Focus

Compiled by Thor Kommedahl

Flame chlorosis is a new soil-transmitted viruslike disease of barley reported in Manitoba by S. Haber and associates of Agriculture Canada, Winnipeg. Economic losses result when 20% or more of the plants are infected. (J. Phytopathol. 129:245-256, 1990)

More Pseudomonas isolates from the endorhizosphere than from the root surface inhibited growth of seedlings and 5-week-old tomato plants, report R. van Peer and associates at the State University of Utrecht and Leiden University, Netherlands, and the inhibition was measurable 2 months after bacterization. (Appl. Environ. Microbiol. 56:2462-2470, 1990)

Recurrent selection is effective for increasing resistance of corn to Goss's wilt, according to C. L. Treat and associates at the University of Wisconsin, Madison. (Crop Sci. 30:893-896, 1990)

Propiconazole reduced severity of leaf diseases and increased grain yield and kernel weight in both barley and wheat where disease pressure was high, but where pressure was low, it only increased the number of large kernels (useful in seed selection), report M. H. Entz and associates at the University of Manitoba, Winnipeg, and the University of Saskatchewan, Saskatoon, Canada. (Can. J. Plant Sci. 70:699-706, 1990)

Antiviral protein from Dianthus barbatus is a true ribosome-inactivating type-1 protein and is part of the plant's general defense mechanism, according to R. Frötschl, M. Schönfelder, and G. Adam of the University of Stuttgart, Germany. (Arch. Phytopathol. Plant Prot. 26:319-328, 1990)

Mycelial incompatibility among strains of Sclerotinia sclerotiorum indicates that genetic heterogeneity can exist within species and intraspecific heterogeneity can be categorized by pairing of strains in culture, report L. M. Kohn and associates at the University of Toronto, Canada. (Exp. Mycol. 14:255-267, 1990)

Mitochondria are involved in the general biochemical changes occurring in tomato tissues in response to attack by Meloidogyne incognita, report S. Molinari and associates at the Istituto di Nematologia Agraria Applicata ai Vegetali, Bari, Italy. Resistant plants have lower respiration rates. (Physiol. Mol. Plant Pathol. 37:27-37, 1990)

Tubercularia vulgaris was reported by K. J. Kessler, Jr., of the USDA and Southern Illinois University, Carbondale, for the first time as a cause of canker of autumn olive in Illinois and Indiana; wounding is necessary for infection. (Eur. J. For. Pathol. 20:148-153, 1990)

Immunofluorescence was used to detect ring rot of potato in Sweden by P. Persson of the Swedish Agricultural University in Uppsala, and results were compared with those of Gram stain and eggplant tests. (Vaxtskyddsnotiser 53:134-138, 1989)

Mycena citricolor does not cause leaf spots on coffee unless oxalic acid is produced, and the acid plays a key role in pathogenesis, according to A. Wang of the University of Costa Rica, San Jose, and J. P. Tewari of the University of Alberta, Edmonton, Canada. (Cryptogam. Bot. 1:396-398, 1990)

A phage from an avirulent strain of Pseudomonas solanacearum controlled bacterial wilt of tobacco, report H. Tanaka and associates of Japan Tobacco Inc. in Yokohama and Tochigi. (Ann. Phytopathol. Soc. Jpn. 56:243-246, 1990)