

# **KENTUCKY PEST NEWS**

ENTOMOLOGY • PLANT PATHOLOGY • WEED SCIENCE

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## **WATCH FOR:**

YARD BEES buzzing over turf and entering holes in lawns; CEREAL LEAF BEETLES laying eggs in rye and wheat; some small BLACK CUTWORM larvae are developing, egg laying continues; feeding by BOXWOOD PSYLLIDS causes cupping of terminal leaves; HOLLY LEAFMINERS will make small punctures in the leaves.

- Display the data in a graphic format that is easy to view and understand
- Standardized traps and operating procedures to produce data that is directly comparable in time and space
- Widen the area of coverage
- Obtain multiple years of data to establish baselines at each location for each insect
- Present all the current year data at a single web location

## **ANNOUNCEMENT**

### **REGIONAL INSECT TRAPPING SYSTEM TO BEGIN**

by Doug Johnson and Patty Lucas

Ms. Lucas and I have received information indicating that we will be funded for a grant proposal to develop a regional trapping system. Although the notification has not yet translated into funds, we have begun setting up the system. After all, biology does not wait for bureaucracy!

For more than ten years we have operated pheromone baited traps for several insects species here at Princeton. This has provided us with enough data to help evaluate the risk of outbreak for certain species in a given year. In 2006, we were able to indicate when an outbreak of true armyworm would occur within a weeks' time. On the other hand, the data was not easily usable by field practitioners, and it covered only a small area. Thus Patty and I, along with a colleague, Dr. Russ Patrick at the University of Tennessee at Jackson, requested funding to allow us to develop a standardized system over a larger region. We have begun to initiate this in the current season.

What we are trying to do is really quite simple (though not necessarily easy). We want to:

If you go to the UK-IPM web pages at: <http://www.uky.edu/Ag/IPM/ipm.htm> you can see the early results of this effort. Look for the "NEW Regional Trap Counts" just below the opening graphic. If you click on "Regional Trap Counts" you will view a series of data tables. Each table represents the trap captures for six insects at that location for the current season. There are four locations currently available; Princeton and Lexington, KY and Jackson and Milan, TN. Each of these locations uses exactly the same make and model traps and same make and model pheromone baits, and exactly the same service and data collection protocols. But, we only have historic data for the Princeton location.

This is just the beginning. While the forthcoming funding will support the developmental work for establishing the data bases and displays for these four locations in this year, we have been requested to resubmit a further proposal for widening the scope of the system. We have made preliminary contacts with two other states and will soon approach two additional states to see if they are interested in participating in this effort. If we are successful in this attempt, we should be able to look at population development for these pests, over a wide area and compare current year data to those of previous years.

It is important that you understand that this information will not permit you to stop looking at fields. It is possible

to have high counts and no problems and low counts and significant problems. There are factors other than population size that affect how bad an infestation might be (e.g. plant stage, local weather, insect natural enemies etc.).

We also feel that although this information may be of value to anyone in crop production, it will be of special interests to crop consultants. These data may provide you with a “heads up” on what to look for and allow you to manage your time and efforts in a more efficient way. We would therefore ask that you take a moment to make sure your colleagues know about this effort and can get to the reporting web pages. We will certainly welcome any comments and suggestions you may have to improve the sites.

## TOBACCO

### WIREWORMS IN TOBACCO

by Lee Townsend

*The setting of tobacco plants is often followed by considerable injury by wireworms.* This is the opening sentence of the 1940 UK Experiment Station Bulletin Wireworm Injury to Tobacco Plants. Wireworms were a significant problem then because tobacco usually followed an established bluegrass sod which was typically infested by two to four wireworm species. Plowing the sod removed the wireworm's food supply so they turned to tobacco, tunneling into stalks and stunting or killing the transplants. Damaged plants ranged from 6% to over 60% in fields, depending upon the severity of the infestation but plant death was low, usually 1% to 3%. Soil insecticides were not available and cultural practices had little effect. Fall plowing was ineffective as a control measure and planting date reduced damage by the insect only if the crop was set after mid-June.

