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<p>TOBACCO</p> <ul style="list-style-type: none">• Current Blue Mold Status <p>CORN</p> <ul style="list-style-type: none">• Preparing equipment for corn harvest <p>SOYBEANS</p> <ul style="list-style-type: none">• Severe strain of bean pod mottle virus• Soybean podworm populations on the move up. <p>HUMANS</p> <ul style="list-style-type: none">• Stinging caterpillars• Velvet ants	<p>VEGETABLES</p> <ul style="list-style-type: none">• Insecticide changes for the 2002-2003 ID-36 <p>LAWN & TURF</p> <ul style="list-style-type: none">• Disease reactions of new creeping bentgrass varieties <p>PESTICIDE NEWS & VIEWS DIAGNOSTIC LAB - HIGHLIGHTS INSECT TRAP COUNTS</p>
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TOBACCO

CURRENT BLUE MOLD STATUS by William Nesmith

This should be the final status report for the 2001 season, unless some very unusual situation develops.

Although much of Kentucky's burley and four types of dark tobacco have been harvested, and most of the remainder is in the post-topping stage, there is still some younger tobacco present in the state. Where this younger tobacco is growing well, it is very susceptible to blue mold late in the season. Furthermore, an abundance of sucker regrowth with considerable blue mold activity and a return to cooler weather has increased the potential and incidence of new blue mold activity in the younger crops, in all regions of the state where blue mold activity has been reported earlier. Most of this new

activity is occurring as foliar spotting and flecking in the upper leaves, with limited crop damage occurring in most cases. Sporulation is light from most of these late season lesions within the crop, but heavy sporulation is occurring on sucker regrowth.

Growers with late-season dark tobacco planted adjacent to a crop of burley with suckers need to be especially watchful in the counties that have blue mold. Small lesions are developing on the dark plants, mainly near the veins, which become colonized in time by the brown spot and frogeye pathogens. Consequently, prompt destruction of the suckers, stalks, and root systems after harvest is important this year to remove this important source of late-season blue mold inoculum.

The incidence of lodging associated with systemic blue mold in June-planted burley is sufficiently high to significantly complicate harvesting operations in

some fields, especially in northern and eastern Kentucky. This symptom of lodging is not difficult to diagnosis if cuts are made into the stem near the soil line to expose the browning of the vascular area. In most cases, this systemic activity resulted from either setting blue mold infected transplants or from activity that occurred during the first 30 days post transplanting. There is also considerable lodging in some fields that has nothing to do with blue mold - usually related to poor root development and wind..

As indicated in the August 20, KPN, the amount of "other" leaf spot diseases is high in this year's crop, and increasing at a rapid rate. Many are confusing these other leaf spot diseases with blue mold, which can lead to poor harvesting decisions. Early harvesting of an entire crop is seldom warranted with blue mold, because the plants become much more tolerant of blue mold with age. If blue mold is the only major disease involved, and only the foliar phase is involved, there is considerable yield advantage to allowing the crop to stand several weeks after topping. In contrast, with these "other" leaf spots, the plants become increasingly susceptible with age, especially 20 days post-topping, so allowing fields with these other leaf spots to stand much longer than the required waiting interval for the sucker control can be costly.

CORN

PREPARING EQUIPMENT FOR CORN HARVEST

by Sam G. McNeill

Extension Agricultural Engineer

Kentucky's grain producers will soon begin harvesting corn and many are fine-tuning their equipment now to reduce mechanical delays, improve performance, assure a safe harvest, and maintain grain quality once they start combining the crop. In fact, a few hours spent with combines, augers/ conveyors, dryers and storage bins will usually have a considerable pay back in the form of reduced elevator discounts when corn is delivered for sale.

