



**SOUTH DAKOTA STATE  
UNIVERSITY EXTENSION**

# Tree Pest Alert



**October 8, 2025**

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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 listing 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: Carrie Moore and Dawnee Lebeau

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## Plant development for the growing season

The cool crisp weather of autumn is only in our imagination. Daytime temperatures hovered in the 80s and 90s during the past week. The hot temperatures pushed the accumulated growing degree days (GDD base-50) by about 100 DD again. Here is the current GDD accumulation for communities across the state.

Aberdeen	2900
Beresford	3440
Chamberlain	3485
Rapid City	2830
Sioux Falls	3420

Spring has come earlier and our falls later during the past several years. This can create problems for our trees. Trees acclimate to winter through two sequential events: shorter days and hard frosts (temperatures 28°F). We are missing the second trigger for cold acclimation – the frosts – so trees are not quite ready for winter yet. We need repeated frosts for trees to fully acclimate to the extremely cold weather of winter.

While we have not seen frost, the dry weather is causing the annual leaf shredding to begin. If you want an estimate of how many leaves are on a tree and the number of leaf bags you will fill after raking them, try out the tree leaf calculator at <https://www.omnicalculator.com/other/tree-leaves>



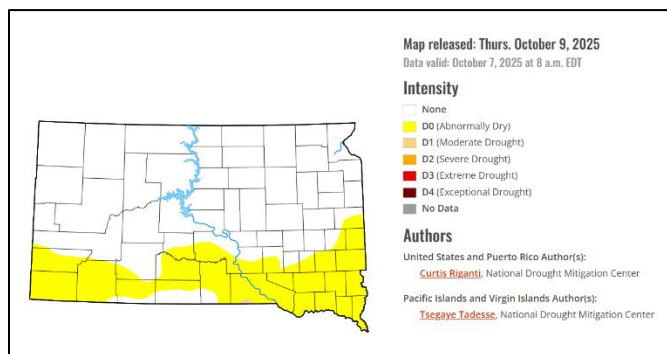
It is simple to follow. Measure a plate diameter and identify that on the form. Then the number of leaves you can lay on the plate without much overlapping. Finally calculate the diameter of the canopy and add that to the form along with the species.

For example, if a sugar maple has a 25-foot crown spread and I can fit seven leaves on a 9-inch plate, the tree has about 51,000 leaves. Let us hope most blow into the neighbor's yard.

## ***Drought monitoring***

The rain seems to have stopped across the state, so we are sliding back into drought. Slightly more than 70 percent of the state is drought free, down from 80 percent last week. Another 30 percent of the state is classified as "Abnormally Dry." This is concentrated along the counties that border Nebraska.

Here is the current map from the National Drought Mitigation Center at the University of Nebraska-Lincoln. Rain is in the forecast so let us hope the map looks better by next week.



## **Treatments to Begin Now** ***Watering trees for winter***

Remember now is the time to water your trees, not just before the soil freezes. We have had good rains this year in much of the state, but it is turning drier as we move into fall. Trees need water to go through the biochemical processes to prepare for cold winters.

If you are in an area that has not received at least three inches of precipitation during September, you may want to begin watering the trees, particularly the young ones in the landscape and windbreaks.

## **Timely Topics**

### ***Emerald ash borer update***

We continue to monitor larval development of emerald ash borer (EAB) from Dakota Dunes to Milbank. The larvae are mostly 4th instars. We are seeing more burrowing in the sapwood to carve out their overwinter chamber. The beetles are getting ready for the winter.

You can spot where they burrow into the sapwood by finding the frass-filled gallery that goes into the wood (at tip of knife). This will lead to the overwinter chamber.



They will remain in their winter chambers until May when they form a pupa. The insects will emerge as adults around Memorial Day next year.

## **E-samples**

### ***Sooty blotch and flyspeck on apples***

I am received e-sample of common fall issues with apples – sooty blotch and fly speck. Sooty blotch disease gets the name from the brown to dull black sooty quarter-inch blotches on the apple surface. The disease is only on the surface, no deeper. They can even be rubbed off.

Sooty blotch is caused by a complex of fungi. They proliferate during cool moist spring weather – like this past spring. Development stalls during hot summer weather but with late summer/early fall rains, the blotches appear. Just rub the blotches off, wash them off, or close your eyes and just bite them off.



Flyspeck is not fly poop or spit, nothing to even do with a fly. This is a fungus, *Zygophiala jamaicensis*, which causes superficial discoloration on the apple skin. The bright shiny dots appear in round groupings, 6-50 dots, on the surface of the ripe fruit. Dots are the sexual fruiting bodies of the fungus and do not affect the quality of the fruit. Just remove the dots by washing and peeling. There also appears to be some insect damage near the fly speck, so there might be a worm when you bite into this apple!





### **Asian lady beetles clustering on trees**

The multicolored Asian lady beetles (*Harmonia axyridis*) are making their annual appearance in yards and homes (see September 24 *Tree Pest Alert*). Once they run out of aphids to eat, they wander to find a place to overwinter. They begin to search for ways in home during days when the temperatures are in the 60s, but before freezing weather. They are not great house guest – they can bite.



If they cannot get into a house or other structure, they will look for litter around the bases of trees (or inside tree tubes). It is common to find large number of these insects on lower tree trunks. They do not harm the trees (nor bite them).

## **Samples received/Site visits**

### **Brookings County, Leaf spot on birchleaf spirea**

Birchleaf spirea (*Spiraea betulifolia*) is a popular spring flowering shrub. Unfortunately, it has two major foliage pests. One is a leafroller that wraps the foliage on a twig with fine webbing, so it has the appearance of cotton candy (see August 6, 2025 *Tree Pest Alert*). The other is leaf spot disease.



