Cooperative Extension

ORNAMENTALS

• H O T L I N E •

April 12, 2019 Issue 3

INSECTS

Brian Kunkel
Ornamental IPM Specialist

BEETLES. A variety of incidental insects can be found flying around lights on warmer nights. One of our early season pests, the bark beetle, *Xylosandrus germanus* has been caught in ethanol traps in Maryland. This beetle and the granulate ambrosia beetle, *Xylosandrus crassiusculus*, are two common borers we have in the spring that attack a variety of trees.

These small beetles attack weakened or stressed trees as well as apparently healthy trees. Trees attacked are often in nursery settings; however, they will also attack trees in the landscape. 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 a few consecutive warm days, females fly to hosts and bore into twigs, branches or trunks. As females construct the oviposition chamber, they inoculate the tree with a fungus that 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. Research has found it takes 55 days to complete development from egg to adult.

Monitoring for beetle flight is an important tool for managing these beetles. Research has found ethanol to be the most attractive compound for these two species; therefore, 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. Treatment options include 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 infested trees for 50 days before removal.

DISEASES

Nancy Gregory
Plant Diagnostician

FUNGI AND SLIME MOLDS IN MULCH - Landscape mulch usually consists of hardwood shreds or bark chips, providing cover to hold moisture and add a finished look. Wood in mulch also provides a food source for fungi that are natural decomposers, breaking down plant material and utilizing organic matter. Without fungi, dead leaves, twigs and branches would clutter forests and landscapes. We see fungal fruiting bodies after growth

(Continued)

What's Hot!

Spring weather has been more typical this year than the previous several years.

▪

Keep a lookout for the galls of cedar apple rust and other *Gymnosporangium* species on junipers. Prune out to reduce spores of these fungi that infect apple and crabapple.

X. germanus. Photo credit: J.R. Baker and S.B. Banbara, NC State University - bugwood.org

Sporulating gall of cedar apple rust fungus on juniper in the spring. Photo credit: N. Gregory

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/

Diseases (Continued)

of threadlike mycelium in soil and mulch. The most recognizable of these spore producing bodies are mushrooms, but sometimes they produce other structures, such as slime molds, stink horns, bird's nest fungi, and artillery fungus. Most of these are harmless, providing decay of excess organic matter. Addition of fresh mulch yearly and raking to break up surface growth can prevent these fungi from sporulating. Artillery fungus can leave unsightly spots from spores deposited on siding, walls and cars. Use of pine bark or nuggets rather than hardwood reduces growth of artillery fungus. Leaf mulch is also available, decomposing more quickly than bark mulch, usually not supporting artillery fungus, and improving soil health. For more information, see the UD fact sheet: http://extension.udel.edu/factsheets/artillery-fungus-and-other-things-that-grow-in-mulch/

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

Editor: Susan Barton
Extension Horticulturist

GROWING DEGREE DAYS

AS OF April 9, 2019

- Swarthmore College (Delaware County, PA) = 76 ('18 = 20)
- Fischer Greenhouse (New Castle County) = 77 ('18 = 22)
- Research & Educ. Center, Georgetown (Sussex County) = 108 ('18 = 34)

Telia of cedar quince rust on juniper. Photo credit: N. Gregory

Bird's nest fungus in mulch. Photo credit: N. Gregory