Developers of fortified food staple awarded World Food Prize
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Four scientists credited with creating food that's fortified with essential nutrients and vitamins and has helped an estimated 10 million people avoid starvation and disease were awarded this year's World Food Prize on Tuesday.

Drs. Maria Andrade, Robert Mwanga, Jan Low and Howarth Bouis were announced as the 2016 laureates during a ceremony at the U.S. State Department in Washington.

The $250,000 prize rewards their work to reduce world hunger and malnutrition through biofortification, the process of breeding critical vitamins and micronutrients into staple crops.

Andrade, Mwanga and Low are being honored for developing the orange-fleshed sweet potato, considered to be the single most successful example of biofortification. It has helped reduce Vitamin A deficiency, which is a public health problem in more than half of all countries, especially in Africa and Southeast Asia, according to the World Health Organization. The vitamin deficiency is the leading cause of preventable blindness in children and it increases the risk of disease and death from severe infections due to a weakened immune system.

Andrade, who was born in Cape Verde Islands off the coast of West Africa, focused her work in Mozambique, developing high-yielding sweet potato varieties and distributing them to more than 100,000 households. The challenges included finding a variety that could withstand drought conditions and training the population how to cook the potato without losing its nutritional value, she said.

The prize came as a surprise, Andrade told The Associated Press in a telephone interview.

"I was driving and got very emotional," she said. "I had to stop the car. I was not expecting the phone call."

For decades, Mwanga has worked primarily in his native Uganda developing vitamin A-rich potato varieties that are disease-resistant and have higher yields. He also has helped his potato gain acceptance among a population that traditionally preferred white or yellow sweet potato varieties with little Vitamin A content. By 2014, more than 30 percent of the farmers in Uganda were growing varieties he developed.

"You realize this is saving lives," he said. "It's preventing children from becoming blind and helping children stay health and spending more time in school and not missing classes because they are sick."

Low, who was born in Denver but now lives in Nairobi, Kenya, structured nutrition studies and programs that convinced almost two million households in 10 African countries to plant, purchase and consume the vitamin-fortified sweet potato.

Bouis, a native of Berkeley, California, is the founder of HarvestPlus at the Washington-based International Food Policy Research Institute. Over a 25-year period, he pioneered the effort to make biofortification a global plant breeding strategy, leading to iron-and zinc-fortified beans, rice, wheat and pearl millet, as well as Vitamin A-enriched cassava, maize and sweet potatoes. The crops have been tested or released in over 40 countries.

The World Food Prize was created by Nobel laureate Norman Borlaug in 1986 to recognize scientists and others who have improved the quality and availability of food. The foundation that awards the prize is based in Des Moines, Iowa, and Andrade, Mwanga, Low and Bouis will receive the prize at an Oct. 13 award ceremony at the Iowa State Capitol.