Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

Department of Entomology 123 West Waters Hall K-State Research and Extension Manhattan, Kansas 66506 785-532-5891 http://blogs.k-state.edu/kansasbugs/ http://www.entomology.ksu.edu/extension



September 2, 2022 No 18

Correction to Sorghum Pests Article in Aug. 26, 2022 Newsletter Chiggers: small bites, big itch! Elm Leaf Beetle Bug Jokes of the Week We Need Your Feedback

Correction to Sorghum Pests Article in Aug. 26, 2022 Newsletter

Figure 1 should have been:



Figure 1: Sorghum (Sugarcane) aphids

September 2, 2022 No. 18

Aphids are rapidly increasing around South Central and North Central KS., both corn leaf aphids (as seen in the Fig 2 in last week's newsletter) which was miss labeled as sorghum (formerly sugarcane) aphids! These sorghum (sugarcane) aphids are rapidly increasing as seen in Fig 1 here (which was only a 2-week-old infestation) as are corn leaf aphids (again-seen in Fig 2 from last week's Newsletter).



Thus, monitoring should continue for these aphid populations, especially since, as yet, there do not seem to be many beneficials, see Fig 3 (ladybeetle larva decimating aphid nymphs) in most fields monitored.



Jeff Whitworth – Field Crop Entomologist

Chiggers: small bites, big itch!

Chiggers, also commonly known as harvest mites are a prevalent problem in Kansas as well as much of the United States. Nymph and adult stages are free-living predators that feed off other arthropods and their eggs but the six-legged larval stage are parasitic. Chiggers do not feed on blood, instead they secrete digestive enzymes from their salivary glands which liquefy skin cells at the attachment site. They consume the liquefied cells together with lymph secreted by the body in response to the induced damage. In many people the result of this feeding is an intensely itchy local reaction. Chigger eggs are laid in batches in plant litter on the ground or directly on the soil surface. People and animals often happen across groups of larvae when walking across or sitting on the grass surface with multiple bites occurring at the same time often in a localized area. Chiggers often chose areas where the skin is thin such as ankles (Figure 1 and Figure 2).



Figure 1: Local reaction on ankle to five chigger bites 24 hours after being bitten. The white itchy bumps are similar to those seen with insect bites like mosquitoes but usually occur in groups.

September 2, 2022 No. 18



Figure 2: One week after chigger bites, itching has resolved and the red marks begin to fade.

Keeping grass cut short and avoiding walking through areas of taller grass can limit exposure to chiggers. Insect repellants can also be useful in deterring these itch-inducing critters. Removing clothing and washing the skin surface can remove any chigger larvae before they have the chance to attach and feed. If you have already been bitten, the intense itching can be relieved (at least for a while) with topical itch creams and usually resolves by itself within a week to 10 days. Try as much as possible to resist the intense urge to scratch at the bites as this can introduce bacteria which can cause a secondary infection!

Cassandra Olds – Livestock and Medical Entomologist

HOME

Elm Leaf Beetle

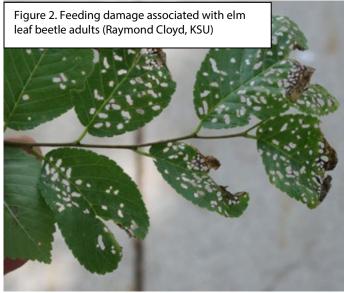
Elm leaf beetle, *Pyrrhalta luteola*, larvae and adults are prevalent throughout Kansas feeding on elm trees (e.g. Siberian and American). The larvae and adults are typically present simultaneously. Extensive feeding damage can ruin the aesthetic quality of elms in landscapes, parks, and other areas where elms are grown.

Elm leaf beetle adults are 1/5 to 1/4 of an inch long, yellow to dull-green, with a black stripe on each side of the wing cover that extends the entire length of the abdomen (last section). In addition, there are two

September 2, 2022 No. 18

black spots on both sides of the thorax (middle section) (Figure 1). Adults feed between the major veins, which results in leaves having a 'shot hole' (similar to 'buckshot') appearance (Figure 2).



