Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel

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Mimosa Webworm Is Out-And-About

Mimosa webworm (*Homadaula anisocentra*) caterpillars (larvae) are now present feeding on honeylocust, *Gleditsia triacanthos*, and mimosa, *Albizia julibrissin*. The larvae are 1/2 inch long when fully grown, and rapidly move backward when disturbed. Larvae web leaves together on the ends of branches. The webbing usually starts at the tops of trees and serves as protection from natural enemies (parasitoids and predators). Heavily infested trees appear brown or scorched as the larvae skeletonize the leaf tissue. The larvae eventually fall from trees on a silken strand just prior to pupating. Mimosa webworm pupates in bark crevices or the pupae can be observed glued to structures. What about control? Well, in some instances, it may be too late. Pest control materials recommended for control of mimosa webworm…that are primarily exposed…include acephate (Orthene), *Bacillus thuringiensis* spp. *kurstaki* (Dipel and Thuricide), spinosad (Conserve), and carbaryl (Sevin). In addition, several pyrethroid-based insecticides may be used to "control" mimosa webworm caterpillars. Be sure to read the label of each product to make sure that at least webworms are on the label. Also, high volume sprays are essential in order to contact the larvae inside the protective webbing. If trees are heavily-infested with webbing then it may not be appropriate to apply a pest control material.

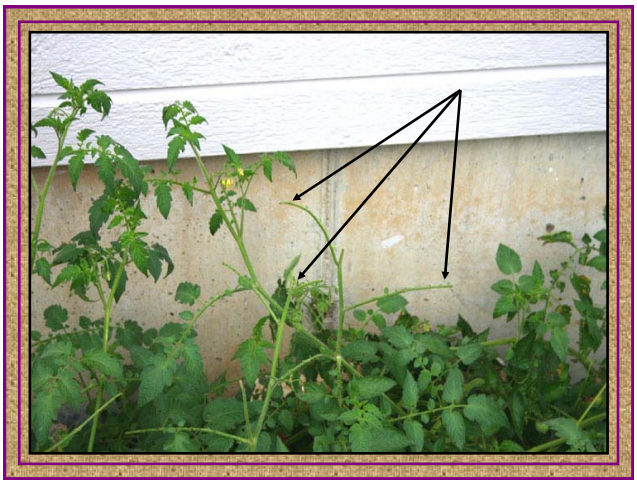
Raymond Cloyd

It's No Illusion.....

Many people are fascinated by acts performed by world renowned illusionists. As if by magic, things disappear. Of course there is always a trick "behind-the-scenes" — things never really disappear.

When home gardeners pass by their tomato plants, they sometimes note a disappearance of leaves. THIS IS NOT AN ILLUSION! Foliage really has disappeared. But there is no trickery involved.

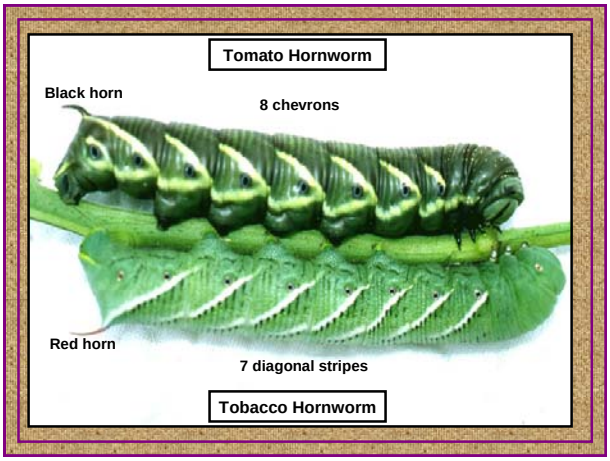
What is the explanation?



Often times, “green stuff” will be noted on the ground beneath the defoliated plants. These are fecal pellets/poop of “worms”.

And by closely inspecting the affected tomato plant, the culprits will be found: hornworms.

Two closely related “hornworms” feed on tomato plants: tomato hornworms (TOM) and tobacco hornworms (TOB). It may be a moot point as to actual species present because the life cycles and feeding habits of both are similar. For the record, each has its own identity. The TOM has a black “tail”/horn and 8 chevrons. The TOB has a red “tail”/horn and 7 diagonal stripes. Shades and darkness of the primary color (green) vary.



