

Black twig borers active in local trees

Q. The ends of small branches have turned brown in some of my trees. What's causing this?

A. More than likely this is the results of the Black Twig Borer. This very small beetle, about 1/16 inch long, has been active this year.

We're receiving many questions from the public on this beetle. It's an interesting insect with a wide host range. Trees attacked include cedar, golden rain tree, maple, redbud, sweetgum, loquat, dogwood, Shumard oak, Chinese elm, magnolia, Bradford pear and pecan. The beetle is not limited to these trees. And it may attack woody shrubs, grapevines, etc.

This beetle only damages branches that are approximately pencil size in diameter. These small branches die above the point of entrance with the leaves turning brown, creating a flagging effect of numerous dead branches scattered throughout the outer canopy of the tree. These dead twigs with their brown leaves are what bring attention to the infested trees.

Bending an infested twig downward will result in it snapping or breaking at the entrance/exit hole. Carefully putting the twig back together may allow you to see the hole. The hole is usually on the underside of the branch and will be very small, about the size of pencil lead in diameter. Sometimes you may see the minute, shiny black beetle and/or the white brood inside the tiny hollowed out area of the twig at the point where it snapped.

The black twig borer, *Xylosandrus compactus*, is one of the few ambrosia beetles that will attack healthy trees. However, a couple years of drought followed by periods of heavy rainfall this year stressed many of our tree and plant species making them more susceptible to insect damage and disease.

Female beetles bore into small branches or twigs of woody plants, excavate tunnels in the wood or pith and produce a brood. Damage occurs when the beetle introduces ambrosia fungi on which the larvae feed. The beetles emerge in late February, attack twigs in March and brood production begins in April. Highest population levels occur from June to September. Adults spend the winter in damaged twigs and branches. So it's important to pickup and dispose of the small branches as they fall.

Where practical, the best control is to prune tree limbs 3-4 inches below the infested area, then remove and destroy the limbs. Proper mulching, avoiding overfertilization and irrigating during dry weather should improve tree health, allowing trees to better withstand attacks. Chemical controls are usually not practical or effective.

Additional information on this beetle is available though the UF/IFAS County Extension Office, your County Forester or online at http://creatures.ifas.ufl.edu/trees/black_twig_borer.htm.

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