

Focus

Genetically transformed maize plants were obtained from protoplasts treated with recombinant DNA, report C. A. Rhodes and associates at the Sandoz Crop Protection Corporation, Palo Alto, CA. Plants were regenerated from transformed cell lines and grown to maturity. (Science 240:204-207, 1988)

Metalaxyl resistance of Phytophthora infestans is governed by a single locus showing incomplete dominance, reports R. C. Shattock of the University College of North Wales at Bangor, Gwynedd. (Plant Pathol. 37:4-11, 1988)

Inoculum of Verticillium albo-atrum carried on the cutter bar in alfalfa fields appears to be the most important means of dispersal, and airborne inoculum may be unimportant in epidemiology, according to R. M. Jimenez Diaz and R. L. Millar of Cornell University, Ithaca, NY. (Plant Pathol. 37:64-70, 1988)

Although populations of plant-parasitic nematodes in the soil of a maize field were five times greater 11 weeks after planting than 3 weeks after, populations in roots were greatest 3 weeks after planting and decreased by 50% at 11 weeks, report D. De Waele and E. M. Jordan of the Grain Crops Research Institute, Potchefstroom, South Africa. The percentage of parasitic nematodes in maize rhizosphere is positively correlated with numbers around roots and can indicate potential infestation of roots. (Rev. Nematol. 11:65-74, 1988)

Trace elements, especially copper, reduced Rhizoctonia root rot of peanuts, report K. Murugesan and A. Mahadevan, University of Madras, India. Manganese and zinc were less effective than copper, and boron was the least effective. (Int. J. Trop. Plant Dis. 5:43-57, 1987)

Six of 33 Fusarium proliferatum isolates but none of 43 F. moniliforme isolates from soil, seeds, and stalks of corn produced moniliformin, report A. Logrieco and A. Bottalico of the Consiglio Nazionale delle Ricerche in Bari, Italy. All toxin-producing isolates came from soil or seeds; isolates from stalks were not toxigenic. (Trans. Br. Mycol. Soc. 90:215-219, 1988)

Application of benomyl can increase mycorrhizal formation on black spruce in the field by inhibiting fungi such as Trichoderma spp. that prevent mycorrhizal formation, according to R. C. Summerbell of the University of Toronto, Canada. Most soil ascomycetes were inhibited by benomyl. (Can. J. Bot. 66:553-557, 1988)

Pratylenchus penetrans significantly increased the incidence of crown gall on raspberry roots, report T. C. Vrain and R. J. Copeman of Agriculture Canada and the University of British Columbia, Vancouver, Canada. At high concentrations of nematodes, however, reproduction was reduced in crown gall tissue. (Can. J. Plant Pathol. 9:236-240, 1987)

Tobacco streak virus caused stunting of the gladiolus flower spike and mosaic, streaks, and ring spots of the leaves, report M. G. Bellardi and associates at the Università degli Studi in Bologna, Italy. (Phytopathol. Mediterr. 26:73-80, 1987)

Unbiasedness and precision in field trials are highest when every treated plot is placed next to an untreated control plot, according to K. Hahn of the Kleinmachow Institute for Plant Protection in East Germany. The increase in labor concomitant with frequent replication of the untreated control is justified by the improvement in unbiasedness and precision. (Arch. Phytopathol. Pflanzenschutz 23:483-494, 1987)