

Friday's Feature

By

Theresa Friday

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Black twig beetle bores into local trees

The warmer weather and frequent rains along the Gulf Coast has stimulated lush, green growth in the landscape. So, when you notice a dead branch in a tree, you have to wonder what's going on. Dead twigs and branches can be caused by several things including mechanical breakage by high winds. Recently, however, we've seen several trees affected by a common beetle.

Black twig borer beetles are very small, about a sixteenth of an inch long and one of the few ambrosia-type beetles to attack healthy plants. Adult beetles overwinter in infested tree twigs and branches. They emerge during late February and re-enter new twigs in March. By April they are hollowing out the insides of these twigs, developing galleries to lay eggs. They also introduce a fungus into the burrow that produces a white fungal "ambrosia" on which their immature grubs feed. The physical damage and the fungus cause the infested twigs to die back to the point of entry.

The black twig borer is native to Asia. It was first collected in the United States at Ft Lauderdale, Florida in 1941. By the mid 1970s, its range extended northward to Tallahassee and Savannah, Georgia. The present distribution in the Southeast is along the Coastal Plain from Texas to North Carolina.

While its most common host plant is the dogwood, the black twig borer beetle will attack up to 224 different tree and shrub species. Known Florida hosts include red maple, pecan, redbud, sweetgum, Magnolia, willows and blackgum.

The first sign of an infestation is the wilting of small twigs and branches. This beetle only damages branches that are approximately pencil size in diameter. These small branches eventually die above the point of entry 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.



Numerous dead branches scattered throughout the canopy of the tree may indicate a black twig borer infestation

Photo credit: Theresa Friday



Bending the branch at the entry hole will cause the twig to break, sometimes revealing the black beetle

Photo credit: Theresa Friday



The entry hole will be perfectly round and on the underneath side of the twig.

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If you notice these symptoms, look on the underneath side of the affected twig or branch. Look for a perfectly round hole about the size of pencil lead in diameter. Bending the infested twig at the entry hole will result in it snapping and breaking. 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.

Where practical, the best control is to prune tree limbs three to four inches below the infested area, then remove and destroy the limbs.

While this insect may cause lots of twigs or branch tips to die, it is not considered a major pest in landscape trees and shrubs. Many trees have lived with an infestation for years. Proper mulching, avoiding overfertilization and irrigating during dry weather should improve tree health, allowing trees to better withstand attacks.

For more information, call your local Extension Office or view an online University of Florida publication at <http://edis.ifas.ufl.edu/IN577>.

Theresa Friday is the Environmental Horticulture Extension Agent for Santa Rosa County. The use of trade names, if used in this article, is solely for the purpose of providing specific information. It is not a guarantee, warranty, or endorsement of the product name(s) and does not signify that they are approved to the exclusion of others.

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