Fortunately, wireworm infestations are relatively rare now in Kentucky, wireworms are not common in fescue sod. The need for a preventive wireworm treatment is unlikely unless the field had a very significant bluegrass component, or there was wireworm damage to the previous crop. In this instance a preventive wireworm treatment would be justified. Broadcast incorporated applications of products like Lorsban (chlorpyrifos), Mocap (ethoprop), or DiSyston (disulfoton) should be made about 2 weeks before transplant in order to have time to work before the crop is set. Some transplant water or tray drench applications are labeled for wireworm suppression but may not be effective against high population pressure. There are no rescue treatments for wireworms.

Cutworms can be a problem following transplant. The potential for an infestation is greatest in fields that have had a flush of winter annual weeds. Black cutworm moths are flying now and laying their eggs on dense, low-growing plants. Tillage removes the food but does not kill the cutworms. The PPI chlorpyrifos wireworm application should give good cutworm suppression. Orthene can

be used as a foliar spray to control cutworms in after transplanting.

## CORN

### EARLY-SEASON CORN INJURY DURING COOL WET CONDITIONS

by James R. Martin and J.D. Green, Extension Weed Scientists

The prolonged cool soil temperatures and wet conditions over the last several days slowed the metabolism and emergence of corn plants and allowed more exposure time of corn seed and emerging seedlings to herbicides in soil solution. Prolonged exposure to certain herbicides can lead to injury.

The following is a brief discussion of some of the herbicides and symptoms associated with early-season corn injury during cool wet soil conditions:

#### *Chloroacetamide / Oxyacetamide Herbicides:*

Chloroacetamide herbicides are widely used for weed management in corn. Examples of herbicides in this class of chemistry are acetochlor (e.g. Degree, Degree Xtra, Harness, TopNotch, Harness Xtra); alachlor (e.g. Micro-Tech or Bullet); dimethenamid-P (e.g. Outlook or Guardsman Max); metolachlor (e.g. Parallel or Stalwart C) and S-metolachlor (e.g. Dual II Magnum, Camix, Charger Max, Cinch, Bicep II Magnum, Lexar, or Lumax). Flufenacet (e.g. Define, Axiom, or Epic) is classified as an oxyacetamide and is similar to chloroacetamide herbicides.

Acetochlor, metolachlor, and S-metolachlor tend to have a greater potential to cause injury compared with similar herbicides, yet they are usually formulated with a safener to limit the risk of corn injury.

Symptoms of corn injury from chloroacetamide and oxyacetamide herbicides include malformed and stunted seedlings with twisted leaves that do not unroll properly. Plants that are severely injured may eventually die because leaves cannot unroll.

*Synthetic-Auxin Herbicides.* Products containing 2,4-D and dicamba (e.g. Banvel, Clarity, Oracle, or Sterling) are often referred to as synthetic-auxin or growth-regulator herbicides. They can be used as a part of a burndown weed control program in no-tillage corn. Their activity is based primarily on foliar uptake in emerged weeds; however, they have limited soil-residual activity that can sometimes result in corn injury.

Corn injury from synthetic-auxin herbicides occurs during seed germination and resembles symptoms associated with chloroacetamide and oxyacetamide herbicides. Synthetic-auxin herbicides often cause abnormalities of both shoots and roots of corn plants; whereas, chloroacetamide and oxyacetamide herbicides tend to affect only the shoot growth.

Products containing 2,4-D generally should not be used during the period from 7 to 14 days prior to planting until 3 to 5 days after planting and before corn emerges. Products containing dicamba may injure corn if seed is planted less than 1.5 inches below the surface.

*Isoxaflutole:* Injury from products containing isoxaflutole (e.g. Balance Pro, Epic, or Radius) is seldom an issue in Kentucky but has occurred when soil conditions were cold and wet and weather was cloudy for several days following planting. Corn injury symptoms associated with isoxaflutole range from minor yellowing or complete bleaching of plants to significant stand loss. Isoxaflutole does not directly affect roots but may indirectly limit root growth by inhibiting photosynthetic activity of plants. Injury from isoxaflutole is usually short lived but can cause yield loss if corn stands are reduced.

*Pendimethalin:* Preemergence applications of pendimethalin (e.g. Prowl H2O or Pendimax) can result in significant injury where corn seed are exposed to the herbicide. This typically occurs when corn is planted shallow (less than 1.5 inches deep) or when the seed furrow is not completely closed or sealed. Injured corn plants have stunted roots with swollen tips. Corn stands can be reduced in severe cases. Surviving plants are usually stunted and may turn purple, particularly during prolonged cool soil conditions after plant emergence.

