

Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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Bagworms Are Back!
Alfalfa Update
Soybean Update
Corn and Sorghum Update
Insect Diagnostic Laboratory Report

Bagworms Are Back!

It is the time of year you have all been waiting for, that is, dealing with that “infamous” of insect pests known as the bagworm (*Thyridopteryx ephemeraeformis*). Throughout Kansas, bagworm eggs have hatched and the young caterpillars (“munching machines”) are out-and-about feeding on both broadleaf and evergreen trees and shrubs. Bagworms were first considered a pest of conifers but over the years they have expanded their host range to include a number of broadleaf plants, including: rose, honeylocust, and flowering plum. So, what is the best way to deal with bagworm caterpillars and thus prevent them from causing damage? Hand-picking any small caterpillars (along with their accompanying bag) and placing them into a container of soapy water will kill them directly. This practice, if feasible, will quickly remove populations before they can cause substantial plant damage. I recommend that everyone should consider having a weekend “bagworm hand-picking party” with prizes awarded to those individuals that collect the most bags 😊. These “bagworm hand-picking parties” will be a way to enhance family quality time 😊.

For those less interested in hand-picking, there are a number of insecticides labeled for use against bagworms including those with the following active ingredients (trade name in parentheses): acephate (Orthene), *Bacillus thuringiensis* subsp. *kurstaki* (Dipel/Thuricide), cyfluthrin (Tempo), lambda-cyhalothrin (Scimitar), trichlorfon (Dylox), indoxacarb (Provaunt), chlorantraniliprole (Acelepryn), and spinosad (Conserve). Many of these active ingredients are commercially available and sold under different trade names or as generic products. However, several insecticides may not be directly available to homeowners.

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The key to dealing with bagworms when using insecticides is to apply early and frequently enough in order to kill the highly susceptible young caterpillars that are feeding aggressively on plant foliage (Figure 1).



Figure 1

Older caterpillars that develop later in the season, in the bags (Figure 2), are typically more difficult to kill with insecticides. In addition, females feed less as they prepare for reproduction; thus, reducing their susceptibility to spray applications and any residues. The bacterium *Bacillus thuringiensis* subsp. *kurstaki* is active on young caterpillars; however, the active ingredient must be consumed to be effective, so thorough coverage of all plant parts and frequent applications are required to avoid having to deal with later life stages.



Figure 2

This compound is sensitive to ultra-violet light degradation and rainfall, which reduces residual activity. Spinosad is the active ingredient in a number of homeowner products, including: Borer, Bagworm, Tent Caterpillar & Leafminer Spray; Captain Jack's DeadBug Brew; and Monterey Garden Insect Spray. These products work by contact and ingestion (stomach poison) although they are most effective when ingested and can be used against older or larger bagworm caterpillars (Figure 3).



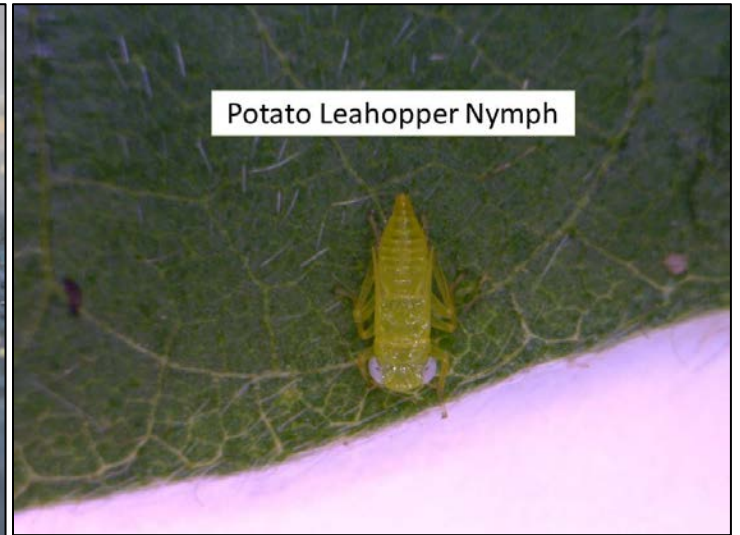
Figure 3

Cyfluthrin, lambda-cyhalothrin, trichlorfon, chlorantraniliprole, and indoxacarb may be used against both the young and the older caterpillars. However, thorough coverage of all plant parts, especially the tops of trees and shrubs, where bagworms commonly start feeding, and frequent applications are required. The reason why multiple applications will be needed when bagworms are first detected is because bagworms “blow in” (called ‘ballooning’) from neighboring plants. If left unchecked, bagworms can cause significant damage, thus ruining the aesthetic quality of plants. In addition, they may actually kill plants, especially evergreens since they do not usually produce another flush of growth, and newly transplanted small plants.

If you have any questions regarding the management bagworms contact your county horticultural agent, or university-based or state extension entomologist.

Alfalfa Update

Potato leafhopper populations are very active throughout north central Kansas. There are small nymphs, many adults, and the adults seem to still be migrating into the fields.



