

WHAT'S HAPPENING

Volume 24, Issue 13

July 25, 2008

ENTOMOLOGY AND PLANT PATHOLOGY EPP#60

"Rash" of Delusory/Illusory Parasitosis Cases

By Karen Vail

We've recently experience a "rash" of inquiries that appear to be cases of delusory (DP) or more appropriately illusory (IP) parasitosis. Most were middle-aged women complaining about itching from an unseen insect, mite, or other very small organism. For cases where samples were submitted to our lab, we did not find any parasites. This is not unusual.

"Delusory parasitosis (DP) is a false, unshakable belief that tiny organisms, such as mites, fleas, or worms, live in or on the skin, or within the body" (Bione and Hinkle 2006, Hinkle 2000). Some of our cases appear to be illusory parasitosis which means that the individual will accept an explanation that the cause of itches is something other than insects or other parasites. DP/IP sufferers tend to be disabled or "retired", female and middle-aged to 80 yrs old.

Patients with DP typically report "insects" invading their skin, ears, nose, eyes, and other areas of their body. These "creatures" frequently disappear and reappear, but can't be caught, and may change colors while being observed. Specimens brought in for identification usually consist of bits of dead skin, hair, lint, fibers and miscellaneous debris. The skin of the individual is often severely irritated and sometimes infected from desperate scratching, excessive bathing and application of ointments/insecticides. While these occurrences may seem bizarre to persons who are not affected, they are frighteningly real to the patient. Delusory parasitosis, as well as other suspected emotional or medical conditions, should be brought to the attention of a physician.

Because the cause of itches cannot be seen in many cases, folks conclude that insects or mites are responsible and apply an insecticide. Unfortunately, insecticides seldom work in these situations and they may even cause further irritation and additional health problems. In addition, the medical community will too often prescribe medication for scabies or lice without even examining the patient. They fear the facility will be infested during the examination and get the patient out of the office as soon as possible. One person informed me the health care professional met them in their car to prevent infesting the waiting room. Recently, I've heard of physicians prescribing scabies medication over the phone. Unfortunately, this adds to the delusion as well as unnecessarily medicates and exposes the patients directly to pesticides and may further irritate the skin.

There are many possible causes of itches and irritations other than pests. Allergies, cosmetics, medications and environmental contaminants can result in reactions similar to insect bites. Just

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because an insect, mite or other parasite is not present does not mean the individual is not experiencing these symptoms. Keep an open mind to the possibility of non-insect causes of such reactions. An attempt should be made to rule out all potential sources of irritation. The Hinkle (2000) reference listed in the sources at the end of this article is one of the most thorough and informative articles written on delusory parasitosis and other causes of itching/rashes. I often dispense the Potter (1997) article to suspected IP/DP cases to help them determine the causative agent (or to better understand IP/DP).

The following can be used as a checklist to aid clients in determining the cause of an itch (modified from Potter 1997):

I. Obscure Biting Arthropods (Many of these pests are large enough to be seen without magnification EXCEPT those indicated with an *. One should also consider the possibility of delayed irritation such as from bites obtained while outdoors.)

- bird and rodent mites (tiny, dark specks that move)
- scabies* (burrows into the skin – often found on fingers, elbow, knee, and shoulder blades; can be identified by a doctor via a skin scraping)
- lice (head and other hairy areas of the body)
- fleas (usually bite people around the ankles)
- chiggers * (constriction between skin and clothing - ankles, knee, or waistline)
- biting midges/mosquitoes
- ticks
- bedbugs (1/4 inch, oval, flattened bugs which are becoming more abundant, bites resemble a mosquito bite and often are in areas of the body that were exposed during sleeping)
- hairs from stinging caterpillars

II. Household Products

- detergents (especially phosphate-based)
- soaps
- cosmetics/hair products
- ammonia-based cleaners
- medications
- printing inks (e.g., carbonless)
- clothing (especially fire retardant)

III. Environmental Factors

A. Physical irritants

- paper, fabric, or insulation fibers
- low humidity
- seasonal changes in temperature
- static electricity

B. Chemical irritants

- formaldehyde (e.g., from particle board, wall and floor)
- coverings
- ammonia
- solvents/resins associated with paints and adhesives
- tobacco smoke
- volatiles from asphalt and tar installation

