**ANNOUNCEMENT**

**SOYBEAN PEST MANAGEMENT STRATEGIC PLAN (PMSP) WORKSHOP -- We need YOUR INPUT!!**

PMSP’s are documents that set future pest management priorities for a commodity and demonstrate stakeholder input in the process. Ideally, a PMSP outlines the current state of a commodity at the state, region, or national level. It presents a prioritized list of needs for research, regulatory activity, and extension education activities. The document takes a crop phenology and pest-by-pest approach to identifying both chemical and non-chemical options for pest control.

This information is used by the United States Department of Agriculture (USDA) and the Environmental Protection Agency (EPA) to understand pest management needs for commodities and to get input for the pesticide re-registration process under the Food Quality and Protection Act (FQPA). To make good regulatory decisions regarding pesticide registration issues and decisions on research/education funding, it is important for these organizations to get producer input.

The Kentucky Pest Management Center (KPMC) is sponsoring a soybean PMSP workshop in Bowling Green, Kentucky on August 4th & 5th. We are seeking producer input to this process. We invite individuals receiving Kentucky Pest News and who are involved with soybean production to list some of their pest management areas of concern, but a clear statement of problems or concerns would be most helpful. You are encouraged to provide as much or as little content as you feel necessary. Those interested in providing input should go to our website [http://www.uky.edu/Agriculture/KPMC/KPMC.htm](http://www.uky.edu/Agriculture/KPMC/KPMC.htm) and fill out the pdf worksheet that has been posted.

**WORKSHEET DIRECTIONS:**

1. Go to: [http://www.uky.edu/Agriculture/KPMC/newsupdate.htm](http://www.uky.edu/Agriculture/KPMC/newsupdate.htm)
2. Click on the “Soybean Pest Management Strategic Plan Meeting” link at the top of the page.
3. Then, click on the pdf file titled “SOYBEAN PMSP WORKSHEET”.
4. This document can be completed in your web browser, then printed. Just click on the line that you would like to type on, then “tab” you way through the document. Or you can print it, and fill it in by hand.
5. Once completed, fax to Lowell Sandell by Friday, August 1 (fax#: (859) 323-1120).

If you are a soybean producer and would like to attend the workshop in person, please contact Dr. Doug Johnson (See contact information below). The KY Pest Management Center has funds to cover travel and living expenses for several additional producers. Your only cost will be your time. We invite and urge you to participate!

If you have questions, please contact Lowell Sandell.
Realize that we do not know where active blue mold is present in Kentucky, because we do not know where all the infected transplants were set. If the crop was set with plants from east Tennessee after about May 25, assume it has blue mold until proven otherwise. We need to get those communities using east Tennessee plants on our status maps (ASAP), to help growers appreciate their risk. Anyone with information about where Tennessee plants were used is asked to report it to their local county agent immediately, and agents are requested to promptly alert the Kentucky Blue Mold Warning System if they have such plants in the county. Without this information, the warning system is blind and the value of our information is greatly reduced!

The threat now is that there are some large fields producing heavy spore loads into the air, rather than a few lesions in shady areas of the field with a few lesions releasing spores. Therefore, I have expanded the watch area in the eastern third of Kentucky to include all counties in the Licking River, Bluegrass, Fort Harrod, Lake Cumberland, Quicksand, and Wilderness Trail areas. Do not underestimate this change in inoculum potential! Furthermore, appreciate that the host plant has become highly susceptible to blue mold during the past 10 days as recent rains and warm soils have allowed much of the crop to grow rapidly. In addition, the watch-areas have a large percentage of the crop that is very young tobacco; some of it with larger flowering crops nearby. Weather events forecast for the first half of this week will be highly conducive for sporulation and infection by the blue mold pathogen. With cool temperatures in the 60's and 70's, expect each lesion to cause more damage as lesions will be larger with a sharp increase in systemic activity associated with veins, midribs, and buds/stems.

In Kentucky, warnings are present for those with active blue mold which has been confirmed in the following Kentucky counties: Madison, Estill, Jackson, Pulaski, Breathitt, and Perry in eastern Kentucky; plus Logan and Todd in western Kentucky (but only old lesions have been sent to the labs from these western counties). Blue mold also continues to build in the Appalachian region with activity in western North Carolina, east Tennessee, and western Virginia. Some of the reports involved multiple fields with strong inoculum production.

