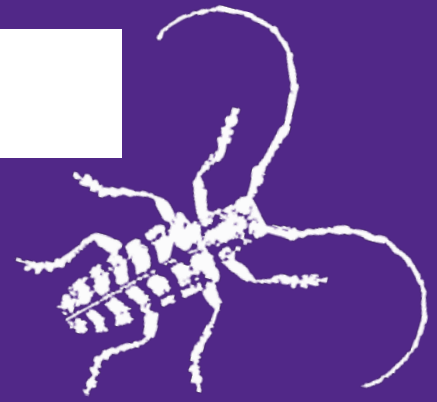


Kansas State University Extension Entomology Newsletter

For Agribusinesses, Applicators, Consultants, Extension Personnel & Homeowners

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Green June Beetle Adult

Green June beetle, *Cotinis nitida*, adults are flying around in massive numbers over both managed and unmanaged grassy areas. Green June beetle adults are erratic flyers and occasionally bump into people and objects. Adults are 3/4 to 1.0 inch long, velvety-green, with yellow-orange margins extend lengthwise on the front wings (Figure 1). The underside of the body is shiny and metallic green or gold. Adults fly around for several weeks from July through August. Green June beetle adults are sometimes mistaken for Japanese beetle, *Popilla japonica*, adults; however, they really do not look alike.

Green June beetle has a one-year life cycle, overwintering as a mature larva or grub in the soil.

Adults typically emerge from late-June through early-July and are active during the day, resting at night on plants, in thatch, or in compost. Adults produce a sound when flying that is similar to bumble bees. Adults feed on ripening fruits and corn tassels, and may feed on the leaves of oak and maple trees. Male green June beetles swarm in the morning, flying to-and-fro just above managed and/or unmanaged grassy areas where females are located. The females emit an odor or pheromone that



Figure 1. Green June Beetle Adult
(Raymond Cloyd, KSU)

attracts the males. Clusters of beetles may be seen on the soil surface or in grassy areas with several males attempting to mate with a single female. After mating, females lay clusters of 10 to 30 eggs in moist soil with a high organic matter content. The larvae emerge (eclose) from eggs in approximately two weeks and feed near the soil surface. Larvae are 3/8 of an inch (early instars) to 1-1/2 (later instars) long and have the distinct characteristic of crawling on their back (Figure 2). Larvae primarily feed on organic matter in thatch or grass-clippings.



Figure 2. Green June Beetle Larva
Crawling On Back (Raymond Cloyd, KSU)

For more information on how to manage green June beetle adults and larvae refer to the following extension publication:

Green June Beetle: Insect Pest of Turfgrass (MF3600 March 2022)

<https://www.bookstore.ksre.ksu.edu/pubs/MF3600.pdf>

Raymond Cloyd – Horticultural Entomology

HOME

Scout for headworms in sorghum from flowering into milk stage

Relatively new, cost effective, and environmentally friendly products are available for controlling headworms in sorghum. These are pest-specific viruses, formulated as biological pesticides that can be sprayed on the same as any foliar insecticide, or delivered via overhead irrigation sprinklers. But application must be made early in the infestation, while the majority of larvae are still small. These products should not be used as rescue treatments, but an early application will ensure infections propagate naturally throughout the field and that reapplication will not be required. Sold under the brand names Heligen® (for corn earworm) or Fawligen® (for fall armyworm), these products are highly specific, killing only the target pest,

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sparing beneficial insects, and using other insects as vectors to create a local 'epizootic' of disease in the field. Thus, there is no environmental impact of treating below threshold (conventionally one or more worms per head), and it is valid to use these products as a relatively low-cost insurance policy, especially in a year when earlier sorghum to the south is already experiencing fall armyworm damage.

Farmers should be aware that many of the generic pesticides that might appear attractive on the basis of low cost are now much less effective against these pests, due to their repeated exposure to the same modes of action on many different crops over the years. In contrast, there are no known cases of pests evolving resistance to a virus, and unlike fungal pathogens, virus infections do not require humidity or leaf wetness. However, the product must be consumed by the pest, and larvae take up to a week to die, depending on temperature, but will stop feeding 48-72 hours post-injection. These virus formulations are also compatible with tank mixes of other materials, provided pH is held below 8.0, and combinations of both products are available if both species of headworms are present. More information is available from the supplier:

<https://www.agbitech.us/>



J.P. Michaud, Professor of Entomology Agricultural Research Center, Hays, KS

HOME

Fall Armyworms

Adult fall armyworms are moths (fig. 1) and have been reported from southern Kansas for about the last 2 weeks and probably will be in the rest of the state soon-if not already. A quick refresher relative to this pest: they normally do not overwinter in Kansas, but in the lower portions of southern states, and down into Mexico and Central America. The moths usually arrive in Kansas anywhere from mid-June to mid-July as they fly/are blown here on southern winds. Fall armyworms have a wide host range but in Kansas are most often a cause for concern in corn and/or sorghum and later sometimes in wheat depending on planting date and weather. Also, in Kansas, especially the last 2 years, brome has been seriously defoliated (in combination with armyworms) in many areas around the state. Armyworm larvae may be part of the "ragworm" complex of larvae feeding in the whorl of corn and/or sorghum and then later the next generation become part of the complex of "headworms" or larvae feeding in the sorghum head directly on the developing grain. So the moths are here, ovipositing and thus the larvae are, or soon will, be feeding on whatever host the eggs were deposited on. Fall armyworms were quite common (in combination with other species) in 2020 and 2021 and thus monitoring should be initiated in any potentially susceptible crops. For management considerations please refer to the 2022 KSU Insect Management Guide for the crop of interest.

(Photo of fall armyworm moths taken of a Riker mount provided by revered KSU Extension entomologist, now retired, Dr. Bob Bauernfeind).



Garden Webworms

Garden webworms (fig. 2) have just about finished feeding on soybeans and/or alfalfa (where they have been much less noticeable). They will pupate in the soil for the next 4-7 days then the moths will emerge to start depositing eggs in acceptable host plants. From a crop perspective this time of year, hopefully they will have little impact as the soybeans have developed far enough that these worms won't defoliate enough to affect yield. But the really late-planted soybeans or those that may be moisture stressed may still have some concern, so monitoring should include these defoliators starting soon.

Figure 2: Garden webworm mature larva
(picture by Steve Freach)



Jeff Whitworth – Field Crop Entomology

HOME

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