BLUE MOLD STATUS REPORT by Kenny Seebold

Blue mold has been confirmed in 56 counties in KY, and in CT, OH, MA, NC, PA, TN, VA, and WI. The worst appears to be over, but active blue mold is still present in some areas of the Commonwealth. Rain and cooler temperatures brought by the cold front that moved through the area this past weekend (August 19-20) created, more than likely, favorable conditions for the blue mold pathogen. New growth, i.e. suckers, and tobacco awaiting topping could become infected in areas where inoculum is present. In general, tobacco that has been topped and treated with a sucker-control chemical becomes less susceptible to blue mold; however, this is a gradual process that can take several days before the crop reaches a level of maximum resistance. Thus, it is possible for tobacco to develop a significant amount of disease just after topping under favorable environmental conditions. Maintaining an effective disease control program can be important to prevent losses to blue mold and to avoid damage by secondary pathogens that may colonize older lesions of blue mold.

After topping, pay close attention to sucker control, since suckers (juvenile tissues) are susceptible to blue mold. Visit the KY Tobacco Disease Information Page (www.uky.edu/Ag/kpn/kyblue/kyblue.htm) for updates on blue mold and for recommended controls. See www.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/ppfsag8.pdf for list of fungicides labeled for tobacco, or refer to Kentucky Pest News No. 1095. Please contact me if you find or suspect blue mold in your area, or if your area has not been included in the list of counties.
with blue mold.

**LAWN & TURF**

**GRAY LEAF SPOT AND LABEL CHANGES FOR THIOPHANATE METHYL**

by Paul Vincelli

The US Environmental Protection Agency is required by law to review pesticides originally registered before 1 Nov 1984, in order to assure that these products meet today’s standards of safety and environmental protection. That process is called re-registration.

The re-registration for the fungicide thiophanate methyl (the active ingredient in Cleary’s 3336 Plus, Fungo, Pro-turf Systemic Fungicide, SysTec 1998, Cavalier, Absorb TM, T-Storm, and Tee-Off) recently was completed. As a consequence of this process, product labels for thiophanate methyl underwent some significant changes, including reductions in maximum rates for individual applications and the imposition of a maximum allowable amount per season. Some of these changes are highly relevant to gray leaf spot control and should be highlighted, since thiophanate methyl is one of the most effective fungicides for gray leaf spot available.

Gray leaf spot is a highly aggressive disease of perennial ryegrass, a grass used in this region for golf course fairways and athletic fields, among other uses. Because of the high susceptibility of established varieties of this grass, fungicides are an important tool for managing the disease during an epidemic, and this year is shaping up to be a season of at least moderate disease pressure.

With the recent label changes, the maximum allowable rate for an individual application of thiophanate methyl on fairways is now 4 oz of Cleary’s 3336 50WP (or an equivalent rate of a similar product). Thiophanate methyl has performed very, very well against gray leaf spot in many tests across the country. However, in the large majority of these, it was tested at rates of 6-8 oz of Cleary’s 3336 50WP (or equivalent). There are few studies where the 4 oz rate was tested against a higher rate, and in those studies which I found, the 4.0 oz rate performed as well as higher rates. While I think we need more study on this issue, this sounds hopeful. However, I believe that if I were in the middle of a raging epidemic, I might be tempted to tank-mix at least a low rate of some other fungicide, such as chlorothalonil or mancozeb, just as a precaution until more data come in. Under light to moderate pressure, the 4 oz rate is probably fine.

The 2 oz rate of Cleary’s 3336 WP (or equivalent) is now the labeled rate for residential and public areas, which would include athletic fields. This rate is probably inadequate for complete control of gray leaf spot, and tank-mixing would be recommended, at least under high disease pressure.

