TOBACCO

BACTERIAL SOFT ROT (HOLLOW STALK, LEAF ROT AND LEAF DROP) IN TOBACCO
by William Nesmith

One farmer called it a stinking, slimy rotting mess causing extensive loss. It looks like hollow stalk, but it's different!

As a consequence of the wet growing season and the amount of leaf wounding from weather-related events and other leaf diseases, tobacco growers are experiencing much greater bacterial soft rots (caused by *Erwinia* spp.) than normal. These soft rots have become especially severe following the prolonged wet weather of last week. They are occurring as hollow stalk in the stems, and bacterial soft rot/drop of leaves. These soft rots are developing very quickly in wounded tissues that have been over-fertilized, and will develop faster as temperatures increase. The wound sites are usually caused by wind and hail damage to the leaf petioles or from systemic blue mold in the lower main stem, leaf veins or midribs.

This same group of organisms also can cause extensive rot of cut tobacco while still in the field and early houseburn of tobacco, especially the slimy rot that occurs prior to yellowing. So, expect greater leaf drop during harvesting and housing and early houseburn potential in crops harvested with hollow stalk and soft rot.

These soft rot bacterium are natural inhabitants of all soils and also are hosted by most weeds. They also develop on leaf and stem surfaces during wet weather and await an opportunity to enter through wounds. The wetter the season the greater their numbers, but they need the wounding to cause disease as these bacteria cannot enter healthy host cells. In a more normal growing season, we see them entering through the topping wound and moving down the stalk causing classic hollow stalk disease. But, in a season when young tissues are wounded by hail, wind, or other diseases, expect to see soft rots develop around those wound sites.

To minimize losses from this complex, growers will need to more carefully manage harvest and housing of crops with these soft rots. In addition to the normal practices recommended for improved ventilation in the tobacco barn during a wet season, consider the following for crops with these bacterial soft rots. Avoid cutting wet tobacco, as this will greatly enhance rot on the stick while still in the field. Instead, wait until the tobacco leaves have dried and cut carefully. Avoid including rotting plants on the stick, as they will just serve to create a “rotting nest” on the stick and move to other sticks. Give the tobacco a good field wilt, but do not let such crops get wet in the field. Crops with bacterial soft rot should be housed under conditions of excellent ventilation to minimize the losses from rot.

SOYBEAN

IMPACT OF RECENT RAIN EVENTS ON SOYBEAN DISEASES
by Don Hershman

The significant rain events that soaked much of Kentucky last week will have little impact on the soybean crop, except perhaps where late-season foliar diseases are concerned. Some fields may experience an upturn in brown spot or frogeye leaf spot. These diseases are present, at more or less low levels, in many soybean fields at this time. Typically, brown spot and frogeye leaf spot increase towards the end of the season as leaves begin to senesce. It is possible that we will see increased disease activity as the soybean crop matures, due to the recent wet period. However, most fields are far enough along that I would not anticipate significant effects on yield. In the same vein, I do not expect saturated soils and short-term standing water this late in the season to do any harm. A more significant problem may be increased levels of pod and stem blight, and accompanying...
several species of the fungus that cause rust diseases of aster. Rust can be recognized by the orange-red pustules that develop on the undersides of the leaves. Heavy infections can cause the leaves to turn yellow and die. Some of the rusts (Colesporium) have pines as alternate hosts. Earlier this season, high levels of pine needle rust caused by the same fungus were observed. Thus, it should not be too surprising to see more than the usual amount of this rust on aster, the alternate host for pine needle rust. Other rusts of aster (Puccinia) have various sedges and grasses as alternate hosts. If practical, alternate hosts can be removed. It is probably too late to control initial rust infections of aster. For prevention, fungicides such as Fore (mancozeb), Heritage (azoxystrobin), Cygnus (kresoxim-methyl), Eagle (myclobutanil), Banner (propiconazole) and others should be effective.

