Focus

In the 1981 rust survey, wheat stem rust races 151, 15, and 11 were most prevalent, in that order. Only a trace of stem rust developed on winter wheats, however, and no rust occurred on spring wheats commonly grown in the United States. NA-27 was the principal oat stem rust race, but the early planting dates nullified the effects of early rust infection. (Cereal Rust Bull., Rep. No. 8, 12 August 1981)

A potato late blight epidemic in 1980 in the Netherlands is attributed by L. C. Davidse and colleagues at the Agricultural University, Wageningen, to development of a metalaxyl-resistant population of Phytophthora infestans. This failure of metalaxyl resulted in considerable losses to potato growers. (Neth. J. Plant Pathol. Vol. 87, No. 2, 1981)

Somatic hybrid plants of three Nicotiana spp. (tobacco) produced by protoplast fusion had apparent resistance to tobacco mosaic virus (local-lesion type), report D. A. Evans of the Campbell Institute for Research and Technology, Cinnaminson, NJ, and C. E. Flick and R. A. Jensen of the State University of New York, Binghamton. (Science Vol. 213, No. 4510, 1981)

The pinewood nematode reported in the United States during the past 3 yr was determined to be the same species (Bursaphelenchus xylophilus) that causes severe losses of pine in Japan, according to W. R. Nickle, A. M. Golden, and W. P. Wergin of the USDA, Beltsville, MD, and Y. Mamiya of the Forestry and Forest Products Research Institute, Ibaraki, Japan. Determinations were based on morphology and genetic crosses of Japanese and American populations of nematodes. (J. Nematol. Vol. 13, No. 3, 1981)

A growth medium for culture of rickettsialike bacteria associated with plum leaf scald and phony peach diseases has been developed by J. M. Wells of the Southeastern Fruit and Tree Nut Research Laboratory, Byron, GA, and B. C. Raju, G. Nyland, and S. K. Lowe of the University of California, Davis. The medium is a modification of the Feeley charcoal-yeast extract medium developed for fastidious bacteria. (Appl. Environ. Microbiol. Vol. 42, No. 2, 1981)

Metalaxyl increased marketable pepper transplant yields by 625,000/ha and plant stands by 182,000/ha and reduced Pythium disease loci from 13 to 0.06/36-m row, report C. A. Jaworski, S. C. Phatak, and A. S. Csinos of the USDA and the University of Georgia, Tifton. Marketable tomato transplant yields increased by 219,000/ha, size of marketable cabbage transplants increased, and incidence of downy mildew decreased with metalaxyl treatment. (HortScience Vol. 16, No. 3, 1981)

Anthracnose was an important factor in reducing forage yields of susceptible alfalfa cultivars in 15 of 24 U.S. locations, report J. H. Elgin and colleagues in 18 state experiment stations. In a 3-yr study, forage yield was, on the average, 10% higher from anthracnose-resistant alfalfa than from susceptible cultivars. (Crop Sci. Vol. 21, No. 3, 1981)

Postharvest treatment with hot water and fungicides effectively controlled surface and decay fungi of muskmelon fruits, according to W. W. Carter of the USDA, Weslaco, TX. Although ineffective alone, hot water increased the efficacy of the fungicides. (HortScience Vol. 16, No. 3, 1981)

The primary spread of the mushroom disease caused by Verticillium fungicola was shown to be by a fly (Megaselia halterata), reports P. F. White of the Glasshouse Crops Research Institute, Littlehampton, Great Britain. Subsequent disease spread was due mainly to watering and was exponential. (Prot. Ecol. Vol. 3, No. 1, 1981)