Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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Redbud Leaffolder

Now is the time of year when we start noticing the leaves of the Eastern redbud, *Cercis canadensis*, turning brown and folded on top of each other. This is caused by the caterpillar stage of the redbud leaffolder, *Fascista cercerisella*. Adults are 1/4 inch in length, black to dark brown with an orange head, and there are approximately 10 white spots on the wings. They are very active when disturbed. Adult females lay oval, white eggs near the leaf veins.

Caterpillars emerge (eclose) from eggs and feed on the leaves of Eastern redbud. Early-instar caterpillars are 1/4 inches long, initially white (Figure 1), and then become light-green. Later-instar caterpillars are 1/2 inches in length with alternating bands of white and black on the body (Figure 2). Caterpillars fold the edges of leaves onto the upper side (Figure 3); fastening the leaves together with white strands of silk (Figure 4). The caterpillars feed within the folds on the upper leaf surface, which protects them from natural enemies (e.g. parasitoids and predators). If you pull the leaves apart, the caterpillars will move vigorously and fall off the leaves. Redbud leaffolder overwinters as a pupa in the folds of fallen leaves. There are three generations per year in Kansas.

Figure 1. Early-instar caterpillar of redbud leaffolder (Raymond Cloyd, KSU)

Figure 2. Later-instar caterpillar of redbud leaffolder (Raymond Cloyd, KSU)

Figure 3. Edges of leaves folded onto the leaf upper side (Raymond Cloyd, KSU)

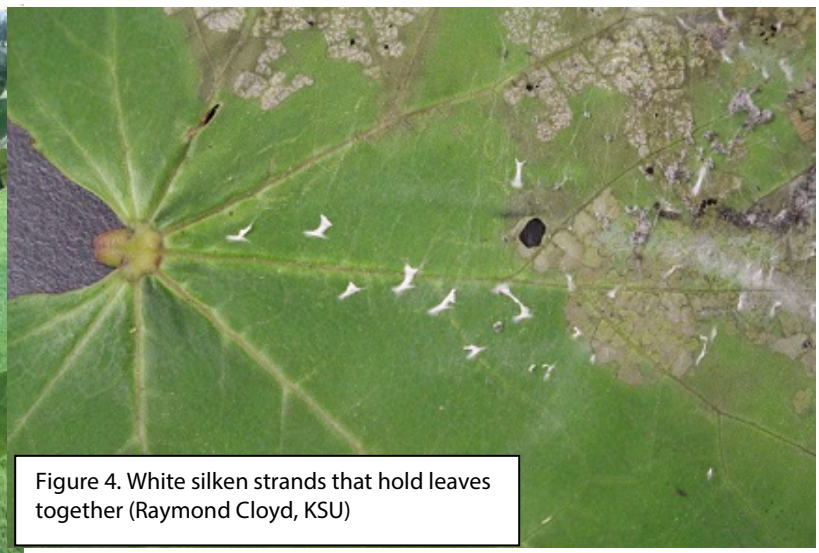

Figure 4. White silken strands that hold leaves together (Raymond Cloyd, KSU)

Eastern redbud trees or shrubs may be disfigured and leaves distorted when leaf margins fold over each other. Heavily infested Eastern redbud trees or shrubs may drop their leaves prematurely.

Redbud leaffolder caterpillars are difficult to manage with spray applications of insecticides once the leaves are fastened together because the caterpillars are protected from exposure inside the folded leaves. However, folded leaves can be physically removed and placed into a container of soapy water that will kill redbud leaffolder caterpillars.

Raymond Cloyd

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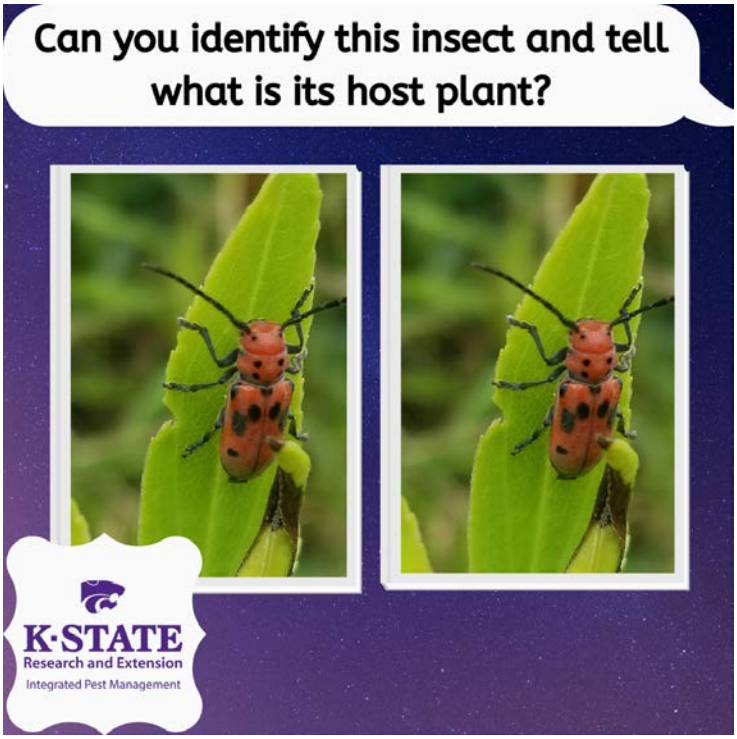
ID to last week's bug