In counties under a watch reduce the plant’s susceptibility to blue mold by using Actigard 50W if the plants are large enough, otherwise, start sprays with Acrobat MZ if located with 25 miles of active blue mold. In counties under a warning, at least one spray of Acrobat MZ should be made to reduce inoculum even if Actigard will be used. In fields with active blue mold, use aggressive spray programs with Acrobat MZ to get the

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Tobacco

Current blue mold status

by William Nesmith

The blue mold situation in eastern central Kentucky has changed significantly during the past week, because blue mold has been introduced into the area on transplants from east Tennessee. This is particularly significant, because the introductions occurred a month ago, and secondary spread has probably been occurring from those farms for several weeks. Fortunately, conditions have not been highly conducive for widespread blue mold development in Kentucky during the period since the plants arrived.

Yes, last week I bragged too soon on Kentucky's tobacco growers. Recall that once the disease appeared in east Tennessee, I had strongly urged them to avoid tobacco transplants from east Tennessee, and if they did use them, to maintain aggressive spray programs regardless of what the rest of the state was being advised to do. I recently learned that some growers did not follow that advice and now their crops are threatening the heart of Kentucky’s burley crop. Well, much for sound advice when Kentucky tobacco farmers are short of transplants. When I challenged one grower this weekend about the consequences of his bringing in plants from east Tennessee, his reply was: “I was only concerned with the consequences of me not setting a crop; the other fellow was none of my concern - at the time.”

One such introduction is in Madison County, Kentucky where 14 acres of tobacco with widespread blue mold activity is developing. It started in transplants obtained in mid-June from near Limestone, Tennessee. Many of these plants had systemic infections of the lower stem and root system, but most of the activity was associated with foliar lesions. The grower had held the Tennessee transplants in a local greenhouse with the remainder of his plants, where they had also become infected. He said the plants had arrived in a very yellowed state and grew slowly, so it was difficult to see yellow blue mold lesions on yellow leaves. No blue mold controls had been put into place until the grower found active disease in the field last week. I visited the farm and could easily count four to five generations of lesions in the field, plus probably one or two more had occurred in the greenhouse. From this grower we learned that other farmers in central Kentucky had also received transplants at about the same time from east Tennessee. So how many other sites like this are developing?

Realize that we do not know where active blue mold is

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(lsandell@uky.edu or (859) 257-6693) or Dr. Doug Johnson (doug.johnson@uky.edu or (270) 365-7541 ext 214).
disease under control, plus activate the plant’s immune system with Actigard. Widespread fungicide application within counties not under a watch or warning is not warranted unless: infected transplants have been used in the community, or strong centers of blue mold are present within the community, or a large mass of inoculum outside the state becomes threatening.

Application guidelines for the fungicides labeled for blue mold control in the field in Kentucky can be found in Kentucky Pest News, issue number 983, April 28, 2003 or at web address - http://www.uky.edu/Agriculture/kpn/kpn_03/pi030428.htm

CHECK TOBACCO BARNS FOR HORNETS AND BUMBLE BEES BEFORE HOUSING TIME
by Lee Townsend

Paper wasps, hornets and yellowjackets, and bumble bees often nest in and around barns but also can occur in some unexpected places. You may even find a nest was discovered in the hollow tongue of a wagon. In addition to painful stings, people working high up on rails in a barn can be injured as they try to escape these angry insects. As if this were not enough, some people can have a severe allergic reaction to the venom of these insects. Wasps, hornets and yellowjackets are more dangerous and unpredictable than honey bees and should be treated with respect; nests should be eliminated with great care and in a specific manner.

Paper wasps, hornets and yellowjackets construct nests of a paper-like material which is a mixture of finely chewed wood fragments and salivary secretions of the wasps. Paper wasps typically build their umbrella-shaped nests under eaves and ledges. These wasps are not as aggressive as yellowjackets or hornets, and can be eliminated rather easily with a wasp and hornet spray sold at most grocery and hardware stores. These formulations have an added advantage in that they often spray as far as 20 feet.

