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Voluntary - Public

Date: 11/25/2009 **GAIN Report Number:** CH9091

China - Peoples Republic of

Post: Beijing

Biotechnology

Report Categories:

FAIRS Subject Report

Approved By: William Westman Prepared By: Mark Petry and Wu Bugang

Report Highlights:

On November 21, 2009, Beijing-based Origin Agritech became the first company to receive deregulated status for a corn variety modified using biotechnology for planting in China. Confirmed by China's Ministry of Agriculture, Origin's phytase corn product recently received the final biosafety certificate that permits its domestic sale and marketing. This ground-breaking authorization may foreshadow a smoother regulatory process for future biotech food crops for planting in China.

Executive Summary:

On November 21, 2009, Beijing-based Origin Agritech announced that it is the first company to receive de-regulated status for genetically modified corn for planting in China. Confirmed by China's Ministry of Agriculture, Origin's phytase corn product recently received the final biosafety certificate that permits its domestic sale and marketing. Biosafety certificates restrict use to certain provinces and it is currently unclear in which provinces MOA has permitted the use of this product.

The deregulation of this product is a ground-breaking event in Chinese agriculture. Though Chinese leaders have long stated that the technology can be safely used given the proper safety evaluation and precautions, no large-scale commercially viable food crops have ever been granted a safety certificate. Prior to this announcement, the list of approved genetically modified plants approved for planting in China included: cotton, tomato, sweet pepper, petunia, poplar, and papaya. At this time, the only large-scale planting of approved biotech plants is cotton and poplar, while there is limited production of biotech papaya. China has approved over 200 varieties of biotech cotton for planting. China currently permits 28 varieties of corn, cotton, canola, sugar beet, and soybean to be imported for processing.

While the granting of the safety certificate is a milestone, it will likely be several years before these seeds are in the hands of farmers. First, seed companies need to register individual seed varieties (conventional or biotech) with provincial authorities. This process of testing can take two years or more. Following the variety approval, the company would then need to replicate the seeds in the field to obtain enough seed for commercial sale. As a result, Chinese farmers may not see these seeds on sale until the 2012 planting season or beyond. Though farmers and livestock producers may want to see the technology in fields sooner, this is a normal timeframe of the development and marketing of new seeds in China, conventional or biotech.

Additional information on China's biotechnology strategy, research and market can be found in GAIN Reports CH9060 and CH9061. Information on planting seeds can be found at CH9001.

General Information: ATTACHED BELOW ARE SEVERAL NEWS ARTICLES AND PRESS RELEASES REGARDING ORIGIN AGRITECH.

Saturday, 21 November 2009 00:30 Business Wire

BEIJING--Origin Agritech Limited (NASDAQ GS: SEED) ("Origin"), a leading technology-focused supplier of crop seeds and agri-biotech research in China, today announced it received a biosafety certificate from China's Ministry of Agriculture as a final approval for commercial release of the world's first genetically modified phytase corn.

Origin's phytase corn is the first transgenic corn to officially introduce the next generation of corn product approved and sold commercially into the domestic marketplace.

Genetically modified seed products in China must undergo five separate stages of approval beginning with a phase one laboratory approval to the final receipt of the biosafety certificate in phase five. Currently, this GM seed approval process is restricted only to domestic seed producers such as Origin Agritech.

Phytase is currently used as an additive in animal feed to breakdown phytic acid in corn, which holds 60% of the phosphorus in corn. Phytase increases phosphorus absorption in animals by 60%.

Phosphorus is an essential element for the growth and development of all animals, and plays key roles in skeletal structure and in vital metabolic pathways. Phytase, as an additive for animal feed, is mandatory in Europe, Southeast Asia, South Korea, Japan, and other regions for environmental purposes.

Phytase transgenic corn, developed by and licensed from Chinese Academy of Agricultural Science (CAAS) after 7 years of study, will allow animal feed producers the ability to eliminate purchasing phytase and corn separately. It will eliminate the need for mixing the two ingredients together, saving time, machinery, and labor for the animal feed producers.

Origin's GMO phytase-producing corn is expected to reduce the need for inorganic phosphate <u>supplements</u> as animals will directly absorb more phosphate from their feed, reducing animal feed's high cost. Inorganic phosphates may be contaminated with fluorin and heavy metal residues created in the manufacturing process. These fluorin and heavy metal residues in the feedstuff are toxic to animals, and dangerous to humans. Origin plans to release further details of the development of their phytase product line as this develops.

Dr. Gengchen Han, Origin's Chairman said, "With this landmark seed approval, we not only own the first GM corn seed product in China, but we are actively leading the new genetically modified generation of agricultural products for China, and will continue to do so for the future."

Press Release from Origin:

http://www.originagritech.com/news/news.php

Origin Agritech Updates Genetically Modified Pipeline

Specific GM products have historically dominated the worldwide crop market

Introduced in US in 1998, glyphosate-resistant corn grew from 950,000 acres in 1998 to 2.3 million acres in 1999 to 41 million acres in 2007

BEIJING--(BUSINESS WIRE)--Origin Agritech Limited (NASDAQ GS: SEED) ("Origin"), a leading technology-focused supplier of crop seeds and agri-biotech research in China, today updated its genetically modified pipeline to set forth the next generation of corn product into China.

