Disease Notes

First Report of Gibberella fujikuroi var. subglutinans in Minnesota. C. E. Windels and T. Kommedahl, Department of Plant Pathology, University of Minnesota, St Paul 55108. Plant Disease 67:1290, 1983. Accepted for publication 11 July 1983.

Gibberella fujikuroi var. subglutinans Edwards, the teleomorph of Fusarium moniliforme var. subglutinans Wr. & Reink., was found in Minnesota for the first time in 1982. Perithecia were not observed in nature, but perithecia 35.5 μm in diameter (220–420 μm) bearing mostly one-septate, viable ascospores 16 μm long (12.5–18.8 μm) formed in three Fusarium colonies on homemade potato-dextrose agar (PDA) in routine isolations from cornstalks (Zea mays L.). Single-ascospore cultures produced microconidia on simple lateral phialides and polyphialides typical of F. moniliforme var. subglutinans. Transfer of perithecia from the original cultures to PDA resulted in production of perithecia and ascospores in 5–8 wk.


An as yet undescribed nematode species of the genus Meloidodera was found infecting roots of the grape cultivar Delaware in experimental plots at Fredonia, NY. In host range studies, this nematode did not develop in either Menitha (the host of M. kirjanovae) or Polygonum (the host of the Meloidodera sp. found in Maryland). The nematode was parasitic on at least 15 grape cultivars, which included types of Vitis labrusca L., V. riparia Michx., and the French-American hybrids. The female developed in grape roots in a manner similar to that described for other Meloidodera spp. The males developed in the soil and had a degenerative esophagus that lacked a stylet. Cystoid bodies containing viable eggs were produced. Diagnostic symptoms are not known.


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Since about 1976, Cornus nuttallii Aud. in the Puget Sound Basin area has shown severe symptoms of anthracnose, including twig and stem dieback. Small necrotic areas on newly expanded leaves in early spring typically develop into large, irregular brown regions along veins and occasionally on petioles. A species of Discula Sacc., perhaps new to science, has been isolated repeatedly from these necrotic regions. Dead 1-yr-old twigs are common on trees with foliar symptoms, and entire branches may have dead immature and expanded leaves. After 2–3 yr of infection, only the ends of the branches may have foliage, and the lower part of the canopy may consist of dead branches. The disease also occurs in Idaho, Oregon, and British Columbia (to a lesser extent on C. floridana L. and C. kousa Hance) and has been reported from Washington; a similar anthracnose was reported this year from the Northeast.


Apical chlorosis of sunflower (Helianthus annuus L.) was observed in Kansas in 1982. Isolations from symptomatic tissue consistently yielded gram-negative fluorescent bacteria that caused symptoms characteristic of apical chlorosis when inoculated into greenhouse-grown sunflower plants. Bacteria reisolated from chlorotic tissue were further characterized and compared with isolates of Pseudomonas syringae pv. tagetis (Helmers 1955) Young, Dye & Wilkie 1978 from North Dakota. The isolates reacted similarly to physiological characterization tests (oxidase and arginine dihydrolase reactions, induction of hypersensitive reaction in tobacco, use of carbon sources, potato soft rot, growth at 41°C, and levan formation). This is the first report of P. tagetis occurring in Kansas.