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

November 13, 2015 No. 26

Here Comes The Asian Ladybird Beetle!
Winter Grain Mites
New proposed Pesticide Applicator rules-comment period open for a limited time

Here Comes The Asian Ladybird Beetle!

This is the time of year when the Asian ladybird beetle, *Harmonia axyridis* adults start entering homes and becoming a nuisance. The Asian lady beetle is a native of Asia and was introduced into the southeastern and southwestern portions of USA to deal with aphids on pecan trees. However, the Asian ladybird beetle has spread rapidly to other portions of the USA. The Asian ladybird beetle is a tree-dwelling ladybird beetle, more so than the native species of ladybird beetles, and is a very efficient predator of aphids and scales.

During fall and early winter, when the weather is cooler, Asian ladybird beetle adults start aggregating on the south side of buildings and entering homes. The beetle does this because in their homeland of China they inhabit tall cliffs to overwinter. There are very few “tall cliffs” in Kansas—so the next best thing is a building.

The Asian ladybird beetle can be easily distinguished from other species of ladybird beetles by the presence of a pair of white, oval markings directly behind the head, which forms a black M-shaped pattern. Adults are 1/4 inch long, 3/16 inch wide and yellow to dark-orange colored. In addition, their body is usually covered with 19 black spots. Adults can live up to 3 years. Female beetles lay yellow, oval-shaped eggs in clusters on the underside of leaves. The eggs hatch into larvae that are red-orange and black in color, and shaped like a miniature alligator. The larvae are primarily found on plants feeding on soft-bodied insects such as aphids and scales. They eventually enter a pupal stage. Pupae can be seen attached to plant leaves. The adults emerge from the pupae and start feeding on aphids. Adults can be found on a wide-variety of trees including apple, maple, oak, pine, and poplar.

Asian ladybird beetle adults are a nuisance pest because they tend to aggregate and overwinter inside buildings in large numbers. The beetles release a pheromone that attracts more beetles to the same area. Although the beetles may bite, they do not physically harm humans nor can they breed or reproduce indoors. Beetles are attracted to lights and light-colored buildings, especially the south side due to the warmth provided when they bask in the sunlight. The beetles then work their way into buildings through cracks and crevices. Dark-colored buildings generally have fewer problems with beetles (so now is the time to paint your house). Adult beetles will feed on ripening fruit such as peaches, apples, and grapes creating shallow holes in the fruit. Large numbers of beetles feeding on fruit may cause substantial damage so that the fruit is less appealing for consumption.

Beetles may be prevented from entering homes by caulking or sealing cracks and crevices. Beetles already in homes can be physically removed by sweeping them or vacuuming. Be sure to thoroughly empty the vacuum bags afterward. Do not kill the beetles. Just release them outdoors underneath a shrub or tree away from the house. Commercially available indoor light traps can be used to deal with beetles indoors. The traps need to be placed near the center of a room and they are only effective at night in the absence of competing light. In addition, they work best when room temperatures are 75°F or higher.

If crushed, the beetles will emit a foul odor and leave a stain. The dust produced from an accumulation of dead Asian ladybird beetle adults behind wall voids may incite allergies or asthma in people. Although there are some sprays available, the use of insecticides is not recommended for indoors.

Homeowners that want to avoid dealing with overwintering beetles entering their homes can hire a pest management professional to treat the points of entry on the building exterior with a pyrethroid insecticide. The treatments need to be made in late September or early October before the beetles enter the building to overwinter. Beetles that are feeding on fruit can be "controlled" with insecticides commonly labeled for use on fruit trees.

Raymond Cloyd

HOME

Winter Grain Mites

This time of year there is usually considerable interest in winter grain mites and this year is no exception. A little refresher relative to winter grain mites:

- Adults can be seen by the naked eye, but they are tiny.

- They have dark colored bodies with distinctive red legs and a red spot at the rear of their back, which is an anal pore.

- There are 2 generations per year.
- Adults will be actively feeding in the fall and spring and overwinter and oversummer as eggs.