Red milkweed beetle – The red milkweed beetle comes by its name due to the fact it is generally host specific to milkweed plants. The antennal base of these beetles bisects the eyes creating the appearance of four eyes. If these beetles are startled, they will make a shrill noise.



Frannie Miller

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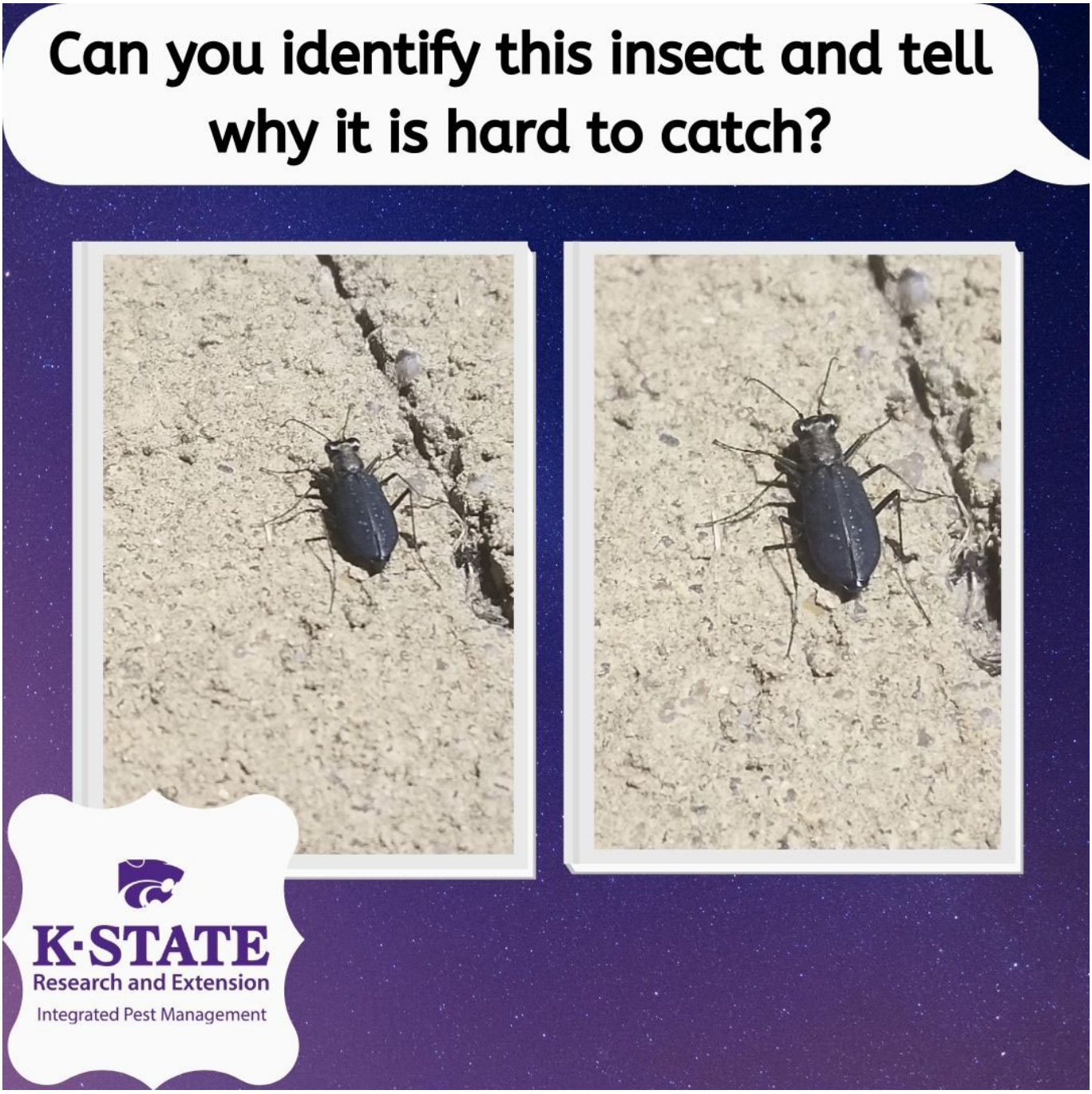
Identify This Insect



Frannie Miller

Golden Garden Spider

This is the time of year when we see the golden garden spider, *Argiope aurantia*, in landscapes, gardens, and in unmanaged areas. Golden garden spiders are 1.0 inch (25.4 mm) long, with black and yellow markings on the abdomen, and a silvery cephalothorax (combination of head and thorax) (Figure 1). The spider typically hangs with the head positioned downward in the center of a web that has vertical crossed zigzag bands (Figure 2).