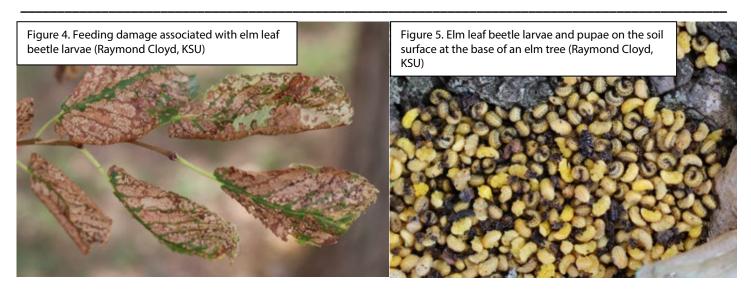


Elm leaf beetle larvae are 1/3 to 1/2 of an inch long when mature and dull-yellow with two black lines extending the length of the body (Figure 3). The larvae cause the most damage feeding for about three weeks. The larvae feed on the underside of leaves causing the leaves to appear skeletonized and eventually turning brown (Figure 4). The larvae will migrate down the trunk of elm trees and tunnel into or reside on the soil surface to pupate (Figure 5). Adults emerge later on and migrate upward on the tree trunk. In late summer through fall, elm leaf beetle adults will leave elm trees and seek sites to overwinter. Adults overwinter in buildings, homes, and in protected places outdoors such as the bark of elm



trees. Adults can be a nuisance pest inside homes when they enter in the fall or leave in the spring. There are two generations per year in Kansas.

September 2, 2022 No. 18



A contact insecticide should be applied in spring to manage elm leaf beetle larvae and adult populations feeding on leaves. Thorough coverage of leaf undersides is important because the leaf undersides are where larvae and adults primarily feed. However, if elm trees are exhibiting ≥50% feeding damage then do not spray. Mature elm trees can usually sustain damage associated with elm leaf beetle larvae and adults feeding without direct harm. However, be sure to implement cultural practices such as providing sufficient water and mulching the base of elm trees to ensure that elm trees produce leaves for next year.

Systemic insecticides can be applied to the soil or injected directly into elm trees in early spring before new growth emerges. The systemic insecticide active ingredient will translocate throughout the elm tree and accumulate in the leaves. Elm leaf beetle larvae and adults are killed when they ingest a lethal concentration of the systemic insecticide active ingredient after feeding on leaves.

For more information on how to manage elm leaf beetle populations please refer to the following extension publication:

Elm Leaf Beetle: Insect Pest of Elm Trees (MF3537 July 2020)

https://www.bookstore.ksre.ksu.edu/pubs/MF3537.pdf

Raymond Cloyd, Horticultural Entomologist

HOME

September 2, 2022 No. 18

Bug Jokes of the Week

Why are frogs always happy?

Answer: Because they eat whatever is "bugging" them.

I had a bug on my window, the pest control guy identified it as a "glasshopper".

Jeff Whitworth - Field Crop Entomologist

HOME

We Need Your Feedback

We would really like to know the value of the Extension Entomology Newsletter to our readership so we are requesting that you provide feedback on what you like, dislike, and what changes we should make to enhance the value of the newsletter to our readership. Please send all comments to Sharon Schroll at sschroll@ksu.edu

Raymond Cloyd – Horticultural Entomologist

HOME

Sincerely,

Jeff Whitworth Extension Specialist Field Crops

phone: 785/532-5656 e-mail: jwhitwor@ksu.edu

September 2, 2022 No. 18

Raymond A. Cloyd Professor and Extension Specialist Horticultural Entomology/Integrated Pest Management

Phone: 785-532-4750 Fax: 785-532-6232 e-mail: rcloyd@ksu.edu

Cassandra Olds Assistant Professor Livestock & Veterinary Entomology

Phone: (509) 715-7611 e-mail: <u>colds@ksu.edu</u>



Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact *LOCAL NAME*, *PHONE NUMBER*. (For TDD, contact Michelle White-Godinet, Assistant Director of Affirmative Action, Kansas State University, 785-532-4807.)

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, , Ernie Minton, Director.