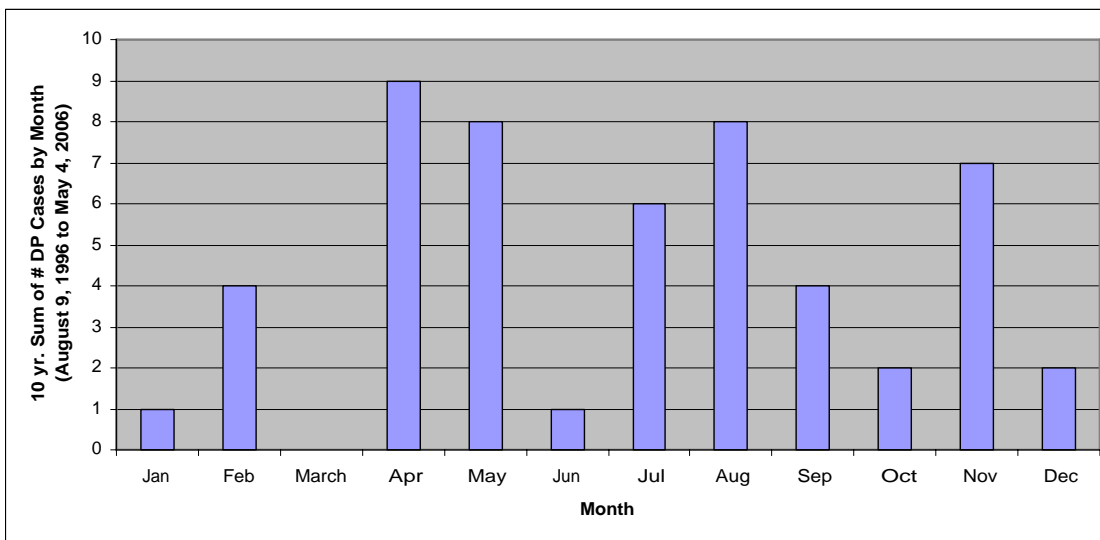
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IV. Health-Related Conditions

- pregnancy
- communicable diseases (e.g., chicken pox, measles)
- stress (home, work, death or prolonged illness of a loved one)
- diabetes, liver, or kidney disorders
- food allergies
- insect phobias
- many others

When should you expect to receive calls pertaining to IP/DP? Well, I used to expect an increase in calls pertaining to itches in July/August and November. I assumed it was due to a decrease in humidity caused by heat or air-conditioning that caused the skin to dry and itch. Dry skin contacted by electrically-charged items, such as coarse fibers from carpets and upholstery or small shards of paper, could lead to a rash, itch and irritation very similar to an insect bite. After a rash of calls in the spring of 2006, I decided to plot all suspected IP/DP cases based on my lab records from August 1996 to May 2006. This does not include phone conversations. I now realize we have an even higher peak of IP/DP calls in April/May than experienced in August.



If DP or IP is suspected, one of the first steps should be an inspection of the premises to determine if a parasite is present. If a person believes that the insects are too small to be seen crawling over his or her skin, strips of clear cellophane tape may be patted over the affected area as the "crawling" sensation is occurring. Most small biting arthropods move slowly and will stick to the tape if present. Tape samples should be carefully attached to a white index card, so as not to crush any specimens and labeled to indicate from where they were collected. Glue boards can also be placed against edges of the structure's surfaces where insects are suspected.

In the UT Extension Urban IPM Lab, the microscope has a digital camera which feeds to a TV monitor. When suspected parasite samples are viewed under this microscope, the client can observe the specimens also. The images, often of fibers, can be saved and printed. The client leaves with printed evidence

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that insects are not the probable cause of their symptoms. I believe, using this technique, we have been successful in showing people have illusory parasitosis when they were originally believed to be suffering from delusory parasitosis. At least they appear this way when they leave the lab and they don't contact us any further.

As you handle these cases, remember, you are not a health care professional and any dermatitis should be referred to a doctor or other health care professional. UT Extension entomologists are not health care professionals, therefore our labs do not accept body fluids, scabs, blood products or any substance originating from the body, including clothing or products that may have come in contact with these substances, for identification. These types of products should be sent to a health care professional. If they isolate and preserve an insect, we will then aid in the identification process.

I've made it a policy in my lab to examine specimens from a suspected DP or IP case once and only once. I suggest that they bring all of their glue boards or pieces of tape. But I will not look at any other specimens from this client pertaining to this problem. It has been suggested that examining specimens more than once will further support the delusion.

Even if pressured by the client, pest management technicians should not spray any pesticide if no pests are present. Often the client has already misapplied and over-applied over-the-counter products. Inform them of the inspection results. The technician should indicate pesticide applications are not necessary and that it is the client's welfare that is of concern. Findings of no insects should be documented and all appropriate company personnel informed.

An article in Pest Control Technology (Bione and Hinkle 2006) provided advice for the pest management technician when dealing with suspected delusory parasitosis. Much of this has already been discussed above. These clients are very frustrated, often sleep-deprived, depressed, anxious and may be thinking of suicide as a way to relieve these incessant symptoms. If a technician suspects a person may be considering suicide, a pest management company manager should be informed and the decision made whether to "call the police for a welfare check to ensure the client's safety." A network of pest management professionals (who are often first contacted by a person with DP), entomologists and psychologists (and physicians) was suggested to help identify and treat delusory parasitosis.

