Focus

Compiled by Thor Kommedahl

Binding of protonated cytosines to the coat protein of Turnip yellow mosaic virus to represent a new motif in RNA-protein interactions is proposed by H. H. J. Bink and associates at Leiden University, Leiden, The Netherlands. (Proc. Nat. Acad. Sci. USA 99:13465-13470, 2003)

Resistance of tobacco to the cyst nematode is conferred by a single dominant gene according to B. J. Crowder and associates at the Southern Piedmont Agricultural Research and Extension Center, Blackstone, and Virginia Polytechnic Institute and State University, Blacksburg, VA. (Crop Sci. 43:1305-1312, 2003)

A transgene confers systemic resistance in Nicotiana benthamiana to Plum pox virus without preventing local infection, useful for resistance in fruit trees where systemic disease causes damage, report T. Pandolini and associates at the University of Verona, Verona, Italy. (BMC Biotechnol. http://www.biomedcentral.com/1472-6750/3/7)

Prolonged exposure of acorns from Quercus rober to copper perturbed root morphology, reduced root and shoot growth, and caused leaf chlorosis, report L. Wisniewski and N. M. Dickinson of John Moores University, Liverpool, UK. (Environ. Exp. Bot. 50:99-107, 2003)

The parasite Rhinanthus minor increased uptake, deposition, and transpiration of water in barley, and the parasite extracted water mostly from the host xylem sap, report F. Jiang and associates at the Julius von Sachs Institut für Biowissenschaften der Universität, Würzburg, Germany. (J. Exp. Bot. 54:1985-1993, 2003)

Five species of Botrytis are said to cause onion neck rot, three of them exclusively, according to D. S. Yohalem and associates at the Danish Institute of Agricultural Sciences, Slagelse, Denmark. B. allii and B. aclada are considered valid names. (Mycotaxon 85:175-182, 2003)

A siderophore-producing, growth-promoting strain of Pseudomonas sp. can improve iron availability and reduce fertilizer usage for mung bean, report A. Sharma and associates at G.B. Pant University of Agriculture and Technology, Uttaranchai, India, and University of Waterloo, Waterloo, Ont., Canada. (Soil Biol. Biochem. 35:887-894, 2003)

Phoma sclerotioides, which causes brown root rot of alfalfa, prevalent in Alberta and Saskatchewan, Canada, appears to be widespread in irrigated alfalfa fields in Wyoming, report C. R. Hollingsworth and associates at the University of Wyoming, Laramie and Casper. (Can. J. Plant Pathol. 25:215-217, 2003)

Japanese hornwort mosaic virus is a new potyvirus isolated from Cryptotaenia japonica showing mosaic symptoms, report K. Okuno and associates at Kyushu University, Fukuoka, Japan. (J. Gen. Plant Pathol. 69:138-142, 2003)

Pratylenchus penetrans causes cortical cell damage and death in strawberry, which favors infection by Rhizoctonia fragariae to increase severity of black root rot according to J. A. LaMondia at the Connecticut Agricultural Experiment Station, Windsor, CT. (J. Nematol. 35:17-22, 2003)

Symptoms in sunflower plants infected with Sunflower chlorotic mottle virus, similar to the development of senescence, are the result of a high virus buildup in the tissues and not to oxidative stress, report M. C. Arias and associates at IFFIVE-INTA, Córdoba, Argentina. (J. Phytopathol. 151:267-273, 2003)

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