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CORN

CORN INSECT UPDATE
By Ric Bessin

Often the best laid plans can go awry. This has been the case with many corn fields across the state this year. While many were intended to be planted in April, much of the planting was delayed, in some areas to mid- or even late May. Planting date is the most important factor governing the potential for insect problems in corn. While delayed planting increases the chances for damage by some insects, it can reduce the potential for damage by others.

Serious losses caused by fall armyworm (FAW) and southwestern corn borer (SWCB) are usually associated with late-planted fields. Problems with FAW and SWCB have been more of a problem in the western region of the state, while late plantings are found across the state. Both of these insects are very difficult to manage if allowed to get out of control. Young larvae must be controlled before they find protection in the stalk or deep in the whorl.

Late season SWCB larvae can greatly increase losses by cutting the stalk just above the soil line prior to harvest. While it is late to scout for first generation European corn borer, now is the time to monitor corn for first generation Southwestern corn borer. If young SWCB larvae are active in the whorl and 35% or more of the plants are infested, then an insecticide should be used for control.

With FAW, delay insecticide applications until egg masses are present on 5% of the plants, or when 25% of the plants are infested with larvae. Treatment must be applied before larvae burrow deep into the whorls or enter ears of more mature plants.

Second generation ECB is more severe in late plantings, as well. Fortunately, at least at this early date, it does not look like this will be a severe year for ECB. Like SWCB, ECB needs to be controlled before they bore into the stalk. Later plantings may also escape much of the ear damage caused by Japanese beetles.

Corn leaf aphids will begin to be found in corn soon. They are commonly found in corn from about four weeks prior to tasseling until tasseling. Growers who have had a history of corn leaf aphids should begin monitoring about three weeks prior to tasseling.

Corn leaf aphids are small, pear-shaped insects with soft bodies. They vary from blue-green to gray and have piercing sucking mouthparts. They occur in clusters on the plant. Some may have small, clear wings. Aphids occur in clusters in the curl of leaves, in the whorl or on unemerged tassels. Discolored brown or golden aphids are diseased or parasitized and should not be counted when assessing aphid infestations.

Corn leaf aphids are very common in whorl stage corn, but they rarely cause economic loss. Moderate (400/plant) corn leaf aphid infestations in whorl stage corn, three weeks before tassel emergence, can cause physiological damage and have been associated with yield loss. However, infestations that occur closer to tassel emergence, despite large numbers of aphids, don't cause economic losses. While the infestations reported are not likely to cause physiological yield loss, some producers feel that the large number of aphids and honeydew may interfere with pollination by gumming up the tassels. Corn leaf aphids cause the worst damage when plants are under drought stress. That has not been a problem this year. In those instances, corn will be stunted or wilted.

In tasseled corn, infestations of corn leaf aphids usually have done most of their damage already and killing them often provides little savings to producers. Excessive honeydew on the tassels may limit pollen shed and it has been associated with barren corn, although this is very uncommon. Silks that are covered in honeydew will continue to grow until they are pollinated. But few guidelines for making control decisions are available for tasseling corn. If tasseled corn is to be treated, aphid treatments need to be made within 48 hours of tassel emergence.

TOBACCO

COMMON STALK BORERS IN TOBACCO
By Lee Townsend

Larry Rogers, Elliott Co ag agent reported common stalk borers in tobacco. These caterpillars have a yellow-brown head and distinct white stripes that run along the body from head to tail. The stripes are interrupted about 1/3 of the way back from the head by a dark purple “saddle”. About 1-1/2" long when full grown, these borers are live inside the stalks of wilted plants or stems of wilted leaves.

Usually, only a few plants are affected and they tend to be along grassy field margins or waterways. The stalk borers have moved in from these areas after outgrowing the plants, often grasses, in which they were developing. Common stalk borers tend to enter the first plant they come across with a stalk large enough to hold them. Usually, they will remain in the plant unless it dies or they outgrow it and are forced to move again.

Plants turn yellow and wilt for a variety of reasons. To confirm stalk borers, look for a small hole in the stem or stalk. Carefully split the tissue and look for the insect or the sawdust-like waste material inside.

Insecticidal control of borers within plants is impossible. Common stalk borers are vulnerable to insecticides only as they move from plant to plant or chew on treated surfaces as the enter a plant. Their movement cannot be predicted accurately so preventive measures are not feasible. Fortunately, in most cases only a small numbers of plants are affected. The damage potential is greatest in long, narrow fields where a great proportion of the plants are along grassy edges. Even then, there is no alternative once the insects are established in the plant.