All equipment that will contact corn as it moves from the field to the storage bin should be thoroughly cleaned prior to harvest to minimize mold and insect infestations and protect the purity of individual corn varieties or seed lots. This is

especially true for genetically enhanced crops, which should be harvested after non-genetically altered crops to avoid possible mixing. All combines, hauling vehicles, conveyors, drying equipment and storage bins should be thoroughly cleaned before the rush of harvest begins.

Ideal corn varieties are disease and insect free at harvest, have high yield potential, high test weight, a sound disease resistance package, strong stalks to avoid lodging problems, and rapid dry-down in the field after maturity. Less than ideal conditions requires more management skill to avoid potential problems after harvest. Combines should be serviced and adjusted according to the owner's manual prior to harvest and checked during harvest to reduce machine losses and assure minimum mechanical damage to corn kernels. Recall the number of volunteer corn sprouts that appeared a few weeks after harvest last year in many fields in Kentucky. And remember that a ¾ pound ear (or equivalent weight) in a 1/100-acre area or 2 loose kernels per square foot left in the field after harvest are equal to one bushel per acre loss.

Dryer maintenance will help producers get the most out of the dollars spent on gas and electricity, reduce equipment downtime, and avoid overdrying grain (which can cost more than drying fuel even with corn at \$2.00 per bushel). Clean out grain dryers, perform a routine maintenance check on sensors and controls, and test fire the unit(s) prior to the beginning of harvest to assure efficient operation.

Thoroughly clean out all grain bins, especially caked grain that will contaminate the new crop. Sweep down walls, ladders, ledges and floors inside grain bins to remove old grain and fine material where insects and mold spores can lie in waiting to invade the incoming crop. Provide dust protection masks so workers will avoid potential breathing problems when cleaning bins and equipment. Use a wet/dry vacuum to completely remove dust and small grain particles from all conveyors and other areas around the facility. After thoroughly cleaning bins, mow the vegetation around them to eliminate areas where rodents and insects like to live and multiply.

After cleaning and mowing, spray a residual pesticide inside the bin to the point of runoff for additional protection from insects. Be sure to read

pesticide labels carefully for any specific delays prior to filling the bin or other restrictions after application. It is always a good idea to fumigate the space under the false floor of grain bins to eradicate that area of insect populations. Don't confuse residual pesticides with fumigants, which have no carry over effect, and keep in mind that fumigants are toxic to humans and other warm-blooded animals and therefore are Restricted Use pesticides.

Treatment of grain soon after harvest often determines the storability of a crop and can strongly influence its quality and value when delivered to the end-user...which may be several weeks, months or even years after harvest. Thus, it behooves corn farmers to keep equipment in good operating condition and to implement sound grain harvest, drying and storage practices to maintain the U.S. reputation of being a reliable supplier of good quality corn to the global market.

Successful post-harvest grain processing with on-farm facilities requires a thorough understanding of the factors that influence grain quality. On-farm drying and storage equipment can help producers and farm managers control elevator discounts and improve economic returns to their operation. The use of such facilities requires operators to maintain high grain quality from the field to the point of sale to capture the highest market price.

SOYBEAN

SEVERE STRAIN OF BEAN POD MOTTLE VIRUS

By Don Hershman

During the course of conducting a state-wide soybean virus survey and processing numerous diseased soybean samples submitted to the Plant Disease Diagnostic Laboratory, it has become evident that a severe strain of Bean Pod Mottle Virus (BPMV) is quite active in Kentucky this season. BPMV is exclusively transmitted in Kentucky by the bean leaf beetle.

About 15 years ago we conducted a state-wide survey and found that BPMV was extremely common throughout the state. Specifically, BPMV was detected in 66% of 382 fields from 28 counties. Typical BPMV symptoms are a very light mottle pattern in foliage and the propensity for stems and pods to remain green during the harvest period. It has been generally assumed that yield losses were

light except in cases where plants were doubly infected with BPMV and Soybean Mosaic Virus (SMV).

