

## **Arcadia Biosciences, USAID and CIMMYT to Develop Heat-tolerant Wheat**

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### **--New Varieties To Improve Wheat Yields Despite Increasing Global Temperatures--**

**DAVIS, Calif., Mexico City, Mexico, and Washington, D.C. (October 19, 2012)**– Arcadia Biosciences, Inc., an agricultural technology company focused on developing technologies and products that benefit the environment and human health, the International Maize and Wheat Improvement Center (CIMMYT) and the U.S. Agency for International Development (USAID) today announced that they have signed an agreement to develop heat-tolerant wheat varieties using a range of classical breeding and modern molecular biology tools. Under the terms of the agreement, CIMMYT will receive non-exclusive rights in developing countries to Arcadia’s heat-tolerance technology developed under this agreement, and Arcadia will retain exclusive commercial rights in the developed world. Arcadia will lead the program under a \$3.8 million grant from USAID. Heat-tolerant varieties from the program will allow wheat farmers in both developed and developing countries to maintain yields and satisfy ever-increasing demand for this key food grain in the face of rising global temperatures.

Development of heat-tolerant wheat aligns Arcadia’s commercial wheat technology program with the missions of USAID and CIMMYT in poverty reduction and food security. This alliance will bring the resources and expertise of all three organizations to drive technological innovation to address a significant global challenge. With approximately 50 million acres under cultivation worldwide, wheat is the world’s second largest food crop. Because of its importance in diets around the globe, demand in developing countries is projected to increase 60 percent by 2050 to meet demands of the growing global population. While total wheat acres are increasing, global wheat productivity is decreasing, mostly as a result of increasing average temperatures. In fact, wheat yields have already fallen an estimated 5 percent in major wheat-producing countries such as the U.S., Australia and Russia. An estimated 1.2 billion poor people – a majority of whom live in South Asia – depend upon wheat as a primary food source. Current climate change models suggest that wheat yields could decline by as much as 40 percent by 2050 in South Asia. The development of heat-tolerant wheat can play a significant role in maintaining yields and meeting demand in both the developed and developing world.

“Wheat is one of the most important food commodities for consumers, farmers and the food industry, but the effect of rising global temperatures is already having a negative impact on production,” said Eric Rey, president and CEO of Arcadia. “Our partnership with USAID and CIMMYT enables us to share advances in our wheat technology program and access CIMMYT’s expertise and experience testing wheat in stressed environments. Through our global commercial wheat relationships, products of this collaboration will benefit farmers in the major wheat-producing countries and contribute to the productivity of small farmers in developing countries, thereby enhancing food security.”

#### **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 CIMMYT**

Headquartered in Mexico, [the International Maize and Wheat Improvement Center](#) (known by its Spanish acronym, CIMMYT) is a not-for-profit agriculture research and training organization. The center works to reduce poverty and hunger by sustainably increasing the productivity of maize and wheat in the developing world. CIMMYT is a member of the [CGIAR Consortium](#) and receives support from national governments, foundations, development banks, and other public and private agencies.

#### **About USAID**

The U.S. Agency for International Development (USAID) is an independent agency that provides economic, development and humanitarian assistance around the world in support of the foreign policy goals of the United States. As stated in the

President's National Security Strategy, USAID's work in development joins diplomacy and defense as one of three key pieces of the nation's foreign policy apparatus. USAID promotes peace and stability by fostering economic growth, protecting human health, providing emergency humanitarian assistance, and enhancing democracy in developing countries. These efforts to improve the lives of millions of people worldwide represent U.S. values and advance U.S. interests for peace and prosperity. [www.usaid.gov](http://www.usaid.gov)

### **About Feed the Future**

Feed the Future is the United States Government's global hunger and food security initiative. It supports country-driven approaches to address the root causes of hunger and poverty and forge long-term solutions to chronic food insecurity and undernutrition. Drawing upon resources and expertise of agencies across the U.S. Government, this Presidential Initiative is helping countries transform their own agriculture sectors to grow enough food sustainably to feed their people.

[www.feedthefuture.gov](http://www.feedthefuture.gov)