



Tree Pest Alert



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Samples

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of plants or insects from other states. If you live outside of South Dakota and have a question, please send a digital picture of the pest or problem.

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions as the label is the final authority for a product's use on a pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such, but it is the reader's responsibility to determine if they can legally apply any products identified in this publication.

Reviewed by Master Gardeners: Bess Pallares, Carrie Moore, and Dawnee Lebeau

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Plant development for the growing season

We are at 2,740 growing degree days (GDD base 50) now in Sioux Falls. It has been a long, hot summer, not that you need GDD to tell you that! As the days shorten, trees and shrubs begin to prepare for winter and this preparation requires energy. Energy that a drought-stressed tree may lack. Watering now is key to winter survival.

Treatments to Begin Now

Watering

While Ida is pushing moisture up our way, the need to water trees continues. The ideal precipitation is about one inch per week. Supplemental watering is needed when we receive less than this amount during a week.

Fertilizing

There is no critical need to fertilize your trees this fall. A good time to fertilize is late spring as the tree begins to start its annual flush of shoot growth. The roots are actively growing and absorbing elements to be used by the tree in photosynthesis and other functions.



Fall is also an acceptable time to fertilize but this fall may not be the best. The only way elements are absorbed is via the water flow into the roots. If the soils are dry, few elements enter the tree's roots. Unless the tree is receiving adequate moisture, either rainfall or supplemental irrigation, fertilizing will not be of much benefit.

Fertilizing can even add to the stress of a tree already suffering from a water deficiency. Uptake and utilization of fertilizers requires the tree to expend energy – and they do not have a lot of excess to use this year.

The old “feed a cold and starve a fever” (or is it the other way around?) can apply to trees. Water when a tree is drought stressed, fertilize when it is not! Fertilizer is not a substitute for water.

Timely Topics

Emerald ash borer update

We are at mostly 3rd instar now with many larvae approaching an inch long or so (note: the instar is determined by head capsule size and other characteristics, not length). These are plowing through the inner bark and outer sapwood in their serpentine pattern.



Heavily infested trees are declining quickly due to the combined stress of the beetle and the drought. I am seeing some infested ash that are shedding small, yellow leaves.

E-samples

Ash/lilac borer

The ash/lilac borer (*Podosesia syringae*) is one of our native ash borers. It has been discussed in numerous articles in the *Pest Alert* over the years. This is a common borer in drought-stresses ashes, but it is also a pest of lilacs.

While it certainly does not appear obvious, there is a close relationship between ash and lilac (both in the Olive family) and this insect will attack both hosts, so much so that another common name for the insect is the ash/lilac borer. I had an email from a person who noticed the lilacs in their belt were declining and there was boring dust and holes along the lower trunks.



One of the pictures that was sent showed this pupal skin from the ash/lilac borer that emerged earlier this summer. The management for this insect on lilac is the

same as for ash; reduce stress on the plant by watering and provide a protective spray on the trunks in early May. The most common pesticides used to protect against successful attack contain Permethrin as an active ingredient.

Leafy spurge hawk moth

This is a picture sent in from Aberdeen of very colorful larvae on a leafy spurge. These are the leafy spurge hawk moth (*Hyles euphorbiae*) larvae. The adult moths are out in late spring and are one of the sphinx moths. They hover as they fly from flower to flower at dusk, almost like a hummingbird.



The mature larvae are out now and are about 3- or 4-inches long. They are brightly colored with yellow or red striping, light colored spots and black proleg. All instars of this caterpillar have a horn.

Willow scab

I am receiving numerous pictures and questions regarding willow scab (*Venturia saliciperda*). This is a common foliage disease that appears in late summer on willow trees across the state. I am not seeing as much of the disease this year due to the dryness, but occasional samples come in.



The disease is closely related to apple and pear scab and the typical symptoms are discolored and falling leaves as well as tip dieback. This disease has similar symptoms to black canker (*Glomerella miyabeana*), a willow twig disease that can also cause the leaves to wilt and the shoot tips to die back.

The two diseases are difficult to separate and as mentioned last week are closely related but the willow scab infected leaves will usually have “tufts” of spores on the underside of the leaf, generally along the midvein. These two diseases are often found in association with one another and when they occur together the disease is just simply called willow blight.

Samples received/Site visits

Minnehaha County, Tree wound

This was a stop to look at a sugar maple with a large wound on the side of the trunk. The tree appears healthy, other than the wound, as the canopy is full and all the leaves are the normal size and color.



There is also callus wood forming around the wound. The only concern is that this is still a large wound. It is not the length of the wound that is a concern, it's the width of the wound and how much it encircles the trunk. Usually if a wound is cutting off more than a third of the trunk circumference, the vascular damage may reduce sugar and water transport enough to harm the tree. Also, a wound this size can result in enough decay to compromise future stability.

The wound on this tree is not quite a third of the way around and it is a young tree so it may be able to compartmentalize this wound.

Moody County, Chicken-of-the-woods

The question was about the yellow “growth” coming from a rotted ash tree. This fungus belongs to a group of wood-rotting shelf fungi. The sulphur shelf fungus forms colorful orange and yellow rosettes that arise from overlapping, fan-shaped shelves (as they age, they become bleached).

This is a delicious fungus when properly cooked with a nice texture – like chicken hence the name Chicken-of-the-woods. It should not be consumed with alcohol as the combination will make some people very sick (**WARNING:** do not use this brief description of the fungus to identify edible fungi, always have an experienced mushroom hunter along on any gathering expedition). The fungus also means the tree is suffering from extensive rot and may fall over.



Union County, Tar spot

Tar spot (*Rhytisma*) is showing up on a few trees in the southeastern South Dakota and this, along with chlorosis, is making for a lot of unsightly Freeman, red, and silver maple trees. The disease begins as greenish-yellow spot in late June and then develops into these black tar-like structures within a month or so. The remaining leaf tissue often becomes chlorotic.



The treatment for the disease is two-fold. First, if practical, remove and destroy the fallen leaves this autumn to reduce the overwintering fungus though this has limited value and usually mowing the lawn will speed up the decomposition process. Next year treat the tree with a copper fungicide at bud-break and repeat the application about two weeks later. Important note: follow label directions carefully as to when, how much and what to treat as copper can be phytotoxic to maples.