

Pest Update (June 24-July 4, 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.

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Timely Topics

Plant development. The catalpas are in bloom in Brookings, a little later than normal. While the recent warm weather is allowing us to catch-up, we are still behind from last year.

Treatments you should have done by now or very soon



Photo credit: Missouri Botanical Gardens.

Apple maggot (*Rhagoletis pomonella*) is one of the insects that can infest apples in our state and one of the most serious apple problems East River. Symptoms of a maggot infestation are dimpled, lumpy appearance to the surface of the apple and the flesh often turning mushy and containing the brown trails of the larvae – hence the other common name “railroad worm.” A sure sign of the pest – an unpleasant one if you happen to

find one, or *half* of one, while eating the apple – is a small (1/4”), creamy white and legless larva in the fruit. The adults, resembling houseflies with banded wings, should be flying and placing eggs on the developing apples in another week or two and will continue egg-laying for another month. Once the eggs hatch the larvae burrow into the apple. The apple maggot pupates in the soil and emerges as an adult beginning in early July. However emergence and egg laying do not really begin until the middle of July so there is still time plenty of time for control measures (even if any eggs are laid earlier in the season the egg is either crushed by the expanding fruit or the larvae cannot survive in the high-acid of the newly developing apple). Control is either carbaryl (Sevin) or Malathion applied in another week or two with subsequent applications every 7 to 10 days for three or four applications. Apple maggots tend to emerge from the soil after a 1/2-inch rains so some growers time applications with rainfall but this is not necessary for the home-production.

Another means of management is to place 3-inch diameter bright red balls in the tree, about 2 in semi dwarf trees (about 10-15 feet tall) and 5 in standard size trees (about 20-30 feet tall) that are covered with a sticky material called tanglefoot. The female apple maggot always flies to the biggest, brightest apple to lay her eggs and these will be the biggest, brightest “apples” in the tree. You cannot eliminate the pest by using this control but the population can be significantly reduced. The “apples” can be made from material found in almost any garden store – even can find tanglefoot at most hardware stores or you can buy the completed “apples” from the Internet, try www.GardensAlive.com.

Still another possible control measure is to spray Kaolin clay on the fruit. The clay is not a true pesticide but it irritates the adult apple maggot and they tend to fly to other fruit. The clay must be reapplied if we have some heavy rains

so expect to make several applications during a season. The clay is sold as 'Surround at Home' and can also be obtained from www.GardensAlive.com.

Information you can use



Mountain pine beetles are just beginning to fly in the Black Hills. Most of the insects are still pupae beneath the bark but there are also some adults beginning to emerge. These pioneer beetles, the beetles that begin flying ahead of the main flight so people may start to notice fresh pitch masses along the trunks of pines. These pitch masses are evidence of new attacks by the beetle as they attempt to burrow their way into a tree. The emergence and flight of

the beetle is expected to peak before Rally Week (beetles and bikers apparently go together) and then decline with sporadic emergence and flights continuing into September. The flight of the pioneer beetles means the end of the spraying season as our sprays to protect pines from mountain pine beetle only work to kill the beetles as they attack. Once the beetle is in the tree the insecticides do not work. Now we can only wait to see what is attacked.

E-samples



Aphids are appearing on many trees at this time of year and their activity is generally noticed by the abundance of **honeydew** they excrete on the lower leaves and any plants or objects beneath the tree. I usually get calls about now from tree owners concerned about their weeping tree and what they are referring to is the sticky liquid that is covering anything beneath the tree. Walnuts seem to be particularly attractive to aphids and this is one

of the most common hosts that I receive questions about. The aphid population is usually not high enough on a mature walnut to do much harm and the problem is just an annoyance to have to clear the honeydew from car windshield and patio furniture.



Another aphid I receive calls about at this time of year is the **woolly elm aphid**. The feeding by the nymphs and adult aphids causes the young leaves to swell and curl around the colony. The aphids usually do not harm the tree and the only problem is the honeydew that rains down on objects beneath

the tree. Since the aphids are living in a curled leaf, most insecticides are ineffective as they work on contact and none of the pesticide contacts them. The best control is through the use of systemic insecticides such as imidacloprid that are applied as a soil drench and kill the insects as they feed on the sap. These insecticides must be put on the tree before the problem is noticed as it can take up to 30 days before they begin working.



More pictures are coming in on **pine sawflies** and their damage. These pine sawflies feed on last year's needles, not the needles that are forming now, so their damage is limited and usually not fatal to the tree. However, tree owners are often alarmed by the clusters of these small "worm-like" creatures feeding on the foliage. The numbers can become so large that it is common to see them migrating on the bark in search of more needles. The feeding is just

about done now so any spraying is really "revenge" treatments, just a chance to kill some insects, rather than provide any effective control.



I got a picture of the gall formed by the **poplar vagabond aphid**. This aphid overwinters as eggs that hatch as the shoots are expanding. The leaves at the tips are the feeding site for the nymphs and as they suck the sap from this foliage the leaves turn reddish and become deformed. This deformed leaves are hollow and form the gall as seen in the picture. The adult aphids are leaving these galls now and flying off to their other host, grasses, where they

feed on the roots. Another generation of aphids develops there and the new adults return to lay eggs on the poplars in the autumn. The galls are common on cottonwoods and quaking aspens. They do not harm the tree and once you see the galls it is too late for any control.

Samples received



Beadle County **What are these strange growths on the fruit?**

This is plum pockets, a fungal disease that results in spongy, hollow fruit on plums and chokecherries. The control of this disease involves fungicide sprays in the spring as the buds are just beginning to open but I have had little success with treatments. Removing the infected fruit might be the best option. Plum

pockets are not common on chokecherry and there is a small insect called the chokecherry midge that can cause symptoms that are very similar.

Davidson County
mulch?



What is this growth coming up in the

This is 'Dog Vomit' fungus and it seems to show up in organic mulches in the eastern side of the state every year. This fungus, and the name is very descriptive, usually appears in June or July when the temperatures and humidity are high. The fungus generally forms in fresh mulch so most of the calls come in on mulches that have been placed this last spring or fall. The only control is to break up the fungus with a rake to dry it out – it rarely

reappears unless you add fresh mulch.

Harding County

The leaves are beginning to dry out on this apple tree, but the surrounding ones appear fine. What might be the problem?

This appears to be fireblight, a bacterial disease of pome fruits such as apples, crabapples, pears, mountainash and cotoneaster. I suggest pruning out all affected tips to at least a foot below the symptoms (and always back to a side branch or trunk, don't leave a stub). If the entire tree is expressing these symptoms, removal is probably in order.