Pest Update (Nov 13-20, 2013)
Vol. 11, no. 33
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, Agriculture 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/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 product identified in this publication.

Timely topics
The tree book is out!..............................................................1
Finding the perfect Christmas tree........................................2

E-samples
Cotoneaster identification......................................................4

Timely Topics

The tree book is finally out! The long anticipated book *TREES! Fruit, Nut, Ornamental, Shade and Windbreak Trees for the Northern Plains* is finally available. This book, decades in the making, covers the 80 genera, almost 300 species and more than 450 cultivars of trees that can be grown on the Northern Plains. The book includes information on site requirements, rootstocks, flowering and fruiting and numerous other facts on every tree. The book contains
pictures of these trees as well as line drawing of the leaves. The 499 page soft cover book is available through iGrow at the link below.

http://igrow.org/product/trees-an-illustrated-field-guide/

Finding the perfect Christmas tree. 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 and now there is a return to having the traditional tree. A traditional Christmas tree is also the environmental friendly way to celebrate the holidays. The average artificial Christmas tree has 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 below the tree, particularly from the branch tips, 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.

Regardless of whether you buy a tree from a lot or cut it yourself, once you get the tree home, leave it outside 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 up to this amount in 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 about one-inch from the bottom. This will open the sap-filled tracheids – the 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. Once the tree is in the stand add water and then \textit{never} let the stand become empty. If the stand becomes empty for more than 6 hours, the tree’s pores plug up. Water uptake will then 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 stand 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.

\textbf{Which is the best tree?}  Each species has it good points but the Fraser fir is probably one of the favorites. The tree is very fragrant, has excellent needle retention and the branches are stiff enough to hold ornaments. 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 is very fragrant, has excellent needle retention and the branches are stiff. White pine is another pine commonly sold at Christmas tree stands and has a fair fragrance, but the needle retention is not quite as good 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 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 as the needles may only last that long. Once the needles begin to fall, blue spruce are about the worst tree to have 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 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 though is used in the Black Hills. It does make a nice tree, particularly when cut fresh but it does not have much of a fragrance and occasionally Black Hills spruce trees can have a slight musky odor.

**E-samples**

I received a picture of this leaf with a request for identification. The leaf is from the hedge cotoneaster (*Cotoneaster lucidia*), one of the most common hedge shrubs used in our state. The shrub is noted for good performance on a wide range of sites and excellent hardiness. It only detraction is the susceptibility to fireblight. This plant and the Peking cotoneaster (*C. acutifolius*) are often confused but the Peking cotoneaster has a dull green, rather than shiny one and most authorities consider this plant just a form of Hedge cotoneaster.