For Agribusinesses, Applicators, Consultants and Extension Personnel



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April 24, 2015 No 3

HopGuard II Section 18 Approved for Kansas Alfalfa – Weevils and Aphids Wheat – Aphids Eastern Tent Caterpillar (ETC) and European Pine Sawfly (EPS) Update Ash/Lilac Borers (ALB) Update on the status of Emerald Ash Borer (EAB) in Kansas And Still Talking About Ash Trees – Brownheaded Ash Sawflies Insect Diagnostic Laboratory Report

### HopGuard II Section 18 Approved for Kansas

For Kansas beekeepers interested in using HopGuard II for varroa mite control, the 2015 section 18 was approved effective April 13, 2015 through December 31, 2015. The active ingredient in HopGuard is 16% potassium salt of hop beta acids, which offers an alternate chemistry against varroa mites and is considered to be a more natural or 'softer' chemistry.

The use directions for HopGuard II in the colony at a rate of one strip per five deep frames covered with bees in each brood chamber. Strips must be opened and hung over the frame, two strips per ten frame super. There is a maximum of three applications per year per super (i.e. six strips per year super) is allowed. Application should occur based on varroa mite levels in the colony. For optimal results, little to no brood should be present in the colony.

#### Inspections

The Kansas Department of Agriculture needs beekeepers, who are current users of HopGuard, to volunteer for required Section 18 inspections. If you use HopGuard and would allow KDA to come inspect HopGuard use in your hive(s), please contact Judy Glass, <a href="mailto:judy.glass@kda.ks.gov">judy.glass@kda.ks.gov</a>. Judy will need your name and contact information to follow-up. These inspections should not take longer than an hour to complete (probably less), but are required data for EPA in order for Kansas to continue to apply for Section 18 status. All volunteers may not be inspected.

Contact Sharon Dobesh (<u>sdobesh@ksu.edu</u> or 785-532-1340) if you have any questions regarding the section 18 approval, need a copy of the HopGuard II label, or the KDA inspections.

Sharon Dobesh

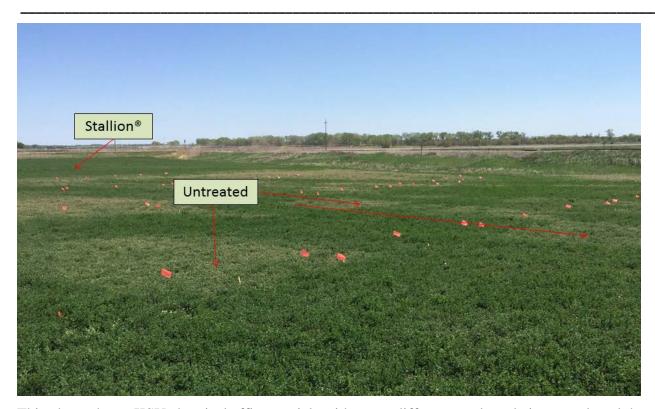
# Alfalfa - Weevils and Aphids

Alfalfa weevils continue to be very active in north central Kansas. The recent cooler weather has slowed down development a little but they are still feeding. We determined development from larvae collected on 20 and 22 April. Here is what the population breakdown looks like:

20 April		23 April No. larvae
No. larvae		
12	1 <sup>st</sup> Instars	4
25	2 <sup>nd</sup> Instars	16
15	3 <sup>rd</sup> Instars	30
numerous	Pupae	numerous



So what does this mean? Alfalfa weevil larval feeding will continue for another 7-10 days, depending on the weather. Egg hatch and consequent larval feeding has been going on since 13 March in north central KS. Insecticides applied since that time have provided adequate protection, for the most part.



This photo shows KSU chemical efficacy trials with many different products being tested, and the obvious untreated plots plus the border around the plots. The rest of the field was treated with Stallion® by MKC in Abilene, KS and, as illustrated here seemed to work relatively well with 1 application. Remember, feeding will continue for at least another week and therefore treatment (or re-treatment) may still be appropriate.

