. Without these the company would have earned $0.20 a share. Some of these charges will continue, in lesser amounts, through 2016 and into 2017.
March was stronger than expected by management which pulled revenue above the company's guidance. This may have borrowed from the fourth quarter since some shortages of seeds occurred in the USA and Arabia but we expect the 4Q15 results to be close to those of the 3Q15. Margin expansion due to the Pioneer business was met by better pricing abroad and margins from the legacy business was close to that of the seed sold through Pioneer. We expect some margin decline from the 3Q15 to the 4Q15 for US sales offset by the much higher margins from the Australian business that is being harvested now.

Currently there is no problem due to the extreme drought conditions in California. Seed from the San Joaquin Valley is primarily purchased under contract from farmers that have access to water and Imperial Valley acres are watered with Colorado River water purchased under contract.

The company is expanding its acres owned and under contract. Some, in the NW USA, will be planted with dormant seed and the Australian operations are acquiring property in NSW and Victoria for growing non-dormant varieties. The Australian additions have been used to grow cotton (an annual crop that requires a fair amount of water) and this should produce a good yield per acre.

Round-Up resistant seeds have been planted and sales should occur in 2016.

New greenhouses are being built for the germination and growing of Stevia plants. A third patent will be applied for this year. Plants will be sold to growers and there may be some sales in late fiscal 2016.

S&W Seed has begun the development of alfalfa varieties that combine the best characteristics of the best selling Pioneer seeds with those of certain S&W Seed varieties. This is to improve such things as yield, drought and heat resistance. The result will be to expand the geographical coverage (increase available market) of the dormant alfalfa varieties. This is a long term effort that will have a long lasting effect on the markets.

The company has filed a 8-K with the SEC regarding the impact of the 8% Senior Secured Convertible Debentures and the warrants on the number of shares outstanding. The NASDAQ requires such a filing if the full conversion would result in the increase of more than 20% in common stock outstanding.

During the second quarter demand in the Middle East was very strong as inventory levels declined from the high levels caused by record crops in Australia. More normal crop levels and increased demand had a positive impact on prices, with some commodity type seeds increasing in price by over 25%. At this time world wide inventory levels of proprietary seeds is low and there is very little inventory of low end seeds. In the Middle East inventory has been depleted. This has pulled some expected revenue from the fourth quarter into the third quarter.

The addition of the Pioneer dormant stable of products is having a beneficial side effect on order inquiries from S&W Seed's traditional market. The company can now offer a customer a full range of seeds in both the dormant and non-dormant markets. Customers can make the company a "one stop shop" for all types of alfalfa seeds. The company will have to increase its available acreage to fill potential orders from Canada and the State of Washington.

S&W Seed is now preparing acreage for the production of Round-Up tolerant GMO seeds. This will result in seeds for sale in the 2016 fiscal year.

The company now has an exclusive distributer in China. A container of seeds is being shipped but the dock slowdown on the West Coast is delaying some shipments. The tropical alfalfa variety currently being tested is generating significant interest.

The second half of fiscal 2015 and all of 2016 will carry a heavy burden of both cash and non cash interest expense due to the convertible stock issued for the acquisition. However, since the convertible can be redeemed at the company's option, if the stock price exceeds $5 a share there may be significant conversion of the debt into equity, thereby reducing interest expense but increasing shares outstanding.

On Jan. 26, 2015 the company announced the sale of two properties in California for an aggregate of $7.3 million, the pay down of a mortgage of $2.3 million and the redemption of $5 million of the recently issued convertible debenture. We would anticipate further redemptions from cash flow in fiscal 2016. The two properties sold were 759 acres in Calipatria in the Imperial Valley and 30 acres of farmland in Five Points, near to the company's HQ. The property in the Imperial Valley will continue to produce S&W Seed's proprietary alfalfa seed under contract. The Central Valley property was not under cultivation at this time.

The redemption of the debentures will have a double impact on the income statement. It will save about $0.125 million in interest cost per quarter and will reduce the potential dilution when the company reports a profit. The sales will result in a charge to earnings from work in progress of $0.5 million in Q2 and $0.126 million profit on the 30 acres in Q3.

S&W Seed has announced the appointment of Dr. Mark Smith to the position of Director of Breeding and Genetics. Dr. Smith will have primary responsibility for continued R&D on the dormant alfalfa varieties acquired from Pioneer Du Pont and will be working with S&W Seed's integrated R&D group on further research on non dormant varieties as well as the development of GMO varieties.

Previously S&W Seed had announced the appointments of Kirk Rolfs as VP of production and Robin Newell as VP of N. American Sales.

Mr. Rolfs will be responsible for relationships and contracts with S&W Seed's growers as well as management of the newly acquired seed processing facility in Nampa, Idaho. His career includes management of Pioneer's non-dormant seed production in the San Joaquin Valley as well as Quality Supply Logistics as well as world-wide distribution planning and Supply and Demand Planning.

Primary responsibility for N. American Sales will lie with Mr. Newell which will include distribution relationships with DuPont Pioneer. The development of private label business relationships for dormant varieties will also be part of his responsibilities.

On January 8, 2014 S&W Seed held a conference call to discuss the purchase of Pioneer DuPont's alfalfa operations.

S&W Seed will receive a prepayment for the delivery of seed to Pioneer for resale. It has, in fact been paid $22 million for seed that will be sold, on an accounting basis, later this year and will receive another $4 million in April, 2015. Sales under the agreement will be recorded as $16.9 million in the third fiscal quarter and $9.1 million in the fourth quarter. The deal includes a provision for a 4% a year price appreciation of the seeds sold to Pioneer.

In the 2016 fiscal year the company will record sales of $26 million in Q3 and $14 million in Q4 but will receive $13 million in cash in November 2015 (Q2), $13 million in January 2016 (Q3) and $14 million in April 2016 (Q4). These cash payments will be sufficient to cover working capital requirements such as payments to growers.

The deal is of great benefit to S&W Seed. The dormant seed varieties developed by Pioneer have a high yield as compared to most of the competitive alfalfa varieties. The current market is for the "snow belt" from NY State, through Canada and the upper Midwest, into Alberta and back down to Montana and Idaho. This is a large potential market. The company stated that 80% of the US market is for dormant alfalfa and Pioneer is the largest company in that market. We estimate that S&W Seed will have access to well over 10,000 acres of contracted farmland for growing dormant seed varieties.

Pioneer has been selling GMO alfalfa for about three years. S&W will continue to grow these plants but will not acquire the rights to the varieties for a couple of years.

The acquisition will enable S&W to grow seeds for overseas markets such as China, where it already has established a presence. It can also sell its own varieties through the Pioneer sales organization to its own customers if they wish to do business that way.

To pay for the Du Pont Pioneer acquisition S&W has raised $31.7 million through a combination of convertible debt with warrants and the sale of stock. The increase in shares, assuming the convertible is converted to common stock, is in line with our assumptions and our estimates have not been changed.

The company will sell 1.294 million shares to MFP Partners LP at $3.60 for $4.66 million. These shares will be registered.

Up to $27 million of senior secured convertible debentures will be sold in a private placement to accredited investors. These will have a coupon of 8% a year paid monthly and will mature after 35 months. The interest can be paid in common stock or cash at the option of S&W Seed. The

conversion price is $5 a share. Starting on July 01, 2015 the debentures can be redeemed in stock or in cash.

The sale of the debentures will include up to 2.7 million warrants. The debentures and warrants have not been registered. The warrants strike price is also $5 a share.

S&W Seed announced on December 19, 2014 that it will acquire the alfalfa operations of Du Pont Pioneer. We assume that this is the result of the resumption of the talks that ended in October, 2014. The stock reacted strongly to the news in after-market trading and closed up 25% for the day.

S&W Seed will purchase all of Pioneer's non-GMO alfalfa operations, assets and research facilities. This includes 31 current employees. The cost is $27 million in cash on signing, a $10 million promissory note at 3% interest and $5 million earn-out payable in 3 years. The company will also buy the GMO alfalfa germplasm developed for extending their sales, these apart from those developed by S&W Seed for its varieties, subject to certain (not specified) conditions for $7 million at the end of 2017.

The deal includes over 15 seed varieties on the market that generate about $40 million a year in revenue. There are over 60 varieties in development. A seed cleaning and production facility in Idaho is included, which means that S&W Seed now has access to three seed cleaning facilities. There are research facilities in Wisconsin.

Du Pont Pioneer will continue to sell alfalfa seeds through its own sales representatives but they will now be produced by S&W Seed under a ten year exclusive arrangement. It is possible that S&W Seed can leverage its own varieties by selling those to Pioneer

We do not know how Pioneer obtained its seed. It is probably through contract growers since no land is included in the deal. Some of the seed varieties may thrive in either the Sam Joaquin or the Imperial valleys, which could well leverage earnings in the future.

On December 11, 2014 S&W Seed announced changes to the Board of Directors with Mark Harvey becoming Chairman and Mark Wong joining the board. Mark Harvey was one of the founding members of Seed Genetics International of S. Australia before it was acquired by S&W Seed in April 2013 and he became a member of the Board of Directors of S&W Seed. He has had many years of experience in managing an international seed business. Mr. Wong is described as having many years of experience in agribusinesses with an emphasis in the development of engineered proteins and seed development. He is also well versed in the financial side of mergers and acquisitions.

S&W Seed announced on Dec. 09, 2014 that it has filed for a patent on a stevia variety, SW201. This is the second filing for a stevia variety by the company. The leaf of this variety has an

improved taste profile as compared to traditional varieties. Fresh or dry leaves can be used to sweeten beverages or to be added, like herbs, whilst cooking. SW201 can also be grown in home gardens.

Stevia leaf is sold in health food stores as well grocery stores and through the internet. The overall stevia sweetener market is worth about $550 million (Zacks estimate for 2015) but there is no market data for the sales of leaf or plants.

On December 08, S&W Seed announced that Grover Wickersham would step down from the post of Chairman of the Board prior to year end 2014 but would remain a Director of the company.

