**Kansas State University Department of 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://www.entomology.ksu.edu/extension

**September 13, 2018 No 21**

*Scolia dubia*: Parasitoid of Green June Beetle Larvae
Goldenrod Soldier Beetles
Household Pests of Kansas is now available!

## *Scolia dubia*: Parasitoid of Green June Beetle Larvae

Have you seen large wasp-like looking insects feeding on flowering plants such as wild onion, *Allium* spp and goldenrod, *Solidago* spp.? Well, this is *Scolia dubia*, which is a parasitoid of green June beetle, *Cotinus nitida*, larvae (grubs) located in the soil. Parasitoids are approximately 3/4-inches long with purple to black wings. The abdomen has red-brown markings and two very conspicuous yellow spots on both sides of the third abdominal segment (Figure 1). The parasitoids may be seen flying in a figure-eight pattern several inches above turfgrass infested with green June beetle larvae. The parasitoid can be seen feeding on goldenrod flowers along with goldenrod soldier beetle, *Chauliognathus pennsylvanicus*, adults (Figure 2) (see next article).

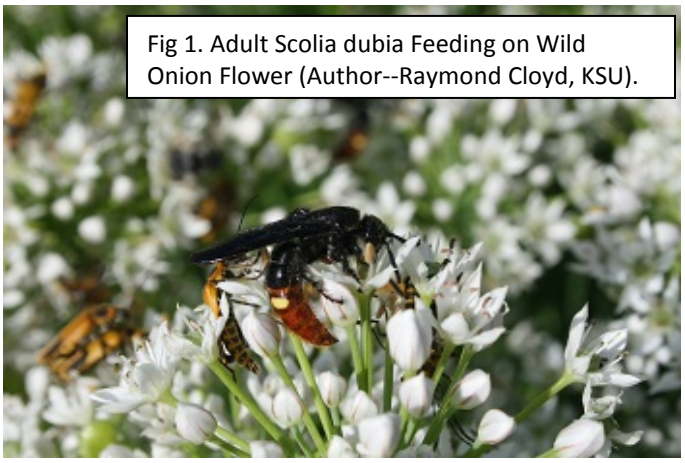


Fig 1. Adult Scolia dubia Feeding on Wild Onion Flower (Author--Raymond Cloyd, KSU).

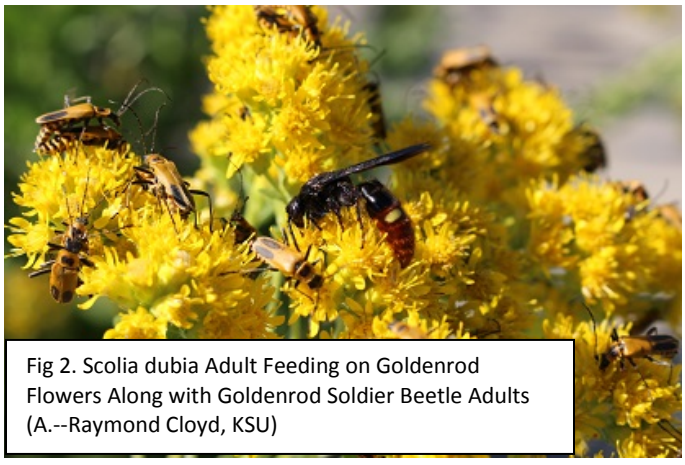


Fig 2. Scolia dubia Adult Feeding on Goldenrod Flowers Along with Goldenrod Soldier Beetle Adults (A.--Raymond Cloyd, KSU)

Female parasitoids enter the burrow of a green June beetle larva, paralyze the larva by stinging it, and then attach an egg to the underside of the larva. After hatching, the parasitoid larva consumes the dead green June beetle larva. *Scolia dubia* overwinter as a pupa in a cocoon located at the bottom of the burrow and then emerge (eclose) later as an adult. Adult parasitoids typically emerge (eclose) in middle to late August and feed on flower pollen and nectar. These parasitoids, unlike cicada killer wasps, are not very aggressive and will only sting (at least the females) when handled or stepped on with bare feet.

Raymond Cloyd

HOME

## Goldenrod Soldier Beetles

Hordes of goldenrod soldier beetle, *Chauliognathus pennsylvanicus*, adults are now feeding on goldenrod (*Solidago* spp.) (Figure 1) and other flowering plants. Adults are extremely abundant feeding on the flowers of wild onion (*Allium* spp.) (Figure 2), and can also be seen feeding on linden trees (*Tilia* spp.) in bloom. Adults, in fact, can be seen feeding and mating simultaneously. The goldenrod soldier beetle is common to the western and eastern portions of Kansas.

