

## CIBA-Geigy Award

Sponsored by the CIBA-Geigy Corporation, this award is given to individual plant pathologists who have made significant recent contributions to the advancement of knowledge of plant diseases or their control. The award consists of a trophy and an expense-paid trip to Basel, Switzerland.

### John M. Duniway



**John M. Duniway** is awarded the CIBA-Geigy Award for his pioneering research on the water relations of plant-pathogenic fungi in soil and of host-pathogen interactions. The ingenuity and originality of his approach to research and his high standard of excellence have quickly placed him as a pioneer and leader in research on the water relations of plant-pathogen interactions. He has developed new or improved research techniques that have

become essential for the reliable, quantitative study of effects of soil water on pathogens, plants, and disease development. He has greatly advanced our knowledge of *Phytophthora* spp., an important but poorly understood group of pathogens, and has stimulated others to test and expand his findings. His accomplishments have laid the groundwork for renewed research efforts by many scientists involved in the study of soilborne plant pathogens.

Dr. Duniway's studies on *Phytophthora* root rot of safflower exemplify the importance of his work. For many years the relationship between water stress and root rot in field-grown safflower had been observed, but not understood. In a series of thorough and precise experiments, Dr. Duniway clearly showed that water stress predisposed safflower plants to infection, and was even capable of breaking down genetic resistance. Outside of plant pathology, his research has been recognized by

scientists in the fields of plant physiology and soil science. Furthermore, plant breeders in the United States and other continents are using the results of his research in their efforts to detect and deploy stable genetic resistance.

Dr. Duniway's interest in epidemiology also led him to examine the role of soil moisture on the behavior of species of *Phytophthora* in soil. His leadership is evident here, too, as he developed some of the first and most complete work on the effects of soil moisture on sporangium formation and germination, as well as zoospore behavior and survival.

Dr. Duniway was born and raised in San Francisco, CA. He attended Carlton College in Northfield, MN, where he received

a B.A. degree in biology in 1964. He then entered graduate school at the University of Wisconsin, Madison, where he earned the Ph.D. degree in 1969. His Ph.D. research was done under the direction of R. D. Durbin and involved the water relations of bean plants infected with *Uromyces phaseoli*. Upon completing his Ph.D., Dr. Duniway spent one year at the Australian National University on an NSF Postdoctoral Fellowship, where he worked with R. O. Slatyer on the water relations of Fusarium wilt in tomato. In 1971, Dr. Duniway joined the faculty at the University of California, Davis, where he is presently a professor.