*Flumetsulam:* Extended cold wet conditions (soil temperature below 50° F and excessive rainfall with wet soil conditions) increase the chance of injury from flumetsulam (Python, Hornet) during germination and early development of corn. Injury symptoms caused by flumetsulam are similar to those caused by other ALS-inhibiting herbicides and include yellowing of leaves and /or stunted shoots and a reduced root system.

While corn injury is a risk under cool and wet environmental conditions, there is no assurance it will occur. Fields need to be monitored to assess the corn stands to determine if symptoms are present. Corn may outgrow injury, however it will likely require several days of warm temperatures for plants to recover. If it is decided to replant, the surviving corn plants will need to be controlled. See information in Corn and Soybean Newsletter (Vol. 7 Issue 4) for controlling corn as a weed ([http://www.uky.edu/Ag/CornSoy/cornsoy7\\_4.htm](http://www.uky.edu/Ag/CornSoy/cornsoy7_4.htm)). It is recommended to not retreat with the same soil-residual herbicide(s) that caused the injury. Monitor fields and follow up with postemergence treatments if needed.

## **RISK OF PLANTING CORN INTO STANDING WHEAT**

**by Doug Johnson and Ric Bessin**

The damage to wheat caused by this springs' cold temperatures has many producers planning to replace their wheat crop with corn. While this may be a good agro-

nomic alternative, it brings with it concerns for controlling insect pests. Two particularly important pests are (true) armyworm and black cutworm.

Both insect pests are common and both can occur in corn. In addition, both may occur at increased levels in corn planted into standing wheat but for different reasons. Both are "grass loving" insects; that is they can live and reproduce on grasses and may choose this type of plant in preference to others.

Why has the risk increased? With armyworms this is pretty simple, they are primary pests of wheat. They are not often a problem because they are usually controlled by their natural enemies to a level below the economic threshold. However, one must understand that there are many more wheat plants in an acre than there are corn plants. For example a wheat crop planted to achieve 30 plants per square foot would have about 1.3 million plants per acre. Comparing this to a corn population of 28 thousand plants per acre is a difference of near 50:1! So, an insect population that would cause minor damage to wheat may cause significant damage to corn.

So far in this 2007 the UK-IPM pheromone traps have indicated a higher than normal numbers of black cutworm and armyworm moths.

[See these graphs at: <http://www.uky.edu/Ag/IPM/ipm.htm>]

It is too early to know if this will remain the case. Certainly the counts over the last two weeks have been lower but this may simply be because of very low daily temperatures and very high winds. One can not yet tell if the insect populations have been damaged by the cold.

We think that the insects that have hatched into worms in the field are unlikely to be much of a problem for the corn. By the time the corn emerges those insects will have died or completed their development. What is as yet unknown is how far into the spring egg lay we have proceeded. With armyworm we can say with some confidence that barring damage to the insects by cold, we can expect that the majority of the eggs have not yet been laid.

Estimation for black cutworm is more difficult. This insect does not produce distinct generations. But our guess is that like the armyworm, the bulk of the eggs have yet to be laid.

Listed below are some items that can help you reduce the risk your corn planted into dieing wheat will face from these insect pests.

**Choose your Corn Varieties Carefully:**

Some of the Bt corn events have good suppression of black cutworm, others do not. Seed treatments also have some suppression of cutworms but levels may vary to some extent on the level of seed treatment. But one fact remains, depending on the level of cutworm and army-

worm activity, preventive treatments may not provide sufficient control of these pests. We strongly suggest that these fields be monitored regularly until the field reaches 12 to 18 inches in height.

Before Corn Planting / Emergence:

- If possible remove the bulk of the wheat plant for some other use (example - hay, wheatlage WARNING: Samples should be tested for safety to animals).
- Use a herbicide that kills the wheat quickly,
- Leave as much time as possible between the killing of the wheat and the emergence of the corn.
- "Pre- or At-" plant insecticides are unlikely to provide complete protection because of the length of time the insects will be present.
- These two insect pests may be in the field together, depending upon the state of the dying wheat tissue.
- Decaying organic matter will provide the armyworm and cutworms a place to hide from natural enemies, and protect the insects from pesticides.

