# Focus

Two new disease-resistant corn inbreds incorporating exotic with domestic germ plasm have been developed by H. L. Warren, USDA and Purdue University, West Lafayette, IN. Line H110 is resistant to maize dwarf mosaic virus and maize chlorotic dwarf virus, line H111 is resistant to Diplodia and anthracnose stalk rots and Stewart's wilt, and both are resistant to northern leaf blight (races 1 and 2), southern leaf blight, and anthracnose leaf blight. (USDA-ARS news release, 10 September 1982)

Of 30 compounds that are precursors, analogs, derivatives, or fragments of strigol, five stimulated germination of witchweed (Striga asiatica) seed and may provide a control method for this parasitic plant, report A. B. Pepperman and associates of the USDA Southern Regional Research Center, New Orleans, and North Carolina State University, Raleigh. The five substances break seed dormancy and induce germination, and the seedling starves. (Weed Sci. Vol. 30, No. 5, 1982)

Among 53 species of plant-feeding nematodes found on sugarcane roots in South Africa, Pratylenchus spp. were the most numerous, according to V. W. Spaull of the South African Association Experiment Station, Mount Edgecombe. Other frequently found genera were Rotylenchus, Scutellonema, and Helicotylenchus. (Phytophylactica Vol. 13, No. 4, 1981)

Allelopathic inhibition of green alder by balsam poplar is possible, according to R. Jobidon and J.-R. Thibault of Laval University, Quebec, Canada. Growth inhibition was about 25% less in nodulated alder seedlings than in seedlings without nodules. (Am. J. Bot. Vol. 69, No. 8, 1982)

Absence of take-all in winter wheat in the Pacific Northwest under long-term wheat culture has been due to factors external to the pathogen (Gaeumannomyces graminis var. tritici) and not to decline in its virulence, report R. J. Cook and T. Naiki, USDA and Washington State University, Pullman. (Plant Pathol. Vol. 31, No. 3, 1982)

In eradicating apple mildew during the dormant season, fungicides mixed with low concentrations of surfactant were as effective, as well as less toxic to trees, as surfactant alone, according to L. D. Hunter, P. S. Blake, and A. A. J. Swait of East Malling Research Station, Kent, England. Fungicides alone failed to control mildew in winter applications. (J. Hortic. Sci. Vol. 57, No. 3, 1982)

Virus infection significantly affected nitrogen fixation and plant growth in cowpea, report S. K. O'Hair and J. C. Miller, Jr., of Texas A&M University, College Station. Cowpea strains of tobacco mosaic virus had the greatest effect, followed in order by cowpea strains of cucumber mosaic and southern bean mosaic viruses. (J. Am. Soc. Hortic. Sci. Vol. 107, No. 3, 1982)

Inheritance of resistance of wheat to glume blotch (Septoria nodorum) is complex and may involve several genes, according to L. R. Nelson and C. E. Gates of Texas A&M University Agricultural Research and Extension Center, Overton. Crosses with a susceptible parent showed heterosis for a more resistant reaction. (Crop Sci. Vol. 22, No. 4, 1982)

Coating cottonseed with Trichoderma spp. reduced the incidence of damping-off caused by Rhizoctonia solani up to 83% in greenhouse trials, report Y. Elad, A. Kalfon, and I. Chet of the Hebrew University of Jerusalem, Israel. T. hamatum was most effective at 20 C and T. harzianum, at 27 C. Disease severity was reduced 47-60% in two field trials; organism treatment was about equal to pentachloronitrobenzene treatment. (Plant Soil Vol. 66, No. 2, 1982)