

# WHAT'S HAPPENING

Volume 25, Issue 4

May 15, 2009

ENTOMOLOGY AND PLANT PATHOLOGY—EPP#60

## Cutworms Sometimes a Problem in Tobacco Fields

**By Gene Burgess**

Black cutworm infestations can be a problem in tobacco fields. The potential is greatest in conventionally-tilled fields where winter annual weed growth was evident for several weeks prior to final field preparation and a significant number of cutworm moths have been flying. Moths have been flying since around the second week of March and are still active, so cutworm damage can still be expected.

Dense low-growing weeds are selected by female moths as ideal places for egg deposition. These plants will serve as food for the developing cutworm larvae. When the weeds are killed or turned under, the cutworms suddenly are left without food. Newly-set tobacco transplants provide the needed food and the cutworm larvae quickly resume feeding.

Cutworms may already be present in infested fields before transplanting, but there is not a good way to determine whether or not they are present or how abundant they may be. The extent of weed flush in the field over the last few weeks is a good indicator, along with reports of cutworms in nearby communities from fields that have already been set.

Cutworms feed at night or on overcast days and hide in the soil during the day. If the soil is moist, they may feed on leaves in contact with the ground. In dry soil, they are more apt to stay below the surface and feed on stems, cutting off plants. The first signs of an infestation may be feeding holes at the leaf edge or cut, wilted plants.

Capture and Orthene are labeled for cutworm control as transplant water applications. With this approach, the treated area is immediately around the plant roots. Control may not be considered satisfactory if there is a large number of cutworms in the field or if they are large (> 1.5 inches). Lorsban and Capture may be used as pre-transplant soil applications, as an alternative to the transplant water use. Capture, Orthene, or Warrior can be used as broadcast rescue treatments, if cutworms are found on transplants in the field.

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## Cutworms

**By Russ Patrick**

Black cutworms are more numerous this year than in past years. They are invading gardens mostly, but have been observed in corn and other crops. If they are fully grown, they will not consume much more. The smaller ones will cut off the plant just below or above the ground level. Plenty of insecticides are labeled for their control, such as: Warrior, Karate, MUSTANG MAX, and SEVIN XLR. The pyrethroids are quite effective in controlling larger worms. If you observe up to 2 to 3% INFESTATION LEVELS in corn, treatment should be made, but only if you have worms present in the field.



Black cutworm (moth)



Black cutworm (corn)

## Azalea Leaf and Flower Gall

**By Darrell Hensley**

Galls are commonly found on many types of plants. However, on azalea, one common gall often observed during or after bloom, is azalea leaf and flower gall. This disease may be found on other plants in the Ericaceae or heath family. Azalea leaf gall is caused by the fungus known as *Exobasidium vaccinii* and is more common on plants grown in humid, sheltered areas which have little air movement. These conditions allow the foliage to stay wet for long periods of time, which is perfect for infection. Usually infection occurs in early spring when leaves and flowers are developing. Infected leaves and buds develop fleshy, pale or whitish galls (swellings) which, while unsightly, usually do not cause severe damage. As galls mature, they usually turn dark brown to black in color, become hard and fall off the plant. Leaf galls are the most common galls formed, however galls may form on flowers and/or stems. Galls may be hand picked to aid in control, however if a great number of plants are involved you may select chemical control. Chemical control should begin the following season, in the spring at bud break. Non-chemical control is usually sufficient to control this disease, however, fungicide applications may be needed. Fungicides containing mancozeb (Fore) have provided excellent control of this disease.

## Gaicho XT Flowable

**By Gene Burgess**

Gaicho XT Flowable had received a 24(c) registration in Tennessee for use in Switchgrass (*Panicum virgatum*). It aids in the control or suppression of early season seed and seedling diseases. Also, it provides early season protection of seedlings against injury by wireworms and white grubs.

## Dos and Don'ts to Storing Grain in Bags:

**By Russ Patrick**

1. The grain bag method is not recommended for long term storage.
2. You cannot aerate or treat grain once it is stored.
3. Grain must be treated as it is being placed into bags.
4. Treatments: Storcide II, Pyreon (crop spray), Diaconils are the materials to be used on wheat. They can be mixed with the crop spray.
5. Store bags on higher ground. Low lying areas often become wet enough to cause moisture to seep into the bags.
6. Monitor for temperature, moisture and insects.
7. A good moisture/temperature probe may be purchased for approximately \$200. Contact Charles Patrick at 731-425-4718, if you have questions concerning grain probes.



Checking for temperature and moisture using a grain probe

## New Products & Label Change — May, 2009

### By Gene Burgess

The following is new information related to pesticide registrations in Tennessee.

