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

June 26, 2009 No. 15

PA Pesticide Program Updates 06/19/09

http://www.epa.gov/pesticides

New Pyrethrins and Pyrethroid Information Available

Three new items on EPA's Web site will enhance the public's access to information about pesticides in the pyrethrin/ pyrethroid class of insecticides. These items are 1) a new consolidated Web page on these chemicals, 2) a paper and related fact sheet on the Agency's analysis of whether an association exists between pyrethrin/ pyrethroid exposure and asthma and allergies, and 3) a description of new environmental hazard and general labeling for non-agricultural outdoor use pyrethroid products, including tips for consumers to use in reducing the potential for pesticide runoff and drift. The new items are described further below.

EPA's Office of Pesticide Programs (OPP) has launched a new Web site on pyrethrins and pyrethroids. On this site, you can access information about EPA's reevaluation of these pesticides, assessment of pyrethrin and pyrethroid incidents, and other related topics and issues. Pyrethrins and pyrethroids are insecticides included in over 3,500 registered products, many of which are used widely in and around households, including on pets, in mosquito control, and in agriculture. The use of pyrethrins and pyrethroids has increased during the past decade with the declining use of organophosphate pesticides, which are more acutely toxic to birds and mammals than the pyrethroids. This new Web site is available at http://www.epa.gov/oppsrrd1/reevaluation/pyrethroids-pyrethrins.html .

Included on this Web site is a new paper on pyrethrin/pyrethroid products and asthma/allergy effects. Differing from previous reviews, this review uses a "weight of the evidence approach" to determine whether there is a clear and consistent association between pyrethrins/pyrethroid exposure and asthma and allergies. From this analysis, the Agency has concluded that there is no clear evidence of an association. For more information on this paper, visit http://www.epa.gov/oppsrrd1/reevaluation/paw-factsheet.html .

Also included on the new Web site is a page on Environmental Hazard and General Labeling for Pyrethroid Non-Agricultural Outdoor Products. This page describes the revised "Environmental Hazard Statements" and general "Directions for Use" language for pyrethroid pesticide products used in non-agricultural outdoor settings, which affects over 2,000 end-use pyrethroid pesticides. The revised label language will reduce the potential for pesticide runoff and drift of pyrethroid pesticides, ultimately providing better protection to aquatic habitats and the environment. Consumers can begin using these improved practices to protect water resources.

Visit http://www.epa.gov/oppsrrd1/reevaluation/environmental-hazard-statment.html to find out more information on this labeling initiative.

Sharon Dobesh

EPA Pesticide Program Updates 06/23/09

EPA Launches Protection Team to Explore Bee Deaths

WASHINGTON - EPA has formed a pollinator protection team to expand the agency's inquiry into the possible causes of declines in pollinators, especially honey bee populations in the U.S. The new multidisciplinary team will address the potential risks that pesticides may contribute to what is known as colony collapse disorder.

Although the role that pesticides play in the phenomenon has not been scientifically established, the team will explore possible approaches, tools, and resources for reducing the potential risks of pesticides to pollinators. The team has also developed a strategic plan that focuses on three main goals for guiding the agency's work and direction in protecting pollinators in the years ahead:

Advancing the agency's scientific knowledge and assessment of pesticide risks to pollinators
Improving risk management tools for mitigating potential risks to pollinators
Increasing and broadening EPA's collaboration and communication with governmental and non-governmental organizations and the public in addressing pollinator issues

EPA has been working on multiple fronts to protect honey bees through regulatory, voluntary, and research programs. However, since colony collapse disorder first focused attention on honey bee declines beginning in 2006, the agency has been reassessing its approach to pollinator protection.

More information: http://www.epa.gov/pesticides/ecosystem/pollinator-protection.html

Sharon Dobesh

The "Wanderers"……..millipedes

There is a song called "The Happy Wanderer". The "wanderers" in this instance are campers and hikers enjoying and observing wonders of nature. And the familiar refrain of this song is a cheerful, uplifting: "Val-deri,Val-dera, Val-deri, Val-dera-ha-ha-ha-ha-ha, Val-deri,Val-dera. My knapsack on my back".

