



# KENTUCKY PEST NEWS

ENTOMOLOGY • PLANT PATHOLOGY • AGRONOMY

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April 4, 1999

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## TOBACCO

### CURRENT BLUE MOLD STATUS

By William Nesmith

Blue mold continues to build and spread in the southeast, especially in southern Georgia. Recent weather events in Georgia should have favored further development and spread. Dr. Paul Bertrand, Extension Plant Pathologist located at Tifton, Georgia reported that blue mold is now common in greenhouses and plant beds all over southern Georgia, especially along a line from Moultrie through Douglas. He indicated that conditions most of last week (March 29 to April 2) across Georgia's flue-cured belt were ideal for the spread of blue mold spores and the development of new infections. It is estimated that 2,000-3,000 acres of tobacco fields have already been set with infected transplants. Blue mold has been confirmed in five counties in southern Georgia: Coffee, Colquitt, Echols, Grady, and Lowndes. Dr. Tom Kucharek, Extension Plant Pathologist at Gainesville, Florida reported that blue mold had been confirmed in the bordering areas of two northern counties of Florida, Columbia and Union. A general drought is occurring in northern Florida, which continues to suppress blue mold development.

I urge Kentucky's growers not to ignore this blue mold activity in the southeast, because it can threaten Kentucky's production in two ways:

- There is significant production of commercial transplants in southern Georgia, northern Florida and south Florida and some of those plants are scheduled to be shipped to Kentucky. Plants from the Southeast could become infested/infected either at the site of production or as they travel through southern Georgia.
- In addition to the transplant risk, spores produced in the southeast could be blown into Kentucky or nearby states as low-pressure weather systems envelope over the southeast. For example, the North American Blue Mold Forecasts System at North Carolina State University showed trajectory forecasts on March 31 routing spores directly from southern Georgia through the eastern third of Kentucky. Fortunately, that particular weather system developed such that the spores probably did not survive the long trip. However, allow that forecast to serve as a reminder that spring weather systems are capable of moving viable spores from the Southeast directly to Kentucky.

I urge all Kentucky transplant producers to keep their plants sprayed on a 5 to 7-day schedule with Dithane DF or Ferbam.

Many have asked: "Can I use the carry-over Acrobat MZ from last year on transplants this year, since I still have the old label?" The answer is no, not legally. The Emergency Exemption on Acrobat MZ obtained in 1998 covered a period of time (which ended September 30, 1998); it did not cover the life of the packaged product. As indicated earlier, the manufacturer has elected not to permit Acrobat MZ fungicide use in transplant production this year, because of concerns about dimethomorph resistance. However, it is anticipated that Acrobat MZ will receive a state-label for field use in Kentucky. However, approval of this use is contingent upon favorable rulings from EPA concerning permission to use rotational crops consistent with Kentucky's tobacco production. Labels supporting field use of Acrobat MZ have already been approved for some southern states where the season is more advanced and where the current rotational crops options available following Acrobat MZ application pose less complication than it does for Kentucky's tobacco farms. We will use this regular report to keep the industry informed about the status of this label request.

## **DISEASE ADVISORY FOR TOBACCO PRODUCTION**

**By William Nesmith**

The change to milder weather recently in Kentucky is not without costs. Mild conditions could favor an outbreak of foliar diseases in tobacco transplant production, especially in greenhouses. Recent temperatures have been mild enough that the need to heat the greenhouse has declined, but in many systems heating had been serving as the key factor in humidity control in the past. As a result of less heating, in many houses the relative humidity has been remaining very high, especially at night in foggy areas. Consequently, foliar disease activity should rise. Wet foliage will favor outbreaks of collar rot, soreshin/target spot, bacterial diseases, foliar Pythium, foliar black shank, and even blue mold.

Reducing moisture around the plant is the single most important step in controlling the foliar phases of most transplant diseases. Be especially watchful of long periods in which free-moisture is present on the foliage. Take steps to maintain dry plant foliage

during both the day and night time through proper use of heat and ventilation systems.

Proper clipping of transplants can be a valuable tool in reducing foliar and stem diseases, but this operation requires special care during humid periods. Be sure to clip the plants while they are dry and operate the equipment properly to avoid dropping clippings into the canopy. Also keep the water level sufficiently high in the bays that the top of the trays are above the retaining boards go to improving air circulation and drying within the tray.