About four years ago, however, we started to observe virus symptoms in soybean leaves that were very similar in appearance to SMV, but in fact, the virus turned out to be a severe strain of BPMV. This is the virus we are detecting in most samples during 2001. Foliar symptoms are a severe mosaic/mottling pattern with foliar distortion (usually puckering of tissue). Symptoms are usually most evident in the upper leaves of diseased plants.

Preliminary greenhouse tests suggest that yield losses can be in the 40+ % range when plants are infected in the seedling stages with the severe strain of BPMV. Yield impact of the severe strain of BPMV under field conditions is unknown. The time of infection likely plays a major role in yield loss. With SMV, for example, yield reductions are usually very low in full season crops. This is because, by the time aphid populations build up in mid summer (SMV is primarily an aphid-transmitted disease), the plants of full season crops are far enough along in development to escape serious yield loss. However, doublecrop and late-planted soybean are another matter. These late crops have had documented yield losses of 12-14% when infected with SMV under field conditions. It is very likely that we will find that late-planted crops (including doublecrop soybean) are also more susceptible to yield loss than full season soybean when infected with the severe strain of BPMV. However, this has not been clearly established; losses will probably depend upon when, and to what extent, bean leaf beetle populations build up each year, among other factors.

A major concern with the upswing in the severe strain of BPMV is that there is no reliable means of controlling the virus at present. Resistant varieties exist for the control of SMV, but not for BPMV. Addressing this deficiency has been a major focus of Dr Said Ghabrial's laboratory in the UK Department of Plant Pathology. Progress is being made, but until soybean varieties are available which resist BPMV, we will need to search out others means of managing this virus. For example, it may be possible to apply insecticides at specific times to control bean leaf beetle populations and, hence, impact transmission of BPMV. However, this strategy is fraught with poor or inconsistent results

when applied to other insect vector/virus systems. Other management strategies need to be researched as well. Specifically, there may be certain cultural practices which limit the spread and impact of BPMV in soybean.

The apparent increase in virus diseases in soybean is not confined to Kentucky. In fact, the entire midwest soybean crop has experienced an increase in virus activity in recent years. This situation is compounded by the appearance of the soybean aphid in the US. It is possible that the soybean aphid, which is the first aphid to be able to colonize soybean in the US, will result in additional spread of SMV in the midwest and elsewhere. The main concern with that turn of events is a dramatic increase in the incidence of plants doubly infected with SMV and the severe strain of BPMV. These dual infections are known to reduce plant yield by 60+%. This could be devastating to the soybean industry in the US if this situation becomes widespread. As a result, there is, and will continue to be, a great deal of research and interest in the soybean viruses and soybean aphid over the next few years.

SOYBEAN PODWORM POPULATIONS ON THE MOVE UP

By Doug Johnson

Recent pheromone trap captures of soybean podworm moths, (aka corn earworm) are on the increase. This is to be expected this time of year. Rapidly maturing corn is forcing the moths to seek other hosts on which to lay their eggs. Among our crops, soybean is the most likely choice for these moths.

We are seeing an up swing in moth capture. Moths are the adults. However, it is the larva (worm or caterpillar) that causes the damage. This increase in moth capture only warns us that the insect population is 1) on the increase and 2) on the move. You must examine your fields for the worms to know if you have an infestation.

Young larvae are very small and grow to 1-1/2 inches in length when full grown. They are usually tan to pale green in color with several dark stripes down the back. Color may vary greatly with some appearing almost black

The soybean podworm feeds mainly on pods but may also feed on leaves, stems, and flowers. Larvae

will eat the pod wall and consume the seed.

Full season and / or narrow row spacing soybeans fields form a complete canopy sooner, so they are less likely to have a problem.

Delayed maturity may also increase the risks of late-season damage. More severe damage tends to be present when large larvae are present on plants with fairly mature pods. This is because the larvae will now feed on the beans inside the pods.