Treatment of wasps, hornets, and yellowjackets is best performed at night; paper wasps can be eliminated during the daytime provided you do not stand directly below the nest during treatment. Most wasp and hornet sprays cause insects to drop instantly when contacted by the insecticide. Standing directly below a nest increases one’s risk of being stung. Following treatment, wait a day to ensure that the colony is destroyed, then scrape or knock down the nest. This will prevent secondary problems from carpet beetles, ants and other scavenging insects.

Hornets are far more difficult and dangerous to control than paper wasps. The nests resemble a large, inverted tear-drop shaped ball which typically is attached to a tree, bush or side of a building. Hornet nests may contain thousands of wasps which are extremely aggressive when disturbed. Treatment can be accomplished by applying a wasp freeze-type, aerosol insecticide or dust formulation (Sevin) directly into the nest opening.

Hornet nests have a single opening, usually toward the bottom, where the wasps enter and exit. It is essential that the paper envelope of the nest not be broken open during treatment or the irritated wasps will scatter in all directions, causing even greater problems. Following treatment, wait at least a day before removing the nest to ensure that all of the wasps are killed. If hornets continue to be observed, the application may need to be repeated.

Bumble bees can nest in small piles of hay, paper, or other similar materials, usually at ground level. Look for activity around the barn and deal with it before the rush of housing begins.

CORN

FALL ARMYWORM APPEARING IN SOME LATE CORN
by Ric Bessin

There have been a few reports of fall armyworm in late planted corn fields. In particular, growers need to pay close attention to corn while it is still in the whorl stage. Most of the corn planted in mid May and before has already tasseled and is less attractive to fall armyworm. When monitoring fields, look for ragged leaves emerging from the whorl. Often several adjacent plants may be damaged as this insect lays its eggs in small groups. When determining whether or not to treat a particular field, try to target sprays at smaller larvae as they are much easier to control.

FRUIT CROPS

CODLING MOOTH REMAINS ACTIVE IN MID SUMMER APPLES
by Ric Bessin

Late season codling moth generations are often overlooked by growers, but these are the larvae that can remain in the apples at harvest. In Kentucky, we have between three and four codling moth generations per year depending on the year. The first two generations are managed well by growers, but occasionally, as growers become involved with peach and early-season apple harvest, less attention is given to codling moth control. But codling moth can attack through September in Kentucky. Grower should be reminded to continue to use and maintain codling moth pheromone traps through the
end of September, and to spray accordingly.

**MONITOR FOR GRAPE ROOT BORER**  
by Ric Bessin

An unseen problem of grapes in Kentucky is that of the grape root borer. While damage and vine loss by this insect is not common in new vineyards, it is more common in older vineyards. The larvae of the grape root borer feed for two years below ground, emerge and lay eggs on grape foliage and weeds around the base of grape vines. The adults are paper wasp mimics and, unlike most other moths, these are day fliers that are commonly seen on grape foliage during midday. Grape root borer adult moths should become active in the next weeks. The presence of pupal cases around the bases of 5% vines is the threshold for treatment of the vines next year.

**VEGETABLES**

**SQUASH BUG IN CUCURBIT VEGETABLES**  
by Ric Bessin

There have been several reports of high squash bug numbers in squash, pumpkins and other cucurbit vegetables. While squash bug can damage plants and fruits by removing large amounts of sap with its sucking mouthparts, it is also a vector of the agent that causes Yellow Vine Decline. Control of this disease depends on control of squash bugs. For this reason, we now recommend preventive controls for squash bug in cucurbits crops that are highly susceptible to yellow vine decline.

Some of the growers noted that they had treated these fields with Admire or Platinum and were still finding squash bugs at moderate to high numbers when they had begun picking. Keep in mind that these insecticides are primarily targeting cucumber beetles, and they provide 3 to 5 weeks of control depending on the rate of application. However, squash bug is not listed on the Admire or Platinum label. But research at the UK South Farm has shown us that these insecticides will also provide some squash bug control. We have observed that the duration of control is not as long as it is with the cucumber beetles.

