

Focus

A mung bean breeding line with resistance to powdery mildew and *Cercospora* leaf spot has been developed at the Asian Vegetable Research and Development Center in Taiwan. Known as selection VC 1560 D, it can yield up to 2 t/ha. Seed for crop improvement services may be obtained from AVRDC, P.O. Box 42, Shanhua, Tainan 741, Taiwan, Republic of China. (Centerpoint 3(1):1, 1982)

Sweet and field corn seedling decline is most severe where soil pesticides, such as carbofuran, have been used continuously for several years, report D. R. Sumner, J. R. Young, A. W. Johnson, and D. K. Bell of the University of Georgia and USDA at Tifton, GA. Decline appears to be due to a complex interaction of soil pesticides, soil microorganisms, and possibly phytotoxins produced in the rhizosphere. (Prot. Ecol. 4:115-125, 1982)

Damping-off and root rot of muskmelon caused by *Rhizoctonia solani* were more severe and prevalent where nematodes (*Rotylenchulus reniformis*) existed, reports W. W. Carter of the USDA/ARS, Weslaco, TX. Disease severity with the nematode-fungus interaction was greater at 28 C than at 22 or 34 C. (J. Nematol. 14:434-435, 1982)

Schizophyllum commune was reported for the first time on sorghum feed grain by A. S. Foudin of APHIS/USDA, Columbia, MO, and O. H. Calvert of the University of Missouri, Columbia. The grain may have caused loss in conception and increased incidence of abortion in cows on a Missouri farm. (Mycologia 74:1041-1043, 1982)

Spraying nitrogen fixing strains of *Klebsiella* isolated from the phyllosphere onto wheat foliage enhanced plant dry weight, chlorophyll and nitrogen content, and 1,000-grain weight, according to B. Sen Gupta and S. P. Sen of the University of Kalyani, India. Grain yield was 20-25 q/ha for *Klebsiella*-sprayed plants and 24 q/ha for urea-sprayed leaves. (Plant Soil 68:69-74, 1982)

A necrosis-inducing factor extracted from cells of *Pseudomonas syringae* pv. *tomato* by Y. Bashan, Y. Okon, and Y. Henis of Hebrew University of Jerusalem, Israel, caused necrosis in leaves of bean, cucumber, and pepper but not tomato. (Can. J. Bot. 60:2453-2460, 1982)

Fire blight caused by *Erwinia amylovora* was observed on old trees of Bradford pear, which is reputed to be resistant, report H. Waterworth of the USDA, Glenn Dale, MD, and C. N. Clayton of North Carolina State University, Raleigh. Affected twigs drop off in midsummer, however, leaving no disfigurement. (HortScience 17:789, 1982)

Nonspecific defense mechanisms of plants can involve shedding of infected peripheral parts, reports J. T. Tippett of the University of New Hampshire, Durham. Periderm forms at root bases and induces shedding of short lateral roots and cortex of fir, hemlock, and pine, thereby ridding roots of tissues prone to invasion by parasites and pathogens. (Can. J. Bot. 60:2295-2302, 1982)

Structural genes for insecticidal endotoxin are plasmid-borne in *Bacillus thuringiensis*, according to J. M. Gonzalez, Jr., B. J. Brown, and B. C. Carlton of the University of Georgia, Athens. Plasmids are easily transferred between *B. thuringiensis* and *B. cereus*, indicating close taxonomic relations and facilitating genetic studies in *Bacillus*. (Proc. Nat. Acad. Sci. 79:6951-6955, 1982)

Of more than 70 nematode parasites associated with corn in the United States, 17 are proven pathogens, according to D. C. Norton of Iowa State University, Ames. Losses vary from minor to 100%, depending on hybrid and cropping sequence. (J. Nematol. 14:462, 1982)