Sampling for the soybean podworm in wide rows should be made using shake cloth. At each sample site, using a two foot cloth, bend the plants over the cloth and shake them vigorously. Note the number of larvae in a four foot sample area at each site. The number of sites you need to examine in a field is based on the size of the field. The economic threshold for soybean podworm is two worms(caterpillars) per row foot.

In narrow rows the process is more difficult. Because the canopy is so tight it is almost impossible to get into the field to sample. One must make the best educated guess possible based on pod damage and the presence of worms in areas which can be sampled. Remember you have far more plants per acre in narrow row beans.

You can view color pictures of the soybean podworm and its damage to soybean at: www.uky.edu/Agriculture/IPM/scoutinfo/scout.htm

If insecticidal control is warranted recommendations can be found in ENT-13 or on our web site at: www.uky.edu/Agriculture/PAT/recs/rechome.htm

Good control of this insect is possible. Its main danger is that most people do not look for podworm damage. Remember you will NOT necessarily see any leaf feeding. You must examine the pods.

HUMANS

STINGING CATERPILLARS

By Lee Townsend

Stinging caterpillars usually advertise the potential irritation they can cause by bright colors or distinct markings. Unfortunately, many of the encounters with them are accidental as people brush up against the bristly larvae while gardening or walking in the woods.

The irritation results from thin, hollow bristles on the surface of the caterpillar that pierce and break off in the skin. The irritant spreads into the puncture or over the surface of the skin producing a red rash and localized burning sensation and swelling. Some people have an allergic reaction that is more severe and may go into anaphylactic shock.

Mild cases can be treated by using pieces of sticky tape to strip spines from the skin, application of ice packs, and /or use of oral antihistamines. Serious reactions should be treated by a physician.

More information on stinging caterpillars, along with pictures of some of the common species, can be seen at www.uky.edu/Agriculture/Entomology/entfacts/misc/ef003.htm

VELVET ANTS

By Ric Bessin

One unusual insect that is occasionally seen running around open areas in the yard during July, August, and September is the velvet ant. Velvet ants look like large hairy ants, but they are actually wasps. They differ from ants in having only a slight constriction between the thorax and abdomen and having straight rather than elbowed antennae. They may be seen in lawns or pastures, or occasionally wandering into buildings. These solitary wasps, as the name implies, are densely covered with short hair.

The males have two pairs of transparent black wings. The females are wingless, and are sometimes confused with ants. Ants, however, have elbowed antennae, and a "hump" in the constriction between the thorax and abdomen. Velvet ants are brightly colored. They are shades of yellow and brown or red and black. Velvet ants are not aggressive and will try to escape when encountered, but females have a very painful sting if handled. Females use a long, needle-like stinger concealed at the tip of the abdomen. Many of the velvet ants can produce

a squeaking sound when disturbed.

Adult velvet ants feed on nectar and water. The immature stages are external parasites of bees and wasps that nest in the ground. A few species parasitize some flies and beetles. Consequently, there are no identifiable nests to treat. Velvet ants prefer pastures and fields with sandy soil where their

prey are most likely to be found. There is no effective control measure for them. If they are particularly abundant in an area, it may be helpful in the long

run to overseed to get a better grass cover. This would discourage the ground nesting bees and wasps on which velvet ants feed. Because velvet ants

are uncommon and do not cause any damage, no chemical control is recommended.

One velvet ant that is commonly submitted for identification is the 'cow killer.' The cow killer is the largest of the velvet ants in Kentucky, nearly an inch

in length. It earned its name by the reputation of the female's sting. It is said that the sting is so painful that it could kill a cow. The female is mostly red with some black, the male is half red and half black with dark wings. Females seek out bumble bee nests and lay eggs inside the wax cups. After bees or wasps have formed cocoons, adult female velvet ants enter the host nest by digging through the soil or breaking through nest walls. The cow killer larvae feed on the bumble bee larvae and pupae and will pupate inside the bumble bee nest. This bumble bee is ultimately killed.

