

Focus

A new species of Erwinia (E. nalandii) described by M. L. Schuster, A. Schuster, and D. S. Nuland of the University of Nebraska, Lincoln, occurs on bean seed (Phaseolus vulgaris) and produces conspicuous pink discoloration on seed and a yellow spot on leaves. Bacterial growth under seed coats of pea and tepary bean is golden brown with some pink coloration. (Fitopatol. Bras. Vol. 6, No. 3, 1981)

Of nine seed treatment fungicides tested on barley against stripe, net blotch, and covered smut in Sweden, Panocrine Plus (guazatine 300 g/L + imazalil 20 g/L), Cevex (carboxin 50 g/L + imazalil 15 g/L), and Cevex T (Cevex + thiabendazole 20 g/L) proved as effective as mercury, report B. Olofsson and L. Johnsson of Uppsala. These compounds were applied at the rate of 200 cc/100 g of seed. (Vaxtskyddsnotiser Vol. 44, No. 5, 1980)

The widely used "most-probable-number" method for determining propagule numbers in a given substrate can be estimated by using a programmable pocket calculator, according to A. L. Koch of Indiana University. A computer program capable of handling the necessary arithmetic eliminates laborious calculations and use of tables. (Appl. Environ. Microbiol. Vol. 43, No. 2, 1982)

Removing peach trees with visible symptoms of phony peach disease is not feasible economically and may not slow disease spread, according to D. R. Evert and T. P. Gaines of the University of Georgia, Tifton, and W. J. French of the Agricultural Irrigation Center, Monticello, FL. At least 35% of trees without symptoms carry the rickettsialike bacteria in their roots. (J. Am. Soc. Hortic. Sci. Vol. 106, No. 6, 1981)

Root-dip applications of Trichoderma viride or Penicillium chrysogenum spores to tomato seedlings before transplanting them in soil containing Verticillium albo-atrum effectively controlled Verticillium wilt, reports B. K. Dutta of the College of Swansea, Wales. (Plant Soil Vol. 63, No. 2, 1981)

The exceptional resistance of wounded carrot tissue to invading fungi during storage is attributable to production of antifungal substances, not structural barriers, according to B. Garrod, B. G. Lewis, M. J. Brittain, and W. P. Davies of the University of East Anglia, Norwich, United Kingdom. This is a new explanation for the resistance shown by healing wounds. (New Phytol. Vol. 90, No. 1, 1982)

A root observation chamber designed by M. C. Rutherford and B. Curran of the Botanical Research Institute, South Africa, is intended for replicated use in a natural community. The small, low-cost steel chamber also allows microscopic observation of roots while major soil climatic factors are recorded. (Plant Soil Vol. 63, No. 2, 1981)

Three biocontrol agents--rust (Puccinia chondrillina), gall midge, and eriophyid mite--introduced in southeast Australia from 1968 to 1980 to control the weed Chondrilla juncea caused the decline of form A, the most widespread, report J. J. Burdon, R. H. Groves, and J. M. Cullen of CSIRO, Canberra City, Australia. Rust, the most aggressive of the three agents, depressed seed yields of form A both in pure and in mixed stands of the dominant form (A), allowing for population increases in the less common forms B and C. A race that attacks form B has been released. (J. Appl. Ecol. Vol. 18, No. 3, 1981)