

Pest Update (July 23, 2014)

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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 product identified in this publication.

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Plant development (Phenology) for the growing season

Plant development. The smooth hydrangeas are in full bloom in Brookings. This is a little behind normal, but not much.

Timely Topics

A subject that needs to be addressed from time to time is what to do about suspected herbicide drift injury on windbreak and ornamental trees. Each year I received numerous calls from tree owners that believe their trees were injured by a neighbor spraying a corn or bean field. The tough calls are the one where the suspected application was made the previous year but now the trees are dying and they want someone to come out to identify the chemical, give them an appraised value to the losses and fine the applicator.



Unfortunately, it is not all the easy and the longer the tree owner waits to report the damage, the tougher the task becomes. I often talk with tree owners that say “Well we decided to wait a year and see how the plants do. Now they are dead.” Any suspected herbicide drift tree injury should be reported to the South Dakota Department of Agriculture, Ag Services, Pesticide Complaint Investigation and Enforcement within 30 days of seeing the symptoms (call 605.773.4432 or use their online reporting form). Do not wait for months or years to initiate a pesticide incident or damage complaint. Many herbicides will degrade to undetectable levels months (sometimes weeks) after an application. The other issue is other injury can occur, for example winter injury, and that will mask any symptoms of herbicide. It can be very difficult, depending on the herbicide, to associated plant injury with a herbicide application made months or years before.

The tree owner also needs to know who applied the herbicide. There is no ‘CSI’ lab that can identify the herbicide and the applicator just from a sample. The task is much simpler if the tree owner knows who sprayed. This way the testing need only be for the herbicide applied, not all the possible herbicides that cause the particular symptoms. The herbicide drift must also be on the land of the person who files the complaint.

Also Ag Services does not seek damages for the tree owner. This is a separate action and if herbicide drift is determined to be the causal agent then the tree owner may have to contact a tree appraiser to provide them with a value to their losses.

Finally the best option is to talk with the applicator first, have them look at the damage and try to come to some agreement without involving the state. There are limited resources for investigation of these claims, and while they are a service that people can use, it is best if the two parties can come to an agreement without involving others.

E-samples



Ash and privet borer. This was covered two weeks ago in the *Pest Update* and I mentioned that it is rare. However, I received another picture of this same insect from Rick, a Department of Agriculture forester in Sioux Falls. The insect is native to the eastern and central United States and has been recorded previously in South Dakota though it is a relatively rare insect. The borer is typically found in mature or drought-stricken windbreak trees. The adults emerge in May or June and the female lays eggs on dying ash trees (or at the base of privet stems though this is not a common host in South Dakota). The larvae begin feeding in the phloem tissue and then move into the sapwood as they

mature. The larvae pack their galleries with frass so the initial tunneling by the larvae is very similar to those created by the emerald ash borer. The insect moves back closer to the bark to pupae and the adults emerge from oval-shaped holes similar in size to those made by the emerald ash borer. The insect takes two years to complete their life cycle. Since the adults are attracted to dying trees, management is focused on keeping the tree healthy rather than treating the insect. The insect is not a serious problem in South Dakota but is a close “look-a-like” to the emerald ash borer.



Chokecherry midge is an insect that is occasionally seen in the chokecherry fruit at this time of year. The bright orange larvae can be found feeding on the inside of the swollen fruit now. The larvae release a toxin as they feed which causes the seed to abort and the fruit to enlarge – more room for the midge. The larvae drop out of the distorted fruit in another few weeks and pupae in the soil. Next spring the adult fly emerges about the time the chokecherries

bloom. The only treatment is to remove and destroy infested fruit. There are no insecticides labelled for control of this insect. There is also a cherry curculio (similar to the plum curculio discussed later in this section) that causes similar damage but the larvae are white rather than orange. Plum pockets, a fungal disease can cause similar symptoms but the hollow fruit will not contain larvae.

This looks like another very bad year for **Dutch elm disease**.

I have seen many trees with the 'X' of death sprayed on the trunks. There are still some communities in South Dakota that conduct DED surveys at this time of year to mark infected trees and their crews are placing 'X' marks on infected trees. If the infected trees are promptly cut down and either debarked or burned and the stumps ground down, the chance of spreading the disease to nearby health elms is much reduced. The infections are very visible now as entire branches with wilting, yellowing leaves that are dropping. Infected trees can be easily spotted by the ground littered beneath the tree with these leaves.



Fireblight is showing up in apple and crabapple trees in many areas of South Dakota. The typical symptoms that we are seeing at this time of year include individual branches with leaves that have wilted and turned almost black. The tip of the branch is often curled into a crook. The small developing fruit on the affected branches are also discoloring and becoming shivered. These branches may also develop sunken cankers that

ooze, altogether not a pleasant sight. Fireblight is a bacterial disease that is a common disfigurer and killer of apples and crabapples as well as cotoneasters, pears and mountainashes. The only treatment at this time is prompt pruning of infected branches to slow the spread. The pruning should be made at least a foot below the symptoms but do not leave the branch as a stub. Always prune back to a larger supporting limb or the trunk. Also the pruning tools, either a handsaw or pruner, should be disinfected between cuts to prevent further spread of the disease. Alcohol or a bleach solution have been common disinfectant recommendations in the past but Lysol Disinfectant is also a good choice that is not harmful to the tree or corrosive to tools.



Plum curculio is a common, but often overlooked, pest of fruit trees in South Dakota. While stone fruits, including plums, are easily damaged by this weevil, damage to apples, while noticeable, is minimal. The most common damage to apples is the slit (often shaped like a half-moon) cut into the fruit from the egg laying activity of the adult female. The slits made early

in the season may less than 1/8" deep and often heal over leaving only a brown scar. The slits made later in the season may be more than 1/4" deep. Generally this slit is the extent of damage to the fruit. The larvae have a difficult time developing in the harder flesh of apples so you rarely cut open an apple and find one. The fruit is still edible, just the skin will have a blemish. If the problem is too noticeable, the tree can be treated next year. At petal fall apply Malathion and repeat the application about 10 days later. Do not use a spray containing carbaryl, as an application of insecticides containing this active ingredient can result in fruit drop if made within 30 days of full bloom.

Samples received/site visits

Beadle County

What is wrong with this crabapple?

There may be more problems than what I can see from the sample but the leaves show a fairly heavy apple scab infection. The olive-drab spots and distorted margins are usually good indicators of the disease. The tree will probably have these infected leaves start dropping during August, if not sooner. Control at this time is ineffective, but captan applied as the leaves first begin to open and then repeat the treatment every 14 days till mid-July usually can reduce this fungus problem.

Miner County

Is this fireblight?

Yes, the wilting leaves and dying twigs on cotoneaster are symptoms of the bacterial disease fireblight. I recommend cutting the plant to within 2 to 3 inches of the ground this autumn after the leaves drop. This should remove the infected wood and the plant will resprout very quickly next year. Be sure to spray the pruning shears with Lysol Disinfectant to disinfect the pruner between cuts.

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