

Pest Update (April 25, 2018)

Vol. 16, no. 12

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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.

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 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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Plant Development

Finally, we are beginning to get some warm weather, but we are about a month behind our typical plant development. This Tuesday the corneliancherry (*Cornus mas*) was just beginning to bloom in Spearfish, usually that occurs in late March.

Timely Topics

How have evergreens performed in this long winter weather?



Reports of desiccation injury on arborvitae, junipers, and yews are beginning to come in from the southern part of the state. The combination of a dry fall and a long winter has left many of these plants susceptible to desiccation injury. This injury appears as yellow to browning foliage that will turn red in the next few weeks as our temperatures continue (finally) to warm.

The only treatment is to begin watering these evergreens as soon as the ground can absorb moisture (now in many areas of the state) and prune off any branches as they die. I would delay the pruning until it is obvious that the branch has died. Some lightly discolored branches may recover, however “once red, it’s dead” and should be pruned off. We may also see an increase in phomopsis injury on arborvitae and junipers due to this twig injury. The disease can be managed with an application of a copper fungicide applied as the new growth begins expanding this spring and then repeated for about 3 times, 10 to 14 days apart.

We may also see an increase in desiccation injury on young evergreen plantings in windbreaks. Spruce are also vulnerable to winter desiccation injury, and even pines to a lesser extent, and expect to see some of the same symptoms on young trees planted this last spring – yellowing to reddening foliage. Now is the time to check the buds on the tips of seedling branches and twigs exhibiting discolored foliage. If the buds are dry and discolored the shoot will not expand and the branch or even the entire seedling may be dead. I also expect to see desiccation injury on blue spruce, regardless of age, it is not a very tolerant tree of this type of injury.

E-samples



Black knot (*Apiosporina morbosa*) is a fungal disease that is common on chokecherry trees. You can occasionally find it on plums here though it is a major problem in plum orchards in other states.

The name black knot comes from the most noticeable sign of the disease, a cylindrical mass of black, woody knots along shoots. The knots will eventually girdle the shoot and kill

the tips. If a knot forms on the stem, it can kill the entire tree.

Many people mistakenly believe if they prune out the knots they eliminated the disease, only to be disappointed when it reappears several month later. The knots form the second year of infection. The first-year infection is only a slight swelling along a shoot that is perhaps a little lighter than the surrounding shoots.

If a gardener has time and patience, they can go out now and prune out all the knots and swollen shoots to eliminate the disease. The pruning should be done at least 6 inches below the visible infection and all the infected clippings burned.

The best management is basal pruning, remove the infected tree. Once infected, a tree will just become infected again. Some trees are more susceptible to this disease than others and some tree never get the disease.

Fungicides may also be used for management of the disease. Fungicides containing chlorothalonil as the active ingredient and labelled for black knot may be used. The first application is made as the buds begin to swell (usually when we start getting temperatures above 60°F) and repeated every 7 to 10 days until shoot expansion is completed in June. Chlorothalonil cannot be used after bloom if the fruit will be harvested for human consumption.



The mystery of the boring walnut table is closer to being solved. An adult beetle emerged from a new walnut table a few weeks ago and the owner sent some pictures of the holes coming from the table and the adult beetle. I asked for, and received, the adult beetle last week. It appears to be the velvet longhorned beetle (*Trichoferus campestris*) though we are awaiting confirmation.

This is a boring insect from East Asia, native to China, Korea and Russia. It was first detected in North America in Quebec (2002) and since then in 14 states including Colorado (2013) and Minnesota (2010). The insect is typically detected in traps and in warehouses, but it is established in trees in Utah.

The larval stage of the insect can infest raw timber and even dry wood. The preferred living host is apple/crabapple (*Malus*) and peaches (*Prunus*). But it has been found in birch (*Betula*), honeylocust (*Gleditsia*), mulberry (*Morus*), pine (*Pinus*), spruce (*Picea*), walnut (*Juglans*), and willow (*Salix*). Infested trees usually present with declining canopies and epicormic shoots. There will also be pencil size oval holes on the trunk and frass (sawdust-like pellets) at the base of the tree. Finding these symptoms and signs does not positively identify the tree as infested by the velvet longhorned beetle as infestations by our native longhorned beetle will present the same.

This insect has the potential to be a significant pest in apple and peach orchards. It also can become a structural problem in rustic furniture, any wood product with some bark retained on the edge. The insect has been known to live 18 months in furniture before emerging.

Samples received/Site visits

Lawrence County

What happened to this tree?



This is rabbit browsing on a limber pine. The rabbits have browsed off the tips of every branch and only the terminal remains. Limber pine produces soft needles and flexible branches (hence the name limber). It is not considered a favorite for browsing and is rated as only fair for palatability for mule and white-tail deer (which rarely feed on it) but bunnies seem to like it.

Sometimes it is difficult to distinguish between rabbit and deer browse but the simple way to tell them apart is deer tear and rabbits bit. Deer do not have incisors on their upper jaw, so they grab and pull tissue while rabbits have incisors on their upper and lower jaw, so they make a clear cut – almost like a hand pruner.

Pines, unlike deciduous trees, cannot sprout at cuts from adventitious buds. Once the shoot tip is removed, the shoot will die. The only buds are now at the very tip and there is probably not enough foliage and shoots for this tree to recover.

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