Phacidiopycnis washingtonensis is a new species causing fruit rot in apple, dieback and canker in crabapple, and dead twigs on pear, report C. L. Xiao and associates at Washington State University, Wenatchee. (Mycologia 97:464-473, 2005)

Arabidopsis SGT1b has two functions in immune systems; one is to antagonize RAR1 to negatively regulate R protein accumulation before infection and another is to regulate programmed cell death during infection, report B. F. Holt and associates at the University of North Carolina. (Science 309:929-932, 2005)

The cell pole is the site of assembly of the Agrobacterium tumefaciens type IV apparatus that transfers effector macromolecules to host target cells, report P. K. Judd and associates at the University of Minnesota. (Proc. Natl. Acad. Sci. USA 102:11498-11503, 2005)


Erwinia psidii on guava produces two quorum-sensing signaling substances; one is N-heptanoyl-homoserine lactone, first to be found in Erwinia, report A. M. Pomini and associates at State University of Campinas, Natura Inovacao e Tecnologia Ltda, and ESALQ, Brazil. (J. Agric. Food Chem. 53:6262-6265, 2005)

Transgenic finger millet with a high degree of resistance to leaf blast disease and expression of pin gene was reported by A. M. Latha and associates at Osmania University, Hyderabad, India. (Plant Sci. 169:657-667, 2005)

Multiple RNA elements in Cucumber necrosis virus replicase assembly are important to ensure fidelity of template selection during replication, report Z. Panaviene and associates at University of Kentucky. (J. Virol. 79:10608-10618, 2005)

Xylella fastidiosa migrates in the xylem via type IV-pilus-mediated twitching motility at speeds up to 5 µm min⁻¹ against rapidly flowing medium (20,000 µm min⁻¹) report Y. Meng and associates at Cornell University, State Agricultural Experiment Station, and New York State Department of Health. (J. Bacteriol. 187:5560-5567, 2005)

An internal RNA sequence element in the P3 cistron of Wheat streak mosaic virus that affects replication and movement of the viral genome was identified by H.-R. Choi and associates at University of Nebraska and USDA-ARS. (J. Gen. Virol. 86:2605-2614, 2005)

Inbred lines of sunflower with a high degree of resistance to Sclerotinia sclerotiorum were developed by S. Rönicke and associates at Justus-Liebig-Universität Giessen and Universität Hohenheim, Stuttgart, Germany. (Plant Breed. 124:376-381, 2005)

Virus proteins of Potato virus Y accumulated massively in infected tobacco cytoplasm, decreased starch volume density, and increased plastoglobuli volume density in chloroplasts, report R. Schnablová and associates at Charles University and Academy of Sciences of the Czech Republic. (Int. J. Plant Sci. 166:713-721, 2005)