

Transgenic tobacco plants constructed to produce caffeine were highly resistant to Tobacco mosaic virus and Pseudomonas syringae by stimulation of endogenous host defense systems (caffeine may be a signaling molecule) report Y.-S. Kim and H. Sano at the Nara Institute of Science and Technology, Japan. (Phytochemistry 69:882-888, 2008)

Some populations of Cercospora beticola, a genetically highly diverse species, may reproduce sexually, report M. Groenewald and associates at CBS Fungal Biodiversity Centre and Wageningen University, Netherlands; and Australian National University, Canberra. (Plant Pathol. 57:25-32, 2008)

Tobacco mosaic virus replicase-Aux/IAA interactions selectively enhance virus pathogenicity in tissues where Aux/IAA proteins accumulate, report M. S. Padmanabhan and associates at the University of Maryland. (J. Virol. 82:2477-2485, 2008)

Volatiles from 5% clove oil reduced egg hatch in Meloidogyne incognita in water by 30% and decreased viability of hatched second-stage juveniles by up to 100%, report S. L. Meyer and associates at USDA-ARS, Beltsville. (Pest Manag. Sci. 64:223-229, 2008)

Melon resistance to Cucurbit leaf crumple virus was due to a single, recessive gene culcrv and appeared allelic (one cultivar), report J. D. McCreight and associates at USDA-ARS, Salinas, and University of California, Holtville. (HortScience 43:122-126, 2008)

A type II secretion system-deficient mutant of Ralstonia solanacearum contributes to systemic infection by enabling bacteria to invade xylem, report S. Tsujimoto and associates at Kochi University and National Agricultural Research Center, Tsukuba, Japan. (J. Gen. Plant Pathol. 74:71-75, 2008)

Scab severity was lower in apple seedlings treated with plant growth retardant prohexadione-Ca than in controls; also, expression of almost all pathogenesis-related genes increased, report F. Bini and associates at the University of Bologna, Italy. (Ann. Appl. Biol. 152:19-27, 2008)

Cells in mutant strains of Xanthomonas axonopodis could not induce symptoms of citrus canker at high copper concentrations and were more sensitive than wild-type strains to copper, report E. C. Teixeira and associates at UNESP, UNIFESP, and UFSCar, Brazil. (Microbiology 154:402-412, 2008)

Aerial spraying with insecticide slowed progress of pine wilt disease and maintained biomass in pine forests, report S. Ugawa and K. Fukuda at the University of Tokyo, Japan. (For. Pathol. 38:16-28, 2008)

The mycotoxin fumonisin B₁ inhibits eukaryotic protein synthesis in germinated corn seedlings from 4 to 22%, depending on dosage, but the toxin is less potent than cycloheximide, report R. Karuna and R. B. Sashidhar at Osmania University, India. (Mycopathologia 165:37-49, 2008)

The Andean potato predominated in the 1700s, but the Chilean potato was introduced into Europe as early as 1811 and became predominant long before the late blight epidemics in the UK based on DNA from herbarium specimens, report M. Ames and D. M. Spooner at the USDA-ARS and University of Wisconsin. (Am. J. Bot. 95:252-257, 2008)