

Nitric oxide has a key role in disease resistance by inducing hypersensitive cell death in soybean, and in the response of Arabidopsis thaliana to Pseudomonas syringae, according to M. Delledonne and associates at the Salk Institute, LaJolla, California, and the Noble Foundation, Ardmore, Oklahoma. (Nature 394:585-588, 1998)

Polyamines appear to be involved in the response of tobacco to tobacco mosaic virus, report A. L. Ribiti and associates at the Università degli Studi, Bologna, Italy; a few hours after inoculation, the response in hypersensitive plants differs from that in susceptible plants. (New Phytol. 139:549-553, 1998)

The contributions in yield and nutrient uptake to cassava of arbuscular mycorrhizal fungi were greater than those of interplanted woody legumes, report O. Fagbola and associates at the University of Ibadan, and the International Institute of Tropical Agriculture, in Ibadan, Nigeria. (J. Agric. Sci. 131:79-85, 1998)

Cochliobolus victoriae has the mating type 2 (MAT-2) gene but not MAT-1 and is either female sterile or infertile; field populations of this species came from one strain by a horizontal gene transfer for pathogenicity to oats into a MAT-2, female-sterile C. carbonum strain, postulate S. K. Christiansen and associates at the RISO National Laboratory, Roskilde, Denmark; Universität Konstanz, Germany; and Cornell University, Ithaca, New York. (Mycol. Res. 102:919-929, 1998)

Toxoflavin produced by Burkholderia glumae is the virulence factor that causes seedling rot of rice, report K. Yoneyama and associates at Meiji University, Kawasaki; Ibaraki University, Ibaraki; The Institute of Physical and Chemical Research, Wako; and Nihon Nohyaku Co. Ltd., Kawachinagano; Japan. (Ann. Phytopathol. Soc. Jpn. 64:91-96, 1998)

Beauvericin, able to induce apoptosis in mammals, is produced by 12 Fusarium spp. and may be a contaminant in cereals and corn, report A. Logrieco and associates at the Consiglio Nazionale delle Ricerche, Bari, and Università degli studi di Napoli Federico II, Naples, Italy; the University of Agriculture and the Polish Academy of Sciences, Poznan, Poland. (Appl. Environ. Microbiol. 64:3084-3088, 1998)

Chrysanthemum stunt viroid was detected in petunia by J. T. J. Verhoeven and associates at the Plant Protection Service, Wageningen, Netherlands, and the Plant Science Institute, Beltsville, Maryland. (Eur. J. Plant Pathol. 104:383-386, 1998)

Ten new species in the Fusarium fujikuroi complex have been described and illustrated, and a key provided, by H. I. Nirenberg of the Biologische Bundesanstalt für Land- und Forstwirtschaft, Berlin, and K. O'Donnell of the USDA National Center for Agricultural Utilization Research, Peoria, Illinois. (Mycologia 90:434-458, 1998)

More than 80% of root-knot nematodes analyzed contain multiple mtDNA forms within individuals (heteroplasmy), report L. E. Whipple and associates at the University of California, Riverside. Meloidogyne incognita is the first obligate parthenogen to be analyzed in this way. (Fundam. Appl. Nematol. 21:265-271, 1998)

Application of salicylic acid solutions to pea leaves induced systemic resistance to Erysiphe pisi, report S. Frey and T. L. W. Carver at the Institute of Grassland and Environmental Research, Aberystwyth, Wales, UK. (J. Phytopathol. 146:239-245, 1998)

Biocontrol of root pathogens by Bacillus subtilis depends on temperature and nutrition, ability to colonize roots and promote plant growth, and strain selection, according to B. Krebs and associates at Humboldt-Universität Berlin; FZB Biotechnik GmbH, Berlin; IGZ, Grossbeeren; Germany; and the University of Horticulture and Food Industry, Budapest, Hungary. (J. Plant Dis. Prot. 105:181-197, 1998)