

Long-term durable anthracnose resistance in Phaseolus vulgaris can be provided by pyramiding resistance genes using two RAPD markers that ensure retention of the hypostatic Are gene, according to R. A. Young and J. D. Kelly of Michigan State University, East Lansing. (J. Am. Soc. Hortic. Sci. 121:37-41, 1996)

When Pseudomonas fluorescens derived from sugar beet leaves was genetically modified and applied as seed inoculum to field-grown sugar beet, it colonized roots and leaves of developing plants and survived in the phytosphere throughout the growing season, report I. P. Thompson and associates at the Institute of Virology and Environmental Microbiology in Oxford, England. (Bio/Technology 13:1493-1497, 1995)

The tobacco mosaic tobamovirus movement protein essential for cell-to-cell spread of infection may be targeted to plasmodesmata by microtubules, according to M. Heinlein and associates at The Scripps Research Institute, La Jolla, California. (Science 270:1983-1985, 1995)

Bacillus subtilis, Bradyrhizobium japonicum, and Glomus fasciculatum in combination increased shoot dry weight and nodule number, and reduced nematode multiplication and Fusarium wilt in pigeon pea, report Z. A. Siddiqui and I. Mahmood at the Aligarh Muslim University, Aligarh, India. (Fundam. Appl. Nematol. 18:559-566, 1995).

Viable Phytophthora capsici and P. parasitica propagules can be carried long distances in furrow irrigation water to infect squash and tomato, report A. C. Café Filho and J. M. Duniway of the University of California, Davis. (Plant Pathol. 44: 1025-1032, 1995)

An AG-8-specific DNA probe (pRAG12) to detect Rhizoctonia solani in soil was developed by D. L. Whisson and associates at the South Australian Research and Development Institute, and CSIRO, in Glen Osmond, South Australia. (Mycol. Res. 99:1299-1302, 1995)

Wheat streak mosaic virus infection in wheat shifts host metabolism, leading to mesophyll cell collapse probably caused by greater xylanase and less peroxidase activity, according to S. A. Kofalvi and associates at the University of Guelph, Ontario, Canada. (Physiol. Mol. Plant Pathol. 47:379-389, 1995)

Aster yellows group plant-pathogenic phytoplasmas in four species of Brassica were detected by combined fluorescence and electron microscopy, confirmed by RFLP analysis, by C. Marccone and A. Ragozzino of the Università di Napoli "Federico II," Portici, Italy. (J. Plant Dis. Prot. 102:449-460, 1995)

Preemergence damping-off in snapdragon, vinca, and petunia caused by Phytophthora parasitica was controlled in a 1:1 peat/vermiculite medium drenched with aluminum, according to D. M. Benson of North Carolina State University, Raleigh. Aluminum was not phytotoxic in a limed growth medium. (HortScience 30:1413-1416, 1995)

Most forage legumes and grasses grown in the northeast and north central U.S. are hosts for Pratylenchus penetrans; a few, however, are poor hosts, making them useful as forage rotations in fields heavily infested with this root-lesion nematode, report J. A. Thies and associates at the University of Minnesota, St. Paul. (Crop Sci. 35:1647-1651, 1995)

The benefit to Vulpia ciliata from arbuscular mycorrhiza is in protection by altering the root-infecting mycoflora of the grass and not in improving phosphorus uptake, report K. K. Newsham and associates at the University of York, York, and the University of East Anglia, Norwich, England. (J. Ecol. 83:991-1000, 1995)