VEGETABLES

INSECTICIDE CHANGES FOR THE 2002-2003 COMMERCIAL VEGETABLE RECOMMENDATIONS (ID-36)

by Ric Bessin

Early this winter the 2002 revision of ID-36, *Vegetable Production Guide for Commercial Growers*, will be distributed to the county extension offices. There have been several insecticide recommendation changes and some new products for that revision. This article addresses some of the labeled uses for these new insecticide and miticide products since the last release of our production guide in 2000. Always consult the label for additional usage and

safety information.

Actara 25 WDG (thiamethoxam) - This new insecticide has recently been labeled for use on cucurbits, peppers, tomatoes, and eggplant potato for control of aphids, Colorado potato beetle, flea beetles, leafhoppers, whiteflies and stink bugs.

AgriMek 0.15 EC (Abamectin)- While this has been labeled on a number of vegetables, it will now be listed for peppers and watermelons. It is used for spider mite and leafminer control. Other uses include mite, leafminer and Colorado potato beetle control on tomatoes, potatoes, and cucurbits.

Avaunt 30 DG (indoxacarb) - This new insecticide has recently earned approval for use on sweet corn, cole crops, peppers and tomatoes for control of lepidopterous insects including cabbage looper, diamondback moth larvae, European corn borer, fall armyworm, hornworms, and imported cabbageworm.

Danitol 2.4 EC (fenprothrin) - This insecticide has expanded its vegetable label to include cole crops and cucurbits for control of spider mites, cabbage looper, fall armyworm, and imported cabbageworm.

Fulfill 50 DF (pyrethroid) - This new insecticide has been labeled for use on cucurbits, tomatoes, peppers, eggplant and potato for control of aphids and whiteflies.

Fury 1.5 EC (zeta-cypermethrin) - This insecticide is labeled for use on cabbage, head lettuce, bulb onions, and garlic for control of cutworms, corn earworm, leafhoppers, flea beetles, imported cabbageworm, stink bugs, armyworms, cabbage looper, cucumber beetles, and onion thrips.

Leverage 2.7 SE (imidacloprid and cyfluthrin) - This new premix insecticide is labeled for foliar control of cutworms, cabbage looper, Colorado potato beetle, European corn borer, flea beetles, and leafhoppers on potato.

Knack 0.86 EC (Insect Growth Regulator) - This new insecticide has recently been labeled for use on peppers and tomatoes for control of whiteflies.

Platinum 2 SC (thiamethoxam) - This soil insecticide has recently been labeled for use on

cucurbits, peppers, tomatoes, eggplant, and potato for systemic control of aphids, Colorado potato beetle, flea beetles, leafhoppers, and whiteflies.

LAWN & TURF

DISEASE REACTIONS OF NEW CREEPING BENTGRASS VARIETIES

by Paul Vincelli, David Williams*, and A.J. Powell*

Depts. of Plant Pathology and *Agronomy

In recent years, many new varieties of creeping bentgrass have been released which possess considerably better turfgrass quality than the old standby, Penncross. Most notable is the considerably improved density and texture of these varieties under putting green conditions. These new varieties, as well as numerous experimental lines, are thoroughly tested in University of Kentucky trials, as part of the National Turfgrass Evaluation Program. An important component of these evaluation includes diagnosing and assessing disease reactions of the varieties under conditions of natural disease.

This article summarizes the disease reactions of several of the most important varieties. Disease data from Kentucky have been given special weight, although data from across the country has been considered. Recognize that these comments are based on data to collected since 1998. During that time, substantial databases have been assembled on these varieties. Nevertheless, these comments are necessarily only valid for the data collected to date.

L-93

Overall turfgrass quality of this variety has been at or near the top of the list, noticeably better than Penncross. This variety appears to be suitable for use on tees, fairways, and greens in Kentucky. An important feature of this variety is that it offers enhanced quality over Penncross without additional maintenance needs.

