

# Pest Update (July 13, 2016)

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

## Available on the net at:

<http://sdda.sd.gov/conservation-forestry/forest-health/tree-pest-alerts/>

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 and the label is the final authority for a product's use on a particular 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.

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## Plant development

We are right on schedule for plant development this year, maybe even a little ahead. The smoke trees are still blooming in Brookings just about on schedule. During cooler summer they often bloom in the middle of July.

## Timely topics



**Sucking insects** are becoming the concern as we enter the summer heat. Each year at about this time the volume of calls increase with the question; “Why is my tree weeping?” or “Why is everything beneath my tree sticky?” This is honeydew, a fluid excreted by sap-sucking insects, either aphids or soft scales, as they feed on the tree. These insects suck sap from tree leaves, twigs and branches and their utilization of this sap is very poor. Only

about half the ingested nitrogen is absorbed, along with some of the sugars, so the rest is passed from the insect. The honeydew is a food source for ants and you’ll often find trees with sticky leaves also covered with ants. These ants protect the aphid from predators and parasites as they move their ‘herd.’ The honeydew also serves as a food source for sooty mold which forms dark colonies on the sticky material. The honeydew and mold do not harm the tree, though the mold can reduce photosynthesis slightly. The real problem is the sticky material covering decks and other surfaces. Usually a mild soap and warm water solution is all that it takes to remove the honeydew and mold from outdoor furniture and cars. Sometimes plastic and treated wood will require household bleach: water solution, usually a 1:4 ratio, but always use caution when applying bleach and test a small area first.



The appearance of the aphids can be alarming to some people. While trees can tolerate a tremendous loss of sap, large populations of sapsuckers on young trees and shrubs may result in yellow leaves and stunted shoots. Insecticides applied now are probably ineffective as much of the injury to the plants is done, but it can stop the honeydew from raining down on the house. Most common insecticides, Malathion and Sevin (Carbaryl), will kill the

aphids along with pesticides containing acephate, though on large trees a soil drench rather than a spray may be more practical. Unfortunately, soil drench applications take a while to move up to the crown of the tree, sometimes 30 days or more, so are better used as preventative treatments rather than curative. They work best when applied in the spring for control of insects that are feeding during the summer. However, there is increasing resistance to using soil drenches of systemic chemicals as these can appear in the pollen and impact the pollinator population.



**I am getting a few calls regarding trees and shrubs with distorted, cupped and/or curled leaves.** The most common woody plants afflicted with these symptoms this year are hackberry and lindens. The culprit is not 8-legged, 6-legged or even 4-legged, it's 2-legged. You guessed it – people! It seems to be a special type of person, guys who appear to have

nothing better to do on a hot, windy day then to spray their lawn with 2,4-D or similar chemical! I have seen several individuals out spraying their lawn in 95°F heat (the herbicide volatilizes even better at high temperatures, any temperature over 80°F increase the risk of non-target plant injury from herbicide drift) with a 10 to 15 mph wind (which can carry the herbicide several home yards away without any difficulty). This is not the best time to try and spray the weeds in your lawn and it is about the worst time to spray in regards to the sensitivity of your woody plants. The only treatment for this misuse of herbicide is to find them a hobby – fishing seems like a good choice and better use of time.



**But not everything that looks distorted is due to herbicide.** The forest health people in Minnesota reported a number of years ago that they found the twisting of needles on spruce trees, often with the tips of the needles appearing to be cemented together, was due to an eriophyid mite. These mites are so small it takes a 40x scope to see them and they are fairly allusive. Many times it is difficult to find the mites on the needles until the eggs

hatch. While we have not yet found this mite in 2016, we are receiving many spruce shoots with these symptoms and are attempted to see if we can coax a mite from them. An update will be provided in an upcoming issue.

## E-samples



The trees are “buzzing” with the sound of the cicada. These insect make a high-pitched sound that sounds like a very loud hum. The adults are difficult to find. They are stout, about one inch long, and fold their wings over the body. The nymphs feed in the soil on roots of many different plants then crawl out of the ground to molt vertical objects like tree trunks or fence posts. The cast skin from the molt is what people usually find and wonder what was in this hollow shell. The adults are harmless to us (but tend to scare folks due to the size of the insect) and really do not cause much harm to plants.

However, cicada do make slits in tree branches and twigs for egg laying and this can result in broken twigs.



Here is an unusually e-sample. I received a picture with the question “What is my linden tree leaves turning yellow and brown?” It’s not the leaves that are turning brown, it’s the leafy bracts that support small clusters of nutlets. These bracts and the attached nutlets are beginning to drop now. The bracts will twist in the wind as they drop and this disperses the seeds a little farther from “mom”.



Is this poison sumac? No, fortunately poison sumac (*Toxicodendron rydbergii*) does not occur anywhere near South Dakota. This is common chokecherry (*Prunus virginiana*), a native tree that can be found in almost every county of the state. A fair number of these trees will produce reddish-purple leaves during the summer. There have been several cultivars developed from this reddish-purple form with ‘Canada Red’ and Schubert’ being the two most common.

## Samples received/site visits

Hanson County

**What are these bugs on the oak leaves?**

This is the oak lacebug (*Corythucha arcuata*), a small sucking insect that can be found on oak leaves at this time of year. The feeding by the insects results in discoloration and stippling damage on the leaves as well as a dusty or “dirty” appearance from the numerous dot-size insects and their excrement. No

treatment is necessary as the tree will tolerate this level of infestation. I seem to see more of this insect during dry summer and I suspect this will be the first of many samples.

Jackson County

### **Is this frost on our hackberry?**



I stopped by as I drove through town and yes, the hackberry in the park look like all the other hackberry that were impacted by the late spring frost. Fortunately, there are healthy buds on the defoliated shoots and these shoots are still green just beneath the bark. I suspect these trees will releaf yet this year. This is what happened a number of years ago when we had a similar frost. I am reminding folks that even though some of the branches may be bare, these stressed trees still require water. And if they do releaf yet this year, these trees will require lots of water as the tender leaves are opening during hot, dry conditions rather than the cool, moist weather of spring.

Jones County

### **What is wrong with these oaks?**



I made another stop to look at some oaks and other than trying to grow in Murdo, South Dakota, nothing was wrong with them. These are eastern pin oaks (*Quercus palustris*) a tree far better adapted to the climate and soils of the eastern United States. The trees that attempt to grow in South Dakota tend to develop pale green to yellow foliage due to the alkaline soils inhibiting the uptake of iron. My suggestion is to remove the synthetic mulch mats, replace

with shredded pine bark to a depth of 2 inches and apply a chelated iron fertilizer next May.

Lake County  
**leaves?**

### **What are these small white fuzzy spots on the oak**

This is one of the many oak galls caused by a small eriophyid mite. The galls almost appear as blisters along the upper surface of the leaf while the underside is covered with dense hairy felt-like pads. These are primarily an aesthetic issue, though occasionally they can significantly reduce the capability of the tree to manufacture food. There is no control, as the life cycle of these mites is not well known.

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