

Focus

Leaf rust (*Puccinia recondita*) is severe throughout southeastern U.S. wheat fields and probably accounts for much of the low bushel weights and yields per acre reported in the extreme southern soft red winter wheat area. By early June, heavy leaf rust was reported in fields of Kansas, southern Illinois, and Indiana and in plots in Tennessee and Virginia. Leaf rust is increasing slowly in the Pacific Northwest. (Cereal Rust Bull. Rep. Nos. 2, 3, and 4, 1982)

Anthracoze (*Colletotrichum trifolii*) was found on alfalfa in Minnesota for the first time in 1981, and Verticillium wilt (*V. albo-atrum*) was reported in three counties by F. Frosheiser, USDA-ARS and the University of Minnesota. Verticillium wilt is now established in the Pacific Northwest, north central, and northeastern regions of the United States. (Minnesota Pest Rep. No. 940-1, 4 June 1982)

Lewjain, a new soft white winter wheat released in the Pacific Northwest, is resistant to all regional races of common and dwarf bunt and stripe rust. The cultivar was released jointly by the USDA-ARS, the Idaho and Oregon Agricultural Experiment stations, and the Agricultural Research Center of Washington State University. (USDA-ARS news release, 2 June 1982)

Hilling sugar beets increases incidence and severity of root rot caused by *Rhizoctonia solani*, according to C. L. Schneider and G. J. Hogaboam, USDA-ARS and Michigan State University. E. G. Ruppel and R. J. Hecker of Colorado State University report similar findings, eg, beet yields from resistant lines were reduced by 7.5% and from susceptible lines, by as much as 22.5% in hilled plots. (USDA-ARS news release, 3 June 1982)

Calcium ion was detected in amyloplasts of root-cap cells of corn, peas, and lettuce by S. Chandra, J. F. Chabot, G. H. Morrison, and A. C. Leopold of Boyce Thompson Institute and Cornell University. The authors suggest that the ion is an essential component of the geotropic-sensing system of roots. (Science Vol. 216, No. 4551, 1982)

The first record of systemic infection of tomato by tobacco necrosis virus (TNV) was reported by D. Gallitelli, V. Savino, and P. Piazzolla of the Institute for Plant Pathology, Bari, Italy. Both TNV and potato virus Y caused local and systemic infection in tomato without reciprocal interference. (Inf. Fitopatol. Vol. 32, No. 3, 1982)

Sclerotia of *Sclerotinia sclerotiorum* were produced in both oil and fiber flax stems for the first time in Canada in September 1981 by F. M. Mederick and L. V. Piening of the Agricultural Field Crops Branch, Lacombe, Alberta. Inoculum may have originated from diseased rapeseed plants in nearby fields. (Can. Plant Dis. Surv. Vol. 62, No. 1, 1982)

Mycoplasmalike organisms were associated with a lethal disease of coconut palms in Tanzania, and the disease was considered similar to lethal yellowing of palms in the Caribbean region and in West Africa by F. Nienhaus and colleagues of Friedrich-Wilhelms University in West Germany. No vector was found in Tanzania. (J. Plant Dis. Prot. Vol. 89, No. 4, 1982)

The ability of mycorrhizal fungi to alter water relations of onion plants is pronounced in low-phosphorus soils, according to C. E. Nelson and G. R. Safir of Michigan State University. Under conditions of high water and phosphorus availability, however, mycorrhizal infection may have no appreciable effect on plant-water relations. (J. Am. Soc. Hortic. Sci. Vol. 107, No. 2, 1982)