Pest Update (Aug 27, 2014)

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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/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

What about BOB? We have a relatively "new" disease of bur oaks that is known as BOB, bur oak blight (*Tubakia iowensis* sp *nov*). There are a number of *Tubakia* fungi that occur on oaks but Dr. Tom Harrington at Iowa State identified the specific one causing the disease. The disease was first noticed on bur oaks in southern Minnesota, Iowa and eastern Nebraska back in the 1990s where it became associated with dying oaks. It has been reported in past *Update* issues and the disease has been found in most of the South Dakota counties bordering Minnesota and Iowa. The leaf symptoms do not really become noticeable until August so now is the time samples begin to come in.



The most common symptoms associated with the disease are leaves becoming discolored in late summer; purple-brown lesions appearing along the middle vein, yellow wedge shaped blotches on the leaf blade and black pustules at the base of the petiole. The infected leaves tend to persist on the tree throughout much of the winter. The symptoms generally occur on the lower branches but during successive years intensify and eventually cover the entire canopy.

The disease is a leaf disease and infected trees will produce new leaves the following spring. However, infected trees are more susceptible to secondary stress agents such as two-lined chestnut borer and often begin showing extensive dieback after a few years of the initial symptoms and may die if the disease and the secondary stresses are left unmanaged. It is common to see only one or two trees in an oak grove expressing symptoms so there appears to be some variation in resistance to the disease. The disease is also more prevalent on the bur oak botanical variety *Quercus macrocarpa* var. *oliviformis* which is more common to dry, upland sites. This variety is common in eastern South Dakota and produces slightly smaller acorns than most other bur oaks.

The disease really needs a wet spring (like we had this year) to get it going. When we experience wet weather during the initial shoot expansion in May the disease proliferates and mature bur oaks can develop symptoms throughout the canopy during August, sometime almost appearing overnight. If we have a series of dry springs, infected trees can make a recovery.

The most common treatment for BOB is an injection of proprionazole, a chemical used to treat oak wilt, made during the growing season or a foliar spray of proprionazole during leaf expansion. Since the disease has only recently been studied; treatments, rates and timing are still being investigated. An additional approach is to manage the overall health of the tree, reducing the impact of any other stress agents, construction and borers being two common ones.

E-samples



Fall webworm nests are appearing on many trees this late summer. You can see the nests on trees through the state. If you tear open one of these nests you'll find fall webworm larvae. The yellow to brown, tufted, larvae are about 1/2-inch long and actively moving within, and beyond, the nest at this time. The webworm differs from tent caterpillars in time of feeding (spring for tent caterpillars and late summer for webworms) and where they form their

nests (interior, near branch crotches, for tent caterpillars and exterior, out on the branches for webworms). The fall webworm favorite foods are cottonwoods, chokecherries and walnut, but almost any hardwood tree species will do. It is a myth that since they are feeding on leaves that will soon drop anyway that no damage is caused – the next month or so is a time of high productive for these leaves and the loss of them will leave the tree going into winter with fewer reserves. Control for the larvae is fairly simple when they are small – less than 1/2-inch – either just tear the nests open and let the predators and parasites after them or treat with malathion or carbaryl among other insecticides. Many of the larvae are beyond this size already so the best treatment may be to wait until next May or June and apply a soil treatment of a product containing imidacloprid as the active ingredient. This will be absorbed by the tree and kill the young larvae as they begin feeding on the leaves next summer.



Septoria leaf spot is appearing on dogwoods. This is not too surprising considering the wet (and late) spring we had this year. The fungal disease symptoms are small (usually less than ¼ inch) angular to irregularly shaped spots that are bordered by leaf veins. The spots begin as dark brown to purple, almost black

at times, that gradually develop a light gray center as the season progresses. If we have enough moisture, like this year, it is common to see dogwood hedges and rows in windbreaks that entire leaves are covered with spots by late summer and the infected leaves are already falling.

The disease overwinters on infected leaves so good clean up is an excellent means of managing the disease. Some people just used the disease as a good excuse to practice rejuvenation pruning, pruning the entire hedge or row to within 3 inches of the ground, during the dormant season. Dogwoods benefit from frequent pruning and rejuvenation pruning is a good means of removing infected tissue, stem cankers and a variety of other problems. There are also fungicide

treatments, such as products containing chlorothalonil, which can be applied in the spring when the leaves are just opening but if the spring and summer have normal or below normal rainfall we are not likely to see much of the disease.

Samples received/site visits

Codington County The ponderosa pines tips are turning brown. The problem seems to be getting worse over the past few years.

This is diplodia tip blight. The disease is common problem with Austrian and ponderosa pines. The shoot tips become infected and this results in tips that die back. These tips are easily identified by the stunted, ash-gray needles that are hanging from them. The disease does not often kill the tree but it certainly can cause them to look very ugly. The most common management is fungicide treatments in the spring as the buds are swelling. More information on updated treatments will be available next spring.

Davidson County What is wrong with these silver maple leaves?

We are seeing a lot of tar spot again on silver maples this year. Tar spots results in hard, almost tar-like, black spots throughout the leaf. No control is useful for controlling the disease at this time of year and generally control is not recommended as the disease causes little harm to the tree, just its appearance. We also do not see the disease very much if we have a drier spring.

Minnehaha County What is causing this ugly black growth on the tips of these cottonwoods?

This is a gall formed by the poplar vagabond aphid. The nymphs cause the young shoot tips to deform as the aphid feeds. They seem to attack the same trees year after year while avoid neighboring trees – apparently they develop a taste for certain trees so not every tree in a grove or belt will have these galls. Treatments are generally not recommended as the aphid is hard to control and it rarely causes any serious injury to the tree. A systemic insecticide such as ones containing acephate as an active ingredient applied as the leaves are beginning to expand will provide some control.

Turner County These 7-year old caraganas looked nice until summer when the leaves started to turn color and fall. Now many of the plants look dead. Is this mildew?

Powdery mildew was first reported on caraganas (peashrub) in North America back in 2003 but that is not the problem with these plants. The foliage appears to be infected with septoria (see more information above on septoria). This is a different fungus than the one that infects dogwood but management is similar.

recommend cutting the plants in the row down to about 3 inches tall sometime between the end of October and early April. This treatment will also eliminate any canker diseases and there is the possibility that stem cankers may be responsible for the dieback.

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