

Number 14 - August 29, 2017

Tubakia Leaf Spot

Tubakia leaf spot is a fungal disease caused by the pathogen, *Tubakia dryina*. It is a common sight on oak trees late in the summer. All oak species are susceptible to this disease, but those within the red oak group are more commonly affected. This leaf spot is often associated with stressed trees, especially Pin oaks with symptoms of iron chlorosis. While the disease is mostly found on oak trees; other potential hosts include maple, hickory, chestnut, redbud, ash, black tupelo, sourwood, sassafras and elm.

Tubakia leaf spot that appears late in season. The symptoms are similar to and are often confused with those of anthracnose. As rule of thumb, oak anthracnose symptoms usually appear late spring to early summer (May-June), while tubakia leaf spot occurs late summer with symptoms appearing in July and August. Tubakia leaf spot lesions will vary with host susceptibility and environmental conditions. The lesions start as small water soak areas. They become evident as they enlarge and transition to a reddish brown color. Severe infections may cause premature leaf drop, a symptom which can be alarming to those scouting for oak wilt. The Tubakia pathogen is fairly easy to confirm in a diagnostic laboratory with the aid of a microscope. It produces a distinctive disc-shaped fruiting body which is composed of mycelia and spores and called a

pycnothyrium. Symptoms tend to be most severe on the lower branches where moisture accumulates and remains for longer periods of time.

Tubakia leaf spot is more prevalent in years with abundant rainy weather and moderate temperatures. These conditions promote infections and to allow the spread of this fungus. The disease is much less common during years with predominately dry weather.

While the symptoms may appear alarming, the disease develops late enough in the season that there are no long-term adverse effects on tree health. As a result, treatment with fungicides is not usually recommended. Raking and removing fallen leaves may reduce inoculum in the surrounding area, thus limiting disease occurrence the following growing season. Promoting tree vigor and alleviating any potential stresses to the tree is also recommended. (*Travis Cleveland*)

Pollinator Conference

The second national conference on 'Protecting Pollinators in Urban Landscapes' will be held October 9 – 11 in Traverse City, Michigan, giving landscape professionals a unique opportunity to hear some of the best experts in the country on this topic. Arborists, city foresters, lawn and landscape professionals, public or private garden managers and golf

course superintendents will all benefit. The program is packed with gems for landscapers and arborists, starting with an entertaining keynote address by Lawrence Packer, professor and author of “Keeping the Bees” and “Bees: A Close-up Look at Pollinators Around the World”. Several speakers will be addressing best management practices for landscapers and arborists, including one entire session. The conference is designed to be fun as well as educational, so plan on hearing plenty of discussion following presentations and on meeting lots of cool people between sessions, at meals, and in the evenings.

The conference has a maximum registration count of 200, so don't wait too long, but there are still plenty of slots open at this point (August 15th). Also, rooms are still available in the conference hotel (Park Place Hotel, Traverse City). Finally, there is no better place to be for fall color!

Visit this website to see a complete program:
<http://msue.anr.msu.edu/news/second-national-conference-on-protecting-pollinators-in-urban-landscapes>

And you can download the brochure or register here:

<https://events.anr.msu.edu/event.cfm?eventID=F29D7CC5F604007C> (Dave Smitley, Michigan State University, and Phil Nixon)

Armyworm

Large numbers of adult armyworms are being found in the Midwest. These moths have reddish-brown wings, and a

wingspan of about two inches. The dark brown moths with one-and-one-half inch wingspans that are very common now are green cloverworm adults. Their larvae feed primarily on legumes.

Armyworms were covered in issue 5 of this newsletter published on May 30, 2017, so refer to that issue for more information. Armyworm caterpillars feed on turfgrass at night in large numbers. In a single night, they can eat all the grass blades off half a lawn; they will eat the other half and part of the neighbor's lawn the next night if not controlled.

They are most common in turf areas abutting wheat, oats, and other small grain fields. Many insecticides are effective if applied in time. Grazed lawns will rapidly grow new grass blades with adequate moisture. (*Phil Nixon*)

Azadirachtin Recall

Four organic insecticides were recently found to be contaminated with several synthetic insecticides by the Oregon Department of Agriculture (ODA). ODA is now working to identify the source of contamination for these insecticides. All found contaminants are insecticides, and their presence in treated plant products could lead to unknown health effects for consumers and major economic losses for organic and other growers. If organic growers used these adulterated organic insecticides, they could end up with illegal residues on their agricultural products, potentially preventing them from marketing their production.

The ODA issued a stoppage of sale and distribution in Oregon on 6/28/17 for

AzatrolHydro Botanical Insecticide and AzatrolEC Insecticide (both under EPA Reg. No. 2217-836) manufactured by PBI-Gordon. The manufacturer has since issued a nation-wide voluntary recall of both of their adulterated insecticides. On 7/24/17, the Oregon Department of Agriculture issued a stoppage of sale and distribution of Neemix 4.5 (EPA Reg. No. 70051-9) manufactured by CertisUSA, LLC and AzatinO (EPA Reg. No. 70051-9-59807) manufactured by OHP, Inc.

These insecticides list azadirachtin as the only active ingredient. For Neemix4.5 and AzatinO, azadirachtin makes up 4.5% of the mixture. For both Azatrolinsecticides, azadirachtin makes up

1.2% of the mixture. Azadirachtin is derived from neem seeds. All four of these insecticides are listed for organic use by the Organic Materials Review Institute (OMRI).

The pre-harvest interval (PHI) for these insecticides is zero days for multiple fruits and vegetables. If you see AzatrolHydro or AzatrolEC for sale, please share this information with the distributor so they can participate in the recall. If you have either of these insecticides already in your possession with the EPA Reg. No. listed, contact your distributor or the manufacturer. (*Mike Wierda and Peter Ellsworth, University of Arizona, and Phil Nixon*)