Mr. Wickersham founded S&W Seed as it is today after he acquired the partnership that had owned it. Following the building of the current senior management he took the company public in May of 2010. Since that time S&W Seed has become the largest producer of non-dormant alfalfa seed in the world. He has also played a significant role in the development of high yield stevia plants. Grover continues to be a major stockholder in the company.

In early September, 2014 S&W Seed provided an update on its progress with stevia. It was in the progress of compiling data and preparing for patent applications (please note the plural) for stevia varieties (plural again) with improved flavor profiles. Today the company announced that it has filed for one stevia plant variety known as SW107. This suggests that more patents will be filed in other varieties. SW107 has an improved aftertaste profile which is important when stevia is used in cooking. SW107 is a more vigorous plant, has more leaves than the usual varieties and the leaves have a higher concentration of Reb-A, which is the primary sweetener currently used. The ratio of Reb-A to stevioside concentration is more than double the ratio found in current plants. The plant better withstands cold weather than does the type of plants grown in China.

The first major market for stevia was Japan and this encouraged the famers in China to expand crop production close to the market. The US is now a major, if not the largest, market for the purified glycoside and SW107 has been optimized for growing in North and South America, that is closer to the market. In field trials in the western United States SW107 produced about 40% more leaves than samples from large production facilities.

S&W Seed announced on Nov. 20, 2014 that it has made its first sale to a distributor in the Republic of Turkey. This follows the announcement earlier this year of expanding into Argentina. The company is likely to expand the number of distributors in Turkey as part of its strategy of geographical diversification.

The initial sales will be of seed varieties already registered in Turkey by Seed Genetics and are sourced from S. Australia. The current market in Turkey is fragmented and consists of lower

quality seeds (lower priced). Seeds sourced from Australia have a lower cost basis than seeds from California.

The estimated market is about $12 million with the current sales mix. However, there is a significant opportunity for S&W Seed to introduce higher yield varieties at higher prices once its presence is established.

On Nov. 1, 2014 S&W Seed Co. announced its first fiscal quarter of 2015. Revenue was slightly higher than guidance and net income was in line with our estimate. Second quarter revenue guidance is $12 million. In our opinion the company will fall short of the 10% increase in annual revenue that has been projected due to seed usually sold in Argentina being diverted to Saudi Arabia.

The glut of lower priced seed due to the record harvest in Australia last year is working its way through the system. Prices are improving for seed grown in Southern Australia, increasing from $4.00 a kilo to $4.40 a kilo over the past few weeks. However, the excess seed in the market will impact the second quarter as farmers buy the cheaper seeds still available.

The second half of the year should be better, more in line with prior years, as seed from California is sold into the market. Instead of producing seed some farmers are feeding the alfalfa to cattle as the hay price is still high in the western States and about 6,000 acres has been taken out of seed production. There is very little seed available for sale in Canada at this time.

The company will use about 200 acres to grow Round-Up resistant alfalfa seeds and should have seeds for sale in about a year from now (November 2015)

Stevia patents may be extended to other parts of the world depending on where the plants are grown but meaningful revenue from stevia is unlikely for about two years.

A few years ago when alfalfa seeds were being dumped onto the Saudi market S&W Seed withdrew from the market until conditions stabilized. With some seeds currently being sold at less than cost we would expect the company to mirror its previous actions. California produced seeds are selling well in markets outside of the Middle East.

The plant patents on the Stevia plants should be filed before the end of the calendar year. These plants should have a better flavor profile (there are many flavor components in the leaf and not all plants have a desired flavor) as well as a higher concentration of Reb. A.

The company announced on September 25, 2014 that it has entered into a distribution agreement with Maxim International (Private) Limited for Maxim to be the exclusive distributor of

all of S&W's elite alfalfa seeds in Pakistan. Maxim is one of the largest provider of farm products in Pakistan, selling directly to more than 2,000 farms and to over 2,000 distribution partners. The country has a fast growing beef and milk production industry and the current alfalfa market is predominantly commodity uncertified (growing low quality forage) seed. S&W has a long history of stable relationships with significant distributors, especially in the Middle East.

S&W Seed has announced Sept. 10, 2014 that it will form a fifty-fifty joint venture with Bioceres S.A. in Argentina to develop and sell GMO and proprietary alfalfa seeds in Argentina. At this time there are no sales of GMO alfalfa in Argentina. Bioceres is similar to a farmers coop with over 270 shareholders, most of whom are farmers, that plant nearly 2.5 million hectares. (about 6 million acres) in Latin America. Currently the members are not growing or marketing alfalfa through Bioceres and the JV is a means whereby the farmers can buy seeds with consistent characteristics for yield and dormancy. S&W Seed has not sold its California grown seeds in Argentina. The JV will be a vehicle for S&W Seed to penetrate the Latin American market, mainly Argentina. S&W Seed will sell to the JV and the members will buy from the JV. S&W Seed has a number of brands already registered in Argentina. It will be possible for Bioceres members to buy seeds from the JV as long as they are registered varieties. Bioceres is actively working on modifying plant structure to adapt plants for abiotic changes (changes that affect plants apart from biological changes) that include drought tolerance, salt tolerance, extreme changes in temperature or wind conditions, acidity (pH) changes, and even tolerance to rapid moisture changes that can effect seeds during germination. Bioceres has developed modified root structures on legumes so that the plant develops longer roots. Bioceres is working on incorporating genes derived from sunflowers and has already inserted these into wheat seeds. Many of these plant modifications are similar to those developed over the years by S&W Seed using its own genetic selection methods to breed drought and salt tolerance capabilities into alfalfa.

Argentina is the third largest market for alfalfa seeds after Mexico and Saudi Arabia with about 17 million acres under alfalfa. There is the normal crop rotation of one third of the acres replanted every year leading to a market of 6 to 8 million pounds of alfalfa seed. The market is fragmented with over 30 seed suppliers and no dominant supplier. Argentina is one of the largest producers of GMO crops.

The company has announced that it will apply for patents on stevia varieties that have improved glycoside profiles (including increased concentrations of Reb A.) and possibly more vigorous plants that would have more leaves. The combination of greater yield and a better taste profile would make these varieties attractive to potential stevia plant growers. Trade sources report that high purity Reb A. sells for over $50 a pound so the increased concentration has a significant value.

S&W Seed now has four avenues for marketing its stevia products. These are from selling leaves (dried of fresh), selling immature plants (stevia traditionally has had a low germination

rate in the fields), selling seeds and granting a grower a license to use S&W Seeds to grow the plants. Collaborative agreements to develop other varieties is also possible. Granting a license to grow patented varieties could involve up-front royalty payments. The sale of intellectual property rights can be very profitable since the cost of development has been absorbed in prior periods.

S&W Seed announced on August 05, 2014 that it has contracted the production of its high yield California alfalfa seed varieties in about 1,000 acres of land in Australia. The initial (meaning more acres later) planting will be harvested in the Australian harvest period of March and April in 2015. The costs of production are lower in Australia than in California. Assuming comparable yields this production should have a modest but positive improvement in gross margins. The cost of shipping seeds from Australia to the Middle East are about the same as the cost of shipping from California.

The company has four basic strategies (these are not triggers or events) that do, to a certain extent, overlap. These are:

A) Expand current production by adding acres or using higher yield varieties.

B) Introduce higher value varieties in place of lower value (often commodity) seeds.

C) Add Round-Up Ready alfalfa seeds in those areas where it is legal to do so.

D) Produce proprietary Stevia seeds possibly to be sold to its partner Pure Circle.

All of these strategies should grow sales with products that carry much higher gross margins.

Following the successful trials of S&W Seed's dormant alfalfa seed in China the company has announced the first sale (and export) of its proprietary seeds to the Chinese market.

The dormant market is at least as large as the non dormant market, although a significant part of the dormant market is commodity product. It appears that S&W Seed has been able to produce commercial quantities of high yield varieties that can be sold into the Asian market. China is the highest growth area in the world for the use of alfalfa as feed in the dairy market.

This is the first of three major events that are expected to drive revenue and earnings over the next few years. The others are the introduction of high yield GMO alfalfa varieties and the sale of proprietary varieties of stevia seeds for the sweetener market.

Stevia is still alive! The company has developed strains that have superior and desirable flavour profile. The plants are vigorous and should grow well in China and India. S&W Seed will not

grow and sell leaves but will sell seeds. This is a departure from the original plan of selling leaf to Pure Circle.

S&W Seed expects gross margins to improve to the high 20s over the next few years as proprietary seeds replace commodity seeds in Australia, China becomes a significant market in 2015 and new varieties of dormant alfalfa are grown and the seeds sold.

On May 13, 2014 S&W Seed entered into an agreement with Imperial Valley Milling Co. (IVM) for IVM to process seeds from S&W Seed in a tolling arrangement. The alternative was to ship the unclean seeds to the plant in the Central Valley and process them there. However, in our opinion, the N. California plant will be used to process the Round-Up Ready treated seeds and the current agreements with IVM will prevent contamination seeds for sale in markets that prohibit the sale of GMO plants.

S&W Seed announced in June, 2013 that a new strain of alfalfa, RD 132, has entered third party testing for traits suitable for growing alfalfa in tropical climates. At this time there is no crop that offers the productivity of alfalfa that is grown in tropical climes so this is a new potential revenue stream for the company. Developed by Seed Genetics, starting in 2008, RD 132 has been tested by Seed Genetics and S&W Seed in the tropical areas in N. Australia. It is one of four candidates that have been grown and tested for disease resistance in tropical climates and RD 132 is the most advanced. Testing will proceed for 10 months and the seed will then be introduced into the market place. We would not expect a significant amount of revenue from this variety before fiscal 2016. This will give S&W Seed time to set up a sales organization in Central America, equatorial Africa and SE Asia. Few leguminous and fodder varieties grow in the tropics (rice is too important to be fed to cattle) and there is a need for a seed to grow high quality and productive crops such as alfalfa.

