

## **BAGWORMS**

June is the month to scout out and remove those pesky bagworms that appear on our evergreens. Look for small (~1/4 inch) cocoons decorated with organic material from the host tree. These bags protect the caterpillar or larvae, pupae, female adults and eggs throughout the year. The designer bags almost look like they have ornaments attached with silk-like threads. A happy home to lady bag worms!

The first evidence of an infestation appears in late May or June in Oklahoma on our arborvitae, juniper, pine, spruce and red cedars. A heavy infestation can defoliate and kill small plants. Breaking the annual cycle is critical for the health of our evergreens. Once a plant is infected, the bagworm becomes a persistent problem unless controlled.

### **Life Cycle**

Although the small bags appear in June, the life cycle begins the previous fall when eggs are laid and overwintered within bags of one-year-old females. The eggs hatch in April and the young larvae begin to feed and construct their personal summer palaces, which they carry on their backs.

Bagworm caterpillars feed for about 6 weeks, enlarging the bag as they grow and withdrawing into it when disturbed. When the larvae are mature, they fasten the bag to a plant stem or branch with a silk-like thread. Pupation occurs in the bag in late summer and, in fall, the males emerge and start their search for wingless females who are immobilized in their bags. After mating, the females lay hundreds of white eggs. The female then evacuates the bag and dies. The eggs remain in the bag until they hatch the following June. Fortunately, these bag decorators only produce one generation per year.

The adult males are small, clear winged moths with a black hairy body and a wingspan of about one inch. Adult females are wingless, have no functional legs, eyes or antennae and are similar to maggots in appearance. The ladies stay in their bags while the males can fly.

Bagworms are found in most states east of the Rocky Mountains and are common to all areas of Oklahoma. Occasionally, bagworms are found on bald cypress, maple, box elder, sycamore, willow, black locust, and oaks. Fortunately, activity by natural enemies such as wasps, birds and predatory insects help curb bagworm populations and explain the fluctuation from year to year.

### **Controls**

Small infestations can be reduced by handpicking the bags anytime of the year. Just be sure to burn or destroy the bags and their viable eggs.

Chemical controls are a more complete approach and effective if applied when larva are small in June in Oklahoma. Bt (*Bacillus thuringiensis*) kurstaki is a bacterial insecticide reported to provide good control of bagworms. Also effective are products that contain the active ingredient spinosad, another microbial agent. Be sure to read the label and follow the instructions on any kind of pesticide.

Insecticides must be ingested by the caterpillars or larvae to achieve kill, so be patient as it will take some time to see results. Repeat application two weeks following initial application may be needed because not all eggs hatch at the same time or there may be migration (wind dispersal of small larvae during June) from other host trees.

So remember - after selecting your new spring sun hat and gardening duds, search for those designer bags on your evergreens. Good luck and happy hunting!