

Focus

Leaf rust, stem rust, wheat streak mosaic, and speckled leaf blotch are active on the 1987 wheat crop in Kansas, reports T. Sim IV of the Kansas State Board of Agriculture, Topeka. Leaf rust is the most widespread in the state. (Kans. Plant Dis. Surv. Rep., 7 November 1986)

Sphacelotheca holci promises to be a biocontrol agent for johnsongrass by eliminating seed set, report C. L. Massion and S. E. Lindow of the University of California at Berkeley. This systemic smut does not infect sorghum. (Weed Sci. 34:883-888, 1986)

Soybean and pinto bean were not affected by exposure to acid sulfate aerosol for 4 hours but showed injury and chlorophyll loss when ozone was added, according to B. I. Chevone and associates at Virginia Polytechnic Institute and State University, Blacksburg, and the University of Minnesota, St. Paul. (J. Air Pollut. Control Assoc. 36:813-815, 1986)

The luciferase gene from firefly was used as a reporter of gene expression by production of light in transfected cells and transgenic plants, report D. W. Ow and associates of the University of California at San Diego. The Agrobacterium tumefaciens tumor-inducing plasmid was used with tobacco plants. (Science 234:856-859, 1986)

In a mixture of four barley cultivars with different resistances to Puccinia hordei, two had lower rust severity and higher yield than the average of their components in monoculture, report H. Hartleb, D. Kopahnke, and U. Meyer of the Institute for Phytopathology at Ascherleben, East Germany. This effect was noted only with components having major genes. (Arch. Phytopathol. Pflanzenschutz 22:427-429, 1986)

Bacteria of four genera isolated from onion bulbs were thought by E. J. Cother and V. Dowling of the New South Wales Department of Agriculture, Yanco, Australia, to be endophytic microflora of bulbs that become opportunistic pathogens triggered by high temperatures at bulb maturity. (Plant Pathol. 35:329-336, 1986)

A new genus and species, Arkoola nigra, that causes black leaf blight of soybeans was described by J. Walker and G. E. Stovold of the New South Wales Department of Agriculture at Rydalmere, Australia. As much as one-third of potential yield can be lost. Seed transmission is possible. (Trans. Br. Mycol. Soc. 87:23-44, 1986)

Rhizobium strains associated with bean and other legumes reduced growth of Fusarium solani in culture and suppressed symptoms in the greenhouse, report A. J. Buonassisi and associates of the British Columbia Ministry of Agriculture and Food, Agriculture Canada, and the University of British Columbia, Vancouver. Seed inoculation with Rhizobium may have potential for biocontrol of Fusarium root rot. (Can. J. Plant Pathol. 8:140-146, 1986)

The root-knot nematode Meloidogyne javanica was found for the first time to complete its life cycle in the inflorescence of a plant (Palisota barberi), report P. S. Lehman and J. B. MacGowan of the Florida Department of Agriculture and Consumer Services, Gainesville. The nematode was also found on leaf blades and petioles. (J. Nematol. 18:583-586, 1986)

When hyphae of Monographella maydis that alone elicit no symptoms meet hyphae of Phyllachora maydis, the cause of tar spot, in a lesion on corn, the lesion enlarges, report E. Müller of the Swiss Federal Institute of Technology, Zurich, and G. J. Samuels of DSIR, Auckland, New Zealand. (Nova Hedwigia 40:113-121, 1984)