Pest Update (Nov 19, 2014)

Vol. 12, no. 28

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. **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.

Timely Topics

Finding the perfect Christmas tree

Real or Plastic? Christmas tree lots are already beginning to spring up around the state and Thanksgiving marks the start of the Christmas tree season with more than 36 million trees being sold between Thanksgiving and Christmas. While artificial trees enjoyed increased sales during the past decade, those sales

have stagnated though about 50 million homes use artificial trees. However, a traditional Christmas tree can be the environmental friendly way to celebrate the holidays. The average artificial Christmas tree may have a life span of 6 years before it ends up in a landfill. The traditional Christmas tree, while used only one season, can become valuable mulch, a winter bird feeder or even used as a fish habitat after the holidays.

Here are some tips on picking out the perfect tree. The way to obtain the freshest tree is to harvest it yourself at a choose-and-cut Christmas tree farm. This way you are guaranteed a "fresh" tree rather than one that may have been harvested several weeks earlier. If cutting your own tree is not possible, here are some ways to check for freshness at a Christmas tree sales lot. First, give the tree a light but vigorous shake. Only a few interior needles should fall out of the tree if it is fresh. If a pile of brown needles appears on the ground after shaking, it is not a fresh tree. Next, reach into a branch and pull the needles *gently* through your hand as you move out towards the tip. The needles should bend, not break, as your fingers run across them and the branch should only slightly bend. If they break off completely this is another indicator that the tree has already dried out too much.

Regardless of whether you buy a tree from a lot or cut it yourself, once you get the tree home leave it outside in the shade while you set the stand up. The choice of a stand is probably the most critical factor in maintaining the freshness of the tree once in the home. The stand should be able to hold one-half to one-gallon of water as the new Christmas tree may absorb this much water from the stand on the first day. A good rule-of-thumb is a tree will use 1 quart of water per day for every inch trunk diameter at the base. If you have a tree with a 3-inch base, it may use 3 quarts of water per day.

Just before you bring the tree in the house cut the base between a half and one-inch from the bottom. This will open the sap-filled pores responsible for transporting water and allows water to be absorbed into the tree. The base cut does not have to be slanted; the angle makes little difference in the amount of water absorbed so cutting perpendicular to the trunk is best. Do not drill holes into the trunk or whittle the trunk smaller, neither will improve water uptake. Also brush off any debris or dirt on the base before placing it in the stand.

Once the tree is in the stand add water and then *never* let the stand become empty. If the stand becomes empty for more than 6 hours, the tree's pores plug up again. Water uptake will be significantly reduced, the tree will dry out and the needles will soon begin to fall. If the tree stand does dry up for half a day or more there is nothing that can be done other than pull the tree out of the stand and recut the base – not a pleasant task once the lights and ornaments are already up. Nothing needs to be added to the water in the stand to improve needle retention. The commercial "tree fresher" products do not significantly increase the life of the tree and the home remedies such as aspirin, sugar, soft drinks and vodka do not work and may be harmful to pets that may drink from the stand.

Place the tree in a spot that receives only indirect light from the windows and not near any heat duct. This will reduce water loss from the tree and prolong its freshness. Another tip to prolonging freshness is to start out with a clean stand. Before setting up the tree wash the stand out with a solution of about a capful of bleach to a cup of water, to reduce the growth of microorganisms that may also plug up the tree's pores.

Which is the best tree? Each species has it good points but the Fraser fir (pictured to the left) is probably one of the top favorites. The tree is has a very pleasant scent, excellent needle retention - they will last the entire holiday season - and the branches are stiff enough to hold most ornaments (however if heavy ornaments are desired go with a spruce). The bright green needles are white on the underside and this makes a very attractive display. Balsam fir, pictured to the left, is another good choice though the needles do not last as long and the branches are not quite as stiff. Canaan

fir, another popular fir appears to have qualities similar to Frasier fir and is also becoming a popular Christmas tree.

