



IPS Engraver Beetles

While driving around the state, or on your drive to work or school, have you noticed the needles on a single pine tree or a small group of pine trees fading from a dark green to a lighter green, then to yellow, red and finally brown? There is a good chance that the *Ips* engraver beetle has attacked these trees.

The *Ips* engraver beetles kill more pine timber in the South than any other forest insect, with the exception of the southern pine beetle. *Ips* engraver beetles usually attack injured, dying, or recently felled trees and fresh logging debris. Beetle populations will increase when pine trees are weakened due to weather conditions such as tornadoes, hurricane, ice, hail-damaged and drought. Infestations are particularly common in trees weakened by drought or lightning strikes. Drought conditions, such as those of this last year and stress from Hurricane Katrina winds have cause the *Ips* engraver beetle populations to increase dramatically in Mississippi.

There are three species of *Ips* engraver beetles (four-spined engraver, five-spined engraver, and six-spined engraver) in Mississippi, and all three can be found within the same infested tree. The *Ips* engraver beetle ranges in size from $\frac{1}{8}$ to $\frac{1}{4}$ of an inch and is reddish brown in color. The

smaller species tend to be found higher in the tree on small limbs and branches, while the large species is found on larger branches and the trunk of the tree.

Signs of an *Ips* engraver beetle attack are "pitch tubes" or a slight accumulation of reddish to whitish sawdust at the base of the tree, caught in nearby spider webs and/or understory foliage. Pitch tubes are red to white masses of sap that accumulate at the point of entry by the beetle. These pitch tubes may or may not be present, especially if the crown of the tree is attacked. Pitch tubes are usually missing if the trees are extremely stressed or if large numbers of beetles attack the trees.

If the *Ips* engraver beetle attack is due to stressed conditions, such as what has followed Hurricane Katrina, the occurrence of rainy periods will generally end the attack. Once an infestation is documented, it is practically impossible to control with chemical applications. The best approach, therefore, is to follow a sound management plan to prevent infestation from occurring. In a forest situation, monitor *Ips* engraver beetle infestations in pine pulpwood stands and salvage only if economically justified. In the urban environment, infested trees should be removed as soon

as possible. Since *Ips* engraver beetles are capable of attacking trees from the top to bottom, insecticides are ineffective unless the entire length of the tree is sprayed. This is not recommended in the urban setting due to the possibility of pesticide contaminations to birdbaths, feeders, swimming pools and people.

For additional information, check out these articles:

- Mississippi State University – [Ips Engraver Beetles](#) or [Pest of the Home & Home Landscape – Ips Beetle](#)
- U. S. Forest Service - [Ips Engraver Beetles](#)
- Forest Health.Org – [Ips Engraver Beetles](#)
- Texas Forest Service for some pictures of [Ips Engraver Beetles](#)