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<p style="text-align: center;">TOBACCO</p> <ul style="list-style-type: none"> • Current blue mold status <p style="text-align: center;">WHEAT</p> <ul style="list-style-type: none"> • Coincidence—spring aphid sighting and BYDV • Off-Colored Wheat: What is the Problem? <p style="text-align: center;">ALFALFA</p> <ul style="list-style-type: none"> • A good time to be growing alfalfa 	<p style="text-align: center;">SHADE TREES AND ORNAMENTALS</p> <ul style="list-style-type: none"> • Look for tip blight in Christmas tree plantations <p style="text-align: center;">LAWN AND TURF</p> <ul style="list-style-type: none"> • Clover mites like lush lawns • Earthworms <p style="text-align: center;">HOUSEHOLD</p> <ul style="list-style-type: none"> • Overwintering bugs active <p style="text-align: center;">DIAGNOSTIC LAB - HIGHLIGHTS</p>
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TOBACCO

CURRENT BLUE MOLD STATUS

By William Nesmith

This is the first Current Blue Mold Status Report for the 1999 crop season.

Blue mold is now active in southern Georgia. Dr. Paul Bertrand, Extension Plant Pathologist, University of Georgia reported last week that blue mold was active at low levels in three counties in southern Georgia: Colquitt, Echols, and Grady. These outbreaks involved noncommercial transplant production - beds and greenhouses. Data were not available as to the metalaxyl sensitivity of the fungi involved.

It is my understanding that the above mentioned outbreaks do not directly involve transplants destined for the north. However, established blue mold in southern production areas could be a risk to Kentucky, because if weather conditions are favorable it potentially exposes transplants growing in the southeast for shipment north to blue mold. Kentucky's tobacco industry is advised to consider this potential risk in making decisions about plug-

plants, pre-finished plants, and transplants from the southeast.

Regular protective fungicide sprays of either Dithane DF or Ferbam are recommended for use in for ALL tobacco transplant production in Kentucky (greenhouses, float beds, and traditional seed beds). Acrobat MZ is NOT labeled for use in transplant production this year. Growers should not be waiting for blue mold watches or warnings before starting fungicide sprays in transplant production systems. Why? These fungicides have NO curative action; the transplants are grown mostly under near ideal conditions for blue mold to develop if the fungus is available; and, these fungicides will aid in the control of certain other transplant diseases.

The North American Blue Mold Forecast System at N.C. State University is again posting forecasts on Mondays, Wednesdays, and Fridays to their website. This is an excellent site for keeping current on the national blue mold situation and for national forecast information. The Kentucky Blue Mold Warning System is now operational for this season and it is linked to the national forecast site. The URL address for the Kentucky Blue Mold Warning System is:

www.uky.edu/Agriculture/kpn/kyblue/kyblue.htm

The National forecast site can be accessed through

the Kentucky site.

WHEAT

COINCIDENCE - SPRING APHID SIGHTING AND BYDV

by Doug Johnson

At this time of year I get many questions about treating for aphids to avoid Barley Yellow Dwarf in wheat. The most common question concerns the aphids that are present now (mid-March and later) and symptoms or perceived symptoms that will occur in several weeks. The conversation often goes like this.

Question: I am seeing a few aphids, should I spray them to avoid BYD?

My Answer: No, it is too late. If you see symptoms in several weeks, they will not be from virus moved by the aphids you are seeing now, but rather from aphid feeding that occurred last fall or very early this winter.

A few weeks pass and some BYD symptoms appear. SEE!! I should have sprayed those aphids I saw in March. I didn't, and now I have BYD.

My Answer: If you are seeing BYD symptoms now, then you had BYDV in March, aphids or no aphids. Spraying that late would have no affect.

In Kentucky BYD symptoms rarely show up before spring, even though most infections and almost ALL important infections began in fall or early winter. Spring aphids and spring BYD symptoms are by and large coincidence. Almost all important BYD infections need to be controlled in the fall and early winter.

Now, separate from BYDV, if you observe large numbers of aphids (most likely English grain aphid) during head filling time then you need to control those aphids to avoid their feeding damage. This has nothing to do with BYDV which is why so many more aphids are required (50 per head) to result in an insecticide application.

OFF-COLORED WHEAT: WHAT IS THE

PROBLEM?

By Don Hershman

Over the past month, we have received numerous samples and complaints about wheat being off-color in entire fields or large portions of fields. Typical symptoms are brown lower leaves and yellowed upper leaves, which often have purplish tips. Symptoms are often worse in lower areas of fields. Emerging growth often looks normal, however.

We have tested a number of samples for various wheat viruses, and I am confident that we are not dealing with a large scale virus epidemic. We have detected some wheat spindle streak mosaic, but all samples, thus far, have come back negative for barley yellow dwarf and soil-borne wheat mosaic. In addition, we see no evidence that herbicides used in previous crops are involved.

