# Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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September 26, 2014 No 24

# **Beginning Beekeeping**

Fall and winter are the time of year in which those wanting to start beekeeping should be preparing for the spring season. Efforts should focus on researching suppliers, equipment, and sites to place hives. Once a decision has been made, equipment should be ordered and assembled. If ordering package honey bees, begin making contacts in January and February with suppliers. Another consideration for new beekeepers is joining local and/or state beekeeping associations. There are a few local groups throughout Kansas, contact Sharon Dobesh, <u>sdobesh@ksu.edu</u>, for more information and contacts. Beekeepers should also look into the Kansas Honey Producers Association (KHPA), the Kansas statewide organization. Attending bee organization meetings gives a new beekeeper networking opportunities and resources to learn more about their hives and hobby.

# **Upcoming Kansas Honey Producers Meeting**

The Kansas Honey Producers will host their 2014 fall meeting October 17<sup>th</sup> and 18<sup>th</sup> at the Clarion Inn and Suites in Wichita. Guest speakers this year are Gary and Ginger Reuter from Minnesota where Gary is a research technician at the University of Minnesota Bee Lab. Please visit <u>http://www.kansashoneyproducers.org/Meeting\_Information.html</u> for more information on this meeting and registration.

Sharon Dobesh

# Fall Alfalfa Weevil Control

Fall applications of Stallion® insecticide have been made the last two years (2012 & 2013) to determine if this would be an effective strategy to help reduce or control spring alfalfa weevil larval infestations. Adult weevils return to alfalfa fields in the fall after over-summering elsewhere. They then mate and start inserting eggs in alfalfa stems. This activity continues anytime the temperature is above 45°F throughout the fall and winter. These eggs hatch in the spring and the very intense larval feeding then occurs over about a 3-6 week period. If these larvae are not effectively controlled, and in a timely manner, they can significantly reduce the

# **Kansas Insect Newsletter**

#### September 26, 2014 No 24

first spring cutting and this also will impact the rest of the cuttings. Spring weather in Kansas can be highly variable (but the weevil larvae continue to voraciously feed) which often makes it difficult to effectively spray in a timely manner. Thus, the idea of treating in the fall to reduce adults which would, hopefully, then reduce the following spring's larval infestation. A couple different methods of sampling were used to determine if the fall applications impacted eggs and/or adults. However, the impact on spring larval infestations is really the only result that has significance to growers. We do have considerable data relative to fall treatments for various aspects of alfalfa weevil management. However, as we said, the one of interest to producers is shown here:



As you can see, the third application for both years resulted in significantly less larvae in the spring. In this case the third application means the plots were treated six weeks after alfalfa weevil adults were first detected in alfalfa fields after summer. So there does seem to be some consistency there. However, from a practical standpoint, even though this treatment timing resulted in significantly less larvae, it did not result in larval infestations below the treatment threshold of 1 larva/2 stems. The third application in the fall for both years (treating six weeks after the first adults returned to alfalfa fields) still did not reduce the spring infestation below the treatment threshold. Thus, insecticide applications were still required, at the same time for both years in all 10 fields utilized in this two year study, as in all the other fields in the area that were not treated in the fall.

Jeff WhitworthAlysha SoperHolly Schwarting

# Itchy? Chiggers? OR, SOMETHING ELSE!

A recent telephone conversation sparks this inclusion in this week's Kansas Insect Newsletter. The caller related an uncomfortable situation that was diagnosed as chiggers. Apparently he was familiar with chiggers, and related that his current situation "seemed different". He then went on to describe his red welts as having tiny centralized blisters. It had been several years ago, but I recalled something-from-the-past. I asked whether he had been around pin oak trees. "Yes, 3 large pin oaks on my property".

While I lay no claim to having expertise in medical matters associated with arthropods, I am offering this heads up: it is possible that there will be a rash (pun intended) of reports regarding red welts with a centralized blister. While people often receive a pleasurable soothing, satisfying relief by itching (for instance a mosquito bite), in this instance, **itching is painful**.

The causative agent is the oak leaf itch mite (OLIM), *Pyemotes herfsi*. Refer to <u>Extension Publication MF</u> 2806, Oak leaf itch mite (available on-line). It details a very interesting relationship between female OLIMs which parasitize the larvae of a midge fly responsible for causing marginal galls on oak leaves. [Point of interest: the recent caller did not find marginal galls on the leaves, but rather pocket galls along the main veins on the underside of leaves. These vein pocket galls are caused by another type of midge. It is conceivable that the OLIM parasitized the larvae of these closely-related midge species. It has been suggested that OLIM (perhaps out of necessity) are opportunistic, having been found parasitizing/feeding on the eggs of periodical cicadas]. There is a dispersal point-in-time when the female OLIMs leave the marginal galls. Anybody under the oak tree becomes a prime target. Or, because they are very small and light in weight, the OLIMs are easily carried (by air currents) to more distant places bringing them into people contact. Lastly, people have reported reactions after raking leaves.

Bites are not felt. Rather, itching reportedly begins 10-16 hours after exposure. Also, there apparently are different degrees of sensitivity (between individuals) ranging from no reaction to severe. Consult <u>Extension</u> <u>Publication MF 2806, Oak leaf itch mite</u> for relief remedies from oak leaf itch mite bites.