TOBACCO APHID BUILDUPS
By Lee Townsend

Tobacco that has been in the ground for three or more weeks should be checked for the presence of aphid colonies. Dr. Bill Nesmith reported very high numbers of tobacco aphids in Laurel county and at the Quicksand station late last week. He said that Infestation levels were much higher than he had seen there in the past for this time of year.

An insecticide application is recommended when 20% or more of the plants in a field have at least one cluster or colony of about 20 aphids. Typically, these are on the leaves in the bud area. It is easy to check this region of the plant quickly when sampling the field. Examine 5 groups of 20 plants in scattered locations over the field. If 20 or more are infested, then an insecticide application should be made.

Use of the 20% threshold improves control and reduces potential yield loss. When an infestation is caught early, most of the aphids are on the undersides of relatively upright leaves. This allows much better spray coverage of the target area. The goal of this application is to protect the leaves in the bud area of the plant so that they expand to their fullest extent and can develop the thickness and weight needed for top yields. Make additional applications if aphids reach the treatment guideline again. Usually, no more than two treatments are needed for aphid control. Any yield reduction by aphids is done before plants are topped.

Golden Leaf (endsulfan) and Orthene are the major insecticides used for tobacco aphid control. Both have consistently worked well in field trials if the treatment is well-timed.

YELLOWSTRIPED ARMYWORMS ON TOBACCO
By Lee Townsend

Yellowstriped armyworms can be found on many crops early in the season. I was finding them occasionally while evaluating flea beetle damage on tobacco on 22 June. The incidence was low (10 / 300 plants) and I found them only because I was looking very carefully at transplants that had been in the ground about a week.

Yellowstriped armyworms are glossy black to gray with a distinct black stripe running longitudinally along each side of the body. There are pairs of black, triangular spots on the top of most body segments.

Most of them were small, 1/4" long, with only 2 approaching ½" . The damage was easy to overlook because the holes in the leaves were very small at that point - about the size of three flea beetle holes joined together. All were hanging on the undersides of the leaves and were chewing relatively smooth-sided elongated holes in the leaves. The larvae feed for about 3 weeks and can be up to 1-3/4" long when mature. Large larvae can bore into the plant and tunnel in the stalk.

Generally, there are not large numbers in a field and the damage is of no consequence. Orthene, Golden Leaf, or Bt products should provide good control if a treatment is needed. Hornworms remain the greatest potential caterpillar threat at this time of the season.

CURRENT BLUE MOLD STATUS
By William Nesmith

BLUE MOLD WATCH EXISTS STATEWIDE AND WARNING exists for the following State Extension Areas: Purchase, Pennyrile, Green River, Mammoth Cave, Lake Cumberland, Lincoln Trail, Bluegrass, and Fort Harrod. In addition, WARNING also exists for all counties with confirmed blue mold, even if the entire area is not under a warning. Southern Ohio and Southern and Southeastern Indiana are also under a Watch status, with warning for those counties in Indiana with blue mold. Blue mold has been confirmed in the following Extension Areas/Counties:

COUNTIES WITH CONFIRMED BLUE MOLD ACTIVITY, BY AREA:

PURCHASE AREA: Calloway, Graves, and Marshall
PENNYRILE AREA: Caldwell, Christian, Muhlenberg, Todd, and Trigg.
GREEN RIVER AREA: Daviess, Hancock, Henderson, McLean, Ohio, and Webster.
MAMMOTH CAVE AREA: Allen, Barren, Edmonson, Hart, Logan, Monroe, Simpson, and Warren.
LAKE CUMBERLAND AREA: Adair, Casey, Clinton, Cumberland, Pulaski, Russell, Taylor, and Wayne.
LINCOLN TRAIL AREA: Breckinridge, Hardin, Nelson, and Washington
FT. HARROD AREA: Boyle, Jessamine and Lincoln
BLUEGRASS AREA: Bourbon, Clark, Estill, Fayette and Madison.
LOUISVILLE AREA: Henry
NORTHERN KY AREA: Gallatin
LICKING RIVER AREA: Bath and Mason
NORTHEAST KY AREA: none
QUICKSAND AREA: none
WILDERNESS TRAIL AREA: Whitley

