



Bagworms

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Revised April 2025



A close-up of a bagworm

Hosts

Bagworms feed on a variety of deciduous and evergreen plants, including arborvitae, juniper, spruce, pine, maples, sycamores and numerous others. Evergreen trees and shrubs cannot recover from complete defoliation, whereas deciduous trees usually develop new leaves following defoliation.

Identification

Early infestations of bagworms are detected by closely examining foliage for small upright bags clinging to leaves or needles. These small bags are the 'dunce-cap' stage of the pest. Bagworms found later in the summer are 1—2 inches long, hang down and are easier to detect. In late summer, they are often found on branches that are turning brown or losing foliage due to their feeding.

Biology

Bagworms overwinter as eggs inside old bags. Eggs hatch in late spring (about June 1 in Delaware), and the young larvae crawl about the bush or tree, spinning long threads of silk on which they drop to other parts of the plant. As they hang suspended on

the silk threads, the wind carries some of them to other trees.

Soon after emerging, each tiny larval caterpillar begins spinning a bag around itself, leaving an opening at the head end for crawling around and feeding. As they feed, they attach small pieces of leaves or needles to their bags; as they increase in size, they add more pieces. Bags on different hosts may differ somewhat.



Bagworms infested in a Green Emerald tree. Photo by Jackie Czachorowski

Bagworms finish feeding by late August and change inside the bags to the pupa stage. During September and early October, males leave the cases and fly to bags containing females, where mating takes place; the females remain in the bags. Females produce between 500 and 1,000 eggs, which remain in their bodies after they die.

Control

Hand-picking the bags from infested plants during the spring, fall and winter and destroying the cases is a simple way of reducing bagworm numbers. In late fall, you can put the bags in jars with coarse screening to allow any parasitoids in the bags to emerge and escape. These natural biological control organisms will help in control of future bagworm populations.

When bagworms are too numerous to hand-pick, an insecticide may be applied. Products available for control may vary according to time of year or applicator, so please contact the nearest cooperative extension agent for recommendations.

Insecticides

Please contact your local Cooperative Extension office for insecticide options.

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