**BLISTER BEETLES CAN TAKE BITE OF SOME CROPS**  
by Lee Townsend

Blister beetles have softer bodies than most beetles but they pack an irritating punch that more than makes up for structural limitations. Blister beetle blood is laced with cantharidin, a blistering agent that can raise welts if the beetles are smashed on the skin. We have several species in Kentucky including black, margined, and striped blister beetles. Several species feed on crops but the margined and striped blister beetles can be found feeding on eggplant, potato, tomato. Blister beetles often accumulate in groups on plants, feeding on flowers or foliage. Extensive defoliation can occur but it is usually limited to hot spots in the garden.

**LIVESTOCK**

**JULY 31 - OPENING OF CATTLE GRUB TREATMENT SEASON**  
by Lee Townsend

Application of a cattle grub treatment is one of the Kentucky CPH requirements. Cattle grub damage to muscle and hide requires extra trimming of carcasses and decreases the value of hides. Grubby carcasses are routinely docked by packers.

Cattle grub control is a part of producing quality steers for the feedlot. While the damage (cysts or swellings long the back line) will not show up for several months, control measures must be applied to Kentucky cattle between now and October 31 to kill the pests without harming the animal.

**Host Reaction to Cattle Grubs**

Depending upon the species, cattle grub larvae move either to the esophagus (common cattle grub) or spinal column (northern cattle grub)during their migration to the back. The grub larvae are in these sensitive areas during November and December. If large grubs are killed there, the surrounding tissue can become severely inflamed and additional symptoms can develop.

In animals infested with the common cattle grub, the esophagus can swell shut, and produce difficulty swallowing, drooling, or bloat. Northern cattle grubs killed in the region of the spine can put pressure on the spinal column. This results in stiffness in the hind quarters, loss of balance, or inability to lift the hind feet.

Be careful when treating for grubs. Use accurate weight estimates to determine the proper dose. Undertreating may not provide satisfactory control. At best, overtreatment will waste money; at worst, it may cause the animal to become sick.

There are a variety of formulations of cattle grub insecticides. Pour-on or Spot-On products are convenient if good handling facilities are available. High pressure sprays are an alternative when chutes or working pens are not an option. Animals must be wet to the skin when high pressure sprays are used. Products for internal parasite control, such as Cydectin, Dectomax, or Ivomec, also will control cattle grubs. When these products are
applied, there is no need to treat with an insecticide, too.

**LAWN & TURF**

**MEDALLION® FUNGICIDE FOR ANTHRACNOSE ON TURFGRASSES**

by Paul Vincelli

Syngenta Corporation has recently issued a Section 2(ee) Recommendation for the use of Medallion 50W® fungicide (active ingredient fludioxonil) for preventive control of anthracnose on *Poa annua* and creeping bentgrass. Although the product label does not include anthracnose, the manufacturer is permitted to issue such a recommendation under Section 2(ee) of the Federal Insecticide, Fungicide, and Rodenticide Act as long as the usage is consistent with the labeled use of the product against other diseases that could conceivably be active on that turf at that time. The product is being recommended at 0.25 to 0.5 oz/1000 sq ft either alone or in combination with Daconil Ultrex at 3.25 oz/1000 sq ft.

I found only three published research reports on control of anthracnose with Medallion. Undoubtedly, more research is currently underway. Nevertheless, three studies is enough to form some impressions. In one study where basal rot anthracnose was reported, complete control was provided by Medallion alone. In a second site with basal rot anthracnose, partial control was provided by Medallion, but complete control was achieved when Medallion was mixed with Daconil Ultrex as described above. In a third study where only foliar anthracnose was reported, health of *Poa annua* was not improved by either Medallion alone or in combination with Daconil Ultrex at 1.8 oz/1000 sq ft.

Given the general difficulty of controlling basal rot anthracnose on some golf courses, and the emergence of strains of *Colletotrichum graminicola* at many sites in the U.S., including Kentucky, I can imagine this product will have some utility as part of a control program. Clearly, more research is needed to develop a clear picture of how well the product will work, but it appears to have some potential for controlling the basal rot phase, the most damaging phase of the disease. Curative control has not been tested; these studies are with preventive control only. However, recovery from basal rot infections is very difficult during summer, so I doubt that any product will be a magic bullet for that situation.