INDIANA: Harrison, Jefferson, and Spencer
OHIO: none
WEST VIRGINIA: none

GENERAL STATUS: Blue mold continues to spread across Kentucky via prevailing winds on a northern

and eastward path, as well as on transplants moving within the state. The sunny and hotter weather of the past few days should have slowed long-distance spread significantly and allowed growers access to fields for spraying fungicides. However, it has not been hot enough to stop blue mold! A large number of communities have already reported active blue mold and once established, local sources become the most important sources. Expect the disease to build in fields where it has become established as long as the foliage remains wet at night, with rapid increases associated with canopy closure or periods of rapid growth, when these are accompanied by protracted periods of wet weather. Furthermore, I suspect the disease is even more widespread than has been reported, with the amount of systemic blue mold being the most underestimated, because it is more difficult to recognize. A lot of things are stunting tobacco at this stage of the crop.

The level of blue mold activity is highly variable, even within communities with the strongest disease levels. Overall, production has not been seriously impacted at this point, but some individual crops have sustained serious losses. However, there is concern that too many growers are not taking the potential risk as serious as the situation warrants. Many county agents report that getting farmers to spray transplant systems has been successful, but most indicate little advancement in field fungicide spraying.

The strongest and most widespread development is in western Kentucky, but even there, neighboring farms have highly variable levels of disease. Blue mold has not been confirmed yet in northeastern, eastern, or southeastern Kentucky, southern Ohio, or West Virginia. However, growers in these areas need to appreciate that disease is active in most of Tennessee's production areas (from far western Tennessee to the Virginia/Tn border) and several counties in western North Carolina and western Virginia. As summer weather patterns develop, sources in the southeast will become as important as those in the southwest, if not more so. Summer weather patterns favor the movement from the southeastern mountains into eastern Kentucky.

Laboratory tests continue to indicate that all the blue mold operating in Kentucky is resistant to the active ingredients in Ridomil and Ridomil Gold, but very sensitive to dimethomorph, a component in Acrobat MZ. However, growers operating on sites with black shank need to maintain Ridomil programs. The potential for black shank is high this season, also, both for the soil and foliar phases.

CONTROL RECOMMENDATION: There is still significant acreage to be set, so useable plants should be protected with fungicides. Spray programs in transplant production systems should be maintained at five-day intervals. Any transplant not needed should be destroyed immediately. Abandoned transplant sites will serve as staging areas for blue mold to be harbored during periods when it is too dry or sunny for the disease to operate in the field. Foliar fungicide sprays in the field should be started in all counties with active blue mold, as well as in neighboring counties. Sustain the spray programs until the local county agent lifts the advisory, which should not happen until the disease is under control and dry weather has persisted. With the number of unknowns involved, spraying of newly set fields throughout the state, irrespective of how close they are to known sources, is reasonable and prudent at this stage of the season.

Acrobat MZ @ 2.5 lbs/100 gallons and Dithane DF @ 1.5-2.0 lbs/100 gallons are the two fungicides labeled for field use in Kentucky. The volume should be adjusted for crop stage with Acrobat MZ. Good coverage of the entire plant's foliage, stem, and bud is critical with both fungicides. Excellent coverage is achievable with high-pressure sprayers equipped with hollow-cone nozzles on drops. However, while the tobacco is small, good coverage may be possible with less sophisticate spray equipment. Failure to apply these fungicides correctly will result in little control and high input costs. In contrast, a very high level of control is possible with proper application of Acrobat MZ and moderate control is possible with Dithane DF. However, economic benefit is not achievable with foliar fungicides in crops with low yield potential, because of the high input costs associated with frequent foliar fungicide applications.

INDIANA: As of June 19, Acrobat MZ is approved for emergency use in Indiana on tobacco for blue mold control. The blue mold situation in southern Indiana is similar to that in western Kentucky, except for lower levels of disease being reported,

with confirmed activity in Spencer and Harrison counties. The forecast site at Springfield, Tn is serving western Tennessee, western Kentucky and southern Indiana. In southeastern Indiana, the situation is similar to that in northern Kentucky, with confirmed activity in Jefferson County, but it is probably more widespread. The national forecast office at NC State University has added a site of New Castle, Ky., which should serve northern Ky and southeastern Indiana.

OHIO: Blue mold has not been confirmed in southern Ohio, but the disease is probably present at low levels in Adams and Brown counties. The spore shower that hit Mason County, Ky, probably extended into southern Ohio. Acrobat MZ is also labeled for use on tobacco in Ohio.