The leaf spot disease is caused by fungi like *Cylindrosporium* (now named *Phloeospora spiraeicola*). They cause yellow and brown irregular spots on the leaves. The spots may coalesce with heavily infected leaves fall prematurely.

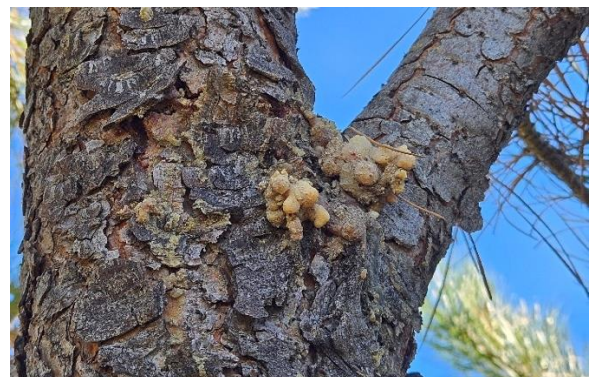
The management is focused on having leaves dry as quickly as possible so spacing the plants for good air circulation is important. Fungicide containing myclobutanil, and labelled for this use, can be applied in the spring as the leaves open and repeated every two weeks until June.

### **Butte County, Zimmerman pine moth in ponderosa pine windbreak**

This was a stop to look at a ponderosa pine windbreak. There were several trees that had branches that snapped off at the trunk. One tree the top snapped off. Near these breaks were large granular pitch masses. This is the work of the larvae of the Zimmerman pine moth (*Dioryctria zimmermani*).

The adult moths were flying in August and laying eggs near the junction of the trunk and branches. The larvae have now hatched. These small larvae do not harm the tree during late summer and fall as they are just crawling along the bark looking for a spot to pass the winter. This fall, they will become enclosed in protective webbing beneath bark flakes to spend the winter.

Next spring is when they begin to harm their host. The larvae burrow into the wood near where the branches connect to the trunk. Pitch masses identify where they burrow into the tree. This tunneling in the inner bark is where the damage occurs, either killing the branch or weakening the connection causing the branch to break.





Treatment is a bark application of an insecticide containing either bifenthrin or permethrin (and labeled for control of this moth). The application can be made next spring to kill the young larvae as they are crawling on the bark before burrowing into the wood.

### **Lawrence County, Fabric girdling pine trees**

This is a twenty-year-old ponderosa pine belt. Some of the trees have discolored needles and are declining. The cause was at the base of the tree – death by fabric.

The fabric was pressed up against the trunks of the trees. The fabric was tightly folded along some of the trunks. It was embedded in the trunk for other trees. The staples were even pressed against and into the trunks!



This is a good reminder to check for fabric gridling in belts with cedars, spruce, or pines at five and ten years. Relief holes – slitting the fabric around the trunks – may be required. Once the trees are in their teens or twenties, it may be too late.

### **Lawrence County, Leaf spot on quaking aspen**

Marssonina leaf spot on cottonwood was discussed in the September 24 *Tree Pest Alert*. The symptoms are slightly different on quaking aspen (*Populus tremuloides*), but it is the same disease.

The infection begins in early summer with small brown flecks in the foliage. The spots enlarge during the growing season. They become blotches with a lighter center and a darker margin by fall. The leaves may also appear chlorotic. The infected leaves usually begin to drop sooner than healthy leaves.



Usually, the disease is more cosmetic than a health threat. If the tree is infected several years in a row, the loss of foliage may result in dieback. High-value trees can be treated with fungicide applications beginning in the spring as the buds begin to swell. The treatments need to be repeated every two weeks until the spring rain stops. There are fungicides containing chlorothalonil as the active ingredient that are labelled for this use.

### **Meade County, Western gall rust cankers on pine**

Western gall rust is a fungal disease (*Endocronartium harknessii*) that causes large woody galls to appear on ponderosa pine branches. These galls can enlarge and choke out the host branch but usually this is limited to a few small branches.

The disease can also result in large stem cankers that slowly squeeze the trunk. This results in a deformed area of the trunk, when it becomes smaller and flattened compared to the trunk above and below the canker. The canopy above the canker becomes stunted. Resin may ooze out of the canker. Eventually the bark falls away and the layers of dead wood are visible.

Large trunk cankers are rare but are more common on ponderosa pine in the Black Hills than other areas of the West. There are no treatments other than to remove the infected tree.



## **Minnehaha County, Chlorotic mountainash trees**

There are many yellowing European mountainash trees (*Sorbus aucuparia*) in the Sioux Falls area. The affected trees have leaves that are pale yellow with faint green veins. While there are a few diseases that affect mountainash, such as fireblight, the problem here is a disorder.



This is iron chlorosis, the inability of the tree to absorb the limited available iron from alkaline soils. The iron is present in the soil but due to the high pH, it is in a form that is not soluble and available to the tree. The problem is worse during drought.

The treatment is irrigation, so the tree has adequate water. Available iron can be supplemented with injections of iron into the trunks. These are applied by commercial applicators in the spring. The treatments can be effective for two or three years before needing to be repeated.

An available form of iron can also be applied to the soil. The best option for our highly alkaline soil is the FeEDDHA chelated form. Most other chelates are ineffective at a pH greater than 7.2. Soil treatments are best applied in spring.

Mountainash is not related to ash, so it is not infected by the emerald ash borer.