

Pest Update (August 26, 2015)

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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

At this time of year I often receive requests on how to grow trees from seed. A recent request on this subject was **how to start walnuts from seed**. This tree is actually fairly simple to grow from seed; squirrels do this routinely with great success considering the number of walnuts that germinate in gardens and other prepared soils! The trick is to think like a squirrel. Harvest the seeds as soon as they drop and plant them this autumn while the soils are still warm. The seed will not initiate growth this fall, but germination next spring improves if they are exposed to several weeks of warm temperatures before enduring the winter cold. The planting site should be well-drained soils, gardens really are the best, and cover the soil with a light mulch, straw or leaves that will not mat such as oak leaves (do not use maple or basswood leaves, nor grass clippings as these tend to mat). The only trick is removing the husk of the fruit to find the seed.



First begin gathering the nuts as soon as the first few start dropping from the tree. Once they begin to drop naturally, shaking branches with a long pole can encourage more to fall; however, do not pull the nuts off the branches. Also do not wait too until they have all fallen on the ground and dried. The walnuts should be harvested while they are still firm but green – once they dry and harden they are near impossible to crack.

The next step, after gathering the walnuts is to change into clothes you don't plan on keeping as well as wear an old pair of gloves. Now find a hard surface to hammer open the husk. You might not want to use your sidewalk or driveway as the removing the husk will create a dark green, oily stain that does not easily wash off from most surfaces. Some people cover the surface with thick cardboard to reduce staining; others use the neighbor's driveway. Once the husk has been hammered apart and the seeds extracted, let them dry for a day or two (and place them where the squirrels cannot find them) then plant. A good rule is to plant the walnut seed at a depth equal to three times its diameter. Finally sit back and wait till spring, and if the squirrels have not found your seeds you will probably be rewarded with 50 to 80% germination.



If interested in harvesting nuts for you (rather than leaving them for the squirrels), here are a few tips additional tips First hulling by hand is a very labor-intensive process and can be sped up by using a corn sheller. After hulling is completed, wash the nuts and place them in a tub of water. The edible nuts will sink; those with only partially developed kernels will float.

After completing the float test, lay out all the “sinkers” in a cool dry place for about 2 weeks. After that the kernels can be eaten or stored for later.



Fall webworms are on the move and getting bigger. The yellow to brown, tufted larvae are now outside the nests and defoliating trees. The webworm differs from tent caterpillars in time of feeding (spring for tent caterpillars and late summer for webworms) and where they form their nests (interior, near branch crotches, for tent caterpillars and exterior, out on the branches for webworms). The fall webworm favorite

foods are cottonwoods, chokecherries and walnut, but almost any hardwood tree species will do. It is a myth that since they are feeding on leaves that will soon drop anyway that no damage is caused – the next month or so is a time of high productive for leaves and the loss of them will leave the tree going into winter with fewer reserves. Control for the larvae is fairly simple when they are small – less than ½-inch – either just tear the nests open and let the predators and parasites after them. Once they become larger, more than ½-inch, carbaryl (Sevin) should be used as a foliar spray. Usually one application is sufficient to kill the majority of the insects.



DO NOT EAT THIS FRUIT! I have been receiving pictures of this fruit accompanied by the question “Can we eat this?” or “Will this make a good jam?” The short answer is NO! This plant is the common buckthorn (*Rhamnus cathartica*) easily identified by the single thorn at the tip of each twig. The dark purple to black berries found on this tall shrub in late summer and fall should not be eaten or used in jams or jellies. Eating the fruit will result in

rapid and persistent diarrhea.

E-samples



Fasciation on a spirea was probably the most unusual e-sample to come in this month. Fasciation is the term for abnormal flattening of the stem. The stem will also often appear ribbed. The mutation occurs in meristematic cells and sometime can be vegetatively propagated though this mutation is so unstable it often does not persist. Fasciation can also occur from 2,4-D drift and, on some plants, viruses. Regardless it is more of a curiosity on a stem or two rather than a persistent problem in a plant.



Some years I receive a rash of samples of a particular problem all within a short time period and this is true for Melampsora leaf rust. The disease can be a common one though we often go a few years without seeing much of a problem then it suddenly appears again (the spring rains this year created great conditions for the disease). The first indicator of the disease is the bright orange and yellow

urediospores that form on the underside of the leaves. If you look close you can see them in this picture. Trees that are heavily infected will often prematurely drop their lower and interior leaves with only the outer and upper most leaves remaining by early autumn. This is an interesting disease in that it requires two hosts, the cottonwood and a conifer, and the two do not need to be near one another as the spores can be carried very long distances. Cottonwoods may also produce spores that infect other cottonwoods. The primary control is the use of resistant cultivars. 'Siouxland' was a poplar one, but has been discarded due to its susceptibility to canker disease.



Septoria leaf spot is appearing on dogwoods across much of the eastern part of the state. All dogwoods are affected, gray, pagoda, red-osier and Tartarian, although the gray dogwood is most susceptible. The common symptoms of these septoria leaf spot diseases on dogwoods are the spots are not round, but more angular and fall within

the vein patterns of the leaf. The color of the spots changes through the season, usually beginning as just a slightly brown smudge and then gradually the center becomes lighter with a purplish brown margin. The disease appears just about this time every year on dogwoods; perhaps see just a little bit more of the disease due to the wet spring weather. The disease is not a serious threat to the health of the shrubs but certainly affects the appearance. There are no effective controls at this time.



Tar spot is showing up even more across the state 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. The remaining leaf tissue is usually 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. Next year treat the tree with a fungicide as the leaves expand and repeat the application about two weeks later.

Samples received/site visits

Davison County
cherry?

What type of fruit is this? It's so small, is it a

It is a crabapple, the Red Jewel crabapple, which is known for its small, bright red fruit. All crabapples (as well as all apples and pears) are pome fruits, meaning they have many seeds near the center rather than one as found on stone fruits such as plums and cherries.

Lincoln County FL1500023

What is wrong with these apple leaves?

This is cedar-apple rust, one of the most common foliage diseases of apple (the other being apple scab). This is not the time for management as the foliage becomes infected in the spring as the spores are released from the galls on Eastern redcedars and Rocky Mountain junipers. Fungicides are usually applied in May and repeated for several times at about 10 day intervals. Specific fungicides to use will be addressed in an *Update* next spring as they change from year to year.

Sully County
trees?

Why are the leaves turning yellow on these

Both samples were from crabapples and the yellowing of the terminal leaves is common at this time of year. We have two problems that can cause yellowing foliage on crabapples; 1) apple scab and 2) iron chlorosis. The leaves also show symptoms of apple scab – these are the olive drab spots in the yellow - and the marginally scorching and green veins are good indications that chlorosis is also present. No one says a plant can only have one problem. The apple scab can be treated next spring the fungicides and that will be addressed in an *Update* next spring. The chlorosis problem has been discussed in several *Updates* this summer. We are seeing more of this problem due to the wet spring

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