TOM/TOB overwinter in the soil as pupae earthen cocoons.

While working the garden soil in early spring, people often find the pupa which was broken out of the earthen cocoon.

TOM/TOB moths emerge from the pupa beginning in late May-early June, and will be continually present throughout the summer. These are one of the species of the"hummingbird moths" commonly seen hovering over flowers during early evening hours. They uncoil their long proboscis as they "drink" nectar/liquids from flowers.

Moths deposit eggs on tomato foliage. Although fairly large and readily visible without the aid of a magnifier, eggs are seldom observed due to the thick foliage of plants as well as their green coloration which blends with the leafy background. Equally difficult to observe are the small 1.5 mm long larvae which eventually hatch.

For approximately 4-5 weeks, larvae go undetected as they feed. But they betray their presence when large enough to consume large amounts of foliage. At this point in time, there is little to be done other than hand-picking and disposing of them or, simply, allowing them to complete their feeding cycle (they are already nearly done).

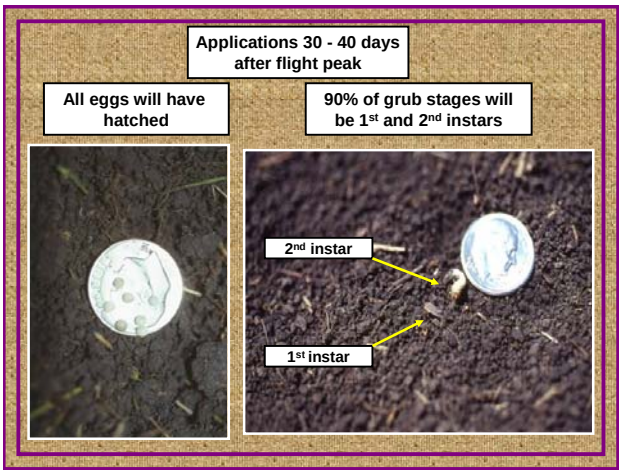
Masked Chafer Flight Peak .....

As determined by blacklight trap catches **in the Manhattan area**, masked chafer flights peaked the evening of July 5. (This may have occurred earlier in southeast Kansas, or is yet to have occurred in far northwest Kansas).

For people who previously applied preventative systemic insecticide treatments (or plan to yet do so within the next couple of weeks (See Kansas Insect Newsletter #12, June 27, 2008), this is little importance as there is no need for further treatment considerations.

For people considering the use of short residual insecticides as preventative treatments against grubs (the larvae of masked chafer beetles), the flight peak has a bearing on treatment application. optimal treatment window 30 - 40 days after the relies on the rationale that (roughly) all deposited hatched, and 90% of the grubs will be in either their developmental stage — too little to have caused especially susceptible to insecticide kill.

contact annual white flight peak has The 10-day flight peak eggs will have first of second damage, and



It is important for consumers to read product labels. While the image of a white grub may appear on a product package, not all are "the best" for controlling grubs. Two active ingredients have proven "acceptable" efficacy against annual white grubs: carbaryl and trichlorfon. For the homeowner, carbaryl is formulated as a granular product with the trade name Sevin Lawn Granules, and trichlorfon as a granular product marketed as 24-Hour Grub Control.

Steps for successful control include:

1) Calibrating applicators. Drop spreaders are more accurate than whirlybird spreaders. Both are more practical to use than hand-held applicators. Calibration ensures that proper amounts of insecticide are applied to achieve maximum kill. Manufacturers may suggest settings-to-use with their equipment. However, especially after wear and tear on the equipment, calibration becomes important to maintain proper product delivery rates.

2) Thatch can tie-up insecticides. To facilitate the movement of insecticides into the soil zone where grubs actively feed, a vertislicer, power rake or core aerator will help create passage ways through the thatch layer.

3) Apply a pretreatment watering to the lawn/turf. This should encourage grubs to be near/in the root zone. More importantly, a pre-moistened soil will facilitate the following.....

4) Apply a post-treatment irrigation as soon as possible after insecticide granules have been applied. Short-residual insecticides are subject to rapid breakdown and must immediately be moved into the soil.

Bob Bauernfeind

Ant and Termite Populations on the Rise?