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Monitoring and Management of Turfgrass Pests

By Frank A. Hale and Tom Samples

Armyworms, cutworms and sod webworms, the larvae of night-flying moths, can severely damage turf. Armyworms can feed any time of the day. They are known for moving en masse from one turfgrass area to another where they can cause extensive defoliation. Cutworms feed at night, severing leaf blades near the soil surface. Cutworms often destroy the plant crown, making recovery impossible. Cutworms and sod webworms spend the day in a silk-lined burrow in thatch and soil.

Armyworms, cutworms, sod webworms, and billbugs can be monitored throughout the growing season by using two teaspoons of dishwashing detergent (as used to wash dishes in the sink) with a gallon of water. Pour the soapy water over four square feet (2 ft by 2ft) of turfgrass. A 2 ft by 2 ft frame can be made out of PVC pipe or 2" by 4" boards. Pour the water within the frame and observe for 5 to 10 minutes. The insects are irritated by the detergent and will come to the surface where they can be collected into a pan for identification and counting. This sampling can be done every week to 10 days throughout the spring and summer to detect turfgrass pests early in their development. Wash any soapy residue off the turfgrass when done sampling to reduce the possibility of damaging the blades of grass.

This early detection will aid the turfgrass manager in making informed management decisions. Also, let others know when specific pests are active so that they can also monitor for these pests and control if needed. Apply a recommended insecticide when an average of 4-6 or more sod webworms are found per four square feet. The treatment threshold for cutworms is one or more per four square feet. Armyworms lay clusters of eggs so populations can quickly become very high. Apply insecticide whenever armyworms are detected.

White grubs, the larvae of certain scarab beetles, consume organic matter including the roots of plants, especially turfgrass. There are several species of white grubs in Tennessee and most years they are the most damaging turf pest in the state. Initial injury occurs below ground and symptoms often resemble drought stress. When populations are high, white grub feeding damage can kill large sections of turfgrass.

Monitor for white grubs by digging square foot sections of turfgrass and lifting the turf back to count the white grubs. Sample several different areas in a lawn. Collect the white grubs in a pan for identification and counting. This sampling can be made from mid-July through mid-August. When done sampling, replace the section of turfgrass, lightly tamp down and irrigate. Annual white grubs such as Japanese beetle, Oriental beetle, and Asiatic garden beetle should be treated with a recommended insecticide when an average of 5-10 grubs per square foot are found. The treatment threshold for another type of annual white grub, the masked chafer, is 15-20 grubs per square foot. Masked chafers also feed on dead organic matter and not just live roots so they do not cause as much feeding damage as a similarly sized Japanese beetle grub. Black turfgrass atenioides white grubs are much smaller than other white grub pests which is reflected in the treatment threshold of 30-50 grubs per square foot. May beetles and June beetles have a treatment threshold of 3-8 grubs per square foot while the green June beetle treatment threshold is 6-8 grubs per square foot.

Billbugs are weevils that lay their eggs in the stems or stolons of grass. The larvae tunnel down the stem or stolon and fill it with their saw-dust like frass (excrement). These damaged stems will easily break off at the crown, if tugged, and the frass can be seen. The mature larvae often clip off stems at the crown. The legless larvae can be found in the stems, stolons, crown, and roots. Damage often resembles drought stress although billbugs generally cause smaller patches of dead turfgrass than found with white grubs.

To be effective, most insecticides must directly contact the target insect pest. Thus, always follow label directions on how to apply an insecticide to best control specific pests. Commercial turfgrass insect control recommendations can be found at:

<http://eppserver.ag.utk.edu/redbook/pdf/commturf insects.pdf>

Dichlorvos (DDVP)

By Darrell Hensley

The Environmental Protection Agency (EPA) denies objections to, and requests for hearing on, a prior order denying a petition requesting that EPA revoke all pesticide tolerances for dichlorvos (also known as DDVP) under section 408(d) of the Federal Food, Drug, and Cosmetic Act. The objections and hearing requests were filed on February 1, 2008, by the Natural Resources Defense Council (NRDC). The Original petition was also filed by NRDC. Dichlorvos is an organophosphate (OP) insecticide. It has been in use since about 1955 and has been used for both professional pest control, in homes, gardens and other areas of pest control. It has been used in agriculture and horticulture: in mushroom houses; it has been used to control various insects and beetles in poultry houses; and on protected ornamentals, protected vegetables and herbs and brassica seedlings. DDVP has been used as a veterinary medicine, in protecting farmed salmon against salmon lice; and as an aerosol against cat and dog fleas; used to control flies in cattle production. It was also used years ago in homes and restaurant settings in the famous No-Pest Strips. For more information concerning dichlorvos see: <http://www.epa.gov/EPA-PEST/2008/July/Day-23/> of the Federal Register.