Once the corn is up:

- Scout fields with standing green / yellow wheat first for the presence of armyworm,
- Scout fields with heavy loads of dead wheat tissue first for cutworms.
- Apply insecticides as needed. Ensure that good coverage of the corn plant is obtained, both insects will hide in the organic matter.

## WHEAT

### CONTROL OF DAMAGED WHEAT AND CROP REPLANT OPTIONS

by James R. Martin

There are certain weed management decisions that will need to be made during the transition from damaged wheat to another crop.

The rotational-crop restrictions for herbicides applied to wheat are one of the first factors to consider. The issues will vary depending on the specific herbicide(s) used and when they were applied. The following table addresses rotational-crop restrictions of several wheat herbicides.

Another key management decision is how to "burndown" or kill the existing wheat stand in order to plant another crop. Although wheat is damaged, it is not dead and will likely remain green and initiate new tillers. While these plants may not be as competitive relative to normal tillered wheat, they can compete for soil moisture and harbor voles and certain other pests. In order to control re-tillering wheat, it is desirable that plants have approximately 4 inches of actively growing vegetation in order to allow for optimum uptake of foliar-applied burn-down herbicides such as glyphosate or paraquat. However, many of the damaged wheat tillers will not die back to allow for new tillers to emerge quickly.

The following are general comments on using paraquat and glyphosate for burndown treatments to control wheat for no-till plantings.

#### GLYPHOSATE:

- Since glyphosate is a translocated herbicide, a spray volume of 10 to 15 GPA may be adequate to achieve the desired spray coverage in most cases. Translocation of glyphosate from damaged tillers to newly developing tillers may be limited due to stem damage.
- Control is slow, particularly when temperatures are less than 50° F. Dead vegetation may degrade slowly. Because of the slow rate of control, problems with voles and other pests can be an issue.
- Addition of atrazine (for corn or grain sorghum ) may reduce speed of control.
- The addition of dry Ammonium Sulfate at 1 to 2% by weight (8.5 to 17 lb/100 gal) or an equivalent amount of liquid AMS, may improve speed and level of control in such cases as when hard water is used as the carrier, or when tank mixing with certain herbicides.
- Rate ranging from 0.75 to 1.13 lb ae/A should be adequate for most cases. Consult label for rate of specific product.

#### PARAQUAT:

- Good spray coverage is important. A minimum spray volume in the range of 15 to 20 GPA will probably offer better control than a spray volume of 10 to 15 GPA. Spraying within the next few days will help control damaged tillers, but may not limit growth of newly developing tillers
- Control may be erratic, particularly when wheat is in tillering stage.
- Plants decay rapidly. This may provide a more favorable environment for emergence of corn or other crops planted into the damaged wheat and may limit problems with voles or certain insects.
- Addition of atrazine at 1.5 to 2 lb ai/A (for corn or grain sorghum) often improves control, but rainfall within a few days after application is needed to ensure root uptake of the triazine herbicide.
- Rate ranging from 0.5 to 0.75 lb ai/A should be adequate for most cases. Consult label for rate of specific product.

A timely, but "somewhat" risky option would be to apply paraquat plus atrazine within the next few days to achieve rapid control of freeze - damaged tillers. Then plant Roundup Ready corn as soon as feasible and follow up with glyphosate to control any regrowth from newly developing tillers. Getting a good stand of corn in this environment can be challenging if voles or other pests are present before damaged tillers are completely dead.

It is likely that soil-residual or other foliar-applied herbicides will need to be included with glyphosate or paraquat depending on spectrum of weeds to be controlled. Consult labels for approved tank mixes.

