

ORNAMENTALS

• H O T L I N E •

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Issue 4

INSECTS

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BARK BEETLES. Warmer days followed by cool days will help slow the activity of one of our early season pests, the bark beetle, *Xylosandrus germanus*. This beetle and the granulate ambrosia beetle, *Xylosandrus crassiusculus*, are two common spring borers that attack a variety of tree species. University of Maryland cooperative extension has caught *X. germanus* in their traps already this year. Their alcohol bolts did not show activity, which suggests they have not started attacking vulnerable trees yet. Vulnerable host trees should be scouted and considered for treatment once we have consecutive days of 70°F weather. Redbud, styrax and yellowwood are especially susceptible.

These small beetles attack weakened or stressed trees as well as apparently healthy trees. Attacked trees are usually in nursery settings; however, they will also attack landscape trees. Hosts for *X. germanus* include ash, beech, birch, dogwood, holly, linden, maple, pine and many others. Hosts for *X. crassiusculus* include: *Styrax*, redbud, dogwood, maple, plum, ornamental cherry, sweet gum, magnolia, azalea and many more. After several consecutive warm days, females fly to hosts and bore into twigs, branches or trunks of trees. While constructing the oviposition chamber, females inoculate the tree with a fungus which clogs xylem tissues and interferes with vascular functions. Visual evidence of beetles in trees include: toothpick-like frass projections sticking out from infested branches or trunks, small holes on infested branches, or areas of sap oozing/"weeping". Infested trees may die from the galleries, introduced fungus, or from pathogenic fungi such as *Fusarium* taking advantage of entry points caused by the tunneling. It takes 55 days to complete development from egg to adult.

(Continued)

DISEASES

Nancy Gregory
Plant Diagnostician

APPLE SCAB infection periods are currently open due to growth stages and rain events. Spores will be produced from old fruit and bud infections, and will infect newly expanding leaves of apple and crabapple. Fungicide sprays (ex. captan, myclobutanil, or thiophanate-methyl) are protectant and should be applied now if blooms are not open, and again after petal fall (do not spray when bees are active). Rotate chemistries to avoid resistance development in fungi.

FIRE BLIGHT infection occurs when apple and pear trees are in bloom, and wet weather promotes spread of the bacterium causing fire blight. Antibiotic sprays can be of some help in

(Continued)

What's Hot!

HERBICIDE INJURY on shrubs and landscape plants is common in the spring in wet weather when chemicals applied to lawns volatilize or are carried in rain water runoff. Diagnostic clues are symptoms of distortion on one side of a plant or on several types of plants in a landscape. Prune out the worst affected.

TWIG GALLS ON FORSYTHIA have been observed and can be pruned out now. The bumpy galls are produced by infection with the fungus *Phomopsis*, but a bacterium has also been implicated. Branches can eventually be weakened due to growths, so prune when weather is dry and clean pruners between cuts.

Bark beetle toothpick.
Photo credit: G. Keith
Douce, University of
Georgia, bugwood-org



X. germanus. Photo
credit: JR Baker, NC
State University,
bugwood-org



For more
information

on pests & practices covered in this
newsletter, call your County Extension Office

Helpful numbers to know:



Garden Line (for home gardeners only)	831-8862
New Castle County Extension	831-2506
Kent County Extension	730-4000
Sussex County Extension	856-7303

View more pictures at <http://extension.udel.edu/ornamentals/>

UNIVERSITY OF DELAWARE

COOPERATIVE EXTENSION

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Diseases (Continued)

management, but are expensive. Timing of antibiotic sprays is critical, and should be applied when trees are flowering and risk is high. Risk of bacterial infection is related to leaf wetness and temperature. Check out the video by Nicole Ward Gauthier from University of Kentucky Extension:

<https://www.youtube.com/watch?v=PdcDXNftoWg>. For long term management, resistant cultivars of apple are available, and cultural controls such as pruning well below infected areas when weather is dry are recommended.



Apple fire blight. Photo credit: N. Gregory

Insects (Continued)

- Monitor for beetle flight to manage these
- beetles. Traps with ethanol will attract
- even small populations. Traps within 0.5
- m (1.6 ft) of the ground catch the greatest
- number of beetles. Treat with bark sprays
- with permethrin or bifenthrin on the trunk
- or major branches of host plants every
- two weeks until full leaf flush. Focus
- management efforts on major or high
- value tree species and keep young infested
- trees for 50 days before removal. Mature
- trees with some activity can tolerate slight
- infestations from these beetles but should
- be treated to protect the tree and tree
- health encouraged.

Editor: Susan Barton
Extension Horticulturist



Gall on forsythia. Photo credit: N. Gregory