Focus

Compiled by Thor Kommedahl

Lime witches' broom is caused by "Candidatus Phytoplasma aurantifolia," so designated to indicate an interim taxonomic status because "phytoplasma" has been approved only as a trivial name (not a genus) for MLOs, report L. Zreik and associates at the Institut National de la Recherche Agronomique, Villenave d'Ornon Cedex, France. (Int. J. Syst. Bacteriol. 45:449-453, 1995)

Two chimeric genes in potato enabled engineering resistance to late blight and limiting lesions generated, analogous to hypersensitive cell death, by inhibiting growth and reproduction of Phytophthora infestans, report G. Strittmatter and associates at the Max Planck Institute in Cologne, Germany, and at Plant Genetic Systems, Gent, Belgium. (Bio/Technology 13:1085-1089, 1995)

Walnut ringspot caused by the cherry leaf roll virus was reported for the first time in Slovakia by H. Baumgartnerová and L. Slováková of the Institute for Experimental Phytopathology and Entomology, Ivanka pri Dunaji, Slovakia. (J. Plant Dis. Prot. 102:435-440, 1995)

Pseudomonas syringae multiplied on and invaded mulberry leaf tissue through cystoliths, not stomata or trichomes, according to V. P. Gupta and associates at the Central Sericultural Research and Training Institute, Mysore, India. Necrotic spots appear 9 days after inoculation. (J. Phytopathol. 143:415-418, 1995)

After culturing Rhabditis oxycerca for 400 generations with increasing concentrations of aldicarb and oxamyl, compared with control, nematicide-exposed strains developed a tolerance, especially to aldicarb, report L. Kämpfe and H. Schütze of the Ernst-Moritz-Arndt University, Greifswald, Germany. (Nematologica 41:449-467, 1995)

Pepper vein yellows virus was the first luteovirus to be isolated from pepper plants in Japan and due to certain differences is considered a new member of this group, report T. Yonaha and associates at Ryukyu University, Nishihara; Okinawa Prefectural Agricultural Experiment Station, Naha; Osaka Prefectural University, Sakai; and Niigata University, Niigata; Japan. (Ann. Phytopathol. Soc. Jpn. 61:178-184, 1995)

Inocybe lacera was synthesized on aspen roots for the first time by C. L. Cripps and O. K. Miller, Jr., of Virginia Polytechnic Institute and State University, Blacksburg. Synthesized and natural mycorrhizae are similar. (Mycorrhiza 5:357-370, 1995)

Tylenchorhynchus zambiensis is a weak pathogen on corn and requires a large population to adversely affect plant growth, according to M. E. Venditti and G. R. Noel of the USDA and University of Illinois, Urbana. (Nematropica 25:7-13, 1995)

Based on DNA homology, general morphology, and similarities in symptoms produced on barley, Pyrenophora japonica is proposed as a synonym for P. teres by P. W. Crous and associates at the University of Stellenbosch, South Africa. (Mycol. Res. 99:1098-1102, 1995)

Alternariol and other mycotoxins are produced in tomato fruit infected with Alternaria alternata, reports H. A. H. Hasan of Assiut University, Assiut, Egypt. However, storage below 7°C for up to 10 days or application of cinnamon oil (500 ppm) controls fungus growth and toxin production. (Mycopathologia 130:171-177, 1995)

Prions have been identified in yeast but their propagation in yeast requires the specific domain of the prion precursor protein Ure2p (involved in nitrogen catabolism), report D. C. Masison and R. B. Wickner at the National Institutes of Health, Bethesda, Maryland. (Science 270:93-95, 1995)