Focus

Subterranean clover mottle virus, a new virus, was reported on subterranean clover in Western Australia by R. I. B. Francki and colleagues of the Waite Agricultural Research Institute, Adelaide, and the Western Australian Department of Agriculture, Perth. A new taxonomic group was proposed based on common properties with several other viruses and similarities in RNA complements. No vector was found. (Plant Pathol. 32:47-59, 1983)

Summer rainfall was the only climatic factor that had any significant effect on incidence of disease in winter wheat caused by Leptosphaeria nodorum, according to M. J. Richardson of Agricultural Scientific Services, Edinburgh, Scotland. Crops from dry, cold winters had higher than expected incidences of infection. (EPPO Bull. 13(2):87-95, 1983)

Direct addition to soil of a pentachlorophenol-degrading strain of Arthrobacter (10^6 cells/g soil) reduced the half-life of this pesticide and wood preservative from 2 weeks to less than a day, report R. U. Edgehill and R. K. Finn of Cornell University, Ithaca, NY. This bacterial treatment of soil reduces the hazard of runoffs when spills occur during treatment of wood poles near streams and lakes. (Appl. Environ. Microbiol. 45:1122-1125, 1983)

Resistance of alfalfa to Fusarium wilt is controlled by at least two genes, according to E. H. Hijano, D. K. Barnes, and F. I. Frosheiser of the University of Minnesota, St. Paul. One gene is dominant, the other additive. Recurrent selection can increase wilt resistance in plant populations. (Crop Sci. 23:31-34, 1983)

Infection of plants with Glomus fasciculatus mycorrhizae appeared to increase wheat tolerance to drought, whereas infection with G. mosseae did not, report M. F. Allen and M. G. Boosalis of the University of Nebraska, Lincoln. Conventional tillage reduces endophyte populations that promote drought resistance and increases populations less adapted to wheat production. (New Phytol. 93:67-76, 1983)

Procymidone and vinclozolin are suggested as alternatives to benomyl for suppressing overwintering inoculum of the brown rot fungus (Monilinia fructicola) on stone fruits. According to P. F. Kable of the Biological and Chemical Research Institute, Rydalmere, Australia, these dicarboximides can be used where benomyl-resistant strains have developed but do not represent a long-term solution to resistance. (J. Hortic. Sci. 58:45-50, 1983)

Faba beans inoculated with Glomus mosseae had increased dry matter, according to R. M. N. Kucey of Agriculture Canada, Lethbridge, and E. A. Paul of the University of California, Berkeley. Root colonization and total phosphorus uptake also increased in inoculated beans. (Can. J. Soil Sci. 63:87-95, 1983)

Of about a dozen herbicides applied to wheat singly or in combination, none had any appreciable effect on intensity of common root rot, report R. D. Tinline and J. H. Hunter of Agriculture Canada research stations in Saskatoon and Regina. Reported increase in disease incidence from herbicide application was attributed to soil disturbance rather than to the chemical or to a change in prevalence of Cochliobolus sativus or Fusarium spp. (Can. J. Plant Pathol. 4:349-352, 1982)

Planting of sunflowers can result in accumulation of leachates and residues toxic to succeeding crops, according to M. K. Schon and F. A. Einhellig of the University of South Dakota, Vermillion. Adverse effects on growth and water status of grain sorghum were attributed to allochemicals released from the previous crop of sunflower plants and their residues. (Bot. Gaz. 143:505-510, 1982)