Disease Notes

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First Report of the Foliar Nematode *Aphelenchoides fragariae* Infecting *Lamium*. J. A. LaMondia, Department of Plant Pathology and Ecology, The Connecticut Agricultural Experiment Station Valley Laboratory, Windsor 06095. Plant Dis. 79:642, 1995; published on-line as D-1995-0505-01N, 1995. Accepted for publication 11 April 1995.

Stunting and foliar symptoms consisting of irregular leaf spots, necrosis, and leaf drop were observed in rooted cuttings of the perennial groundcover *Lamium maculatum* L. 'White Nancy' (common name, dead nettles) in a commercial nursery in 1995. Over 30% of approximately 1,500 cuttings were affected. Stock plants were symptomatic and the cuttings had been watered with overhead irrigation. Modified Baermann funnel extraction of symptomatic leaves resulted in the recovery of the foliar nematode *Aphelenchoides fragariae* (Ritzema Bos, 1891), Christie, 1932 (1). Approximately 1,000 adults and juveniles in 2 ml of aqueous suspension per plant were placed on leaves of uninfected *Lamium* cvs. White Nancy and Pink Pewter, *Begonia hiemalis* Fotsch 'Baluga,' and leaves and buds of strawberry (*Fragaria* × *ananassa* Duchesne) cv. Seneca. Leaf symptoms were reproduced after 3 weeks on both *Lamium* cultivars and begonia but not on strawberry. Inoculated leaves and buds were rinsed and placed on modified Baermann funnels. *Aphelenchoides fragariae* were recovered from all three plant species. No nematodes were recovered from uninoculated plants. This is the first report of *A. fragariae* infecting *Lamium*.

Reference: (1) K. C. Sanwal. Can. J. Zool. 39:143, 1961.

First Report of Production of Fumonisin B_1 by *Fusarium polyphialidicum* Collected from Seeds of *Pinus strobus*. Hamed K. Abbas, USDA-ARS, Southern Weed Science Lab, Stoneville, MS 38776, and Cynthia M. Ocamb, USDA Forest Service, North Central Forest Experiment Station, St. Paul, MN 55108. Plant Dis. 79:642, 1995; published on-line as D-1995-0510-01N, 1995. Accepted for publication 2 May 1995.

Fumonisin B_1 (FB_1) was first identified in 1988 from *Fusarium moniliforme* J. Sheld.; five other species were later reported to produce FB_1. *Fusarium polyphialidicum* Marasas, Nelson, Toussoun, & Van Wyk (1), first described in 1986, has never been reported as a plant pathogen. This *Fusarium* species was isolated from eastern white pine (*Pinus strobus* L.) seeds that were extracted from cones for planting in the field (2). All fourteen isolates of *F. polyphialidicum* examined were found to produce FB_1 when grown on rice. Culture filtrates of these isolates exhibited phytotoxicity to 2-week-old jimsonweed (*Datura stramonium* L.); symptoms ranged from mild to severe necrosis and mortality. The levels of FB_1 produced varied among isolates, from 5.4 to 498 ppm, as determined by high performance liquid chromatography. As levels of FB_1 increased, so did symptom severity on jimsonweed. The identity of FB_1 was confirmed by thin layer chromatographic and fast atom bombardment mass spectroscopy methods. This is the first report of mycotoxin production by *F. polyphialidicum*, expanding the range of *Fusarium* species known to produce FB_1.

References: (1) W. F. O. Marasas et al. Mycologia 78:678, 1986. (2) C. M. Ocamb and J. Juzwik. Phytopathology 83:1411, 1993.

First Report of *Pythium uncinulatum* on Romaine Lettuce in California. R. M. Davis, C. Q. Winterbottom, Department of Plant Pathology, University of California, Davis 95616, and J. L. Aquiar, Cooperative Extension, Indio, Calif. 92201. Plant Dis. 79:642, 1995; published on-line as D-1995-0519-01N, 1995. Accepted for publication 18 May 1995.