As the proprietary seeds from S&W are grown by IVS we would expect the beginning of a three year cycle (alfalfa has a three year life in the field) where higher average seed prices drive gross margins higher. Also with SGI, starting late in fiscal 2014, assuming the weather cooperates, S&W varieties for the Mid Eastern markets can be grown in Australia.

Other drivers are converting the IVS land from commodity alfalfa to proprietary non dormant varieties and the introduction (in 2015/6) of RoundUp-Ready varieties. S&W Seed is making a significant effort in educate farmers in the advantages of its high yield varieties. A $30 increase in seed costs per acre can generate a $200 (or more) increase in alfalfa revenue per acre per year. Since the crop is harvested for three years before replanting this is a major selling point. This could easily double its current revenue over a five year period.

With its recent acquisitions of land and the expansion of leased land under cultivation S&W Seed is one of the largest producers of non-dormant alfalfa seeds in the world. Trade sources suggest that the company could soon be the number one commercial producer, bigger than Dow, of proprietary alfalfa seeds.

**Enhanced stevia plants:**

Stevia demand in the US is amongst the highest in the world. It is now possible to buy fruit flavored drinks that are sweetened with stevia. A stable and dependable source of stevia leaf in the US is important to the producers of the steviol glycosides. The extraction of the glycosides is not much more difficult than making a cup of tea and is not capital intensive.

**S&W Seed** has been working with Dr. Clinton Shock for a number of years. Dr Shock, whilst in the Peace Corp. in Paraguay, developed an interest in stevia and collected many samples of stevia plants and seeds from remote villages. Many of these are atypical examples of wild stevia, and they have been made available to S&W Seed. Some of these samples have been crossed with each other and seeds grown and tested for glycoside types and concentrations. In the photo below Dr. Shock is standing behind some of the plants that are substantially bigger than the plants sourced from China (as seen in the background) The monster plants are at least waist high whereas the others are knee high.

These plants have substantially more leaf mass the leaves contain higher concentrations of Reb. B and Reb. C but, at this time, lower concentrations of Reb. A. Further crossing and selective breeding could lead to plants with higher Reb. A concentrations whilst maintaining the high plant mass.

**Stevia:**

The revenue from the stevia sold in the first quarter of fiscal 2012 will be recorded in the second quarter. On Nov. 10, 2011 S&W announced that the stevia leave provided to PureCircle passed all of the required specifications for Reb. A content, moisture content and low levels of contaminants such as seeds, stems and branches.

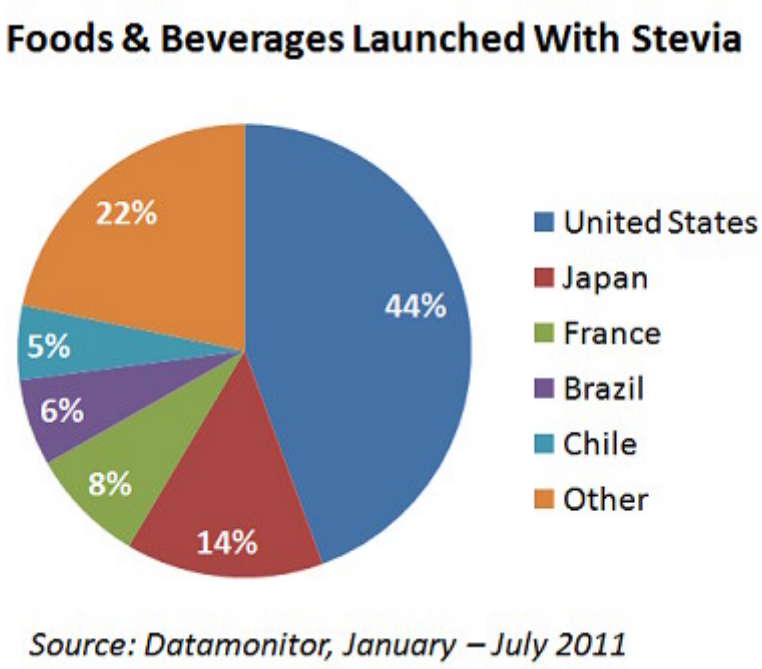
Although the stevia plant can be stripped of leaves up to three times a year the optimum Reb A concentrations would probably occur with an annual harvesting. Selective breeding for the maximum Reb A content will continue.

The Official Journal of the European Union has published regulations permitting the use of stevia sweeteners in European Union. This will allow the sale of products made with stevia as soon as December 2nd, 2011. PureCircle stated that this permission could increase the overall potential market by 50%.

PureCircle has announced the launch of a new flavor modifier, NSF-02, that works with stevia based sweeteners, Reb A and SG-95 as well as HFCS.

SG-95 is a stevia rebaudiana based glycoside that is sold as a sweetener. It is a Diterpene glycoside whose structure was recently identified by scientists at the Coca-Cola labs in Atlanta GA.

In the first six months of 2011 there 15% more foods and beverages announced than the same period in 2010. Over 40% of these were announced in the United States.




*Source: Datamonitor, January – July 2011*

**From the 10K:**

S&W Seed recently filed its 10K. Part of the filing discussed the reduction in revenue in 2011 versus 2010 from Saudi Arabia of $2.4 million. In the fourth quarter of fiscal 2011 the company had significant sales to a Saudi customer, confirming that the market has turned up. Our revenue estimates assume that the current market strength continues, the price increases hold, there is a little revenue from stevia and the Saudi market contributes $2.5 million to this year's revenue.

**PureCircle comments:**

S&W Seed reiterated the comments made by PureCircle last August and announced that the two companies will continue to work together and expand the production of stevia by leveraging S&W Seed's relationships with its growers of alfalfa in the Central Valley of California. PureCircle will continue to work with S&W Seed in cultivating multiple breeds of stevia with higher concentration of glycosides. The first crop will be shipped to China in a few days.

**Stevia Update:**

We are assuming that no meaningful revenue will be generated from Stevia in fiscal 2014, 2015 or 2016.

A report on the internet (http://health.yahoo.net/rodale/RH/the-4-best-and-3-worst-sweeteners-to-have-in-your-kitchen) stated that Coke and Pepsi got the green light to use Pure Circle's Truvia (the leading stevia sweetener).

The company has exclusive rights to use improved stevia plant varieties collected by Dr.Shock of Oregon State University. Testing for Reb A sweetener concentration is currently underway in S&W Seed test plots. As the company plants and harvests plants with better Reb A values we would expect higher prices per pound.

Truvia (stevia/Reb A from Pure Circle) is now the second highest selling sugar substitute in the United States, passing Sweet N' Low in about two years after its commercial introduction, with the overall Stevia market exceeding $500 million a year.

S&W Seed's value to Pure Circle is being able to produce more productive plants using cross breeding of plants currently in test plots. As the US market grows sweetener companies will have to treat the leaf closer to the market than Asia, and S&W Seed will be a pivotal player in this market.

**The Alfalfa Market:**

The shortage of alfalfa hay (due to low levels of planted acreage in late 2010 and early 2011) has caused significant increases in prices. (Source: The Hoyt Report, Inc.). This will pull acres back into alfalfa plantings, increasing the demand for seeds from S&W Seed.

**Upgraded recommendation in July :**

The acquisition of the company's distributer, responsible for nearly half of the company's annual revenue improves S&W Seed's outlook, adds to operating profit, and builds brand awareness overseas. Consequently on July 11, 2011 we upgraded our recommendation from Neutral to Outperform.

**S&W Seed buys international distributor:**

The company announced on July 8, 2011 that it has purchased its international distributor, Genetics International (GI, owned by Richard Penner), with which it had a relationship for over 20 years. GI had generated nearly 50% of S&W Seed's total revenue in prior years but, due to profitless pricing of alfalfa seed in Saudi Arabia there has been no revenue in fiscal 2010

The acquisition of GI will increase margins on sales that are made to GI's customer list, less the 3% commission paid.

**Stevia news:**

On May 18, 2011 the company released an update of the stevia situation. 114 acres are ready for planting. Seeds were sorted before planting and this significantly improved the germination rate. About 3.8 million plants will be planted using commercially available tomato planting equipment. Assuming reasonable weather the first cutting should occur by September 2011.

At this time yield per acre is unknown but trials have yielded over 5,000 # per acre of dried leaf with three cuttings. We are assuming 1,500# per acre for each cutting and a price to S&W Seed of $0.90 a pound.

The leased land mentioned below is being prepared for planting and a drip irrigation system is being installed. Since we do not know what crop(s) will be planted and on how many acres we have not included any revenue from this land in our current estimates.

**New distributer:**

On 04/06/11 S&W Seed Company announced the expansion of its distribution network with the addition of an international distributor of forage crops currently serving international agricultural markets. The new international dealer issued a purchase order for alfalfa varieties for $260,000 which should be shipped within 30 days, and is anticipated to represent the first of several orders from this new distributor over the coming months.

**New line of credit:**

On 03/31/11 the company announced that it has completed an agreement for a one-year, revolving line of credit with Wells Fargo Bank National Association with maximum availability of $5,000,000. The outstanding principal balance of the line of credit will bear interest at one month LIBOR plus 2%, which presently equals 2.25% per annum. The line of credit bears a standby fee on one-half percent (0.50%) per annum on the average daily unused amount of the line of credit, for a maximum of $25,000 if the line is not utilized.

**Cargill pushes Truvia™.**

According to Cargill after only two years on the US market, the Truvia™ brand has become the number one stevia-based sweetener, and opened a new category of sweetness. This innovation attracted new consumers to the market and grew a previously stagnant retail sweetener category by 18 percent. As such, it has become the third best-selling of all the non-sugar sweeteners – a market currently valued at

$685 million (£434 million) in the U.S. – overtaking Merisant's Equal® (aspartame) – Canderel® in Europe – for the past 12 months. Latest figures value the UK market for low calorie sweeteners at £50 million.

## KEY POINTS

- There is significant operating leverage in the wheat and other seed processing businesses.
- Stevia is a very large opportunity with modest entry costs for the company.