Apply fungicides sprays to achieve complete coverage and reduce the application interval to the shortest interval allowed by the label.

## **SLUGS IN GREENHOUSES CAN BE HARD TO CONTROL**

**By Lee Townsend**

Slugs and snails are almost universal pests in greenhouses. Their soft, unsegmented bodies, exude a slimy, sticky, mucous-like substance that leaves characteristic shiny trails in their wake. They come from the soil or the surrounding area.

Slugs use their rasping mouthparts to feed on most any kind of plant. Immature tend to feed on surface tissue while larger individuals eat irregular holes in foliage. They usually feed at night and hide in moist, dark areas during the day. Slugs and snails may eat several times their own body weight each night so damage can be serious within a short time. Their damage is often blamed on cutworms or other insects but the slime trails are key clue in diagnosing the problem.

Although slugs are hidden during the day, they apparently are not repelled by light. Rising temperatures spur them to crawl down to their hiding places to rest and absorb water through their skin. As temperatures start to fall, slugs actively begin foraging, again. Slugs may be active during the day after a cooling shower as long as the temperatures decline or remain steady. Slugs are so sensitive to temperature that they can detect temperature changes as gradual as 2 F per hour! Slugs prefer temperatures in the low 60's but they can lay eggs and develop normally but more slowly when it is cooler. Development stops at 41oF. Slugs can survive slight freezing but they tend to hide in

cold weather and are protected. Slugs try to avoid temperatures above 70 .

Slugs are sensitive to air currents. Gentle breezes cause them to turn toward the source and extend their antennae. As the breeze becomes stronger, the slugs turn away from the source, evidently to escape dehydration. Improved ventilation may force slug to move. Slugs can survive a short period of time in the water but they will drown after several hours.

Slug baits containing metaldehyde may be used for control. Best results are usually obtained if the baits are applied in the afternoon watering is delayed until the next day. Slugs feed intermittently so several applications of bait are necessary for control.

Metaldehyde baits may attract slugs from up to 3 feet away. The toxic effects of metaldehyde seem to be primarily due to dehydration as metaldehyde elicits excessive mucus production (mucus is 98 percent water and 2 per cent mucoproteins.) Thus in dry weather, metaldehyde is more effective. In wet weather, slugs sometimes can absorb enough moisture to compensate for the water lost in mucus production and therefore recover from the effects of metaldehyde. However, if slugs consume too much metaldehyde, they do not recover.

Control of slugs in the greenhouse consists primarily of placing baits in areas where the slugs will find them. The effectiveness of such baits is greatly increased by placing the bait under a board, pot, or flat. Slugs will not crawl across a barrier of copper metal or wooden surfaces treated with copper sulfate.

Good sanitation with the removal of extraneous vegetation and trash piles or other material which might offer food or shelter to these pests will aid in the effectiveness of the control program. (Adapted in part from Florida Cooperative Extension Service information)

## **SOYBEANS**

### **SOIL SAMPLING FOR SOYBEAN CYST NEMATODE**

**By Don Hershman**

#### ***Why sample?***

Sample to determine if a field is infested by soybean

cyst nematode (SCN) and, if so, the level of infestation. These pieces of information are essential in order to develop an effective SCN management program. When sampling fields for SCN, keep in mind that the results of the analysis are only as good as the original sample sent. A poor sample is likely to yield a poor result.

#### ***Which fields should you sample?***

There is a common misconception that all of fields need to be sampled each year. This is not the case. Rather, the only fields that need to be sampled in any given year are the ones that might be planted to a SCN-susceptible soybean during the coming season. If a field will be planted to corn or some other non-host for SCN, or if you are committed to planting a SCN-resistant soybean variety, then those fields need not be sampled. Thus, in most cases, fields will not need to be sampled more often than once every four years, assuming you are following the recommended crop sequence of: corn in year 1; resistant soybean in year 2; corn in year three, and susceptible soybean in year 4.

The main goal of soil sampling in the above crop sequence is to determine whether or not you can safely plant a SCN-susceptible soybean variety in year four of the rotation. If SCN levels are still above threshold at the end of year 3 in the sequence, it may be necessary to plant another year of a resistant variety. But, ultimately, the goal is to work a SCN-susceptible variety into the rotation as soon as possible. Superficially, this goal does not make much sense. Why on earth would you want to plant a SCN-susceptible variety in a field infested by SCN? The answer to this question is that by allowing periodic, unrestricted SCN reproduction, race shifts will be avoided. This avoidance is critical to the continued utility of currently-available SCN resistant varieties in managing SCN over the long term.

