

# Focus

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Head smut (Sphacelotheca reiliana) was found in Washington County, Iowa, on corn for the first time by A. J. Balducchi of Iowa State University, Ames. Only one tassel was infected in a 4-acre field in 1982. (Personal communication)

Wheat leaf rust is more severe in wheat-growing states along the South Atlantic Coast this year than in 1982, according to surveys by USDA personnel at the Cereal Rust Laboratory in St. Paul, MN. In Kansas, Thomas Sim IV reports the earliest incidence of leaf rust since 1975. (Cereal Rust Bull., Rep. No. 1, 13 April 1983)

Two new nematode species have been found in South Africa by E. Van Den Berg of the Plant Protection Research Institute, Pretoria, and V. W. Spaull of the South African Sugar Association Experiment Station, Mt. Edgecombe. The species were described as Tylenchulus furcus sp. n. and Sphaeronema cornubiensis sp. n. (Phytophylactica 14:131-144, 1982)

Of eight corn inbreds, three (H60, H84, H95) supported lower populations of Pratylenchus hexincisus, report L. Georgi, J. M. Ferris, and V. R. Ferris of Purdue University, West Lafayette, IN. Differences in nematode populations were attributed to differential reproduction. (J. Nematol. 15:243-252, 1983)

In a search for selective media to recover Cylindrocladium and Fusarium species from roots and stems of tree seedlings, J. R. Newhouse and B. B. Hunter of California State College, California, PA, found that yeast extract reduced recovery of Cylindrocladium but greatly enhanced isolation of Fusarium species. (Mycologia 75:228-233, 1983)

Traquaria, a fungus found in Pennsylvanian coal balls and thought to be a protozoan, has been more thoroughly described by S. P. Stubblefield and T. N. Taylor of Ohio State University, Columbus, as a fungus in the Ascomycota, similar to species in the Eurotiales and Erysiphales. (Am. J. Bot. 70:387-399, 1983)

Ribavirin, a broad-spectrum antiviral compound, delayed symptoms of grapevine leafroll disease by 50 days, according to J. H. Stevenson and P. L. Monette of Agriculture Canada, Sidney, British Columbia. The drug appears to inhibit replication of the leafroll agent and functions as a virostatic agent. (Can. J. Plant Sci. 63:557-560, 1983)

Planting Sphacelotheca reiliana teliospores and damp vermiculite mixtures with kernels of sweet corn, using a V-belt planter, was the most effective way to test sweet corn cultivars for resistance to head smut, according to J. R. Baggett and P. A. Koepsell of Oregon State University, Corvallis. The method resulted in 95% disease incidence in a susceptible cultivar. (HortScience 18:67-68, 1983)

Bacterial and fungal colonists of straw in soil promote aggregate stabilization of volcanic ash and soil, such as occurs from Mount St. Helens' activity, report J. M. Lynch and L. F. Elliott of Washington State University, Pullman. Addition of microbially degraded straw residues containing aggregating agents (eg, composts) can benefit unstable soils. (Appl. Environ. Microbiol. 45:1398-1401, 1983)

Lectins in wheat, barley, and rye embryos are closely related chemically and physically but differ from lectins outside the Hordeae tribe of the Gramineae, according to R. C. Miller and D. J. Bowles of the University of Leeds, England. Lectins in corn and oat embryos differ in structure and function from those in wheat and barley, but the significance is not known. (Planta 157:138-142, 1983)