## OVERVIEW

The company was formed in 1980 to breed, contract to grow, process and sell agricultural commodities, primarily alfalfa seed and, to a lesser extent, wheat. It owns and operates a 40-acre seed cleaning and processing facility in Five Points, California. Seeds are harvested and cleaned from plants grown by farmers in the San Joaquin Valley of California that have worked with S&W Seed for multiple generations. Sale of proprietary alfalfa seed varieties has been a mainstay of the business for decades, but the company has also derived material revenue from processing wheat and other small grains, which should continue to generate revenue in the future.

In fiscal 2010, the company started a pilot program to produce and sell Stevia leaf, the source of an all natural, non-caloric, sweetener.

**World Agriculture Overview:**

One of the biggest challenges the world faces is to expand agricultural production so that it can meet the food and nutritional demands of the world's growing population. The United Nations Population Division estimates that worldwide population has been consistently gaining more than 79 million people each year since 1999. The United Nations projects that the world population will increase by 35% to 7.7 billion from 1995 to 2020, with 95% of this population increase expected in developing countries.

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. However, due to 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. Increased use of fertilizer has improved crop yields but overuse can cause problems of increased salt content in the soil.

S&W Seed attacks this problem by breeding high-yielding alfalfa seeds that are tolerant to inferior, saline soils, thereby increasing the productivity of marginal soils with inferior water quality.

**Alfalfa Seed Industry:**

Alfalfa (Medicago sativa L.) is often referred to as the “Queen of Forages” due to its relatively good digestibility, high protein content, and ability to readily fix nitrogen. As a result of fixing nitrogen, the protein produced by alfalfa has a high economic return in dairy systems because minimal outside inputs are required to produce it (i.e., no expensive nitrogen-based fertilizers).

The alfalfa plant is primarily used for animal feed. Seed is planted to produce alfalfa that is then used for grazing, ‘‘greenchop’’ (fresh alfalfa cut in the field without drying), silage, baled hay, cubes or pellets as a primary food stock for the livestock industry, which includes dairy and beef cattle, horses and sheep. Although originally a hot climate plant native to the Middle East, dormant and semi-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 fully dormant varieties are rated 2 through 4, and the most non-dormant varieties are rated 10. The non-dormant varieties are best suited to hot, dry climates, where the growing season is able to be sustained for most of the year, resulting in larger yields per plant.

Of the approximately half-million acres under irrigation in Imperial County, California, almost half is seeded to alfalfa. Approximately 80 million pounds of alfalfa seed are produced in the U.S. each year. The Pacific Northwest produces seed of semi-dormant and dormant varieties, while substantially all of the seed produced in California is of non-dormant varieties, with dormancy ratings of between 7 and 10.

The climate in the western U.S. is excellent for production of high-quality alfalfa seed, and 85% of U.S. alfalfa seed is produced in California, Idaho, Oregon, Washington and Nevada. Although California is the largest supplier of alfalfa seed in the U.S., changes in economics, including the cost of water and the economic return to farmers for planting competing crops, as well as environmental and regulatory constraints, including pesticide regulations, have had a negative impact on California production. While expansion in Idaho, Oregon and Washington has maintained total U.S. supplies of alfalfa seed at a near constant level, this production has not replaced California’s production of non-dormant varieties because these Northwestern states lack the warm climate suited to non-dormant varieties. A significant percentage of California’s production is exported to the Middle East, North Africa, Mexico and other hot, arid regions of the world.

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.

The alfalfa industry (and therefore the alfalfa seed industry) is highly dependent on the dairy industry, which is the largest consumer of alfalfa hay. In recent years, the California dairy industry has been severely impacted by prices being set below production costs. Dairy prices are now improving, albeit slowly.

S&W Seed has developed high-yielding alfalfa seed that is tolerant to inferior, saline soils, thereby allowing farmers to farm marginal soils with inferior water quality as productively as they do superior soils. Alfalfa seed is used for growing animal feed, known as ‘‘forage,’’ which is essential for dairy and beef cattle, horses and other livestock. We specialize in developing proprietary alfalfa seed varieties that are suited to warmer climates and produce high yields of superior quality alfalfa hay. Although our non-dormant seed varieties are not well suited to colder environments where freezing conditions are common, because of the highly advantageous characteristics of our varieties for hot climates, approximately 50% of our alfalfa seed is sold to end users in Saudi Arabia, Morocco and countries in Latin America.

The company's ‘‘flagship’’ salt tolerant variety, SW 9720, was rated No. 1 out of 44 top alfalfa varieties as of the end of the 2008 season in yield per acre tests conducted by the University of California at Davis (‘‘UC Davis’’). During the fall of 2009, certain growers agreed (under contract) to produce an improved seed variety that is 15% more salt tolerant than SW 9720 while producing equal or better yields. This variety will be available for sale for the first time during the 2010 sales season, which falls primarily between June and mid-October. Many years are needed to create, test and build a market for seed products. The company has used the past almost 30 years to breed and build awareness of the seed varieties it markets and sells.

This is a barrier to entry because of the long length of time required to develop competitive alfalfa seed varieties without genetic engineering. The company has not employed genetic engineering in the development of seed varieties, which permits it to sell seeds throughout the world. Europe, the Middle East, and certain other parts of the world do not permit the use of genetically modified organism (‘‘GMO’’) alfalfa, although As a result the company is investigating what actions would be required when GMO alfalfa varieties became legal.

**An All Natural Sweetener**

Over the past several years, use of an all natural sweetener made from the Stevia plant has begun to attract significant attention from flavor ingredients and consumer product companies in the U.S. Stevia is a genus of about 240 species of herbs and shrubs in the sunflower family (asteraceae), native to subtropical and tropical regions from western North America to South America. Stevia grows wild as a small shrub in parts of Paraguay and Brazil. The glycosides in its leaves, including up to 10% Stevioside, account for its incredible sweetness, making it unique among the nearly 300 species of Stevia plants. There are indications that Stevia (or Ca-he-he) has been used to sweeten a native beverage called mate since Pre-Columbian times. However, a Natural Scientist names Antonio Bertoni first recorded its usage by native tribes in 1887.

The Stevia plant has been used as a base for sweeteners around the world for hundreds of years, from Native Americans centuries ago, to the Japanese in the early 1900s, to even Russia and China during the Cold War. The majority of Stevia crop around the world today is now found in China, where a very large number of small farmers cultivate the plant. However, as demand is increasing, production is spreading into new areas around the equator such as Paraguay, Kenya, Indonesia, and India.

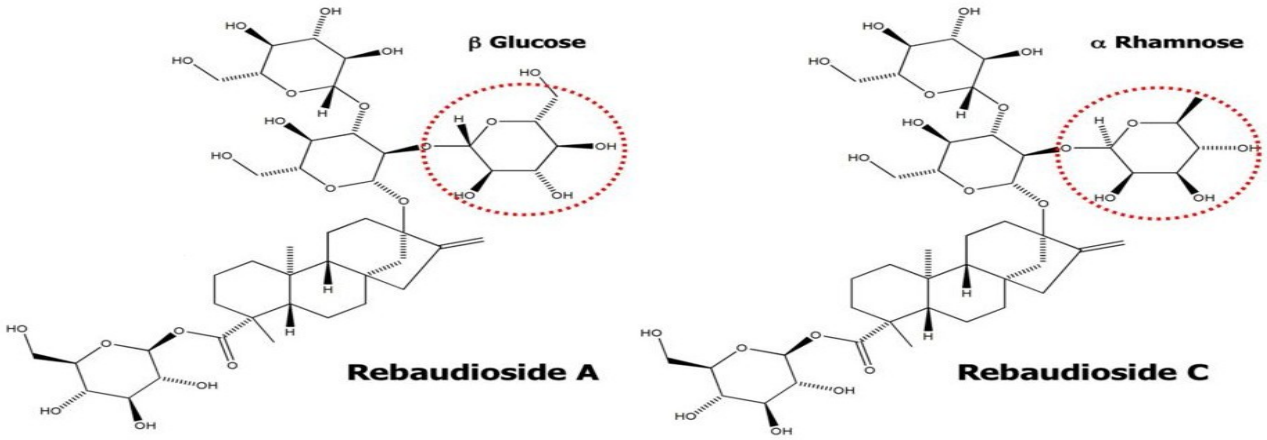
California may be an ideal environment to grow the plant. Cold weather kills the plant so it is replanted every year in northern climes. In the San Joaquin Valley the cool weather causes the plant to become dormant but it grows back in the spring. This could be a major plus since the costs of the leaf will be lower.

Leaf extracts called steviol glycosides contain a mixture of over two dozen related compounds, including several forms of rebaudiosides, steviosides, and dulcosides, the chemical structures of two rebaudiosides are shown below. Two major compounds found in steviol glycosides, stevioside and rebaudioside A (Reb-A), have a sweetness ranging from 250x to 450x that of sucrose:

**Compound Sweetness:**

| | |
|---|---|
| Lactose | 0.16x |
| Erythritol | 0.65x |
| Glucose | 0.75x |
| Sucrose (sugar) | 1x |
| Fructose | 1.5x |
| Aspartame (Equal) | 200-250x |
| Stevioside | 200-250x |
| Reb-B | 200-300x |
| Reb-A (Truvia, PureVia) | 300-400x |
| Saccharin (Sweet N Low) | 500x |
| Sucralose (Splenda) | 600x |

Not all of the compounds in the Stevia leaf have practical use. Scientists have discovered that rebaudioside A is the least bitter of all the compounds in the Stevia plant, and thus it has the most applicable use for foods and beverages as a low-calorie sweetener. Medical research has also shown Stevia has a negligible effect on blood glucose, thus making it an attractive natural alternative to people on carbohydrate-controlled diets such as type 1 and type 2 diabetics. These extracts may also contain possible benefits in treating obesity and high blood pressure.