- This feeding will continue as long as temperatures are cool (not cold), i.e. they are most active from 40°F to 70°F.

Feeding activities usually peak about this time of year and will cease during winter, when temperatures usually are just too cold. This 1st generation deposits eggs in November and December and these eggs will hatch in late February to March. This is about the time wheat is breaking dormancy, thus another time for grower concern. Under dry conditions winter grain mite feeding may cause plants to take on a silvery appearance because mites penetrate individual plant cells and remove the plant juice, resulting in this silvery look. Serious feeding, again in dry conditions, may result in yellowing of plants but, more commonly, just the tips. Under good growing conditions this feeding will not even be noticed. Hot weather causes adult populations to quickly decrease.

In summary, mite feeding activity will be terminated by cold weather in winter and hot weather in the spring, both of which cause eggs to be deposited into the soil to withstand the unfavorable conditions. Winter grain mite feeding is only noticeable when wheat is under moisture stress, is reversed by adequate moisture, and rarely, if ever, results in any impact on yield.

Jeff Whitworth Holly Schwarting

HOME

New proposed Pesticide Applicator rules-comment period open for a limited time

The **EPA** has proposed new rules for those getting Private and Commercial Pesticide Applicators licenses. The final set of rules will likely not take affect for some time, however the time to comment on the proposed rules is now *until November 23, 2015*. **To read the full document and leave comments** go here.

Among the proposed changes, a few to note are:

- Establishes a first time-ever nation-wide **minimum age of 18** for certified applicators and persons working under their direct supervision.
  - currently there is no age limit for private applicators in KS
- Requires all applicators to renew certifications **every 3 years**.
  - currently this is every 5 years for private applicators in KS
- Requires **additional specialized certifications** for private applicators using high-risk application methods (**fumigation** and aerial).
  - currently there is no specialized certification for this in KS
- Requires **first time annual safety training** and increased oversight for persons working under the direct supervision of a certified applicator.
- Private applicators will be required to pass a written, closed book-proctored exam for certification
  - currently private applicators exams are open book in KS
- The credit hours or CEU's required for applicators will increase:
  - **Private applicators**-6 general core CEU's + 3 CEU's per category of certification (currently **no training** is required for Private applicators in KS)
  - **Commercial applicators**-6 general core CEU's + 6 CEU's per category of certification (currently 1 core hour is required +7 per category for most categories in KS)

To read more go to http://www2.epa.gov/pesticide-worker-safety/epa-proposes-stronger-standards-people-applying-riskiest-pesticides

Sarah Zukoff Frannie Miller

HOME

Insect Diagnostic Laboratory Report

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

Eva Zurek

HOME

Sincerely,

Raymond A. Cloyd
Professor and Extension Specialist
Horticultural Entomology/Integrated Pest Management
Phone: 785-532-4750
Fax: 785-532-6232
e-mail: rcloyd@ksu.edu

Jeff Whitworth
Extension Specialist
Field Crops
phone: 785/532-5656
e-mail: jwhitwor@ksu.edu

Holly Schwarting
Research Associate
Phone: (785) 532-4730
e-mail: holly3@ksu.edu

Frannie Miller
Pesticide Safety & IPM Coordinator
Kansas State University
600 W. Woodside
McPherson, KS 67460
Phone: (620) 241-1523
Fax: (620) 241-3407
http://www.ksre.ksu.edu/pesticides-ipm

Sarah Zukoff
Assistant Professor/Extension Entomologist
Kansas State University
Southwest Research and Extension Center
4500 East Mary St.
Garden City, Kansas 67846
Phone: 620-275-9164
Fax: 620-276-6028
Cell: 620-290- 1111
email: snzukoff@ksu.edu

Eva Zurek
Insect Diagnostician
Phone: (785) 532-4710
e-mail: ezurek@ksu.edu

KANSAS STATE UNIVERSITY | Department of Entomology

Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact *LOCAL NAME*, *PHONE NUMBER*. (For TDD, contact Michelle White-Godinet, Assistant Director of Affirmative Action, Kansas State University, 785-532-4807.)

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, John D. Floros, Director.