SOYBEAN

GRASSHOPPERS IN SOYBEANS
By Doug Johnson

I am still receiving reports and questions concerning grasshoppers in soybeans. It appears, at least in some areas, that the hoppers are not following what we would consider normal patterns. Fancy that! Too bad grasshoppers can't read. However let's review the more important points on how to make a treatment decision.

Generally, grasshoppers are likely to occur in at least two situations, depending upon the tillage used. No-tillage—grasshoppers may occur very early in the season, distributed entirely across the field, especially if the field was pasture or fallow before planting.
Conventional-tillage—grasshoppers usually are not a problem until mid-summer, and then they first appear along field edges. However, this does not seem to be the case this year. In some areas, beans planted in fields that are routinely cropped are being attacked. The beans are no-tilled, but the weed cover was very slight. So keep your eyes open on all young beans.
Early in the season (NOW) you should be especially concerned from the time beans emerge, through the cotyledon stage, to first trifoliate. This is the most important time period. IF growing conditions are good, once the beans begin to put out trifoliate leaves, the plants will out grow the ability of the grasshoppers to eat them. However, if these young beans are eaten off below the growing point, they will not recover. If the cotyledons are eaten before true leaves are established the plant will be under considerable stress.

Description: There are several species of grasshoppers present in Kentucky soybean fields. The information in ENTFACT-116 will help you to identify them. All species will have enlarged "jumping" legs. Mature hoppers will have wings. Some species never get larger than ½ to ¾ inch. It is the small species that usually cause the most damage. Don't be fooled into the believing that because the hoppers are small you don't have a problem or because they are large that you do have a problem. It is not the size of the hopper so much as the number present.

Damage: Grasshoppers are mainly foliage feeders. Injury usually appears as very ragged leaf removal, beginning first on leaf margins. Under severe cases, petioles and stems will be eaten.

How to scout: Grasshopper populations are very hard to estimate because they move so rapidly out in front of you as you move through the field. Watch for large numbers of hoppers as you move through the field and combine these observations with defoliation of the plants. In general, vegetative stage plants can tolerate about 30 percent defoliation before a control is required. If plants are at bloom or later, consult Table 2 in ENT-13.

Control if required should be relatively good with any of the products listed in ENT-13. However, grasshoppers are very mobile. You may well get good control of the population in the field and then a couple of weeks later find that all the neighbors grasshoppers have moved into your field.

LIVESTOCK

RAT-TAILED MAGGOTS
By Lee Townsend

Rat-tailed maggots are the immature or larval stages of a fly that resembles a bee. These 3/4 inch long whitish larvae are different from other fly maggots in that they have a 1/2 inch long "tail" that is used as a breathing tube when they are in the water. Large numbers of the maggots can be

present in most any accumulation of stagnant water, such as manure pits or lagoons, where they feed on decaying organic matter.

The maggots can be a nuisance when they crawl away from their breeding site to find a dry place where they can transform to the adult stage. In this wandering stage, maggots may enter milking parlors, milk rooms, feed rooms, or other areas. They crunch underfoot and do not seem to be affected by direct sprays of insecticides.

Adults are rarely seen. They do not remain around breeding sites like house flies do so they are not nuisance flies. Bee flies visit flowers for nectar but also will go to decaying odors where they may lay eggs. These flies neither bite nor sting and apparently do not carry diseases.

Rat-tailed maggots are seldom a problem in liquid lagoons where floating solids are kept to a minimum, the manure is completely covered with water deeper than the depth of the breathing tube, and banks are kept steep and free of emergent weed growth. Agitation of the pit contents or routine clean out, if practical, also can disrupt maggot development.

The tough-bodied larvae are usually not affected by even direct insecticide applications as they crawl along the ground. Placing a barrier of dry, loose soil or sand in the path of the wandering maggots generally will stop them. They will burrow into the soil and remain there. The soil and maggots can be shoveled up and discarded outdoors away from buildings.

SHADE TREES AND ORNAMENTALS

JAPANESE BEETLES ARE HERE
By Mike Potter

Japanese beetles were spotted in several counties last week, indicating that the adult flight period has begun. Infestations in Kentucky have been less severe in recent years, but it is difficult to predict how serious a problem the beetles will be this year.