Referring back to old issues of the Kansas Insect Newsletters: in late August and early September of 1992, hundreds of people from both rural and urban settings in Johnson County sustained rashes and welts. All was apparently quiet in 1993. But on September 12, 1994, it was reported that (in Emporia) several days after attending an open house and a-school picnic, many people reported welts and rashes with "focal points" (?centralized blisters?).

There followed intervening years during which there was a lull in reports --- until 2004 when football players from Western State Colorado University college went home covered with bites after playing against Pittsburg State University on August 26. At the same time, the Crawford County Health Department was inundated by calls from residents of Pittsburg complaining of itchy bites. Manhattan, KS, Lincoln, Nebraska and St. Joseph, MO, were other communities in surrounding areas reporting similar attacks by oak leaf itch mites. The situation remained the same in 2005 with the exception that reports were minimal from Manhattan.

# **Kansas Insect Newsletter**

#### September 26, 2014 No 24

An OLIM decline in 2006 was attributed to parasitic wasps which suppressed midge larvae populations ---- thus a diminished host source to support/produce high OLIM populations. And, in 2007, further diminishment of OLIM resulted from an early-season freeze event which killed oak leaves and the midge larvae within.

At least to my knowledge, little work has been conducted on oak leaf itch mite during the 6-7 year interim until now. For any number of reasons, control of the gall midges would seem difficult. There are unknown's with regard to the whereabouts of *Pyemotes herfsi* in the absence of an appropriate host to sustain a reservoir population during a large portion of the year.

# "Lawn Moths" = sod webworms

When recently mowing my lawn, I scared up many small light-colored tannish moths. While there are many species of small tannish moths, these in particular displayed sort of brief zig zag flight patterns before quickly settling down. And when closely examined while resting, the moths appeared sort of tube-like, their wings curled around their body. Another prominent feature was their labial palps which projected forward. Thus, these moths go by several common names: lawn moths, tube moths and snout moths. Their larvae are called sod webworms.

Sod webworms is an umbrella term which covers a wide range moth species whose larvae are potential turf pests. Certain species are predominant depending upon geographical location. In Kansas, the primary species is *Parapediasia teterrella*.

Parapediasia teterrella produces 2 generations per year. They overwinter as previous season's 2<sup>nd</sup> generation larvae which resume feeding in early spring. By mid-to late May, matured larvae pupate. This is followed by a moth flight which peaks towards mid-June. These 1<sup>st</sup> generation moths produce eggs. After a summer feeding period, matured 1<sup>st</sup> generation larvae pupate.

	Adult prese	nce and peak occurre	ence						
Species	Location and source	Generations per year	Apr	Мау	Jun	Jul	Aug	Sept	Oct
Chrysoteucia topiaria	Mich.,* Wash. <sup>b</sup>	1	1 Rooming	Desce of	-	-			the states
Crambus caliginosellus	Mich.4	1	1.00	di lora		-			1000
	Va.e	1	1 the		-		-	- Original	
Microcrambus elegans	Va. <sup>d</sup>	2		in su an	-		-		in nu
Parapediasia teterrella	Va. <sup>d</sup>	2		-					in the second
	Tenn."	3		-					-
Pediasia trisecta	Wash. <sup>b</sup>	1	0.10	10 10		-			
	Iowa-Ohio <sup>r</sup>	2	10	-		-		-	
	NJ,#, Va.d	2-3							-
Crambus speryellus	Los Angeles, Calif. <sup>h</sup>	3			-	-		-	-
Tehama bonifatella	Los Angeles, Calif. <sup>1</sup>	4	-		-				-

This is then followed by the emergence of  $2^{nd}$  generation moths whose flight activities peak in late summer. We currently are in the  $2^{nd}$ generation flight period as evidenced by blacklight trap captures. These moths will produce eggs giving rise to the previously mentioned overwintering  $2^{nd}$  generation larvae.

As previously mentioned, sod webworm moths are commonly referred to as lawn moths. It is during the evening hours that moths actively fly and drop their eggs into



grassy areas. During daylight hours, moths go undetected due to their small size (½-inch long) and their habit of resting on and being hidden in lower portions of grass plants/blades. About the only time people become aware of moth activities is when moths are disturbed as people walk across/through grassy areas or when mowing lawns.

To treat or not to treat: that is the question. Sod webworms rarely are cause for concern. While they may be seen/encountered every year, their population levels are low enough that lush healthy lawns are able to absorb and mask feeding damage. In general, people are unaware of the presence of sod webworms. Unless a lawn has a history of frequent/repeated sod webworm damage, one should not be overly concerned if and when they observe lawn moth activity. From a personal perspective: I know that the moths being caught in my blacklight trap did not fly in from any great distance away. Again, being that the moths are weak flyers which make but short flights, I know that they were produced from sod webworms in my lawn.

**Bob Bauernfeind** 

# **Insect Diagnostic Laboratory Report**

http://entomology.k-state.edu/extension/diagnostician/recent-samples.html

Eva Zurek

### September 26, 2014 No 24

#### Sincerely,

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**Kansas Insect Newsletter** 

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# Department of Entomology

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