A magnesium to zinc ratio below 100 in flowers indicates that orange trees would later develop iron chlorosis; this allows time for treatment, report M. Pestana and associates at Universidade do Algarve, Faro; Instituto Superior de Agronomía, Lisboa; University of Guelph, Canada; and Estación Experimental de Aula Dei, Spain. (Plant Soil 259:287-295, 2004)

Glomaceae members were the only mycorrhizae found in the green manure crop Tithonia in Central and South America, Asia, and Africa, report R. A. Sharrock and associates at University of Wales, UK; CIAT, Colombia; CATIE, Costa Rica; and ICRAF, Kenya. (Mycorrhiza 14:103-109, 2004)


Pseudomonas syringae, a highly clonal and stable species, is endemic but the genetic variation only weakly predicts host association, report S. F. Sarkar and D. S. Guttman at the University of Toronto, Canada. (Appl. Environ. Microbiol. 70:1999-2012, 2004)

The three signaling pathways salicylic acid, jasmonic acid, and ethylene are involved differentially in inducing necrosis and defense by the cell wall glycoprotein elicitor (CBEL) of Phytophthora parasitica, report M. Khatib and associates at UPS-CNRS, Castanet-Tolosan, France. (New Phytol. 162:501-510, 2004)

Low-dose application of ultraviolet light-C delays ripening and Rhizopus soft rot in tomatoes, report C. Stevens and associates at Tuskegee University, Alabama; USDA-ARS, Kearneyville, West Virginia; and The Volcani Center, Bet Dagan, Israel. (Crop Prot. 23:551-554, 2004)


For cell-to-cell movement of cucumoviruses, the C-terminal 29 aa of the movement protein has to be compatible with the C-terminal two-thirds of the coat protein according to K. Salánki and associates at the Agricultural Biotechnology Center at Gödöllő, and the Eötvös Loránd University, Budapest, Hungary. (J. Gen. Virol. 85:1039-1048, 2004)

Solanum torvum is resistant to race 1 bv.1, and tolerant to bv.3 and race 3 bv.2 of Ralstonia solanacearum to aid in breeding resistant potato cultivars, report C. Clain and associates at Université de La Réunion, CIRAD, and the Université Paris Sud, France. (Plant Sci. 166:1533-1540, 2004)

A new class of cap-independent translation element (TE) called Barley yellow dwarf virus-like TE is proposed by R. Shen and W. A. Miller of Iowa State University, Ames, for an untranslated region of Tobacco necrosis virus RNA. (J. Virol. 78:4655-4664, 2004)

A suspension of Rhizoctonia inoculum (equivalent to 10 mg carbon per plant) applied to the sugar beet crown identified cultivar resistance in 11 weeks in the greenhouse that was confirmed in the field, report G. Büttner and associates at the University of Göttingen, Germany. (Plant Breed. 123:158-166, 2004)