

IN MEMORIAM

James F. Harrington
Professor of Vegetable Crops, Emeritus
Davis
1916–2002

James F. Harrington died of congestive heart failure at his home on April 12, 2002. He was born Nov. 24, 1916, in Newark, N.J., and grew up in Caldwell, N.J., and Cleveland, Ohio. He attended Dartmouth College for one year, then transferred to The Ohio State University and received his bachelor's degree in 1939. Jim earned his master's degree from Ohio State in vegetable crops in 1940, and his Ph.D. from Cornell University in 1944.

Jim took a position as an assistant professor at Iowa State University in 1944. Two years later, he was appointed assistant professor of vegetable crops at UC Davis, where he remained on the faculty until his retirement in 1980 as a professor of vegetable crops and olericulturalist in the Agricultural Experiment Station.

Jim Harrington's research interests focused on the physiology and quality of vegetable seeds. He was most well known for his studies on packaging and moisture contents of seeds in relation to their longevity. He established the relationships between ambient humidity and seed moisture content for seeds of many species and further characterized how long seeds of various species would store under various conditions without losing viability. These studies resulted in the development of a rule stating that the potential storage life of seeds doubles for every 1% decrease in seed moisture content or 10°F decrease in storage temperature within certain temperature and moisture limits. This relationship is known worldwide as "Harrington's Rule" and is widely used as a guide by seedsmen when storing or shipping seeds. Jim also conducted studies on hermetic and vacuum packaging of seeds to exclude moisture and extend their lifetime. His biochemical studies on the role of lipid peroxidation in seed deterioration opened a productive avenue of research that is still being explored today. Jim was named a Fulbright Research Fellow in 1954 and a USDA Research Fellow in 1962.

Jim worked very closely with the seed industry in California to solve problems related to the production of vegetable seeds. He was involved in the development of the hybrid vegetable seed industry and made research contributions to numerous crops. He worked closely with and served as an officer for many professional organizations, including the Association of Official Seed Analysts, the California Seed Association, and the California Seed Council. The American Seed Trade Association presented him its Award of Honor for Horticultural Achievement in 1964, and the Pacific Seedsmen's Association named him as its "Man of the Year" in 1967. He served on the Board of Directors of the California Crop Improvement Association for over 30 years.

Jim's public service contributions also included many governmental and international organizations, including the Food and Agriculture Organization of the United Nations, USAID, the International Seed Testing Association and the Rockefeller Foundation, which awarded him a Rockefeller International Professor Grant in 1969. He traveled extensively around the world, teaching seed storage techniques to preserve viability and vigor of seeds and designing improved seed storage facilities. During his career, Jim visited more than 100 countries and continued to travel extensively following his retirement.

An entire generation of students learned the principles of seed production in Jim's courses at UC Davis. He also taught in specialized seed courses at other institutions, including an annual seed course at Mississippi State University. A number of his reviews of seed storage and seed vigor were classics in his field and were widely cited.

Jim Harrington is best remembered for his dedication to improving the quality of seeds. He furthered the development of the seed industry in California, helping to make it one of the premier seed production locations in the world. He assisted in the development of seed improvement programs in many countries around the world. His studies on seed testing and seed vigor helped harmonize regulations necessary for the international seed trade. His commitment to public service made him an international ambassador for the University of California.

Jim Harrington was preceded in death by his wife, Helen, and a grandson, Guy Harrington. He is survived by his three children and their spouses: daughter Sally and Leigh Holmes, son Gordon and Delia Harrington and son Mark Harrington and his wife Dixie Dursteler; 11 grandchildren; and 14 great-grandchildren.

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