

PINE BARK BEETLE



WHAT IS THE THREAT:

Several species of bark beetle (*Dendroctonus*) including Southern Pine Beetle, Black Turpentine Beetle, Mountain Pine beetle, Western Pine Beetle and Ips Engraver Beetles are known to attack and kill pines. These beetles bore into the tree's cambium in large groups and disrupt nutrient and water movement, thus killing the tree. Several of these species also introduce a fungus, known as blue stain, which may kill a tree by clogging its vascular system.

WHERE IS THE THREAT:

Some bark beetles occur nationwide, while the Mountain and Western Pine Beetles appear west of the Rocky Mountains. The Southern Pine Beetle originated in the southeastern United States, but is now found as far north as New York and as far west as Texas.

SYMPTOMS:

Most of these beetles will attack both stressed and healthy pines, nutrient deficiency, and/or excess moisture. Cream to red colored pitch tubes will be present in the lower bole of the tree. Crowns of individually attacked trees will fade from green to yellow to red, followed by tree death over several weeks. Most of these beetles carry a fungus that serves as a food base for young larvae. The introduced fungus then adds to inhibited water transport ability and hastens tree mortality.

WHAT TO DO ABOUT IT:

A trunk injection of TREE-äge® or TREE-äge® G4 will provide up to two years of protection from bark beetle damage. Preventive treatment is best, as trees with existing beetle infestations are unlikely to survive. In areas where beetles carry the blue stain fungus, it is recommended that a systemic fungicide such as Propizol® be added as a sequential treatment to eliminate additional stress from the fungus.



Mountain pine beetle larva



Mountain pine beetle damage



Southern pine beetle galleries

Header Image taken by: Ron Long, Simon Fraser University, Bugwood.org, Mountain Pine Beetle Larva taken by: William M. Ciesla, Forest Health Management International, Bugwood.org Mountain Pine Beetle damage taken by: Dave Powell, USDA Forest Service (retired), Bugwood.org, Southern pine beetle gallerie taken by: Roger Anderson, Duke University, Bugwood.org

TREE-äge® Insecticide is a Restricted Use Pesticide and must only be sold to and used by a state certified applicator or by persons under their direct supervision.