Figure 1. Golden garden spider (Raymond Cloyd, KSU)

Figure 2. Golden garden spider in web. Note the vertical zigzag bands in the web (Raymond Cloyd, KSU)

Golden garden spiders find prey in their webs by sensing vibrations as prey try to escape. Spiders capture grasshoppers in their webs and then wrap them in fine silk (Figure 3). Golden garden spiders typically build webs in open areas instead of inside the canopy of trees and shrubs or inside shelters. The other species in Kansas is the banded argiope spider, *Argiope trifasciata*, that does not have distinct black markings on the top of the abdomen. However, thin black transverse lines may be present.

Figure 3. Golden garden spider wrapping a grasshopper in silk (Raymond Cloyd, KSU)

Raymond Cloyd

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Green Cloverworms

Green cloverworms are still feeding on soybean leaves, and therefore still causing some concern, especially in double-cropped soybeans (some fields were being treated with insecticides on 2 Sep). As stated previously, green cloverworms can be very voracious leaf feeders. However, rarely, if ever, do they cause enough damage especially at this time of year (and plant developmental stage) to justify an insecticide application. Plus the soybean canopy usually harbors many different types of beneficials and they will be negatively affected by an insecticide application. Green cloverworms also seem to be very vulnerable to natural controls (please see figs 1 & 2, of fungus-infected green cloverworm larvae, provided by Mr. Tom Maxwell), which often effect great control on green cloverworm populations.

Figure 2 Fungal-infected green clover worms most commonly turn white as seen in this photo.

Figure 1 Fungal-infected green cloverworm after leaf feeding

Jeff Whitworth

Soldier Beetles

Have had several inquiries regarding soldier beetles (please see fig 3 provided by Kaysie Morris). These beetles are quite common throughout Kansas and most commonly noticed in late summer as the adults are highly mobile, relatively large, and are very active searching for and feeding on pollen. Thus, they can be very common on any crop, or weed, that is pollinating, especially sunflowers, sorghum, and cucurbits such as cantaloupes and watermelons. Soldier beetles are often mistaken for blister beetles because of their size and shape but are not in the same taxonomic family and thus, produce no cantharidin, the chemical that causes external blisters in humans and other problems in livestock when ingested. However, soldier beetles are harmless.

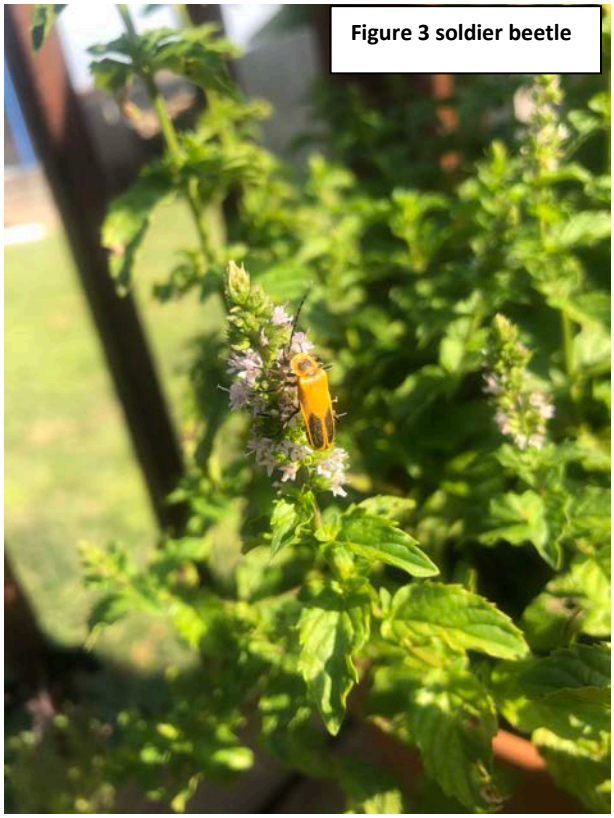

Figure 3 soldier beetle

Jeff Whitworth

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Bug Joke of the Week

Question: What Did One Flea Say To Another?

Answer: "Should We Walk Or Take The Dog?"

Raymond Cloyd

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Sincerely,

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