For Agribusinesses, Applicators, Consultants and Extension Personnel



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Thistle Caterpillars, Green Cloverworms, Soybean Aphids, Etc.

Many insects are currently defoliating soybeans, or attempting to. There are green cloverworm larvae, bean leaf beetles, corn earworms, grasshoppers, woollybear caterpillars, etc., especially on late-planted or double cropped soybeans (see photos). However, one species that has received more attention this year than in past years is the thistle caterpillar. This is the larval stage of the painted lady butterfly. These caterpillars are relatively common and are probably more noticeable than the other defoliators because of their large size, distinct spiny appearance and the webbing they produce. Thistle caterpillars (see photos) usually are more numerous in spots rather than infesting consistently throughout a field. They are relatively noticeable because of their habit of webbing the leaves together to form a shelter from which they can feed. Thus, sampling needs to continue, especially in the later planted fields, until the beans are mature enough that defoliation is not an issue. There are also some soybean aphids in central and north central soybean fields. These also need to be monitored for the next couple of weeks because aphid populations can increase quite dramatically under the proper environmental conditions. For more information regarding treatment thresholds and insecticides for soybean pest, please refer to Soybean Insect Management Guide, 2011: http://www.ksre.ksu.edu/library/ENTML2/Mf743.pdf



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Photo Courtesy of Brian McCornack

Holly Davis

All My Children ---- Meet Jimmy, Jenny, Judy, Johnny, Bob, Bobbi and Hank

Of course I don't know who is who ----- they all look alike (Figure 1). "Experts" would be able to identify them as either male or female by dissecting them. But then, alas, the poor creatures would be dead. And anyways, what would have been the point?



Figure 1

Perhaps this is a silly way to reintroduce the subject of hornworms on tomatoes. Reintroduce? Yes. It was a month ago (August 4) that hornworms were addressed in Kansas Insect Newsletter #17. A point made was that people only become aware of the presence of hornworms after they have attained sufficient size enabling them to rapidly consume foliage and thus leave readily evident "bare stems". Such is my current situation.

In that Newsletter, information was presented on various aspects of hornworms --- where they come from and their seasonal activities in Kansas. The article ended with: "When hornworms are detected, they are at the end of their feeding cycle. A person may decide to apply an insecticide directly to them. Or handpick them and dispose of them. OR SIMPLY, LET THEM BE!"

So do I practice what I preach? Yes! My <u>tobacco</u> hornworms (identified by their "red horns" and 7 white diagonal stripes) (refer back to KIN #17) have been allowed to munch away unscathed. The reasoning is that they are not causing sufficient damage to cause me to be upset. I ask, "What harm are they really doing?" Yes, they are stripping some stems (Figure 2A). But there is plenty of remaining foliage (Figure 2B).





Plants will continue to produce new foliage which will not be consumed because the nearly mature hornworms will soon disappear when they bury themselves in the soil where they will overwinter as pupae in their earthen cocoons (again, see KIN #17).

Aside from bare stems, hornworms may also feed on green tomatoes (Figure 3).



Figure 3

But this is not of great detriment. There are many other tomatoes already are set, developed and ready to be picked, (Figure 4). Production to continue through much of the Fall season.



Figure 4

Other "Worms" On Tomatoes?

Corn earworms? Bollworms? "Headworms"? "Podworms"? One second here! We are addressing tomatoes. So why mention "worms" associated with corn, cotton, sorghum and soybeans/snap beans? Okay ----- tomato fruitworm. So now we are back "on track". But we never really left the track because all of the worms mentioned refer to the same critter which just happens to have a wide host range.

Occasionally, a tomato (or two or three) may be picked only to discover that it is being fed on by a tomato fruit worm (Figure 5).



Figure 5

While one cannot rule out the possibility a tomato fruitworm here or there, for all practical purposes, instances of these encounters are rare, especially when considering the enormous numbers of this most popular garden crop. Depending on the size of the fruit and amount of damage, the tomato may be partially salvageable ----- remove the worm and slice away the damaged portion. Not to be flippant, but if this is an unacceptable, pitch the tomato and pick another.

And Ants On Tomatoes?

While on the topic of tomatoes ----- on 8/2, I received a phone from a gardener requesting information on how to control ants on tomatoes? One source estimates that there are 1.5 million ants for every human being on earth. As I sit here at this very moment, the World Population Clock at 20:22 UT (Universal Time), September 1, 2011, says that there are an estimated 6,959,314,506 people on our planet. Well, my hand calculator is useless on this one, but an on-line calculator figured it out for me: 104,389,717,000,000 ants! Not surprising, then, that one might come across an ant or two in the garden. But ants really do not constitute a tomato pest.

Visiting further with the caller: many of his tomatoes had cracks/splits. Especially if soft rots become established, wound areas will attract insects. Ants (which are always searching/foraging) will exploit any attractive food source. In this sense, ants are a secondary presence. The oozing liquids likely served as an attractant. And once there, ants may feed on the softened tissues thus expanding the areas of damage on

individual fruits. Rather than thinking about spraying insecticides to kill the ants, one might inspect and pick tomatoes on a daily basis. This will help to ensure that even split but usable fruits are removed before becoming attractive to "strangers" looking for a free meal.

Bob Bauernfeind

Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostic Laboratory from August 26th to September 1st.

August 26 2011 – Sherman County – Flat bark beetle found on human August 29 2011 – Riley County – Armyworm feeding on iris leaves August 29 2011 – Reno County – False black widow spider in lawn August 29 2011 – Riley County – Spotted orb weaver spider and dog day cicada around home August 29 2011 – Meade County – Grasshopper feeding on Euonymus leaves August 30 2011 – Morton County – Unidentified galls on locust August 30 2011 – Wyandotte County – Scoliid wasps on soccer field September 1 2011 – Morris County – Euonymus scale on Euonymus September 1 2011 – Ness County – Pieridae caterpillars feeding on ivy

If there are any questions regarding these samples or about the identification of any arthropod please contact the Insect Diagnostician at (785) 532-4739 or <u>GotBugs@ksu.edu</u>.

Holly Davis

Sincerely,

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