#### ***When should you sample fields for SCN?***

Sample fields in the fall or spring before planting soybeans. Fall is the preferred time to sample fields for several reasons: 1) soil conditions usually favor soil sampling; 2) farmers generally have more time available to collect soil samples; and 3) seed and crop selection decisions can be altered more readily, if indicated by the SCN soil analysis. SCN and soil fertility samples can be one in the same; the method for taking samples is the same. The only difference is that SCN soil samples should not be air-dried as may be done for fertility samples.

### **How should you sample a field?**

Except for very small fields of 5 acres or less, it is impossible to accurately determine the level of SCN infestation from a single soil sample. This problem exists because SCN infestations are frequently highly variable within individual fields. Instead, divide fields larger than 5 acres into four quadrants of equal size. For EACH quadrant collect 20 soil cores representing the entire area. These cores should be 4 to 6 inches deep, with the shallow sampling depth being reserved for no-till fields. Mix the 20 soil cores in a bucket to generate a composite sample and place a portion of each composite sample into a labeled soil box or bag. The net result is that you will have four samples for each field; one from each quadrant. Protect the samples from extreme heat or freezing and take them to your local county Extension office for submission to the SCN laboratory. Samples submitted through an Extension office will be analyzed free of charge, courtesy of the Kentucky Soybean Association. However, samples submitted directly to the SCN Laboratory will be assessed \$5 per sample. In either event, be sure to include a SCN Analysis Form with each submission. Forms are available at the Extension office.

## **WHEAT**

### **HENBIT AND PURPLE DEADNETTLE** **By James R. Martin**

Henbit and purple deadnettle (sometimes called red deadnettle) are the purple flowered weeds that occur in wheat. The name "deadnettle" tends to carry a negative connotation, consequently, many people use henbit when referring to the purple flowered weeds in wheat.

Ironically, henbit is the species that may have some poisonous properties, whereas, purple deadnettle has not been confirmed as being a toxic plant. Apparently the poisonous nature of henbit is minimal since no cases of poisoning have been confirmed in the US.

Both species are generally considered cool-season annuals that begin to emerge in the fall and continue to emerge throughout the winter. Henbit may begin to bloom in February while Purple deadnettle may not bloom until later. The figure below shows some the distinguishing characteristics of these two weeds.

Control: By now the majority of henbit and purple deadnettle plants have bloomed or matured, consequently, there is probably very little to gain economically by spraying these with a postemergence herbicide. Mature plants will eventually die back as temperatures become warmer.

#### **Henbit** (*Lamium amplexicaule*)

- Leaves are opposite on square stems.
- Upper leaves have no petioles, while lower leaves are on petioles.



#### **Purple deadnettle** (*lamium purpureum*)

- Leaves are opposite on square stems
- Leaves have petioles and tend to be reflected or pointed down



## **CORN**

### **NEW CORN INSECTICIDE REGISTERED** **By Ric Bessin**

FMC has just received full federal registration for their insecticide Capture 2EC for use on field corn, popcorn and corn grown for seed. The active ingredient in Capture 2EC is bifenthrin, a broad spectrum pyrethroid insecticide that controls many foliar insect pests, as well as mites. It carries the signal word of WARNING and is a restricted use insecticide. It is labelled for control of corn earworm, European corn borer, southwestern corn borer, and corn rootworm adults at rates of 2.1 to 6.4 fluid ounces per acre. It had performed well in trials at UK for control of corn earworm and European corn borer. It is labeled for control of twospotted spider mite at higher rates, 5.12 to 6.4 fluid ounces per acre. Capture has a 30 day Preharvest Interval (PHI) and a 12 hour Restricted Entry Interval (REI). A maximum of 12.8 fluid ounces may be applied per acre per year.

## **SOUTHWESTERN CORN BORER SPRING**

## SURVEY

By Ric Bessin, Doug Johnson, Wayne Mattingly, Mike Smith, Lincoln Martin and Lee Townsend

A survey of Southwestern corn borer damage and larval survival was conducted in Caldwell, Daviess, Henderson and Fulton counties between March 5 and 15. The purpose was to estimate the extent of SWCB damaged as evidenced by basal stalk girdling. In addition, we wanted to estimate the survival of the larvae in the crowns of these damaged plants. In each county two to five fields were evaluated and within each field 10 groups of 10 plants were examined for damage and presence of live SWCB larvae. An additional 50 damaged plants were examined for the presence of live SWCB larvae.

