

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



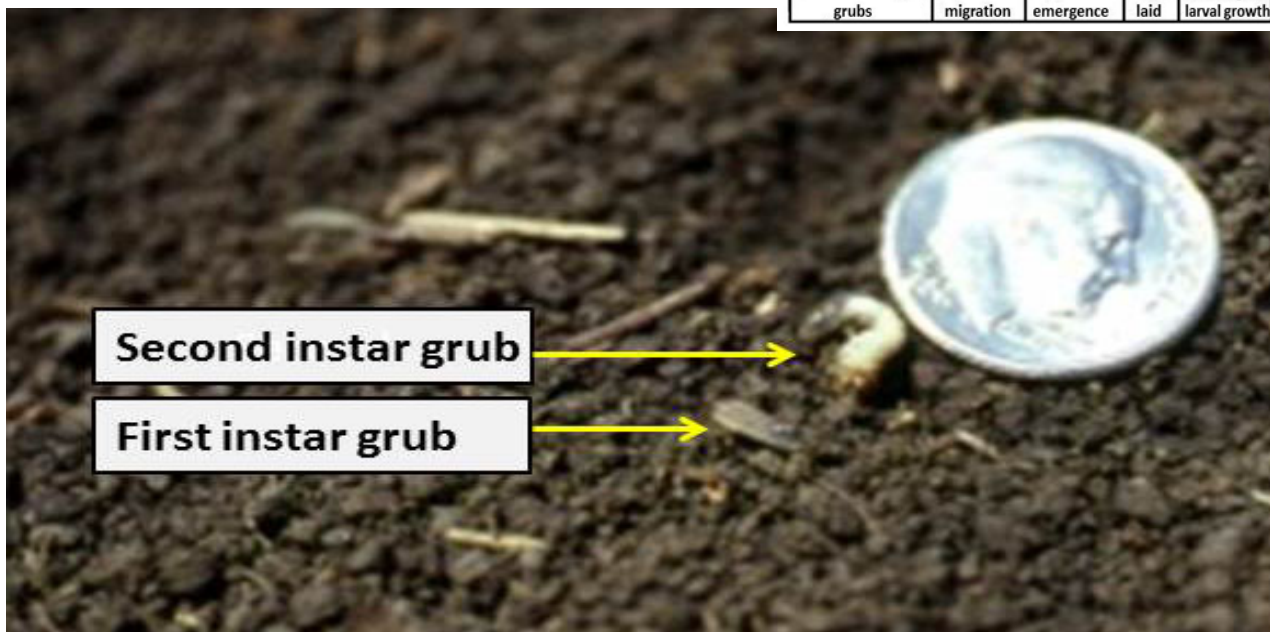
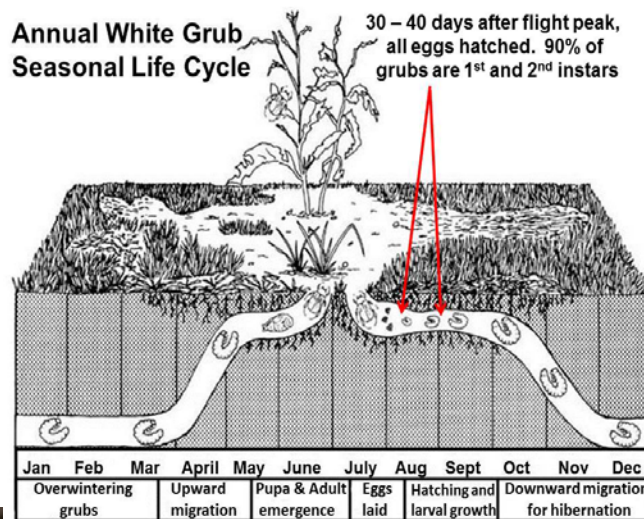
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With Regard to Grub Control in Turf --- Part 2

In the June 27, 2013, Kansas Insect Newsletter, the rationale for utilizing **systemic insecticides** as a preventative tactic against annual white grubs was presented. What was not addressed was the use of **short-residual contact insecticides** as grub preventatives. Unlike systemic insecticides which have fairly liberal timing for their application, the effectiveness of contact insecticides is contingent upon their being applied in a more precise manner to coincide with the actual presence of grubs.

The recommended timing for these applications is at a time when egg hatch has been completed. The general rule-of-thumb is that applications be made 30-40 days after the peak flight of masked chafers, a time after which all eggs should have hatched, and 90% of the grubs should be in their 1st and 2nd instars (developmental stages) ---- small and most susceptible to insecticide treatments. The two short-residual active ingredients currently registered for use (in Kansas) against grubs are carbaryl and trichlorfon. Check local retail outlets for product availability.



