

Disease Notes

Powdery Mildew of *Brassica* spp. in Wyoming. A. Karakaya, F. A. Gray, and D. W. Koch, Department of Plant, Soil and Insect Sciences, University of Wyoming, Laramie 82071-3354. Plant Dis. 77:1063, 1993. Accepted for publication 18 June 1993.

In 1990 and 1991, a powdery mildew was observed on foliage of *Brassica rapa* L. × *B. pekinensis* (Lour.) Rupr. 'Tyfon', kale (*B. oleracea* L. var. *acephala* DC. 'Premier'), rape (*B. napus* L. 'Emerald'), and turnip (*B. rapa* L. 'Purple Top White Globe') grown as forage crops in irrigated experimental field plots at Powell and Riverton, Wyoming. The disease was also prevalent in a greenhouse at Laramie, Wyoming, on the same hosts. The disease was detected on young leaves of *Brassica* spp., and the mycelia and conidia of the fungus gradually covered the leaves during the summer growing season. The disease was conspicuous on all species, but cv. Tyfon was the most affected. Both sides of leaves and petioles were affected. The disease may influence the cold tolerance of these crops as well as forage intake by grazing livestock and forage value. A teleomorphic stage of the fungus was not observed. The fungus produced abundant cylindrical conidia that were borne singly and had a mean size of 49 × 19 μm. Conidiophores were zero to three septate. No conspicuous fibrosin bodies were observed. Terminal germination of conidia was observed, and moderately lobed or unlobed appressoria were present. The causal fungus was identified as *Erysiphe cruciferarum* Opiz ex Junell (1,2). This is the first report of powdery mildew on *Brassica* spp. in Wyoming.

References: (1) H. J. Boesewinkel. Bot. Rev. 46:167, 1980. (2) U. Braun. Beih. Nova Hedwigia 89:1, 1987.

***Bromus catharticus*: A New Host Record for Wheat Stem Rust in South Africa.** F. J. Kloppers and Z. A. Pretorius, Department of Plant Pathology, University of the Orange Free State, Bloemfontein 9300, South Africa. Plant Dis. 77:1063, 1993. Accepted for publication 6 May 1993.

In November 1991 near Bloemfontein, South Africa, uredinia were observed on culms, pedicels, and spikelets of rescue grass (*Bromus catharticus* Vahl (= *B. unioloides* H.B.K., = *B. wildenowii* Kunth) growing in proximity to wheat (*Triticum aestivum* L.) infected with *Puccinia graminis* Pers.:Pers. f. sp. *tritici* Eriks. & Henn. Typical wheat stem rust pustules developed on seedlings of wheat cv. McNair 701 inoculated with urediniospores collected from rescue grass. Virulence of all single-pustule isolates from this collection to 19 differential lines was similar to that of stem rust pathotype 2SA102, a variant detected for the first time in South Africa in 1988 (2). Inoculation of 8-wk-old *B. catharticus* plants with pathotype 2SA102 confirmed pathogenicity. *B. catharticus*, an annual or short-lived perennial, is widely distributed in the summer rainfall areas of South Africa and also serves as a host for the Russian wheat aphid, *Diuraphis noxia* (Mordvilko) (1).

References: (1) Y. K. Aalbersberg et al. Phytophylactica 20:87, 1988. (2) J. Smith and J. le Roux. Vortr. Pflanzenzücht. 24:109, 1992.

First Report of *Botrytis cinerea* on *Limonium perigrinum*. L. H. Cheah, G. K. Burge, and B. G. Dobson, Crop & Food Research, Levin Research Centre, Private Bag 4005, Levin, New Zealand. Plant Dis. 77:1063, 1993. Accepted for publication 29 April 1993.

