

Focus

Treating zinnia with a polymer-based antitranspirant not only increased plant height and weight and lengthened the flowering period but also resulted in a lower incidence of powdery mildew than that obtained with Acti-dione, reports M. Kamp of Texas Tech University, Lubbock. (HortScience 20:879-881, 1985)

Only 1.5% of 7,537 genotypes of corn tested were resistant to both northern corn leaf blight and the European corn borer, report W. D. Guthrie and J. L. Jarvis of Iowa State University, Ames, B. D. Barry of the University of Missouri, Columbia, and E. C. Rossman of Michigan State University, East Lansing. Resistance to the two species was not correlated. (J. Econ. Entomol. 78:811-814, 1985)

Dipping or spraying plants and cuttings of Rosa indica in a suspension of Agrobacterium radiobacter strain 84 before planting in a rose nursery controlled crown gall, report E. Farkas and J. H. Haas of Volcani Center, Bet Dagan, Israel. Dipping was more effective than spraying. (Phytoparasitica 13:121-127, 1985)

Sclerotia and mycelia of several Rhizoctonia species contain materials having antibiotic properties, according to R. J. Burton and J. R. Coley-Smith of the University of Hull, England. Most antibiotic-producing species are binucleate. (Trans. Br. Mycol. Soc. 85:447-453, 1985)

Ozone, SO₂, acidic rain, and soil treatments significantly affect mycorrhizal associations on oak seedlings, according to P. B. Reich and associates at the Boyce Thompson Institute for Plant Research, Ithaca, NY. Ozone increased and SO₂ decreased the number of infected short roots, suggesting that mycorrhizae are a sensitive component of the plant-soil system. (Can. J. Bot. 63:2049-2055, 1985)

Concentrations of deoxynivalenol are low in grains of scab-resistant cultivars of wheat, rye, and triticale and high in grains of susceptible cultivars, report J. D. Miller, J. C. Young, and D. R. Sampson of Agriculture Canada, Ottawa, Ont. (Phytopathol. Z. 113:359-367, 1985)

PI 437654, a new germ plasm source of soybean resistance to races 3, 4, and 5 of the soybean cyst nematode reported by S. C. Anand, J. A. Wrather, and C. R. Shumway of the University of Missouri, Portageville, may be genetically different from previously reported resistance sources. (Crop Sci. 25:1073-1075, 1985)

Alternaria solani can invade ozone-induced lesions on potato leaf tissue and transform them into early blight lesions, report J. D. Holley, G. Hofstra, and R. Hall of the University of Guelph, Ont. (Can. J. Plant Pathol. 7:277-282, 1985)

On the basis of ribosomal RNA sequence comparisons, the rickettsia Rochalimaea quintana is a member of the purple bacteria, report W. G. Weisburg and associates of the University of Illinois, Urbana, and the Naval Medical Research Institute, Bethesda. The organism is specifically related to agrobacteria and rhizobacteria, and all have close associations with eukaryotic cells. (Science 230:556-558, 1985)

All but one of 40 multinucleate isolates of Rhizoctonia solani obtained from canola (rapeseed) in Saskatchewan belong to two anastomosis groups, AG2-1 and AG4, according to D. A. Kaminski and P. R. Verma of Agriculture Canada, Sask. (Can. J. Plant Pathol. 7:256-261, 1985)

Spinach plants exposed to constant 5 C have increased tolerance to extracellular freezing, report C. L. Guy, K. J. Niemi, and R. Brambl of the University of Minnesota, St. Paul. Alteration of the relative abundance of mRNAs during exposure to 5 C may be responsible. (Proc. Natl. Acad. Sci. USA 82:3673-3677, 1985)