#### ***Insecticides***

*Permethrin 3.2* (AI= permethrin) -- control of insects in various crops. (Arysta LifeScience)

*LD-44Z* (AI= pyrethrins) -- kills and repels insects in farm houses and around the farms. (Chem-Tech LTD)

*Fire Ant Killer Granules2* (AI= bifenthrin) -- kills fire ants and various insects around the home. (Green Light Co)

*Vectica* (AI= flubendiamide) -- for use on cucurbits and leafy and fruiting vegetables. (Nichino America Inc)

*Lepitect Infusible* (AI= acephate) -- control insect pest of ornamental trees & shrubs in landscapes. (Rainbow Treecare)

*Hot Shot Bedbug & Flea Killer* (AI= pyrethrins) -- kills various insects on contact. (Spectrum Group)

#### ***Herbicides & Plant Growth Regulators***

*Mojave 70 EG* (AI= imazapyr) -- control of annual and perennial grasses and broadleaf weeds. (Alligare LLC)

*Ultra-Kill* (AI= glyphosate) -- kills unwanted weeds, grasses and roots in and around flower beds. (Chemsico)

*Dismiss South* (AI= sulfentrazone) -- for selective weed control in turf and warm season turf-grass. (FMC Corp)

*Wipe-Out* (AI= penoxsulam) -- post-emergence control of annual and perennial broadleaf weeds. (Green Light Co)

*Sortie RUP* (AI= dimethenamid) -- for use in bean, beets, corn, garlic, horseradish, & peanuts. (Helena Chemical)

*Dioquat AG* (AI= diquat dibromide) -- for use to control weeds in noncrop areas and nonbearing crops. (Helm Agro)

## New Products & Label Change--Cont'd

*Atrazine 4L* (AI= atrazine) RUP -- control weeds in corn, sorghum, and other crops .  
(Makhteshim Agan)

*Atrazine 4L* (AI= atrazine) RUP -- control season long weed in corn, sorghum and certain crops. (Tenkoz Inc)

### ***Fungicides, Rodenticides, & Other Pesticides***

*Disarm G* (AI=fluoxastrobin) -- control various diseases in turf grasses. (Arysta LifeScience)

*Propiconazole E-AG 41.8 EC* (AI= propiconazole) -- broad spectrum fungicide for control of certain diseases . (Etiga)

*Gavel 75DF* (AI= mancozeb) -- broad spectrum fungicide for disease control in potatoes, grapes,cucurbits . (Gowan)

*Ro-Pel* (AI=denatonium saccharide) -- animal and rodent repellent. (Grant Laboratories)

*Di-Kill* (AI= difenacoum) -- kills rats and mice indoor and outdoor. (Hacco Inc)

*Algae Hunter* (AI=copper sulfate pentahydrate) -- 90 day algaecide for pools. (N Jonas Co)

*Super Tin 4L* (AI= triphenyltin hydroxide) RUP -- control fungal infestations on various crops .  
(United Phosphorus)

*Jomax* (AI= chlorine dioxide) RTU -- kills mold mildew, bacteria and odors. (Zinsser Co)

**Key** AI = active ingredient      IGR= insect growth regulator      RTU = ready-to-use  
PCO = for pest control professionals      RUP = restricted-use pesticide  
WSB = water soluble bags

**Note:** This information has been adapted from TDA's May issue of *The Registration Review*.  
For more information please call (615) 837-5340, or email John.Ewell@state.tn.us.

## Plant & Pest Diagnostic Highlights

**By Bruce Kauffman**

We received 102 samples from April 28 to May 12, 2009, including 42 samples via the UT Diagnostic Web Site.

**FRUIT & VEGETABLES :** Fusarium crown and root rot of 'Empire' tomatoes; edema and possible over fertilization of pepper; peach leaf curl infections of peach leaves; leaf spotting caused by cultural methods and/or site conditions on 'Crimson Tide' watermelon seedlings; pythium root rot of watermelon seedlings; possible high pH and/or fertility problems of blueberry; cucumber mosaic virus on tomatoes; possible spray damage to leaves, twig and fruit of pear and apple; overly wet site and/or root-inhabiting bacterial infection of tomato; possible sclerotinia root rot of Austrian winter peas.

**INSECTS, CRUSTACEANS, & MITES :** Ichneumonid wasp parasite of wood borers of hardwood; light leaf-tier, fall cankerworm and/or forest tent caterpillar feeding on sugar maple leaves; possible borers damaging oak trunk; rosy apple aphids distorting apple leaves; walnut scale of buckeye; fungus gnat larvae feeding on watermelon seedling roots; lantania or greedy scale of pencil cactus; possible eastern tent caterpillar and tarnished plant bug damage to apple leaves and fruit; cutworms feeding on tomatoes; pear leaf mite gall on Bartlett pear leaves; possible linden looper feeding on weeping 'Candied Apple' crabapple leaves; fourlined plant bug nymph on apple mint; eastern tent caterpillar feeding on cherry, pear and birch leaves; elm coxscumb aphid galls on elm leaves.

