

Ambrosia Beetles

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Bark beetles are generally small, reddish brown to nearly black, cylindrical beetles that are about 3-5 mm long (Figure 1), and excavate tunnels (called “galleries”) inside of stems and trunks of trees. Ambrosia beetles are a specialized group of bark beetles that differ from other bark beetles by boring through the bark and into the sapwood (xylem tissue) rather than burrowing just below the bark surface (phloem and cambial tissues). Also, ambrosia beetles do not actually feed on the tree, but live in symbiosis with fungi they cultivate on the walls of their galleries. Most ambrosia beetles infest stressed trees, or trees that have been recently injured, but a few exotic species are able to infest healthy trees.

Damage

Toothpick-like strands of sawdust protruding from tree trunks and branches is indicative of an ambrosia beetle infestation (Figure 2). These toothpicks are composed of sawdust pushed out of the tree by females burrowing into the wood. Sawdust can also accumulate at the base of an infested tree. Plant symptoms include branch dieback and sap or resin flowing from wounds.

Management

Healthy trees can typically resist infestation using their own defensive mechanisms. It can be challenging for these beetles to infest a healthy host and infestation is usually a result of a stressed tree that is attacked simultaneously and en masse. Unfortunately, ambrosia beetles are difficult to control once a tree is infested and prolonged infestations will kill the trees. Therefore, maintaining tree health and vitality through proper irrigation, mulching, soil management, and pruning is a critical first line of defense. There are no biological agents that help manage ambrosia beetles, but there are highly effective preventative treatments available. Please contact your Bartlett Arborist Representative to learn about a program for maintaining tree health and management options for infestations.

Figure 1: Adult ambrosia beetle



Figure 2: “Toothpicks” are a sign of an ambrosia beetle infestation