**SHADE TREES & ORNAMENTALS**

**WOODY PLANT FOLIAR DISEASES ARE COMMON THIS YEAR**

by John Hartman

Many woody landscape plants are showing evidence of leaf spot and leaf blight diseases this summer. With frequent rains, weather conditions this spring were ideal for infection by many pathogens. Warm, humid weather with occasional thundershowers this summer have further encouraged many foliar diseases. County Extension Agents and landscape managers are often faced with identifying or managing foliar diseases in landscape plantings. The following is a list of common landscape plant foliar diseases being seen now in the field and in the U.K. Plant Disease Diagnostic Laboratory.


Most of the foliar diseases of landscape plants listed here are not fatal diseases. Some, like crabapple scab and dogwood powdery mildew, cause plants to be unattractive and will reduce flowering the next year.

Managing woody plant foliar diseases.
• Choose disease-resistant species and cultivars.
• Provide good sunlight penetration and ventilation through judicious pruning.
• Prune out blighted shoots.
• Rake up and remove fallen leaves in summer and autumn.
• Apply fungicides only if justified. Can all of the following questions be answered “yes?”
  • Is the plant a valuable specimen?
• Has the disease been properly diagnosed?
• Have all available cultural practices for disease control been used?
• Are there legal chemical controls available?
• Are appropriate application methods available?
• Will only one or a few fungicide applications each season be sufficient?
• Are off-targets such as vegetable gardens and play areas unlikely to be exposed to the treatments?

DIAGNOSTIC LAB HIGHLIGHTS
07/14/03
by Julie Beale and Paul Bachi

Samples in the Diagnostic Laboratory this past week included leaf hopper injury and Lepto leaf spot on alfalfa; black shank, soreshin, blue mold, nitrogen deficiency, alfalfa mosaic virus, tobacco streak virus, tomato spotted wilt virus, and manganese toxicity on tobacco.

On fruits and vegetables, we have seen black rot on grape; brown rot on apricot and peach; Rhizoctonia root and stem rot on bean; poor pollination on cantaloupe; bacterial stalk rot on sweet corn; blossom end rot on pepper; and Septoria leaf spot, early blight, bacterial canker, and blossom end rot on tomato.

On ornamentals, we have seen Septoria leaf spot and powdery mildew on dogwood; leaf/flower gall on azalea; bacterial spot on ivy; leaf hopper injury on maple; magnolia scale on magnolia; Cylindrosporium leaf spot on weeping mulberry; Entomosporium leaf spot on photinia; and leaf scorch and dieback on many woody ornamentals from a variety of environmental stresses including chronic drought stress (from the past several summers) and transplant shock.

DIAGNOSTIC LAB HIGHLIGHTS
07/21/03
by Julie Beale and Paul Bachi

Samples in the Diagnostic Laboratory this past week included rootworm injury on corn; leaf hopper injury and Cercospora leaf spot on alfalfa; leaf hopper injury on clover; Rhizoctonia root and stem rot on soybean; black shank, soreshin, blue mold, Fusarium stem rot, Fusarium wilt, angular leaf spot, hollow stalk, manganese toxicity and early flowering on tobacco.

On fruits and vegetables, we have seen cedar-apple rust, frogeye, fire blight, and burr knot on apple; brown rot and scab on peach; Phyloxera on pecan; poor pollination on cantaloupe; bacterial wilt on cucumber; smut on sweet corn; bacterial spot and blossom end rot on pepper; stalk rot on sweet corn; and leaf mold (Fulvia), Fusarium wilt and blossom end rot on tomato.

On ornamentals and turf, we have seen Pythium root rot and low fertility on chrysanthemum; Rhizoctonia root and stem rot on snapdragon and ivy; crown rot (Sclerotium) on ajuga; black root rot on holly; powdery mildew on crepemyrtle; anthracnose and Verticillium wilt on maple; brown spot and tip blight on pine; Rhizosphaera needlecast on spruce; and anthracnose on fescue.

INSECT TRAP COUNTS
UKREC, Princeton KY
July 11-18, 2003

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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.