

# Pest Update (April 3, 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/Forestry/Educational-Information/PestAlert-Archives.aspx>

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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## How many trees do I need have fruit?

This question comes up each spring as people are starting to think of planting some fruit trees. Here is the list of the most common fruit trees for our region.



**Self-fruitful** – these fruit trees are able to pollinate themselves and you only need the one plant to have fruit set. *European plums* (Stanley and Mount Royal are the two cultivars planted here, but best south of I-90)

*Sour cherries*

*Peaches* (you can grow the trees almost anywhere in the state but our spring frosts often kill the tender flowers)



**Self-sterile** – these fruit trees will not accept their own pollen and must be pollinated by different cultivars (just having two trees is not enough, they must be different cultivars). The two trees should be within 50 feet of one another.

*Apple and crabapples* (they can serve as pollinators to each other)

*Pear*

*Hybrid plums* (these are most of the plums we plant; Toka is a great pollinator)

*Apricots* (the two cultivars we plant, Moongold and Sungold, the other cultivars are self-fruitful, but not as hardy)

*Sweet cherries*

## Fertilizing seedling trees (an update)

I answered a question about fertilizing seedling trees to be planted in a belt this spring in the March 20 *Update*. Bob, a field specialist at the Regional Extension office in Winner, asked that the recommendation also be given in ppm as many soil tests report use this unit rather than lbs/acre. The recommendation for phosphorous is there is no need to fertilize if the soils contain 20 ppm of this element. Potassium need not be applied if about 75 ppm. I do not recommend adding these elements even if the soil contains close to these numbers, within 20%. As I mentioned last week adding elements beyond the level needed can increase soil salts to harmful amounts to seedlings. Fertilizing is generally of more value after the seedlings become established, usually a year after transplanting. The first year weed control and irrigation are the primary concerns.

## E-samples



This girdling was noticed on juniper stems after the snow melted around them. It looks like meadow vole damage (discussed in the March 6 *Update*). They can girdle the bases of junipers as well as the lower branches, up to more than 3 feet from the base. The damage most commonly occurs in late winter as activity increases yet food is hard to find.

Controls are tough to come by, the best being just to eliminate any cover near

the junipers either by mowing or herbicides. There are rodenticides available but they are also deadly to non-target animals and the surviving voles quickly learn to avoid them (apparently smarter than other critters) so the benefits are short-term.



This is the time of year for 'critter' samples. Here is an elm branch that was chewed by squirrels. They often will girdle branches on elms, hackberries and maples. Sometimes the ground is littered with the cut twigs. For some reason – known only to the squirrels – they did a tremendous amount of girdling on trees late summer. We had some trees on campus that the squirrels have girdled almost every branch.

## Samples received

Brookings County

**I received a dying spruce sample, not an uncommon event as frequent readers of the Update know. This tree, about 10 feet tall, had the interior needles shed from the lower branches and the exterior needles shed from the upper branches – not a happy tree.**



branches were completely covered with the insects and the quality of sap removed by their feeding can result in premature needle loss.



detached needles.

There were several problems with this spruce. First, it is common to have the lower interior needles shed due to either age (spruce normally lose their 5- to 7- year old needles) or shading. However this natural process was sped up a bit by a very heavy infestation of spruce bud scale. This insect is often overlooked as the sessile adult scale appears as a bud, a reddish-brown round object as the base of the twigs. The

The insect found on the exterior branchlets near the top of the tree was the spruce needleminer. The needleminer gets its name from the fact it mines the needles as a small larvae. You can probably see the hole at the base of the needle in the center of the picture. Once the larvae becomes too large to fit inside, it webs the needles around itself as a nest so another common sign to an infestation of this insect is clumps of

Corson County

**trunks these ponderosa pines?**

**What is causing the holes in the**

The oval-shaped holes, about the size of a pencil, circle the trunk in almost parallel rows. This is the work of a sapsucker, a bird, rather than an insect. These birds, a close relative to the woodpecker, are not drilling for insects but the sweet spring sap. They most commonly attack elms, maples and pines.

Hanson County

**might be the problem?**

**These spruce trees are dying. What**

There are probably several seasons for the decline. I am seeing lots of spruce dying in the southeastern part of the state due to the extended drought. I am also seeing more spruce spider mite injury in this same area - mites seem to proliferate during years with hot, dry conditions. This sample was covered with the debris left by last year's mite populations and the very tiny eggs were found on the small twiglets. I will be updating the pesticide recommendations for mites in another week.