Penn State
Turfgrass Entomology Newsletter

May 4, 2009
Volume 3, No. 1

Editor:
Paul Heller, Professor of Entomology, PSU (With input from Danny Kline)

ISSUE HIGHLIGHTS

***TURFGRASS INSECT UPDATE – ANNUAL BLUEGRASS WEEVIL, GROUND NESTING BEES, POSSIBLE NATIVE CRANE FLY SPRING DAMAGE, WHITE GRUBS ARE ON THE MOVE AND YELLOW JACKET ACTIVITY IS RISING!**

*** NEW DUPONT ANNUAL BLUEGRASS WEEVIL WEB SITE TITLED - WEEVIL TRAK NOW ON LINE!**

***FQPA REVIEW OF IMIDACLOPRID AND TRICHLORFON!**

ANNUAL BLUEGRASS WEEVIL (formerly *Hyperodes* weevil): This weevil pest continues to be a major threat to *Poa* fairways, green, collars, tees, etc. Annual bluegrass weevil (ABW) adult spring activity was first reported in PA this year in the Lewisburg area on April 19 (full bloom of service berry), while adults were identified in Harrisburg on April 27 (50% green/50% gold forsythia) and near Central City (100% gold forsythia and full bloom of service berry). If you would like to participate in a survey on both anthracnose and annual bluegrass weevil then proceed to the following url - http://www.turf.uconn.edu/ne1025.htm.

Over the past 24 months concern has arisen regarding the potential for ABW resistance to pyrethroid insecticides registered to suppress ABW populations. Entomologists are collaborating with golf course superintendents in various states to collect ABW adults then expose these adults to a pyrethroid insecticide treated paper filter disc. Next results from the treated paper filter disc will be compared to untreated check paper filter discs. The latter evaluation method was developed by Dr. Rich Cowles (CT AG EXPT STN). To date our program has evaluated ABW adults from four courses located in PA. Only one of these courses exhibited resistance to a pyrethroid insecticide in the preliminary 2008 study. Adults collected from the other three courses in 2008 did not demonstrate resistance to this class of insecticide. However, we will have to continue monitoring ABW populations for resistance issues in the future. The USGA is very concerned about ABW as its distribution increases and moves into the mid-Atlantic area. Please refer to Images 1 and 2 to view an adult weevil and larval feeding damage.

Image 1.
Adult Annual Bluegrass Weevil;
Courtesy of Danny Kline.

Image 2.
Annual Bluegrass Weevil Spring Feeding Damage on a Fairway Adjacent to an Infested Rough;
Courtesy of Danny Kline.

***CRANE FLY (NATIVE) POSSIBLE DAMAGE REPORTED FROM SE PA!**

Several weeks ago I was forwarded images of damage to a residential lawn located in SE PA. The damage and larvae resembled native crane fly activity. Several years (2006) ago we had several outbreaks of native crane fly on residential lawns located in SE PA and the York County areas. These insects can cause substantial spring damage to residential lawns. Refer to Image 3 to view native crane fly 2006 spring larval feeding damage and Image 4 for native crane fly larvae.

Image 3 – Native Crane Fly Larval Feeding Damage; Courtesy Paul Heller, Penn State.

Image 4 – Native Crane Fly Larvae; Courtesy Paul Heller, Penn State.

GROUND NESTING BEES: We are receiving calls regarding ground nesting bees on golf course roughs. Ground nesting bees create individual holes in turf and include membrane, digger, sweat, mason, and leafcutter bees. These bees generally prefer nesting in areas with morning sun exposure and well-drained soil containing little organic matter. Burrows are excavated in areas of bare ground or sparse vegetation. Ground nesting bees usually avoid damp soils. These insects usually are considered nuisance pests but are becoming more economically important since some species serve as pollinators. Since we are concerned with problems associated with honey bees (i.e., honey bee colony collapse disorder; refer to PSU url at http://www.ento.psu.edu/HoneyBeeResearch.html), these insects may become more important in the future as potential pollinators for various crops. Images of ground nesting bees and their respective nest can be viewed below.

IMAGE 5	IMAGE 6
Example of a sweat bee; Image courtesy: Susan Ellis, Bugwood.org.	**Example of a leafcutter bee; Image courtesy: David Cappaert, Michigan State University**

Image 7
Example of Ground Nesting Bee Nest; Courtesy P. Heller.

***WHITE GRUB MOVEMENT:** Over the past few weeks white grubs have been recovered from depths of 1-2 inches in the soil profile. The current trend of very warm temperatures should move the grubs up to the soil-thatch interface where they will start feeding. Keep sampling to determine when this event occurs. In a later newsletter we will list products registered for white grub suppression. Remember that Asiatic garden beetle adults, black turfgrass ataenius adults, European chafer adults, May and June beetle adults and Northern masked chafer adults are active at night and may be monitored with a black light trap. Refer to Image 8 for an example of a black light trap.

Image 8 – Example of a Black Light Trap Positioned at Penn State's Valentine Turfgrass Research Center used to Monitor the Adult Activity of Beetles, Cutworms and Sod Webworms; Courtesy Paul Heller, Penn State.

***YELLOW JACKETS ARE ON THE MOVE:** Last weekend I observed increasing numbers of yellow jackets in my back yard near the deck. In some instances yellow jackets act as predators consuming black cutworm larvae and other insects. Additional information on yellow jackets can be located at the following url: http://entnemdept.ufl.edu/creatures/urban/occas/hornet_yellowjacket.htm

Always contact your local county extension office for current information on these insects as well as identification of the insect.

*** NEW DUPONT ANNUAL BLUEGRASS WEEVIL WEB SITE TITLED - WEEVIL TRAK NOW ON LINE!**

Recently Dupont™ added a new feature to its web site which addresses annual bluegrass activity within our state and surrounding states. You can access this new site by going to the url at http://www.weeviltrak.com/biology.html

***FQPA REVIEW OF IMIDACLOPRID!** Here is the statement I received regarding this review process:

- To all University, Cooperative Extension, company, and independent cooperative researchers:

  The Food Quality Protection Act of 1996 mandated a registration review program for all pesticides registered, distributed, or sold in the United States.

  The Registration Review of imidacloprid was initiated by EPA on December 17, 2008. As part of the process, EPA is inviting the public to comment on EPA's preliminary registration workplan and rationale.
  Information on this program is provided at the following website:
  http://www.epa.gov/oppsrrd1/registration_review/

- Comments may be submitted to EPA through the mail, in person, or electronically on or before March 17, 2009. Submitted comments on imidacloprid must refer to the docket control number EPA-HQ-OPP-2008-0844 in the subject line on the first page of your submission.

SPECIAL NOTE: I was just informed by Bayer™ that trichlorfon is undergoing FQPA reassessment. You can access information on this FQPA reassessment by completing a search on USA.GOV at http://www.usa.gov/index.shtml

Note of Caution When Using a Website Mentioned in this Newsletter

Please remember that pest control suggestions to suppress insect and mite pests will vary between states and countries. Likewise pest control suppression strategies and timing also will vary. Always contact your local county extension office or department of agriculture to acquire the most current pest control suggestions.