Fig 1. Goldenrod Soldier Beetle Adults Feeding On Goldenrod Flowers (A.--Raymond Cloyd, KSU)

Fig 2. Goldenrod Soldier Beetle Adults Feeding on Wild Onion Flowers (A.--Raymond Cloyd, KSU)

Adults are about 1/2 inch (12 mm) long, elongated, and orange with two dark bands located on the base of the forewings (elytra) and thorax (middle section) (Figure 3). Adults are usually present from August through September. Adult soldier beetles feed on the pollen and nectar of flowers; however, they are also predators, and will consume small insects such as aphids and caterpillars. Flowers are a great place for the male and female soldier beetle adults to meet, get acquainted, and mate (there is no wasting time in the insect world ☺) (Figure 4). Soldier beetle adults do not cause plant damage. Sometimes adults will enter homes but they are rarely a concern. The best way to deal with adults in the home is to sweep, hand-pick, or vacuum.

Fig 3. Goldenrod Soldier Beetle Adult (Author--Raymond Cloyd, KSU).

Fig 4. Goldenrod Soldier Beetle Adults Mating (A.--Raymond Cloyd, KSU)

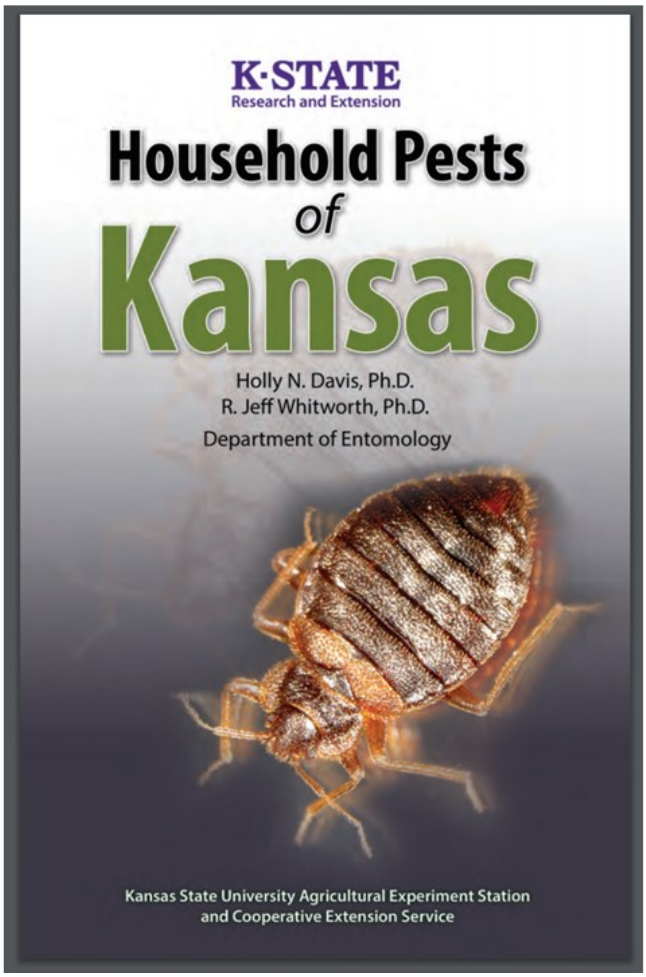
Adult females lay clusters of eggs in the soil. Each egg hatches into a larva that is dark-colored, slender, and covered with small dense hairs or bristles, which gives the larva a velvety appearance. The larva resides in soil feeding on grasshopper eggs. Occasionally, the larva will emerge from the soil to feed on soft-bodied insects and small caterpillars.

Raymond Cloyd

HOME

## Household Pests of Kansas is now available!

Household Pests of Kansas was written to help homeowners and pest managers identify and manage key arthropod pests found in and around Kansas homes including insects, spiders, ticks and more. This guide includes color photos, descriptions, basic biology, types of damage, and management options. It is a valuable reference for all Kansas residents. You can download your copy today, or order your print version from the KSRE bookstore here: https://www.bookstore.ksre.ksu.edu/Item.aspx?catId=526&pubId=21199




Jeff Whitworth Holly Davis

HOME

---

**Sincerely,**

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

Jeff Whitworth
Extension Specialist
Field Crops
phone: 785/532-5656
e-mail: jwhitwor@ksu.edu

Holly Davis
Research Associate
Phone: (785) 532-4730
e-mail: holly3@ksu.edu

KANSAS STATE UNIVERSITY | Department of Entomology