

<http://www.oznet.ksu.edu/entomology/extension/extension.htm>

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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Cattail Caterpillars:



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Caterpillars Feeding

Photos Courtesy of Ryan Higbie, Johnson County Extension Office

Received several calls the last two weeks relative to cattail caterpillars in sorghum. These insects are frequently found in sorghum and are rather distinctive. However, they've never attained densities that would cause an economic loss, at least not that we've heard about. They will feed on the leaves and around the whorl causing concern to growers and consultants. However, at this stage of growth, the sorghum plant can withstand considerable leaf feeding without significant effect on yield. There is no established economic injury level or treatment threshold in Kansas, as they've just not been enough of an economic problem to justify the expenditure of research dollars to establish either. Most of the larvae I've seen are relatively mature and probably won't be feeding much longer, thus most "damage" has been done. If feeding continues or head damage becomes apparent please call or email us ASAP.

Jeff Whitworth

Squash Bugs:

Of all the insect pests confronting home gardeners, none seem more vexing than squash bugs. There is no great mystery about squash bugs. First described as pests back in the late 1800's, much is known (today) about their developmental cycles and habits. Yet their perennial appearance makes them the woe of people attempting to grow squash and pumpkins. This is mainly because people first note their presence only after plants begin to "look sick and wilted". At that point in time, hoards of squash bugs (in all developmental stages) become apparent. Managing out-of-control populations is complicated, and results are often disheartening.

It is important to understand that some insect pest cycles are brief. That is, breeding populations may be present for but a brief period of time, and eggs are deposited within that time frame. Consequently, egg hatch and the eventual presence of immature stages are concise in their appearance. Thus an insecticide treatment or two should be sufficient to eliminate those synchronous

populations. Such an approach does not lend itself to controlling squash bug populations.

The overwintered female is relatively long lived, and continuously deposits eggs into summer. In fact, daughters from her first-laid eggs may have matured and begun depositing their eggs while “Mom” continues to produce eggs. There is a continuum of egg, nymph and adult life stages throughout the season going late into the fall until first freezes terminates the season’s activities. Thus a single spray or two is insufficient to keep squash bug populations below nondamaging levels.

Although we are at a point (in the season) that squash bugs have gained a somewhat firm foothold, they are not beyond being controlled **IF PEOPLE ARE WILLING TO COMMIT TO AN INTENSIVE CONTROL EFFORT.**

Commitment means thorough inspections of plants for the presence of squash bug throughout the production season. Mating adults (Figure 1) means that egg production is imminent. Eggs are deposited mainly on the bottoms of leaves usually in vein axils (Figure 2). Eggs hatch after 7-10 days. A first instar nymph is greenish and has a black head (Figure 3). Succeeding instars are grey and become progressively larger (Figure 4). Wing pads appear in the last instar. Adults emerge after the final molt.



Figure 1



Figure 2



Figure 3



Figure 4

A sure sign that squash bug activities have become established is the presence on many nymphs moving about on leaves, stems and fruits (Figure 5). This is but the tip of the iceberg. Many more nymphs and adults go undetected because they are on the undersides of leaves and fruits, especially those close to the ground. This natural inclination to remain hidden complicates control efforts ---- “shielded/protected” squash bugs often are unscathed by treatments, having escaped direct contact by insecticides.



Figure 5

Thus, thorough spray coverage is key to achieving the control of squash bug populations. Merely “misting” plants will do little to dent squash bug numbers. Rather, use an adequate amount of water in the sprayer to ensure a total plant coverage. It will be necessary to insert the sprayer nozzle deep into the plant foliage to achieve coverage of lower leaf surfaces. Also, it is essential to treat the bottoms of leaves laying on the ground as well as the ground per se.

The difficulties of achieving total spray coverage may discourage further spray treatments. Yet numerous additional spray treatments are required throughout the entire production season if one is to successfully cope with squash bugs.

There is a dizzying array of insecticidal products gracing the shelves of retail outlets. . Complicating the picture is that a single company may market several products containing the same active ingredient but offered under different trade names. The various active ingredients which are registered for use against squash bugs and include: azadiractin, bifenthrin, carbaryl, endosulfan, esfenvalerate, permethrin, pyrethrin and rotenone. Consumers need to check for the active ingredient appearing on product labels and then read the label to ensure that the intended pest and use/crop site appears on that product label.

Bob Bauernfeind

Field Crop Insect Outlook:

We are approaching a busy time of year insect wise.

Corn rootworm beetles are active which means corn fields need to be scouted either to predict the need for soil insecticides next year or to treat the adults before they can lay eggs and reduce the need for soil insecticides for next year. For more information see: <http://www.oznet.ksu.edu/entomology/extension/InsectInfo/Corn/Rootworms.html>

Corn borer moths should be emerging and beginning to lay eggs for the second generation. Treatments are generally warranted where eggs are found on 10 to 20% of the plants. Refer to European Corn Borer Management on the www at: <http://www.oznet.ksu.edu/entomology/extension/InsectInfo/Corn/European%20Corn%20Borer.html> or Southwestern Corn Borer Management: <http://www.oznet.ksu.edu/entomology/extension/InsectInfo/Corn/Southwestern%20Corn%20Borer.html>

Spider mite numbers are fairly low for this time of year due to the rain fall that we received in June, however if weather turns off hot an dry there is still plenty of time for mite populations to rebound and create problems, so fields should be watched carefully.

On soybeans the only real concern so far has been grasshoppers in isolated fields. Watch for grasshoppers moving into fields from borders. With the current moisture conditions, grasshoppers may stay put, but if dry weather returns hoppers could again pose problems to soybean fields. For information on Grasshopper management see: <http://www.oznet.ksu.edu/entomology/extension/InsectInfo/Soybean/Grasshoppers.html>

In cotton continue to watch for flea hoppers. Flea hoppers can cause serious damage if abundant, however, avoid treating unless you can actually find significant numbers of flea hoppers. Populations can be expected to vary greatly among fields, depending on surrounding vegetation that would serve as an alternate host for the flea hoppers. See http://www.oznet.ksu.edu/entomology/extension/KIN/KIN_2004/kin-17/04ksnew.17.htm#COTTON_FLEAHOPPER for more information.

Phil Sloderbeck

Weekly Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from July 8 through July 15, 2004:

- 7-8-2004, Jackson County: Carpet Beetles in home, yard.
- 7-12-2004, Riley County: Wheelbug in garden.
- 7-12-2004, Saline County: Larder Beetle in home.
- 7-13-2004, Sedgwick County: Horntail Wasp Larvae in River Birch.
- 7-13-2004, Norton County: Black Willow Aphids on Willow.
- 7-14-2004, Johnson County: American Dog Tick off person.
- 7-14-2004, Washington County: Aphids on trees, shrubs.
- 7-14-2004, Wabaunsee County: Green June Beetle, False Wireworm in yard.
- 7-14-2004, Reno County: Mydas Fly, Paper Wasps.
- 7-15-2004, Riley County: Horsehair Worm in pond.
- 7-15-2004, McPherson County: Bat Bugs in home.
- 7-15-2004, Shawnee County: Aphids on Petunias.

If there any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at

785-532-4739 or at bbrown@oznet.ksu.edu .

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Sincerely,

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