Most people are familiar with the metallic green and bronze appearance of adult Japanese beetles. The beetles begin to emerge from the ground in June, and are abundant throughout most of the summer. They feed on nearly 300 species of plants, devouring leaves, flowers, and overripe or wounded fruit. Adults are particularly fond of roses, grapes, purple-leaved Norway and Japanese maples, linden, purple leaf plum, and most varieties of flowering crabapple. Plants in full sun are preferred, and beetles usually feed in groups on the upper foliage. The adults are extremely mobile and can infest new areas from very long distances.

Outlined below are options for protecting trees, shrubs and flowers from adult Japanese beetles. Grub control will be covered in a subsequent newsletter.

What Works

Plant Selection- The best way to avoid perennial battles with adult Japanese beetles is plant selection. Certain plant species (see ENT-5, *Japanese Beetles In the Urban Landscape*) are much preferred by the beetles, and are poor choices for new plantings in beetle-prone areas. ENT-5 also lists species of trees and shrubs that are relatively unattractive to beetles. Other tactics must obviously be used for susceptible plants that are already established in the landscape.

Physical Removal and Exclusion- Removing beetles by hand may suffice for small plantings when beetle numbers are relatively low. By not allowing Japanese beetles to accumulate, plants will be less attractive to other beetles. One of the easiest ways to remove beetles from small plants is to shake them off early in the morning when the insects are sluggish. The beetles can be killed by shaking them into a bucket of soapy water. Small plants such as roses can be protected by covering them with cheesecloth or other fine (< 1/4") netting during peak beetle activity.

Insecticides- Various insecticides, including Sevin (carbaryl), Scimitar, Tempo, Talstar, Turcam, Dursban, malathion, and Orthene are labeled for control of adult Japanese beetles. Sevin is very effective and is the product of choice for most homeowners. Foliage and flowers should be thoroughly treated. The application may need to be repeated at 7-10 day intervals to prevent reinfestation during the adult flight period, or after heavy rains. Follow label directions, and avoid spraying under windy conditions. Insecticidal soaps will control beetles that are hit by the spray, but they provide no residual protection. Botanical insecticides such as neem or pyrethrum are

generally ineffective.

What Doesn't Work

Japanese beetle traps continue to be sold in many garden centers. These traps catch large numbers of beetles, but do not reduce damage to plantings. Research conducted by UK's Horticultural Entomology Lab showed that traps attract many more beetles than are actually caught. Consequently, susceptible plants along the flight path of the beetles and in the vicinity of traps are likely to suffer more severe damage than if no traps were used at all. If clients wish to experiment with traps, they should be placed far away from gardens and landscape plants.

TREES AND SHRUBS YELLOWING IN THE LANDSCAPE

By John Hartman

The leaves of oaks, azaleas, blueberries and other woody plants are appearing very yellow in some landscapes. This condition, called chlorosis, occurs when there is a reduction in the normal amount of chlorophyll in the leaves. This loss of chlorophyll reduces the efficiency of the leaf in manufacturing food. Chlorotic leaves may result from fungus, virus, or insect attack; low temperatures; toxic materials in the air or soil; excess soil moisture; and too much or not enough of soil minerals such as iron. Chlorosis of azaleas and pin oaks, for example, associated with iron deficiency is really due to non-availability of iron rather than with the lack of iron in the soil. This is especially true in soils containing limestone, ashes, or other alkaline materials, where the pH of the soil ranges from 6.7 to 8.5. Iron may be present in such soils, but in a form that cannot be absorbed by the plant.

Symptoms. The leaves of affected trees first turn uniformly yellowish green, or they may remain green along the veins but turn yellow between the veins. The terminal growth of twigs is reduced, and the tree or shrub is generally stunted. The tissue between the leaf veins or along the leaf edge may die on trees affected for several years with chlorosis. Eventually whole branches or the entire tree or shrub may die prematurely unless the condition responsible is corrected. New growth is usually more severely affected than growth produced earlier in the season.

Iron chlorosis imposes a stress on trees and shrubs with the problem. Oaks growing under stress are often attacked by leaf-spotting fungi such as *Tubakia dryina*, cause of Actinopelte leaf spot, a disease that often results in premature defoliation. Azaleas and blueberries are subject to canker diseases such as Botryosphaeria canker which might not otherwise attack plants growing well.

Control. Chlorosis caused by deficiency or non-availability of iron can often be corrected by special treatments. Lowering the soil pH from the alkaline to the acid range makes iron and other minerals in the soil more available to plants needing these elements. Soils can be acidified using granular or powdered sulfur. Soluble iron can also be applied to the foliage. Iron solutions may also be applied by injection or implantation of iron into the trunks of trees, but this creates wounds. Methods for correcting iron deficiency chlorosis are discussed in U.K. Cooperative Extension publication ID-84.

