

Pest Update (March 9, 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. **Walnut samples may not be sent from any location – please provide a picture!**

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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Timely topics

Walnut syrup

Everyone has hear about tapping maples for their syrup, but maples are not the only trees to have their sap flow in the spring. Birch, hickory and walnut also have their sap run in the spring and these trees are used for syrup product

though, surprisingly, walnut is the better of the group. Some walnut trees can even rival maples in the flavor of their sap.



Walnuts have a few more advantages over maples. First, you can find walnuts growing almost anywhere in the state while most maples are limited to the eastern third of the state and the communities along the edge of the Black Hills. Second, they can be tapped at a smaller diameter than maples, about 8 inches diameter (at 4.5 feet above the ground) versus 10 to 12 inches for maples.

The downside? The sap flow is less on walnut. A 12 inch diameter walnut may yield only about a gallon of sap for the season though some trees may have four times that amount. It may take 30 to 40 gallons of sap to make a gallon of syrup but that is not too much different than what is needed for many maples.

Last week the McCrory Gardens staff made some walnut syrup (they make and sell maple syrup and its great!). The walnut syrup is fairly dark, a little thicker than maple syrup and has just a slight hint of a “nutty” flavor. They have too little of the walnut syrup to sell, remember the trees do not produce much, but what they have is flavorful. This sparse sap flow is one reason that walnut syrup is fairly expensive compared to maple syrup.



E-samples



This was the week of borers! I received two pictures of borer in trees this week. The first picture appears to be from a tree in decline as evident by the bark falling off. Once the bark flaked off, it revealed a network of tunnels and holes. This are not due to a borer that is responsible for the decline, but a borer taking advantage of the decline. There are many insects, most of them longhorned beetles, that colonize dying trees. I have

seen this problem on many mature and over-mature trees in yard and belts in the state. There is no treatment for this other than a chain saw.



The other picture was of a Siberian elm with trails of tunnels beneath the bark. The pattern to these tunnels, usually referred to as galleries, can be a means of identifying the insect. While there is considerable overlap in the galleries, these appears to be constructed the banded elm bark beetle. The galleries of this insect differs from those of other elm bark beetles in the symmetrically fan-shaped galleries with the larval mines

from the same egg gallery overlapping. However, with high populations the entire surface of the phloem can become a solid network of tunnels and reduce the tissue to almost a dust. The banded elm bark beetle is native to Western and Central Asia and was introduced into this country, Colorado and Utah, sometime in the early 2000's. It first appeared in Pennington County a few later and then spread throughout the state though I see it more West River than East River. It is more a problem in Wyoming and the western states. The management is a spray the trunk and limbs with an insecticide labelled for bark beetles and containing bifenthrin, carbaryl or permethrin. The application should be made by early April.

Samples received

Davison County **What is wrong with these young blue spruce? The trees started to have the needles turn color last fall. The producer sprayed the trees with a fertilizer in September.**



As with most spruce samples, it's not what *is* the problem but what *are* the problems. The needles have a very small population of pine needle scale but not enough to be a major stress. There is also a lot of debris and eggs from the spruce spider mites and the needles show the bronzing from the stippling causes by the mite feeding. The egg density is not extremely high but the producer might consider a dormant oil treatment if it can be applied very soon.

The other option is a high pressure stream of water in a couple of weeks to dislodge the eggs and newly hatched mites

Finally the newest whorls on the branches had a considerable population of smaller spruce bud scale and this might be the most serious stress on the trees. The smaller spruce bud scale emerges as crawlers about the time lindens bloom and that is the most vulnerable time for treatment. The ideal treatment is a summer oil spray, it has minimal impact on the natural enemies of the scale. However, read and follow instructions carefully! Oils cannot be tank mixed with many other insecticides, they can also cause needle damage is applied in hot temperatures and they will remove the blue pigment from a blue spruce.

Yankton County **What is this tree that keeps suckering up around a building and is there any way to kill it without chemicals?**



This is the Tree-of-Heaven (*Ailanthus altissima*) a “weedy” tree native to China. It is not completely hardy in South Dakota so we are not cursed with this tree (it suckers profusely and the male flowers smell) but it does thrive in the Yankton area where I have seen trees more than 40 feet tall. The best control is just cut it to the ground, repeatedly, for about two summers. These may exhaust

the food reserves in the roots and finally kill it.

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