

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants and Extension Personnel



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Soybeans

Many soybeans are past the vulnerable stage of growth (R8, usually) and thus an insecticide application would not be beneficial. However, many fields were late-planted or double-cropped and thus still have a ways to go before they are no longer susceptible to yield loss due to insect attack. Have not seen or heard of any large infestations of a single species of defoliator, however, there are a few woolly bear caterpillars, green clover worms, and adult bean leaf beetles all feeding on leaf tissue. Collectively this can cause some ragged-looking leaves, but if the plants are at least in the R6 stage, the defoliation is probably too little too late to impact yield. However, some of the bean leaf beetles have started feeding on the newest pods (see photos). This can be a problem if they remove enough of the pod to expose the seeds to disease or desiccation. Generally, if the beetles are feeding on pods enough that you think you might lose three beans or seeds/plant, an insecticide application would be justified.



There are also all different stages of stink bugs in many soybean fields (see photos). These bugs have piercing-sucking mouthparts and can insert them into succulent, developing beans where they suck the juice, which may result in smaller and/or deformed beans. Generally, 1 stink bug/row ft. can result in yield reductions if they are feeding on the developing beans. Once the beans have reached full size, however, stink bugs will not be

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problematic. Please consult the KSU Soybean Insect Management Guide for insecticides registered for bean leaf beetle and/or stink bug control at: <http://www.ksre.ksu.edu/bookstore/pubs/Mf743.pdf>





Seed Treatments

There seems to be considerable interest in wheat seed treatments this fall. That is interesting because we did not have large infestations of wheat pests last fall that we heard of. Insecticide seed treatments work well for those pests that the specific seed treatment is registered for. Some of the occasional pests that insecticide seed treatments can effectively control for 21-28 days include wheat aphids (bird cherry-oat, greenbugs, English grain, and Russian wheat aphids), chinch bugs (somewhat), grasshoppers, and Hessian fly. Mites and worms/caterpillars (Lepidopteran larvae) are not much affected. So, if you do plant wheat early enough in the fall that some of these pests are known to still be present when the wheat germinates, seed treatments may help to get and maintain a stand for 21-28 days after planting. Otherwise, ensure volunteer wheat is destroyed at least 2 weeks prior to germination, plant as late as possible, and save the money a seed treatment costs.

Jeff Whitworth

Holly Schwarting

That Time of Year: Leaves/Twigs/Branches = Lawn Litter

While autumn is the time for leaves to turn color and drop, such has yet to occur. So what is responsible for the “lawn litter”?

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An easy diagnosis is to examine what lies beneath the tree. In the first instance (left panel above), the leaves are attached to small twigs (A). The ends of the twigs have a rough and ragged cut pattern – you may even discern individual incisor marks (B). The ground and pavement beneath the tree is littered with acorn caps and outer nut shells. **SQUIRRELS!**



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A very different situation is as follows: the downed leaves are attached not to twigs, but to larger downed branches. By examining the end of the branch, what will be seen is a buzz-saw cut, very circular and clean with broken central core. This is the work of a longhorned beetle commonly called the twig girdler, *Oncideres cingulata*.