### 1999 SWCB Spring Survey Results

	Damaged plants	Live SWCB recovered
<b>Princeton</b>		
Field #1	38/100	0/88
Field #2	25/100	8/75
<b>Daviess Co.</b>		
Farm #1	29/100	8/79
Farm #2	81/100	8/131
Farm #3	17/100	7/67
Farm #4	36/100	16/86
Farm #5	28/100	22/78
<b>Henderson Co.</b>		
Farm #1	17/100	23/67
Farm #2	30/100	10/80
Farm #3	49/100	29/99
Farm #4	33/100	7/83
Farm #5	37/100	4/87
<b>Fulton County</b>		
Farm #1	52/100	2/102
Farm #2	45/100	1/95
Farm #3	33/100	1/83

Farm #4	19/100	1/69
Farm #5	41/100	1/91

This is the first year that we have conducted such a survey, so it is important to understand that we need to take care to not jump to inappropriate conclusions over the results. At this time we cannot conclude that this will be a light, moderate, or severe year for the SWCB in any of the counties surveyed. We cannot say whether or not this year will be better or worse than last year.

Overwintering survival is just one of the variables that will, in part, determine the potential for SWCB problems in 1999. Historically, the date of planting of individual fields will have been a key variable contributing to the potential for late season SWCB damage. Typically, fields planted after May 5 have an increased potential for this type of damage.

What we can conclude:

- we found live SWCB larvae in each of the counties surveyed.
- the frequency of finding live larvae present in the corn stubble was highest in Daviess and Henderson counties.
- winter temperatures were not sufficient to eliminate SWCB larvae
- SWCB remains a threat in some areas for 1999.

## PASTURE

### MUSK THISTLE CONTROL IN KENTUCKY PASTURES

By J. D. Green

One of the most troublesome weed problems in Kentucky pastures and hayfields are thistles. Thistle plants can interfere with livestock grazing and limit the amount of available forage. The spring and early summer months is when thistles become a major problem for land owners and livestock producers who graze cattle or produce hay.

Musk thistle, also called nodding thistle, is the most common type of thistle plant found in Kentucky. It is considered a noxious weed because of its ability to reproduce rapidly and limit pasture production. Musk thistle only reproduces by seed. Therefore, the major aspect of any control efforts is to prevent or limit seed production.

The primary growth period of the plant is generally

in the spring through the early summer months. However, most seeds germinate in the fall and form a rosette which grows close to the ground, often growing unnoticed until the spring months. The leaf surface is waxy in appearance and contains spines along the leaf margins. Flower stalks develop in the spring followed by bright purple to reddish flowers, which bloom in late May to early June. The seeds, which are produced for the next generation, develop soon after flowering and are easily carried by wind and spread to other areas as well.

The most important step in long-term control of musk thistle is to prevent flowering, and the production and spread of new seed. This can be accomplished by using various mechanical, biological, or chemical control methods.

For mechanical control efforts mowing, clipping pastures, or even hand-grubbing can be used. These control methods should be initiated before flowers begin to open. Some regrowth and production of flowers can occur after mowing, but seed production will be notably less than if a mechanical control method had not been used. Thistle plants mowed or removed by hand after flowers have bloomed contain enough energy reserves that these plants will still produce viable seed.

A reduction in musk thistle populations can also be obtained through biological control methods. Two different insects are known to inhibit thistle growth and development, the Thistle-Head Weevil and the Thistle Rosette Weevil. The Thistle-Head Weevil can be found during the spring in many counties throughout central Kentucky. These insects feed on the maturing seed inside the developing flower head. The impact of the Thistle-Head Weevil will not eliminate all seed production, but can significantly reduce the amount of seed produced by individual plants in areas where the insect has become established.

Broadleaf herbicides labeled for use in pastures can be applied in grass pastures and non-cropland areas for control of musk thistle rosettes. However, for herbicides to be effective the timing of the application is critical. Best results can be obtained if herbicides are applied to plants that are in the early rosette stage of growth and actively growing. Therefore, the best times for herbicide application is in the early spring or fall. Application of herbicides in the spring should be made during March and

April when thistle plants are actively growing. In the fall, apply herbicides in October or early November following new seed germination. When plants are in the rosette stage they are more susceptible to herbicide applications.

