

** This story from K-State Research and Extension is available online at <u>https://ksre-learn.com/scout-for-bagworms</u>

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Now is the time to scout for bagworms

Experts say that insecticides may need to be applied for up to five weeks

K-State Research and Extension news service

MANHATTAN, Kan. – State forestry and horticulture experts are urging patience and persistence when trying to manage bagworms, noting that caterpillars may emerge from eggs from late spring through early summer, depending on weather conditions.

Shad Hufnagel, forest health coordinator with the Kansas Forest Service, and Raymond Cloyd, extension specialist in horticultural entomology with K-State Research and Extension, advise that homeowners scout for bagworms from early- to mid-May and apply insecticides when young bagworms are present.

Once bagworms are detected, they said, homeowners might need to treat with an insecticide weekly for up to four weeks.

Cloyd said that in addition to emergence over time, young bagworms can 'blow in' - called 'ballooning' - from neighboring plants on silken threads, thus increasing the importance of treating multiple times during the growing season.

"Once the caterpillars emerge from eggs, they begin feeding on the host tree or shrub, creating a protective bag, hence the common name," Cloyd said. "The plant material fed upon is used to build a protective covering that provides protection from predators and insecticide treatments, which can influence the effectiveness of insecticide applications."

Hufnagel added: "The larger and more robust the caterpillars and their cases become, the more difficult they are to control chemically."

Bagworm feeding is commonly associated with such conifers as juniper, arborvitae, pine, and spruce, but Hufnagel said the caterpillars also feed on numerous deciduous host plants. Although defoliation of deciduous trees and shrubs typically does not result in long-term plant damage, extreme defoliation of conifers can cause significant plant stress and even plant mortality.

He said insecticides can be effective in mitigating damage to trees and shrubs. However, bagworm infestations are often cyclical; consequently, bagworm infestations may be low enough that spraying an insecticide may not be needed.

For increased effectiveness and to prevent bagworms from causing substantial plant damage, Hufnagel advises judicious treatment of windbreaks, Christmas trees, and ornamental landscape trees as soon as bagworms are present.

"Thorough coverage is important when treating for bagworms, including penetration into the interior plant canopy and upper branches," he said. "Commercial treatments may be more effective for large trees or established windbreaks where applications from common household sprayers cannot reach the upper canopy of trees."

Many insecticides are labeled for bagworms, but timing of application and thorough coverage will ensure the effectiveness of insecticides in managing bagworms. When bagworm caterpillars are small (1/8 to 1/4 of an inch long), products containing *Bacillus thuringiensis* subspecies *kurstaki* (*Btk*) or spinosad as the active ingredient can be effective in managing bagworms.

Cloyd said the recommended insecticides have minimal direct impact on beneficial insects compared to broad-spectrum insecticides, which could lead to outbreaks of spider mites or scale insects that can cause damage to treated trees and shrubs.

If insecticides are not applied when bagworm caterpillars are 1/8 to 1/4 of an inch in length, then broad-spectrum insecticides -- including those containing malathion, acephate, or cyfluthrin as the active ingredients -- can be applied. Be sure to read the product label and follow directions.

Hand removing and destroying bagworm bags is an option for smaller infestations. For more information on controlling bagworms, reference the publication, <u>Bagworm: Insect Pest</u> <u>of Trees and Shrubs</u>, written by Cloyd.

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FOR PRINT PUBLICATIONS: Links used in this story

Bagworm: Insect Pest of Trees and Shrubs, https://bookstore.ksre.ksu.edu/pubs/MF3474.pdf

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