Insects and other pests around the home : adult reproductive termites; algal growth on gravel; lone star tick nymphs; odorous house ant; webbing clothes moth; millipedes; Asian lady beetle larvae; springtails; black carpet beetles; possible redheaded ash borer in cherry furniture; black fly; possible bat bug; bird mites; clover mites; army ants.

**ORNAMENTALS & TREES :** Site stress of dogwood caused by overly wet site; anthracnose leaf blight of red maple, elm, sycamore and ash; winter dieback or root establishment problem of newly-planted crape myrtle; impatiens necrotic spot virus and cultural problems of African violets; verticillium wilt of sugar maple; black root rot of 'Green Luster' holly; possible iron chlorosis of pin oak; stressed oak with possible botryosphaeria canker; possible drought dieback (2007 drought) of sycamore; pestalotia needle and shoot blight of stressed Leyland cypress; possible winter damage and phomopsis and fusarium cankers of English laurel; botrytis infection of torenia leaves and stems; phytophthora root rot and phomopsis canker of azalea; botryosphaeria canker associated with possible wounding and moderate phytophthora root rot of 'Cherokee Princess' dogwood seedlings; melanconium canker of walnut seedlings; minimal phytophthora root rot and some lesion nematodes on boxwood; plant stress by low pH, low fertility and/or root disease on boxwood; abundant phytophthora root rot of 'Blue Rug' and 'Blue Pacific' junipers; phytophthora root rot of rose cuttings; loss of older needles due to a root establishment problem of Leyland cypress; possible stress due to 2007 drought on southern magnolia and Leyland cypress; possible mechanical damage to

## Plant & Pest Diagnostic Highlights—Cont'd

Leyland cypress branches; iron deficiency caused by high pH of petunia and Madagascar periwinkle; root rot and low pH of Kentia palm; phomopsis stem canker of pencil cactus (*Euphorbia* sp); anthracnose of stems and leaves of English ivy; spot anthracnose of dogwood leaves; possible bacterial stem galls of rosemary caused by *Pseudomonas syringae*; overly wet site and pH and fertility problem with azaleas; dodder on greenhouse 'New Guinea' impatiens; possible phenoxy spray damage to pin oak leaves; powdery mildew of rose; drought stress and/or low fertility of holly; possible pH and/or fertility problem of rose; possible overly wet, pH and/or fertility issue with camellia; possible herbicide and/ or insect defoliation of Bradford pear; possible chemical leaf scorching of injected sycamore; root and/or canker diseases of cherry; possible seiridium canker of Carolina cypress; mushroom (*Panus* sp) decay of outer bark of hardwood.

**TURF & FORAGES :** Pythium foliar blight of 'Champion' bermudagrass; drechslera leaf blight of bermudagrass; possible root nematodes and drainage problems in bentgrass.

ENTOMOLOGY AND PLANT  
PATHOLOGY—EPP#60

**OTHER UT NEWSLETTERS WITH PEST MANAGEMENT INFORMATION**

**Fruit Pest News**

<http://web.utk.edu/~extepp/fpn/fpn.htm>

**Tennessee Crop and Pest Management Newsletter**

[http://www.utextension.utk.edu/fieldCrops/cotton/cotton\\_insects/ipmnewsletters.htm](http://www.utextension.utk.edu/fieldCrops/cotton/cotton_insects/ipmnewsletters.htm)

**Ornamental Pest and Disease Update**

<http://soilplantandpest.utk.edu/publications/ornamentalnwsltr.html>

**School IPM Newsletter**

<http://schoolipm.utk.edu>

**Tennessee Soybean Rust Hotline - 877-875-2326**

**USDA Soybean Rust Web Site**

<http://www.sbrusa.net>

**This and other "What's Happening" issues can be found at**

<http://eppserver.ag.utk.edu/Whats/whatshap.htm>

**Entomology and Plant Pathology Web Site**

<http://eppserver.ag.utk.edu>

**Pesticide Safety Education Program, PSEP**

<http://PSEP.utk.edu>

**Precautionary Statement**

To protect people and the environment, pesticides should be used safely. This is everyone's responsibility, especially the user. Read and follow label directions carefully before you buy, mix, apply, store or dispose of a pesticide. According to laws regulating pesticides, they must be used only as directed by the label.

**Disclaimer**

This publication contains pesticide recommendations that are subject to change at any time. The recommendations in this publication are provided only as a guide. It is always the pesticide applicator's responsibility, by law, to read and follow all current label directions for the specific pesticide being used. The label always takes precedence over the recommendations found in this publication.

Use of trade or brand names in this publication is for clarity and information; it does not imply approval of the product to the exclusion of others that may be of similar, suitable composition, nor does it guarantee or warrant the standard of the product. The author(s), the University of Tennessee Institute of Agriculture and University of Tennessee Extension assume no liability resulting from the use of these recommendations.

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