Pest Update (September 21, 2016)

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John Ball, Forest Health Specialist SD Department of Agriculture,
Extension Forester SD Cooperative Extension

Email: john.ball@sdstate.edu
Phone: office 605-688-4737, cell 605-695-2503
Samples sent to: John Ball
Plant Science Department
rm 230, Agricultural Hall, Box 2207A
South Dakota State University
Brookings, SD 57007-0996

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.

Available on the net at:
http://sdda.sd.gov/conservation-forestry/forest-health/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 products identified in this publication.

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Timely Topics

I have received lots of calls and pictures of "dying" pine trees in the last week. The symptoms are all the same – a sudden appearance of yellowing needles towards the center of the tree. This is just the annual

shedding of the third year needles, an event that usually occurs unnoticed. Why the alarm this year? During sunny, dry late summers, the older needles quickly turn a straw yellow and line the interior of the tree.

This is the year for verticillium wilt. This vascular disease appears to be expressing symptoms more this year than in past years, perhaps due in part to the cool, moist weather we experienced in the spring. I have received numerous samples of catalpa (and some maples) that have shown signs of infection. Smokebush (sometimes called smoketree) are also susceptible to the disease though I rarely see an infected plant. Verticillium wilt is a soil-borne fungus that affects a wide range of hosts but maples and catalpa are the primary woody plants that are affected by it in our region. The disease results in leaf curling and drying, also wilting, followed by branch dieback and sometimes the death of the entire tree. Many infected plants will only have a branch or two express symptoms and the disease does not spread out from there. Other times the complete tree wilts and dies the same summer. I suggest they prune out any dying branches and see if the shrub recovers next spring.

E-samples

This cottonwood seems to have more than it's share of problems. The leaves are very chlorotic and there is substantial dieback but the most interesting symptom is the diamond shaped botches on the bark. This is cytospora canker (*Valsa sordida*) which occurs on cottonwoods, aspens and willows. The disease is not the same canker that appears on spruce but both pathogens require a weak host to really proliferate. This fungus is the same one associated with diamond willow canes since the canker often leaves diamond-shaped botches on the sapwood. The only management is to either restore the tree's health so it can outgrow the cankers (unlikely in this instance) or remove the tree.

One problem that seems to become very noticeable at this time of year are the **ash flower galls** that line the branches of ash trees. The galls are caused by the feeding of the ash flower gall mite (*Eriophyes fraxiniflora*). This tiny (2/100-inch) eriophyid mite feeds only on the male flowers of ash trees. Ash trees are usually

dioecious, meaning there are male ash trees and female ash trees. Most of our ash cultivars are clones of male trees since no one like the seeds cluttering up their gutters and covering sidewalks and driveway. Unfortunately, this selection had the unintended consequence of creating a great food source for this mite.

The galls start out in the spring as round, green tumor-like growths below the tip of the new shoots. These galls enlarge to about 1-inch by late summer and turn dark brown. They may remain hanging on the tree for one or two years. While they are unsightly, they do not harm the tree. No treatments are recommended and very few have any effectiveness.

I received an interesting picture of a pear-shaped crabapple. This appears to be the **Toringo crabapple** (*Malus toringoides*) based on the pictures of the tree's form, the leaves and the fruit. Apples (including crabapples) and pears were once in the same genus (*Pyrus*) as there is little difference between them. Some of our Asian pears have apple-like fruit, red and round, and some of our apples and crabapples have pear-like fruit. Regardless, this is one of the more attractive crabapples and the fruit often persists late into the winter.

Samples received/site visits

Roberts County **What is this plant?**

This is the shrub (or small tree) nannyberry viburnum (*Viburnum lentago*). The shrub, known for its white flowers and edible fruit (called wild raisin), is native to the Big Stone Lake region and the Black Hills.

Sully County **Can you identify this tree for me?**

This is the white mulberry (*Morus alba*), an introduced tree from Russia that is common throughout the state. It produces a small raspberry-like fruit in the summer that the birds "plant" just about everywhere. The tree is unusual in that it has several different leaf shapes and they can all occur on the same tree (or branch).

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