L-93 has shown levels of dollar spot similar to Penncross in our tests. However, in some other locations with similar climates to ours, L-93 occasionally has shown significantly less dollar spot than Penncross. Expect significant dollar spot on L-93 under high disease pressure, although occasionally perhaps less than might be seen with Penncross.

When it comes to brown patch, all varieties of creeping bentgrass are somewhat susceptible. In our tests and elsewhere, L-93 suffered no more brown patch than did Penncross and sometimes it showed significantly less. Thus, use of L-93 would be expected to reduce brown patch pressure slightly over Penncross.

Less damage from pink snow mold and *Microdochium* patch (two diseases caused by the same fungus) was observed in L-93 than Penncross in UK tests. This has also been seen in other locations in the region. Thus, use of L-93 should result in reduced pressure from pink snow mold compared to Penncross.

One concern I have about L-93 is that it is susceptible to take-all. Although this disease is a concern primarily in newly established swards, it does sometimes occur and can even be destructive in older, established swards. Take-all is a root disease; root diseases can be destructive to the turf, and recovery can be slow. In our test, L-93 showed 21% damage from take all while Penncross showed 10% damage. This difference was not statistically significant because of high levels of variability in the experiment. However, it does raise a flag in my mind. A test in Wisconsin showed no difference in susceptibility between L-93 and Penncross, so it is possible that what we saw in our tests was just due to normal experimental variability. In any case, L-93 clearly is susceptible to the disease, so expect take-all to occur in some instances where L-93 is used.

A-series and G-series

These varieties (A-1, A-2, A-4, G-1, G-6) offer excellent turfgrass quality at very low mowing heights, being at or near the top of the list under Kentucky conditions. In particular, A-4 has been at the top of the list for all three years of testing, and it was significantly better than *all* other varieties in 2000. While these varieties perform very well at mowing heights at or below 1/8 inch (a remarkable breeding achievement!), they appear to need higher maintenance than Penncross, in the form of more frequent topdressing, verticutting, and aerifying.

Most of these varieties have shown dollar spot reactions similar to Penncross in most tests. The most notable exception to this is A-1, which sometimes has exhibited significantly less dollar

spot than Penncross, including in UK tests. In some instances in locations outside of Kentucky, A-4 has had slightly more dollar spot than Penncross.

A weakness of A-4 is that it is unusually susceptible to brown patch, more so than Penncross. This has been documented at UK and elsewhere. In UK tests, the other A- and G-series varieties were within range of Penncross, although in some tests in other locations, A-1 and A-2 also were also unusually susceptible to brown patch.

At UK, all A- and G-series varieties exhibited less pink snow mold/*Microdochium* patch than Penncross; this has also been documented in other locations.

G-6 is as susceptible to take all as is Penncross; we have no take-all data for the other varieties in this series.

Other Varieties

Crenshaw was developed under hot, dry conditions to withstand summer heat stress better than previous varieties. Unfortunately, that variety was also selected under conditions of low dollar spot pressure compared to what we experience in Kentucky. Consequently, Crenshaw is significantly more susceptible to this important disease than Penncross. This is a distinct disadvantage: use of this variety under our conditions would mean increased need for fungicide (keep in mind that more fungicide is used to control dollar spot than any other turfgrass disease) as well as increased risk of fungicide resistance. There are other new varieties with unusually high susceptibility to dollar spot, besides Crenshaw, including Backspin. I strongly recommend avoiding any variety which is "hypersusceptible" to dollar spot.

PESTICIDE NEWS & VIEWS

SWITCH, A NEW FUNGICIDE FOR STRAWBERRY GRAY MOLD **by John Hartman**

Strawberry gray mold fruit rot, caused by the fungus *Botrytis cinerea* is one of the most devastating diseases of Kentucky strawberries. A new fungicide, Switch, has recently been granted federal registration for use against *Botrytis* gray mold in strawberries and also in onions. Switch fungicide is a product of the Syngenta Corporation.

