

# IPS Pine Bark Beetles

## TREE DOCTOR TIPS

### IPS Pine Bark Beetles

#### DESCRIPTION:

Several species of IPS bark beetles (also called engraver beetles) primarily attack both pine and spruce trees. Adults are about the size of a dull pencil point and vary in color from brown to black.

#### HOSTS:

These beetles are classified as borers. Both adults and larvae tunnel into (or engrave) the vascular tissue (phloem) that carries nutrients just under the bark. All stressed trees are vulnerable to attack and should be examined for signs of beetle activity.

#### BIOLOGY AND SYMPTOMS:

Male beetles tunnel into the bark phloem and release biochemical substances called aggregation pheromones to attract females. Eggs are deposited, and both larvae and adults destroy vascular tissue.

Normally, the beetles are not a problem in healthy trees that have a strong sap or resin flow that interferes with their tunneling attempts. However, beetles can gain a foothold in trees weakened by drought, construction damage, lightning or soil disturbances.

Evergreens may not show symptoms of attack, such as dull or faded foliage, drooping needles, or needle drop, until it is too late. Sawdust coming from various points on the trunk is a sure indication of beetle activity.

These beetles can destroy a tree in a few months, depending on the severity of the stress or the number of beetles. Vigorous trees in the vicinity of intense beetle activity may die from repeated attacks.

#### MANAGEMENT:

Prevention is key. Water, fertilize and mulch to keep trees at maximum vigor. If possible, remove weakened or infested trees to minimize bark beetles and other borer populations. If the beetles still threaten, apply an appropriate pesticide. Pine engravers have 3 generations per year and stay active all season. Numerous borer species are also a threat, so season-long protection is needed until the trees weather the stressful conditions and regain their vigor.



A



B

FIGURE A. IPS BARK BEETLE ON WOOD

FIGURE B. DESTRUCTION TO A TREE TRUNK BY IPS

*The scientists at **The Davey Institute** laboratory and research facility support our arborists and technicians in diagnosing and prescribing based on the latest arboricultural science. For specific treatment and application details, your arborist may consult *The Davey Institute PHC Handbook*.*

