

Focus

Disease losses in the 1984 Kansas wheat crop totaled 14.7%, compared with 16.4% in 1983 and a 5-year average of 12.6%, according to T. Sims IV of the Kansas State Board of Agriculture, Topeka, and W. G. Willis of Kansas State University, Manhattan. Speckled leaf blotch, tan spot, and soilborne mosaic were the most damaging diseases. (Preliminary report by authors)

Fusarium solani f. sp. cucurbitae was used to kill the weed Texas gourd in a soybean field. This is the first soilborne fungus to be evaluated as a microbial herbicide in a row crop, according to C. D. Boyette, G. E. Templeton, and L. R. Oliver of the University of Arkansas, Fayetteville. (Weed Sci. 32:649-655, 1984)

The first report of cabbage yellows, caused by Fusarium oxysporum, being suppressed by a species of Penicillium was made by A. A. Reyes of the Agriculture Canada Research Station in Vineland, Ontario. Inocula of P. oxalicum and F. oxysporum f. sp. conglutinans were added separately to soil before cabbage seeds were planted. (Phytoprotection 65:27-33, 1984)

EPTC and linuron applied to soil reduced postemergence damping-off, caused by Rhizoctonia solani, and Fusarium wilt in cotton, report M. El-Khadem of Suez Canal University, Egypt, and G. C. Papavizas, USDA-ARS, Beltsville, MD. The herbicides were thought to suppress saprophytic growth of R. solani and chlamydospore germination of Fusarium oxysporum. (Plant Pathol. 33:411-416, 1984)

A benomyl slurry controls Fusarium oxysporum on infected melon seeds, according to J. F. Ferreira and P. S. Knox-Davies of the University of Stellenbosch, South Africa, and is useful in preventing introduction of infected seed into new areas. (Phytophylactica 16:67-69, 1984)

Tabtoxin is the main and perhaps sole determinant of pathogenicity of Pseudomonas syringae pv. tabaci on tobacco, according to J. G. Turner and R. R. Taha of the University of East Anglia, Norwich, UK. Resistance to this non-host-specific toxin protects plants from seedling diseases caused by P. s. pv. tabaci. (Physiol. Plant Pathol. 25:55-69, 1984)

Maize dwarf mosaic virus was occasionally detected in the endosperm and pericarp of mature sweet corn kernels but not in the embryo or pollen, report M. A. Mikel, C. J. D'Arcy, and R. E. Ford of the University of Illinois, Urbana. The virus was regularly detected in kernels, silks, glumes, and whole anthers before fertilization, however. (Phytopathol. Z. 110:185-191, 1984)

Resistance of dry beans to white mold was quantitatively inherited and primarily due to additive gene action, report P. A. Fuller, D. P. Coyne, and J. R. Steadman of the University of Nebraska, Lincoln. A breeding strategy involving recurrent selection should improve resistance. (Crop Sci. 24:929-933, 1984)

Ammonia-induced mycostasis is not attributable to enhanced release of carbon compounds, report H. J. M. Löffler and B. Schippers of the Willie Commelin Scholten Phytopathological Lab, Baarn, Netherlands, who applied labeled carbon to conidia of Botrytis cinerea, Cochliobolus victoriae, and Fusarium solani. (Can. J. Microbiol. 30:1038-1041, 1984)

Application of fertilizers in wet and dry soils depressed abundance of fungus-feeding and omnivorous nematodes but favored bacteria feeders (especially when irrigation was combined with fertilizer) in a Swedish pine forest, report B. Sohlenius of the University of Stockholm, Sweden, and L. Wasilewska of the Institute of Ecology, Lomianski, Poland. (J. Appl. Ecol. 21:327-342, 1984)