Pest Update (July 10, 2013)

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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/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 lindens are in bloom in Brookings, about two weeks later than normal. While the recent warm weather is allowing us to catch-up, we are still behind from last year.

Treatments you should be doing now

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." Please see last week's *Update* for control information.

E-samples



Ash flower galls are appearing on the twigs of ash throughout the state. The brown to black "ball" hang in clusters beneath the branch shoots. The galls are due to the feeding activity of the ash flower gall mite (*Eriophyes fraxiniflora*) and this mite only feeds on the male flowers of ash. Many of the black, green and white ash cultivars are "male-only" as most tree owners do not like to deal with cleaning up the small winged

samaras that develop from the female flowers. However many trees, such as this one from Tripp County, have both male and female flowers as you can see the galls and the samaras in the picture. The galls may be objectionable and detract from the appearance, but do not harm the health of the tree.



The **ash leaf curl aphid** also known as the woolly ash aphid (*Prociphilus fraxinifolii*) is showing up across the state again this year as it frequently does each summer. The symptoms are curled leaves forming rosettes at the ends of ash shoots; particularly the rapid growing terminal shoots. If you unfolded the leaves you'll find these little "fuzzballs" that are aphids. You might also find lady beetle larvae that are

feeding on the insects. Management is usually either letting it be – since no treatment will uncurl the leaves and the lady beetles do a pretty good job of control – or applying an insecticide containing imidacloprid as a soil drench. This is an effective means of having the insecticide absorbed into and throughout the canopy of the tree and will kill the insects as they feed on the leaves. Most

insecticides are contact poisons and will not reach the aphids living inside the curls. Unfortunately, the soil drench should be made before you see the damage; this means it should be applied in *early June* so perhaps best just to note this on the garden calendar as a treatment to do next year.



I received a picture last week from West River showing the fungal disease called **black knot** (*Apdiosporina morbosum*), also known as dead man's finger, a very common disease of cherry and plums. These black, coal-like galls that are sometimes covered with a white power can often be found lining the branches and trunks of plums, chokecherries and Mayday trees. A common recommendation is to prune out these galls during the winter

months, but this activity has very limited value. First, these blackened galls are the *second* year of infection. The shoots initially infected last year have only a slight greenish swelling of the tissue. If these shoots are not removed they will grow to form the blacked masses the following year, as you can see it is hard to get ahead of the disease by pruning. The other problem is only some trees are very susceptible to black knot and once they get the disease you can probably expect the tree to become infected again regardless of your pruning efforts. Basal pruning (cutting the tree down) is probably the best approach if you have one that is covered with the knots.



Powdery mildew is appearing on lilacs in many areas of the state. This a very common disease of lilacs but powdery mildews (usually different fungi as these mildews are host specific) can occur on many different plants including grapes, roses and Virginia-creeper. Powdery mildew appear as white to grayish spots or patches on the leaf that often contain small pin-size black dots. These symptoms usually occur

on the upper leaf surface. They also are more common on plants that are crowded and shaded, locations that provide the high relative humidity need for the disease to develop. Since the disease occurs mostly on crowded plantings, the best solution is to selectively prune out (or even remove) plants to provide better air circulation and lower the humidity. There are also many fungicide labeled for control of this disease but these need to be applied every 10-days throughout the growing season or at least throughout the hot, humid summer weather.

Samples received

Lincoln County FL1300016 What are these spots on my apple? There are orange-yellow bums on the leaves and the fruit.

This is cedar-apple rust, a disease that usually affects the foliage, often covering the leaves with the spots, but can also infect the fruit. The disease can be managed with fungicides but the application time beginning in the spring, usually early May, with applications continuing on a 10-day time period until mid-June. It is too late for spraying this year but fortunately the disease is not a tree killer. This disease must move from apples (and crabapples) to junipers and back so a common recommendation is to remove nearby "cedars" (Rocky Mountain juniper and eastern redcedar) but to be effective means removing these plants within a mile or two of the apple so not a practical measure.

McPherson County Chinese elms?

What are these "bugs" in the

First, these are not Chinese elms (*Ulmus parvifolia*) but Siberian elm (*Ulmus pumila*). I think we have only one true Chinese elm in the state and that is in Yankton. The insects in the picture appear to be parasitic wasps that are searching for borers. We do see the banded elm bark beetle in Siberian elms in your county and this insect's burrowing activity is responsible for the decline of these trees in many areas of the west.

Minnehaha County leaves?

What is wrong with these ash

This is ash rust, a common fungus disease of ash trees that occurs whenever we have a cool, moist spring. The symptoms are yellow to yellow-orange spots on the upper leaf surface (and these can occur on the petiole as well). The spots enlarge over time to become also "pimple" size and give a wart-like appearance to the leaf by midsummer. No control is usually recommended for the disease as it does not seriously harm the tree (though it can look poor by this time of year), it rarely affects trees every year as the conditions are not favorable and last, most chemical controls are not very effective.

Potter County FL1300018 What is wrong with these recently (May) planted lilacs, pears and poplars?

Even with rains and watering many trees and shrubs will have a little dieback the year following planting so a few branches or twigs dying back is not necessarily a cause for concern. I did notice that the pear appeared to have pear scab, a foliage disease similar to apple scab, but the symptoms are different with pear scab often having infected leaves turn almost a black along the margins. Its management is similar to that of apple scab; fungicide sprays applied beginning at bud swell in the spring and continuing for at least two months at 10-day intervals. The lilac shows symptoms of bacterial leaf blight, a disease that also blackens the leaves and also results in the shoot tips turning black and curling. This disease is best managed by pruning out infected shoots (be sure to disinfect

the pruners between cuts) and applying a copper fungicide just before bud break. Since the disease is a bacterium, not fungi, most chemicals will not help slow the disease but apparently copper has some benefit. The 'Siouxland' poplar appears to be just suffering from transplant shock but this is very common with this cultivar.

Roberts County leaf?





The "skeletonizing" where the upper surface of the leaf is missing yet the lower side remains is a common symptom for damage from pear slugs. Pear slug, or sometimes-called cherry slug, despite these names, is not a slug but a sawfly (closely related to wasps). The larval stage, the "slug", is about $\frac{1}{4}$ - to $\frac{1}{2}$ -inch long, dark and slimy and they are the ones responsible for the injury to the leaves. There are two

generations a year, one in July and a second in September. The two most common insecticides used are either carbaryl (Sevin) or malathion applied when you see the slugs.