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

July 25, 2014 No. 15

Walnut Caterpillar

We have seen an "explosion" of the walnut caterpillar (*Datana integerrima*) in several portions of Kansas. Walnut caterpillar feeds on the leaves of walnut, pecan, hickory, and may also feed on birch, oak, and apple.

The larvae tend to feed in groups/clusters consuming all leaves on a single branch before moving to another branch to devour leaves. Excessive defoliation may result in sunscald that could weaken trees and increase susceptibility to wood-boring insects. Walnut caterpillar overwinters as a pupa that is located beneath the soil surface under a host tree. Adults are robust moths that emerge from pupae in mid-to-late spring, depending on temperature and host plant growth. The brown forewings possess irregular dark cross lines. Females deposit eggs on leaf undersides with each female capable of laying >300 eggs in a mass. The first instar larvae or caterpillars skeletonize leaves, whereas the second instar larvae feed on the entire leaf with the exception of the mid-vein. The later instar (third and fourth) larvae, which are red in color, feed on the entire leaf including the petiole. Larvae feed for approximately one month before reaching maturity. Full-grown larvae are 2.0 inches in length, with yellow stripes on the side, and are grayblack and covered with long, gray to white hairs. When disturbed, larvae will arch their head and the end of the abdomen in order to ward off predators. When it is time to molt, they all gather together on a branch or trunk and molt simultaneously, leaving patches of fur-like hair. There may be one to two generations per year. The primary effective means of dealing with infestations of walnut caterpillars are to





hand-pick caterpillars and place in a container of soapy water, use a forceful water spray to quickly dislodge caterpillars, or apply insecticides with one of the following active ingredients: acephate, spinosad, malathion,

Kansas Insect Newsletter

July 25, 2014 No. 15

cyfluthrin, permethrin, or bifenthrin. Although the eggs and larvae of walnut caterpillars are susceptible to parasitoids, the female parasitoids may not attack enough eggs or larvae to substantially impact the population.





Raymond Cloyd

Cattail Caterpillars

Cattail caterpillars continue to be very active in sorghum (see photos). There are various stages, from relatively small ones to pupae. Parasitoids are also very active parasitizing caterpillars (see photo 2). In one field of 8-9 leaf sorghum, 40% of the cattail caterpillars were parasitized. These larvae eat relatively big holes in the leaves, sometimes only leaving the midrib (see photo 2); however this early leaf feeding has not been shown to have a negative impact on yield, but it does cause growers to become concerned.

Pupa Mature Larva

Photo 1



Photo 2

Potato Leafhopper

Potato leafhoppers also continue to be active in alfalfa. There are many small nymphs, which often get overlooked or mistaken for aphids. There are still eggs remaining in stems. Swathing within 10-14 days should alleviate, if not eliminate, the problem. However, some fields have recently been swathed so an insecticide application should be considered. All registered products seem to work well and re-infestation after application is not probable. Be sure to check REI and PHI for any product applied.

Sunflower Head Moths

Checked two fields in Dickinson County this past week for sunflower head moth. Both fields were approximately 90% flowered. No sunflower head moths were found. NONE! This is really unusual! However, flowers need to continue to be monitored as head moth infestations can be initiated quickly and end up in a serious infestation.

Grasshoppers

Grasshoppers are still plentiful and growing. It is still a good idea to spray them while they are not yet fully grown and are still in the weedy and/or grassy areas, before they move out into the crops.

Jeff Whitworth

Holly Davis-Schwarting

Insect Diagnostic Laboratory Report

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

Eva Zurek

Kansas Insect Newsletter

July 25, 2014 No. 15

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: <u>jwhitwor@ksu.edu</u>

Holly Davis-Schwarting Research Associate Phone: (785) 532-4739 e-mail: holly3@ksu.edu

Eva Zurek

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



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.