Science Societies

In memoriam: J. Neil Rutger

December 20, 2024



J. Neil Rutger

Neil Rutger, a 62-year member of ASA and CSSA, passed away on June 6, 2024 in Dixon, CA. He was born on Mar., 3, 1934, on a farm near Noble, IL. He rode a horse to a one-room elementary school where he was the only student. After graduating from high school, he farmed for four years before enlisting in the U.S. Army in 1954. He served in Regensburg, Germany as a track-vehicle mechanic and in the U.S. Army Reserves for six years.

Rutger received his B.S. at the University of Illinois (Agricultural Science, 1960) and advanced degrees at the University of California–Davis (M.S. in Agronomy, 1962; Ph.D. in Genetics, 1964). He served on the academic faculty at Cornell University from 1964–1970 and joined USDA-ARS at Davis, CA in 1970 as a rice geneticist in the University of California–Davis (UC-Davis) Department of Agronomy. He was an adjunct faculty member who taught a plant-breeding course and trained 12 M.S. students in Agronomy and Plant Breeding and 12 Ph.D. students in Genetics.

Rutger created a renaissance of induced mutation breeding by the rapid development of new rice cultivars. In 1976, he developed Calrose 76, the first semidwarf table-rice cultivar in the USA, which had a 20% yield advantage over tall cultivars. This was followed by M-101, using Calrose 76 as a parent. Calrose 76 became the source of semi-dwarfism for numerous varieties developed in California, Australia, and Egypt. These semidwarf varieties resulted in farm yield increases of 20%, leading to millions of dollars of increased income for rice growers. This work was widely recognized by the International Atomic Energy Agency in Vienna as an example of successful use of induced mutation in plant breeding.

After serving as Location Leader for USDA-ARS in Davis, in 1989, Rutger became Associate Director of the USDA-ARS Midsouth Area in Stoneville, MS. In 1993 he was

appointed the first director of the Dale Bumpers National Rice Research Center, Stuttgart, AR. Rutger recruited scientists, directed the research at this world-class facility, and produced numerous semidwarf and early flowering mutants and aromatic rice germplasm. In Arkansas, he initiated an indica base-broadening program to develop indica rice adapted to the U.S. and in 2003 established the Genetic Stocks Oryza Collection.

Rutger authored or coauthored more than 200 papers and released 60 germplasm lines and genetic stocks. His awards include Fellow of ASA, CSSA, and AAAS. He received the USDA-ARS Western Region Scientist of the Year Award, the American Nuclear Society Award for Application of Nuclear Techniques in Food Production, the US-Davis College of Agricultural and Environmental Sciences Award of Distinction, and California and national rice industry awards. He was inducted into the USDA-ARS Science Hall of Fame in 2009 for demonstrating the value of induction, evaluation, and integration of mutants in rice genetics and breeding. The Global Rice Research Foundation is developing a fund to support a J. Neil Rutger scholarship to support graduate students working on rice-related research.

Rutger's many professional activities included: USDA-ARS Administrative Adviser to Rice Technical Working Group, 1983–2006; Founding Chair, Rice Crop Advisory Committee, 1983–1990; U.S. Agency for International Development Scientific Liaison Officer to the International Rice Research Institute, 1982–91; Chairman of the Board, Arkansas Science and Technology Authority, 2005–2006; Chair of Crop Science Rice Subcommittee for Crop Registration, 1986–1988 and 2004–2006; and President, Stuttgart (Arkansas) Rotary Club, 2003–2004. He traveled to 57 countries on rice-related activities.

Upon retirement in 2007, Rutger moved to Woodland, CA. In 2012, he was appointed emeritus adjunct professor at UCD Department of Plant Sciences.

He was preceded in death by his loving wife of 65 years, Peg, and son-in-law Nathan Bohl. He is survived by two daughters, Ann Bohl of Woodland, CA and Robyn (Bruce) Rominger of Winters, CA, and five grandchildren.

In this audio-video interview from 2013, Rutger discusses his career at UC-Davis and beyond.

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