Focus

Lupines were bred for resistance to Phomopsis stem blight by crossing domestic with wild types, report W. A. Cowling and associates of the Western Australia Department of Agriculture, South Perth. Resistance to this disease reduced toxicity (lupinosis) of plants grazed by sheep. (Crop Sci. 27:648-652, 1987)

A detached leaf technique was used to evaluate resistance of 50 cultivars and lines of muskmelon to Myrothecium roridum by J. O. Kuti, T. J. Ng, and G. A. Bean of the University of Maryland, College Park. Test results correlated well with resistance by immature fruits. (HortScience 22:635-637, 1987)

Enzyme electrophoretic patterns of species of the subgenus Penicillium reinforce current concepts of the species, according to R. H. Cruickshank of the University of Tasmania and J. I. Pitt of the Commonwealth Scientific and Industrial Research Organization, New South Wales, Australia. (Mycologia 79:614-620, 1987)

Wheat grains from Fusarium head blight samples in Manitoba yielded 10 species of Fusarium and the mycotoxins deoxynivalenol, diacetoxyscirpenol, HT-2 toxin, and T-2 toxin, report D. Abramson and associates, Agriculture Canada Research Station and Grain Research Laboratory, Winnipeg. (Can. J. Plant Sci. 67:611-619, 1987)

Fluorescent pseudomonads consisting of 43 different electrotypes represented up to 35% of the rhizobacterial population in corn roots, report B. Lambert and associates at the Plant Genetics Systems in Ghent, Belgium. Thirty-three isolates from four strains of Pseudomonas cepacia showed antifungal activity to corn pathogens. (Appl. Environ. Microbiol. 53:1866-1871, 1987)

The four attributes of a biocontrol agent for sclerotium-forming pathogens are reduction of propagule number and/or viability, growth potential in soil, activity over a wide range of environments, and survival and reproductive potential, according to C. M. Kenerley and J. P. Stack of Texas A&M University, College Station. (Can. J. Microbiol. 33:632-635, 1987).

Massive dispersal of elm bark beetles and Ceratocystis spores from infested wood to surrounding elm stands does not occur in southern Sweden, report O. Anderbrant and F. Schylter of the University of Lund. Scolytus scolytus flies actively all summer and may produce a second generation. (J. Appl. Ecol. 24:539-550, 1987)

Injection of calcium chloride solutions into core cavities of apples at harvest reduced incidence of bitter pit in stored fruit from 32% to 16% with 1% solutions and to 5% with 2% solutions, report M. A. Perring and K. Pearson of the AFRC Institute for Horticultural Research, East Malling, England. (J. Hortic. Sci. 62:303-304, 1987)

In soil infested with Pythium ultimum, seedling stands from sugar beet seeds treated with hyphae of Rhizoctonia fragariae or R. solani (but not R. cerealis) were about equal to those from seeds treated with captan, report D. Walther of the University of Florida, Gainesville, and D. Gindrat of the Swiss Federal Agricultural Research Station, Changins. (J. Phytopathol. 119:248-254, 1987)

Simple recurrent selection is the most effective way to develop inbred lines of corn for resistance to Gibberella ear rot, according to M. S. Chiang and associates in Agriculture Canada at Saint-Jean-sur-Richelieu and L'Assomption and at Saint-Hyacinthe Research Station, Quebec. The inbred SD18 was the most susceptible to ear rot, whereas A619, P317, and SD15 appeared to be resistant. (Phytoprotection 68:29-33, 1987)