

Pest Update (May 1, 2013)

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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/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 product identified in this publication.

Timely topics

Plant development.....	1
Treating for apple scab.....	2
Treating for tent caterpillars.....	2
Treating for Zimmerman pine moth.....	2
E-samples	
Cedar bark beetles in central South Dakota.....	3
Banded ash borer appearing in homes.....	3
Rabbit-damaged trees: can they be saved?.....	4
Samples received	
McPherson County (winter-burn on spruce).....	4
Stanley County (possible pine wilt).....	4

Timely Topics

Plant development. What plant development? It was still snowing on May 1 in many parts of the state. Last year the crabapples were finished blooming at this time, and the year before (2011) the crabapples were at least leafing out. This

year the buds are just beginning to expand, though I saw several crabapples in leaf down in Yankton and in Rapid City last week.

Treatments now (and the cooler weather has bought you a little more time)...



Apple scab control first application should be on fairly soon to avoid discolored leaves and fruit and premature foliage drop later in the season. I usually begin receiving calls about apple scab in mid-July when it is far too late to do much about it. The young leaves are most susceptible within the first five days of unfolding so the most effective control is *early* control. Captan is the most common fungicide homeowners can use and can be used on crabapples and apples. Fungicides labeled for apple scab and containing chlorothalonil or propiconazole may be used but *only* on ornamental crabapples, not trees in which the fruit will be harvested. First application should be on now, as the foliage buds are swelling or open and this application should be followed by 2 or 3 more spaced 10 days to two weeks apart.



Tent caterpillars are beginning to hatch now so if you have not removed the egg mass from the trees you are probably going to have to spray. The nests, found in the branch crotches of the trees are just beginning to form and the larvae are very small, less than ¼-inch. There are two means of control right now. First, if the nests can be torn open that exposes the young larvae to predators and parasites and they can significantly reduce the population. Second, now is also the time to begin treatments with an insecticide and there are numerous ones available that are labeled for tent caterpillars. Too often people wait to spray until the larvae are fully grown and almost finished feeding and while this may be fun, we refer to this as 'revenge' spraying as it is too late to do much for the tree, it just kills insects.



Zimmerman pine moth, two of the three species in this complex will begin laying eggs on new trees and previously infested ones. Infested trees typically have masses of reddish pitch near branch attachments. Infested trees will also often have branches breaking off at the trunk. Treat the tree with an insecticide labeled for Zimmerman pine moth. There are a number of products containing permethrin as the active ingredient.

E-samples



Cedar bark beetles (*Phloeosinus* spp) are a native, and common, pest of Rocky Mountain juniper and eastern redcedar in our state. However, we typically do not receive too many samples or make many site visits where this pest is a problem. Cedar bark beetles generally attack weakened trees and healthy windbreaks usually are not affected. But add a year or two of drought and the beetles become more noticeable. The combination of drought-stressed trees and increased beetle activity is the one-two punch that can quickly kill the trees in a belt. I received these pictures from Bob down in Lyman County of a belt of dead and dying junipers that were heavily infested with the bark beetle. I have already seen heavy infestations on other belts in the center part of the state and expect to see more if the drought continues.



The initial symptoms of an infestation are canopies that are turning yellow-green to reddish-green on many of the junipers along a row in a belt. Generally the entire canopy or a major portion of it will have this color change. If just the tips of the branches have turned color, the problem may be one of the fungi associated with juniper twig blight (see last week's *Update*). If the entire canopy is discolored, examine the trunk for small, about 1/16-inch, holes peppering the bark. You might also find reddish boring dust around the base of the tree or on the bark but this tends to quickly blow away so it is not always observed. If the bark is scrapped away a network of tunnels, the galleries of the larvae, will be visible and in recent attacks the larvae will be found at this time of year. However, once the trees are dead, or near death, the adults have left and all that remains as evidence of their presences is the galleries and the exit holes. The adults may feed on the shoot tips of living trees and sometimes this feeding is responsible for the ends of the new shoots discoloring and breaking off.

There is usually only one generation per year, though sometimes a partial second, with the adults emerging sometime in early to mid-summer. There are few pesticides labeled for control of this insect since generally no control is needed as they do not attack healthy trees. However, if treatment is necessary then an insecticide labeled for bark beetle control should be applied as a trunk spray in early to mid-June.



Guess who came for dinner? I got a picture of some insects that were flying around inside the house. The homeowner wondered what they were and how to control them. The insects are the adults of the banded ash borer (*Neoclytus caprea*) a common, and native, borer of dying ash trees. The adults are about ½ to 1 inch long, dark brown to almost black with four bands of white to yellow hairs on the elytra (wing covers). The insects emerge in the spring, probably late May this year, but if you bring in firewood that is infested by the beetles they are happy to “wake up” a little earlier and start flying around the home. They cannot do much harm in the house other than buzz around so a rolled-up newspaper is the best control.



Rabbit damaged trees – can they be saved? I got this picture of a small apple tree that the rabbits had recently girdled with the question “Can this tree be saved?” The short answer is “no”. Once the rabbits have chewed through the bark more than half way around the trunk, the tree is not likely to survive. It may produce suckers around the base of the tree but these will be from the rootstock, not the apple cultivar, so the fruit will not have the same appearance or quality of the cultivar purchased. It is best to remove the tree and plant another this spring.

Samples received

McPherson County

What is causing the discoloration on the needles of this Black Hills spruce?

Based on the color of the reddish-brown color to the needles and the pattern of discoloration on the tree, it appears to be winter-kill that was brought about from the drought last summer. Many conifers started the winter severely water-stressed and this resulted in more winter damage than we typically see. There were no signs or symptoms on the samples that are from an insect or a disease.

Stanley County

The needles of our Scotch pine are losing color and we have a dead Austrian pine? Someone told us this might be pine wilt.

We have not found the pine wilt nematode as far north as your location and the symptoms on the Scotch pine are not consistent with those expressed by the disease. Typically trees infected with pine wilt rapidly decline, within a single growing season, rather than gradually have needles discolor and die. The Scotch pine sample symptoms, dark bands and yellow spots, appear closer to that seen with *Dothistroma* needle blight, a fungal disease, though these are

common symptoms seen for many other problems and we'll have to do a little more work to determine the cause for the discoloration.