

Scientific Society Honors K-State Scientists



Plant pathologist John Leslie addresses Fusarium workshop participants.

The American Association for the Advancement of Science, the world's largest scientific society, has named four K-State faculty members among its 2013 fellows.

John Leslie, university distinguished professor of plant pathology, was recognized for pioneering genetics of *Fusarium*, leading laboratory and scientific writing workshops worldwide, and service as head of the Department of Plant Pathology.

He is one of the world's leading experts on a devastating group of fungi in the genus *Fusarium* that causes billions of dollars in losses annually from plant diseases and can sicken and kill humans and domesticated animals.

In 2000, Leslie pioneered the Fusarium Laboratory Workshop to bring researchers from around the world to K-State to learn about these fungi, the diseases they cause, and the toxic compounds they can produce. In years when the workshop is not in Manhattan, Leslie organizes the workshop with colleagues in such places as Argentina, Australia, Brazil, Italy, Malaysia, and South Africa.

He became head in 2006. Under his leadership, the U.S. National Research Council ranked the department as the No. 1 plant pathology department in the nation, and *PHDS.org* ranked the

department's doctoral program as the best in the nation.

Leslie was a senior Fulbright Scholar at the University of Sydney, Australia, and has been instrumental in forming recent partnerships with Australian universities.

John Reese, professor of entomology, was honored for contributions to entomological sciences, particularly in the fields of plant-insect interactions and plant resistance to insects.

Reese joined the Department of Entomology in 1982. He conducts

collaborative research with K-State scientists on the Manhattan campus and research centers across the state on the molecular genetics of aphid-plant interactions, especially the role of aphid salivary gland genes.

Groundbreaking research on the survival of the aphid on its host plant was published in *Proceedings of the National Academy of Sciences*.

Host plant resistance in crop plants reduces the need for insecticides, is relatively compatible with other methods of integrated pest management (IPM), and increases yields.

When soybean aphids were discovered in Kansas in 2002, he began developing a plant resistance program and conducting feeding behavior studies with an electronic monitoring system.

The other fellows — Walter Dodds, university distinguished professor of biology, and Donald Kaufman, professor of biology — have research projects at the Konza Prairie Biological Station partially funded through K-State Research and Extension.

The awards were announced in the Nov. 29, 2013, issue of *Science*, and presented at the American Association for the Advancement of Science annual meeting Feb. 15, 2014, in Chicago.



John Reese inspects aphids removed from a cornstalk.