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 785-532-6154 http://blogs.k-state.edu/kansasbugs/ http://www.entomology.ksu.edu/extension



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News Corner

- Sugarcane Beetle
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NEWS CORNER

Sugarcane Beetle

We have received several inquiries from Southeast Kansas regarding black beetles causing damage to turfgrass. The black beetles are adults of the sugarcane beetle, *Euetheola humilis* (Burmeister) (Coleoptera: Scarabaeidae). The sugarcane beetle is native to the USA and is also called the rough headed corn stalk beetle.

Sugarcane beetle adults are 1/2 of an inch (13 millimeters) long, black, with distinct punctures or indentations that extend along the length of the body (Figure 1). The front legs have four serrations that allow the adult to tunnel through the soil. Sugarcane beetle adults are active in spring and feed during the night. Adults are attracted to light sources at night. Sugarcane beetle adults walk across the turfgrass in the early morning. Adults tunnel into the soil and remain in the soil during the



Figure 1. Sugarcane beetle adult (Raymond Cloyd).

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day, which allows them to avoid predators and exposure to direct sunlight. Sugarcane beetle overwinters as an adult in the soil and there is one generation per year.

In the spring, females can lay between 30 to 60 eggs in the soil during their lifespan and then die after laying eggs. Sugarcane beetle larvae emerge (eclose) from eggs after approximately 10 days, and are white grubs with a red head and six yellow legs. There are three larval instars (stages between each molt) with the third instar larvae 1-1/4 of an inch (32 millimeters) long. Larvae are located in or below the thatch layer.

Larvae and adults can damage turfgrass by feeding on the roots, stems, and leaves (blades). Sugarcane beetle adults cause damage to warm season turfgrasses, such as, bermudagrass and zoysiagrass associated with golf courses, home lawns, and sod farms. In addition, sugarcane beetle adults can damage tall fescue lawns. Adults can also damage turfgrass when tunneling through the soil. In addition, mammals including: armadillos, birds, moles, and raccoons can cause substantial damage to turfgrass when searching for sugarcane beetle larvae and adults.

Sugarcane beetle populations can be managed by properly irrigating and fertilizing turfgrass to maintain health and vigor, which can mitigate damage caused by sugarcane beetle larvae and adults. Furthermore, turn off all lights in the area at night to avoid attracting adults.

Pyrethroid based insecticides can be applied to manage sugarcane beetle adult populations in turfgrass. Apply insecticides when adults are initially present in the spring. Insecticides are more effective against adults that just emerged from overwintering than adults that are present later in the season.

Raymond Cloyd – Horticultural Entomology/Plant Protection

HOME

Fall Invaders

This time of year, it is typical to get many, and varied, uninvited guests into our structures. At the present time, the most common ones causing a nuisance around the state are crickets, and scorpions. First crickets: The 2 types of crickets commonly entering homes this fall are the house cricket and the field cricket. It is important to distinguish the difference because the house cricket may set up residence in your house and live for generations if the conditions are right.

Field cricket

However, field crickets won't cohabit with you for much more than a month. They may move in but usually die in less than a month, or so. The field cricket is generally black on top and dark brown to mahogany on the sides (see fig 1). They are univoltine, i.e. they have 1 generation/year. They feed mostly on plant matter, so sometimes can be a pest in gardens. They mate in late summer and deposit eggs from then until fall. In the fall they sometimes wander into structures to avoid extreme weather-i.e. cold temperatures or wet weather, etc., where they may live for a month or so before they die. The main nuisance caused by field crickets is the incessant chirping of the males. But they can also cause a little staining on rugs, etc.



Figure 1. Photo of a female field cricket (photo by Cooper Wyckoff).

House cricket

Generally, much browner (see fig 2) than field crickets and these crickets can reproduce inside a home or other structure if the conditions are conducive. These are usually the crickets sold in bait shops, pet stores, etc. They feed on about anything organic inside the structure, such as cotton or wool clothing or decorative plants, etc. Males may also produce an irritating chirping, much as field crickets, and females of both species have three long appendages sticking out from the end of the abdomen which are NOT stingers. Crickets cannot sting. But adults of both species seem to be able to hop or fly short distances. To help manage either species, try to plug all cracks and crevices on the ground level of the structure. Often applying a 6-12foot insecticide band, labeled for crickets, around



Figure 2. Photo of a house cricket.