**TABLE 1. ROTATIONAL INTERVALS BETWEEN APPLICATION OF WHEAT HERBICIDES AND PLANTING CORN, GRAIN SORGHUM, OR SOYBEANS.**

Wheat Herbicide	Rotational Crop Interval		
	Field Corn	Grain Sorghum	Soybean
Axial	120 days	120 days	120 days
2,4-D	7-14 days	3 months or until chemical has dissipated from soil.	7 - 30days
Buctril	30 days	30 days	30 days
Clarity	0 days May plant any time after application.	15 days	14 days Consult label for more details.
Finesse Grass & Broadleaf	Conduct field bioassay the following year.	Conduct field bioassay the following year.	9 months for STS soybean
Harmony Extra <sup>1</sup>	14 days	14 days	14 days
Harmony GT	0 days May plant any time after application.	0 days May plant any time after application.	0 days May plant any time after application.
Hoelon <sup>2</sup>	*	*	*
Prowl	Not approved for the same year.	Not approved for the same year.	0 days May plant any time after application.
Osprey	12 months	10 months	90 days
Sencor	4 months	12 months	4 months

<sup>1</sup> Harmony Extra label was recently revised to allow a 14 - day interval for corn or soybeans

<sup>2</sup> No information available on Hoelon label

## FRUITS

### SHOULD FRUIT GROWERS WITH NO CROP OR VERY LITTLE CROP CONTINUE TO SPRAY FUNGICIDES?

by John Hartman

In March, abnormally warm temperatures induced Kentucky tree fruits and small fruits to break dormancy, to begin blooming and to develop green shoots and leaves. An historic and sudden outbreak of cold weather at the end of the first week of April exposed these vulnerable plant tissues to killing and damaging temperatures. The most obvious effect was a near total loss of the fruit crop in many orchards and vineyards. This has led some growers to ask if it should be necessary to incur the costs of spraying their orchards and vineyards this year.

**Apples.** Damage may be more extensive than just loss of flowers. Some trees may have also suffered death of vas-

cular cambium tissues which is typical of winter injury. To repair this damage, apples will need to expend energy, energy that can only be replenished by healthy leaves with active photosynthesis. The goal should be to prevent any diseases that would reduce green leaf area or would cause defoliation.

Spray for apple scab, especially early in the season to prevent primary infections so that fewer sprays will be needed later on. Also, prevent cedar-apple rust which will still pose a threat for the next few weeks. A fungicide containing mancozeb (Dithane, Penncozeb, and others) might be the treatment of choice because it is effective for both diseases and the long pre-harvest interval (77 days) may not be a concern this year. Be aware that unsprayed crabapples near the orchard could be a source of secondary scab. Note that dry weather conditions unfavorable for scab could still be favorable for powdery mildew. For suggestions of fungicide use, consult the U.K. Cooperative Extension publication ID-92 "2007 Commercial Tree Fruit Spray Guide."

Fire blight may still be a concern. On early blooming apple cultivars and on pears, some primary infections may have occurred in the flowers before the cold arrived. Cold weather probably slowed the spread of those infections into the tree from the flower cluster. If those infected, but now dead blossoms subsequently drop off they might not threaten the tree. However, as the weather warms up and last year's cankers become active again and promote buildup of bacterial populations, there may be a lot of cold-injured tissue remaining on the tree that would allow entry of the fire blight bacteria. Following the trauma of freeze injury, fire blight can sometimes be very serious. If average daily temperatures reach 60 or 65 F for several days in a row and there is a prediction of rain, growers would be advised to apply streptomycin to their injured trees to prevent blight.

**Peaches and other stone fruits.** Most of the sprays normally applied for stone fruits are for management of fruit diseases. Thus, with no fruit crop, fungicide sprays may not be needed this season. Growers fighting plum black knot and peach perennial canker may need to utilize sprays as needed, though the time is probably past for best management of these diseases. In stone fruits, injured cambium in the trunk and branches is more likely than in apples. If there is sufficient winter injury, expect bark splitting and additional canker-causing microbes to attack these trees.

**Grapes.** Much of the new growth has been killed and cambial damage in the vines is probable, so grapevines are going to be in a weakened state most of this growing season. In trying to recover from the cold damage, the vines will push out new growth again which will deplete their energy reserves. Thus, there will be less energy to ward off diseases or other adverse growing conditions. Energy to restore the health of the grapes comes from carbohydrates produced by actively photosynthesizing healthy leaves. Grapes will need all the help they can get this season.

Diseases such as downy mildew, *Phomopsis* cane and leaf spot, black rot, and powdery mildew will reduce photosynthesis. Healthy leaves will promote grapevine recovery more quickly. Thus, as new growth emerges, growers should use their regular spray schedule as outlined in U.K. Cooperative Extension publication ID-92 "Midwest Commercial Small Fruit and Grape Spray Guide 2007."

