

Focus

Gibberellic acids (GA) are important in regulating heterosis and in inbreeding depression in corn, report S. B. Rood and associates at the University of Lethbridge, Agriculture Canada Research Station in Harrow, and University of Calgary, Canada, and Australian National University, Canberra. Hybrid vigor is partly due to enhanced GA concentration. (Science 241:1216-1218, 1988)

By isozyme analysis, the pathogen of soybean rust in the Americas differs from that in Asia and Australia and may be a different species, report M. R. Bonde, M. H. Royer, and W. M. Dowler of the U.S. Department of Agriculture, Frederick, MD. (Fifth International Congress of Plant Pathology, Kyoto, Japan, August 1988)

A new viroid disease in the hop stunt viroid group was reported by T. Sano, T. Hataya, Y. Terai, and F. Shikata of the Faculty of Agriculture, Sapporo, Japan. It causes a dapple fruit in plum and peach and consists of 297 nucleotides. (Fifth International Congress of Plant Pathology, Kyoto, Japan, August 1988)

Dipping potato tubers for 2 minutes in a mixture of pentachloronitrobenzene (75%) and organic mercury (0.03%) effectively controlled tuberborne inoculum of powdery scab, and soil fumigation with methyl bromide or metham-sodium in irrigation water controlled soilborne inoculum, report A. Nachmias and J. Krikun of the Gilat Experiment Station in Negev, Israel. (Phytoparasitica 16:33-38, 1988)

Cocklebur, sicklepod, smallflower morningglory, pitted morningglory, prickly sida, and spotted spurge are potential sources of inoculum in the disease cycle of purple stain in soybean, according to K. S. McLean and K. W. Roy of Mississippi State University. (Can. J. Plant Pathol. 10:166-171, 1988)

Prior inoculation of wounded tomato plants with 5×10^4 cells per wound of various Pseudomonas syringae pathovars protected plants against infection with Corynebacterium michiganense inoculated on the same site, reports S. Süle of the Hungarian Academy of Sciences in Budapest. (J. Phytopathol. 122:343-350, 1988)

Fusarium solani f. sp. cucurbitae applied alone or with trifluralin can control Texas gourd, a weed in cotton and soybean fields, report G. J. Weidemann and G. E. Templeton, University of Arkansas, Fayetteville. (Weed Technol. 2:271-274, 1988)

With the soil washing technique, numbers of species per soil particle influence fungal species composition, reports E. Baath of the University of Lund, Sweden. Use of small particles in which one isolate per particle is likely overcomes problems of colonies interacting on agar media. (Can. J. Bot. 66:1566-1569, 1988)

Bacterial blight of safflower caused by Pseudomonas syringae was reported for the first time in Europe by M. Fioro, A. Foddai, and A. Franceschini of the Institute of Plant Pathology in Sassari, Italy. (Phytopathol. Meditter. 27:38-41, 1988)

Brazilian Baccharis species acquired toxin-coding genes from Myrothecium species in soil by a transpecific horizontal gene transfer mechanism, postulate B. B. Jarvis, J. O. Midiwo, and G. A. Bean of the University of Maryland, College Park. Toxins are produced only in female plants after pollination. (Fifth International Congress of Plant Pathology, Kyoto, Japan, August 1988)

The dot-blot immunoassay was simpler and faster than ELISA for detecting rice grassy stunt virus in rice plants, report P. Q. Cabauatan and H. Hibino, International Rice Research Institute, Philippines, and H. T. Hsu, USDA, Beltsville, MD. (Int. Rice Res. Inst. News1. 13[4]:34-35, 1988)