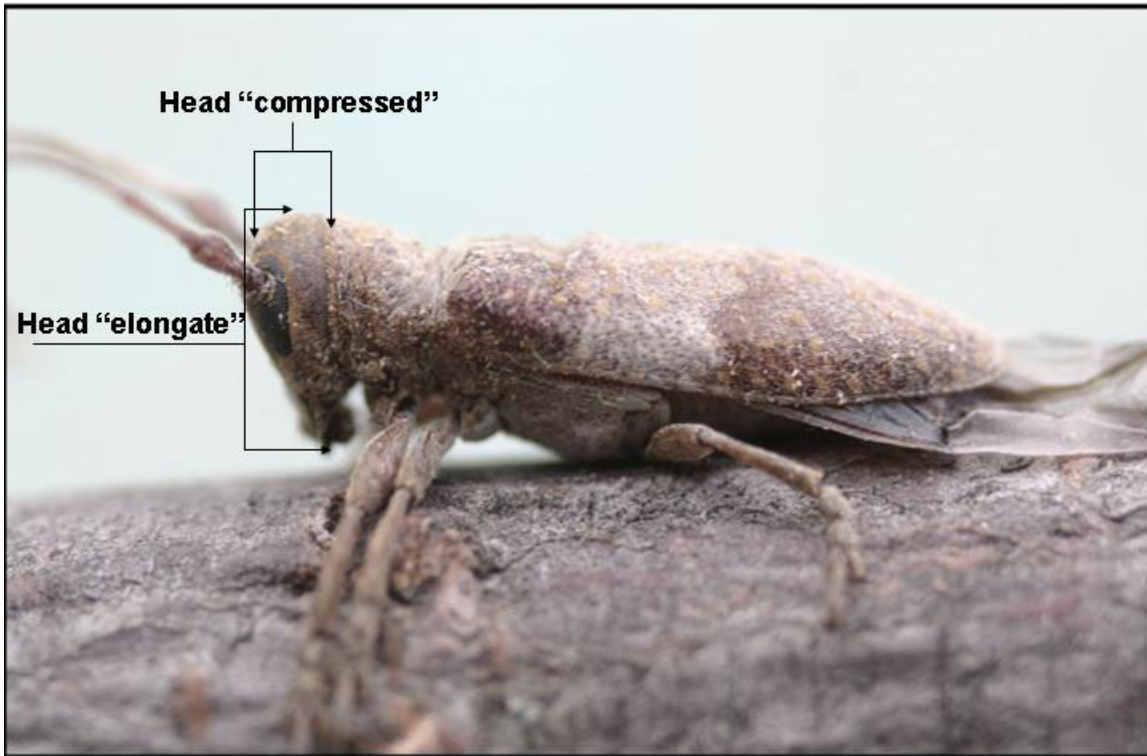
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Upon examining a fresh “girdle”



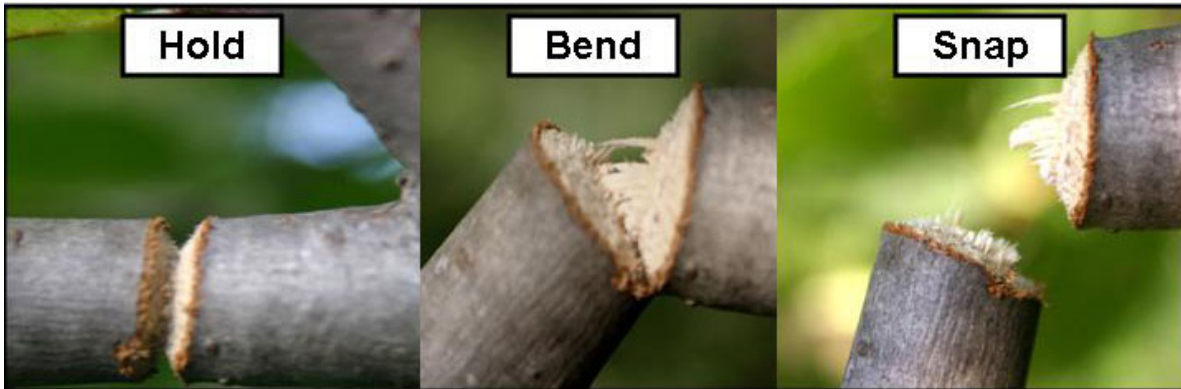
...one has but to look at the head of a twig girdler to realize that it is well-equipped for the girdling task. The head is compressed from front to back, and somewhat elongate from top to bottom ---- just right for allowing it to fit into the V-shaped girdle it creates. And her mandibles resemble the “jaws-of-life” rescue equipment --- stout and strong, ready to cut/girdle branches ranging in size from 6 to 13 mm in diameter ---- apparently dependent on the size of the individual female beetle ---- what her 4 front legs can encircle ---- the back legs to anchor.



The girdling process is not a complete shearing of branches. Rather, the smooth cut stops, but an intact central core remains and prevents the branch from falling. However, because girdling severs vascular elements, the portion of the branch beyond the cut dies and dries out. This results in the central core becoming brittle. It is at this point, then, that the weight of the branch (with or without the aid of the wind) overcomes the ability of the core to support the branch. The core snaps and the branch falls to the ground.