Some grape spray program modifications might be in order. If there are no fruit, botrytis bunch rot sprays can be omitted. Similarly, if there are no fruit, mancozeb (Dithane, Penncozeb, and others), could be used longer in the season because the 66-day pre-harvest interval would not be a concern. Mancozeb is relatively inexpensive and controls downy mildew, black rot, and *Phomopsis*. It does not control powdery mildew, however, so addition of another fungicide might be warranted. Be aware that downy mildew and powdery mildew can also occur in

late summer and autumn even after harvest time, so applications need to be continued to the end of the season. Controlling these diseases this season reduces the adverse effects of cold temperatures next winter.

**Strawberries.** If there is no crop, no sprays will be needed unless it is a very wet summer and foliar diseases become a problem. As flowering continues, healthy flowers (those with yellow as opposed to black centers) will need fungicide applications during bloom for botrytis fruit rot management.

**Blackberries and raspberries.** Hopefully, most growers applied liquid lime-sulfur to manage anthracnose while the canes were still dormant. Additional fungicide treatments should not be needed this season. How much winter damage occurred in the woody canes remains to be seen.

**Blueberries.** Fungicide sprays for blueberry fruit diseases will not be needed this growing season, especially if there is little or no crop. Winter damage to the stems and branches is possible and would increase the incidence of stem canker, anthracnose, and twig blight diseases which cause twig and branch dieback. Fungicides applied through the season for these stem diseases might be useful. See the "Midwest Commercial Small Fruit and Grape Spray Guide 2007" for suggested fungicides.

**All fruit crops with woody stems, branches and vines.** If temperatures were low enough and if plant growth was sufficiently advanced, injury to bark, cambium, and wood are likely. This can be observed by cutting into the twigs or stems and looking for browning of the inner bark and outer wood. The amount of browning can vary a lot and it is difficult to know how much browning results in killing of the twig or stem. If there are sufficient surviving cells, plants can regenerate and replace the killed cells from those that are still living. Some plants that appear winter-injured now will grow out of it while others may survive but take years to recover, if at all. Some severely damaged plants may grow for a few weeks or months until it gets hot and dry and then collapse. Young plants are the most likely to be damaged.

## LIVESTOCK

### CATTLE INSECTICIDE EAR TAG TYPES AND SAFETY

by Lee Townsend

Insecticides in cattle ear tags belong to one of three main classes of active ingredients. Each attacks the nervous system of an insect in a different way. A seasonal rotation between the three can be useful in combating insecticide resistance that can develop as a consequence of continuous use of products from a single group. Some brands combine members of two groups in a single tag.

1. Organophosphate (OP) insecticides such as diazinon,

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- fenthion, pirimofos methyl, or a diazinon + chlorpyrifos combination.
2. Synthetic pyrethroid (SP) insecticides- cyfluthrin, cypermethrin, cyhalothrin, fenvalerate, and permethrin.
  3. Chlorinated hydrocarbon insecticide – endosulfan

Protect yourself from exposure to insecticides when using these products. Insecticidal ear tags should not be handled bare-handed. The concentration of active ingredient in the tags varies from 8% to 36%. They are manufactured so that the insecticide is rubbed off the surface and onto the animal. Any handling of the tags leaves some insecticide on the hands. The insecticide then can be transferred easily to the mouth, eyes, face or other areas of the body. Some individuals may be very sensitive to the active ingredients in the tags.

Signal words on the label range from CAUTION to WARNING. Several products carry statements about the potential for allergic reaction following exposure. Many are easily absorbed through the skin or eyes, some have irritating vapors. Wear protective gloves and wash hands thoroughly with soap and water after tagging or when taking a break.

## TURF

### YARD BEES BUZZING

by Lee Townsend

Several species of “yard/ burrowing/ mining/ digging bees” can be found entering and leaving pencil- diameter holes in turf. Often, there will be a scattering of fine soil around the holes, which are entrances to their underground nests. They generally live alone but over time, large communities can develop where conditions are favorable and food is abundant. These small, hairy bees, similar to honey bees, tunnel into well-drained soils where grass cover is thin. Females may share entrances but dig separate tunnels with side branches for brood rearing chambers. These bees collect pollen and nectar and bring it back to the nest to feed their larvae.

