



## Ambrosia Beetles in Urban Trees

There are many species of ambrosia beetles in Georgia. Some have been in Georgia for more than 50 years and some are new introductions, but none are native. Ambrosia beetles are major wood-boring pests that usually attack hardwoods and ornamental trees during times of drought, storm damage and construction damage. There is also a species of beetle that infests southern pines (*Platypus flavicornis*), usually after an attack by one of the five species of pine beetles or following a lightning strike.

Ambrosia beetles bore through the bark and into the sapwood and heartwood of trees, tunneling out galleries and depositing fungi along the way. The mature beetles and larvae feed on this fungus, generally referred to as ambrosia, which is the main source of food for the beetle. Ambrosia beetles do not eat woody tissue, but rather use the tunnels as nests for future generations. The fungus they feed on multiplies in the moist environment of the tree's sapwood and plugs the nutrient-conducting tissue of the tree. The tree begins to wilt and then dies. This process may take months in a large tree or just weeks in smaller landscape trees.



Signs of a beetle attack can vary. They include fine powdery sawdust piled at the base of the tree, sawdust in the grooves of the bark, and telltale “toothpicks” of wood frass pushed from the pinhead-sized bore holes drilled by active beetles. Once the beetles have heavily attacked the tree, it is likely the tree will die. Following discovery of recent infestation in a tree or nearby plant material, the best treatment is to spray the bark of high value trees with a recommended pesticide such as permethrin or bifenthrin (follow label recommendations).

Infested material from dead trees should be burned or removed to a landfill that manages woody debris. Ambrosia beetles usually fail to successfully infest dried downed wood or firewood because the water content is too low to support their needs.

*Image source: University of Georgia*