Dr. Lloyd Murdock, Extension Soils Specialist, and I visited a field in Graves County last week that was showing the symptoms described above. In that case Dr. Murdock determined that the problem was the result of poor root development and, thus, limited nutrient uptake and crop stress due to fields having excess soil moisture. Dr. Murdock has visited other fields this year with the same symptoms and came to the same conclusion. A common denominator in all the fields, thus far, has been the presence of a hard-pan which contributes significantly to a soil being "wet natured". This explains the yellowing and purpling of wheat across entire fields. The browning of lower leaves is simply the result of freeze damage which occurred in January, and nitrogen deficiency. The normal green new growth is an indication that the crop will recover as soon as soil temperatures warm and nitrogen applied is taken up by plants. Significant improvement in many of the fields that were a concern just a few weeks ago suggests that this prognosis is accurate for most situations.

ALFALFA

A GOOD TIME TO BE GROWING ALFALFA

By Lee Townsend and John Parr

Egg samples collected this winter point to a low potential for alfalfa weevil damage for the second straight year. Egg densities of 100 or more per square foot at this time would indicate weevil levels that are capable of causing significant injury. The

results from Mr. Parr's winter survey show egg densities that are well below this level. About 80% of these eggs would be expected to hatch, unless there is a severe late freeze.

County	Date	Eggs per foot ²
Fayette	1/20	26
Fayette	1/20	4
Owen	2/17	28
Owen	2/17	41
Warren	2/25	21
Warren	2/25	22
Hart	2/25	33
Hart	2/25	42
Barren	2/25	25
Breckinridge	2/28	30

While egg-laying will continue into April, the eggs present at the end of winter indicate the amount of pressure that the weevils will place on small alfalfa just breaking dormancy. Once the plants are growing rapidly, the major threat from this insect is greatly reduced.

The safest course of action is to use the degree day sampling program and tables that are included in the recommendations. Alfalfa weevil degree day accumulations are available on individual county home pages or through the Ad Weather Center home page by selecting Kentucky Agricultural Weather Information and then Insect Degree Day Accumulations / Forecasts.

SHADE TREES AND ORNAMENTALS

LOOK FOR TIP BLIGHT IN CHRISTMAS TREE PLANTATIONS

by John Hartman

The fungus *Sphaeropsis sapinea* commonly causes tip blight disease of Scots pines in landscapes, but only occasionally is the disease seen in Christmas tree plantations. This disease usually only becomes severe in landscapes after the trees have reached maturity; thus it is not normally a problem in Christmas trees because they are usually cut before

they are very old.

Although we have observed Scots pine Christmas trees infected with this fungus in the plant disease diagnostic laboratory occasionally, it has been rare. However, we have been getting reports from nearby states that this disease could be a serious problem for Christmas tree growers. A recent visit to a Christmas tree plantation in southern Ohio revealed that this disease can be severe on Scots pines well before they are ready for cutting. Trees scattered throughout the plantation ranging in age from three years to cutting age were showing symptoms.

Symptoms. Disease symptoms on Christmas trees are very different from landscape trees. Disease symptoms on Christmas trees are very different from landscape trees. Tip blight symptoms on exterior branches, are uncommon. This is because there are few tips left to become infected on most trees after shearing in early summer. However, small shoots in the interior of the tree may show tip dieback with typical stunted, dead needles covered with tiny black fungal fruiting bodies. On the tree exterior, one may find swaths or areas of dead needles just back of the sheared branch ends, often in one section of the tree. Sometimes top branches are dead and a canker can be found on the subtending trunk near the top of the tree. Such trunk cankers are usually encrusted with a copious outpouring of resin. In still other cases, a resinous canker may appear on the lower trunk, with the tree otherwise appearing healthy. Trunk cankers are hardly ever seen in landscape pines.

Disease management. Some of the symptom patterns suggest that infections may be occurring during shearing in early summer. Thus, shearing of Christmas trees should be discouraged during wet weather. Wiping cutting tool blades periodically with 10% lysol or 10% bleach should reduce contamination of the tools. Fungicides such as thiophanate-methyl or chlorothalonil applied in spring and also at shearing time may also help. Badly infected trees should be removed and destroyed.

It is likely that, as in Ohio, this disease has become more important in Kentucky Christmas tree plantations this year as well. We would be interested in knowing of specific Kentucky growers who are observing Scots pines with this serious

disease problem. Be aware that in addition to Scots

pinus, this disease may also affect other conifers.

LAWN AND TURF

CLOVER MITES LIKE LUSH LAWNS

By Lee Townsend

Clover mites are accidental invaders that can be a temporary nuisance during the early spring. These very small, reddish brown creatures appear only as moving dark spots to the naked eye. Sheer numbers, plus the resulting red-brown stain left behind if they are crushed, make them unwelcome visitors. Clover mites are not blood feeders and will not harm people or pets, nor will they infest household products. Once inside a home or building they will soon die.

Clover mites feed on clover and grasses. They can be especially abundant in the heavy, succulent growth of well-fertilized lawns. They usually enter a home around windows or doors so they are usually seen crawling along sills or thresholds.

A soapy rag or wet sponge can be used to clean mites off of surfaces. Wipe carefully to avoid crushing the mites and causing stains. The crevice tool of a vacuum cleaner may also be used to pick up mites. Rely on non-chemical control indoors. Do not apply insecticides to kitchen counters or other interior surfaces.

