Disease Notes

Ascochyta Blight on Major Food Crops in Rwanda, East Africa. M. Price and D. Cishahayo, Institut des Sciences Agronomique du Rwanda, B.P. 629, Kigali, Rwanda. Plant Disease 70:1159, 1986. Accepted for publication 3 September 1986.

In 1983, Ascochyta blight (A. phaseolorum Sacc.) caused severe damage on several varieties of cowpea (Vigna unguiculata (L.) Walp.) in Rwanda. In 1985, an intensive survey identified A. phaseolorum on leaves of beans (Phaseolus vulgaris L.) and soybeans (Glycine max (L.) Merr.), A. adzamethica Schoschiaschuili on leaves of groundnuts (peanuts) (Arachis hypogaea L.), A. bataticola Chochr. & Djurin on leaves of sweet potatoes (Ipomoea batatas (L.) Lam.), and A. pisi Lib. on leaves of peas (Pisum sativum L.). All fungal identifications were confirmed by the Commonwealth Mycological Institute. Ascochyta blight on cowpea produced a circular to irregular-shaped, zonated brown lesion with a chlorotic halo. Lesion size varied according to susceptibility of crop. The disease also caused severe defoliation, then death of susceptible plants. This is the first report of Ascochyta blight of sweet potato, cowpea, soybean, and pea in Rwanda.

Phomopsis and Sirococcus Shoot Blights of Colorado Blue Spruce in Wisconsin. P. G. Sanderson and G. L. Worf, Department of Plant Pathology, University of Wisconsin, Madison 53706. Plant Disease 70:1159, 1986. Accepted for publication 24 July 1986.

Needle necrosis and tip blight on 3-0 Colorado blue spruce in a Wisconsin nursery were caused by Phomopsis occulta Trav., a fungus previously regarded as only saprophytic on this host (1). Initial symptoms were chlorotic flecks on the basal half of needles near the shoot tips, followed by small stem cankers and often accompanied by resinous exudates. Symptom severity was greatest when inoculated plants were maintained at a warm temperature (25 vs. 16 C) and high relative humidities (79-95 vs. 25-36%). Picea pungens Engelm., P. obovata Ledeb., P. glauca (Moench) Voss 'Densata,' P. abies (L.) Karst., Abies balsamea (L.) Mill., and A. concolor (Gord.) Lindl. were inoculated with P. occulta. Only spruce species, particularly P. pungens, showed symptoms. Sirococcus strobilinus Preuss was isolated from a 15-yr Colorado blue spruce showing symptoms similar to those caused by P. occulta. Pathogenicity of S. strobilinus was confirmed for the first time on this host in Wisconsin.

Reference: (1) G. G. Hahn. Mycologia 35:112, 1943.

First Report of Cactodera estonica in the United States. R. L. Norgren, Wisconsin Department of Agriculture, Trade and Consumer Protection, Madison 53707, and A. M. Goldon, Biosystematics and Beneficial Insects, USDA, Beltsville, MD 20705. Plant Disease 70:1159, 1986. Accepted for publication 3 September 1986.

In the fall of 1983, cysts of Cactodera estonica (Kirjanova & Krall, 1963) Krall & Krall, 1978, were recovered from a soil sample collected from a soybean field in Walworth County, Wisconsin. A limited number of cysts were also recovered from the same field in 1984 and 1985, planted to corn and soybean, respectively. Corn, soybean, and several weeds and grasses were determined not to be hosts for the nematode. According to the original description, the lateral field of juveniles has five incisures (1). No cyst nematode is known to have five incisures in the lateral field, however, and examination of type specimens and Wisconsin juveniles revealed only four. According to a Russian report, the only known host plant to date is prostrate knotweed (Polygonum aviculare L.). C. estonica was reported from Estonia in 1963 and since then from Bulgaria, Poland, Sweden, Turkey, and Yugoslavia. This is the first report of the nematode in the Western Hemisphere.

Reference: (1) E. Krall. Nematologica 23:311, 1977.

