

Pest Update (August 21, 2013)

Vol. 11, no. 25

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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

A great year for apricots and peaches..... 2

E-samples

Willow blight..... 2

Herbicide injury and trees..... 2

Ash flower gall mite..... 3

Leaf cutter bees..... 3

Samples received

Beadle County (drooping spruce)..... 3

Turner County (willow aphids)..... 4

Timely Topics

We are apparently back to summer with the temperatures heading back up into the 90s for much of the state. Schools have been cancelling afternoon classes

due to the heat, the same schools that had to cancel classes in late April due to snow....it has been an odd year.



However, if you are a peach tree this has been a great year. The continual cold weather we experienced last April delayed the flowering of apricots and peaches until after the danger of frost. Typically these trees bloom too early and the frosts kill the blossoms before they are pollinated. We also have had a warm, but not hot summer (at least until this week) and adequate precipitation, almost perfect for fruit development. I am getting good reports of apricot and peach production this year. Dave, a forester with the South Dakota Department of Agriculture, sent along this picture of a Reliance peach loaded with fresh peaches. The reports for apples and pears are not as favorable. We had a cold, wet period when many of these trees were in bloom, not the best conditions for bees to pollinate the flowers, so many folks are seeing a much smaller crop than normal even though the trees had plenty of blossoms this spring.

E-samples



Willow blight, a term to describe two diseases of willow black canker and scab, is appearing in trees along the eastern side of the state. This disease complex is one of the most common problems with willows and weakened trees – those affected by drought (and we are still dealing with the lingering aftermath of the 2012 drought). The disease starts with the blackening of the margins of new leaves in the spring. The symptoms progress during the season with most of the leaves on a branch affected and the terminal shoots on the branch also blackening and curling. The symptoms appear very close to those seen with fireblight but this is not the same disease and is not due to a bacterium but fungi. The disease also results in cankers along the shoots and these can expand and result in the loss of branches and eventually entire limbs. The most common recommendation is to water the tree during dry periods to reduce stress and, if possible and practical, prune out and destroy infected shoots and branches to reduce the spread of spores in the spring.



I am also getting pictures and samples that appear to be **herbicide-related**. It seems every August folks start spraying the weeds in their lawn – not the ideal time for control – and generally these applications cause more stress to the trees than the weeds. The two most common herbicides I see used during this time periods are 2,4-D and dicamba. These selective broadleaf weed

herbicides will result in malformation of tree leaves, typically the youngest leaves are affected first and these leaves are twisted, cupped and curled and sometimes elongated, almost strap-like. The old, mature foliage will generally look normal on trees that have been exposed to herbicide drift. Not much can be done once the trees have been sprayed.



And finally a sample that showed some spray injury but also, and more apparent in this picture, the galls formed by the **ash flower gall mite**. These galls are formed from the tissue that develops into the male flowers on an ash tree. Since most tree owners do not want to deal with seeds, the majority of our ash cultivars are seedless, meaning they have male flowers, not female (though over time many of these trees start producing both male and female flowers). While the lack of seeds might be nice, the blackened clusters of malformed male flowers are not all that attractive either. There is no effective control for this mite. While there are pesticides labeled for treating trees to prevent gall formation, their use rarely achieves any significant control.



Leafcutter bees are actively creating nests and that means lots of leaves looks like someone took a cookie cutter to them. The leafcutter beetle cuts the edges of leaves in a very distinctive style, making a mostly smooth semicircle cut along the edges of the leaves. The missing leaf tissue was not eaten but was carried back to create nest cells. The nests are filled with all the materials a young bee needs, nectar and pollen, and then a female bees lays an egg inside the nest and seals it. While they will make a nest out of any leaf, the favorites are roses, ash and lilac. Leafcutter bees are the timid cousins of the honey bee, they do not usually sting people and when they do, the sting is less painful. The leafcutter bees are beneficial as they serve as pollinators for many different plants. The damage they do to plants by cutting the tissue is minimal and probably it is best just to tolerant rather than treat. The only exception to this policy of “live and let live” is for roses and there be sure to seal any pruning wounds or just wait until late fall for pruning. The leafcutter bee does not generally tunnel into rose canes unless there is a wound that exposes the pith.

Samples received

Beadle County

Why are these spruce shoot tips drooping? Also there are some trees that are just declining.

The drooping and curling shoot tips from Duane’s trees appears to be due to spring frost injury. If you recall, we had a very unusual spring with a very late start to the growing season. I have seen lots of this injury and most folks have

confused it with herbicide. The poor growth, needle discoloration and shedding seen in the other samples from his place appear to be mostly due to drought.

The sample from Emma's trees is most likely also showing drought injury but there were also some spruce needleminers in the bag. These are insects that in the larval stage are small enough to burrow into the needles to feed (hence the name "miner"). As they mature they can no longer fit in the needle but bundle them up into a nest and live inside this webbed cluster of detached needles. The management involves spraying the tree with an insecticide containing carbaryl as the active ingredient in April and then early July. Later this autumn he might try just shooting a high pressure stream of water through the plant to dislodge the miners.

Turner County

What is this tree and also why is there so much sap coming from the willow?

The tree is not a chestnut, but an Ohio buckeye. This is the most common tree mistaken for chestnut. There are very few true chestnuts in South Dakota but we do have many buckeyes and horsechestnuts. These trees also produce a nut, but unlike chestnut, they are not edible and are poisonous to people, horses and cattle.

The sap coming from the willow is due to aphids. For more information on the willow aphids see the July 24th issue of the *Update*.