Focus

Compiled by Thor Kommedahl

A sterile red fungus isolated from wheat that produces antibiotics and colonizes root cortex has potential as a biocontrol agent against take-all of wheat, report M. M. Dewan and K. Sivasithamparam of the University of Western Australia, Nedlands. (Mycol. Res. 93:156-160, 1989)

Of 604 strains of Erwinia amylovora collected from 11 pear orchards in Egypt, 22 were resistant to streptomycin, report M. A. El-Goorani and associates of the University of Alexandria. Resistance was found most often in orchards where streptomycin had been applied for 5 years. (J. Phytopathol. 127:69-74, 1989)

Respiratory rate and root growth can be used to evaluate resistance of wheat to Heterodera avenae, report J. D. deVirville and F. Person-Dedryver of INRA and the University of Pierre and Marie Curie, Paris. Respiratory changes from infection are related to morphological changes in roots. (Rev. Nematol. 12:379-386, 1989)

Gnomonia radicicola is a new pathogen and species of greenhouse-grown roses described by M. E. Noordeloos and associates of the Plant Protection Service in Wageningen, Netherlands. (Persoonia 14:47-49, 1989)

The most important factor affecting efficacy of postharvest fungicides for control of blue mold of stored apples is spore concentration at the time of treatment, according to L. J. Penrose and associates at the New South Wales Agriculture and Fisheries Station in Orange, Australia. (Plant Pathol. 38:421-426, 1989)

Simultaneous inoculation of cotton with Glomus fasciculatum and Meloidogyne incognita did not alter nematode numbers or egg production and did enhance growth of cotton, according to H. M. Saleh and R. A. Sikora of the University of Bonn, West Germany. (Nematologica 34:432-442, 1988)

Up to one-half of the spores that become airborne in the field during periods of brisk wind can escape from the wheat canopy within a downwind distance of 1-2 m, reports D. E. Aylor of the Connecticut Agricultural Experiment Station, New Haven. Spore deposition is thereby reduced near a source and increased at a distance. (Agric. For. Meteorol. 47:109-122, 1989)

Resistance of cotton to Xanthomonas campestris appears to be controlled by the same gene or two closely linked genes when tested to a mixture of U.S. races and is controlled by a single dominant gene against a new race from Africa, report T. P. Wallace of Mississippi State University, Mississippi State, and K. M. El-Zik of Texas A&M University, College Station. (Crop Sci. 29:1114-1119, 1989)

Diaporthe phaseolorum f. sp. meridionalis from soybean comprises genetically distinct vegetative compatibility groups that can explain such behavior as differential sensitivity to benomyl and triadimefon, report R. C. Ploetz, Tropical Research and Education Center, Homestead, Florida, and F. M. Shokes, North Florida Research and Education Center, Quincy. (Can. J. Bot. 67:2751-2755, 1989)

Corky root of lettuce is caused by a gram-negative bacterium, and the bacteria found in Florida, New York, Wisconsin, and California are probably the same one, according to P. R. Brown and K. N. Jochimsen of the University of California, Davis. (Appl. Environ. Microbiol. 55:2635-2640, 1989)

Lycopersicon peruvianum, L. pimpinellifolium, and L. esculentum are more resistant than L. hirsutum to branched broomrape, according to M. A. Kasrawi and B. E. Abu-Irmaileh of Jordan University, Amman. (HortScience 24:822-824, 1989)