The **millipede** "wanders" of current focus are less inspirational. In fact, they may be regarded as a nuisance. Kansas has been the recipient of adequate moisture this spring. And as we have just slipped into summer, environmental conditions are quite moist which favors populations of various organisms living on the ground beneath leaf litter and other surface debris. Our current "moist" conditions parallel those of 2008, when, in fact, the June 29 Kansas Insect Newsletter addressed millipedes. Rather than reinvent the wheel, this newsletter contain a repeat of the 2008 millipede information as follows:

Millipedes are elongated "wormlike" arthropods. They can be differentiated from centipedes by virtue of the number of legs per body segment. Whereas centipedes have a single pair of body legs/segment, millipedes have 2 pairs (Figure 1).

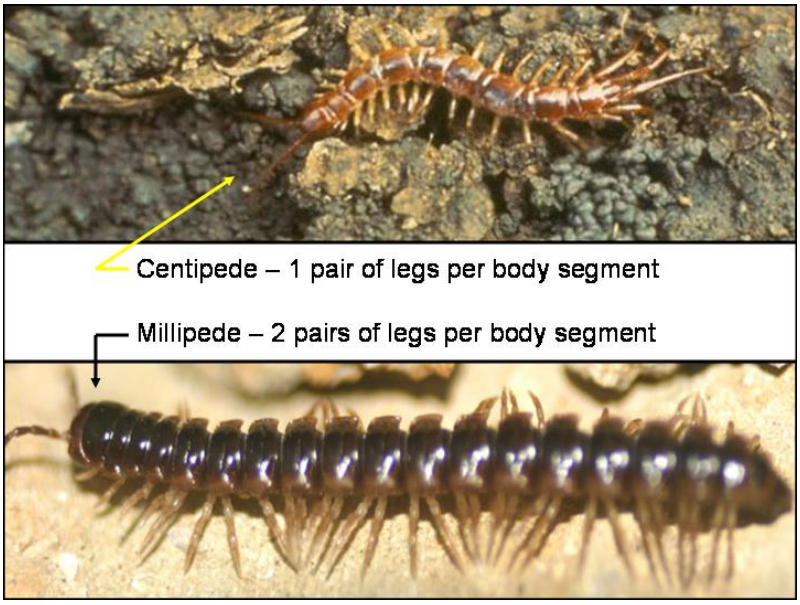

Figure 1

(As an aside, actually what appears to be a single body segment in millipedes is, in fact, two fused segments, each with a pair of legs --- hence the 2 pairs of legs per body appearance)

There are 4 basic body forms of millipedes. The two most common are cylindrical and plated (or flat-backed) (Figure 2). The cylindrical are sometimes referred to as "wireworms" (not to be confused with "true wireworms" – the larvae of click beetles), and when viewed from above, their legs are somewhat hidden due to their ventral position. The legs of flat-backed millipedes are more highly visible as they project outward from beneath the extended plate.