Repellents are an Important Tool to Assist People in Protecting Themselves from Mosquito-borne Diseases—Updated Information Regarding Insect Repellents

Prepared by CDC, submitted/modified by Karen Vail

With the recent onslaught of heavy rains, I expect adult mosquito presence to increase. Here's a reminder of how to reduce the probability of being bitten by a mosquito. Most of this article is devoted to the use of mosquito repellents; however, in addition to wearing repellent, you can also protect yourself and your family by taking these precautions:

- Wear clothing with long pants and long sleeves while outdoors. Apply permethrin or another EPA-registered repellent to clothing, as mosquitoes may bite through thin fabric. (Remember: don't use permethrin on skin.)
- Use mosquito netting over infant carriers.
- Reduce the number of mosquitoes in your area by getting rid of containers with standing water that provide breeding places for mosquitoes.

CDC recommends the use of products containing active ingredients which have been registered by the U.S. Environmental Protection Agency (EPA) for use as repellents applied to skin and clothing. EPA registration of repellent active ingredients indicates the materials have been reviewed and approved for efficacy and human safety when applied according to the instructions on the label.

Repellents for use on skin and clothing:

CDC evaluation of information contained in peer-reviewed scientific literature and data available from EPA has identified several EPA registered products that provide repellent activity sufficient to help people avoid the bites of disease carrying mosquitoes. Products containing these active ingredients typically provide reasonably long-lasting protection:

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- **DEET** (Chemical Name: N,N-diethyl-m-toluamide or N,N-diethyl-3-methyl-benzamide)
 - **Picaridin** (KBR 3023, Chemical Name: 2-(2-hydroxyethyl)-1-piperidinecarboxylic acid 1-methylpropyl ester)
 - **Oil of Lemon Eucalyptus*** or **PMD** (Chemical Name: para-Menthane-3,8-diol) the synthesized version of oil of lemon eucalyptus
 - **IR3535** (Chemical Name: 3-[N-Butyl-N-acetyl]-aminopropionic acid, ethyl ester)
- Note: This recommendation refers to EPA-registered repellent products containing the active ingredient oil of lemon eucalyptus (or PMD). “Pure” oil of lemon eucalyptus (e.g. essential oil) has not received similar, validated testing for safety and efficacy, is not registered with EPA as an insect repellent, and is not covered by this CDC recommendation.

EPA characterizes the active ingredients DEET and Picaridin as “conventional repellents” and Oil of Lemon Eucalyptus, PMD, and IR3535 as “biopesticide repellents”, which are derived from natural materials. For more information on repellent active ingredients see (http://www.epa.gov/pesticides/health/mosquitoes/ai_insectrp.htm).

Published data indicate that repellent efficacy and duration of protection vary considerably among products and among mosquito species and are markedly affected by ambient temperature, amount of perspiration, exposure to water, abrasive removal, and other factors.

In general, higher concentrations of active ingredient provide longer duration of protection, regardless of the active ingredient, although concentrations above ~50% do not offer a marked increase in protection time. Products with <10% active ingredient may offer only limited protection, often from 1-2 hours. Products that offer sustained release or controlled release (micro-encapsulated) formulations, even with lower active ingredient concentrations, may provide longer protection times. Regardless of what product you use, if you start to get mosquito bites reapply the repellent according to the label instructions or remove yourself from the area with biting insects if possible.

These recommendations are for domestic use in the United States where EPA-registered products are readily available. See CDC Travelers’ Health website (<http://wwwn.cdc.gov/travel/yellowBookCh2-InsectsArthropods.aspx>) for additional recommendations concerning protection from insects when traveling outside the United States.

Repellents for use on clothing:

Certain products containing **permethrin** are recommended for **use on clothing, shoes, bed nets, and camping gear**, and are registered with EPA for this use. Permethrin is highly effective as an insecticide and as a repellent. Permethrin-treated clothing repels and kills ticks, mosquitoes, and other arthropods and retains this effect after repeated laundering. The permethrin insecticide should be reapplied following the label instructions. Some commercial products are available pre-treated with permethrin.