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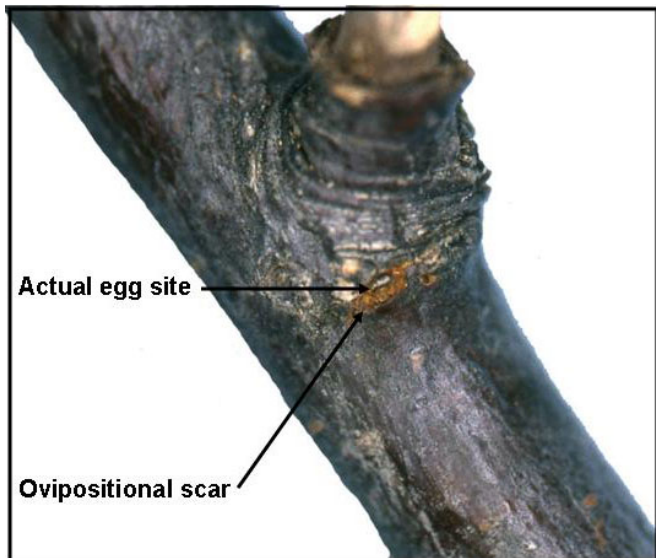
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Twig girdlers have a wide host range including hickory, pecan, dogwood, honeylocust, oak, maple and hackberry. While hackberry is listed as “high” on the list of hosts, in Kansas, most reports of littered lawns occur beneath elms. This preference for elm over hackberry was exemplified in an observation of side-by-side girdled elm and untouched hackberry trees.

Several questions arise regarding twig girdlers:

Why do they girdle branches? The larvae of twig girdlers require a “drier wood” for their growth and development. Beetles deposit their eggs beyond the “cut” thus ensuring the survival of the larvae in the fallen branches. Beetles gnaw through the bark and deposit an egg just beneath the bark. Egg sites can be easily detected by closely examining areas near bud scars or side shoots



Of what harm are girdlers? This depends on where and what they are girdling. In nut production orchards, twig girdlers can be detrimental when damaging newly transplanted trees or stymieing/setting back young trees not yet in production. And in harvestable orchards, there have been reported incidences of reduced nut production and reduced yields following extensive twig girdler activities the previous season.

Can people monitor for the presence of twig girdlers and apply an insecticide treatment to eliminate them before girdling activities? This is impractical. There is no single succinct time of beetle appearance. Rather, their emergence pattern is lengthy, spanning from late August into October. This being said, the impracticality continues. It is not possible to inspect large trees for the presence of the beetles. And while twig borers have a very distinctive appearance,

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they can be easily overlooked because they blend into the background.



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For homeowners, twig girdlers are more of a nuisance in causing the aforementioned branch litter. The recommendation is to gather up and dispose of branches. This will eliminate those beetles which would emerge the following year. However, this does not mean that twig girdlers won't appear the following year: look up, and you may see that many dead branches are still caught up in tree canopies.



For certain, there is one site where girdling activities have ceased.

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Feb. 15, 2009



Sept. 16, 2009



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A Passing Note – Bagworms

A month ago in Kansas Insect Newsletter #19, I had put bagworms to bed. But recently driving about, I noted the recovery of eastern red cedars ---- that is many that (earlier) were looking off-color now LOOK GREAT! This is because with the cessation of 2014 bagworm feeding activities, new greenery has restored their “healthy appearance”. But do not be lulled into thinking that all-is-well ----- that bagworm situations have taken care of themselves. Judging by the number of bags which now appear idle, if ignored in 2015, bagworms will return with a vengeance. As you read this, consider taking out your 2015 calendar and flipping forward to May ---- make a notation to remind you to monitor your plantings for bagworms. By doing this, you will be reminded/alerted to keep ahead of bagworms by applying a timely insecticide treatment.

Bob Bauernfeind

Insect Diagnostic Laboratory Report

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

Eva Zurek

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