Focus

A severe epidemic of wheat streak mosaic, in which 75-100% of wheat plants were infected and many fields contained 100% infected plants, was reported in Missouri by Arnold Foudin of USDA/APHIS and the University of Missouri. A 5-10% crop loss is projected for the estimated $500 million crop. The predominant area of the epidemic lies north of the Missouri River. (A. Foudin, private communication, 25 May 1981)

Ophiobolus patch (Gaeumannomyces graminis var. avenae) was found by P. H. Dernoeden and N. R. O'Neill of the University of Maryland for the first time in Maryland on bentgrass turf. This is the first report of occurrence in the mid-Atlantic states and the second report of the disease in the eastern United States. (APS Potomac Division Meeting, April 1981)

Simultaneous bans on application of dinitroaniline, triazine, and amide herbicides reduced corn yield 14%, soybean yield 17%, and net farm income 65% on an Indiana farm, according to economists C. M. Cashman, M. A. Martin, and B. A. McCarl of Purdue University. Harvest delays due to less effective weed control also resulted in increased machinery and labor requirements. (Weed Sci. Vol. 29, No. 3, 1981)

Fumigation of soil with chloropicrin at 20, 40, and 80 kg/ha significantly reduced numbers of microsclerotia of Cylindrocladium crotalariae and controlled black rot of peanut, report P. M. Phipps and J. A. Barron of Virginia Polytechnic Institute, Suffolk. Increases in peanut yields were noted with all three rates but were significant only with the 80 kg/ha rate. (APS Potomac Division Meeting, April 1981)

Using a sprinkler irrigation system to apply the nematicides fenamiphos, ethoprop, and carbofuran to corn, southern pea, and squash was as effective as incorporating granules into the top 15 cm of soil, according to A. W. Johnson, J. R. Young, and B. G. Mullinix of AR-SEA/USDA and the University of Georgia, Tifton. Both methods increased yields and decreased soil populations of ring and root-knot nematodes and root-knot indices. (J. Nematol. Vol. 13, No. 2, 1981)

Cytospora spp. that cause canker and dieback on stone fruit twigs and branches were inhibited by prophylactic treatment with three Trichoderma spp., Peniophora gigantea, Coniothyrium olivaceum, or Epicoccum purpurascens, reports U. Schulz of the Institute for Plant Protection, Obstbau. Treatment of established cankers was not successful, and combined prophylactic and curative treatments did not improve results. (Z. Pflanzenkr. Pflanzenschutz Vol. 88, No. 2/3, 1981)

Numbers of sclerotia from Sclerotinia minor declined rapidly in four of six agricultural soils, and the sclerotia were colonized by species of Fusarium, Trichoderma, Gliocladium, Talaromyces, Chaetomium, Codinaea, and Paecilomyces, according to M. T. Dunn and R. D. Lumsden of the University of Maryland and the USDA in Beltsville. Fewer sclerotia survived in compost-amended than in nonamended soils. (APS Potomac Division Meeting, April 1981)

Mineral oils and castor oil sprayed onto pumpkin leaves prevented pumpkin mosaic virus infection because aphids could not acquire the virus, according to S. J. Singh of the Indian Institute of Horticultural Research in Bangalore. Oil on leaf surfaces also reduced infection in mechanically inoculated plants. (Z. Pflanzenkr. Pflanzenschutz Vol. 88, No. 2/3, 1981)

Soybean root rot caused by Phytophthora megasperma was found for the first time on Maryland's eastern shore, in August 1980, by J. E. Beagle, J. F. Rissler, and J. G. Kantzes of the University of Maryland. Isolates were identified as race 1. (APS Potomac Division Meeting, April 1981)