Yard bees can sting but generally are not aggressive and do not defend their nest area like honey bees. However, they pose a potential problem in children’s play areas. Sevin dust can be put in the holes or some Sevin, or other turf insecticide, can be mixed in water according to the spray instructions and poured into the nest areas.

#### Alternatives

- 1) Do nothing unless the bees pose a threat – they are good pollinators. Increase mowing height – that may make the area less attractive to them.
- 2) Treat burrow areas with an turf insecticide.
- 3) Long term – over-seed to establish a thicker turf, this should discourage the bees from living in the area.

### GETTING PREPARED FOR TICK SEASON

by Lee Townsend and Mike Potter

Like most creatures, ticks have their favorite haunts and hangouts. They prefer the grassy edges of wooded areas and other overgrown places frequented by small, medium, and large-sized animals that can supply them with a blood meal. Ticks spend a large portion of their life cycle on the ground. When “questing” or looking for a meal, they climb onto low vegetation and catch on to hosts which pass by, including pets and people. Here are some tips to cut down on encounters with ticks.

1. Avoid walking through uncut fields, brush and other areas likely to harbor ticks. Wear light-colored long pants tucked into socks and consider using tick repellents. Walk in the center of mowed trails to avoid brushing up against vegetation.
2. Inspect family and pets after being in tick-infested areas, and promptly remove them. Ticks often attach at the waist band, under the arms, at the nape of the neck, or in the scalp. Remove attached ticks carefully using a fine-point tweezers. Grasp the tick just behind the point of attachment and pull slowly and steadily until the tick is dislodged. Vaseline, matches and other alternate methods of removal should not be used. Wash the bite area, apply antiseptic and cover with a band-aid.
3. Keep grass and shrubs in your yard trimmed, and clear overgrown vegetation from edges of your property. Ticks avoid places characterized by direct sunlight and low humidity.
4. Free-roaming pets are much more likely to become infested with ticks than are those which are confined. Pets may be treated with insecticide dips or sprays, although these products generally lose effectiveness in about a week.
5. Treating lawns is of little benefit since this is not a preferred habitat for ticks. If insecticides are used, treatment should be concentrated in areas where pets, rodents, and other potential wild hosts of ticks are likely to frequent, e.g., dog house, fence line, and along margins between wooded or brushy areas and the lawn. Sevin (carbaryl), Bayer Advanced Lawn and Garden Multi-Insect Killer (cyfluthrin) and Ortho Bug B Gon (permethrin) are examples of effective materials. Check insecticide labels for products that contain these active ingredients.

### DIAGNOSTIC LAB-HIGHLIGHTS

by Julie Beale and Paul Bachi

The bulk of samples received in the PDDL during the past week have been seedling tobacco problems and winter injury in the landscape. On tobacco transplants we have seen both *Rhizoctonia* damping off and target spot, frost injury, *Pythium* root rot, and problems with high soluble

salts and saturated growing media.

Landscape samples have included both winter injury and winter drying (holly, magnolia, boxwood, etc.) which occurred back in February, as well as damage to new foliage of various trees and shrubs from last week's freeze. We have also seen several cases of black knot on plum.

**INSECT TRAP COUNTS**  
**UKREC, Princeton KY**  
Kentucky – Tennessee  
April 6-13, 2007

<i>Jackson, TN</i>	
Black cutworm .....	2
True Armyworm .....	0
Corn earworm .....	4
<i>Milan, TN</i>	
Black cutworm .....	0
True Armyworm .....	0
Corn earworm .....	0
<i>Princeton, KY</i>	
Black cutworm .....	1
True Armyworm .....	11
Corn earworm .....	0

<i>Lexington, KY</i>	
Black cutworm .....	1
True Armyworm .....	3
Corn earworm .....	0

This season insect trap counts will be provided for locations in Kentucky and Tennessee.  
View trap counts for past seasons and the entire 2007 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/>  
For information on trap counts in southern Illinois visit the Hines Report at –  
[http://www.ipm.uiuc.edu/pubs/hines\\_report/comments.html](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.

  
Lee Townsend, Extension Entomologist

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.