

Dr. ELROY L. RICE



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AWARD OF MERIT RECIPIENT
FOR 1984

The 1984 Oklahoma Academy of Science Award of Merit was presented to Professor Elroy L. Rice, Department of Botany and Microbiology, University of Oklahoma, at the November, 1984 technical meeting in Ada. The Award was given in recognition of his research concerning causes of plant succession in abandoned cultivated fields in Oklahoma. This research led to his pioneering work in the field of allelopathy (the production by plants or microorganisms of non-nutritional organic compounds which affect the growth of other plants or microorganisms).

There are four stages in succession in old fields in Oklahoma: the pioneer weed stage (duration, 2 - 3 years), the annual grass stage (duration, 9 - 13 years), the perennial bunch-grass stage (duration 30 - 50 years), and the climax prairie. His research indicates that allelopathy is the dominant factor causing the rapid disappearance of the pioneer weed stage and the greater duration of the two middle stages. The long duration of the two middle stages appears to be due to the allelopathic inhibition of nitrogen fixation by both free-living and symbiotic nitrogen fixers.

Dr. Rice has published over one hundred scientific papers, numerous book chapters, and three books. He wrote the only two scientific monographs in English on allelopathy that had been published up to 1984 and is recognized as a world authority on that subject. The first edition of 'Allelopathy' was published by Academic Press in 1974 and the second by the same press in 1984. His book on 'Pest Control with Nature's Chemicals' was published by the University of Oklahoma Press in 1983.

Dr. Rice was born near Edmond, Oklahoma in 1917 and received his B.S. degree from Central State University, his M.S. degree from the University of Oklahoma, and his Ph.D. degree from the University of Chicago. His major professor for the doctoral program was Dr. Charles Olmsted, who was a pioneer in the field of physiological plant ecology. Dr. Rice joined the faculty of the Botany and Microbiology Department at the University of Oklahoma in January of 1948 and retired from teaching in May, 1981. He is presently a David Ross Boyd Professor Emeritus of Botany. He remains active in research and writing, and has had three doctoral students complete work under his supervision since he retired. During his career at the University of Oklahoma, he was the major professor of 32 doctoral students and numerous M.S. and M.N.S. students. He has given dozens of invited seminar lectures on his research throughout the world and has organized and/or participated in many national and international symposia in many countries. He presented papers on allelopathy at symposia of the American Chemical Society, on 'Semiochemicals' in Miami in May, 1985 and another on 'Allelochemicals' in Chicago in September, 1985. He was also on the planning committee for the Chicago meeting.

Dr. Rice is a member of many scientific societies and a Fellow of the American Academy of Sciences. He is listed in American Men and Women of Science and Who's Who in America.