Pest Update (February 18, 2015)

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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 <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

The emerald ash borer (*Argilus planipennis*) is an East Asian beetle that is a lethal threat to ash trees across the Northern Plains. This borer has been responsible for the loss of more than 50 million ash trees in the United States and Canada since its accidental introduction into Michigan during the 1990s. The borer was discovered in eastern Minnesota and lowa by the mid to late 2000s and a little more than a year ago it was discovered in Colorado. The day the insect will be discovered in South Dakota is drawing near and when it does the impact will be severe.

While the aesthetic and economic impact of the loss of ash to this borer has been severe throughout this country, it will be particularly devastating when it reaches the Dakotas and Nebraska. It's not that we have lots of trees in comparison to other states, but the trees we have are ash.

The emerald ash borer infests ash trees, no other genera with the exception of a recent find in a fringe tree. Emerald ash borer attacks and kills the native and most commonly occurring ash on the Northern Plains; black ash (*Fraxinus nigra*), green ash (*F. pennsylvanica*) and white ash (*F. americana*) along with their many cultivars. There are no cultivars of any of these species that are tolerant to attacks by this insect. We will lose most of our ash, native and planted, once the insect invades our state. The loss will not be at once across the state, but it takes about 10 years from the time the insect is discovered in a community until when they have lost all their untreated ash.





effective There are treatments for managing emerald ash borer, but the costs are too high to protect all our ash, particularly those shelterbelts. in Decisions will need to be made on which trees to protect and which to remove. A further concern with emerald ash borer is that once infested trees die, they become very brittle and begin to fall very quickly and in unpredictable ways. Communities will not be able to just ignore this insect and its damage.

To assist communities, parks, and conservation districts in preparing for this pest, a one-day symposium on emerald ash borer and other exotic threats will be held on the campus of South Dakota State University Tuesday, March 10. The symposium, sponsored by South Dakota State University, the South Dakota Department of Agriculture and the South Dakota Arborist Association, will have presentations from researchers and practitioners who are working with this insect in adjacent states. The registration for the one-day symposium is \$40 and includes lunch. For more information on the workshop and to register, please go online to https://sdsuext-treethreats.eventbrite.com. Registration must be completed before March 3.

E-samples



I am receiving samples and pictures of "yellow" Scotch pine trees from throughout the southern half of the state. While pine wilt disease is found in southern South Dakota, a common theme to the reports on yellow trees is that they just noticed them turning yellow this winter. Also the needles are yellow but otherwise appear normal. Generally with pine wilt disease, the needles turn tan or yellow

during late summer or early fall, not midwinter. The needles of infected trees also often droop as if they are wilting.

Many Scotch pine have their needles turn yellow during the winter. This has long been a frustrating fact to Christmas tree growers who have to spray their Scotch pines with colorant to have green trees for the holiday. The samples that have come in are of branches that appear healthy; the needles are succulent as well as the twig. The only problem is the off-color needles. Unless there are other problems associated with the trees, e.g. dead needles on part of the tree or branches or dead branches, I suspect these trees will turn green again this spring.

Samples received/site visits

Davison County

I recently stopped by Mitchell to inspect some Colorado blue spruces that were planted last year. The trees were turning color from the normal blue-green to a yellow-brown, mostly the needles on the lower branches, and needles were already being shed. You can see by the "bottlebrush" appearance of the foliage that the trees were stressed this past year. Conifers, such as pine and spruce, have preformed growth. The



growing conditions of one year (when the buds form) determines the

Dying spruce



growth the following season. The buds were already programed to produce a certain number of needles on a shoot. When the tree was stressed by transplanting this past summer, the normal number of needles formed but their growth

was stunted by the lack of adequate moisture. What was the planting stress? The trees were planted too deep, an often fatal problem with spruce. I was able to pull some small branches out of the soil and after digging down through the burlap located the first woody root 6 to 8 inches below the soil surface. All trees, but especially trees such as spruce that demand well-drained sites, should be planted so the ground slopes away from the tree's base and the upper most root placed just beneath the surface.

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