Steviol glycosides were first commercialized as a sweetener in 1971 by the Japanese firm, Morita Kagaku Kogyo Co., Ltd., a leading stevia extract producer in Japan. The path to market in the U.S. was not a smooth one however. In 1991 the U.S. FDA labeled stevia as an unsafe food additive and restricted its import. The FDA stated at the time that the "toxicological information on stevia is inadequate to demonstrate its safety." Stevia remained banned until after the 1994 Dietary Supplement Health and Education Act forced the FDA in 1995 to revise its stance and allow stevia to be used as a dietary supplement. This was different from use as a food additive however, and stevia use remained limited until 2006 when the World Health Organization (WHO) performed a thorough evaluation of experimental animal and humans studies of stevioside conducted over the past several decades. The WHO concluded that stevioside and rebaudioside A (Reb-A) are not genotoxic *in-vitro* or *invivo* and that the genotoxicity of steviol and some of its oxidative derivatives *in-vitro* is not expressed *in-vivo*." The report also found no evidence of carcinogenic activity. Furthermore, the report noted that "stevioside has shown some

evidence of pharmacological effects in patients with hypertension or with type-2 diabetes," but concluded that further study was required to determine proper dosage. This opened the door to the commercialization of broad scale stevia-based sweeteners in the U.S.

Cargill was among the first to move on the WHO report. Rebiana is the trade name for a zero-calorie sweetener containing mainly Reb-A produced by Cargill. In 2007, Cargill, in collaboration with Coca-Cola Co., announced plans to obtain approval for their stevia-derived sweetener using Rebiana and erythritol (a natural sugar alcohol) called Truvia. In December 2008, the U.S. FDA approved Reb-A at purifications greater than 95% for commercial use under the generally recognized as safe (GRAS) designation. Not coincidently, shortly after, PepsiCo and PureCircle announced PureVia, a similar stevia-based sweetener. Since their approval, stevia-derived sweeteners have gained significant market share in the alternative / natural sweetener market. In fact, both Coke and Pepsi have expanded use of their respective Reb-A products for use in food and beverages. The products perceived safety and all-natural marketing campaign has greatly increased demand for products.

The extraction process uses freshwater brewing, similar to making tea, to unlock the plant's natural components, including rebaudioside, stevioside, and dulcoside. Reb-A is the primary target for commercial use. The crude extract is then refined to isolate out the Reb-A using crystallization and separation technology. Improvements in yield, breeding, and natural selection has allowed manufacturers, including Cargill and PureCircle to dramatically increase Reb-A yields from 15 to 20% for wild Stevia to over 55% for farmed Stevia. According to PureCircle, it takes approximately 40 lbs of Stevia leaf to produce 1 lb of Reb-A. Through leveraging economies of scale and improving crop yields, PureCircle expects to be able to produce 1 lb of Reb-A from only 20 lbs of Stevia leaf in the near future. The balance of co-product, including Reb-C, is refined out and either recycled or used in the production of other products. Reb-A is a very stable product, with no degradation observed for up to five-year storage at room temperature and 60% relative humidity. The product is highly soluble. Pricing is approaching that of sugar and high-fructose corn syrup.

Soft drinks including sodas, juices, teas, sports drinks, and alcoholic beverages are a $100+ billion market in the U.S. Add in confectionary products such as canned fruit, ketchup, dairy, cereals, chocolate, and snack bars, the total market opportunity eclipses $200 billion. Sugar and high-fructose corn syrup (HFCS) are an estimated $50 billion market worldwide. That being said, artificial and natural low-calorie sweeteners are a small fraction of the entire worldwide sweetener market. By comparison, artificial and natural low-calorie sweeteners are only a $5.5 billion market. But use is on the rise, especially following the approval of natural products like Stevia and highly successful marketing campaigns for Splenda to the older artificial sweeteners such as Equal, NutraSweet, and Sweet N Low. Over 200 million Americans used alternative low-calorie sweeteners in the U.S. in 2008. Stevia based sweeteners are far more common outside the U.S., mainly in Asia and South America, but gaining popularity quickly inside the U.S. following the FDA s decision in December 2008.

Consumers want a safe low-calorie alternative. J&J s Splenda (sucralose), only approved in 2006, is marketed as made from sugar. Splenda is actually an artificial product, but the advertising campaign has been so successful that the compound now dominates the market. However, the low-hanging fruit for Stevia companies is going after the artificial sweetener market. Market surveys indicate that 45% of Americans have a negative perception of artificial sweeteners such as aspartame and saccharine.

Zacks estimates that the 2015 global Stevia market will be about $550 million a year, with Asia at a 36% market share, N. America at 30% and S. America at 24%. Japan accounted for roughly half of the market in 2009, consuming about 1300 metric tons, up from the equivalent of 700 metric tons of Stevia leaves in 1987 alone. However, by 2015 the global Stevia market could eclipse 6,000 metric tons worldwide as use in the U.S. increases and regulatory approval in Europe allows for increased use. Stevia-derived sweeteners are growing significantly faster than the artificial sweetener market, our estimate is around 25% annually. About 80% of stevia production and processing is in China.

**: Redpoint Bio Corporation report by J. Napodano, Zacks Investment Research, March 2, 2010.**

Economics and pricing and price stability will be key determinant in the future growth of Stevia as an alternative sweetener to sugar, HFCS, or artificial sweeteners. Prices vary widely between manufacturers for the same product making the pricing a complex issue. A position paper written in February 2009 by KnowGenix entitled, "Stevia as an alternative sweetener, promise and challenges" concludes that suppliers must rationalize Stevia prices to enter the mainstream ingredient business. Economies of scale and distribution will also throw up new challenges impacting the pricing. Sugar currently (11 July, 2010) costs around $0.17/lbs, or $375 per metric ton (2204.6 lbs). However, the price of sugar has increased dramatically over the past three years. We estimate the global beverage giants spend an estimated $7 billion each year on sugar.

***Price of Sugar***

Alternative (artificial) sweeteners such as aspartame and saccharin cost $55,000 and $25,000 per ton, respectively. Sucralose (Splenda) costs around $450,000 per tonne. Cost for Reb-A is still high compared to table sugar (sucrose), and still significantly higher than artificial sweeteners aspartame and saccharin. The majority of the cost associated with Reb-A today is raw leaf material sourcing, at approximately 70% to 80% of the total cost. As noted above, PureCircle can produce about 1 lbs of Reb-A from 40 lbs of Stevia leaf. Manufacturers including PureCircle and GLG / Cargill hope to improve this ratio through leveraging economies of scale and improving crop yields. By 2016 we would expect the key suppliers will be able to produce 1 lb of Reb-A from only 20 lbs of Stevia leaf. This would allow for a cost of around $125,000 per ton. Adjusting the cost per sweetness unit (1 unit = 1x), we see that current Reb-A pricing is above sugar prices. If the price of Reb-A can get down to $125,000 per ton, it would be extremely attractive for manufacturers like Coca-Cola, PepsiCo, Nestle SA, Dannon, and Corn Products Intl. to begin to use Reb-A in far greater quantities.

S&W Seed has applied for several patents for stevia plants that have significantly higher stevia Reb-A concentrations in the leaves and the plants are more vigorous, thereby increasing the output of leaves per plant. Commercialization of these plants will lower the cost of the Reb-A.

## INDUSTRY OUTLOOK

The demand for alfalfa depends on the number of animals that eat forage, mainly cattle for the dairy industry and cattle for meat consumption but also for horses, sheep and goats. Humans also eat alfalfa sprouts in salads and sandwiches. These are fairly stable, but low growth, markets. However, the size of the dairy herd depends on the price and demand for milk and the price of beef has a marked impact on the number of beef cattle. Overall, demand for alfalfa, and for alfalfa seed, should improve in the near term as the economy improves.

## INDUSTRY POSITION

Alfalfa is the fourth most widely grown crop in the United States (behind corn, wheat, and soybeans) with an estimated value is over $8 billion US. There are 24 million acres of alfalfa cut for hay with an average yield of 3.35 tons per acre. The acreage of all hay harvested including alfalfa per year is over 60 million with an estimated value of $13 billion. When the value of alfalfa as a mixture with other forages is considered the acreage and value of hay is approximately equal to wheat and soybeans in the U.S.

Alfalfa seed is primarily grown in the northwestern areas of the U.S. primarily in the western states of California, Idaho, Nevada, Oregon, Wyoming, and Washington. The approximate yield of alfalfa seed in 1999 for the U.S. was 115 million pounds, with average price of $190 per 100 pounds of seed, thus the estimated value of alfalfa seed is $218.5 million dollars. A fringe benefit to the production of alfalfa seed is the production of honey from bees. In the U.S., $147.7 million dollars worth of honey is produced each year from bees pollinating alfalfa.

S&W Seed is the largest seed producer worldwide in the alfalfa market. However, it is more important as a producer of salt and heat resistant products that are exported to other countries. With the recent acquisition of IV Seeds it may be the largest US company in the export market. The pending purchase of SGI makes the company the worldwide leader in non-dormant alfalfa seed production.