The publication costs of these articles were defrayed in part by page charge payments. These articles must therefore be hereby marked "advertisement" in accordance with 18 U.S.C. § 1734 solely to indicate this fact. Alternaria tagetica on Marigold in New Jersey. P. J. Cotty, Department of Plant Pathology, University of Arizona, Yuma Agricultural Center, Yuma 85364. Plant Disease 70:1159, 1986. Accepted for publication 31 July 1986.

Leaf spotting of seed-grown marigold plants (Tagetes erecta L. and T. patula L.) was observed during July 1985 at a nursery in Ocean County, New Jersey. Over 60% of the stock was affected. A largespored, long-beaked Alternaria species was isolated that was indistinguishable morphologically, culturally, and pathogenically from A. tagetica Shome & Mustafee isolates (ATCC 58763 and 58990) from Sinaloa, Mexico. Plants were spray-inoculated to runoff with spore suspensions (700 spores/ml) obtained from cultures grown on 5% V-8 juice, 2% agar under a 12-hr diurnal light cycle of 5,500 lx fluorescent light. Inoculated plants were incubated in a nonilluminated humidity chamber (100% RH) at 25 C for 24 hr and evaluated after 7 days. Tests were replicated three times and repeated twice. The ATCC cultures of A. tagetica and all isolates tested recovered from leaf spots were pathogenic to T. patula 'Sparky' and T. erecta 'Orangeade' but not to Zinnia elegans Jacq. 'Cherrytime.' In 1983, A. tagetica was reported from both Mexico (1) and the United States (South Carolina) (2) for the first time as a pathogen of marigold. This is the first report of this pathogen from the Atlantic northeastern United States and only the second report from the United States.

References: (1) P. J. Cotty et al. Phytopathology 73:1326, 1983. (2) E. S. Hotchkiss and L. W. Baxter, Jr. Plant Dis. 67:1288, 1983.

First Report of Soybean Naturally Infected with Leptosphaerulina briosiana. A. P. Grybauskas, Department of Botany, University of Maryland, College Park 20742. Plant Disease 70:1159, 1986. Accepted for publication 3 September 1986.

Leptosphaerulina briosiana (Poll.) Graham & Luttrell was identified as the causal agent of a leaf spot on soybean (Glycine max (L.) Merr. 'Ware') field-grown on the Wye Research and Education Center farm near Queenstown, Maryland, in 1982. An infected leaflet from lower canopy leaves bearing small necrotic lesions from which isolations were made has been deposited with the University of Maryland Herbarium (accession 45767). Ascocarps 102–147 μ m in diameter (122 μ m mean) and 96% muriform ascospores (3-4 \times 0-2 septate) measuring 14.6-22.2 \times 38.2–50.0 μ m (16.6 \times 44.1 μ m mean), corresponding to L. briosiana (1), readily developed on V-8 juice agar. Koch's postulates were completed in the greenhouse on soybean cultivars Ware and Miles. This is the first report of a field occurrence of this disease in the United States. The relative importance of this disease is still unknown, however, because subsequent surveys (1983-1985) failed to recover the pathogen from the field.

Reference: (1) J. H. Graham and E. S. Luttrell. Phytopathology 51:680, 1961.

Peanut Stunt Virus in White Clover in Iowa, M. R. McLaughlin, USDA-ARS, Crop Science Research Laboratory, Forage Research Unit, Mississippi State, MS 39762-5367. Plant Disease 70:1159, 1986. Accepted for publication 8 September 1986.

An atypical plant of white clover (Trifolium repens L.) collected in Lincoln Township, Audubon County, Iowa, in August 1983 was transplanted, maintained in isolation, and periodically cloned from stolon cuttings. The plant was genetically unusual (producing redpigmented flowers rather than white) and also had mosaic and stunting symptoms typical of virus infection. Initial and subsequent ELISA of fresh leaf tissue from the original plant and from ramets consistently confirmed infections by peanut stunt virus (PSV) and white clover mosaic virus; PSV was subsequently isolated by passage through Chenopodium quinoa Willd. This is the first report of PSV in Iowa and extends the eastern range of the virus westward from Illinois (2) and northward from Arkansas (1).

References: (1) D. E. Griffin et al. Plant Dis. 66:1194, 1982. (2) G. M. Milbrath and S. A. Tolin. Plant Dis. Rep. 61:637, 1977.