Switch 62.5 WG fungicide is formulated as a prepack mixture of two novel active ingredients, cyprodinil and fludioxonil. Cyprodinil is the systemic component of the product, which is taken up into the cuticle and waxy layers of leaves and fruits and is distributed to other parts of the plant. Fludioxonil is the residual component of Switch, which stays on the leaf and fruit surfaces to provide contact activity.

The fungus *Botrytis cinerea*, cause of gray mold, has developed resistance to several of the fungicides that are listed in our small fruit disease recommendations (Kentucky Commercial Small Fruit and Grape Spray Guide 2001, ID-94). Because of its novel modes of action, Switch demonstrates no cross-resistance among pathogen strains. This, along with its multi-site mode of action, makes Switch an excellent fit for integrated pest management programs. Switch is also compatible with most commonly used fungicides and insecticides. This fungicide was registered under EPA's reduced-risk program, so Switch should be relatively environmentally benign. When using Switch, as with any pesticide, growers are urged to read and understand the label.

STATURE, A NEW FUNGICIDE FOR GREENHOUSE AND SHADEHOUSE ORNAMENTALS
BY John Hartman

Stature 69WP fungicide, sold by the SePRO Corporation, has recently received EPA registration for use on a wide range of ornamentals grown in the greenhouse and shadehouse. Stature is a broad-spectrum fungicide designed to be used in a preventive spray program. Stature is formulated with two active ingredients: dimethomorph, generally effective against oomycetes, and mancozeb, a broad-spectrum fungicide. Tobacco growers may recognize dimethomorph as the active ingredient in Acrobat, a fungicide used in blue mold management.

With the two ingredients, Stature WP is active against fungi causing diseases such as *Alternaria* leaf spot, anthracnose, black spot, *Botrytis* blight, *Cercospora* leaf spot, downy mildew, frog-eye leaf spot, leaf blister, *Phomopsis* blight, rusts, some *Phytophthora* diseases, scab, *Septoria* leaf spot, and

many others. Stature is intended for use on ornamental crops grown in commercial greenhouses and shadehouses. The host plant list includes more than 40 herbaceous plants and more than 35 woody ornamentals. Growers are urged to consult the fungicide label for use instructions.

DIAGNOSTIC LAB HIGHLIGHTS
by Julie Beale and Paul Bachi

Recently in the Diagnostic Lab, we have seen frog-eye leaf spot, soybean cyst nematode, and sudden death syndrome on soybean. On tobacco samples (both lab and survey samples), the foliar diseases that we have consistently seen are blue mold, frog-eye, brown spot, target spot, angular leaf spot and bacterial soft rot. We have also seen lodging of tobacco due to systemic blue mold, soreshin, black shank and wind/water damage.

On fruit and vegetable crops, we have diagnosed *Sphaerulina* leaf spot on raspberry; crown gall on grape; anthracnose on bean; *Fusarium* fruit rot on cantaloupe; anthracnose on pepper; *Microdochium* blight, *Cercospora* leaf spot, *Fusarium* fruit rot, and the virus complex on pumpkin and winter squash; and bacterial spot, early blight, and catfacing on tomato.

On ornamentals, we have seen *Rhizoctonia* stem/root rot on ivy and petunia; black root rot on petunia; anthracnose on bluegrass; *Phyllosticta* leaf spot on peony, maple and pear; *Actinopelte* leaf spot on oak; rosette disease on rose; and *Verticillium* wilt on golden raintree and smoketree.

INSECT TRAP COUNTS

UKREC, Princeton, KY, August 17 - 24

True armyworm
14
Fall armyworm
13
Beet armyworm
0
Corn earworm
193
European corn borer
15
Southwestern corn borer
40

UKREC, Princeton, KY, August 24 - 31

True armyworm
6
Fall armyworm
3
Beet armyworm
0
Corn earworm
349
European corn borer
11
Southwestern corn borer
94

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.