EPA recommends the following precautions when using insect repellents:

- Apply repellents only to exposed skin and/or clothing (as directed on the product label.) Do not use repellents under clothing.
- Never use repellents over cuts, wounds or irritated skin.
- Do not apply to eyes or mouth, and apply sparingly around ears. When using sprays, do not spray directly on face—spray on hands first and then apply to face.
- Do not allow children to handle the product. When using on children, apply to your own

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- hands first and then put it on the child. You may not want to apply to children's hands.
- Use just enough repellent to cover exposed skin and/or clothing. Heavy application and saturation are generally unnecessary for effectiveness. If biting insects do not respond to a thin film of repellent, then apply a bit more.
- After returning indoors, wash treated skin with soap and water or bathe. This is particularly important when repellents are used repeatedly in a day or on consecutive days. Also, wash treated clothing before wearing it again. (This precaution may vary with different repellents—check the product label.)
- If you or your child get a rash or other bad reaction from an insect repellent, stop using the repellent, wash the repellent off with mild soap and water, and call a local poison control center for further guidance. If you go to a doctor because of the repellent, take the repellent with you to show the doctor.

Note that the label for products containing oil of lemon eucalyptus specifies that they should not be used on children under the age of three years. Other than those listed above, EPA does not recommend any additional precautions for using registered repellents on children or on pregnant or lactating women. For additional information regarding the use of repellent on children, please see CDC's Frequently Asked Questions about Repellent Use. [http://www.cdc.gov/ncidod/dvbid/westnile/qa/insect_repellent.htm].

DEET-based repellents applied according to label instructions may be used along with a separate sunscreen. No data are available at this time regarding the use of other active repellent ingredients in combination with a sunscreen.

See <http://www.epa.gov/pesticides/health/mosquitoes/insectrp.htm> for additional information on using EPA-registered repellents.

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Distance Diagnostics

By Darrell Hensley, Frank Hale and Bruce Kauffman

The Distance Diagnostics System (DD) appears to be working alright for the majority of the counties, although we have run into a few problems.

We currently are running two separate diagnostic sites. The first site has a pointer listed on our Department's web page. The listing is <http://eppserver.ag.utk.edu:81/public/spdn.nsf>. The second site has been tested by several county offices and appears to be working very effectively. The URL is not posted on our department's web page yet but is <http://eppftpsserver.ag.utk.edu/diag>. Individuals wanting to use the new site will have to request an account through the site. The account will be manually generated after the request has been determined to be authentic. Generally, the account may be created within a day. However, it may take longer when the administrator is out of town.

When using DD, review images on your personal computer prior to attaching them to the sample form. Often smaller images viewed from the camera appear in focus, when in reality, they are very blurry and make it extremely difficult for anyone to determine the problem.

Include as much information as possible within the description of DD. The more information we have, the better the diagnosis. If at all possible, include the site name (plant, or where item was found). If the sample is suspected as having a disease, please scroll down to **disease** under the "Pest Type." If the sample is suspected of having **herbicide injury**, you may select the "Suspected As Having Herbicide Injury" box. If you need **plant or weed identification**, you may scroll down to Weed under "Pest Type."

Several individuals have been emailing specialists when they have submitted samples into the system. This occasionally causes confusion with the diagnostic lab and the specialist. It is preferred that you submit the sample through the diagnostic system. If you have additional information or questions, please email Bruce Kauffman with your concerns. In the event Bruce is out of the office or if he needs assistance, he may contact individuals in these areas of concern. This will help keep our line of communication from getting clogged with multiple requests, as well as reducing wheels turning on multiple ends.

Occasionally, individuals forget their login ID and password. In the older Lotus Notes system, you may use the same login ID and password as your Lotus Notes email. Usually your login ID is your first initial and last name. Occasionally some login ID's have middle initials included and/or the last name has a few characters removed. Your password is usually your NET ID password. If you are using the new DD system, you may select any password you want to use. If you forget your password, it may be reset at your request.

Special Local Need 24(C) Registration

By Gene Burgess

DuPont Crop Protection has acquired a 24(C) registration on Accent herbicide for the control of annual and perennial grasses in switch grass grown for biofuel in Tennessee.

Plant & Pest Diagnostic Highlights

By Bruce Kauffman

We received 205 samples from June 20 to July 14, 2008 including 122 samples via the UT Diagnostic Web Site.

FIELD CROPS : Potassium deficiency and possible Canopy herbicide injury of soybeans; magnesium, nitrogen and potassium deficiencies of corn; chemical damage and spotted wilt virus of tobacco.

FRUIT & VEGETABLES : Low pH and blossom end rot of watermelon and cantaloupe; spotted wilt, verticillium wilt, walnut wilt, nutrient deficiency and root damage, physiological leaf curl due to air temperature changes, bacterial soft rot, stem rot, hot weather flower drop, root rot, bacterial canker, bacterial spot, glyphosate and/or phenoxy herbicide injury to tomato; poor soil drainage, nematodes, virus and cane blight disease of blackberry; drought effects on pear and apple; scab disease and brown rot of peach and nectarine fruit; brown rot of plum fruit; chemical injury to apples; Pierce's disease, root damage and fertilizer burn of grape; root decline, possible botryosphaeria canker and septoria leaf spot and/or leaf rust of blueberry; phosphorus deficiency and necrotic banding bacterium of corn; mottling of early southern pea leaves; possible crown rot and root rot of raspberries; suspected holicus bacterial leaf spot of corn; spider mites of snap beans; possible boron deficiency and lack of pollination of okra; fusarium basal rot of garlic; fusarium wilt of watermelon; possible root rot and/or graft incompatibility of apple .