## VALUATION

There is no historical valuation that can be used as guidance and there are no direct peers to use as a comparison. Institutional ownership has increased to 36% since, moving from less than 4% a year ago (Source: Yahoo finance). Increasing institutional demand is a bullish sign. The potential growth rate of EPS exceeds 35%. The acquisition of the alfalfa operations of Pioneer DuPont, S&W Seed's largest distributer in the Middle East and of IV Seeds and SGI in Australia, as well as other acreage, will

ultimately enhance profitability. Revenue from dormant varieties could be significant starting in fiscal 2015. Additional sales from the Du Pont Pioneer operations will nearly double the current level of revenue. The introduction of GMO alfalfa and other GM varieties will have a significant impact on gross margins and expand market penetration in those countries that allow GM plants.. We expect some revenue from GMO alfalfa in FY 2016.

| Comparables Table | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Company | Ticker | Price | Mkt Cap. | P/E | P/E | ROE | P/BV | P/Sales | EV/Rev. | EV/EBITDA | PEG | Instl. |
| | | 2/29/16 | (million) | Trailing | Forward | L4Q (%) | LQ | L4Q | L4Q | | | Ownership |
| S&W Seed | SANW | $4.22 | $61.9 | -42.88 | -441.20 | -0.03 | 1.09 | 0.65 | 0.83 | -567.41 | -12.61 | 41.1 |
| | | | | | | | | | | | | |
| Agria Corp. | GRO | $1.01 | $52.1 | N/A | N/A | 7.66 | 0.98 | 0.06 | 0.17 | 3.41 | N/A | 6.0 |
| Agrium Inc. | AGU | $85.93 | $11,870.0 | 12.35 | 12.00 | 15.57 | 1.99 | 0.81 | 1.13 | 7.93 | 1.21 | 80.2 |
| Alico Inc. | ALCO | $23.94 | $198.4 | 26.31 | N/A | 4.61 | 1.17 | 1.25 | 2.71 | 9.17 | N/A | 25.3 |
| Bunge Limited | BG | $49.72 | $7,080 | 10.24 | 8.43 | 9.80 | 1.15 | 0.18 | 0.30 | 7.37 | 0.75 | 6.3 |
| Calava Growers Inc. | CVGW | $53.56 | $931 | 34.11 | 23.29 | 14.87 | 5.07 | 1.09 | 1.13 | 18.55 | 3.86 | 55.2 |
| Coffee Holding Company Inc. | JVA | $3.27 | $20 | N/A | N/A | N/A | 0.85 | 0.17 | 0.19 | N/M | 0.80 | 8.1 |
| Wilmar Int. Ltd | F34.SI | $3.10 | $19,590 | 18.67 | 17.22 | 6.99 | 1.28 | 0.50 | 0.84 | 15.55 | 1.33 | N/A |
| GLG Life Tech Corp | GLGLF | $0.25 | $9 | N/A | N/A | N/A | N/A | 0.39 | 3.63 | N/A | N/A | 20.6 |
| Origin Agritech Ltd. | SEED | $1.18 | $27 | N/A | N/A | N/A | 0.86 | 0.49 | 1.03 | 11.63 | N/A | 0.9 |
| Sygenta AG | SYT | $80.29 | $36,850 | 27.65 | N/A | 15.52 | 4.41 | 2.76 | 2.94 | 14.36 | N/A | N/A |
| Stevia Corp. | STEV | $0.03 | 5.30 | N/A | N/A | N/A | 1.72 | 0.73 | 0.75 | N/A | N/A | 3.7 |
| Stevia First | STVF | $0.08 | 6.50 | N/A | N/A | N/A | N/A | 27.44 | 27.38 | N/A | N/A | N/A |
| Sunwin Stevia Int. Inc. | SUWN | $0.14 | 24.60 | N/A | N/A | N/A | 1.59 | 1.63 | 1.70 | N/A | N/A | N/A |
| (Source: Yahoo Finance and Zacks Investment Research estimates) | | | | | | | | | | | | |
| Mean | | | | 12.3 | -76.1 | 9.4 | 1.9 | 0.8 | 1.3 | -53.3 | -0.8 | |
| Median | | | | 18.7 | 12.0 | 8.7 | 1.2 | 0.6 | 0.9 | 9.2 | 1.0 | |

The two unprofitable stevia related companies have an average market cap of $8 million. In our opinion the equity markets are not paying for any stevia involvement on the part of **$&W Seed.**

## RISKS

### Risks Relating to the alfalfa Business and Industry:

- ***Adverse weather conditions, natural disasters, crop disease, pests and other natural conditions can impose significant costs and losses on the company.***

  Alfalfa seed is vulnerable to adverse weather conditions, including windstorms, floods, drought and temperature extremes, which are quite 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. These factors can nevertheless directly impact the company by decreasing the quality and yields of seed, reducing the amount of product for sale, increasing costs and decreasing revenue and gross margins.

- ***Earnings may be sensitive to fluctuations in market prices and demand for alfalfa seeds.***

Growing conditions, particularly weather conditions such as windstorms, floods, droughts and freezes, as well as diseases and pests, are primary factors affecting market prices because of their influence on the supply and quality of product. Recently, the severe downturn in the California dairy industry that resulted from over-supply had a corresponding negative effect on sales of alfalfa hay and therefore alfalfa seed.

- ***Because the seed business is highly seasonal, revenue, cash flows from operations and operating results will fluctuate on a seasonal and quarterly basis.***

  The seasonal nature of operations results in significant fluctuations in working capital during the growing and selling cycles. As a result, operating activities during the first and second fiscal quarters use significant amounts of cash, and in contrast, operating activities for the fourth and first fiscal quarters generate substantial cash as inventory is shipped and collect accounts receivable.

- ***The company depends on a core group of significant customers, financial and operating results of operations will be negatively affected if key customers reduce the amount of products they purchase.***

  In 2009 the top three customers together accounted for approximately 61% of net sales in fiscal 2009, with the largest customer accounted for approximately 43% of net sales. After several significant acquisitions the US accounted for 18% of sales, Saudi Arabia 26% and Libya and Australia were each 10% in the four quarters ending in Sept. 2014. With the acquisition of the alfalfa operations on Pioneer DuPont this will change significantly.

  Operating results are significantly impacted not only by the quantity of seed purchased by these customers, but also by the timing of their purchases, a factor over which S&W Seed does not have any control. Timing of purchases, particularly by customers for sale in Saudi Arabia, has in the past impacted the financial results.

- ***No long term contracts***

  There are no long-term contracts with any of the customers, and they may not continue to purchase products. The loss of, or a significant adverse change in, the company's relationship with these customers, or any other major customer, could have a material adverse effect on business, financial position, results of operations and operating cash flows. The loss of, or a reduction in orders from any significant customer, losses arising from customers' disputes regarding shipments, product quality, or related matters, or an inability to collect accounts receivable from any major customer could have a material adverse effect. In addition, revenue from customers that have accounted for significant revenue in past periods, individually or as a group, may not continue, or if continued, may not reach or exceed historical levels in any period.

- ***Because the company does not grow all of the alfalfa seed that it sells, it is entirely dependent on its network of growers, and sales, cash flows from operations and results of operations may be negatively affected if any of the largest growers were to stop supplying seed.***

The company has a relatively small network of growers of alfalfa seed that together provide all of the seed sold to customers. Of these growers, one grower accounted for approximately 37% of planted acreage and over 13% of the total amount of seed purchased from our growers in fiscal 2009. Three growers accounted for approximately 44% of total seed purchases from growers in fiscal 2009.

- ***A lack of availability of water in California's San Joaquin Valley and Central Valley could impact business.***

  Adequate quantities and correct timing of the application of water are vital for most agriculture to thrive. 2010 will be the fourth consecutive year of drought conditions in California, causing below normal snowpack, river runoff and reservoir levels. Federal allocations of water to farmers have been severely cut back during the drought years and are expected to continue in the future. These conditions have caused some farmers to revise their crop plans to plant less water-intensive crops or, in the most severe cases, to lose their farms. Whether particular farms are experiencing water shortages depends, in large part, on their location, although continuing drought conditions could 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. If the dairy farmers and others who purchase 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, they may not buy alfalfa seed.

- ***Roundup Ready alfalfa will be available for sale in 2015 or soon thereafter, and its availability could impact existing product sales.***

  In a 7-1 ruling on June 21,2010, the U.S. Supreme Court overturned a lower court's order that has prohibited farmers from planting Roundup Ready alfalfa for the past three years. However, there has been considerable discussion by lawmakers about the risks to the dairy industry and the organic food industry if Roundup Ready alfalfa is cleared for commercial use. Roundup Ready alfalfa successfully completed a food safety review by the Food and Drug Administration (FDA) and was granted non-regulated status by USDA in 2005. A separate review by the Environmental Protection Agency (EPA) found the use of Roundup on the crop to be safe. Prior to the injunction, Roundup Ready alfalfa was planted by approximately 5,500 growers across more than 220,000 acres. Alfalfa is the fourth-largest crop grown in the U.S. with 23 million acres grown in 48 U.S. states annually.

## INSIDER TRADING AND OWNERSHIP

In the six months ending in August, 2015 there were no net buys/sells after adjustment for option exercises.