Phytase

World's first transgenic phytase corn is expected to be commercially launched in 2009, and is expected to be the first genetically modified corn product in China. Final approval (Phase 5) of product development is expected in late 2008. Currently, phytase corn remains the only biotechnology crop product in Phase 5 of development in China. Phytase is currently used as an additive essential for the

growth and development of all animals, and limits the amount of phosphorus waste in the environment. Phytase, as an additive for animal feed, is mandatory in Europe, Southeast Asia, South Korea, Japan, and Taiwan for environmental purposes. The worldwide phytase potential market size is US\$500 million dollars, including US\$200 million for China alone, according to the China Feed Industry Study. The corn seed market in China is estimated at US\$1 billion.

Glyphosate (Herbicide) Resistance

Glyphosate resistance is in the intermediate testing phase (Phase 2). Origin plans to apply for environmental release test for both (Phase 3) in mid-2008 for 5 selected lines. Origin Agritech retains the exclusive license rights to these specific herbicide resistant traits, and expects to be the first company to commercialize the herbicide resistant crops in China.

Worldwide, the largest segment of the transgenic crop market has been herbicide resistant crops. Specifically, glyphosate resistant crops have been widely accepted in cotton, corn, and canola in North America. Introduced in the US in 1998, the use of glyphosate resistant corn grew from 950,000 acres in 1998 to 2.3 million acres in 1999 to 41 million acres in 2007, or at a compounded annual growth rate of 51.9%, according to the US Department of Agriculture. The rapid historical adoption rate indicates farmers find this trait to be extremely valuable. The high level of adoption of these crops by farmers has also caused the reduction in value of the remaining herbicide market.

Since their introduction in 1996, over 75 million acres of genetically engineered glyphosate-resistant crops have been planted, making up 46% of the corn acres, 80% of soybean acres, and 70% of cotton acres in the US. These genetically engineered crops have been adopted by farmers because they are perceived to offer significant economic benefits over conventional crop and herbicide programs. The adoption of glyphosate-resistant crops has reduced costs for US farmers an estimated \$1.2 billion. On the basis of recent adoption rates by growers around the world, it appears that glyphosate-resistant crops will continue to grow in number and in hectares planted.

Pest Resistance (Bt Corn)

Pest resistance (Bt Corn) is in the intermediate testing phase (Phase 2). Origin plans to apply for environmental release test for both (Phase 3) in late 2008 for 3 selected lines, and the company retains the exclusive license rights to these specific pest resistant (Bt corn) traits which, in all early trials, are the best performing traits for pest resistance throughout China.

Bt crops produce a protein toxic to specific insects used in areas with high levels of infestations of targeted pests. Bt cotton, which controls varieties of the budworm and bollworm, was planted on 59 percent of U.S. cotton acreage and 75 percent of the Chinese cotton acreage in 2007. Introduced in 1996 in the US, acreage of Bt corn has grown from 3.6 million acres in 1999 to 44 million acres in 2007, or at a compounded annual growth rate of 36.7%, according to the US Department of Agriculture. This Bt corn variety was planted on 49 percent of U.S. corn acreage in 2007.

Stacked Traits: Glyphosate Resistance & Pest Resistance (Bt)

Glyphosate resistance and pest resistance are in the intermediate testing phase (Phase 2). Origin plans to apply for environmental release test for both (Phase 3) in 2008. Worldwide, more than 250 million acres of biotech crops with herbicide resistant and pesticide resistant traits were planted in 22 countries countries in 2006, with the U.S. accounting for about 54 percent. Argentina, Brazil, Canada, India, China, Paraguay, and South Africa together account for nearly 43 percent, according to the International Service for the Acquisition of Agri-biotech Applications.

Nitrogen Efficiency & Drought Tolerance

Nitrogen efficiency and drought tolerance traits are in the laboratory testing phase (Phase 1). Again, Origin Agritech retains the exclusive license rights to these specific traits.

Historically, these are the glyphosate and Bt traits that have dominated globally. We believe that our product pipeline is unparalleled. Bailang Zhang, a director of Chinese Academy of Agricultural Sciences (CAAS), industry expert, and Origin Agritech board member commented. He continued, Origin continues to be unique with its in-house biotechnology capabilities and GM product pipeline in China. Coupled with the fact that China continues to remain a marketplace for Chinese players, as only China-based firms are able to move past the initial round of testing, Origin Agritech, from a strategic standpoint, remain second to none.

Origin Agritech Limited Reaches Agreement for Novel Glyphosate-Tolerance Gene

Worldwide Rights for Genetically Modified (GM) Corn, Soybean, Rice, Cotton, and Canola products

- Press Release
- Source: Origin Biotechnology
- On Thursday September 17, 2009, 9:23 am EDT

BEIJING--(BUSINESS WIRE)--Origin Biotechnology, a wholly-owned subsidiary of Origin Agritech Limited (NASDAQ:<u>SEED</u> - <u>News</u>) announced it has reached an comprehensive, worldwide agreement with the Institute of Microbiology of the Chinese Academy of Sciences (CAS) and Sichuan Biotech Engineering, Limited. CAS and Sichuan Biotech jointly own the rights to an internally developed gene which is highly tolerant to glyphosate (herbicide). This glyphosate-tolerance gene, demonstrated to be extremely effective in both laboratory and field environments, is entirely new to the consumer markets in that it has never been commercialized, and is protected by patents granted separately by China and USA separately.

