

# Pest Update (May 22, 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.

## Timely topics

Plant development.....	2
What pests to treat soon	
Second treatment of apple scab.....	2
Clearwing ash borer.....	2
Diplodia tip blight.....	2
Spruce spider mites.....	3

## E-samples

Cedar-apple rust.....	3
Curled spruce tips.....	4
Diplodia tip blight.....	4
Mossy rose gall.....	4

## Samples received

Custer County (diplodia tip blight).....	5
Gregory County (drought stressed spruce).....	5
Gregory County (curled spruce tip).....	5
Lyman County (pear scab).....	5

## Timely Topics

**Plant development.** We are still way behind in plant development from most years. This year the crabapples are in full bloom in Brookings; about a month behind last year and a couple of weeks later than normal.

### Treatments now

**You probably should be planning to apply your second application of fungicide for apple scab soon.** Remember most of our fungicides labeled for homeowner use are protectants; they provide a chemical barrier between the susceptible tissue and the organism. Once the fungus enters the leaf it is too late for control. This is the reason for beginning treatments as the leaves open and then continuing applications on a regular basis into the growing season.



**Clearwing ash borer** treatment with an insecticide containing permethrin as an active ingredient can begin in another week. The bark must be sprayed to protect the tree as the insecticide will kill the adults (picture of their exit holes seen below) as they are walking on the bark while laying eggs. The insecticide will also kill the newly hatched larvae before they burrow into the wood. Systemic

treatments are generally ineffective so injecting a pesticide or pouring one around the soil are not practical means of managing this particular borer. The adults are usually out flying about a week or so after Vanhouttee spireas begin to bloom and the shrub should begin flowering in another week or so.



**Diplodia tip blight** first application of a fungicide should be applied soon. Tip blight is probably the most common disease of pines, particularly Austrian pine. Symptoms in early summer are the new needles becoming brown and stunted (as seen in the picture below). Twigs may be infected and become stunted and deformed. The

treatment is a fungicide containing thiophanate-methyl, propriconazole or chlorothalonil (labeled for control of this disease) just before the bud sheaths have opened and should be happening soon. Timing is critical, once the bud sheaths have opened and the candle begins to form, it's a little late to begin the first application and this is the one that provides most of the protection.



**Spruce spider mites** become active now as silver maple leaves are expanding. Spruce spider mites are cool season mites meaning they are active in the spring



and fall, not during the summer heat. The mites will go dormant once the temperatures *consistently* reach into the mid 80's. While the mites are beginning to feed, the damage to the needles, bronzing and browning, does not typically show up until summer just as the mite populations begin to decline. Treatment options are very limited for homeowners, horticultural oils and insecticidal soaps being the two most common.

These are really suppression treatments, not eradication, and the webbing often prevents these pesticides, particularly the soap, from penetrating. They should be applied now and then another treatment next week, about 7 to 10 days after the first treatment to kill new mites as they hatch from eggs. Be aware of the cautions to the use of these products, particularly for spruce, as applications of oils or soaps can result in the loss of blue or silvery color to the foliage. You can make a *blue* spruce, a *green* spruce, very quickly, so read and follow label directions very carefully. You can also turn it *brown* if you apply oil sprays when the temperatures are too hot so read and follow label directions exactly. A spray homeowner can use on their smaller yard spruce contains tau-fluvalinate as an active ingredient. This is usually found in pesticides that also contain chemicals to kill insects so it will be one of the active ingredients listed rather than the only one. Pesticides containing tau-fluvalinate and labeled for mite control should be applied in two treatments spaced 10 days apart.

There are a number of products that commercial applicator can use that provide excellent control and have minimal impact on non-target organisms. However, it would be worth the time and money to have a commercial applicator provide these treatments considering the effectiveness of these products versus those available to homeowners. This is one pest it is far better to pay for a professional than attempt to do it yourself.

And finally, another value in hiring a professional is to be sure the problem is spruce spider mites. We have another mite, the two-spotted mite, that is found on many plants in our state (including soybean) and sometimes it is the problem on the spruce, not the spruce spider mites. The two-spotted mite is a warm season mite and does not overwinter on spruce bark so the timing of controls is different.

