



**FOR IMMEDIATE RELEASE**

**Contact:** Jeff Bergau  
jeff.bergau@arcadiabio.com  
+1-312-217-0419

**ARCADIA BIOSCIENCES AND ADVANTA TO DEVELOP NITROGEN USE EFFICIENT SORGHUM**

**-- Improvement In Fertilizer Use Efficiency To Increase On-Farm Productivity And Decrease Environmental Impact Of Sorghum Farming --**

*2009 H.I.C. Afanwal*  
**DAVIS, Calif. (January 15, 2008)** – Arcadia Biosciences, Inc, an agricultural technology company focused on developing technologies and products that benefit the environment and human health, and Advanta, a leading multinational seed company, today announced completion of a research and commercial development agreement for the development of Nitrogen Use Efficient (NUE) sorghum. Under terms of the agreement, Advanta receives exclusive global rights to the use of Arcadia's NUE technology in sorghum. Arcadia receives an upfront payment, milestone payments and a share of commercial sales.

Sorghum is an important feed crop that is grown on more than 100 million acres globally. In addition, sweet sorghum is a highly productive potential biofuel source. Like most grain crops, sorghum is extremely dependent upon nitrogen fertilizer to achieve attractive commercial yields. Also like most grain crops, it is an inefficient user of nitrogen—barely more than half of the nitrogen applied to sorghum fields is utilized for plant growth. As a result, the remainder may run off into area waterways or volatilize as nitrous oxide, a potent greenhouse gas. Availability of NUE sorghum varieties can significantly reduce the amount of nitrogen farmers apply to fields, which can increase on-farm productivity and profitability while decreasing the potential environmental impacts from nitrogen fertilizer use. Reduced use of nitrogen fertilizer will also reduce the carbon footprint and increase the net energy of biofuels based on sorghum crops.

"While it does not have as much widespread visibility as other grain crops, sorghum is an extremely important global crop, and its importance will continue to grow as a function of the increasing interest in biofuels. Development of NUE sorghum varieties can help farmers who produce sorghum for feed or fuel to farm more efficiently, cost-effectively and in a way that's better for our global environment," said Eric Rey, president and CEO of Arcadia. "Advanta is a world leader in sorghum seed development, distribution and sales and are the perfect partner for this program."

"This is an important step forward for us in our effort to bring the latest technologies to the sorghum farmers around the world. By increasing the efficiency of the sorghum plants in their utilization of nitrogen we will be able to enhance the yields, reduce the consumption of nitrogen and eventually reduce the costs for the farmer. We are very excited by this development," said VR Kaundinya, CEO and managing director of Advanta. "Arcadia has a leadership position in the NUE technology and we are very happy to partner with them in this process."

*H.I.C. Afanwal*





**About Arcadia Biosciences, Inc.**

Based in Davis, Calif., with additional facilities in Seattle, Wash. and Phoenix, Ariz., Arcadia Biosciences is an agricultural technology company focused on the development of agricultural products that improve the environment and enhance human health. For more information visit [www.arcadiabio.com](http://www.arcadiabio.com).

**About Advanta**

Advanta is a global seed company located in India with a wide range of proprietary products in important crops that improve the productivity and profitability of the farmers in different parts of the world. Advanta is a member of the United Phosphorous Group of Companies. For more information visit [www.advantaindia.com](http://www.advantaindia.com).

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H.K. Agarwal