INSECTS, CRUSTACEANS & MITES : Borers of raspberries; fourlined plant bug damage to 'Green Spire' linden; twospotted spider mite of snowball bush; common stalk borer of sedum; Colorado potato beetle on potato; aphids on tomato; catfacing of peach and nectarine caused by stink bugs and tarnished plant bugs; sap (Nitidulid) beetles on peach fruit and stem; lace bug on azalea; eastern tent caterpillar egg mass on Kwanzan cherry; metallic wood-boring beetle (*Buprestis rufipes*) of elm, maple and oak firewood and logs; lilac borer on lilac; grape tube midge (Cecidiomyid) gall and phylloxera adelgid leaf galls of grape; crown borer of blackberries; lesser canna leafroller on canna; possible small hive beetle of beehive; gloomy scale of maple twigs; red-headed ash borer on sugar maple; ambrosia beetle damage to dying hickory; leafhopper injury and leaf-chewing caterpillar damage to redbud leaves; root collar weevil (*Hylobius transversovittatus*) girdling St. John's wort; periodical cicada damage to white oak twigs; possible spruce spider mite injury to hemlock; tuliptree beauty moth; harlequin bug feeding on horseradish; bark lice on redbud and oaks; flatheaded borer damage to Sterling linden stem; leaf-chewing damage to parrotia and paperbark maple; bulb mites of garlic; possible peachtree borer of 'Otto Luken' English laurel; suspected clearwinged borer damage to cherry; twospotted spider mite damage to rose leaves and burning bush; hornworms on tomato; possible inchworm (spring and/or fall cankerworm) defoliation of pin oak; jumping oak galls on leaves of white oak; stem borers of coxcomb and okra; rhizoctonia stem rot of impatiens; pouch leaf gall mites on birch; lace bugs on rhododendron; white grub in flower bed.

Insects and other pests around the home : Small flying ants; termites; northern black widow; giant resin bee; antlions; carpenter ants; Argentine ants; varied carpet beetle; ground beetles; eastern hercules beetle; house centipede; click beetles; dark-winged fungus beetles; possible southern black

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widow; possible sheetweb spider; a ground spider; springtails.

ORNAMENTALS & TREES : Decline and mortality of red oak and willow oak; iron deficiency and possible hail, frost or chemical injury of oak; scattered branch mortality of tulip poplar due to weather damage last year; fire blight, possible girdling roots and botryosphaeria canker and drought stress of Bradford pear; root dieback of sugar maple due to driveway construction; cercospora leaf spot of hydrangea; powdery mildew and drought stress of sycamore; drought stress of eastern white pine; root mortality due to drought stress of holly; drought decline and hail damage and phomopsis canker of Norway spruce; black spot leaf and cane disease of rose; phytophthora root and crown rot of petunia; fire blight and/or botryosphaeria canker of cotoneaster; site change stress of azalea due to shade removal; algal growth on wood deck; environmental stress and possible phomopsis twig canker of hemlock; phytophthora root rot of 'October Glory' red maple and tulip poplar seedlings and cherry laurel; possible phenoxy herbicide damage to tulip poplar; annual canker of red maple seedlings; suspected rose rosette of rose; hail damage to various nursery trees; possible phytophthora canker girdling the lower stem of red maples; crown gall bacterial infection of euonymus branches; dogwood leaf scorch due to over watering; possible armillaria root rot of hickory causing rapid tree decline; leaf spot fungus of parrotia; botryosphaeria canker of Cleveland pear; possible drought stress dieback of branches of yellowwood and sourwood; anthracnose leaf disease of Korean maple; possible water stress and root decline of Burford holly; volutella stem blight of pachysandra; phytophthora root rot and lack of fertilization of Japanese maple seedlings; root decline of juniper; possible root rot of 'Otto Luken' English laurel; over or under watering of yew and Leyland cypress; suspected branch canker and/or too much sun exposure of Japanese maple; possible fungal canker of cherry; root decline of burning bush and arborvitae; lichen on red maple with branch decline; volutella twig and leaf blight of boxwood; cedar-quince rust of crabapple.

TURF & FORAGE : Ergot fungal infection of tall fescue seed heads; seed head smut disease of timothy hay crop; colletotrichum stem rot of lespedeza cover crop; dodder parasitizing sericea lespedeza; severe root pruning by pre-emergent herbicide of zoysiagrass; ascochyta blight, anthracnose, possible liquid fertilizer burn and pythium root decline of bentgrass; brown patch (*Rhizoctonia* sp.) of fescue.

