

Focus

Kanamycin-resistant plant cells were produced in Nicotiana plumbaginifolia with the vector Agrobacterium tumefaciens that carried a chimeric gene for resistance, according to R. B. Horsch and associates at Monsanto Co., St. Louis, MO. Progeny derived from transformed plants inherited the foreign gene in a Mendelian manner. (Science 223:496-498, 1984)

A gene that confers resistance to the broad-spectrum herbicide glyphosate has been isolated, cloned, and inserted into plant cells by L. Comai, L. Sen, and D. Stalker of Calgene Inc., Davis, CA. Glyphosate resistance results from a structural alteration of an enzyme involved in the shikimic acid pathway. (Genet. Eng. News 4[1]:25, 1984)

Aureobasidium pullulans significantly reduced infection and growth of Alternaria solani on tomato leaves, report C. Brame and J. Flood of the University of Bristol, England. A 2-day preincubation period for the antagonists was needed to reduce disease incidence. (Trans. Br. Mycol. Soc. 81:621-624, 1983)

Bacterial blister spot of apple caused by Pseudomonas syringae pv. papulans was reported for the first time in Italy, on Matsu apples in Venosta Valley, by C. Bazzi and A. Calzolari of the University of Bologna. (Phytopathol. Mediterr. 22:19-21, 1983)

Heterokaryosis was induced in Fusarium moniliforme by J. E. Puhalla and P. T. Spieth of the University of California, Berkeley, and was confined to anastomosed cells. There was no nuclear migration through established hyphae. Heterokaryosis is apparently rare in nature. (Exp. Mycol. 7:328-335, 1983)

Paecilomyces lilacinus was the most frequent parasite on eggs of Meloidogyne arenaria in Alabama soil, report G. Godoy, R. Rodriguez-Kabana, and G. Morgan-Jones of Auburn University. Malbranchea aurantiaca, another egg parasite, predominated in chitin-amended soil. (Nematropica 13:113, 1983)

Sap beetles (Glischrochilus quadrisignatus) transmitted conidia and ascospores of Gibberella zeae in corn ears, according to W. A. Attwater and L. V. Busch of the University of Guelph, Ontario, Canada. Ear rot was most severe when contaminated beetles were put on ears at silking. (Can. J. Plant Pathol. 5:158-163, 1983)

Olpidium brassicae and Ligniera sp. were found on roots of alsike clover for the first time in Canada by J. P. Tewari and P. Bains of the University of Alberta, Edmonton. The fungi occurred in epidermal and outer cortical cells but were not virus vectors. (Can. Plant Dis. Surv. 63[2]:35-37, 1983)

Slightly acid pleistocene sand suppressed Rhizoctonia solani more than holocene, about neutral marine soil, according to G. Jager and H. Velvis of the Institute for Soil Fertility, Netherlands. Fewer sclerotia occurred on harvested tubers in suppressive soils. (Neth. J. Plant Pathol. 89:141-152, 1983)

Phytoalexin-inducer chemicals induced resistance to Helminthosporium oryzae in rice seedlings inoculated or infected naturally in the field, report D. N. Giri and A. K. Sinha of Bidhan Chandra Krishi Viswavidyalaya, West Bengal, India. (Z. Pflanzenkr. Pflanzenschutz 90:479-487, 1983)

Drechslera australiensis was found for the first time in Egypt as a leaf spot (eyespot) of banana, report M. K. Abo-El-Dahab, M. A. El-Goorani, and A. A. Schoeib of the University of Alexandria. (Phytopathol. Mediterr. 22:47-48, 1983)