

USU scientists develop barley to be sent to Ethiopia

Crop varieties could help with famines

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In impoverished Ethiopia, famine and drought often go together, but two barley varieties developed by Utah State University researchers could change that equation.

The crop varieties known as Walker and Aquila do well in dry areas, making them perfect for the east African nation.

Both are six-row barley varieties bred by scientists in the USU Small Grains Research program with support from the Utah Agricultural Experiment Station.

Available through the USU-based Utah Crop Improvement Association (UCIA), the crops are not widely grown in Utah but they have traits that made them interesting to Morrell Agro Industries.

MAI, part of Morrell Family Charities, provided funding to send the barley to Ethiopia after it showed promise in test plots in drought-prone areas, according to Evan Maxfield, an agronomist with MAI.

The key: Walker and Aquila develop seed heads early and produce heavier grains relative to many other varieties.

This means that growers will get an adequate harvest even in less than ideal conditions and with little or no fertilizer and pest control, explained Stan Young, UCIA director. The plants also produce stronger straw so they resist lodging, or lying down in the field.

Walker and Aquila will be part of MAI's efforts to produce and distribute new crops that will help Ethiopians combat famine and improve their economic conditions, Maxfield said.

For instance, the crops will support the creation of a 300-cow dairy, which USU students helped design and plan.

The organization's other plans include teaching dairy practices, introducing better nut and fruit trees, improving irrigation practices and developing family gardens.

"MAI introduced dry farming to Ethiopia in October 2008 when we planted barley, wheat, safflower and chickpea at the end of the rainy season," Maxfield said. "The locals laughed at our dry-farming idea and said it would not work. In February and March of 2009, we successfully harvested the first-ever crops of these types grown there."

The organization has begun a program for the Peasant Farmers Associations to train people to use new plants and technologies and is working with Ethiopian government researchers to test the viability of plant varieties that are new to the country.

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