Focus

Compiled by Thor Kommedahl

The development pattern of snow mold resistance in winter wheat caused by Microdochium nivale appears to substantively differ from that involved in freezing tolerance, although both are conditioned by low temperatures, report T. Nakajima and J. Abe of the Tohoku and Hokkaido National Experiment Stations at Iwate and Sapporo, respectively, Japan. (Can. J. Bot. 74:1783-1788, 1996)

A highly sensitive fiber-optic primer/target method has been described by J. A. Ferguson and associates at Tufts University, Medford, Massachusetts, for specific identification of DNA sequences in which each fiber in a bundle of optical fibers carries a different oligonucleotide probe immobilized at its distal end. (Nature Biotechnol. 14:1681-1684, 1996)

Severe infection of potato tubers with Globodera pallida was described by N. Vovlas of the Istituto di Nematologia Agraria, Bari, Italy; tuber infection is less damaging than root infection but may signal high nematode populations in soil. (Eur. J. Plant Pathol. 102:743-746, 1996)

Three wheat genotypes have a high degree of partial resistance to bacterial leaf streak in diallel crosses, report H. El Attari and associates at the Institut National Polytechnique (ENSAT-INP), Toulouse-Cedex, France. (Plant Pathol. 45: 1134-1138, 1996)

A model for the interaction of barley and Erysiphe graminis that includes cutin monomers as primary signals (or elicitors) for a subset of defense reactions leading to acquired resistance was developed by P. Schweizer and associates at the University of Fribourg, Fribourg; and Sandoz Agro Ltd., Witterswil, Switzerland. (Physiol. Mol. Plant Pathol. 49:103-120, 1996)

Cherry leaf roll virus distribution in leaves of deciduous forest trees and herbaceous plants can be detected by tissue print immunopressblotting of whole leaf blades, report A. Quadt-Hallmann and associates at Rheinische Friedrich-Wilhelms-University, Bonn, Germany. (J. Plant Dis. Prot. 103:449-454, 1996)

Nematodes of Bursaphelenchus xylophilus can be transmitted from contaminated wood chips to freshly wounded stems of pine, according to Von Helen Braasch, Biologische Bundesanstalt für Land- und Forstwirtschaft, Kleinmachnow, Germany. (Nachrichtenbl. Dtsch. Pflanzenschutzdienst 48:173-175, 1996)

Phytophthora nicotianae and P. palmivora caused root and collar rot of several Pittosporum spp. of ornamental plant nurseries in Liguria and Sicily, report S. O. Cacciola and G. Polizzi of the University of Catonia and the University of Reggio Calabria, Italy. (Inf. Fitopatol. 46[9]:25-29, 1996)

To distinguish between two species causing eyespot of cereals (Tapesia spp.) a heterothallic mating system with molecular markers was devised by P. S. Dyer and associates at the University of Nottingham; the John Innes Centre, Norwich; and the University of Bristol, UK. (Mycol. Res. 100:1219-1226, 1996)

Tomato plants respond to wounds by producing proteinase-inhibitor genes, and the signals regulating expression of these genes include ethylene and jasmonates, report P. J. O'Donnell and associates at the University of York, UK; and the Institut für Pflanzenbiochemie, Halle, Germany. (Science 274:1914-1917, 1996)

Minaret spring wheat was more sensitive than Eridano wheat to ozone, but leaf senescence in both cultivars increased with increasing concentrations of ozone, report L. Mortensen and H. E. Jørgensen of the National Environmental Research Institute, and the Risø National Laboratory, in Roskilde, Denmark. (Environ. Pollut. 93:121-127, 1996)

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