## **E-samples**

**A common question this week “What are all these bright fruits on the cedars?”** These are not the fruits to the “cedars” (these are actually junipers, commonly either Rocky Mountain juniper or eastern redcedar). These red-brown

rounded structures are the fruiting bodies for cedar-apple rust and are now producing gelatinous tendrils (horns) that release the spores that infect apple and crabapples (There is also a cedar-hawthorn rust that alternates between “cedars” and hawthorn among other cedar rust diseases). The disease rarely causes any serious problems on the junipers, though in very heavy infestations the branches may die, but it is a serious problem on the apples, crabapples and hawthorns. The symptoms that will occur on these host plants later this season are yellow to orange spots on the leaves and fruit.

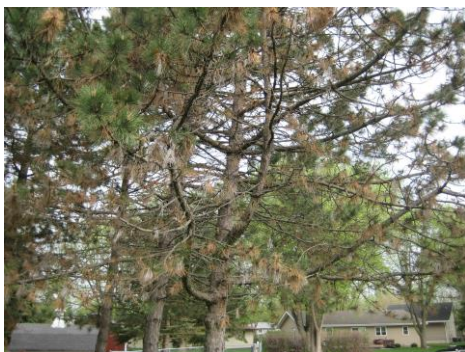


Infected leaves and fruit may also fall prematurely. Interestingly, our ornamental junipers such as the creeping juniper, savin junipers and others rarely serve as alternate hosts for this disease; the hosts are primarily our two native species, Rocky Mountain juniper or eastern redcedar.



**Curled spruce tips** are coming in as samples and pictures during the last week. Obviously these are shoots that curled last year; shoot growth has not started yet for 2013. There are many reasons for the tender shoot tips on spruce to curl. However, the most common is not herbicide (which it is often attributed to) but exposure to frosty weather – and

remember the cold snap we had last spring, just after it turned warm? The most common symptoms are the development of curled tips and the symptoms may be found more on the west and south side of the tree (or belt). It is common to have some trees affected and others not as not all spruce will break bud at the exact same time so there will be differences in susceptibility to the problem. I received a picture of a tree from northern Meade County that appears to be affected by frost and a sample from Gregory that shows the same symptoms.



**Diplodia tip blight** is one of the most common diseases of pine, particularly Austria and ponderosa pine, in South Dakota. The disease symptoms, stunted shoot tips and hanging ash-gray needles, were a common sight last year and the disease was associated with the decline and dieback of many mature pines in eastern South Dakota last summer. The disease can be managed, but not eliminated, with timely applications of a

fungicide (see the article on treatments at the top of this *Update*).

While I do not receive many samples of roses, I do have an occasional one sent my way. This picture was sent in with the question about the “spiny bumps” on



the plant. These are the **mossy rose gall** that is caused by the feeding by the larvae of a small cynipid wasp (a dozen or more larvae can fit in one gall). The galls form in the spring and the larvae feed all summer before emerging as adults later in the year. The gall rarely results in any serious harm to the plant but can weaken it if many galls are formed. Pruning out and destroying the galls is the only commonly recommended control but this will not prevent a new infestation from coming in the

following year.

## **Samples received**

Custer County

**There are a number of pines that are declining around the home. The needle tips are discolored.**

This involved a site visit and the shoot tips were showing common symptoms of Diplodia tip blight, stunted and discolored, but another important clue was the fruiting bodies found on the cones beneath the trees. The spores, conidia, are released from these bodies in the spring and early summer, and they also are an important identification clue for the presence of the disease.

Gregory County

**The tips of these spruce are stunted, about 6 of the 12 trees in the row are showing these symptoms.**

This is most likely drought injury. I continue to receive samples, calls, and picture and do site visits to see the same symptoms and all are related to the hot, dry weather we experienced last year.

Gregory County

**Why are the needles that formed last year curled on these spruce?**

This may be frost injury from the spring of 2012, see above note under e-samples. However, herbicide applied spring of last year is also a possible cause.

Lyman County FL1300005

**The fruit on these pears is “tough” and the leaves were discolored last summer. The fruit still seems to taste okay but is a little grainy.**

This is pear scab, a disease that is a close cousin to apple scab but impacts pears rather than apples. The symptoms on the fruit are corky lesions appearing on the fruit. The leaves develop brown to almost black irregular lesions. Lesions also can occur on the shoots and here they appear as small fuzzy bumps. The disease overwinters on the twigs and fallen leaves with spore released in the spring to infest new leaves and fruit. The disease disfigures the fruit and it also may drop prematurely but it does not change the flavor (other than the corky skin). The fruit appears to be from an Asian pear and not only are Asian pears more susceptible to the disease, the fruit is often grainier. The fruit of Asian pears should be left on the tree until fully ripe (like an apple) rather than picked and allowed to ripen on the kitchen counter. If you pick them too early they will be very gritty.