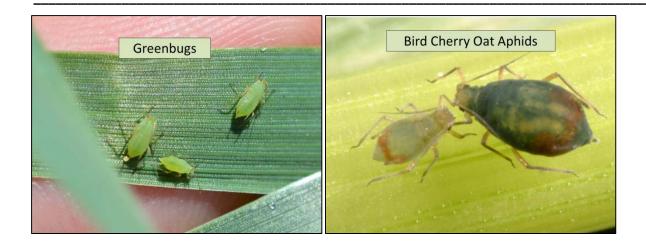
Alfalfa aphids, mainly pea aphids, are becoming more numerous throughout north central Kansas. Treating for alfalfa weevils probably pretty much decimated the natural enemies/beneficials and they will not repopulate as quickly as the aphids migrate in to infest fields.

**HOME** 

# Wheat - Aphids

Aphids, mainly bird cherry oat and greenbugs continue to migrate into wheat fields throughout north central and south central KS (see photos). When temperatures are warmer and winds are from the south, these aphids are migrating/blowing in, in significant numbers. However, we did note some mummies (parasitized aphids) in these fields so these little wasps are active and will probably help control these pests if insecticides are not used in these fields.

#### April 24, 2015 No. 3



Jeff Whitworth Holly Schwarting

**HOME** 

### Eastern Tent Caterpillar (ETC) and European Pine Sawfly (EPS) Update

While recent cool temperatures have had people wondering when warmer temperatures will prevail, both ETC and EPS have thrived ----- not surprising because these are cool-season insects.

Currently, Eastern Tent Caterpillar "tents" are of sufficient size that they can be easily detected. If people object to the presence of webbing and caterpillars, and if within hands-reach, the easiest remedy is to use your fingers to "rake-out" the web. Preferably do this during daylight hours when most (if not all) caterpillars are "resting" within. Do not fret if several caterpillars fall to the ground ---- individually, the few escapees are of no concern. If a person is skittish about touching web masses (and the caterpillars and frass within), that portion of the branch can be pruned and disposed of.



#### April 24, 2015 No. 3

European pine sawflies require a different approach because it is impractical to prune out each infested terminal. Fortunately, EPS are highly susceptible to insecticides. There are numerous products registered for use in Kansas against EPS. Horticultural oils and soaps are very effective against the "soft-bodied" larvae. A single thorough application will eliminate EPS larvae. But do so NOW before they become thoroughly destructive.



**HOME** 

### Ash/Lilac Borers (ALB)

In last week's edition of the Kansas Insect Newsletter, Dr. Cloyd presented information on Ash/Lilac borers including the use of pheromone traps to determine the onset of current-season ALB moth activities. Coincidentally on the date that the newsletter went out (April 16), I recorded first-of-the-year catches (in the Manhattan area). The latest catch was April 21.



It would appear that temperatures regulate moth activities as seen on the following table:

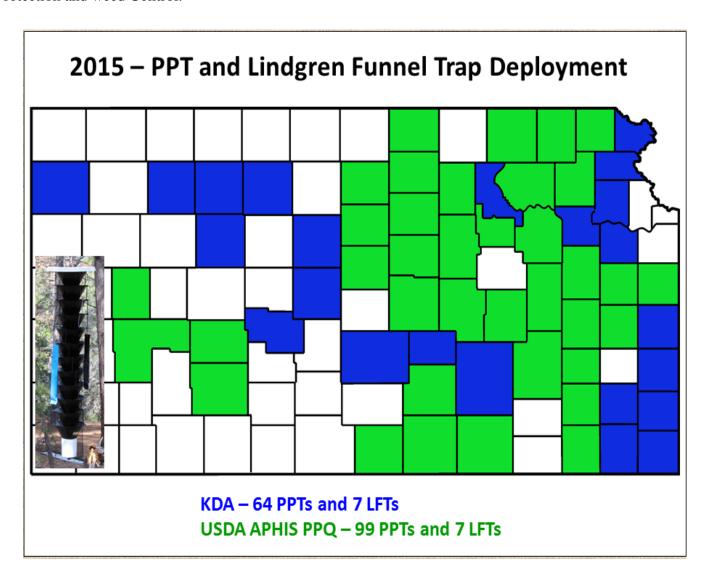
Date	Daytime High (°F)	Number of Moths
April 13	68	0
April 13	70	0
April 13	69	0
April 13	78	18
April 13	75	21
April 13	73	7
April 13	63	0
April 13	63	0
April 13	72	47
April 13	60	0