2008 CA Recertification DVD Distributed

By Gene Burgess

By now all counties should have the *2008 UT Annual Commercial Applicator Recertification Program*. This is worth four points in all categories. The DVD was given to the Program Leaders to distribute. However, in the Eastern Region, they were mail to the counties directly from my office. If a county has not received one, contact your program leader or if you are in the Eastern Region contact my office.

The form EPP Info #317 CART A&B should be completed and sent to my office, when any of the PSEP certification/recertification materials are utilized in training at the county level.

IMPORTANT: The PSEP DVDs, CDs or video tapes are to be shown for educational purposes in Extension offices only. They are not to be loaned out to companies or individuals. Also, they are a good way to earn revenue for your office and the program. If they are loaned out, they can be duplicated and distributed to other people and the County Extension and PSEP offices completely bypassed. Consequently, revenues lost.

Tobacco IPM Report

By Gene Burgess

McMinn Co. -- Clint Crisp, Tobacco Intern

Field 1 – The field had been sprayed with acephate. Aphids and flea beetles were dead or dying. There were increases in brown spot and angular leaf spot. Grasshopper and flea beetle activity had increased on the border rows.

Field 2 – The Admire treatment was still controlling aphids and flea beetles. Brown spot and angular leaf spot had increased.

Field 3 – The field had been plowed, therefore no weeds were present. There were increases in aphids, brown spot angular leaf spot and flea beetles.

Polk Co. – Sheena Hair, Tobacco Intern

Orthene in the transplant water was still doing a good job. There was some evidence of hornworm presence. A few grasshoppers were found. There were very few weeds. The farmer had used Spartan and Command for weed control.

Jefferson Co. – Jennifer Lane, Tobacco Intern

Field 1 – The field had been sprayed with Poast and Warrior since the last scouting report. The field had a substantial amount of weeds. There were some signs of hornworm damage. And, a few aphids were found.

Field 2 – The field had been sprayed on July 9 with Orthene. A few aphids were present. No other insects, diseases or weeds were found.

Bedford Co.– John Marsh, Tobacco Intern

The field scouted had been sprayed with Orthene three days earlier. Some leaves were damaged from insect, probably budworm and/or hornworms. A few flea beetles and grasshoppers were observed. Morning-glory, crabgrass, horsenettle, johnsongrass, sicklepod, common ragweed, maypop passionflower and foxtail

DDVP Objections and Hearing Request Denied

By Gene Burgess

EPA has denied the Natural Resource Defense Council's objections to and requests for a hearing on a prior order that denied their petition asking EPA to revoke all tolerances for dichlorvos (DDVP). The Agency's order became effective when it was published in the Federal Register on July 23, 2008. EPA completed the interim reregistration eligibility decision for DDVP in June 2006 and, following the organophosphate cumulative risk assessment, completed the final Reregistration Eligibility Decision in July 2006. Consistent with that decision, certain DDVP pesticides can still be used safely around the home as long as the directions on product labeling are followed. For more information about DDVP, consult <http://www.epa.gov/pesticides/reregistration/ddvp>. The Federal Register notice is available at <http://www.epa.gov/fedrgstr/>

Wheat Production

By Russ Patrick

After thorough examination of a number of bales of wheat straw, I observed a large number of the immature stage of the Hessian fly known as "flax seed." I am afraid that we may have a large outbreak next year due to possible infestations this fall. We currently have biotype L, however I am not aware of any resistant varieties that may aid in control of this pest. Your producers will need to check any early planted wheat to help them get an idea of the infestation levels.

Stored Grain Production

By Russ Patrick

We have had some great days for aerating wheat, so keep your aeration fans running. Corn harvest is getting near, so make certain bins are cleaned and treated prior to loading. A large number of producers have built large bins this year, so expect to see more storage on the farm.



Hessian fly eggs on wheat



Hessian fly pupa



Grain bins

NAFTA Technical Working Group on Pesticides Releases Five-Year Strategy for Public Comment

By Gene Burgess

The proposed Five-Year Strategy of the North American Free Trade Agreement (NAFTA) Technical Working Group (TWG) on Pesticides is now available for public comment. This document presents the NAFTA TWG's proposed strategic framework for the next five years, outlining the objectives of the TWG, specific work areas that it will focus on to meet those objectives, and indicators to measure its success. Overarching strategic objectives that guide the TWG work include:

1. Providing the United States, Canada, and Mexico with equal access to and same - time introduction of pest management tools.
2. Working cooperatively to reevaluate older pesticides using each country's reevaluation programs to the fullest to increase efficiency.
3. Integrating smart business approaches and practices into NAFTA TWG work.

