

Norman Borlaug

Keynote speaker for the ISU Northeast Research Farm silver anniversary celebration.



Borlaug was born on a small dairy farm near Cresco in 1914. He earned his bachelor's degree in forestry and his master's and doctorate degrees in plant pathology from the University of Minnesota. After a brief stint in private industry, he began work at the International Wheat and Corn Improvement Center (CIMMYT) near Mexico City in 1944. His assigned task was to develop imported varieties of wheat, a crop he admittedly knew little about.

Borlaug is a successful plant breeder and teacher. By 1961, Borlaug and his team had developed two new wheat varieties, which were short-stemmed, rust resistant and very productive. Wheat yields tripled and Mexico quickly moved from a wheat importer to a wheat exporter. During this period Borlaug attracted and trained a cadre of young plant scientists from around the world. Known as the "wheat apostles" these trained scientists returned to their native countries and began campaigning for the new crops and methods needed to grow them.

Borlaug is a tireless promoter able to break through bureaucratic barriers common in international efforts. In 1963, these new wheat varieties were introduced to India and Pakistan, warring countries where famine was common. He convinced the leaders of both countries that the Mexican experience was transferable to Asia and that it could be done very quickly with support. In 1967, large supplies of the improved varieties were imported and planted. In three years, wheat production in both countries doubled. The Green Revolution has been felt in varying degrees in Turkey, Malaysia, Burma, Indonesia, Afghanistan, Brazil, Paraguay, Kenya, Tunisia and other countries with "wheat apostles."

In 1970, Borlaug received the Nobel Peace prize for his role in initiating the "Green Revolution." At the awards ceremony, it was said, "You have made the fight against hunger your life-long mission, your passionate calling, to which you have developed your brains - the brains of a first-rate scientist, your hands - the hands of an Iowa farmer, and your open, broad, warm heart." At that time the Des Moines Register stated, "The Green Revolution is likely to affect more people in a short time than any other technological change in history."

Borlaug has continued his comprehensive efforts to reduce hunger worldwide since 1970. In 1973, CIMMYT released Quality Protein Maize (QPM), a high-lysine variety that has acceptable agronomic traits and is recommended for countries where corn is the staple food. He continues as a senior consultant to CIMMYT.

Since 1984, he has worked with former President Jimmy Carter in Global 2000, a program to promote agricultural development in Africa. The program is built on improved seed (QPM), available inputs and credit, sufficient extension assistance and accessible markets. Global 2000 is intended to realize the agricultural potential of Africa. The program was successfully piloted in Ethiopia and Ghana and is today active in several African countries including Mozambique. Jimmy Carter says, "It's one of the most successful programs in the world and Borlaug is one of the main reasons why."

"Whoever can make two ears of corn or two blades of grass grow where only one grew before, will better service mankind and his country than the whole race of politicians put together..." Jonathan Swift paraphrased.

Borlaug is a successful scientist who can double production. He is a successful teacher who can teach others how to double production. He is a practical, experienced problem solver able to work with farmers in the field or with world agricultural and political leaders at the highest levels. He recognizes that the adoption/diffusion of new technologies requires a favorable economic and political environment. He is willing to use his prestige and reputation to remove the bureaucratic hurdles that must be overcome.

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Borlaug envisioned the World Food Prize; the foremost international award recognized outstanding achievement in improving the quality, quantity and availability of food in the world. He also saw the award as a means of establishing role models that would inspire others. The World Food Prize ceremony is held each October in Des Moines, Iowa. Since its inception in 1987, 18 individuals have been awarded the prize.

This quote from the Des Moines Register article on Borlaug summarizes the impact of his service, “Borlaug has made a greater contribution toward the end of hunger in the world than any other living man.”

The World Food Prize

The World Food Prize is the foremost international award recognizing the achievements of individuals who have advanced human development by improving the quality, quantity or availability of food in the world. The World Food Prize was envisioned by Norman Borlaug and is sponsored by the World Food Prize Foundation established by John Ruan. The president of the World Food Prize Foundation is Kenneth Quinn, the former ambassador to Cambodia. The annual award ceremony is held each October in Des Moines.

Previous winners include:

- 1987 M.S. Swaminathan, architect of India’s “Green Revolution”
- 1988 Robert Chandler, Jr., the founding director of the International Rice Institute.
- 1989 Verghese Kurien, who organized milk cooperatives in India.
- 1990 John Niederhauser, who discovered a durable resistance to potato blights.
- 1991 Nevin Scrimshaw, who developed low-cost, protein-rich food products to combat malnutrition in developing nations.
- 1992 Edward Knipling and Raymond Bushland, entomologists who developed the sterile insect technique to control parasites.
- 1993 He Kang, the former Minister of Agriculture in China who is credited with developing the policies that have resulted in marked increases in that nation’s agricultural production.
- 1994 Muhammad Yunus, founder of the Grameen Bank in India which provides small loans to help the poor become self-sufficient.
- 1995 Hans Herren, for his work on biological control of the cassava mealybug in Africa.
- 1996 Henry Beachell and Gurdev Khush, who shared credit for rice genetic lines that dramatically increased rice production worldwide.
- 1997 Ray Smith and Perry Adkisson, who are credited with developing the concept of Integrated Pest Management (IPM).
- 1998 B.R. Barwale, who led the development of the private seed industry in India
- 1999 Walter Plowright, a British veterinarian who developed a vaccine for rinderpest, a common animal virus in Africa known as cattle plague.
- 2000 Surinder Vasal and Evangelina Villegas who worked jointly for nearly three decades to develop Quality Protein Maze (QPM), corn varieties which contain higher levels of the amino acids necessary for proper human nutrition.

The World Food Prize Youth Institute is held in conjunction with the awards program each year. Students from around the state are invited to participate. A limited number of summer internships are available for students. Leah Schultz from Charles City has had internships in Mexico the last two summers. Emily Clark, of Algona, is currently working in Trinidad on a Youth Institute internship. For additional information on the World Food Prize go to www.worldfoodprize.org