## Arcadia Biosciences and Mahyco Announce Pipeline Advancement for Salinity Tolerant Rice

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# - Technology Can Help Mitigate the Impact of Salt Stress and Improve Productivity in Southeast Asia -

DAVIS, Calif. & JALNA, India--(BUSINESS WIRE)--Mar. 7, 2016-- Arcadia Biosciences, Inc. (Nasdaq:RKDA), an agricultural technology company, and Maharashtra Hybrid Seeds Co. Pvt. Ltd. (Mahyco), today announced the achievement of a pipeline advancement target in the development of Salinity Tolerant rice.

In two years of initial field trials, rice varieties with Arcadia's Salinity Tolerance (ST) trait showed double-digit yield increases under saline conditions with no loss of yield under normal conditions. Mahyco will be advancing these lead ST rice lines into their trait introgression program and conducting further multi-location field trials to validate trait performance, a significant step in product development and commercial advancement for both companies.

"With the conclusion of the salinity tolerant rice trials, we are able to identify lines which have shown superior performance in acute salt stress conditions," said Dr. Usha Barwale Zehr, Chief Technology Officer of Mahyco. "We will now move forward to incorporate these rice lines into elite materials to bring commercial benefits to rice growers."

The global cost of lost crop yield to salt-induced land degradation is estimated to be \$27.3 billion per year according to the United Nations Natural Resources Forum. Of the world's 568 million acres of irrigated land, 111 million acres, or about 20 percent, are estimated to be salt-affected.

Arcadia's Salinity Tolerance trait enables plants to produce increased yields under conditions of elevated salinity, expanding the range of usable acreage for crop production and reducing requirements for fresh water. Salinity Tolerant rice is in Phase 3 of development, and the trait has been applied other important row crops such as wheat and cotton.

Rice is the world's most valuable crop, grown on more than 405 million acres globally with a harvest value of \$328 billion in 2013, according to the United Nations Food and Agriculture Organization (FAO). Salinity stress occurs globally where irrigation is prevalent, where ground water supplies are salinized due to seawater intrusion and where soils are salinized due to mineral deposits. Such areas are common in North America, India, China, Australia and other regions of Asia.

"This development signals an important milestone for us and our partner Mahyco in terms of the additional value salt tolerance traits could have on rice productivity," said Roger Salameh, interim president and CEO of Arcadia Biosciences. "As we explore the global effects of salinity on agriculture, we recognize the importance of this trait for rice farmers throughout Asia. More importantly, Salinity Tolerance is just one of a number of high value yield traits currently under development in the Arcadia/Mahyco collaboration."

#### **About Mahyco**

Established in 1964 by Dr. Badrinarayan R. Barwale, Mahyco is a pioneer and leader in the Indian seed industry. The company strives to provide quality seeds. Since its inception it has been engaged in plant genetic research and production of quality seeds for the farming community of India. Currently, it is engaged in the research, production, processing and marketing of approximately 115 products in 30 crop species including cereals, oilseeds, fiber and vegetables. Mahyco is also developing genetically enhanced crops with the use of gene transfer technology. Mahyco has a national presence with its network across the country. For more information visit <a href="https://www.mahyco.com">www.mahyco.com</a>.

### 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 previously listed in the Global Cleantech 100 and has been named one of MIT Technology Review's 50 Smartest Companies. For more information, visit www.arcadiabio.com.

#### **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 the company's Salinity Tolerance 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: the company's and its partners' and affiliates' ability to identify and isolate desired traits, including Salinity Tolerance; the company's and its partners' ability to develop commercial products incorporating its traits, including Salinity Tolerance, and complete the regulatory review process for such products; the company's compliance with laws and regulations that impact the company's business, and changes to such laws and regulations; the company's future capital requirements and ability to satisfy its capital needs; and the other risks set forth in the company's quarterly Report on Form 10-Q for the quarter ended September 30, 2015 and other filings, including the company's upcoming Annual Report on Form 10-K for 2015. 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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