

Focus

Fungicide-antioxidant combination sprays reduced both early blight (Alternaria solani) and ozone injury in potato, according to S. Bisessar of the Ontario Ministry of the Environment, Toronto. The fungus colonized tissue injured by ozone more than uninjured tissue. Combined applications of chemicals were additive in reducing ozone injury and in increasing tuber yield. (J. Am. Soc. Hortic. Sci. Vol. 107, No. 4, 1982)

Strains of Rhizobium grow and survive at salt concentrations in soil that inhibit growth of most agricultural legumes, report P. W. Singleton, S. A. El Swaify, and B. B. Bohlool of the University of Hawaii, Honolulu. They advise that research on effects of salinity on symbiotic nitrogen fixation should be directed to aspects of symbiosis other than the survival of Rhizobium spp. (Appl. Environ. Microbiol. Vol. 44, No. 4, 1982)

Application of either of the two nematicides oxamyl and fenamiphos controlled nematodes and increased nodulation in peanut, report D. Clarkson, P. B. Bull, and D. J. Moles of the Department of Primary Industry, Konedobu, Papua New Guinea. Oxamyl at high application rates also increased pod number significantly. (Plant Soil Vol. 66, No. 3, 1982)

Resistance of tomato to Verticillium dahliae race 2 can be maintained in advanced generations by eliminating highly susceptible plants and by testing progeny to ensure recovery of resistant plants, and not escapes, according to W. R. Okie and R. G. Gardner of North Carolina State University, Raleigh. (J. Am. Soc. Hortic. Sci. Vol. 107, No. 4, 1982)

U.S. cultivars of soybean yielded well in Tanzania when inoculated with U.S. commercial strains of Rhizobium but not when inoculated with indigenous strains, whereas Tanzanian cultivars nodulated well with indigenous strains without inoculation, report E. L. Pulver, F. Brockman, and H. C. Wien of the International Institute of Tropical Agriculture, Ibadan, Nigeria. A breeding program to transfer the promiscuous character of local cultivars to improved U.S. cultivars could give high-yielding cultivars not needing inoculum. (Crop Sci. Vol. 22, No. 5, 1982)

Resistance of grand fir (Abies grandis) to the beetle Scolytus ventralis was enhanced by the presence of the fungus Trichosporium symbioticum, according to K. F. Raffa and A. A. Berryman of Washington State University, Pullman. The fungus accounts for increase in monoterpenes in trees, making trees more resistant to the beetle. (Can. Entomol. Vol. 114, No. 9, 1982)

Three new pathovars of Xanthomonas campestris have been described by T. Egli and D. Schmidt of Ciba-Geigy Ltd., Basel, and the Swiss Federal Research Station for Agronomy, Nyon, Switzerland. The new pathovars are arrhenatheri, phlei, and poae and, together with graminis, cause bacterial wilt of forage grasses in Europe and New Zealand. (Phytopathol. Z. Vol. 104, No. 2, 1982)

Benomyl at low concentration can prevent penetration and infection of peas by Fusarium solani by inhibiting formation of cutinase, according to W. Köller, C. R. Allan, and P. E. Kolattukudy of Washington State University, Pullman. (Pestic. Biochem. Physiol. Vol. 18, No. 1, 1982)

Air masses entering Alaska in winter from the Arctic contain aerosols of pollutants derived from emissions in central Eurasia, according to G. E. Shaw of the University of Alaska, Fairbanks. One source of the pollution may be the polymetallic ore mining and smelting complex at Norilsk in Siberia. (Nature Vol. 299, No. 5886, 1982)