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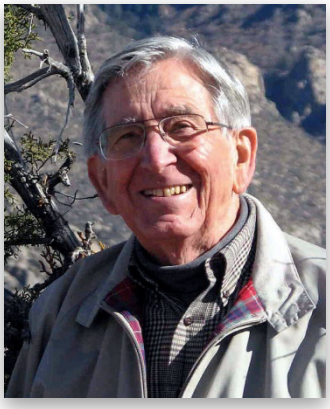

Dr. Larry James Littlefield, retired Professor and Head of the Department of Plant Pathology at OSU, age 83, ***died at home on April 19, 2021*** in Seattle, Washington after a short illness. ***He was born on February 7, 1938*** to R. Spencer and Lena R. (James) Littlefield in Fort Smith, Arkansas, and grew up on a farm in Le Flore County, Oklahoma. Larry graduated from Spiro High School in 1956. He received his B.S. degree in Agriculture/Plant Science from Cornell University in 1960, and his M.S. and Ph.D. degrees in Plant Pathology (minor in Botany) from the University of Minnesota in 1962 and 1964, respectively. Larry married Julianne Hooper on June 29, 1963 in Minneapolis, Minnesota and they have three children: David, Sarah, and Annie.

Dr. Littlefield was a Postdoctoral Fellow at Uppsala, Sweden from 1964-1965, before becoming an Assistant Professor in Plant Pathology at North Dakota State University in Fargo in 1965. His research focused on the anatomy and histology of flax rust and barley stripe mosaic virus, and on biological control of weeds. Dr. Littlefield was a Visiting Assistant Professor at Purdue University, 1969-1970, and a Visiting Associate Professor at Oxford University in England, 1973-1974. He co-authored the book "Ultrastructure of Rust Fungi" with Michele C. Heath in 1979 and was the sole author of "Biology of the Plant Rusts: An Introduction" in 1981.

From 1980-1982, he took a leave of absence from NDSU to work at the USDA Office of International Cooperation and Development in Washington, D.C. where his work focused on international training activities in the United States for AID sponsored participants. In 1985, Dr. Littlefield became a Professor and Head of the Department of Plant Pathology at OSU. He worked closely with the Oklahoma Peanut Commission on research and extension programs and with the Oklahoma Department of Agriculture to draft legislation regulating biotechnology research in the state. He was also active in the University's International Programs, in which he helped formulate and implement in-service training and continuing education programs for Pakistani agricultural scientists. He also served on the College of Agriculture Core Curriculum Task Force. In 1996, Larry returned to full-time research and teaching at OSU, returning to his early-career fascination with fungal ultrastructure by studying Polymyxa graminis, the fungal vector of soilborne wheat mosaic virus, and the biology and ultrastructure of Puccinia carduorum, a rust fungus potentially useful as a biological control for musk thistle. Always an excellent teacher, he taught both Mycology and Introductory Plant Pathology.

As a researcher and mycologist Dr. Littlefield was admired and respected worldwide for his pioneering approaches to understanding the rust fungi through their ultrastructure. A close colleague observed: "Spanning the different segments of his career, Dr. Littlefield was one of a very small group of plant pathologists who pioneered the use of light and electron microscopy to

investigate the development of obligate parasites, such as the rust fungi, in their plant hosts. This work was the keystone to understanding the complexity and cell biology of how this important group of plant pathogens develop in, and interact with, plants at the cellular level."

Dr. Littlefield retired from OSU on June 30, 2004, and he and Julie moved to Albuquerque, New Mexico in the summer of 2005. Larry quickly became engaged in local activities including hiking and photography, visiting and volunteering at art and science museums and the Albuquerque BioPark, and attending concerts and plays. Larry also volunteered with the U.S. Forest Service in New Mexico, initially helping with trail maintenance. That service led to one of the most iconic activities of his retired life. ***He became a New Mexico 'wildflower guru,' and led wildflower hikes and scoured the mountains of northern and central New Mexico to learn and photograph the remarkable diversity of flowering plants. The resulting guidebooks, Wildflowers of the Sandia and Manzano Mountains of Central New Mexico (2011) and Wildflowers of the Northern and Central Mountains of New Mexico (2015), both co-authored with fellow wildflower specialist Pearl M. Burns, were unique among field guides in that they present the biophysical characteristics of various wildflower environments and how they influence the occurrence and location of each species.*** In 2019, Larry and Julie moved to Seattle, Washington to be near family.

Larry is survived by his wife Julie of Seattle; daughters Sarah and her spouse Larisa, and Annie of Seattle; and son David of Los Angeles, California.

(photo from the Los Alamos Daily Post, July 20, 2015 article announcing that Larry J. Littlefield would be the featured speaker at Mesa Public Library at 7 p.m. Thursday, July 23, 2015 – original photo was in his book, "Wildflowers of the Northern and Central Mountains of New Mexico")