



National Association for Plant Breeding LIFETIME ACHIEVEMENT AWARD 2024



REX BERNARDO
University of Minnesota
St. Paul MN

The 2024 recipient of the National Association for Plant Breeding Lifetime Achievement Award is Dr. Rex Bernardo, University of Minnesota, St. Paul MN. Bernardo is Distinguished University Teaching Professor and endowed chair in corn breeding and genetics, where he also serves as director of the University Plant Breeding Center.

As his nomination package states: “Rex Bernardo has made extraordinary research contributions to plant breeding. Unlike other researchers whose impact may be known in certain species or on some topics, Bernardo has had an impact reaching into a wide range of species and on many topics in plant breeding; from international companies to large international crop improvement centers, and to small public plant breeding programs; from designing plant breeding programs to revising classroom teaching, and to engaging undergraduate students. In addition, he has served as a consultant to eight companies. It is rare to see such an excellent combination of impact in academia and industry.”

Bernardo was born and raised in the Philippines, where he obtained his undergraduate degree in plant breeding in 1983. In 1988, he earned his Ph.D. in plant breeding at the University of Illinois. He was a research scientist with Limagrain in Champaign, Illinois from 1988 to 1997, and a professor at Purdue University from 1997 to 2000.

Most of Bernardo's work has been on marker-assisted breeding. He was the first to use best linear unbiased prediction, or BLUP, in plants, and in 1994 he developed a procedure that has since become known as genomic BLUP or GBLUP, which has become very widely used in animal breeding and in breeding major crop species.

A colleague notes: “Dr. Bernardo has been one of the most influential scientists in the past 100 years in the area of crop improvement. His influence and impact span decades and the globe as well as professional sectors: private, public, and government.”

Bernardo received the Young Crop Scientist Award from the Crop Science Society of America (CSSA) in 1999; the Plant Breeding Impact Award from NAPB in 2015; and the Crop Science Research Award from CSSA in 2019. He was elected Fellow of CSSA and of the American Society of Agronomy in 2005. Earlier this year, he was inducted into the Academy of Distinguished Teachers at the University of Minnesota.

At Minnesota, Bernardo teaches a graduate course in plant breeding, a graduate course in professional skills for scientists, and a freshman seminar course on coffee. He has written two textbooks, entitled *Breeding for Quantitative Traits in Plants* and *Essentials of Plant Breeding*. He has developed a sweet corn hybrid, dubbed *GopherCorn*, with kernels that highlight the maroon-and-gold colors of the University of Minnesota and that has been an effective vehicle for public outreach in plant breeding. Bernardo advises the local Community Plant Breeding Team, which is a graduate-student-led effort in breeding leafy African vegetables important to the local African diaspora.

In conclusion, another colleague indicates: “Dr. Bernardo's influence on plant breeding is clear. His mentorship has shaped a generation of successful scientists and industry leaders, evidencing the breadth of his impact. Under his leadership, the UMN Plant Breeding Center has flourished, significantly enhancing the university's role in advancing plant breeding research and education. Rex's authorship of numerous influential research papers, review articles, and widely adopted textbooks underscores his academic prowess and dedication to knowledge dissemination.”

And along with all his many professional accomplishments, Rex shares that he does enjoy leisure time “playing the acoustic guitar, swing dancing with my wife, going tandem biking, and spending time with our six adult F1 progeny and three F2 progeny.”



Dr. Rex Bernardo, University of Minnesota, the 2024 recipient of the Lifetime Achievement Award from the National Association for Plant Breeding, with his sweet corn hybrid, dubbed *GopherCorn*.



Dr. Rex Bernardo, University of Minnesota, the 2024 recipient of the Lifetime Achievement Award from the National Association for Plant Breeding, in his corn breeding plots.