

Focus

Losses on wheat in Kansas for 1980 are estimated by T. Sim IV and W. G. Willis to be: 3.5% (14,518,000 bu) from tan spot (Pyrenophora trichostoma), 3% (12,444,000 bu) from soilborne wheat mosaic virus, 1.3% (5,393,000 bu) from Cephalosporium stripe (C. gramineum), 1% (4,148,000 bu) from speckled leaf blotch (Septoria tritici), 0.6% (2,488,000 bu) from take-all (Gaeumannomyces graminis), 0.3% (1,224,000 bu) from wheat streak mosaic virus, and 0.1% (414,800 bu) from powdery mildew (Erysiphe graminis) and 0.1% from loose smut (Ustilago nuda). Leaf rust, scab, and barley yellow dwarf virus caused only a trace loss. (Coop. Plant Pest Rep. Vol. 5, No. 36, 1980)

Tobacco blue mold (Peronospora tabacina) in major production areas in North America during 1980 was reported by J. M. Davis, R. I. Bruck, C. E. Main, and F. A. Todd of North Carolina State University, Raleigh. The disease was found in Cuba and Jamaica in January; Haiti and Honduras in February; Nicaragua in March; Florida and South Carolina in April; North Carolina and Virginia in May; Maryland and Tennessee in June; Kentucky, Pennsylvania, Connecticut, Massachusetts, Indiana, and Ohio in July; and Canada in August. Prevailing winds favored movement of the pathogen as the epidemic spread northward. (APS Northeastern Division Meeting, November 1980)

A major epidemic of the pinewood nematode is under way in Japan, where \$35 million will be spent on control measures alone during this fiscal year. The nematode is found in over half the states in the United States but is not epidemic, probably because the vector that is common in Japan (Monochamus alternatus) as well as substantial plantings of susceptible pines are lacking. One concern, however, is that importation of containerized cargo could introduce the vector into the United States. (Pinewood Nematode Workshop, University of Missouri, 12-14 November 1980)

A major gene in sugar pine (Pinus lambertiana) conditioning resistance to white pine blister rust (Cronartium ribicola) can be detected by symptoms on cotyledons of seedlings only a few weeks old, according to B. B. Kinloch and M. Comstock of the Pacific Southwest Forest and Range Experiment Station, Berkeley, CA. Large, bright yellow lesions appearing on susceptible genotypes contrast vividly with small, brown necrotic flecks on seedlings carrying the dominant gene for resistance. Large numbers of progeny can be screened rapidly and efficiently with this technique. (Can. J. Bot. Vol. 58, No. 17, 1980)

Virulent strains of Endothia parasitica were converted to hypovirulent strains that could be used to control chestnut blight, report L. Conklin, R. J. Campana, and S. L. Anagnostakis of the University of Maine and the Connecticut Agricultural Experiment Station. Such conversion requires hyphal anastomosis with strains that contain cytoplasmic hypovirulence determinants. Fifty-seven of 200 conversion trials were successful. (APS Northeastern Division Meeting, November 1980)

The white rust fungus (Albugo tragopogi) reduced pollen production of common ragweed by 99% when plants were inoculated at the two-leaf stage, according to H. Hartman and A. K. Watson of McGill University, Montreal. Seed production was reduced by 98%. These results, however, were obtained only when plants were infected systemically. (Weed Sci. Vol. 28, No. 6, 1980)

Tobacco ringspot virus and tobacco mosaic virus have been detected in both green and white ash in New York by J. D. Castello and M. T. O'Shea of Syracuse University; neither virus has been reported previously on green ash. The viruses were detected with the latex particle agglutination technique. Symptoms included premature fall coloration, chlorotic mottling, and brilliant red and green spots on apical leaves. (APS Northeastern Division Meeting, November 1980)