Sad note: Yesterday, April 14, 67 °F ---- 0 ALB, 1 house wren

Now is the ideal time to initiate insecticide applications for controlling ash/lilac borer. As suggested by Dr. Cloyd, "Insecticides containing the active ingredients, permethrin or bifenthrin may be applied to the bark at least up to six feet from the base......". Also, treat larger limbs within reach.

# Update on the status of Emerald Ash Borer (EAB) in Kansas

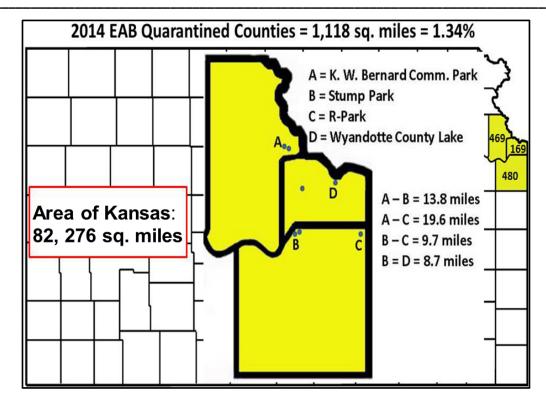
The KDA has recently issued a brief news release on the 2015 deployment of traps for the detection of Emerald ash borers in Kansas. This is a cooperative effort between two regulatory agencies: Federal United States Department of Agriculture APHIS-PPQ, and the Kansas Department of Agriculture's Division of Plant Protection and weed Control.



The majority of traps will be the familiar <u>purple prism traps</u>. Additionally in 2015, Lindgren Funnel Traps (LFTs --- inserted image, left side of above map) will also be used ---- those traps will be green-in-color as opposed to the pictured black LFT.

#### April 24, 2015 No. 3

Within Kansas: Emerald ash borers have been documented in 3 (currently quarantined) counties: Leavenworth, Wyandotte and Johnson. EAB are relatively restricted within those contiguous counties.

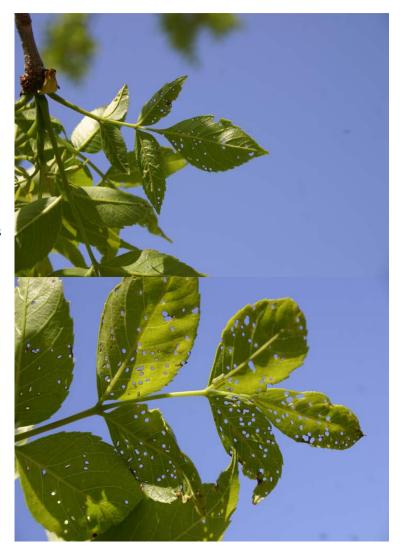


**HOME** 

# And Still Talking About Ash Trees - Brownheaded Ash Sawflies

Based on reports posted by Department of Entomology Diagnostician regarding her having received specimens of adult brownheaded ash sawfly, I went out to a site where ash trees have been heavily infested the past couple of years. And, they are back. Though from a distance all appears normal, upon closer look, "pinhole feeding" is underway. By enlarging the image, the stillwee-larvae responsible for the "nibble holes" can be easily seen.

To treat or no-to-treat becomes an individual's decision. Should trees become defoliated, they will rapidly recover, producing a flush of new foliage.



**Bob Bauernfeind** 

**HOME** 

## **Insect Diagnostic Laboratory Report**

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

Eva Zurek

**HOME** 

#### Sincerely,

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