tested were similar to those observed in the field. No symptoms were observed on water-inoculated plants. Comparative repetitive sequence-based (rep)-PCR DNA analysis using the BOXA1R primer (3) resulted in a DNA banding pattern of each of the isolates from the South Carolina fields (23 isolates), as well as those reisolated from inoculated plants, that was identical to P. syringae pv. alsisalenensis BS91 and different from the P. syringae pv. maculicola FI8 strain. On the basis of the rep-PCR assays and the differential host range (1), the current disease outbreak on broccoli and cabbage in South Carolina is caused by the bacterium P. syringae pv. alsisalenisi. Broccoli is a relatively new, albeit rapidly expanding, production vegetable in South Carolina; this disease may represent a limiting factor to future production.

References:

*The e-Xtra logo stands for “electronic extra” and indicates this Disease Note online contains supplemental material not included in the print edition.

First Report of Chalara fraxinea on Common Ash in Italy. N. Ogris, T. Hauptman, and D. Jurc, Slovenian Forestry Institute, Večna pot 2, 1000 Ljubljana, Slovenia; and V. Florancig, F. Marsich, and L. Montecchio, Università degli Studi di Padova, Dipartimento Territorio e Sistemi Agro-Forestali, viale dell’Università 16, I-35030 Legnaro, Italy. Plant Dis. 94:133, 2010; published online as doi:10.1094/PDIS-94-1-0133A. Accepted for publication 19 October 2009.

In many European countries, the anamorphic Chalara fraxinea Kowalski (teleomorph Hymenoscyphus albidus [Roberge ex Desm.] Phillips; 1-3) is responsible for a severe and rapidly spreading dieback of common ash (Fraxinus excelsior L.) since it was first reported in Poland. Recently, this disease was added to the EPPO Alert List and the NAPPO Phytosanitary Alert System. Symptomatic trees were observed in a forest in northeastern Italy (Turin, UD; 45°50’N, 7°37’E; 728 m above sea level) along the Italo-Slovenian border in July 2009. Symptoms were found on approximately 10% of mature common ash and 70% of seedlings. Main symptoms were shoot dieback, wilting, and branch dieback, while bark cankers (1). Fungal fruiting bodies were not found on or near the canker surface. Furthermore, longitudinal and radial sections through the cankers revealed gray-to-brown xylem discoloration. One symptomatic 3-year-old plant was randomly selected and from the necrotic margin of one canker previously surface-sterilized with 3% sodium hypochlorite and rinsed, four 2-mm-wide chips were placed on malt agar at 22°C in the dark. Among a total of 237 isolates, one that was identical to Florida isolate BCI4 (DQ672344) was found to be identical to an isolate obtained from a Southern Italy (94% match) and also to several other isolates of this species obtained from other regions in Europe (99% match). It was concluded that this isolate is the same species as the Chalara fraxinea Kowalski.

First Report of the Sting Nematode Belonolaimus longicaudatus on Soybean in Delaware. Z. A. Handoo and A. M. Skantar, Nematology Laboratory, USDA-ARS, Beltsville Agricultural Research Center, Beltsville, MD 20705; and R. P. Mulrooney, Department of Plant and Soil Sciences, University of Delaware, Newark 19716. Plant Dis. 94:133, 2010; published online as doi:10.1094/PDIS-94-1-0133A. Accepted for publication 31 October 2009.

In late July of 2005, several, large, irregular areas of severely chlorotic, stunted, and dead soybean plants were observed in two fields of soybean (Glycine max), 8.05 km apart, in sandy soil (94% sand, 2% silt, and 4% clay) in southwestern Sussex County, DE. The grower also had observed stunted corn the previous year in the same areas and thought the fields had a fertility problem. The morphology of adults and molecular analyses of the juveniles isolated from soil samples established the identity of the species as the sting nematode, Belonolaimus longicaudatus (1-4). The population density was 216 nematodes per 250 cm³ of soil. Morphological characters used for identification included female body, stylet and tail length, shape of head, stylet knobs, tail and tail terminus, number of lines in the lateral field, and vulva percentage in relation to body length. The male characters critical for identification were the following: body, stylet, spicule, and gubernaculum length; shape of head and stylet knobs; and number of lines in the lateral field. Measurements of females (n = 5) included body length (range = 2,035 to 2,120 μm, mean = 2,073.7, standard deviation [SD] = 37.0), stylet (117.0 to 127.5, 123.4, 4.5), V% (48.4 to 52.3, 50.6, 1.5), and tail (109 to 140, 120, 14.2). The lateral field had one incisure. Shape of head, stylet knobs, and tail were also consistent with B. longicaudatus. Males (n = 4) were characterized by the body length (range = 1,500 to 2,070 μm, mean = 1,753.3, SD = 290.2), stylet (117.0 to 127.5, 121.5, 5.4), spicules (41 to 50, 47, 5.2), and gubernaculum (17.0 to 18.5, 17.8, 0.8). Molecular diagnosis as B. longicaudatus was confirmed by sequencing two ribosomal DNA markers from three juveniles. Sequence of the internal transcribed spacer region ITS 1 and 2 (GenBank Accession No. GQ969549) from this population was 99% identical to Florida isolate BIC6 (DQ672368), and the 28S large ribosomal subunit D2-D3 expansion region (GQ989548) was 99% identical to Florida isolate BIC4 (DQ672344). A high degree of similarity (~98%) was also shared by several other B. longicaudatus sequences (1).

This detection represents a new state record for Delaware for B. longicaudatus. Since this detection in 2005, there have been no new reports of other observations of sting nematode or spread from these two fields tilled by the same farm operator in Delaware. Elsewhere, B. longicaudatus is known to occur in subtropical regions of the lower coastal plain, from Florida to Georgia, New Jersey, and South Carolina. Within Delaware, another sting nematode species, Belonolaimus maritimus, was detected on American beachgrass (Ammophila breviligulata) and bitter paniclegrass (Panicum amarum var. amarum) from Fenwick Island, near the Maryland border. Sting nematodes have also been reported in Burlington County, NJ.

References:

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(Disease Notes continued on next page)