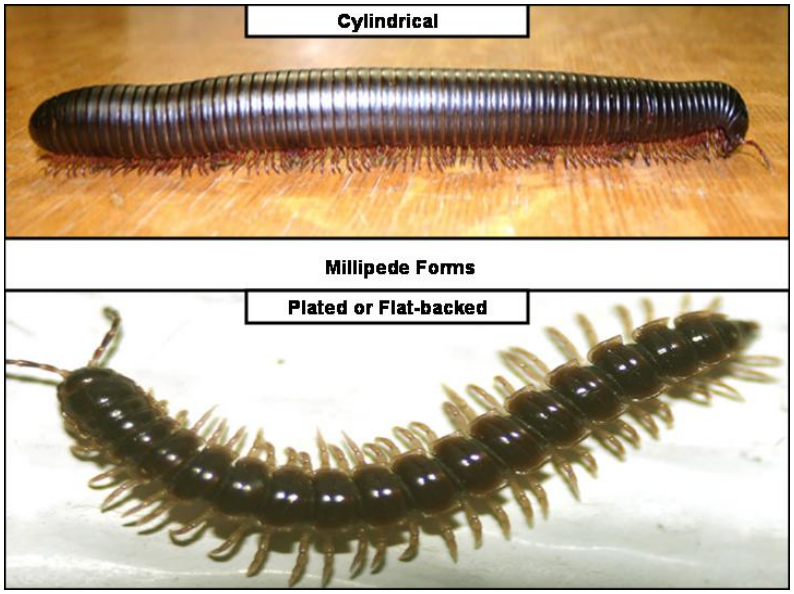

Figure 2

The life cycle of millipedes extends over a period of years. Depending of conditions, development from egg to adult may require 2 - 4 years, with adults living additional years. Thus over time, millipede populations build up (especially) in heavily wooded areas Figure 3) which satisfy their preference for shaded and moist environments where they primarily feed on decaying organic matter, notably leaf litter.

Figure 3

For reasons unknown, whether under extremely dry or wet conditions, millipedes "march". This is when people report "invasions of worms". And although millipedes are harmless (they do not bite of sting), they may sometimes feed on tender garden crops. The most common complaint, however, is that their mere presence is disconcerting. They are mostly observed around daybreak when massing on sides of buildings, patios/decks,

driveways and sidewalks and decorative rocks (Figures 4-6). Especially on hot sunny days, they rapidly disappear as they seek protective shelter/cover, only to re-emerge during the ensuing evening.

Figure 4

Figure 5

Figure 6

Frustrations arise when attempting to control millipedes. Millipedes seek "hiding places" ---- any available crack or crevice in the soil, under bark mulch, under landscape stonework/gravel/plastic ground cover, leaf litter in and around homes (especially in country/wooded settings), up and down the bark of trees, etc. Elimination of these protected sites is impractical/impossible. Insecticides registered for use as perimeter treatments will eliminate those millipedes in the target area. However repeated applications will be required for the duration of millipede movements. Another nuisance factor: the dead millipedes will have to be swept up and disposed of. The best news is that millipede activities cease as suddenly as they began!

Bob Bauernfeind

Report from the Kansas State University Insect Diagnostic Laboratory:

The following samples were submitted to the Insect Diagnostician Laboratory from June 19th to June 25th

June 19 2009 Norton County – Springtails around home
June 19 2009 Labette County – Springtails in home
June 19 2009 Shawnee County – Shield bug nymphs on patio
June 19 2009 Shawnee County – Wheel bug nymphs outdoors
June 19 2009 Norton County – Noctuid moths around outdoor lights
June 22 2009 McPherson County – Syrphid fly larvae in tree stump full of water
June 22 2009 Saline County – Carpet beetles in home
June 22 2009 Clay County – Argus tortoise beetle pupae on thistle
June 22 2009 Ellsworth County – Flatheaded borer (*Buprestis confluenta*) on golf course
June 22 2009 Graham County – Lacewing larvae on trees
June 23 2009 Edwards County – White lined sphinx moth larvae and saltmarsh caterpillars coming out of a bean field
June 23 2009 Osage County – Argus tortoise beetle pupae on dead Iris leaf
June 23 2009 Johnson County – Tachinid flies in sunroom
June 24 2009 Rush County – Spider mites on Eastern red cedar
June 24 2009 Pratt County – Common stalk borer in garden
June 25 2009 Harvey County – Possible fungal spores on stems of plant
June 25 2009 Logan County – Leafroller caterpillars and pupae on crab tree

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 GotBugs@ksu.edu.

Holly Davis

Sincerely,

Robert J. Bauernfeind
Extension Specialist
Horticultural Entomology
phone: 785/532-4752
e-mail: rbauernf@ksu.edu

Holly Davis
Insect Diagnostician
Phone: (785) 532-4739
e-mail: holly3@ksu.edu

Sharon Dobesh
Pesticide & IPM Coordinator
Email: sdobesh@ksu.edu