Focus

With certain monoclonal antibodies, enzyme-linked immunosorbent assay specifically identified the aster yellows agent in diseased lettuce and periwinkle and in inoculative insects, according to C .- P. Lin and T. A. Chen of Rutgers University, New Brunswick, NJ. Specific monoclonal antibodies secreted by hybridoma clones were obtained from infected leafhopper vectors. (Science 227:1233-1235, 1985).

Fenitropan is 200-400 times more toxic to Fusarium oxysporum than to beans, muskmelon, or wheat, report I. Király and associates at Eötvös University, Budapest, Hungary. The difference is due chiefly to the mechanism and rate of uptake of the fungicide. (Pestic. Sci. 16:1-9, 1985)

Inoculum of Peronosclerospora sorghi in sorghum kernels can be detected by soaking the grains in 7.5% KOH with 0.5 g of trypan blue for 36 hours at room temperature, report M. S. C. Prabhu and associates of the University of Mysore, India. Tissues are cleared in lactophenol. (Phytopathol. Z. 111:174-178, 1984)

Two strains of Fusarium graminearum responded differently to various carbohydrates in biosynthesis of major and minor secondary metabolites, report J. D. Miller and R. Greenhalgh of Agriculture Canada, Ottawa, Ont. Problems in defining Fusarium species according to their toxic metabolites were apparent. (Mycologia 77:130-136, 1985).

Elms serving as trap trees killed with cacodylic acid or baited with multilure (synthetic pheromone) attracted the elm bark beetle vector (Scolytus multistriatus), and spraying the trees with 0.5% chlorpyrifos killed the beetles, according to G. N. Lanier and A. H. Jones of the State University of New York, Syracuse. These treatments eliminated diseased and unwanted elms as potential breeding sites for the beetles. (J. Chem. Ecol. 11:11-20, 1985)

A machine devised by G. J. N. Faulkner and D. N. Greet of Rothamsted Experimental Station, England, separates nematode cysts from dried root debris. Particles fall down a chute onto an ascending belt. Cysts and other near-spherical objects roll down into a collecting tray while root debris is carried over onto the top of the belt and deposited in another tray. (Nematologica 30:99-102, 1984).

Fusarium lateritium is a potential biological herbicide against velvetleaf and prickly sida, according to C. D. Boyette of Delta State University, Cleveland, MS, and H. L. Walker of the Southern Weed Science Laboratory, Stoneville, MS. This is the first report of a single pathogen effective against more than one weed species. (Weed Sci. 33:209-211, 1985)

Validamycin A reduces hyphal growth rate in Rhizoctonia cerealis and R. solani, reports A. P. J. Trinci of the University of Manchester, England. Delay in fungus growth gives the host time to mobilize resistance mechanisms. (Exp. Mycol. 9:20-27, 1985)

Race 4 of Pseudomonas syringae pv. glycinea predominated on soybean in eastern Ontario, according to P. K. Basu of Agriculture Canada, Ontario. (Can. Plant Dis. Surv. 64:37-38, 1984)

Soybean has been transformed with Agrobacterium tumefaciens containing the kanamycin resistance gene linked to a soybean subunit carboxylase gene, report D. Facciotti and associates at Calgene, Inc., Davis, CA. The levels of mRNA from intact SSU gene are 50-100 times greater in light- than in dark-grown leaves. (Biotechnology 3:241-246, 1985)