

Focus

Wheat streak mosaic is currently the most damaging disease in the 1988 wheat crop, according to T. Sim IV of the Kansas State Board of Agriculture in Topeka. Barley yellow dwarf is causing some damage in central and eastern Kansas, but foliage diseases are not severe at this time. (Kans. Plant Dis. Surv. Rep. 9, 27 May 1988)

A new viruslike barley disease that appears etiologically novel and is transmitted by the spider mite Petrobia latens is described by N. L. Robertson and T. W. Carroll of Montana State University, Bozeman. Particle length is unique for plant viruses. (Science 240:1188-1190, 1988)

Treatment with metalaxyl within 24 hours of infection protected potato tubers from Phytophthora infestans and even protected germ primordia of infected tubers, report H. Stachewicz and U. Burth of the Institut für Pflanzenschutzforschung Kleinmachnow, East Germany. Tuber treatment also lowered vine susceptibility up to 70 days after planting. (Arch. Phytopathol. Plant Prot. 24:35-43, 1988)

Soybean isolines with the Rps1-k gene for resistance to Phytophthora root rot are also tolerant to the herbicide metribuzin, report R. I. Buzzell and A. S. Hamill of Agriculture Canada, Harrow, Ont. This improved tolerance could reduce injury to soybean cultivars by metribuzin applications. (Weed Technol. 2:170-171, 1988)

Resistance of tomato to Fusarium oxysporum f. sp. radicis-lycopersici was confirmed to be conferred by a single dominant gene, designated Frl by D. J. Vakalounakis, Plant Protection Institute, Crete. (Plant Pathol. 37:71-73, 1988)

A computer method for identifying nematode species, devised by J. M. Rey, M. Andres, and M. Arias of the Institute of Edaphology and Plant Biology, Madrid, Spain, uses an index to measure the probability that a character is common to the unidentified specimen and reference species. (Rev. Nematol. 11:129-135, 1988)

Quinaphthin, an antibiotic produced by the aeroaquatic hyphomycete Helicoon richonis and discovered by P. J. Fisher and associates, University of Exeter, England, is active against gram-positive bacteria, two wall-less bacteria, and the protozoan Trichomonas vaginalis. (Trans. Br. Mycol. Soc. 90:499-502, 1988)

Nivalenol was found for the first time occurring naturally in cereals grown in Canada by T. Tanaka and associates at the Public Health Research Institute of Kobe and the Tokyo University of Science, Japan. They also showed the simultaneous occurrence of the Fusarium mycotoxins nivalenol, deoxynivalenol, and zearalenone in corn, rye, and wheat. (Mycopathologia 101:157-160, 1988)

Application of nitrogen and phosphorus reduced populations of Pratylenchus thornei on wheat roots, to a greater extent in wheat in rotation than in monoculture, according to R. Tacconi and associates at the University of Bologna, Italy. (Inf. Fitopatol. 38[1]:47-50, 1988)

Irrigation of soft white spring wheat during the milk or soft-dough stage significantly increases incidence of black point and results in downgrading of harvested grain, reports R. L. Conner of Agriculture Canada, Lethbridge, Alta. (Can. J. Plant Pathol. 9:301-306, 1987)

A system for evaluating Fusarium resistance of wheat in early growth stages has been developed by T. Miedaner of the University of Hohenheim in Stuttgart, West Germany. Seedlings were inoculated with F. culmorum and data were taken on root and shoot dry weights. (J. Phytopathol. 121:150-158, 1988)