**RESCUE TREATMENTS FOR WHITE GRUBS IN HOME LAWNS**

by Lee Townsend

White grubs are only one of the potential causes of brown patches of dead grass in home lawns. Grub-damaged turf will pull up like loose carpet if the root system has been severely damaged. Turf infestations can be from masked chafer or Japanese beetles. Very dry conditions in much of the state should result in intense grub infestations in lawns that were watered regularly so that they are green and lush when most of the surrounding turf is brown and dry. These become oases in the desert for beetles that have been seeking places to lay their eggs over the past few weeks. Moist warm soils also increase the proportion of grub eggs that hatch and the development rate. All of this sets the stage for some serious turf injury.

Rescue treatments for active white grub infestations require insecticides that act quickly and are toxic to the larger grubs that can be present now. A good choice is Bayer Advanced 24-hour Grub Control that contains the active ingredient trichlorfon. If this product cannot be found, carbaryl (Sevin) can be used. Control may not be as effective and the insecticide is very toxic to earthworms. Heavy earthworm mortality can lead to thatch build up and a general reduction in turf health. Large numbers of white grubs in turf can mean damage from skunks and birds that come to feed on the succulent creatures.

**SHADE TREES & ORNAMENTALS**

**BACTERIAL LEAF SCORCH IS VISIBLE NOW**

by John Hartman

County Extension Agents, landscape professionals, and observant homeowners have no doubt noticed premature browning of many shade trees, particularly oaks, these past two weeks. Most of the affected trees are suffering from bacterial leaf scorch, caused by Xylella fastidiosa. This disease is found on several shade and landscape trees in Kentucky, but oaks, especially pin oaks and red oaks, are the primary victims.

**Symptoms.** Bacterial leaf scorch disease symptoms are characterized by browning of the margins of groups of leaves anywhere in the tree. Some of the scorched leaves are already beginning to drop from the tree prematurely. The number of branches with scorched leaves in a tree...
may increase during the coming month. On trees that have been infected for many years, nearly all branches will show scorched leaves, but on newly infected trees only one or a few branches will be affected this year.

Infected trees leaf out normally the following year, and in late summer, leaves of a few more branches turn prematurely brown. These events repeat themselves over a period of several years until the entire infected tree turns prematurely brown in fall and begins to show twig and branch dieback and tree decline. The reason for the scorching symptom is that *X. fastidiosa* is found in the xylem tissues of trees where it blocks the flow of water to the leaves. The bacterial leaf scorch pathogen is spread by leafhopper and treehopper insects, but it does not appear to be spread from tree to tree very rapidly by these insects. Nevertheless, in some neighborhoods with mature oaks and with the disease present for many years, a high proportion of the trees can show symptoms of bacterial leaf scorch. The disease is confirmed in the University of Kentucky Plant Disease Diagnostic Laboratory by detecting the bacteria in infected leaves with a special test specific for *Xylella*, the cause of the disease.

Where is bacterial leaf scorch? In Kentucky, bacterial leaf scorch has been commonly observed in pin oak, red oak, shingle oak, scarlet oak, white oak, bur oak, and sycamore. It is also occasionally found in red maple, sugar maple, silver maple, London plane, hackberry, mulberry, elm, and sweetgum. Bacterial leaf scorch is found throughout much of the eastern and southern U.S. On the capitol mall in Washington, DC, for example, each summer, American elms can be seen with symptoms of bacterial leaf scorch. The bacteria have been identified in urban trees from such cities as Paducah, Madisonville, Owensboro, Bowling Green, Somerset, Louisville, and Lexington. In Kentucky, this disease has not been detected in forest oaks.

Prognosis for infected trees. There is no effective long-term cure for bacterial leaf scorch. Because infected trees decline gradually, it may take from five to ten years until they have many dead limbs and branches and need to be removed. In the meantime, tree owners should provide good growing conditions for the trees to prolong their survival, and begin to plant replacement trees that will attain a reasonable size before the diseased ones are removed.

HOUSEHOLD

CRICKET WARS
by Mike Potter

“Hundreds of black, ½-inch long bugs are hopping out of my grass, flower beds, and onto my patio. When I open the garage door in the morning, a bunch more jump inside. What are these critters and how do I get rid of them? Several homeowners have called with this complaint in recent weeks. The culprits are field crickets.

