

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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September 4, 2009 No. 24

Beneficial Wasp: *Scolia dubia*

Have you observed large wasps (not cicada killer wasps) hovering over turfgrass? Well, this is *Scolia dubia*, which is a parasitoid of green June beetle larvae (grubs) located in the soil. The wasps are approximately 3/4-inches long with purple to black wings. The abdomen contains red-brown markings and two very conspicuous yellow spots on both sides of the third abdominal segment. The wasps may be seen flying in a figure-eight pattern several inches above turfgrass infested with green June beetle larvae. Female wasps 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 larvae. After hatching, the wasp larva consumes the dead green June beetle larva. Wasps overwinter in a cocoon at the bottom of the burrow and then undergo pupation in the spring. Adult wasps typically emerge in middle to late August (like right now), and feed on flower pollen and nectar. These wasps, 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

Why now? Tobacco Budworm

As an agronomic pest, the tobacco budworm is not restricted to its namesake crop, but is also a major pest with which cotton producers must contend. Over the years, I have heard complaints about “worms” attacking geraniums, and I have recommended that when encountered, an insecticide application should (here comes a horrible pun) “nip the problem in-the-bud”.

So why should I be concerned with tobacco budworms? Because, they have paid a visit to 2110 Londondery Drive. Since 1993, geraniums have been a favorite annual in our home landscape (Figure 1).



Figure 1

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My wife periodically cuts/removes the spent blooms (Figure 2). However, this time she called my attention to ragged leaves and “worms” (Figure 3).



Figure 2



Figure 3

Our “guests” are tobacco budworms. And, no one description fits all because they possess a variety body patterns and color forms (Figure 4).



Figure 4

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Tobacco budworms are the larvae of the tobacco budworm moth (Figure 5) which has a 1-1 ½ inch wing span(Figure 6).



Figure 5

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Figure 6

Tobacco budworms are more of a southern species. While some pupae may survive a mild Kansas winter, for the most part, our winters are too harsh for their survival. Thus their yearly presence in Kansas is due to moths which move northward from their normal southern “home territory”.

So how does a person know if/when moths arrive/are present? Pheromone lures are available for use in monitoring moth movements. Because Kansas cotton producers have a vested interest in their crop, they may employ this tool. However, for homeowners, this may not be practical. Rather, those who are concerned with this pest need to frequently inspect their plants for larval activities.

As their name implies, the larvae do have a preference for the buds and flowers of their host. Look for small gnaw marks/holes in developing buds or flower petals (Figure 7).



Figure 7

As larvae grow, they will turn their attention to the plant foliage (Figure 8).



Figure 8

In addition to geraniums, petunias and various varieties of *Nicotiana* are favorite hosts for tobacco budworms. Begonias apparently are not ---- refer back to Figure 1 where you can see that the row of begonias and geraniums are in close contact, but larvae are found only on the geraniums. Also, larvae are adverse to direct sunlight (hiding by day on or near the ground), and prefer to feed/be exposed during the evening and early morning hours.

The above larval images were taken during the day – but the sky was overcast and so the larvae remained exposed. This tidbit provides a clue as to when it is best to apply an insecticide treatment: at dusk when larvae are getting ready for their nightly foraging activities. Any of the pyrethroid active ingredients (permethrin, bifenthrin, cyfluthrin, lambda-cyhalothrin, beta-cyhalothrin and esfenvalerate) in products marketed for

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homeowner use should provide adequate control as will organically-acceptable spinosad products. Because many companies utilize identical active ingredients in their product lines, be sure to read individual labels to ensure that the product in-hand is duly labeled for use on the proposed site/commodity and target pest.

WANTED: DEAD OR ALIVE ----- Boxelder Bugs

<p>Wanted: Dead or Alive Boxelder Bugs</p> <p>Alias: "Democrats"</p> <p>Crime: Unauthorized Home Invasion</p>	
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It is interesting to note that (if asked) which insect is most annoying as an uninvited "house guest", the boxelder bug seems to be at the top of everybody's list. Yet when purposefully seeking to collect boxelder bugs, one becomes frustrated by their scarcity. That is my current plight (as it was last year).

Our graduate students' Popenoe Entomology Club prepares Insect ID Kits which are sent to various high school FFA Chapters with students enrolled in the Entomology Project. Those students become familiar with the representative species for which they have the responsibility to identify at the State FFA Career Development Event held on the K-State campus.

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I am asking for your assistance in obtaining boxelder bugs. Somewhere out there in the great state of Kansas, they have to be scurrying about. I would appreciate your keeping your ears open for any clientele inquiring about controlling boxelder bugs. Fifty boxelder bugs are what we are aiming for to fill our supply drawer, and we would appreciate any that come our way. Please contact me (rbauernf@ksu.edu or 785-539-7519) if you are able to help out. I will make arrangements to pick up shipping/ mailing costs.

Missing from the Wanted Poster is “The Reward”. Well we can’t promise a Ferrari, but definitely we will extend a **BIG THANK YOU!!!!**

Bob Bauernfeind

Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from August 28th to September 3rd.

August 28 2009 Haskell County – Banded elm bark beetle in elm
August 28 2009 Greenwood County – Tube-tailed thrips and oribatid mites in cedar
August 28 2009 Sumner County – Sarcophagidae larvae (maggots) found in trash bin
August 28 2009 Saline County – Bark beetle damage and longhorned beetle pupae in scotch pine
September 01 2009 Mitchell County – Mining bees near dirt road
September 02 2009 Sedgwick County – Velvet mite found on person
September 02 2009 Riley County – Sarcophagidae larvae (maggots) found in yard
September 02 2009 Bourbon County – Cicada killers and paper nest wasps swarming in a dying Elm tree
September 03 2009 Leavenworth County – Milkweed aphids on milkweed

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or GotBugs@ksu.edu.

Holly Davis

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Sincerely,

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