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the exterior helps, plus a crack and crevice treatment to the inside of the structure. The use of sticky traps in dark corners and under furniture helps also.

Scorpions

Scorpions are very common in many areas of Kansas. The native species is called the striped bark scorpion (see fig 3). These are relatively small, secretive, and mostly nocturnal. Thus, many folks do not realize these little scorpions are living all around them until fall, when they often try or succeed, at getting indoors. These little scorpions can sting, and that venom is much like a wasp's in its effect on people or animals. To prevent scorpions from entering a structure this fall, it is a good idea to plug all cracks and crevices at ground level. Scorpions are not insects; they are arachnids. Hence, a 6-12 feet insecticide application around the exterior of the structure often affects scorpions as well. Also, sticky traps help considerably inside the structure. But, remember, if a scorpion is trapped on a sticky trap, it is most often stuck by its pinchers and/or front legs while the tail-containing stinger is still free and often still capable of stinging (see fig 4).



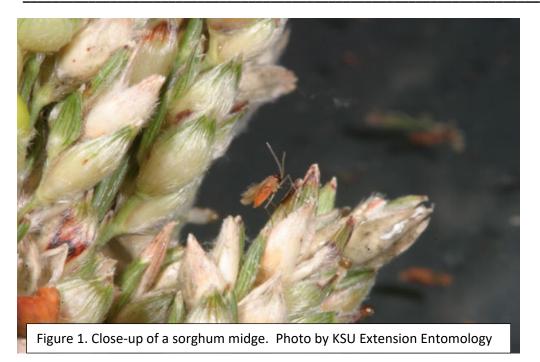
Figure 3. Picture of a scorpion (photo by Kaysie Morris).



Figure 4. Scorpion in a sticky trap (photo by Kaysie Morris).

Here's a video showing a scorpion: https://www.youtube.com/watch?v=G1pVbrRMRvq

Amie Norton – Nanotechnology Entomology Jeff Whitworth – Field Crop Entomology



Watch for Sorghum Midge Damage

Historically, sorghum midge has not been a significant pest in Kansas and has been primarily observed in the southeast portion of the state. However, in recent years, sorghum midge activity has been detected well outside of its typical range in Kansas with occurrences of significant losses in some locations. As sorghum harvest progresses this season, be on the lookout for sorghum midge damage. If you suspect damage, please reach out to your local extension professionals as we are trying to better understand the distribution and impact of this pest across the state.

Sorghum midge is a very small reddish orange fly (Figure 1) active when sorghum fields are blooming. While it is too late in the season to scout for sorghum midge adults, as sorghum reaches maturity, it is easy to find evidence of midge activity even if you did not see adults when the fields were blooming. Simply look for flattened, blank zones on the heads (Figure 2).



Figure 2. Sorghum midge damage. The damage appears as blank zones on the flowering heads. Photo by Anthony Zukoff, K-State Research and Extension.

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These seeds never developed because the sorghum midge maggots consumed them from the inside. Be aware that it is easy to overlook or confuse sorghum midge damage with other sources of damage, with bird damage being a common confounding factor (Figure 3). Photographs can be very useful for differentiating sorghum midge from other sources of damage (Figure 4).



Figure 3. Bird damage on a sorghum head. This damage can be mistaken for midge damage. Bird damage will give the sorghum head a "blasted" appearance. Photo by Anthony Zukoff, K-State Research and Extension.

Figure 4. Various types of damage to sorghum heads. Left to right: undamaged head, severe sorghum midge damaged head, a head with heavy bird damage and on the right, a head exhibiting headworm damage. Photo by Anthony Zukoff, K-State Research and Extension.

Anthony Zukoff—Southwest Research and Extension Center - Garden City, KS

HOME

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Sincerely,

Jeff Whitworth Extension Specialist Field Crops

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

Raymond A. Cloyd Professor and Extension Specialist Horticultural Entomology/Plant Protection

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

Anthony Zukoff Extension Associate – Entomology Southwest Research and Extension Center Garden City, KS Phone: 620-275-9164

Phone: 620-275-9164 e-mail: <u>azukoff@k-state.edu</u>

@westksbugs

Need an insect identified? Visit the Insect Diagnostics Program Website

Amie Norton
Post Doc Fellow
Nanotechnology Entomology
e-mail: amien@ksu.edu

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