

By the first week in July, severities of wheat stem rust were trace to 30% in susceptible wheats in southeast North Dakota, southern Manitoba, and east-central Minnesota, representing the greatest spread of stem rust into the northern Great Plains since 1986, according to the USDA Cereal Rust Laboratory at St. Paul, Minnesota. (Cereal Rust Bull. Rep. 8, 11 July 1990)

Phytoalexins produced by sorghum are 3-deoxyanthocyanidin flavonoids that inhibit pathogenic fungi, report B. A. Snyder and R. L. Nicholson of Purdue University, West Lafayette, Indiana. This site-restricted synthesis suggests that the initial response is by the first cells infected. (Science 248:1637-1639, 1990)

Weed seedling rhizospheres can be manipulated to host specific rhizobacteria that control weeds, report R. J. Kramer and associates of the USDA and University of Missouri, Columbia. (Appl. Environ. Microbiol. 56:1649-1655, 1990)

Twelve gram-negative bacteria associated with winter wheat plants and used as inoculants promoted growth of winter wheat in growth chambers, according to J. R. deFreitas and J. J. Germida of the University of Saskatchewan, Saskatoon, Canada. Some isolates increased seedling emergence and were antagonistic to root pathogens. (Can. J. Microbiol. 36:265-272, 1990)

The landing efficiency of the wheat curl mite is increased on wheat cultivars with high leaf trichome densities, which results in a greater incidence of wheat streak mosaic, report T. L. Harvey, T. J. Martin, and D. L. Seifers of Kansas State University at Hays. (Crop Sci. 30:534-536, 1990)

Inoculation of tomato transplants with Agrobacterium rhizogenes increased root weight significantly, report P. I. Erickson and associates of the FMC Corporation, Princeton, New Jersey. Response to inoculation is homogeneous across genotypes and confined to the original inoculated root mass. (J. Hortic. Sci. 65:333-337, 1990)

Exposure of scions of pome fruits infected with Erwinia amylovora to 40 C for 23 hours killed the bacteria, but lethal effects on host tissue were not evident for 5 days, report M. Keck and associates at the Bundesanstalt für Pflanzenschutz, Vienna, Austria, and INRA, Angers, France. (Pflanzenschutzberichte 51:36-39, 1990)

Triforine, 100-400 µg/ml applied at petal fall and twice again at 14-day intervals, controlled almond red leaf blotch caused by Polystigma ochraceum, reports Z. Banihashemi, Shiraz University, Iran. (Plant Pathol. 39:309-315, 1990)

Bursaphelenchus mucronatus from Norway and France caused minor wilt on Pinus sylvestris but B. mucronatus from Germany and Japan elicited no symptoms; no isolate was as destructive as B. xylophilus from Japan, reports M. Schauer-Blume of the Institut für Nematologie und Wirbeltierkunde in Münster, West Germany. (Rev. Nematol. 13:191-195, 1990)

Five of nine samples of rice bran and six of 25 samples of parboiled rice bran contained aflatoxins, and 16 of 29 isolates of Aspergillus flavus were toxigenic in vitro, report P. Jayaraman and I. Kalyanasundaram of the University of Madras, India. (Mycopathologia 110:81-85, 1990)

Selection of corn inbreds for resistance to root and stalk rot may also select for resistance to mycorrhizal colonization, according to R. Toth and associates of Northern Illinois University at De Kalb and De Kalb-Pfizer Genetics in De Kalb, Illinois. (Can. J. Bot. 68:1039-1044, 1990)