Verdeca's HB4 Stress Tolerance Trait Completes US Food and Drug Administration Early Food Safety Evaluation

August 26, 2015 8:55 AM ET

DAVIS, Calif. & ROSARIO, Argentina--(BUSINESS WIRE)--Aug. 26, 2015-- Arcadia Biosciences, Inc. (NASDAQ: RKDA) and Bioceres S.A. announced today that Verdeca, their soybean technology joint venture, received notification that the US Food and Drug Administration (FDA) has completed the Early Food Safety Evaluation (EFSE) process for HAHB4, the plant protein responsible for Verdeca's HB4 stress tolerance trait. Completion of this review is a major milestone in the development of commercial soybean seed products based on the HB4 stress tolerance trait, as well as the development of HB4-based products in other crops.

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In the EFSE process, the FDA reviewed safety data provided by Verdeca and supported the conclusion that the inadvertent presence of low levels of the HAHB4 protein would not raise food safety concerns. The data provided to the FDA is consistent with international regulatory requirements for genetically modified crops and will be used by Verdeca and its global partners for future regulatory submissions.

Since 1992, the FDA has encouraged developers of new plant varieties, including those varieties developed through biotechnology, to consult with the agency early in the development process to discuss possible scientific and regulatory issues that might arise. The EFSE process accomplishes this objective by reviewing data and conclusions on the protein introduced to a variety, addressing potential allergic reactions and toxicity for humans or animals. By conducting an early evaluation of a protein and finding no food safety concerns, the FDA would then not expect an additional early food safety evaluation to be submitted if the same protein is introduced into another plant species.

"Soybean seed products based on the HB4 stress tolerance trait are in the latter stages of development, and completion of the EFSE process is a very strong and positive signal about safety," said Eric Rey, president and CEO of Arcadia Biosciences. "The core safety data used in the EFSE process will facilitate international regulatory approvals for HB4 stress-tolerant soybeans, and for the use of the HB4 trait in other crops as well."

"FDA conclusions are of great significance to regulators around the globe and constitute a valuable reference for present and future submissions concerning HB4 seeds," said Federico Trucco, CEO of Bioceres. "As more regulatory agencies review the safety data and gain confidence in the safety of HB4 products, we hope to be able to expedite the pending regulatory processes required for the commercial launch of the technology."

Verdeca's HB4 soybeans have undergone extensive testing, including six seasons of multi-location field trials in Argentina and the United States and three years of regulatory field trials. The results of these trials demonstrate that the HB4 trait can provide up to a 14 percent yield advantage under multiple stress conditions – including drought and low-water conditions – typically found in soybean production areas.

The FDA's evaluation follows the April regulatory approval from Argentina's National Advisory Commission on Agricultural Biotechnology (CONABIA) and the Biotechnology Directorate from the Ministry of Agriculture, Livestock and Fisheries of Argentina. The Argentinian approval was the first regulatory approval for the HB4 trait, and the world's first regulatory approval of an abiotic stress tolerance trait in soybeans.

Along with this key regulatory milestone, Verdeca recently announced significant partnerships that will advance the development of high-value traits in soybeans. In July, Bioceres, Arcadia, and Tropical Melhoramento e Genética Ltda. (TMG) announced a collaboration to develop and commercialize Verdeca's HB4 stress tolerance trait in soybeans. And earlier this year, Verdeca announced a collaboration with Dow AgroSciences to develop soybean trait stacks that combine

Verdeca's agronomic performance and product quality traits with Dow AgroSciences' herbicide tolerance and insect resistance traits.

Soybeans are the world's fourth-largest crop, grown on 110 million hectares worldwide. Global demand is projected to increase over the next decade as a result of population growth and the expanding middle class in highly populated countries such as India and China. South America is the world's largest exporter of soybeans to both developed and developing countries, and more than 45 percent of the world's soybeans are grown in Argentina and Brazil. Verdeca is developing multiple agronomic performance and product quality traits in soybeans to give farmers new options to help increase productivity and total value.

About Arcadia Biosciences, Inc.

Based in Davis, Calif., with additional facilities in Seattle, Wash. and Phoenix, Ariz., Arcadia Biosciences (NASDAQ: RKDA) develops agricultural products that create added value for farmers while benefitting the environment and enhancing human health. Arcadia's agronomic performance traits, including Nitrogen Use Efficiency, Water Use Efficiency, Salinity Tolerance, Heat Tolerance and Herbicide Tolerance, are all aimed at making agricultural production more economically efficient and environmentally sound. Arcadia's nutrition traits and products are aimed at creating healthier ingredients and whole foods with lower production costs. The company was recently listed in the Global Cleantech 100 and was previously named one of MIT Technology Review's 50 Smartest Companies. For more information, visit www.arcadiabio.com.

About Bioceres

Bioceres is a fully integrated agricultural biotechnology company utilizing multiple technology platforms to develop and commercialize products that enhance crop productivity and expand feedstock applications. The company is owned by more than 250 of South America's largest growers. Bioceres is a major shareholder of INDEAR (Institute of Agricultural Biotechnology of Rosario) and Bioceres Semillas. For more information visit <u>www.bioceres.com.ar</u>.

About Verdeca

Verdeca, a U.S.-based joint venture between Bioceres and Arcadia Biosciences, develops and deregulates soybean varieties with next-generation agricultural technologies. Working in partnership with South American growers, Verdeca aims to provide technologies that help increase crop productivity, making more efficient and sustainable use of land and water resources. For more information visit <u>www.verdeca.com</u>.

Note Regarding Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements relating to Verdeca's HB4 trait and the regulatory process for such trait. Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially, and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to: Arcadia's and its partners' and affiliates' ability to develop commercial products incorporating their traits, including the HB4 trait, and complete the regulatory review process for such products; Arcadia's compliance with laws and regulations that impact Arcadia's business, and changes to such laws and regulations; Arcadia's future capital requirements and ability to satisfy its capital needs; and the other risks set forth in Arcadia's fullings with the Securities and Exchange Commission from time to time, including the risks set forth in Arcadia's Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 and other filings. These forward-looking statements speak only as of the date hereof, and Arcadia Biosciences, Inc. disclaims any obligation to update these forward-looking statements.

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