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### NF96-264 Bagworms

Frederick P. Baxendale

*University of Nebraska--Lincoln*, fbaxendale1@unl.edu

David L. Keith

*University of Nebraska--Lincoln*, dkeith1@unl.edu

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## Bagworms

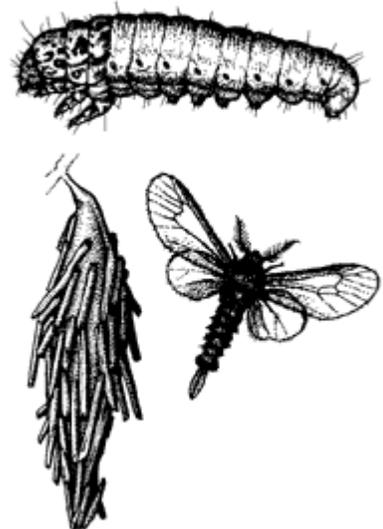
*Frederick P. Baxendale, Extension Specialists-Entomology*  
*David L. Keith, Extension Specialists-Entomology*

The bagworm is native to the United States and is found in eastern Nebraska. Bagworms feed on the foliage of a wide variety of trees and shrubs, but are of the most concern on evergreens, especially juniper.

### Description and Life History

Bagworms overwinter as eggs within bags fastened to twigs. Eggs hatch in late May and early June. Almost immediately after hatching, caterpillars begin to spin tiny (1/4 inch) protective cases or "bags" around themselves. The bags are constructed of silk and needle fragments or leaves. As the bagworm grows, leaf fragments are added to bags which often grow to 2 inches in length by the end of the summer. Larvae feed until late August or early September. Males emerge in September, usually leaving their pupal case extending from the bag, and mate with the wingless females through the bag entrance. Female moths deposit their eggs then die, never leaving the bag. Each female can produce 500 to 1000 eggs. Adult males are small, grey moths with clear wings. Approximately half the bags on a host plant will contain female bagworms, while the other half contain males.

**Bagworm caterpillar (top),  
adult male bagworm (right),  
and bagworms in bag.**



### Damage Symptoms

Bagworms feed on most coniferous plants and on many deciduous trees and shrubs. Common evergreen hosts include juniper, arborvitae, pine and spruce. Heavy infestations are capable of completely defoliating a tree or shrub, which may be severely stressed or even killed if control measures are not taken. Less severe injury will slow growth and stunt plants. Bagworms are especially damaging to conifers because destroyed foliage is not regenerated. Bagworms also feed on deciduous shade, orchard, and forest trees, as well as many ornamental shrubs, but heavy infestations are unusual. Further,

since deciduous plants can grow new leaves, damage is usually not serious. The growth of small or newly planted trees, however, can be slowed by bagworm feeding.

## **Management Strategies**

Bagworm infestations on smaller trees and shrubs can be controlled by removing bags during the winter and spring before the eggs begin to hatch in late May. Destroy bags by crushing or immersing in soapy water. If bags containing larvae are discarded on the ground, the larvae may return to host plants.

### ***Insecticidal Control***

Insecticides are effective if applied during the early stages of bagworm development. For most effective control and prevention of early season damage, apply sprays from mid- to late-June. Options for bagworm control on ornamental plants include: acephate (Orthene), *Bacillus thuringiensis* (Dipel, MVP, Steward), carbaryl (Sevin), chlorpyrifos (Dursban), diazinon, dimethoate (Cygon) and malathion. **Note:** Do not apply acephate (Orthene) to elm, crabapple, maple, cotton-wood, redbud or weigelia. Do not apply malathion to Canaerti juniper.

**Caution:** Use all insecticides with caution to avoid exposure to humans, pets, wildlife and other non-target organisms. Always read, understand, and follow label directions. Store all pesticides out of reach of children in original labeled containers.

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