Pines are very popular with Scotch pine, pictured to the left, probably the most popular tree in the country. It also has a pleasant scent, excellent needle retention and the branches are stiff enough to hold heavy ornaments. White pine is another pine commonly sold at Christmas tree stand. The needle retention is not quite as long as Scotch pine and the branches are very flexible meaning heavy ornaments may fall off. White pines do have very soft needles and if you are going to run into the tree in the middle of the night this is the one!

Spruces are not as popular of Christmas trees primarily due to their relatively poor needle retention. If you want to have a blue spruce as your Christmas tree, you probably should wait until a couple of weeks before Christmas to set it up as the needles may only last that long. Once the needles begin to fall, blue spruce are about the worst tree in the house as the fallen needles are sharp and seem to find their way into socks and slippers. Blue spruce, pictured to the left, has the best needle retention of the spruces – they may last a few weeks or more - but does not have much of a fragrance. The branches are very stiff, however, and can support the heaviest ornaments. White spruce, or Black Hills spruce is not commonly available Christmas tree at lots though is used in the Black Hills where it is cut from the National Forest. It does make a nice tree, particularly when cut fresh, as needle retention is poor. The tree also does not have much of a fragrance and occasionally Black Hills spruce trees can produce a slight musky odor.

E-samples

This is the time for the various insects and spiders to show up in homes and two interesting samples have come in during the past couple of weeks. The first is a spider, the **Parson spider** *Herpyllus ecclesiasticus*. These are fairly common spiders in homes and while a little scary looking, they do not pose much of a threat to people. A bite may result in a little swelling and itching but not likely more serious than that. The bigger concern is what are they eating? They are after other spiders and

small insects so usually where you find Parson spiders there are other creatures lurking as well.

The other sample is also more of a concern for what they represent rather than what they are. A homeowner found floors covered with these small white “worms” but only in certain rooms. These are not powerpost beetles, another common insect found in wood homes, but **blowfiy maggots**. Usually when we find these on the floor they have dropped down from the ceiling and once the attic is entered a dead bat, mouse or rat (or raccoon in one instance) will be found and that is the source of the maggots. The only solution, once the dead creature is removed, is to close up any cracks in the attic that allowed the animal to enter. This sometimes is not an easy task as mice and bats can squeeze through some very small openings.

Samples received/site visits

Clay County **What is causing the needles to die on my spruce tree?**

I was able to find the debris and larvae of the spruce needleminer. The larvae are so small they can burrow into the needles essentially hollowing them out before emerging from a hole in the side. The larvae usually overwinter by building a nest of detached needles that is held together with a silky threat. The larvae will resume feeding in the spring then form another nest to form a cocoon before emerging as adults. The adults are silver-gray moths that are flying during early summer. The easiest control is a high-pressure stream of water through the tree in early spring to dislodge the larvae before they pupae. However, the fallen debris should be raked out from under the tree and destroyed to eliminate any insects. The other option is to apply a pesticide, such as one containing carbaryl as the active ingredient and labeled needleminers in early spring to kill the mature larvae or in late summer to kill the young larvae of the new generation.

Perkins County **Is this an apple tree? It has never produced fruit.**

Yes, this is an apple tree though it is impossible to identify the cultivar from just the leaves. Apple trees do require a pollinator to set fruit and it has to be a different cultivar. The reason for the lack of fruit may be there is no other tree to provide the pollen; ideally another apple would be within 50 feet of this tree. A simple solution is to drive around and find another apple tree in the area and

when both trees are near full bloom next spring cut a few branches with flowers from the second tree and place them in a bucket of water beneath the apple tree. Usually this will provide enough pollen for fruiting to occur. As to the question about planting too deep; an apple can produce multiple stems due to a variety of reasons once one of which is planting too deep. If the first large root is 6 inches or more beneath the surface, the tree was mostly likely planted too deep.

This publication made possible through a grant from the USDA Forest Service.