Warm, humid conditions often produce outbreaks of field crickets during late summer in Kentucky. Infestations are especially common in thatchy lawns and around buildings that are heavily mulched, landscaped or overgrown. Crickets lay their eggs in moist soil; consequently, homeowners who irrigated regularly during July appear to be having the worst problems. Immatures (nymphs) pass through several stages or instars, and there may be 1 to 3 generations per year.

Management -- Field crickets are primarily a nuisance pest; they do not bite, transmit diseases or infest food-stuffs. Since they are dependent upon moisture, they typically do not survive indoors more than a few days. One option is to do nothing other than vacuum or sweep up those that manage to get inside. Removing excess mulch (a 2 to 3-inch layer is plenty for landscaping), weeds and debris close to the foundation will make the area less attractive to crickets. Installing tight-fitting door sweeps, sealing cracks, and performing other forms of exclusion (see Entfact-641 How to Pest-Proof Your Home) will further limit the entry of crickets, spiders, ground beetles and other unwanted pests.

For clients demanding immediate relief, pest proofing can be supplemented with exterior insecticide treatment. Homeowners will get the most for their efforts by applying longer-lasting liquid formulations containing pyrethroids (e.g., Bayer Advanced™ Lawn & Garden Multi-Insect Killer Concentrate, Spectracide Triazicide Soil & Turf Insect Killer Concentrate). Sevin (carbaryl) also is effective. Apply with a pump up sprayer, hose end sprayer, etc. treating along the bottom of exterior doors, up underneath siding, and around the outside perimeter of the foundation in a 2 to 10-foot wide band along the ground, and 2-3 feet up the foundation wall. Pay particular attention to the crack where grass meets the foundation.

Homeowners or businesses who choose not to tackle these activities may wish to hire a professional pest control firm. Field cricket problems subside with the onset of cooler weather.
**PESTS OF HUMANS**

**LONE STAR TICKS ACTIVE AGAIN**

by Lee Townsend

Lone star ticks are active again after a downturn in activity during mid-summer. Encounters with seed ticks, the three legged larval stage, are especially problematic (see picture) now because there can be lots of them in one place. The angry red welts in the picture are from a herd of these little guys that moved from the grass onto an unsuspecting individual. Incidentally, this is only a portion of the bites.

Female ticks lay hundreds of eggs at a time, and when they hatch, there is a large concentration of hungry red-brown blood suckers that are about the size of this “o”. They will attach, feed, and then drop off. The bite site itches intensely and the irritation can last about 10 days – more if the area is scratched and becomes infected.

Tick populations are high in small openings in the woods and along old trails. They tend to occur in tall grass and overgrown areas containing brush and small trees. High soil temperature and low humidity in open, sunny areas are unsuitable for tick survival.

Hunters, hikers, and people working outdoors in overgrown areas are very susceptible to tick attack. If you are in one of these categories, here are some tips to make you tick-ready:

- Wear light-colored clothing – this makes that crawl on you easier to spot.
- Tuck pants into socks and shirt into pants keep ticks outside.
- Use repellents – Deet can be applied to the skin, permit thrin-based clothing treatments (Permanone) can be sprayed on lower pant legs.
- Inspect yourself regularly check and remove ticks as they are found.
- Wash clothing in hot water and detergent immediately after getting home. If this is not practical, put your clothing (which may be carrying ticks) into a sealed plastic bag until it is washed. You may share your ticks with family members and pets if you come in and sit on couches or chairs or just toss your clothes into the family pile.
- Pets or working dogs that accompany you can carry ticks, too. Protect them from ticks, too.

What is the best way to remove a tick?

1. Use fine-tipped tweezers or shield your fingers with a tissue, paper towel, or rubber gloves.

2. Grasp the tick as close to the skin surface as possible and pull upward with steady, even pressure. Do not twist or jerk the tick; this may cause the mouthparts to break off and remain in the skin. (If this happens, remove mouthparts with tweezers. Consult your health-care provider if infection occurs.)

