

Cultures of Puccinia coronata were produced by spraying urediospores onto a cell monolayer stripped from a 7-day-old oat coleoptile, then subjected to 30 C for 2 hours, reports K. Mendgen of the University of Konstanz, West Germany. When sucrose was supplied, haustoria and urediospores formed abundantly.

A computer-oriented system for classifying strains of Puccinia graminis devised by N. H. Luig and B. D. H. Latter of the University of Sydney, Castle Hill, Australia, is based on octal notation, involves 36 single host genes in three groups, and preserves continuity with Stakman race designations.

Footrot, a new tomato disease caused by Fusarium solani, was found in Queensland by R. A. Peterson and L. L. Vawdrey of the Department of Primary Industries, Mareeba, Australia. Taproot lesions girdled the stem, and foliage and root symptoms were associated with a toxin. Disease was most severe during the winter months of July and August.

Triticale was more resistant than wheat but less resistant than rye to take-all in field trials by P. R. Scott and T. W. Hollins of the Plant Breeding Institute, Cambridge, England. In evaluations for resistance, field environment was more important than plant stage.

An integrated control model for Pratylenchus brachyurus, feasible for use in the developing tropical world, has been designed by O. A. Egunjobi of the University of Ibadan, Nigeria. Components include agrowastes, mixed cropping with legumes, water extracts of Azadirachta indica leaves, new rotations, and planting dates.

Pretreating muskmelon and tomatoes with the herbicide trifluralin greatly increased resistance to Fusarium oxysporum, report A. Grinstein, C. Dehan, N. Lisker, N. Umiel, J. Katan, and H. D. Rabinowitch of the Volcani Center, Bet Dagan, and Hebrew University, Rehovot, Israel. Dinitramine induced a similar tolerance to tomato wilt.

Ectomycorrhizal species found on Compositae native to Australia also formed vesicular-arbuscular mycorrhizae, according to P. A. McGee and J. H. Warcup of Waite Agricultural Research Institute, South Australia. Host genera included Helichrysum, Helipterum, Podolepis, Waitzia, Angianthus, and Isoetopsis.

Pseudomonas viridiflava caused damage to floral buds, flowers, and leaves of kiwifruit, resulting in losses up to 30%, according to J. M. Young of the Department of Scientific and Industrial Research, Auckland, New Zealand. Wet spring weather aided disease, which was not controlled by streptomycin.

Chilling injury causes significant postharvest losses in tropical and subtropical fruits and vegetables, according to H. E. Moline of the USDA, Beltsville, MD. Weak pathogens colonize tissues damaged by exposure to low temperatures. Intermittent warming reduces chilling damage.

Alternaria mali and A. kikuchiana on apple and pear produce host-specific toxins that reproduce the necrotic symptoms caused by inoculation with spores, report T. Ueno, T. Nakashima, and H. Fukami of Kyoto University, Japan. The ring conformation of toxin molecules is strongly related to toxic activity.

Fusarium graminearum was isolated from 99% of wheat heads infected with scab during a 3-year period, reports Z. Yuan-Mei of the Fujian Academy of Agricultural Sciences, Fuzhou, China. Seven Fusarium species were tested.