

Ips Beetles
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Are the top of your trees dying? Check for Ips beetles, sometimes known as "engraver beetles," these bark beetles damage pine and spruce trees. They develop under the bark and produce girdling tunnels that can cause dieback and kill trees. There are eleven species of Ips beetles in this region. Ips beetles are not considered as destructive or aggressive as mountain pine beetles; however, under certain conditions population build-ups of Ips beetles are a threat to living trees.

Ips beetles are small (1/8 to 3/8 inch long), reddish-brown to black beetles. As adult Ips beetles enter trees and tunnel, a yellowish- or reddish-brown boring dust is produced and accumulates in bark crevices or around the base of the tree. When the larval tunnel, affected parts of the tree discolor ("fade") and die. These symptoms may be limited to parts of the tree, such as a single branch or the top. However, unlike mountain pine beetle, infestation by Ips beetles does not necessarily mean the whole tree will die.

Small round holes in the bark of infested trees indicate the beetles have completed development in that part of the tree and the adults have exited. Woodpeckers are common predators of Ips beetles. Woodpeckers often remove the tree bark in an effort to obtain this food source. Adults overwinter under the bark or in surrounding litter at the tree base. They begin to attack weakened trees in the spring. The young larvae are small grubs, about 1/4 inch long when mature, white to dirty gray, legless, with dark heads. There can be two to four generations of these beetles develop per year.

To prevent Ips beetle attacks, use practices that promote vigorous tree growth, such as providing adequate water. Freshly cut material that results from pruning or thinning practices should be removed from the vicinity of valuable trees. Ips larvae will not survive standard chipping or debarking treatments.

Insecticides are used as drenching preventive sprays on the trunks and branches. These insecticides need to be applied prior to adult beetle infestation. (Remember that overwintering beetles begin emerging in spring as soon as daytime temperatures consistently reach 50 F to 60 F.) However, timing can be difficult to determine since Ips beetles can have multiple, overlapping generations and life cycles. Because of this extended activity, two treatments (early spring and summer) may be needed to protect trees during high-risk conditions.

Insecticides used to prevent Ips include either permethrin, bifenthrin, or carbaryl (Sevin) as the active ingredient. There are many products currently on the market containing these active ingredients. Follow the manufacturer's recommendation for the proper rate for bark beetle treatment. Bark beetle applications at the labeled rate should provide at least three months control of Ips beetles. I also recommend using the "Bayer advanced tree and shrub insect control" product, in addition to one of the above-mentioned products, also as it is labeled for several borers and other insects, which can stress the trees.

No chemical treatment exists for trees already infested by Ips beetles. This spring be on the lookout for beetle damage in pines and spruces, and a precautionary spraying maybe warranted, especially on the trees that are most valuable in your landscaping. Infested parts of trees should be removed and disposed away from other evergreens.

Adapted from Fact sheet 5.558 W. Cranshaw, Colorado State University Extension entomologist and professor, bioagricultural sciences and pest management; and D.A. Leatherman, Colorado State Forest Service entomologist (Retired).

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