http://www.oznet.ksu.edu/entomology/extension/extensio.htm

Kansas Insect Newsletter

For Agribusinesses, Applicators, Consultants, and Extension Personnel

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Alfalfa:

Potato leafhoppers are starting to show up in alfalfa and soybean fields. In Kansas, they are not usually a problem in soybeans but can be damaging to alfalfa. These insects generally arrive in Kansas about the time the second cutting of alfalfa is ready and can cause significant damage to the crop through the rest of the summer. In late summer or early fall they migrate back to the southeastern part of the U.S. to overwinter.

Potato leafhoppers are lime green, torpedo or wedge-shaped insects with white eyes. They are very active insects and the adults will quickly hop or fly short distances when disturbed. Nymphs are similar in color and shape but lack wings.

Adult Potato Leafhopper

Potato leafhoppers have piercing-sucking mouthparts so when they feed they remove fluids and thus nutrients from the plants. This feeding may cause yellowing or reddening of the foliage and may lead to stunting. First indications of leafhopper feeding is a wedge or v-shaped yellowing at the leaf tip, commonly called hopper burn. As leaves turn yellow, crude protein is reduced making it less valuable for livestock. Continued feeding may stunt the plants, reduce yields and allow weeds to grow. If potato leafhopper feeding continues over several cuttings, future yield potential and winter survival may be affected.

Scouting should start now and continue until fall. Treatment should be considered before feeding causes yellowing and/or stunting. One application is usually sufficient if applied

as a stubble spray. For treatment thresholds and labeled insecticides, please refer to the 2007 Alfalfa Insect Management Guide or online at: http://www.oznet.ksu.edu/.

Guidelines for treatment thresholds are as follows:

Potato Leafhopper Thresholds

Avg. Stem Length (in.)*	Avg. No. of Leafhoppers/sweep**
up to 3	0.2
3-6	0.5
8-10	1.0
12-14	2.0

**Stem length = average plant height of plants from the sampled area

** Leafhoppers per sweep = average number of leafhoppers per sweep from at least 20 pendulum sweeps from at least five representative areas per field.

Alfalfa varieties Konza and Riley have potato leafhopper resistance and are recommended for new plantings.

Jeff Whitworth

Chased by bumble bees????.....

We are on the verge of a yearly event that will have some people “running scared” ---- the emergence of **green June beetles.** As they fly about, they emit a loud buzz (like bumble bees). They are somewhat slow fliers (like bumbles bees looking to settle on a flower). As you catch a glimpse of them flitting about, they look dark and ominous (like bumble bees). At times, they are clumsy, and may bump into a person giving the impression that they are being attacked and in danger of being stung.

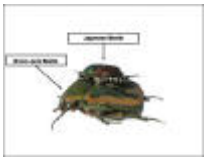
Green June beetles are perfectly harmless. They neither bite nor sting. In fact, if a person takes the time to capture and examine a green June beetle, they will be amazed at the beauty of this beetle. The beetles wing covers possess a mostly velvety green appearance. Their undersides (“bellies”) have a green to bronze metallic sheen.

Green June Beetle color variations

Green June Beetles - metallic "bellies"

Other than the nuisance factor associated with their aerial antics, green June beetles do not constitute a threat to garden crops. They do, however, sometimes cause damage to tree fruits such as peaches which ripen at a time coinciding with the emergence of these beetles which view ripened peaches as an attractive food source.

Green June beetles do not attack ornamentals. People sometimes mistake green June beetles for **Japanese beetles** which are known defoliators of ornamental plants. While there are pocket populations of Japanese beetles established in Kansas, they have a very restricted distribution as opposed to green June beetles which occur throughout Kansas. And in a side-by-side comparison, there can be no mistaking the large green June beetles for the smaller Japanese beetles.



Japanese Beetle on top of Green June Beetle

Bob Bauernfeind

Hundreds of worms with “tail horns”……

The larvae of **white-lined sphinx moths** are hard to miss at this time of year. First generation larvae measure upwards of 3 ½ inches in length and possess a “fearsome-looking” horn on their tail-end. The horn itself is harmless --- it does not sting, nor can it penetrate skin. If picked up, the larvae may squirm, and let loose with a dark “spit”. This is a defensive maneuver which might cause a predator to abandon its meal. But to people, the spit is harmless although it may cause a hard-to-remove stain on fingers and clothing.

White-lined sphinx moth larvae have a range of color and body patterns. Especially when populations are heavy, most larvae appear dark in color (black and yellow). While some green forms are mixed in, they are the more dominant color form when overall populations are light.

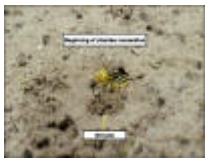
White-lined sphinx moth larva - dark form

White-lined sphinx moth larva - green form

White-lined sphinx moth larvae feed on various species of weed. In country settings, some of the most weed-free alfalfa fields are a result of foraging hordes of larvae. Their presence goes unnoticed until they march out of fields and cross roadways in search of

more food/weeds. Often times, motorists report these activities which otherwise would have gone unnoticed.

Large worms are nearing the end of their feeding cycle. The larvae next create an underground cavity by repeatedly pushing dirt out of the chamber opening. When the excavation is completed, the larvae create an earthen cocoon inside of which it pupates.



Beginning of chamber excavation

Earthen cocoon

Sphinx Moth Pupa

Eventually a white-lined sphinx moth emerges to begin the second and final generation of the year

White-lined sphinx moth

Bob Bauernfeind

Moth Invasion …….

Usually at this time of year, the “miller moths” in question are army cutworm moths which seem to be everywhere (in homes, garages, out buildings, in vehicles with rolled-down windows, in shrubbery, “They’re everywhere”). Just as suddenly as they occur, they disappear as some unknown signals them to up-and-leave-for the Rockies ----- they spend the summer in the cooler upper elevations where they feed and become sexually mature before returning to the central plains in the fall of the year at which time they deposit eggs which are the source of overwintering larvae which will become 2008’s armycutworm “miller moths”.

In addition to army cutworm moths, the moths of true armyworms and forage loopers are currently in large number. This again is the normal time of year at which these first

generation moths occur. However, unlike the army cutworm moths described above, true armyworm and forage looper moths already are sexually mature and will (after mating) deposit eggs for an ensuing generation. This should not concern homeowners because the larvae of these two moth species are not detrimental to lawns, vegetable or flower gardens or trees and shrubs. Other than the brief flurry of moth activity, these moths are inconsequential.

A walk in the hills and countryside at dusk will certainly provide “moth excitement”. Many prairie plants are in bloom and the air seems alive with moths. The three moths already mentioned can be seen feeding on the floral nectars of plants-in-bloom (sumac especially). And rising from the prairie grasses are clouds of small non-descript tannish/buff-colored moths. Again, this should be of no concern to homeowners with, perhaps, homes adjacent to countryside and hill areas.

Bob Bauernfeind

Sincerely,

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