Pest Update (June 24, 2015) Vol. 13, no. 18 John Ball, Forest Health Specialist SD Department of Agriculture, Extension Forester SD Cooperative Extension

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Note: samples containing living tissue may only be accepted from South Dakota. Please do <u>not</u> 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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Plant development

We are still ahead of last year in plant development. The littleleaf lindens are just beginning to bloom in Brookings. The blooming of these trees coincides with a number of treatment periods for insects (see below). We are also seeing ural falsespireas beginning to bloom on campus.

Pest treatments to be done now



Spruce bud scale crawlers will be hatching soon. The scale resembles a small round, reddish bud and they can be found on near the tips of the branches where the side branches attach to the shoot. They, and their mobile young called crawlers, suck the sap from the shoots resulting in dieback and decline of the lower branches. Since these are soft scales they produce honeydew that results in a black, sooty appearance to the needles and twigs.

The scales have one generation per year and the crawlers' hatch about the time littleleaf lindens are in bloom, meaning now. The time to control them is during the crawler stage. The best treatments are insecticides containing carbaryl as the active ingredient and applied on the foliage and shoots near the tips. Products containing imidapcloprid can be effective as a soil drench but need to be applied in the fall for control the following year.



We are also coming up to the time to treat for spruce needleminer. The needleminer (*Endothenia albolineana*) gets its name from it's the fact that the young larvae are so tiny they can live inside the needle, mining it as they feed. They eventually outgrow their home and then create a nest of webbed, detached needles to live in. The larvae usually feed on the lower, exterior needles, almost stripping the tips of needles but they

can also be found in the interior of the tree and even the tops of young trees. The adults are small moths that will begin flying soon and depositing eggs on the needles. Management is usually with a pesticide containing carbaryl as the active ingredient and labeled for this use. The trees should be treated this week as the adults begin to take flight.

Timely topics



The **ash leaf curl aphid**, also known as the woolly ash aphid (*Prociphilus fraxinifolii*) is showing up across the state again as it does every summer at this time. The symptoms are curled leaves forming rosettes at the ends of ash shoots; particularly the rapid growing terminal shoots of young trees. If you unfolded the leaves you'll find little "fuzz balls" that are aphids. You might also find lady beetle larvae that are feeding on the insects.

Treatment is usually either 1) letting it be since any treatment will not uncurl the leaves or 2) spraying the foliage with an insecticide containing acephate. This chemical is a systemic so will be absorbed by the foliage and kill the aphids as they feed (but not remove the damage). Most other insecticides are contact poisons and will not reach the aphids living inside the curls. A soil drench systemic insecticide, usually one containing imidacloprid, will not be absorbed fast enough to provide any control for the aphids this year but a spring application next year can prevent the problem from occurring in the summer.



Dutch elm disease is beginning to show up across the state.

The most visible symptoms of Dutch elm disease (DED) are wilting and yellowing leaves that begin to drop during the summer. Oftentimes these symptoms are restricted to an individual branch or limb but other times they appear throughout the entire canopy. The trees expressing symptoms throughout the canopy now were probably infected last year or even several years ago, sometimes via root grafts with nearby DEDinfested trees that were not promptly removed. These early expression of symptoms are not usually due to new infections carried in by beetles. The symptoms of new infections started

by beetle-carried spores generally occurs in July and are often limited, at least initially to the leaves at the tips of branches turning yellow and wilting. Obviously, wilting and yellowing can be due to other stressors (see next article) but Bark beetles and root grafts are the means by which the fungus spreads from host to host. The most effective community-wide effort for DED management is to quickly identify and remove infested trees. The sooner infested trees are removed, the less likely the surrounding healthy elms will become infected.

Individual healthy trees can be protected from the disease by root-flare injections of either Arbortect or Alamo fungicides though these must be repeated every two to three years. The injections must be done by commercial tree companies.



Elm leaves are turning yellow due to scales as well as DED

While the most common reason for yellowing leaves in the canopies of elms at this time of year is due to DED-infections, there are other possibilities. Scales, small sucking insects that are sessile while adults, are very common on large elms in our state. I have seen a few trees already that are looking very sparse from the falling yellowing leaves but the cause is not DED but very high scale populations. Almost every branch of this tree was covered in cottony maple scale (see last week's Update for a discussion on this scale), the European elm scale (covered the Update several weeks ago) and the lecanium scale. The lecanium scale

(Parthenolecanium) is more a complex rather than a single insect, however, they have many similarities. The adults have brown, hemispherical or turtle-shaped

shells that are tightly held to the twig or branch. The eggs hatch from beneath these shells about the time littleleaf lindens are in bloom (now) and this is the life stage for treatments. Insecticides containing acephate as the active ingredient or Malathion can be sprayed now for reducing the nymph population. A soil drench of an insecticide containing imidacloprid as the active ingredient can be applied in the spring, as the leaves open, or even in the fall. The



chemical is taking up though the tree and kills the insects as they feed. However, it must be applied at least 30 days before the nymphs begin feeding.

E-samples



I received a picture of the red turpentine beetle from Anitha, at our West River Extension Regional Center. This insect is the "big brother" to the mountain pine beetle. The adults have a distinct red-brown color, rather than the black of the mountain pine beetle. The red turpentine beetle also flies from spring until early summer so it is out earlier than the mountain pine beetle. Turpentine

beetles are not considered as serious a threat to the pine tree as the mountain

pine beetle. They generally make fewer attacks on the tree and these attacks occur on the lower trunk, usually lower than 8 feet. Red turpentine beetles are a good indicator that a tree is stressed. They tend to go for fire or construction-damaged trees (and will even attack fresh stumps).



I also received a picture of a lilac with curled petioles. This is curling of the petioles is a common symptom from drift by a **phenoxy herbicide** such as 2,4-D or dicamba. Lilacs are fairly sensitive to drift and, like tomatoes, are good indicators of an application nearby. Now is not a good time for spraying lawns to control weed, fall

is better time for most lawn weed control and an applications at that time of year are less damaging to woody plants.



Venturia leaf and shoot blight is appearing on quaking aspens in the Black Hills and I have received several pictures and calls regarding the disease. The disease results in shoot tips turning black and drooping forming almost a Shepard's crook. The foliage will also develop blackened and browning lesions. The disease is most common in young quaking aspens, though less than 15 feet tall and rarely is a problem on mature trees.

Samples received/site visits

Davison County

Shriveling leaves on a lilac



The shriveled. water-soaked leaves and blackening tips on lilacs are common symptoms of the bacterium *Pseudomonas* svringae. Bacterial blight can occur on all lilac but it seems to be most common on Japanese tree lilacs and white-flowered common lilacs (but not the purple). The only treatment is to remove infected branches at least one-foot lower than the symptoms (and at the collar, do not leave a stub)

and do this pruning during dry weather. The hand pruners or hand saw should be sprayed with Lysol Disinfectant between cuts to avoid spreading the disease. The disease can also be managed with a spray of a copper containing fungicide made in the spring at bud break. While the disease is caused by a bacterium, not a fungus, this treatment seems to help. Generally the infected lilac survives the disease, but a branch or two may die each year or so. The plant will just grow around it.

Miner County What caused this webbing on the chokecherry shrubs?

The webbing on the branch in the bag was the work of the uglynest caterpillar (*Archips cerasivorana*). There were a few dead, dried up larvae contained in the nest. The uglynest caterpillar receives its name from the nest formed from leaves, webbing and frass (insect poop). The defoliation is unsightly but usually the trees will soon put out new leaves to replace the damaged ones.

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