Several newspaper, radio, and even television reports recently have indicated an increase in numbers, or activity, of ants and termites around the state. We have not received an inordinate number of calls this year. Instead of trying to compare this year with previous years from memory, we went back six years in our files to see if there has been an increase in samples submitted for official identification. KSU Entomology provides a service to anyone throughout Kansas for the identification of, and information regarding any arthropod submitted to the KSU Insect Diagnostician, either by sending pictures online at GotBugs@ksu.edu or by mailing the actual specimen to: Insect Diagnostician, 123 Waters Hall, Manhattan, KS 66506. This is a much-used service and therefore a good source for documenting insects and other arthropods over time. These reports are published in our weekly newsletter and therefore provide a good way to discern insect population increases and decreases seasonally and from year to year. From these reports (see table) it is apparent that ant and termite numbers, or activity, have not been greater than normal. In fact, ant samples were the lowest in six years. Data were taken from reports of samples submitted from April – September (except in 2008 in which data is from April – 10 July).

Table - Number of ant and termite samples submitted 2003 – 2008.

Year	# Ant Samples	# Termite Samples	Total of Both
2003	10	4	14
2004	14	8	22
2005	6	4	10
2006	5	3	8
2007	9	5	14
2008	3	6	9

Jeff Whitworth Holly Davis

Wheat Head Armyworm

We received reports of wheat in the Colby area with high IDK counts, most likely the result of wheat head armyworm injury. Not much one can do when worms are not found until harvest. By that time most of the injury has already taken place and even if larvae are still present one can not afford to delay harvest by applying any insecticide to the fields. The larvae are not a threat to stored grain and will soon die if present in grain being placed in storage. One practice that might lower IDK counts would be to mix grain from the edges of the field with grain from the interior of the field while harvesting. Often wheat head armyworm populations are higher along the borders of the fields and IDK counts are higher in the first loads of wheat harvested that consist mainly of wheat harvested along field edges. J.P. Michaud did a radio program for K-State AgToday on June 6, 2008 that discusses harvest-time damage that can be inflicted by the wheat head armyworm and outlined a harvesting strategy that can lessen the market impact of that damage. http://www.oznet.ksu.edu/radio/StreamingArchives/AGTODAY/at060608-3.mp3 . Additional information on the wheat head armyworm including pictures of the larvae is available on our web site at: http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=217&tabid=503

Phil Sloderbeck

False Chinch Bugs

I received a report this week of false chinch bug nymphs causing heavy damage to sorghum seedlings where the sorghum had been planted into a recently harvested canola field in southwest Kansas. This is not too surprising given that a few days ago we noticed high numbers of false chinch bugs in canola fields as they neared harvest and that in the past we have observed heavy damage from false chinch bugs in fields where wild mustard or flixweed was allowed to grow until just before sorghum planting. False chinch bugs may be something to think about if double cropping sorghum following canola. Additional information on false chinch bugs can be found on our web site at: http://www.entomology.ksu.edu/DesktopDefault.aspx?tabindex=283&tabid=535

Phil Sloderbeck

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from July 3rd to July 10th.

July 03 2008: Jefferson County – Assassin bug nymphs found in yard
July 03 2008: Barton County – Leafminer damage in spruce tree
July 03 2008: Harvey County – Carabid (*Scarites* sp.) beetle in home
July 07 2008: Pottawatomie County – Bagworms and leafminer damage in Cedar
July 07 2008: Riley County – Bat bugs (*Cimex adjucntus*) found in home
July 08 2008: Douglas County – Camel crickets found in home
July 08 2008: Ottawa County – Insect eggs and Orbatid mites on Oak leaves
July 09 2008: Chase County – Assassin bug nymphs found in home
July 09 2008: Osborne County – Threestriped blister beetles in yard
July 10 2008: Riley County – Fourlined silverfish in home
July 10 2008: Nemaha County – Twolined spittlebug on Holly
July 10 2008: Johnson County – Probable leafroller larvae in tree
July 10 2008: Shawnee County – Carpenter ants in home
July 10 2008: Riley County – *Dectes* stem borer, potato leafhoppers, green cloverworms, bean leaf beetles, and southern corn rootworms in soybeans

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

Sincerely,

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