

# Focus

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Minitex substrate disks used to identify Bacillus species agreed with 92% of the results of conventional tests, report N. M. Sullivan and associates of the California Public Health Foundation at Berkeley and the University of California at Davis. (Appl. Environ. Microbiol. 53:2680-2682, 1987)

Bakanae disease of rice caused by Fusarium moniliforme was reduced 70% by soaking seeds in a bacterial suspension before planting, according to A. M. Rosales, F. L. Nuque, and T. W. Mew of the International Rice Research Institute in Los Baños, Philippines. Results were comparable to those with benomyl treatment. (Philipp. Phytopathol. 22:29-35, 1986)

Exposure of plants to sulfur dioxide or ozone reduces plant root biomass more than shoot biomass, concludes M. J. Lechowicz of McGill University, Montreal, Canada. Nitrogen dioxide, however, does not induce differential suppression of shoots and roots. (Bot. Rev. 53:281-300, 1987)

A narrower host range and other features suggest that Ustilago nuda evolved from U. tritici, according to J. Nielsen, Agriculture Canada, Winnipeg. Of 11 Hordeum species, five were susceptible to both smuts, three to only U. tritici, and one to only U. nuda; the other two species were resistant to both smuts. (Can. J. Bot. 65:2024-2027, 1987)

Phomopsis longicolla causes seed decay of soybeans by colonizing the coats and embryos of immature and mature seeds, as shown by scanning electron microscopy, report D. M. Baker and associates of the University of Missouri, Columbia. (Can. J. Microbiol. 33:797-801, 1987)

Genetic analysis of cotton infected with the root-knot nematode suggests that the nematodes suppress yield. Yield is not affected strongly, however, by application of dichloropropene (Telone II), according to E. B. Minton and W. R. Meredith, Jr., USDA, Stoneville, MS. The nematicide affects crop performance in other ways, e.g., by suppressing soil microorganisms. (Crop Sci. 27:1001-1004, 1987)

Rhizoctonia solani causes maximum mortality of mung bean seedlings at 20 C, and disease incidence decreases with increase in temperature, report H. R. Kataria and R. K. Grover of Haryana Agricultural University, Hissar, India. Other factors of the soil environment affect disease incidence and must also be considered. (Plant Soil 103:57-66, 1987)

Although pathogens in the rhizosphere grew faster than mycorrhizal fungi, the pathogens were neutralized quickly by the symbionts in the primary root of Scots pine, report P. Chakravarty and T. Unestam at the Swedish University of Agricultural Sciences, Uppsala. Two of three mycorrhizal fungi protected plants for the year of the study. (J. Phytopathol. 120:104-120, 1987)

The genome of the cowpea strain of southern bean mosaic virus is 4,195 nucleotides long and has four reading frames, according to S. Wu, C. Rinehart, and P. Kaesberg of the University of Wisconsin, Madison. (Virology 161:73-80, 1987)

Application of carbofuran or disulfoton to seeds of wheat, oats, and barley resulted in the death of the bird cherry oat aphid that fed on the plants, report J. E. Araya and J. E. Foster, USDA, Purdue University, West Lafayette, IN. Aphid mortality increased with dosage of the insecticide. By controlling the vector, such seed treatments also can control barley yellow dwarf virus on these crops. (J. Econ. Entomol. 80:1272-1277, 1987)