

Focus

Talaromyces flavus is an effective biocontrol agent against Verticillium wilt of eggplant, according to J. J. Marois and colleagues at the USDA Soilborne Diseases Laboratory, Beltsville, MD. Eggplants treated with T. flavus had 67-75% less wilt, depending on field location, and greater yields than untreated plants. (ARS, USDA news release, 28 April 1982)

Application of benomyl, lime, and nitrate controlled Fusarium wilt in a susceptible tomato cultivar, report A. R. T. Sarhan and Z. Király of the Research Institute for Plant Protection, Budapest, Hungary. This is the first report of complete control with an integrated approach. (Acta Phytopathol. Vol. 16, No. 1-2, 1981)

Yield losses in sugar beets do not occur in soil infested with fewer than eight eggs of the cyst nematode Heterodera schachtii per gram of soil, according to N. Greco and colleagues at the Istituto di Nematologia, Bari, Italy. Yields from soil with more than 64 eggs per gram were less than 20% of those from control plots. (J. Nematol. Vol. 14, No. 2, 1982)

Both a wild-type isolate of Verticillium dahliae sensitive to benomyl and a strain derived from that type but insensitive to benomyl were pathogenic to tomato, pepper, and eggplant, report V. Emmanouil and R. K. S. Wood of the Imperial College of Sciences, London. The insensitive strain remained so for at least 15 months on benomyl-free media but produced about 10 times as many sclerotia as the sensitive strain. (Phytopathol. Z. Vol. 103, No. 1, 1982)

A new monograph of the genus Pythium comprising 85 species has been prepared by A. J. van der Plaats-Niterink, Centraalbureau voor Schimmelcultures, Baarn, Netherlands. Sixty-four living strains are available of the 85 species listed in this 242-page revision. (Studies in Mycology No. 21, 1981)

The ice-nucleation bacterium Pseudomonas syringae increases frost susceptibility of soybean and tomato when sprayed onto leaves just before low temperature stress, report J. A. Anderson, D. W. Buchanan, R. E. Stall, and C. B. Hall of the University of Florida, Gainesville. Enough bacteria in a small area of a leaf can result in the entire leaf freezing. (J. Am. Soc. Hort. Sci. Vol. 107, No. 1, 1982)

Glomus mosseae, a vesicular-arbuscular mycorrhizal (VAM) fungus, synthesizes at least two gibberellin-like substances and four cytokinin-like substances, according to J. M. Barea and C. Azcón-Aguilar of the Zaidin Experiment Station, Granada, Spain. Thus, benefits to plants from VAM fungi are not limited to improved nutrient uptake. (Appl. Environ. Microbiol. Vol. 43, No. 4, 1982)

Benomyl and thiophanate-methyl applied to apples during the growing season prevent scab development during cold storage, report L. J. Coulombe and A. Jacob of Agriculture Canada, Quebec. An additional treatment just before apples are stored is needed to control blue mold rot. (Phytoprotection Vol. 62, No. 2, 1981)

Countercurrent chromatography is a new separation technique defined as liquid-liquid partition chromatography without solid support and its attendant complications, according to Y. Ito of the National Heart, Lung, and Blood Institute, Bethesda, MD. The method handles samples ranging from small ions and molecules to macromolecules and particles. (Ind. Res. Dev. Vol. 24, No. 4, 1982)

As leaf Mg increases in eggplant, infectious tobacco mosaic virus concentration decreases, report E. M. Seaker, E. L. Bergman, and C. P. Romaine of Pennsylvania State University, University Park. (J. Am. Soc. Hortic. Sci. Vol. 107, No. 1, 1982)