VEGETABLES

SQUASH VINE BORER AND SQUASH BUG

By Ric Bessin,

The squash vine borer is a key pest of winter squash, gourds and pumpkins in Kentucky. Unfortunately, it is usually noticed only after it has done its damage. Symptoms appear in mid-summer when a long runner or an entire plant wilts suddenly. Infested vines usually die beyond the point of attack. Sawdust-like frass near the base of the plant is the best evidence of squash vine borer activity. Careful examination will uncover yellow-brown excrement pushed out through holes in the side of the stem at the point of wilting. If the stem is split open, one to several borers are usually present. The caterpillars reach a length of 1 inch and has a brown head and a cream-colored body. Winter squash, particularly 'Hubbard', are most susceptible to damage while 'Butternut' is somewhat resistant.

The key to squash vine borer management is controlling the borers before they enter the stem. Once inside the vine, insecticidal control is ineffective. Poor timing of sprays is the usual cause of inadequate control. Monitor plants weekly from mid-June through August for initial signs of the borer's frass at entrance holes in the stems. Very early signs of larval feeding indicate that other eggs will be hatching soon. Use two insecticide applications 7 days apart to control newly hatching

larvae and continue to monitor for additional activity. Sprays need to penetrate the canopy to cover the vines to be effective.

Home gardeners may have some success with deworming the vines. At the first signs of the sawdust-like frass, vines are slit lengthwise near where the damage is found and the borers removed. The stems should be immediately covered with earth. Sanitation is also important. After harvest is complete, vines should be removed from the garden and composted to prevent the remaining borers from completing larval development. Burying a few nodes along each vine will encourage rooting at these nodes. This will lessen the impact if squash vine borers girdle the base of the vine.

The squash bug is another common pest. While all of the cucurbit crops can be attacked, it shows a preference for squashes and pumpkins. This insect can be very difficult to control when populations are allowed to build. Squash bugs damage plants by removing sap and causing leaves to wilt and collapse. Young plants and infested leaves on older plants may be killed.

Only the unmated adult bugs overwinter in Kentucky. Adult squash bugs begin to fly into fields and gardens about the time the plants begin to run. They remove plant sap with their piercing-sucking mouthparts. Soon after beginning to feed, they start laying eggs, primarily on the undersides in the angle between veins. The bronze eggs are football-shaped and lie on their sides in groups of 12 or more. Eggs hatch in one to two weeks. Initially the larvae are dark red with a light green abdomen. Older nymphs are light gray in color with black legs. Young nymphs are gregarious and feed together in groups. Nymphs require five to six weeks to mature into adults. Squash bugs spend most of their time around the base and stems of the plants and on the undersides of leaves.

Management

Timing is the key to successful squash bug control. Insecticide sprays should target adults and small nymphs early in the season when the plants are small. It is much more difficult to control large numbers of older nymphs and adults later in the season when the plant canopy is dense. Treat with a recommended insecticide (See ID-36, Commercial Vegetable Crops Recommendations) if overwintering adults are causing seedlings to wilt. Monitor for squash bug egg masses from prebloom through early flowering. Treat when egg mass numbers exceed an average of one per plant. However, eggs are not controlled by insecticides, so time insecticide applications to control young nymphs. Small nymphs are much easier to control with insecticides than larger nymphs or adults.

DIAGNOSTIC LAB-HIGHLIGHTS

By Julie Beale and Paul Bachi

Alfalfa diseases this week included **Phytophthora root rot, spring black stem and Lepto leaf spot. Pythium root rot** and **Rhizoctonia root and stem rot** were diagnosed on **soybean**.

On **tobacco** we saw **angular leaf spot, Fusarium wilt, soreshin, target spot, blue mold** in several additional counties, **black shank** (both stem and foliar infections); also non-infectious problems including manganese toxicity, drowning and lightning damage.

On fruits, we are seeing **brown rot** on **peach** and **cherry** fruits, **bacterial leaf spot** of **cherry** and **black rot** of **grape.** On vegetables, we are seeing **bacterial spot** (Xanthomonas), **speck** (Pseudomonas) and **canker** (Clavibacter) of **tomato**, as well as **buckeye rot** of **tomato**.

Lee Townsend, Extension Entomologist