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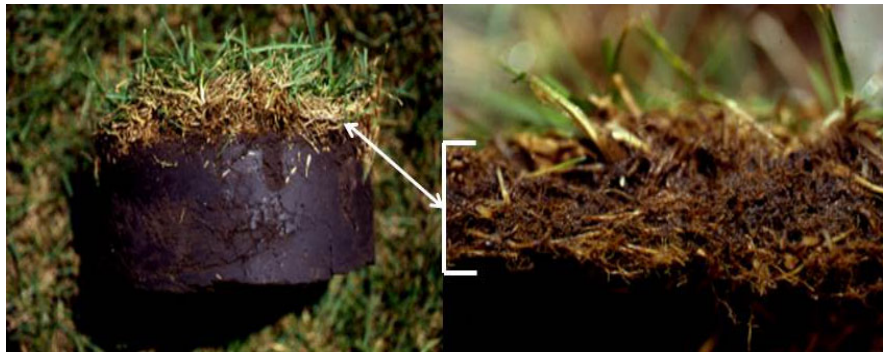
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The 2013 flight peaks at four trapping sites were: July 1 in Topeka; July 7 and 8 at two sites in the Manhattan area, and July 11 at Overland Park. These dates are in line with the rule-of-thumb July 4 date cited as an average time for chafer flight peaks. Given that the guideline is a rough estimation, and taking into account the 10-days between the July 1 and July 11 peaks, the 10-day treatment window for applying short-residual contact insecticides 30-40 days post flight peak can be stretched to July 31 through August 19.

If applying a granular insecticide, a drop spreader will deliver a more accurate and precise insecticide application than can be achieved with a broadcast spreader. While drop spreaders may come with predetermined settings, different granular formulations necessitate calibrations to ensure the delivery of the proper amount of product. In addition, periodic recalibrations need to be conducted to compensate for accumulated wear and tear on equipment which would tend to deliver above labeled rates of product. Also, do not “pinch back” the flow rate to stretch your product in order to save on cost. Under-applying will compromise grub control efforts.

Remember that insecticides applied to the soil surface need to be moved into the soil zone where grubs actively feed on grass roots. Because contact insecticides have short residual properties, it is imperative that they quickly be watered into the soil to achieve immediate contact with grubs. Pre-water your lawn in advance of applying insecticide treatments. A pre-moistened soil will aid in post-treatment irrigations.

Debris and thatch on the soil surface impede that movement. Prior to applying an insecticide, use power rake, vertislicer or core aerator to create passageways through the debris/thatch layer.



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“They’re baaack” ---- Not Poltergeists, but Walnut Caterpillars

The catchphrase, “They’re baaack” is a line delivered by Heather O’Rourke in the Movie Poltergeist II: The Other Side, and is ranked #69 on the AFI’s Top 100 Movie Quotes. Well, individual beliefs as to the existence of poltergeists vary. But until credible scientific evidence shows otherwise, poltergeists are not a reality. BUT WALNUT CATERPILLARS ARE! And, “They’re baaack”.

This is not a total surprise. While blacklight trap catches are not fool proof, for every year that I have recovered walnut caterpillar moths, walnut



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caterpillars per se have made their presence known. **But not in 2012!** I thought it strange that I did not recover a single moth from any of the 3 traps operated in Manhattan. And nary a caterpillar was seen in/on any of my “history trees” in 2012.



This year, moths reappeared in trap catches on June 6. However, I really did not think too much about walnut caterpillar activities between then and earlier this week. As I was out-and-about, I noted “bare branches” in the upper canopies of a couple trees. And the fact that they were bare could only mean that walnut caterpillars “of size” were active. Due to the height of the trees, I could not really get a close-up view of the caterpillars. However, I had another site with shorter trees and a previous history of walnut caterpillar activities. While negative in 2012 (as previously indicated), I headed out for a look.



In this instance, the tree was severely defoliated.

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There were not many caterpillars to be seen. All of those that I was able to observe were in their final instar -----
- 2-inches long, and bodies black in color and adorned with long soft white “hairs”.



Then, it all made sense. The timeline fit. The 6-7 week period between the appearance of moths and the current status of larvae accounted for the bare branches. Why so few caterpillars now? Most have completed their feeding cycle and left to look for sites in which to pupate.