For the entire life of the patent, Origin Biotechnology will receive exclusive rights to sell and develop corn, soybean, rice, cotton and canola products that contain these technology traits worldwide, both in the territory within China and outside of China. Origin Biotechnology will also receive exclusive rights to sub-license to any third parties to sell and develop corn, soybean, rice, cotton and canola

products that contain these traits and with application of patent technology worldwide in the territory within China and outside of China. Origin Biotech will also receive the rights to improve and further develop this glyphosate-tolerant gene. Additionally, no change of control in the patent will have impact on the validity of this agreement.

As a result of this landmark agreement for Origin, Chairman Gengchen Han reiterated, "Origin continues to demonstrate that it is the leading, technology-focused crop seed company in China. Our goal remains consistent ---- to lead the industry by serving farmers with unique enabling technology and services, producing and protecting higher crop yields. Our focus remains in the production of higher quality seed products, whether proprietary or licensed."

UPDATE OF ORIGIN GM PROGRAM

Phytase

World's first transgenic phytase corn is expected to be commercially launched as the first genetically modified corn product in China. Phase 5 passage is expected near term pending a final stage approval from the Ministry of Agriculture (MOA). Currently, phytase corn continues to remain the only biotechnology corn product in Phase 5 of development in China. Phytase is currently used as an additive essential for the growth and development of all animals, and limits the amount of phosphorus waste in the environment. Phytase, as an additive for animal feed, is mandatory in Europe, Southeast Asia, South Korea, Japan, and Taiwan for environmental purposes. The worldwide phytase potential market size is US\$500 million dollars, including US\$200 million for China alone, according to the China Feed Industry Study. The corn seed market in China is estimated at US\$1 billion.

Glyphosate (Herbicide) Tolerance

Glyphosate tolerance has passed the intermediate testing phase (Phase 2) and entered the environmental release testing phase (Phase 3). Worldwide, the largest segment of the transgenic crop market has been herbicide tolerant crops. Specifically, glyphosate tolerant crops have been widely accepted in cotton, corn, and canola in North America. Introduced in the US in 1998, the use of glyphosate tolerant corn grew from 950,000 acres in 1998 to 2.3 million acres in 1999 to 41 million acres in 2007, or at a compounded annual growth rate of 51.9%, according to the US Department of Agriculture. The rapid historical adoption rate indicates farmers find this trait to be extremely valuable. The high level of adoption of these crops by farmers has also caused the reduction in value of the remaining herbicide market.

Since their introduction in 1996, over 75 million acres of genetically engineered glyphosate-tolerant crops have been planted, making up 46% of the corn, 80% of soybean acres, and 70% of cotton acres in the US. These genetically engineered crops have been adopted by farmers because they are perceived to offer significant economic benefits over conventional crop and herbicide programs. The adoption of glyphosate-tolerant crops has reduced costs for US farmers an estimated \$1.2 billion. On the basis of recent adoption rates by growers around the world, it appears that glyphosate-tolerant crops will continue to grow in number and in hectares planted.

Pest Resistance (Bt Corn)

Pest resistance (Bt Corn) has passed the intermediate testing phase (Phase 2) and entered the environmental release phase (Phase 3). In these phase 2 and 3 trials, these traits continue to perform as the best performing traits for pest resistance throughout China.

Bt crops produce a protein toxic to specific insects used in areas with high levels of infestations of targeted pests. Bt cotton, which controls varieties of the budworm and bollworm, was planted on 59 percent of U.S. cotton acreage and 75 percent of the Chinese cotton acreage in 2007. Introduced in 1996 in the US, acreage of Bt corn has grown from 3.6 million acres in 1999 to 44 million acres in 2007, or at a compounded annual growth rate of 36.7%, according to the US Department of Agriculture. This Bt corn variety was planted on 49 percent of U.S. corn acreage in 2007.

About Origin

Founded in 1997 and headquartered in Beijing, Origin Agritech Limited (Nasdaq: <u>SEED</u> - <u>News</u>) is one of China's leading, vertically-integrated agricultural technology company specializing in hybrid seed research, development and production to supply the growing populations of China and Southeast Asia. Origin develops, grows, processes, and markets hybrid seeds to farmers throughout China and parts of Southeast Asia via a network of approximately 3,200 distributors. The hybrid seed industry is estimated at US\$2 billion and that is expected to double by 2010. The animal nutrition market is estimated at US\$1.6 billion. The Company currently operates facilities in 30 of China's 32 provinces as well as Beijing. Since Origin launched its first entirely internally developed seed in 2003, the Company has developed and commercialized a proprietary seed portfolio of ten corn hybrids, six rice hybrids and two canola hybrids. For further information, please log on <u>www.originagritech.com</u>.