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The comment period for this document will last for 30 days, beginning on July 23, 2008, and closing on August 21, 2008. The NAFTA TWG on Pesticides Proposed Five-Year Strategy is available at <http://www.regulation.gov> under docket identification (ID) number EPA-HQ-OPP-2008-0522. The U.S. Federal Register notice announcing the comment period is available at <http://www.epa.gov/fedrgstr/EPA-PEST/2008/July/Day-23/p16381.htm> .

The NAFTA TWG on Pesticides, comprising of representatives from the U.S., Mexican, and Canadian governments, was established in 1997 to address trade issues, national regulatory and scientific capacity, and governmental review burden and to coordinate regulatory decision-making and industry burden reduction. For additional background on the NAFTA TWG, visit <http://www.epa.gov/oppfead1/international/naftatwg/index.html>

EPA Acts to Address Carbofuran Residues in Food

By Gene Burgess

Due to considerable risks associated with the pesticide carbofuran in food and drinking water, EPA is revoking the regulations that allow carbofuran residues in food. Even though carbofuran is used on a small percentage of the U.S. food supply and therefore the likelihood of exposure through food is low, EPA has identified risks that do not meet our rigorous food safety standards. EPA is taking the necessary steps to address these risks to ensure we have the safest food supply possible. The United States has a safe and abundant food supply, and children and others should continue to eat a variety of foods, as recommended by the federal government and nutritional experts.

In addition, EPA is proceeding on the path toward cancellation of the pesticide registration, which will address the risks to pesticide applicators and birds in treated fields. As part of this effort, EPA is also releasing its response to the peer review conducted by the independent Scientific Advisory Panel and the agency's response to the U.S. Department of Agriculture's comments on the effect of the cancellation of carbofuran on the agricultural economy.

EPA will accept public comments on the proposed tolerance revocation for 60 days. For additional information, visit: http://www.epa.gov/pesticides/reregistration/carbofuran/carbofuran_noic.htm

Note: Taken from EPA Pesticide Program Updates 7/24/08.

New Products & Label Changes in Tennessee

By Gene Burgess

Insecticides

Imida E-Pro. AI= imidacloprid. Systemic and foliar insect control in turfgrass. (Etigra, LLC)

Brigadier. AI= bifenthrin; RUP. Insect control in various crops. (FMC Corp)

Gourmet Liquid Ant Bait. AI= disodium octaborate tetrahydrate. Control of sweet & protein feeding ants. (Innovative)

Groundwork Concentrate. AI= permethrin. Insect control in various crops and ornamentals. (PBI/Gordon)

Lambdastar. AI= lambda-cyhalothrin. RUP. Control of various insects on selected crops. (LG International)

Assail. AI= acetamiprid. Insect control in various crops. (United Phosphorus)

Herbicides & Plant Growth Regulators

Ignite 280 Sl. AI= glufosinate-ammonium. Supplemental label for corn, soybean and canola. (Bayer Crop-Science)

Harass. AI= thifensulfuron-methyl. Selective postemergence control of broadleaf weeds. (Cheminova, Inc)

Treflan HFP. AI= trifluralin. Preemergence control of annual grasses and broadleaf weeds. (Dow AgroSciences)

Thifen E-AG 75WDG. AI= thifensulfuron-methyl. Controls weeds in wheat, barley, oats, corn & others. (Etigra, LLC)

Oryzalin 4 Pro. AI= oryzalin. Preemergence for control of annual and broadleaf weeds. (FarmSaver.com)

Showdown. AI= glyphosate. Foliar spray for control of herbaceous plants. (Helena Chemical)

Trillium. AI= 2,4D. Weed control for turfgrasses including use on sod farms. (Regal Chemical Co)

Primero. AI= nicosulfuron. Control of weeds in corn crop. (Rotam North America)

Samson 4SC. AI= nicosulfuron. Control weeds in corn crop. (United Phosphorus)

Fungicides, Rodenticides, & Other Pesticides

Headline. AI= pyraclostrobin. Supplemental label for aerial application in various corn crops. (BASF)

Enable 2F. AI= fenbuconazole. Systemic fungicide used to control various diseases. (Dow AgroSciences)

Kaligreen. AI= potassium bicarbonate. Fungicide for control for powdery mildew. (Otsuka Chemical Co)

Maneb 75DF. AI= maneb. Dry flowable fungicide for disease control. (United Phosphorus)

Key	AI = active ingredient	IGR = insect growth regulator	RTU = ready-to-use
	EPA reg = EPA Registration Number	PCO = for pest control professionals	RUP = restricted-use pesticide
	HLT = lawn and/or outdoor ornamental use	(name in parenthesis) = Registrant	WSB = water soluble bags

Adapted from the TDA Registration Review. August, 2008.

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

Ornamental Pest and Disease Update

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

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>

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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