To treat or not to treat? This provides an excellent example of how-it-is. Ideally, treatments (against any pest species) are best initiated at the beginning of a feeding cycle when immature stages are small and especially susceptible to insecticides. **BUT AT THE SAME TIME**, early insect instars have minimal feeding requirements. Thus, their nibbles cause no noticeable damage to provide “an alert” as to their presence. It isn’t until the last week or so of their development that they gluttonously gobble massive amounts of foliage to the extent that they “give signal” as to their presence. At this point in time, there is little to be gained with insecticide applications. Trees will rebound. New foliage will soon issue forth ---- just in time to provide the salad bar for the second-to-come 2013 generation of walnut caterpillars. And the scenario will be repeated. Caterpillars are being maintained for the purpose of monitoring their transition into the pupal stage and the emergence of second generation moths.

Bob Bauernfeind

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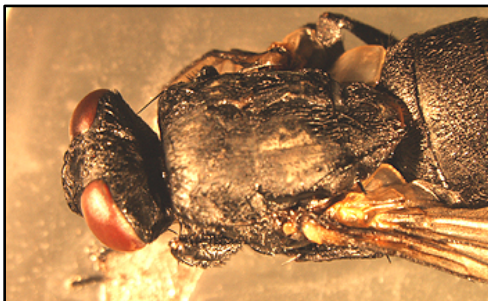
Insect Diagnostic Lab Report for July 19 – 25, 2013

Ash-gray blister beetles (*Epicauta fabricii*) \
Potawatomie County

Black carpet beetle (*Attagenus unicolor*) and Bed bug
(ID is tentative due to the poor condition of the
specimen) collected from bed sheets \ Reno County



Blow flies (Calliphoridae; 16-18mm size) on a window
screen \ Manhattan, KS



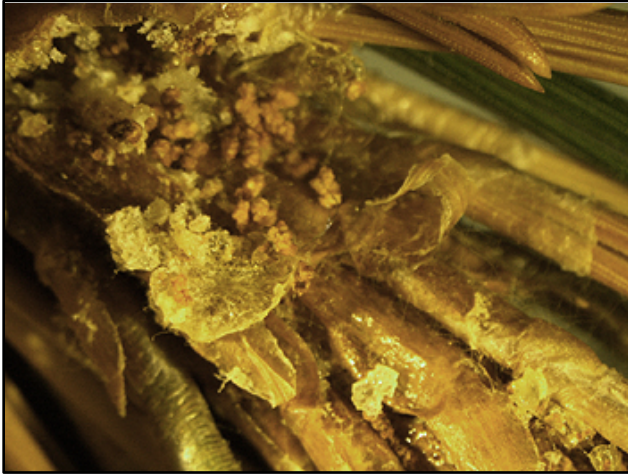
Green aquatic midge (Chironomidae), Darkwinged
fungus gnats (Sciara sp.), and unknown midge collected
in a country-setting senior home \Wyandotte County



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Boring damage in shoots of young evergreen trees - Tip
moths suspected \ Cheyenne County

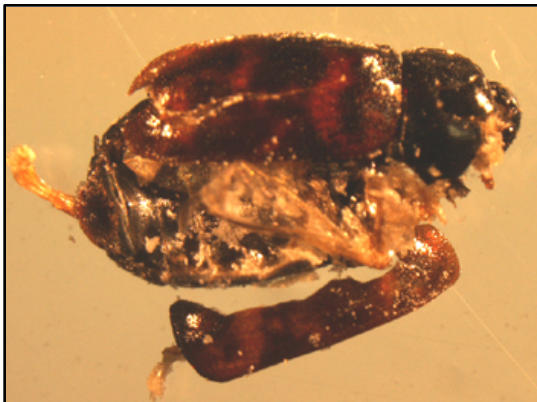


Insect trapped in silos – food company \ Wyandotte
County:

1. Flat Grain beetles (*Cryptolestes pusillus*)



2. Dermestid beetle (*Trogoderma* sp.)



3. Dried fruit beetle (*Carpophilus hemipterus*)



4. Ant-like flower beetle (*Anthicus* sp.)



5. Carabid beetle (*Lebia viridis*)



6. Suspected Odd beetle female (*Thylodrias* sp.)



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From the gotbugs@ksu.edu:

Fishing spider near a creek \ Wabaunsee County



Cottonwood borer (*Plectrodera scalator*) \ Riley County



Case making leaf beetle larva (Camptosomata; Chrysomelidae)



Robber fly (*Diogmites* sp.; Hanging thieves) \ Wamego, KS; photo credit: Julie Eklund



Last instar saltmarsh caterpillar (*Estigmene acrea*) eating basil herb \ Johnson County



American Dagger caterpillar found in oak tree



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Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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