There is an increased potential for invading structures when grass extends up to the foundation. A plant bed or open area will provide a barrier that will stop many mites and provide a long term solution to persistent problems. Avoid overfertilizing lawns. This creates situations that are ideal for mites to increase to tremendous numbers.

EARTHWORMS

By Lee Townsend

Earthworms are very important soil organisms that aid in the decomposition of plant litter, such as the thatch layer, and in recycling of nutrients. They help to break down and condition plant remnants in their gut. Their tunnels in the soil help oxygen and water to enter the soil more easily and their castings (waste) enrich it.

Earthworms may be viewed as pests because their burrows and castings create a roughened surface. Also, since earthworms are a preferred food for

moles, pesticides are sometimes applied to remove food so that the moles will go elsewhere. There is no scientific evidence that elimination of earthworms will reduce problems with moles. Earthworms make significant contributions to a fertile, healthy soil. Attempts to control them to reduce surface disruption can have severe consequences, especially in thatch build up.

Thatch is a layer of living and dead roots, stems, and organic matter that accumulates at the soil surface. Thatch accumulates when the rate of decomposition is much lower than the rate of grass growth. Use of certain fertilizers or pesticides may encourage an accumulation of thatch by increasing turf growth and/or killing beneficial organisms, such as earthworms. Excessive thatch reduces penetration of water and other materials, such as fertilizer. It also encourages shallow grass roots which makes turf more susceptible to stress and pests. A heavy build up of thatch can require expensive dethatching. Earthworms break down the thatch and pull organic matter into the soil. They also mix large amounts of soil into the thatch layer. This aids in a more rapid breakdown of the layer by increasing microbial activity and enhances its propensities for growth of turfgrass.

Earthworms are generally found in the top 12" to 18" of the soil because this is where food is most abundant. The worm ingests soil and organic matter which is swallowed and ground in the gizzard. The ejected material, castings, are used to line the burrow or are deposited at the entrance. Earthworm activity depends directly on soil moisture and temperature. They become active when soil thaws in the spring and move deeper in late summer as the soil dries. More information on effects of pesticides on earthworms is available in ENTFACT 402.

HOUSEHOLD

OVERWINTERING BUGS MAKE "CAMEO" APPEARANCE IN BUILDINGS

by Mike Potter

Many bugs are beginning to appear mysteriously inside homes and businesses. Most of the six-legged "intruders" have either been ladybugs, (queen) yellowjackets and paper wasps, cluster flies, face flies, or hackberry psyllids.

Where Did They Come From?

These critters actually gained entry last fall through cracks and openings, and spent the winter hibernating in attics, soffits, wall voids, window/door casings, and similar protected areas. With the onset of warmer weather, the insects have again become active and are emerging from their overwintering sites. As they attempt to escape to their natural habitat outdoors, some inadvertently disperse inward into living areas, emerging from beneath baseboards, behind window and door frames, from within sash-cord openings, and around light fixtures and ventilators. Since insects are often attracted to light, they are often seen around windows and lighting fixtures.

What Can Be Done Now?

This is a temporary annoyance that will "run its course" as the weather continues to warm. Lady beetles, hackberry psyllids (those tiny, black gnat-like insects abundant on window sills), and cluster/face flies characteristically do not bite, sting, or carry diseases, nor do they infest food, clothing or wood. They do not breed (reproduce) inside buildings, and generally will not survive indoors for more than a few days. Yellowjackets or paper wasps spotted indoors this time of year are overwintering queens, attempting to get outdoors to initiate their spring nests. The emerging queens are not normally aggressive, but will sting if mishandled.

The easiest way to dispose of these overwintering insects found inside the home is with a vacuum cleaner, broom or fly swatter. Insecticides are not generally recommended unless the temporary annoyance can no longer be tolerated.

Supplemental use of insecticides may be warranted, but only in specific locations and for clients demanding immediate relief of heavy infestations. Aerosol-type foggers containing synergized pyrethrins can be used in attics, but will provide no residual control of insects that have not yet emerged from cracks and protected cavities (Large numbers of lady beetles, flies or wasps accumulating in ceiling light fixtures would suggest the attic as a possible treatment area.) Aerosol sprays or foggers are not recommended for treatment of bedrooms or other living areas within the home. The effect of such treatment would be negligible against any insects which have not yet emerged from wall voids and other hidden

locations. Flies or lady beetles spotted on walls, windows, and exposed surfaces can just as easily be removed with a vacuum or fly swatter.

DIAGNOSTIC LAB-HIGHLIGHTS

By Julie Beale

In the Diagnostic Lab recently we are seeing numerous samples of ornamentals--both from the landscape and greenhouses. Landscape specimens diagnosed have included white pine decline and white pine root decline (*Verticillium*); spruce with *Cytospora* canker and spider mites; taxus with *Phytophthora* root rot; and crabapple nursery stock with fireblight cankers. Greenhouse specimens have included calla lily with bacterial soft rot (*Erwinia*); petunia with growth regulator injury and high temperature damage; and geranium with iron toxicity, low fertility and oedema.

Lee Townsend, Extension Entomologist

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