Herbicides which can be used in pastures include 2,4-D, Banvel, Crossbow, and Weedmaster. For spring herbicide applications apply when air temperatures are above 55 F for 2 to 3 days. Complete spray coverage of the plant is also important. When herbicides are applied after flower stalks elongate, control will be less effective and inconsistent. When using herbicides for control, consult the waiting period on the product label for livestock grazing restrictions following herbicide application. Avoid spraying near crops such as tobacco, vegetables, or ornamental plantings. Also, avoid spray drift by not spraying on windy days or days with high temperature and high humidity.

## FORAGE

### **SCLEROTINIA KILLED SOME LATE SUMMER SEEDINGS OF ALFALFA** **By Paul Vincelli**

Seeding alfalfa in late summer and early autumn offers a number of agronomic advantages, including reduced weed pressure and a full year of forage production during the first spring. However, one of the principal limitations to successful late-summer seedings in many areas is Sclerotinia crown and stem rot. Alfalfa fields which were seeded late last summer, where an excellent stand was obtained, but where stand survival now is very poor are very good candidates for this disease.

In a field site north of Lexington which I monitor for research purposes, the fungus that causes this disease was inactive through November. However, during the heart of this rather mild winter that we just experienced, *Sclerotinia trifoliorum* was active enough to cause moderate to severe stand loss in alfalfa seeded last September. While there are some live, growing plants in these plots, most of the plants are small (2-3"), shriveled, dried, dead "carcasses" that will soon be overgrown by weeds and rotted away, leaving no evidence that they were ever there.

If one looks carefully, you can often find *sclerotia* still attached to the dead plant. Sclerotia are fungal survival bodies that are typically 1/16" to 1/8" in

size, lumpy and irregular in shape, with a black rind and a gray (when moist) or white (when mature and dry) interior. They are commonly attached to the stem, and are sometimes found 1/4" to 3/8" below ground. Once the infected alfalfa plant has rotted away, the sclerotia can still be found scattered about on the soil surface, but don't confuse sclerotia with manganese concretions. Manganese concretions can be distinguished from sclerotia because these concretions are round, brown to black on the outside as well as the inside, and as you cut through them with a pocket knife, it feels and sounds like you are cutting through stone (which you are).

If the disease has been active and reseeding is necessary, producers may wish to wait until a seeding window in late-April to seed. The fungus can resume activity during extended periods of cool, wet weather, and seedlings are very susceptible to the disease. Re-seeding in mid-May or beyond, however, runs the risk of drought stress on the young plants with the onset of summer.

**Bottom line:** Check for evidence of Sclerotinia crown and stem rot if you are called out to an alfalfa field seeded late last summer which developed excellent stands going into winter but now has poor survival.

## **SHADE TREES AND ORNAMENTALS**

### **ORNAMENTAL PEST ALERT**

**By Mike Potter**

The recent warm weather has triggered emergence of two important early-season pests of ornamentals. Now is the time to inspect vulnerable plant material in the event control measures are warranted.

**Eastern tent caterpillars** are active on a variety of deciduous hosts, including wild cherry, apple and crabapple. This defoliator overwinters in brown egg masses encircling the smaller twigs of the host tree. Eggs (150-300 per egg mass) hatch about the time that the leaves begin to unfold. The newly-emerged larvae gather at a branch fork and construct a tent-like web from which they venture out during the day to feed on new foliage. The eastern tent caterpillar favors wild cherry, apple and crabapple but will also attack peach, pear, plum, hawthorn and some shade trees. Trees sometimes contain several nests and can be completely defoliated in 2-3 weeks.

**Control** - Control is best accomplished when webs are first noticed and the larvae are small. If nests are within reach, they can be removed with a stick or broom. This should be done in the evening, when the larvae are inside the nest. Insecticidal sprays are also effective. Registered products include Bt (*Bacillus thuringiensis*), carbaryl, chlorpyrifos, diazinon, malathion, and synthetic pyrethroids (e.g. Scimitar, Talstar). Apply treatments to the nest and foliage of plants where the caterpillars are feeding. Dousing nests with gasoline and setting them on fire is dangerous and could harm the tree.

