

Pest Update (June 10, 2008)

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Available on the net at:

<http://www.state.sd.us/doa/Forestry/educational-information/Pest-Alert-Archives.htm>.

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

Pagoda dogwoods are in full bloom in Brookings – about two weeks later than normal – and the catalpas that should be in bloom still have tight buds. We are still way behind in plant development compared to last year in many East River locations; however West River is only a week behind normal.

Treatments to do now

Ash borer treatments with a permethrin product, Astro for commercial applicators or either *Enforcer Outdoor Insect Killer* or *Hi-Yield Garden, Pet and Livestock Insect Control* for homeowners can be applied now. The adults are usually out flying about a week or so after spirea begins to bloom. This often is the first week of May but the spireas began to bloom last week and the borers are flying now. It is important to cover the entire trunk with the insecticide, at least up to a height of 6 or 7 feet. Most of our ash borer attacks are concentrated on the lower trunks of small



trees, those less than 6 to 8 inches in diameter at the base. Another important issue with ash borers is that their exit holes may be confused with those of the emerald ash borer, a more serious insect that is not yet found in South Dakota. The emerald ash borer makes small D-shaped exit holes while the ash borer makes oval to round, almost pencil diameter holes. Sometimes a flap of the bark will remain attached, as can be seen in the above picture, and this can lead to a wrong conclusion that the hole is D-shaped.

Rhizosphaera needlecast first treatment should be applied to spruce now. This is a



common needlecast disease of Colorado blue spruce and results in the loss of the older needles. The typical symptoms for the disease are the previous season's needles turning yellow by midsummer then a purplish-brown by late winter. These needles will also begin showing small, pin-size, fuzzy black fruiting bodies on the needles. These line up in the white stomata bands. The treatment for the disease is an application of a fungicide containing the active ingredient

chlorothalonil, such as Daconil, applied when the new growth is about ½ inch long and then a second application about three weeks later.

E-samples – not the year to be a hackberry!

I am still receiving many questions and concerns about blacking leaves on hackberries. As mentioned in last week's *Update*, the cold weather we experienced in much of the state in April and May resulted in a lot of injury to this tree. The typical symptoms are small, undeveloped leaves, premature leaf drop and leaves with blackening margins. These trees should still recover this year as they are already producing buds and these will be opening in another week or two. Cold weather injury is not the only



butterfly and the fall cankerworm, are near completion of the larval stage and are becoming pupa so controls are ineffective at this time.



for the brooms other than pruning them out of the tree, a very time-consuming task, particularly when the brooms rarely cause any serious harm to the tree.

Another problem that is receiving a lot of attention lately are the numerous galls that are appearing on oaks. There are many different galls that form on the twigs, branches and leaves of oak trees. These galls are due to the feeding of cecidomyiid and cynipid wasps. Oftentimes if you cut into the galls a small white, legless wasp larva can

problem afflicting hackberries at this time. The **hackberry nipple gall** is beginning to appear on the leaves. These large bumps are caused by a small psyllid insect. The nymphs feeding cause the plant to produce these large bumps or galls on the underside of the leaves. There is no effective control and the bumps do not harm the tree. There are also two leaf-feeders infesting hackberries this year resulting in the trees having tattered leaves. These caterpillars began appearing about two weeks ago throughout much of the state. The **fall cankerworm** (*Alsophila pometaria*) is known as an inchworm or looper due to its habit of forming loops as it moves across a leaf. The fall cankerworm is light green with pale green stripes and it has three pairs of prolegs. Another defoliator is the **hackberry butterfly** (*Asterocampa celti*) and this caterpillar is also a light green but has two horns on the head and a pair of projections coming from the end of the body. Both caterpillars, the hackberry



be found. The galls are unsightly, but usually result in very little serious injury to the infested tree. This is fortunate as there are also no effective controls for the galls.

Samples received

Davison County (Extension)

What is causing the brown spots on the maple leaves? Many of the leaves are already falling.

This is a Norway maple (*Acer platanoides*) and the brown spots are from a fungal disease known as anthracnose. I suspect that your sample will be the first of many since the spring weather we have been experiencing – cool and wet – provides the perfect condition for anthracnose diseases to occur on maples as well as ash and oaks. Once the disease is present in the leaves there are no effective controls so all that can be done now is rake up the leaves as they fall. The disease does very little harm to the tree.

Faulk County (Extension)

This is a branch from an elm tree that died last year. The owner wonders if the tree may have died from Dutch elm disease.

It is impossible to tell from the sample. The presence of the Dutch elm disease fungus is easiest to confirm in branches (larger than a pencil diameter) that are supporting yellowing and wilting leaves. Branches that have been dead this long are not good for diagnostic purposes. I suspect that the tree did die of Dutch elm disease. It is the most common serious disease of American elm in our state and last year we lost many trees to the disease. If the tree was dropping crisp yellow leaves last summer before it died, most likely Dutch elm disease was involved.

Faulk County (Extension)

This plant is showing up on the south side of the Methodist Church. What is it?

The palmately compound leaf with 5 to 7 leaflets gives this away as an Ohio buckeye (*Aesculus glabra*). This tree is frequently planted by squirrels and shows up in gardens and flower beds. If left undisturbed it can become a nice ornamental tree having lime-green flowers in June but most people do not like to deal with the fruit that follows the flowers so squirrels plant most of the buckeyes.

Lake County (Extension)

What is wrong with this green ash stem?

The sample was a little rotted when it arrived but I talked with the person who brought the sample in. The spotting is due to a fungal disease called ash rust. I usually receive at least a few samples from the Salem-Montrose area every year showing ash

trees with distorted leaves that have spots on them. The petioles will also sometimes develop “galls” on them from the disease. While the disease can be controlled with a single application of a fungicide containing the active ingredient mycobutanil applied just as the leaves open, the timing is so short that most people do not bother to treat their trees. The disease does not harm the trees though they can become completely defoliated by early summer. New leaves appear soon afterwards and the trees look fine by August. The defoliation is a stress so infested trees are more vulnerable to other pests such as the ash borer and these may require treatment.

Lyman County (Extension)

This looks like iron chlorosis on apples, but are they susceptible to this problem?

While not as susceptible as red maples and pin oaks to this disorder, apples can develop chlorosis. The symptoms of chlorosis, yellowing leaves with green veins, are often due to a microelement deficiency, usually iron, but occasionally manganese in our state. The symptoms are most pronounced on the newest leaves. The problem is not related to the lack of iron in the soil but the lack of available iron. Soils that are alkaline, particularly soils with a pH greater than 7.5, are where we see the most problem with iron availability. The problem is also worse when we have conditions that limit root growth, soils that are cool and wet, so oftentimes the problem is most apparent in the spring and the leaves green up by mid-summer. If the chlorosis does not fade as the weather turns warmer and drier an application of iron chelate can be made to provide iron that can be used by the plant even in alkaline soils. The rate depends on the particular brand purchased but many people have had good success with these products though it may take a year for any greening to occur and often annual applications need to be made to maintain the green leaves.

Roberts County (Extension)

What is causing the leaves on Duane’s silver maple to turn black and wilt? It almost appears to be fireblight.

This is a bacterial blight caused by *Pseudomonas*. The disease causes the shriveling and blackening of leaves and shoots, almost looks like fireblight, on lilacs and maples, particularly Amur and silver maples. Since it is a bacterial disease there are few effective controls other than pruning (and be sure to spray the pruners with Lysol disinfectant between cuts so not to spread the disease). An application of a copper fungicide at bud swell can also slow the disease but will not cure the tree.