



TEXAS A&M FOREST SERVICE

Forest Health: Bagworms

Cedar and arborvitae are the most affected species by bagworms. However, pine and hardwood are occasionally affected. Although bagworms are not considered a major forest pest, large populations can build up in stands of eastern red cedar and related trees. Under normal conditions, attacks in natural stands are limited to single tree.

Identification:

The adult male moth has a wingspan of about one-inch and his wings are almost transparent. The body is slender, black and hairy, and the antennae are broadly feathered. The adult female is wingless, legless and yellow-white in color. The larvae (caterpillars) are about one-inch long when fully-grown, and dark brown with a yellowish head and thorax covered with black spots. Pupae are brownish and enclosed in the bag. Eggs are small, white and laid in the bag.

Signs of Attack:

The most noticeable sign of attack is a bag or case composed of silk, twigs, and other debris. When infestations are heavy, the host may be partially or completely defoliated. The case (bag) of a mature larvae may be as long as two inches.

Life Cycle:

Male moths emerge and fly to the female bags to mate during late summer or early fall. Each female deposits 800 to 1,000 eggs in the bag and then she dies. Eggs remain in the bag over winter. In late spring, eggs hatch and each larva immediately makes a small case in which it lives throughout its larval life. As a larva grows, it enlarges its case to accommodate its increasing size. In order to feed or move about, the larva must partially emerge from its bag so its

head and thoracic legs are exposed. Pupation occurs within the bag during late summer and male and female moths emerge about three weeks later. Most bagworms have one generation per year in Texas.

Control:

Predators, parasites, and other natural control factors usually prevent build up of large populations. Forest control: Chemical control not recommended. Shade tree control: Hand picking and burning cases may be the easiest control method, particularly when only a few infested trees are involved. When pulled out of their bags, larvae make excellent fish bait. Residential trees may become heavily infested and require insecticide applications. Spray foliage with a 0.5% malathion solution (mix 2 tablespoons of 57% malathion EC per gallon of water according to label directions and state law).