**Boxwood psyllids** soon will be emerging on American and Korean boxwood plantings. Psyllids are tiny (1-2mm), green sucking insects that resemble aphids or miniature cicadas. Boxwood psyllids overwinter as eggs inserted between the bud scales. Eggs hatch as soon as the buds begin to open and the nymphs begin to feed on the expanding foliage, removing plant sap. Feeding injury produces cupping and curling of the leaves, enclosing several nymphs in the leaf pockets. The nymphs also produce white, waxy secretions. Adults emerge in late May and June, mate, and lay their eggs under the bud scales. There is one generation per year.

**Control** - Boxwood psyllids generally do not kill plants, but can affect aesthetics and overall plant vigor. Early detection is essential if leaf damage is to be avoided. Insecticides, including Dursban, Orthene, Sevin, Tempo or insecticidal soap are effective and should be applied as the leaves are expanding. Thorough spray coverage is essential. Treatments applied after leaves have fully expanded won't alleviate this year's damage, but may help to reduce psyllid numbers next season.

### **CHECK OUT OUR FORECASTING PUB**

When it comes to protecting ornamentals from insect pests, timing is everything. To be effective, insecticides or other forms of intervention must be applied when pests are present and at their most vulnerable life stage. Our extension publication, *ENT-66: Timing Control Actions for Landscape Insect Pests*, is a valuable forecasting tool. Using flowering plants as indicators, the publication predicts the sequence and emergence date for 33 of the most important pests of woody plants or turf in Kentucky.

## LANDSCAPE FRUIT DISEASE CONTROL REMINDERS

By John Hartman

Primary infections for many landscape plant diseases are occurring now, just as the new blooms and foliage are emerging. Plant disease prevention done now, i.e., controlling primary infection, will provide plant health dividends the rest of the growing season. When diseases appear in the summer, it is usually too late to do anything about them. By applying the old adage "An ounce of prevention is worth a pound of cure," it can be seen that there is much that can be done now to head off trouble later.

Backyard fruit and flowering fruit trees are perhaps the most vulnerable to plant diseases which attack in spring. Some important landscape fruit diseases include:

- Apple and crabapple scab. If new trees are being planted, by all means, use the scab-immune types. For susceptible trees, every time that the leaves are wet for 12 hours or so, new primary infections are likely to occur. If fungicides are to be used to prevent fruit crop loss or to prevent premature defoliation, applications must begin now. Captan is a common protectant fungicide and applications must be made before the leaf wetness infection periods occur. A systemic fungicide with limited curative properties such as Immunox can be applied just after leaf wetness periods have ended.
- Apple, crabapple and pear fire blight. Primary infection happens during bloom. Most cultivars are susceptible to this destructive disease and the fire blight bacteria are generally available; they can even be carried by pollinator bees and moved into trees in the landscape. A few days of warm temperatures and a little bit of rain are all that are needed to get this epidemic started. Soon after bloom, carefully inspect the tiny fruitlets in what were the flower clusters. If any have turned black, remove the entire flower cluster before the disease has a chance to spread to the subtending branch.
- Apple, crabapple, and hawthorn rusts. During any rainy, moist period for the next month, cedars will show the bright orange telial stage of the cedar apple, cedar hawthorn, and cedar quince rust fungi. Apples, crabapples and hawthorns will only become infected during this time; there will be no secondary infections to prevent later on, so this disease can only be controlled now. If

rust galls and cankers cannot be pruned out from nearby cedars in advance, fungicides may be needed. Captan is not effective, but Immunox should work well to control rust.

- Plum black knot. Prune out all swellings. Fungicides such as captan, or ferbam applied now, during bloom to control brown rot may provide some protection from new infections, but will not provide complete control.
- Grape black rot. Remove all mummies hanging from the grapevines. If the weather is particularly wet during the spring, fungicide applications using captan, Immunox, or ferbam may be needed, beginning at bloom.

Suggestions for backyard fruit disease control can be found in U.K. Extension publication ID-21 *Disease and Insect Control Programs for Home Grown Fruit in Kentucky Including Organic Alternatives*.

## INSECT TRAP COUNTS

March 26 - April 2

### UKREC - Princeton, KY

Black Cutworm ..... 2  
True Armyworm ..... 128

### Tennessee

Black Cutworm

March 24 - Milan Experiment Station ..... 8  
March 25 - Lauderdale County ..... 15

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Lee Townsend, Extension Entomologist