Could not find significant populations in fields swathed within the last 7-10 days but as regrowth occurs and immigration continues, these fields need to be monitored. Fields not yet cut are already showing signs of

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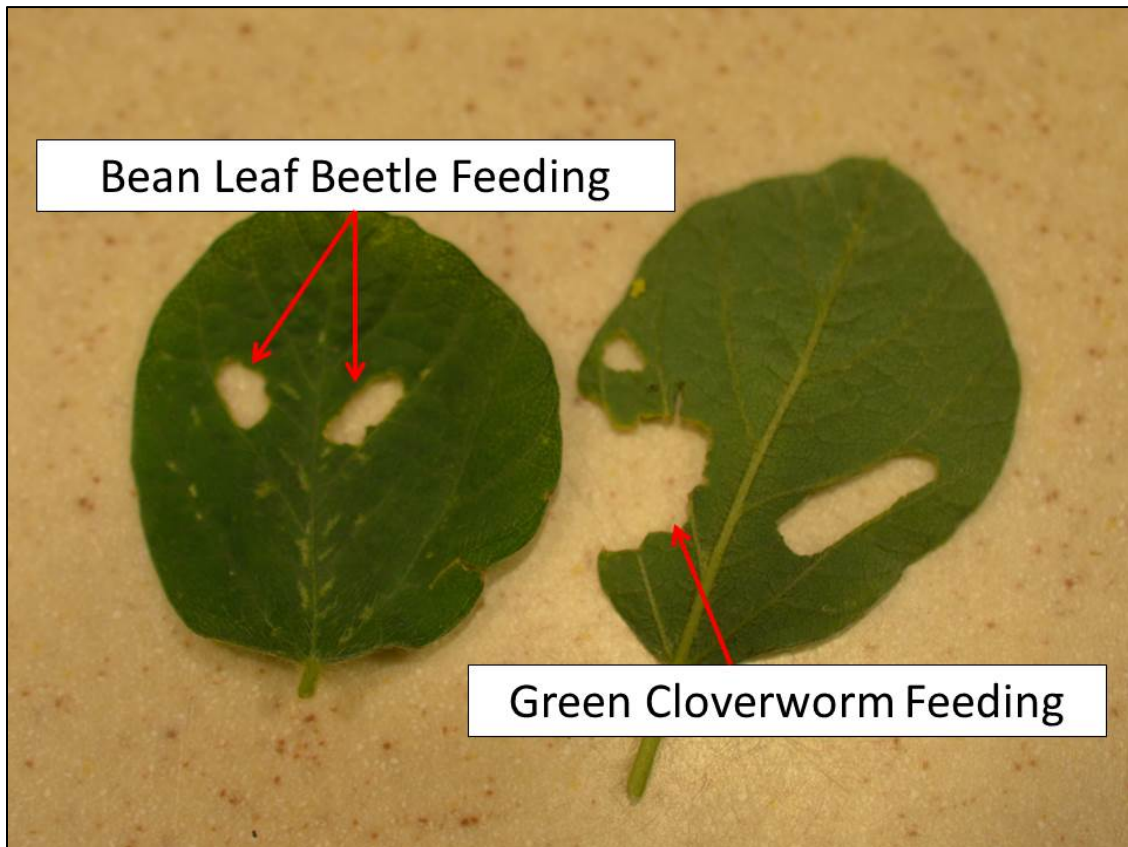
“hopper burn” and should be swathed ASAP or an insecticide application may be justified. Potato leafhoppers have few, if any, natural enemies. Thus, these populations probably will not diminish without management, i.e. either swathing (my preference) or insecticide application. For more information on potato leafhopper management, please visit the Alfalfa Insect Management Guide:

<http://www.bookstore.ksre.ksu.edu/pubs/mf809.pdf>

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Soybean Update

Soybeans are germinating and thus attracting the usual defoliators. Fairly neat, oval shaped holes indicate adult bean leaf beetle feeding. Ragged holes generally indicate green cloverworms, which are starting to reach larval maturity in alfalfa and may therefore move into young soybeans, after pupation, and start ovipositing eggs.



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Bean Leaf Beetle



Green Cloverworm

There are also numerous young grasshopper nymphs in both alfalfa and soybeans, still around the outside edges of fields. The next couple of weeks will be an ideal time to spray borders, weedy patches, grassy waterways, etc. for grasshopper control.



For more information on pest management in soybeans, please visit the Soybean Insect Management Guide: <https://www.bookstore.ksre.ksu.edu/pubs/MF743.pdf>

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Corn and Sorghum Update

As wheat senescens, or matures, the chinch bugs are migrating to adjacent corn and/or sorghum fields. V6+ stage corn can withstand considerable chinch bug feeding but younger plants may be stressed, especially dryland corn.



Chinch Bug Nymph



Chinch Bug Adults

Seedling sorghum adjacent to wheat will be somewhat protected by insecticide seed treatments if chinch bug populations aren't overwhelming as they migrate from the wheat, but only for about 28 days,

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maximum. Waiting about 2 weeks after wheat harvest to plant sorghum will mitigate chinch bug nymph infestation problems. For more information on chinch bug biology and management, please visit: <https://www.bookstore.ksre.ksu.edu/pubs/MF3107.pdf>

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Insect Diagnostic Laboratory Report

<http://entomology.k-state.edu/extension/diagnostician/recent-samples.html>

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