For all fungicide applications, be sure to read the label and apply as directed for hosts and diseases listed on the label.
HUMAN

“SEED TICKS / TURKEY MITES” SERIOUS PESTS
by Lee Townsend

Lone star tick larvae and nymphs (immature stages) are very abundant now. Earlier in the summer, female ticks deposited masses of several thousand eggs on the ground. Anyone unfortunate enough to stand in or pass through such a site can easily pick up dozens (and dozens) of larvae. A sample that arrived this week contained 104 pinhead sized ticks picked off of a 4-year old.

These tiny, 6 or 8-legged creatures, also called “seed ticks, sometimes turkey mites”, are most active between July and October. During this time, the larvae climb low vegetation and wait with outstretched front legs to latch on to passing animals or humans. Once “on board”, they crawl around to find a suitable place to attach and feed. The painful feeding site can be irritating for days after the tick has detached or been removed.

Hikers, hunters, and persons working outdoors should be aware that seed ticks apparently are much more abundant than normal this year. Use repellents and check regularly for ticks. See ENT-35 for more information.

Clothing repellents that contain permethrin (eg Permanone) can greatly reduce, but not necessarily eliminate encounters with ticks. These products are for clothing not application to the skin. See www.uky.edu/Agriculture/Entomology/entfacts/struct/ef6 18.htm - Ticks and Disease for more information.

STRAW ITCH MITE - HAY HANDLERS NIGHTMARE!
By Lee Townsend

Straw itch mites are tiny - 6 to 9/1,000 inch long! The odds of seeing one are a real long shot but the memory of an encounter with them can last a lifetime. Itch mite bites are painless at the time but become noticeable in a few hours. They can cause a dermatitis that includes red welts with a small white pustule in the center and itching that can last for a week or more. Reactions to severe infestations can include vomiting and joint pain, and scratching the bites can mean a nasty infection.

These tiny mites can live in pasture grasses where they feed as external parasites on the myriad of small creatures that live there. Their numbers are greatest in years where weather conditions favor a wide range of insects. That means more food for the mites and more offspring are produced. Itch mites also can live in some dried foodstuffs - especially cereals.

Human encounters result from handling hay or just spending time in tall unmowed grassy areas. People handling square bale hay can unknowingly pick get bitten by the mites present in curing hay. Also people picking up a few bales to mulch gardens or yards, make decorative Halloween displays, etc. can find themselves itch mite victims. There have been instances of equine dermatitis when horses were given mite-infested hay.

There is no way to evaluate bales for the presence or absence of mites and no good control alternatives for mites in infested bales. A temperature of 140 degrees F for a few hours should kill many but that temperature would have to reach the core of the bale.

Humans can gain some protection by application of a repellent, such as deet, and a thorough washing with soap and water immediately after possible exposure.

DIAGNOSTIC LAB HIGHLIGHTS
by Julie Beale and Paul Bachi

Last week in the Diagnostic Laboratory, we diagnosed northern leaf blight on corn; potash deficiency, sudden death syndrome, and charcoal rot on soybean; and blue mold, frogeye leaf spot, target spot, and tobacco ringspot virus on tobacco.

On fruits and vegetables, we diagnosed black root rot (Rhizoctonia) on strawberry; frogeye, and cedar-apple rust on apple; powdery mildew (as “rusty spot”) on peach; and leaf mold (Fulvia) on tomato.

On ornamentals and turf, we saw iron deficiency, fertilizer burn, bacterial leaf spot and Pythium root rot on chrysanthemum; Rhizoctonia web blight and leaf rust on aster; black root rot (Thielaviopsis) on petunia; bacterial leaf spot on hydrangea; Coccomyces leaf and twig blight on kerria; Cercospora leaf spot and Botryosphaeria canker on willow; powdery mildew on dogwood; dollar spot on bentgrass and summer patch on bluegrass.

INSECT TRAP COUNTS
UKREC, Princeton KY

August 22 - 29
Black Cutworm .................................. 0
True Armyworm .............................. 2
Fall armyworm ............................... 3
European corn borer ......................... 7
Southwestern corn borer .................... 8
Corn earworm ............................... 65

August 29 - September 5
Black Cutworm .................................. 1
True Armyworm .............................. 4
Fall armyworm ............................... 2
European corn borer ......................... 3
Southwestern corn borer .................... 1
Corn earworm ............................... 78

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.