Stunted and yellowed Romaine lettuce (*Lactuca sativa* L. var. *longifolia* Lam.) was observed in two fields (about 40 ha each) in the Coachella Valley of California in the winter of 1993. Scattered diseased plants resulted in an estimated 20 to 30% loss in yield. Symptoms included yellowing of the outer leaves and a dark yellow to brown discoloration of the tap roots. Feeder roots were sometimes sparse. *Pythium uncinulatum* Plaats-Niterink & Blok was consistently isolated from infected root tissue on corn meal agar amended with pimaricin, ampicillin, rifampicin, and pentachloronitrobenzene (PCNB). To complete Koch's postulates, 4-week-old inoculum of one isolate of the fungus, produced at 25°C on vermiculite amended with V8 juice and oats, was mixed into steamed U.C. mix at a rate of approximately 30 cc per liter of mix. Individual 2- to 4-week-old Romaine lettuce plants were transplanted into the infested mix in 12-cm-diameter pots in a greenhouse maintained at 18 to 25°C. Noninoculated plants served as controls. Each treatment included 10 to 20 replications. Eight weeks later the plants were lifted from the soil, washed, and weighed. In three separate experiments, the fresh weights of inoculated plants were about half of the weights of the control plants. Symptoms included a slight discoloration of the leaves and a general browning of the tap roots. None of the plants died. Control plants remained symptomless. *Pythium uncinulatum* was reisolated from all the inoculated plants. This is the first report of a root rot of lettuce caused by *P. uncinulatum* in North America. The first report of the occurrence of this fungus outside Europe (1) was on asymptomatic, field-grown lettuce in Arizona (2).

References: (1) I. Blok and A. J. Van der Plaats-Niterink. Neth. J. Plant Pathol. 84:135, 1978. (2) M. E. Stanghellini and W. C. Kronland. Plant Dis. 70:1053, 1986.

First Report of Endive and Escarole as Hosts of *Sclerotinia minor*. S. T. Koike, University of California Cooperative Extension, Salinas 93901, and K. V. Subbarao, Department of Plant Pathology, University of California, Davis and located at U. S. Agricultural Research Station, Salinas 93905. Plant Dis. 79:642, 1995; published on-line as D-1995-0523-01N, 1995. Accepted for publication 17 May 1995.

In 1994, endive (*Cichorium endivia* L. 'Broadleaf Batavian') and lettuce (*Lactuca sativa* L. 'Salinas') were planted in a field trial near Salinas, Calif. Plants were thinned 4 weeks after emergence. One week later, plants were inoculated with a *Sclerotinia minor* Jagger isolate from lettuce. Inocula consisted of a mixture of sclerotia and mycelia-infested oat seed; the mixture was placed on top of the soil 1 cm away from the plant crowns. As plants approached maturity, 80% of the lettuce plants collapsed and died, and 19% of the endive plants developed chlorosis and necrosis of lower leaves with localized necrosis of crown tissue. The small sclerotia of *S. minor* formed on these diseased tissues. Necrotic crown tissues were plated on acidified potato-dextrose agar, and *S. minor* was recovered and identified from colonies that developed after 4 days at 23 to 24°C. Pathogenicity of the *S. minor* isolated from endive was determined by transplanting into sterilized sand 20 4-week-old plants each of endive (cv. Ruffec), escarole (*Cichorium endivia* L. 'Full Heart'), and lettuce (cv. Alpha). Three or four sclerotia, taken from sterilized-potato-slice culture (1), were placed in the sand 0.5 cm deep and 0.5 cm from the plants. Ten control plants of each cultivar were grown similarly, but without soil infestation. After 3 weeks in a greenhouse at 21 to 23°C, the inoculated plants wilted and collapsed. *Sclerotinia minor* was reisolated from necrotic crown and stem tissues. Controls showed no symptoms. The test was repeated with identical results. This is the first report of endive and escarole as hosts of *S. minor*. While 19% of the field-planted endive developed disease symptoms, *S. minor* sclerotia formed on the lower senescent leaves of virtually all of the endive plants in the trial. *Sclerotinia minor* on endive and escarole may contribute inoculum that could increase lettuce drop on the lettuce crops in the Salinas Valley of California.

Reference: (1) C. L. Patterson and R. G. Grogan. Plant Dis. 72:1046, 1988.