# PROJECTED INCOME STATEMENT & BALANCE SHEET

| S & W Seed Company | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consolidated Statements of Operations | | | | | | | | | | | | | | | | | | | | | | | |
| (Dollars in millions except per share data) | | | | | | | | | | | | | | | | | | | | | | | |
| Fiscal Year Jun. 30 | 2Q14 | 3Q14 | 4Q14 | 2014A | 1Q15 | 2Q15 | 3Q15 | 4Q15 | 2015A | 1Q16 | 2Q16 | 3Q16 | 4Q16 | 2016E | 1Q17 | 2Q17 | 3Q17 | 4Q17 | 2017E | 1Q18 | 2Q18 | 3Q18 | 4Q18 | 2018E | 2019E |
| | | | | | | | | | | Act. | Act. | | | | | | | | | | | | | |
| **Net sales** | **$11.46** | **$8.13** | **$19.56** | **$51.53** | **$8.16** | **$13.79** | **$30.53** | **$28.72** | **$81.21** | **$12.25** | **$24.14** | **$24.00** | **$36.00** | **$96.40** | **$13.00** | **$28.00** | **$28.00** | **$42.00** | **$111.00** | **$13.00** | **$30.00** | **$30.00** | **$44.00** | **$117.00** | **$122.85** |
| % Change | (16.26) | 93.23 | 53.77 | 38.03 | (34.05) | 20.37 | 275.45 | 46.82 | 57.58 | 50.10 | 75.01 | (21.38) | 25.34 | 18.70 | 6.09 | 15.99 | 16.67 | 16.67 | 15.15 | 0.00 | 7.14 | 7.14 | 4.76 | 5.41 | 5.00 |
| Cost Goods | 9.08 | 6.48 | 15.93 | 41.56 | 6.85 | 11.83 | 23.41 | 22.51 | 64.61 | 10.28 | 20.11 | 19.92 | 28.80 | 79.11 | 10.79 | 23.10 | 22.68 | 33.60 | 90.17 | 10.79 | 24.90 | 24.00 | 34.76 | 94.45 | 96.85 |
| G & A | 1.47 | 1.72 | 2.03 | 6.81 | 1.79 | 1.86 | 2.26 | 2.58 | 8.49 | 2.47 | 2.31 | 2.30 | 2.30 | 9.38 | 2.30 | 2.30 | 2.40 | 2.40 | 9.40 | 2.50 | 2.50 | 2.50 | 2.50 | 10.00 | 10.40 |
| R&D | 0.25 | 0.17 | 0.19 | 0.84 | 0.22 | 0.21 | 0.61 | 0.84 | 1.88 | 0.69 | 0.73 | 0.75 | 0.75 | 2.92 | 0.80 | 0.80 | 0.80 | 0.80 | 3.20 | 0.90 | 0.90 | 0.90 | 0.90 | 3.60 | 4.00 |
| Depreciation | 0.32 | 0.32 | 0.32 | 1.27 | 0.32 | 0.31 | 0.58 | 0.97 | 2.18 | 0.79 | 0.79 | 1.00 | 1.00 | 3.58 | 1.00 | 1.00 | 1.00 | 1.00 | 4.00 | 1.00 | 1.00 | 1.00 | 1.00 | 4.00 | 3.20 |
| Op Income | 0.34 | (0.56) | 1.10 | 1.05 | (1.02) | (0.42) | 3.67 | 1.82 | 4.05 | (1.98) | 0.20 | 0.03 | 3.15 | 1.40 | (1.89) | 0.80 | 1.12 | 4.20 | 4.23 | (2.19) | 0.70 | 1.60 | 4.84 | 4.95 | 8.40 |
| Interest Expenses | 0.12 | 0.15 | 0.22 | 0.63 | 0.25 | 0.19 | 0.73 | 0.88 | 2.04 | 1.60 | 0.54 | 0.80 | 0.80 | 3.74 | 0.50 | 0.40 | 0.40 | 0.40 | 1.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 |
| Interest Income | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | (2.02) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Non Op Income | (0.02) | 0.02 | 0.02 | 0.04 | (0.05) | (0.54) | (1.14) | (0.69) | (2.42) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | (1.15) | 0.00 | (0.44) | (1.59) | 0.46 | 0.17 | 0.00 | 0.00 | 0.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Calc.Pretax | 0.20 | (0.69) | 0.89 | 0.46 | (1.31) | (2.29) | (0.22) | (0.19) | (4.01) | (3.12) | (0.17) | (0.77) | 2.35 | (1.71) | (2.39) | 0.40 | 0.72 | 3.80 | 2.53 | (2.19) | 0.70 | 1.60 | 4.84 | 4.95 | 6.40 |
| Taxes | 0.09 | (0.29) | 0.27 | 0.09 | (0.44) | (0.74) | 0.24 | 0.08 | (0.85) | (1.25) | (1.53) | (0.31) | 0.82 | (2.26) | (0.96) | 0.14 | 0.25 | 1.33 | 0.77 | (0.77) | 0.25 | 0.56 | 1.69 | 1.73 | 2.24 |
| Tax Rate, Pro-forma basis | 39.1% | 42.0% | 30.3% | 18.1% | 33.4% | 64.8% | -109.4% | -41.4% | 29.8% | 40.0% | 915.6% | 40.0% | 35.0% | 132.3% | 40.0% | 35.0% | 35.0% | 35.0% | 30.3% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% | 35.0% |
| Net Income | 0.11 | (0.40) | 0.62 | 0.37 | (0.87) | (1.55) | (0.47) | (0.27) | (3.16) | (1.88) | 1.36 | (0.46) | 1.53 | 0.55 | (1.43) | 0.26 | 0.47 | 2.47 | 1.76 | (1.42) | 0.46 | 1.04 | 3.15 | 3.22 | 4.16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| GAAP Adj. | 0.02 | 0.00 | 0.00 | 0.02 | 0.00 | 1.15 | 0.00 | 0.00 | 1.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Net For Common | 0.11 | (0.40) | 0.62 | 0.37 | (0.87) | (1.55) | 2.63 | (0.27) | (0.06) | (1.88) | 1.36 | (0.46) | 1.53 | 0.55 | (1.43) | 0.26 | 0.47 | 2.47 | 1.76 | (1.42) | 0.46 | 1.04 | 3.15 | 3.22 | 4.16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shares Used, millions | 11.56 | 11.56 | 11.74 | 11.73 | 11.60 | 11.63 | 13.17 | 13.44 | 13.33 | 13.46 | 14.13 | 14.70 | 14.70 | 13.50 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Earnings Per Share | | | | | | | | | | | | | | | | | | | | | | | | | |
| **EPS (pro-forma)** | **$0.01** | **($0.03)** | **$0.05** | **$0.03** | **($0.08)** | **($0.03)** | **($0.04)** | **($0.02)** | **($0.15)** | **($0.14)** | **$0.10** | **($0.03)** | **$0.10** | **$0.04** | **($0.08)** | **$0.02** | **$0.03** | **$0.15** | **$0.10** | **($0.08)** | **$0.03** | **$0.06** | **$0.19** | **$0.19** | **$0.24** |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross margins | 20.74% | 20.27% | 18.60% | 19.35% | 16.10% | 14.22% | 23.32% | 21.62% | 20.44% | 16.11% | 16.70% | 17.00% | 20.00% | 17.93% | 17.00% | 17.50% | 19.00% | 20.00% | 18.77% | 17.00% | 17.00% | 20.00% | 21.00% | 19.27% | 21.16% |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| As % sales | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cost Goods | 79.26% | 79.73% | 81.40% | 80.65% | 83.90% | 85.78% | 76.68% | 78.38% | 79.56% | 83.89% | 83.30% | 83.00% | 80.00% | 82.07% | 83.00% | 82.50% | 81.00% | 80.00% | 81.23% | 83.00% | 83.00% | 80.00% | 79.00% | 80.73% | 78.84% |
| G & A | 12.84% | 21.18% | 10.36% | 13.22% | 21.90% | 13.48% | 7.41% | 8.98% | 10.45% | 20.19% | 9.55% | 9.58% | 6.39% | 9.73% | 17.69% | 8.21% | 8.57% | 5.71% | 8.47% | 19.23% | 8.33% | 8.33% | 5.68% | 8.55% | 8.47% |
| Marketing | 2.15% | 2.05% | 0.99% | 1.63% | 2.73% | 1.51% | 2.00% | 2.92% | 2.32% | 5.63% | 3.04% | 3.13% | 2.08% | 3.03% | 6.15% | 2.86% | 2.86% | 1.90% | 2.88% | 6.92% | 3.00% | 3.00% | 2.05% | 3.08% | 3.26% |
| R&D | 2.77% | 3.87% | 1.63% | 2.45% | 3.92% | 2.25% | 1.90% | 3.37% | 2.68% | 6.43% | 3.28% | 4.17% | 2.78% | 3.71% | 7.69% | 3.57% | 3.57% | 2.38% | 3.60% | 7.69% | 3.33% | 3.33% | 2.27% | 3.42% | 2.60% |
| Op Income | 2.99% | -6.84% | 5.62% | 2.04% | -12.46% | -3.03% | 12.01% | 6.34% | 4.99% | -16.14% | 0.83% | 0.13% | 8.75% | 1.46% | -14.54% | 2.86% | 4.00% | 10.00% | 3.81% | -16.85% | 2.33% | 5.33% | 11.00% | 4.23% | 6.84% |
| Calc.Pretax | 1.71% | -8.46% | 4.55% | 0.90% | -16.06% | -16.59% | -0.73% | -0.66% | -4.94% | -25.49% | -0.69% | -3.21% | 6.53% | -1.77% | -18.38% | 1.43% | 2.57% | 9.05% | 2.28% | -16.85% | 2.33% | 5.33% | 11.00% | 4.23% | 5.21% |

