

Focus

Spread of witchweed (Striga asiatica) will not be stopped by soil temperatures in winter or soil and air temperatures in summer in the corn- and sorghum-growing areas of the United States, according to D. T. Patterson and co-workers of the USDA at Stoneville, MS, and Whiteville, NC, and Duke University, Durham, NC. Witchweed seeds could survive in the Corn Belt as far north as southern Minnesota. (Weed Sci. Vol. 30, No. 1, 1982)

Goss's bacterial wilt (Corynebacterium nebraskense) was reported in two cornfields in southern Wisconsin in 1981 by C. Grau and D. C. Arny of the University of Wisconsin and R. Norgren of the Wisconsin Department of Agriculture. Verticillium wilt of alfalfa in 28 counties was also reported. (Personal communication)

Race 2 of Helminthosporium turcicum (northern corn leaf blight) was found on corn in Wright County, Minnesota, in 1981, according to E. S. Stromberg (USDA-APHIS) of the University of Minnesota and E. Jordan (USDA-APHIS) of the University of Illinois. (Personal communication)

Of 175 corn hybrids tested in 1981 by the University of Minnesota, 8 were resistant, 111 were moderately resistant, 34 were moderately susceptible, and 22 were susceptible to head smut (Sphacelotheca reiliana), report E. S. Stromberg (USDA-APHIS) and co-workers at St. Paul and Staples. (Personal communication)

Bacterial leaf blight of sunflower caused by Pseudomonas cichorii was found for the first time in Brazil by C. F. Robbs and A. M. R. Almeida, who reported occurrence in commercial fields in the state of Mato Grosso do Sul. (Fitopatol. Bras. Vol. 6, No. 2, 1981)

Natural populations of the two-spotted spider mite (Tetranychus urticae) can decrease strawberry yields by 10-15%, according to F. V. Sances and colleagues at the University of California, Riverside. Photosynthesis and transpiration rates are reduced, and this stress is greater with sudden than with gradual infestation. (Calif. Agric. Vol. 36, Nos. 1 and 2, 1982)

Verticillium lecanii can attack and degrade cysts of the sugar beet nematode (Heterodera schachtii) within 48 hr of inoculation, according to G. Hänsler and M. Hermanis of the Institut für Biologie III, West Germany. The fungus colonizes the cyst cavity immediately after penetrating the wall by secreting lytic enzymes. (Z. Pflanzenkr. Pflanzenschutz Vol. 88, No. 11, 1981)

A phage sprayed onto plants in the greenhouse controlled 99% of the diseases caused by Xanthomonas campestris on cabbage and X. vesicatoria on pepper, report A. Bergamin Filho and H. Kimati, ESALQ-USP, Brazil. Results were best when bacteria and phage were sprayed simultaneously. (Summa Phytopathol. Vol. 7, No. 1,2, 1981)

A bacteriophage of Erwinia stewartii, which causes Stewart's wilt of corn, was isolated from the corn flea beetle (Chaetocnema pulicaria) by T. L. Woods, H. W. Israel, and A. F. Sherf of Cornell University, Ithaca, NY. They suggested that virulent bacteriophages may reduce or eliminate the disease within the beetle. (Prot. Ecol. Vol. 3, No. 3, 1981)

Soybean stem canker, caused by Diaporthe phaseolorum var. caulivora, was identified for the first time in Tennessee in September 1981 by J. W. Hilty and M. A. Newman of the University of Tennessee, Knoxville. The disease was most severe in the southwestern counties, where surveys detected fields with 20-100% of the plants infected. (Personal communication)