### Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



Department of Entomology 123 West Waters Hall K-State Research and Extension Manhattan, Kansas 66506 785-532-5891 http://www.entomology.ksu.edu/extension

October 4, 2013 No. 26

### **Kansas Honey Producers Fall Meeting**

The Kansas Honey Producers will host their fall meeting October 18-19, 2013 in Topeka at the Capitol Plaza Hotel. This year's featured speaker is Larry Connor, owner of WicWas Press and monthly contributor to both the American Bee Journal and Bee Culture magazines. The Kansas Department of Agriculture will present on requirements for labeling and certified kitchens for marketing your honey.

The full meeting agenda and information for hotel and registration can be found at: http://www.kansashoneyproducers.org/Meeting\_Information.html

This is a great opportunity for those thinking about getting into beekeeping to begin exploring beekeeping opportunities. Meeting other beekeepers and gaining knowledge from their experiences is a plus. Please pass this information along to those who either are beekeepers or anyone interested in becoming a beekeeper.

Sharon Dobesh

# Fall Alfalfa Spraying Impact on Spring Alfalfa Weevil Infestations

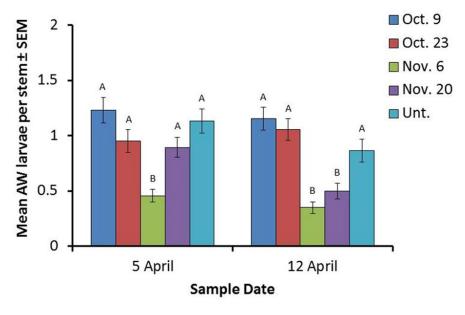
Data indicates that November insecticide applications may reduce alfalfa weevil infestations the following spring.

Alfalfa weevil larvae usually cause serious defoliation of alfalfa in the spring if not treated in a timely manner. They are especially devastating to the first cutting but can cause reduced quality and retard growth even after this first swathing. Because this spring weevil activity can be very intense in only a 3-6 week period, and because the weather is so unpredictable at this time of year, an alternative treatment strategy is being evaluated. This consists of spraying alfalfa in the fall. Alfalfa weevil adults become active in alfalfa fields in the fall where they feed a little, mate, and start laying eggs in alfalfa stems. When the weather gets too adverse for this

activity, they then become inactive in the leaf litter in the field, but anytime the temperatures get above about 45°F throughout the winter, they become active to continue laying eggs until temperatures cool back down.

So, the idea of treating alfalfa in the fall to kill the weevils before they can lay eggs has intrigued many producers. Entomologists at Kansas State University, led by Alysha Soper, a Research Assistant, initiated studies in the fall of 2012 to determine if fall applications would significantly reduce spring infestations, and if so, when the fall application timing would be most effective. Most conventional synthetic-organic insecticides provide 2-3 weeks residual activity, and since this egg laying can start in mid-Oct., it is imperative to determine the most effective time to spray to reduce the weevils, but also to lessen the impact on non-target organisms.

These findings are preliminary, based on only one year, but are from large plots from six different fields (see Fig. 1). This research will be conducted again this fall and evaluated in the spring of 2014. As seen from Fig. 1, the third application date resulted in significantly less weevils in the spring samples. The fall applications were initiated starting two weeks after the first adult weevil was detected in the field (started Oct. 9 in 2012). So, Fig. 1 illustrates the combined results from all six fields. Even though the third application date (Nov. 6, 2012) had significantly less alfalfa weevils per stem than the other application dates (except for the 4<sup>th</sup> application date as sampled on 12 April), the infestation levels were still high. Infestations of 1 larva/2 stems will result in considerable defoliation if not controlled. So, the statistical difference is significant, but the practical difference is less significant because insecticides will still need to be applied or serious defoliation will occur.



**Figure 1.** The mean treatment effect of fall insecticide spray date on spring alfalfa weevil larvae abundance in stems on 5 April 2012 (n = 40 per treatment) and 12 April 2012 (n = 30 per treatment) in 6 production alfalfa fields in Dickinson Co., KS.

Jeff Whitworth Alysha Soper Holly Davis

# **Woollybear Caterpillars in Soybeans - UPDATE**

The woolly bears that we discovered last week defoliating the double-cropped soybeans were mostly healthy appearing:



But we also found several unhealthy ones:



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Last week these unhealthy ones were natural looking in the field, i.e. they were attached to the plants and if you didn't get close you wouldn't realize they were dead or at least moribund. We collected some and brought them back to the lab to see what would emerge from the bodies. This is what has emerged:



So, we are not sure whether it is a saprophytic fungus (one that grows on dead and decaying tissue) or an entomopathic fungus (a fungus that actually killed the larvae) but in either case they are very dramatically covered with a white fungus. Either way this shows the value of a fungus-either by helping to break down dead tissue naturally, or by actually killing the insect itself, which, in this case, is a pest of soybeans.

Jeff Whitworth Holly Davis

## **Insect Diagnostic Laboratory Report**

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

Eva Zurek

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### Sincerely,

Sharon M. Dobesh GPDN Associate Director/Entomologist KSU Collegiate 4-H Faculty Advisor **KSU Plant Pathology** 4024 Throckmorton Manhattan, KS 66506

Phone: 785-532-1340 Cell: 785-313-3983

Jeff Whitworth **Extension Specialist** Field Crops

phone: 785/532-5656 e-mail: jwhitwor@ksu.edu

Holly Davis Research Associate Phone: (785) 532-4739 e-mail: holly3@ksu.edu

Eva Zurek Insect Diagnostician Phone: (785) 532-4710

e-mail: ezurek@ksu.edu



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