3. Do not squeeze, crush, or puncture the body of the tick because its fluids (saliva, hemolymph, gut contents) may contain infectious organisms.

4. Do not handle the tick with bare hands because infectious agents may enter through mucous membranes or breaks in the skin. This precaution is particularly directed to individuals who remove ticks from domestic animals with unprotected fingers. Children, the elderly, and immunocompromised persons may be at greater risk of infection and should avoid this procedure.

5. After removing the tick, thoroughly disinfect the bite site and wash your hands with soap and water.

6. You may wish to save the tick for identification in case you become ill within 2 to 3 weeks. Your doctor can use the information to assist in making an accurate diagnosis. Place the tick in a plastic bag and put it in your freezer. Write the date of the bite on a piece of paper with a pencil and place it in the bag.

Note: Folklore remedies such as petroleum jelly or hot matches do little to encourage a tick to detach from skin. In fact, they may make matters worse by irritating the tick and stimulating it to release additional saliva, increasing the chances of transmitting the pathogen. These methods of tick removal should be avoided. In addition, a number of tick removal devices have been marketed, but none are better than a plain set of fine tipped tweezers.

Lone star ticks are not believed to be vectors of Lyme disease. However the condition known as Southern Tick Associated Rash Illness (STARI) is attributed to them and is estimated to be in about 1% to 3% of Lone star ticks. The rash is a red expanding bulls-eye area (similar to Lyme disease) that develops around the site of a lone star tick bite. The rash appears within about 7 days of the bite and expands to a diameter of about 3 inches. This rash is much bigger than the red area at the bite site. STARI may include fatigue, fever, headache, muscle and joint pain. Its cause is STARI is not known but the rash and symptoms respond to treatment with oral antibiotics.
Recent agronomic samples in the PDDL have included gray leaf spot (Cercospora) and northern leaf spot (Bipolaris) on corn; gray leaf spot (Pyricularia) on millet; downy mildew and northern stem canker (Diaporthe) on soybean; black shank, blue mold, angular leaf spot, frog-eye, and brown spot on tobacco.

On vegetable samples, we have seen Rhizoctonia root and stem rot on bean; bacterial stalk rot on sweet corn; powdery mildew on pumpkin; early blight, Septoria leaf spot, anthracnose (ripe rot), late blight and blossom end rot on tomato.

On ornamental and turf samples, we have diagnosed Pythium root rot on chrysanthemum and petunia; rust and Botrytis blight on aster; Rhizoctonia root and stem rot on sage, rudbeckia, hosta and chestnut; Phytophthora crown rot on liriope; anthracnose on lily; Cercospora leaf spot on peony and hydrangea; Volutella canker on boxwood; powdery mildew on dogwood, oak and walnut; Phyllosticta leaf spot and tar spot on maple; Septoria leaf spot on azalea; black root rot on holly; bacterial scorch on sycamore; Pythium root dysfunction on bentgrass; and summer patch on bluegrass.

INSECT TRAP COUNTS
UKREC, Princeton KY

August 11-18, 2006
Black cutworm................................................................. 1
True Armyworm .............................................................. 29
European Corn Borer....................................................... 6
Southwestern Corn Borer.................................................. 65
Corn Earworm ............................................................... 146
Fall Armyworm.............................................................. 1

View UKREC trap counts for the entire 2006 season at - http://www.uky.edu/Ag/IPMPrinceton/Counts/2006trapsfp.htm
View trap counts for Fulton County, Kentucky at - http://ces.ca.uky.edu/fulton/anr/Insect%20Trap%20Counts.htm

For information on trap counts in southern Illinois visit the Hines Report at - http://www.ipm.uiuc.edu/pubs/hines_report/comments.html

The Hines Report is posted weekly by Ron Hines, Senior Research Specialist, at the University of Illinois Dixon Springs Agricultural Center.

NOTE: Trade names are used to simplify the information presented in this newsletter. No endorsement by the Cooperative Extension Service is intended, nor is criticism implied of similar products that are not named.