Arcadia Biosciences and African Agricultural Technology Foundation Collaborate on Test Planting of Nitrogen Use Efficient Rice

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-- Royalty-Free Technology License From Arcadia To Support African Food Security Through Increased Yield and Reduced Fertilizer Dependence --

DAVIS, Calif. and NAIROBI, Kenya, (June 11, 2013) – Arcadia Biosciences, Inc., an agricultural technology company focused on developing technologies and products that benefit the environment and human health, and the African Agricultural Technology Foundation (AATF) today announced the planting of the first field trial of Nitrogen Use Efficient (NUE) rice in Africa. The NUE rice field trial is the result of more than five years of collaboration between Arcadia, the AATF, and African researchers in more than three countries, working with the United States Agency for International Development (USAID) and other organizations under the Feed the Future initiative to help bolster food security in Africa.

The multi-organizational effort leverages the experience of leading African agricultural research organizations as well as technical expertise and a royalty-free license from Arcadia Biosciences to develop and test new rice lines. The NUE field trials are being conducted in Ghana by the Crop Research Institute (CRI) and in Uganda by the National Agricultural Research Organisation (NARO). The Public Intellectual Property Resource for Agriculture (PIPRA) provided access to enabling technologies, and the International Center for Tropical Agriculture (CIAT) in Cali, Colombia conducted preliminary field evaluations of the most promising varieties.

Rice is one of the most cultivated and important African food crops. According to the United Nations Food and Agriculture Organization, farmers in Sub-Saharan Africa (SSA) produce about 20 million metric tons of rice annually, yet the continent imports 9 million metric tons, which is valued at $4 billion. Most of Africa's rice is produced and consumed by small-scale farmers who are often constrained by challenging environmental conditions, such as nutrient-deficient soil, drought, and salinity.

Soil nitrogen deficiencies in particular affect approximately 90 percent of African land used to grow rice and other crops. Access to rice varieties that make better use of available nitrogen in soil and respond more effectively to small amounts of fertilizer can help alleviate these agricultural pressures on African farmers and can minimize the continent's dependency on food imports. Additionally, Arcadia's NUE technology can decrease greenhouse gas emissions that result from the use of nitrogen fertilizer.

"This year's rice trials in Uganda and Ghana are a significant milestone for the project, advancing the prospect of improved rice varieties that will address the constraints of nitrogen deficiency, drought and salinity in rice production for smallholder farmers," said Dr. Denis Kyetere, the Executive Director of AATF.

"Donating our technical expertise and key technologies in specific crops to the developing world to improve food security has always been part of our founding philosophy. Our long-standing partnership with AATF has yielded exciting results and moved some of our important technologies, like NUE, closer to the growers who need them," said Eric Rey, president and CEO of Arcadia. "These first test plantings in Ghana and Uganda are an important step in our efforts to help alleviate the challenges of feeding a growing population with technologies that are both environmentally responsible and economically sustainable."

The African NUE field trials are part of the larger NEWEST Rice project that Arcadia is working on with the AATF and USAID. NEWEST Rice is a triple-gene stack rice variety that combines nitrogen use efficiency with water efficiency and saline tolerance, helping farmers maintain productivity under variable conditions. Field trials for the NEWEST lines are expected to begin by the end of this year.

About Arcadia Biosciences, Inc.
Based in Davis, Calif., Arcadia Biosciences is an agricultural technology company focused on the development of

agricultural products that improve the environment and enhance human health. Arcadia's agronomic traits, including NUE, Water Efficiency, Salt Tolerance, Heat Tolerance, and Herbicide Tolerance, are all aimed at making agricultural production more economically efficient and environmentally sound. Arcadia's health technologies and products create healthier nutritional ingredients and foods with lower cost of production. For more information visit www.arcadiabio.com.

About The African Agricultural Technology Foundation (AATF)
The African Agricultural Technology Foundation (AATF) is a not-for-profit organization that facilitates and promotes public/private partnerships for the access and delivery of appropriate agricultural technologies with potential to increase the productivity of resource-poor smallholder farmers in Sub-Saharan Africa. For more information visit www.aatf-africa.org.

About the United States Agency for International Development (USAID)
USAID invests in ideas that work to improve the lives of millions of men, women and children around the world by investing in agricultural productivity; combating maternal and child mortality and deadly diseases like HIV, malaria and tuberculosis; providing life-saving assistance in the wake of disaster; promoting democracy, human rights and good governance around the world; fostering private sector development and sustainable economic growth; helping communities adapt to a changing environment; and elevating the role of women and girls throughout all our work. For more information visit www.usaid.gov.

About Feed the Future
Feed the Future is the U.S. Government's global hunger and food security initiative. With a focus on smallholder farmers, particularly women, Feed the Future supports partner countries in developing their agriculture sectors to spur economic growth and trade that increase incomes and reduce hunger, poverty and under nutrition. For more information visit www.feedthefuture.gov.

About The Crop Research Institute, Ghana
CRI's mission is to ensure high and sustainable crop productivity and food security through development and dissemination of environmentally sound technologies. CRI has a broad research mandate covering all food and industrial crops. These include maize, rice, cowpea, soybean and groundnut. Others are cassava, yam, cocoyam, sweet potato, vegetables and fruit crops, plantain and bananas. For more information visit www.cropsresearch.org.

About the National Agricultural Research Organisation, Uganda
The National Agricultural Research Organisation (NARO) is the apex body for guidance and coordination of all agricultural research activities in the national agricultural research system in Uganda. Its goal is to enhance the contribution of agricultural research to sustainable agricultural productivity, economic growth, food security and poverty eradication through generation and dissemination of appropriate technologies, knowledge and information. For more information visit www.naro.go.ug.

About the Public Intellectual Property Resource for Agriculture
The Public Intellectual Property Resource for Agriculture (PIPRA) is a non–profit initiative which helps developing countries access new technologies by decreasing intellectual property barriers, improving commercialization strategies, and increasing technology transfer. PIPRA also helps public institutions more broadly by supporting them in getting their technological innovations to those who need it most. For more information visit www.pipra.org.

About the International Center for Tropical Agriculture
The Centro Internacional de Agricultura Tropical (CIAT) is an international agricultural research organization focused on eco-efficient agriculture. CIAT significantly contributes to major global initiatives that seek to reduce rural poverty, strengthen food security, improve human health and nutrition, and sustainably manage natural resources throughout the developing world. For more information visit www.ciatnews.cgiar.org.