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**May 19, 2023 No. 5**

Bagworms...Get Ready!  
Army Cutworm Moths

## Bagworms...Get Ready!

We are getting close to the time when the 1/8 to 1/4 of an inch bag of the bagworm, *Thyridopteryx ephemeraeformis*, will be present on broadleaf and evergreen trees and shrubs. Consequently, be ready to “take action” against bagworms once they are observed on plants. Bagworm caterpillars (larvae) feed conifers; however, they also feed on a wide-range of plants including many broadleaf plants, such as: elm, flowering plum, hackberry, honey locust, linden, maple, oak, rose, sycamore, and wild cherry. Apply insecticides when bagworms are 1/4 of an inch long or less (Figure 1) to maximize effectiveness of insecticide applications and reduce plant damage.

There are several insecticides labeled for use against bagworms; however, the insecticides recommended to manage bagworm populations early in the season are *Bacillus thuringiensis* subsp. *kurstaki* and spinosad. These active ingredients are commercially available and sold under various trade names. The bacterium, *Bacillus thuringiensis*

subsp. *kurstaki*, is only active on young bagworm caterpillars and must be consumed or ingested to kill bagworm caterpillars. Therefore, thorough coverage of all plant parts and frequent applications are required. The insecticide is sensitive to ultra-violet light degradation and rainfall, which reduces residual activity (persistence). Spinosad is the



Figure 1. Young Bagworm Caterpillar (Larva) Feeding On Plant Foliage (Raymond Cloyd, KSU)

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active ingredient in several homeowner products, including Captain Jack's DeadBug Brew and Monterey Garden Insect Spray. Spinosad works through contact and ingestion; however, spinosad is most effective when ingested by young bagworm caterpillars. The key to managing bagworms with these insecticides is to apply early and frequently enough to kill the highly susceptible young caterpillars feeding on plant foliage. Applying insecticides weekly for three to four weeks when bagworms are first noticed will reduce problems later in the year.

Bagworms commonly start feeding on the tops of trees and shrubs. Therefore, thorough coverage of all plant parts and frequent applications are important in managing bagworm populations. The reason multiple applications are required is that bagworm caterpillars do not emerge (eclose) from eggs simultaneously but emerge over time depending on temperature. In addition, young bagworms can be 'blown in' (called 'ballooning') from neighboring plants on silken threads. If left unchecked, bagworms can cause substantial plant damage, thus ruining the aesthetic quality of plants. In addition, bagworms can kill plants (especially newly transplanted small evergreens), because evergreens usually do not produce another flush of growth after being fed upon or defoliated by bagworms.

If you have any questions on how to manage bagworms in your garden or landscape, contact your county horticultural agent, or university-based or state extension entomologist. You can also access and read the following extension publication on bagworms:

Cloyd, R. A. 2019. Bagworm: insect pest of trees and shrubs. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Kansas State University; Manhattan, KS. MF3474. 4 pgs.

<http://www.bookstore.ksre.ksu.edu/pubs/MF3474.pdf>

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**Raymond Cloyd – Horticultural Entomology**

HOME

## Army Cutworm Moths

We have received several inquiries from areas throughout Kansas associated with massive numbers of moths flying around outdoors and entering homes. These are army cutworm, *Euxoa auxillaris*, adults. The army cutworm adults have dark, gray-brown forewings with distinct markings, including a kidney bean-shaped marking on the upper part of the forewings (Figure 1). Adult females lay eggs in the fall with caterpillars emerging (eclosing) from eggs from fall through winter. The caterpillars (larvae) feed on alfalfa and wheat. Army cutworms overwinter as larvae in the soil. Adults emerge (eclose) from pupae located in the soil in May. Outbreaks of army cutworm can occur every 10 to 15 years. There is one generation per year in Kansas.

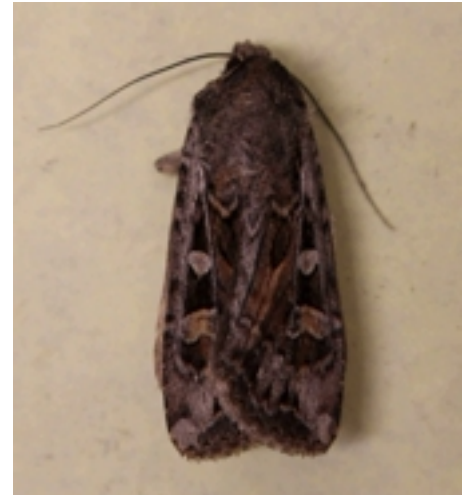


Figure 1. Adult army cutworm moth (Raymond Cloyd, KSU)

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Raymond Cloyd – Horticultural Entomology

HOME

**Sincerely,**

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Department of Entomology

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