

Focus

Calgene, Inc., of Davis, California, has received the first U.S. patent on a gene specifically engineered for crop agriculture. The aroA gene confers tolerance to the herbicide glyphosate and will be marketed under the trade name GlyphoTol. (Genet. Eng. News 5[9]:3, 1985)

Glomus fasciculatus is a weak pathogen of the soybean cyst nematode, according to L. J. Francl and V. H. Dropkin of the University of Missouri, Columbia. Soybean plants with G. fasciculatus and Heterodera glycines produced more biomass than did nonmycorrhizal plants with nematodes. (J. Nematol. 17:470-475, 1985)

Gremmeniella abietina damaged red pine in Finland, report T. Kallio and associates at the Finnish Forest Research Institute, Helsinki. Infection depended on the mode of stand regeneration, the stand density and age, and whether fertilizer had been applied. (Eur. J. For. Pathol. 15:216-223, 1985)

Colletotrichum acutatum is a new pathogen of western hemlock seedlings in Canada, according to J. C. Hopkins, W. Lock, and A. Funk of the Pacific Forest Research Centre, Agriculture Canada, Victoria, British Columbia. Burning hemlock seedlings in the nursery apparently prevented spread of the pathogen. (Can. Plant Dis. Surv. 65:11-13, 1985)

Tropolone, a root-growth inhibitor, was produced in rice by a pathogenic Pseudomonas sp. and caused symptoms of seedling tumbling without rotting plants, report K. Azegami and associates at the National Institute of Agro-Environmental Sciences and the University of Tokyo, Japan. Chlorosis followed growth inhibition, then seedlings withered and died. (Ann. Phytopathol. Soc. Jpn. 51:315-317, 1985)

Verticicladiella spp. should be assigned to the genus Leptographium, which should be amended to include conidiogenous cells that develop enteroblastically and holoblastically, according to M. J. Wingfield of the Plant Protection Research Institute, Stellenbosch, South Africa. (Trans. Br. Mycol. Soc. 85:81-93, 1985)

Stem rot caused by Fusarium merismoides was reported for the first time on tomato by J. T. Fletcher and K. Lord of the Agricultural Development and Advisory Service, Ashford, Kent, England. Seedlings, but not mature plants, were killed by infection. Benomyl is a possible control agent. (Plant Pathol. 34:443-445, 1985)

Barley coleoptile cells are conditioned to susceptibility to Erysiphe graminis by a prior attack by the fungus, and cell resistance is enhanced by an attack by E. pisi at least 60 minutes before the attack by the pathogenic mildew, report H. Kunoh and associates at Mie University, Tsu-city, Japan. Resistance or susceptibility was not transferred to adjacent cells within a 3-hour period. (Physiol. Plant Pathol. 27:43-54, 1985)

The causal fungus of sooty blotch of avocado in South Africa was determined to be Akaropeltopsis sp., report E. M. Smith, J. M. Kotze, and F. C. Wehner of the University of Pretoria. This differs from Stomiopeltis on citrus. (Phytophylactica 17:101-102, 1985)

An optimum concentration of nitrogen is needed for resistance of tomato to Fusarium oxysporum. Coinfection with tomato bushy stunt virus, however, leads to increased virus accumulation, report S. R. Chant and I. S. Gbaja of the University of London, England. Fungus presence in plant tissues may be more important than nutrition in promoting virus replication. (Phytoparasitica 13:47-57, 1985)