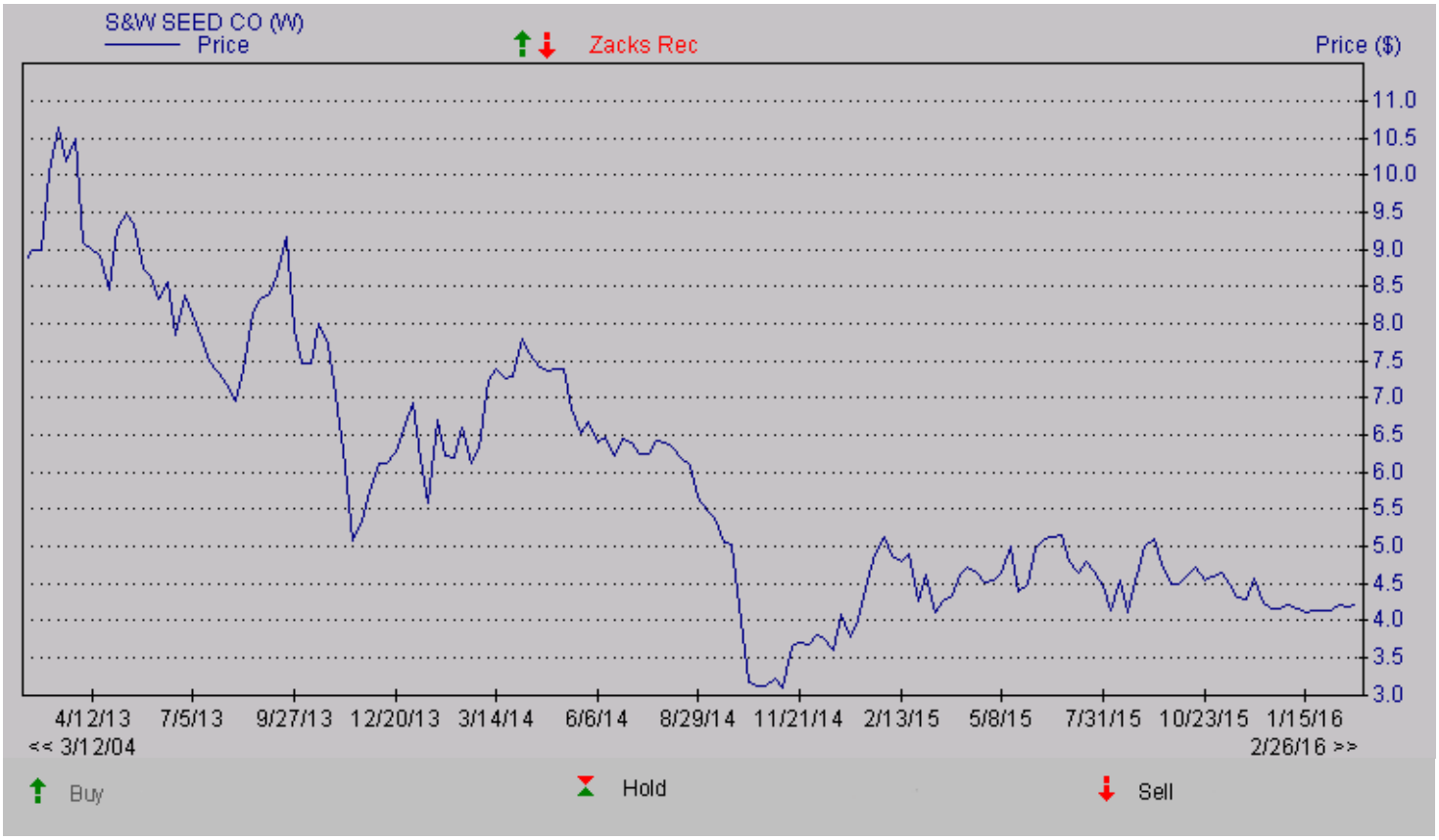
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| S&W Seed | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consolidated Balance Sheet (in millions) | | | | | | | | | | | | | |
| Fiscal Year Jun. 30 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| **ASSETS** | **4Q12** | **4Q13** | **1Q14** | **2Q14** | **3Q14** | **4Q14** | **1Q15** | **2Q15** | **3Q15** | **4Q15** | **1Q16** | **2Q16** |
| Cash & equiv. | 8.24 | 11.78 | 5.13 | 2.59 | 1.66 | 1.17 | 2.32 | 4.92 | 2.64 | 3.54 | 8.38 | 5.22 |
| A/R | 2.72 | 12.70 | 12.84 | 11.87 | 11.07 | 24.26 | 21.49 | 16.10 | 14.58 | 26.73 | 25.95 | 12.65 |
| Inventories | 6.12 | 25.82 | 28.16 | 23.38 | 31.76 | 28.49 | 29.05 | 43.53 | 36.47 | 25.52 | 46.34 | 37.07 |
| Prepaid exp & other | 0.35 | 1.47 | 1.53 | 1.42 | 2.99 | 1.53 | 1.68 | 1.67 | 2.25 | 1.08 | 1.41 | 1.47 |
| Total current assets | $17.42 | $51.77 | $47.66 | $39.25 | $47.49 | $55.44 | $54.54 | $66.22 | $55.94 | $56.87 | $82.08 | $56.41 |
| | | | | | | | | | | | | |
| Property, plant & equip. | 2.44 | 10.24 | 10.26 | 10.32 | 10.30 | 10.36 | 10.40 | 17.51 | 11.15 | 11.48 | 11.49 | 11.86 |
| | | | | | | | | | | | | |
| Investments | | | | | | | | | | | | |
| Intangibles | 0.61 | 20.07 | 20.10 | 19.22 | 19.53 | 19.53 | 18.31 | 49.78 | 48.69 | 47.64 | 46.16 | 46.03 |
| Other | 0.46 | 1.92 | 1.92 | 1.89 | 2.03 | 2.02 | 2.32 | 4.89 | 2.93 | 6.15 | 7.91 | 9.92 |
| | | | | | | | | | | | | |
| **All Assets** | **$22.03** | **$85.58** | **$82.34** | **$73.10** | **$81.86** | **$89.30** | **$88.24** | **$141.41** | **$119.79** | **$122.34** | **$147.63** | **$124.23** |
| | | | | | | | | | | | | |
| **LIABILITIES AND NET WORTH** | | | | | | | | | | | | |
| A/P | 1.45 | 20.41 | 17.52 | 6.70 | 13.69 | 16.08 | 15.97 | 31.69 | 15.23 | 14.85 | 34.61 | 20.27 |
| Accrued liabilities | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 14.10 | 0.22 |
| ST debt | | | | | | | | | | | | |
| Current portion of LTD-related parties | | | | | | | | | | | | |
| Other | 0.45 | 2.33 | 1.72 | 0.60 | 0.86 | 0.82 | 0.53 | 1.32 | 1.11 | 2.39 | 2.50 | 1.34 |
| Total current liabilities | $1.90 | $22.73 | $19.24 | $7.29 | $14.55 | $16.90 | $16.49 | $33.01 | $16.33 | $17.24 | $51.21 | $21.83 |
| | | | | | | | | | | | | |
| L.T. Debt, net of current portion-related parties | 0.00 | 4.67 | 4.60 | 4.48 | 4.47 | 4.45 | 4.44 | 32.70 | 12.61 | 10.68 | 10.67 | 10.59 |
| L.T. Debt, net of current portion | 0.00 | 0.30 | 0.53 | 0.00 | 0.00 | 0.15 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total liabilities | 1.90 | 27.70 | 24.37 | 11.78 | 19.02 | 21.50 | 21.08 | 65.71 | 28.94 | 27.92 | 61.87 | 32.41 |
| | | | | | | | | | | | | |
| Common Stock | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 |
| Additional paid-in capital | 19.80 | 54.35 | 54.41 | 54.60 | 54.78 | 55.12 | 55.31 | 59.76 | 60.99 | 62.07 | 63.25 | 68.42 |
| Retained earnings | 0.33 | (2.19) | (2.15) | (2.04) | (2.44) | (1.82) | (2.69) | (4.23) | (4.70) | (4.98) | (6.85) | (5.49) |
| Other | 0.00 | (2.10) | (1.83) | (2.85) | (2.00) | (1.67) | (3.01) | (4.39) | (5.03) | (5.10) | (6.53) | (5.94) |
| Total stockholders' equity | 20.13 | 50.06 | 50.44 | 49.73 | 50.36 | 51.65 | 49.63 | 51.15 | 51.27 | 52.01 | 49.87 | 57.01 |
| **Total liabilities & stockholders' equity** | **$22.03** | **$85.58** | **$82.34** | **$73.10** | **$81.86** | **$89.30** | **$88.24** | **$141.41** | **$119.79** | **$122.34** | **$147.63** | **$124.23** |
| | | | | | | | | | | | | |
| Ian Gilson, PhD; MBA; CFA | | | | | | | | | | | | |

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| S & W Seed Company | | | | | | | |
|---|---|---|---|---|---|---|---|
| Condensed Consolidated Statements of Cash Flows | | | | | | | |
| Dollars in millions | | | | | | | |
| Fiscal Year Jun. 30 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| **Cash flow from operations:** | | | | | | | 6 Months |
| Net (Loss) Income | 0.48 | (0.81) | 0.38 | (2.52) | 0.37 | (3.16) | (0.51) |
| Depreciation & amortization | 0.22 | 0.24 | 0.27 | 0.69 | 1.27 | 2.18 | 1.58 |
| Impairment of goodwill | | | | | | | |
| Amortization of goodwill and debt discount | | | | | | | 1.96 |
| Stock issued for services | | | | | | | |
| Stock based compensation | | 0.12 | 0.19 | 1.05 | 0.87 | 0.90 | 0.63 |
| Impairment of machinery | | | | | | | |
| Loss on disposal of fixed assets | | 0.01 | | | | | |
| Loss (income) on foreign currency translation | | | | | | | |
| Other | (3.18) | (3.26) | (0.79) | (5.14) | (20.38) | 1.05 | 1.60 |
| **Net cash provided by (used in) operations** | **(2.48)** | **(3.70)** | **0.05** | **(5.13)** | **(17.87)** | **11.11** | **5.25** |
| **Cash flow from investments:** | | | | | | | |
| Purchase of PP&E | (0.04) | (0.40) | (0.55) | (0.14) | (0.43) | 1.60 | (0.90) |
| Proceeds from disposal of PP&E | | 0.01 | 0.01 | (15.66) | 0.03 | 7.10 | |
| Other | | | | | (0.35) | (39.89) | (0.32) |
| **Net cash provided by (used in) investments** | **(0.04)** | **(0.39)** | **(0.54)** | **(15.80)** | **(0.76)** | **(31.19)** | **(1.22)** |
| **Cash flow from financing activities:** | | | | | | | |
| Currency changes | (3.65) | | | (0.52) | 0.15 | (0.02) | (0.24) |
| Proceeds from issuance of common stock | 14.00 | | 5.01 | 12.88 | | 4.16 | 4.87 |
| Warrants exercised | | | | 9.58 | 0.21 | | |
| Proceeds (payment) on lines of credit, net | | | | | 8.92 | | (1.82) |
| Proceeds from debt inc. related parties | | | | | (0.75) | | |
| Proceeds from debt | | | | 2.63 | | 27.00 | |
| Payment on debt | | | | | (0.72) | (7.53) | (5.47) |
| Other | | | | (0.09) | 0.20 | (1.17) | 0.31 |
| **Net cash provided by (used in) financing activities** | **10.35** | **0.00** | **5.01** | **24.47** | **8.02** | **22.44** | **(2.36)** |
| Increase (decrease) in cash and equivalents | 7.83 | (4.09) | 4.51 | 3.54 | (10.62) | 2.36 | 1.68 |
| Cash & equivalents at beginning of period | 0.00 | 7.83 | 3.73 | 8.24 | 11.78 | 1.16 | 3.53 |
| Cash & equivalents at end of period | 7.83 | 3.73 | 8.24 | 11.78 | 1.16 | 3.53 | 5.23 |

## HISTORICAL ZACKS RECOMMENDATIONS



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