The release of a super clone of *Limonium perigrinum* Bergius has stimulated increased production of this new cut flower. *L. perigrinum* produces a branched inflorescence with 250–500 flowers that remain open for 2–4 days. The petals then senesce, but the dry, papery sepals, which are the same pink as the petals, remain open and give the appearance of open flowers. A postharvest disorder was sometimes observed after storage or transport of the cut stems. Signs and symptoms consisted of grayish mycelium and spore masses over the surface of the flowers and, with severe infection, the loss of pink from the

sepals. On close examination, the mycelium and spores were also observed on some of the freshly harvested flowers, although mycelium and spore development were never as extensive. Microscopic examination showed that the grayish spore masses consisted of hyaline, one-celled conidia and conidiophores that conformed to those described for *Botrytis cinerea* Pers.:Fr. The fungus was isolated consistently from diseased tissues onto malt extract agar. Pathogenicity was proved by inoculation of spore suspensions (10⁵ spores per milliliter) from a 7-day-old culture onto healthy flowers. Three cut stems with up to 250 open flowers each were used for inoculation. Control flowers were sprayed with water only. The experiments were repeated three times. Signs and symptoms developed 4 days after inoculation and were identical to those observed in natural field infection. The fungus was readily reisolated on MEA from artificially inoculated flowers, and the pathogen was identified as *B. cinerea*. This is the first report of *B. cinerea* on *L. perigrinum*.

First Report of Fusarium Wilt on East African Highland Cultivars of Banana. W. K. Tushemereirwe, Kawanda Agricultural Research Station, P.O. Box 7065, Kampala, Uganda; and R. C. Ploetz, University of Florida, 18905 SW 280th St., Homestead 33031. Plant Dis. 77:1063, 1993. Accepted for publication 31 May 1993.

Highland cultivars of banana (*Musa acuminata* Colla) are unique to East Africa and are important staple foods in the region. Although Fusarium wilt, caused by *Fusarium oxysporum* Schlechtend.:Fr. f. sp. *cubense* (E.F. Sm.) W.C. Snyder & H.N. Hans., has affected introduced "exotic" cultivars in the region since the early 1950s, highland cultivars have been considered resistant. Recently, Fusarium wilt was observed on highland cultivars in the Kabale and Bushenyi districts in southwest Uganda. The affected areas are above 1,400 m in elevation, and most have been under continuous banana cultivation for >30 yr. Incidence of the disease in affected fields is usually <5%. Atypical symptoms include infrequent vascular discoloration in the pseudostem and a general absence of foliar chlorosis. Pure colonies of the causal fungus were isolated from surface-disinfested rhizome tissue on 1.5% water agar amended with 100 mg of streptomycin sulfate and 10 mg of rifamycin L⁻¹.

Epidemic of Northern Corn Leaf Blight in Texas in 1992. J. P. Krausz, R. A. Frederickson, and O. R. Rodrigues-Ballesteros, Department of Plant Pathology and Microbiology, Texas A&M University, College Station 77843-2132; G. N. Odvody, Texas A&M Research and Extension Center, Corpus Christi 78406; and H. W. Kaufman, Texas A&M Research and Extension Center, Lubbock 79401. Plant Dis. 77:1063, 1993. Accepted for publication 29 June 1993.

In 1992, an epidemic of northern corn leaf blight (NCLB), caused by *Exserohilum turcicum* (Pass.) K.J. Leonard & E.G. Suggs, affected large areas of the Texas corn (*Zea mays* L.) production area. Beginning in the Coastal Bend region, the epidemic spread into the Upper Gulf Coast, central Texas, and finally the High Plains. Some NCLB-susceptible hybrids obtained yields 40–50% below their multiyear averages in the Coastal Bend region. In the same area, hybrids with either the *Ht1* resistance gene or significant polygenic resistance had minimal NCLB despite high inoculum pressure from adjacent susceptible sources. Long periods of wet weather with mild temperatures in the spring and early summer, along with extensive hectareage planted to NCLB-susceptible hybrids, contributed to the epidemic. Isolates of *E. turcicum* from northern Texas differed from those from south Texas in virulence to the *Ht2* and *Ht3* resistant genes. Isolates collected from north Texas were identified as race 0, and those from south Texas were virulent on lines carrying *Ht2* and *Ht3* genes (1). A differential host with the *HtN* gene was not used in this study, but race 23N was previously identified in south Texas in 1986 (2).

References: (1) K. J. Leonard et al. Plant Dis. 73:776, 1989. (2) R. P. Thakur et al. Plant Dis. 73:151, 1989.

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