



DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
 University of Arkansas System

ROW CROP NEWS

*A Multi-County Newsletter
 for Miller, Little River & Lafayette Counties*

June 2017

Welcome to our first edition of Row Crop News. This newsletter covers 3 counties: Miller, Little River & Lafayette. This month's edition will focus on corn & soybean production.

If you have any questions regarding anything in this newsletter, please contact us.

Sincerely,

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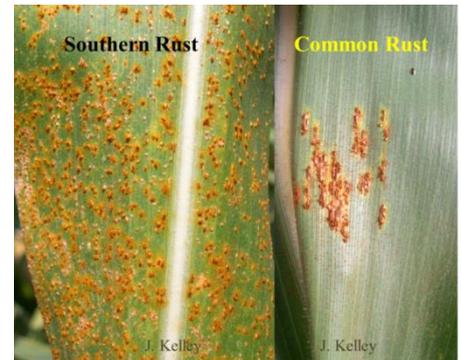
The Difference Between Southern vs. Common Rust in Corn

According to our very own Travis Faske, Extension Plant Pathologist, you can tell the difference between Southern corn rust and common rust by the colors of the pustules.

University of Tennessee, Volunteer Orange is the color of Southern Rust. University of Arkansas Razorback Red is an indicator that those rust pustules belong to common rust.

The difference is that a fungicide application may be needed for

Southern rust, but not for common rust, according to Faske.



Recommendations for Treating Southern Rust if Found

There is no economic threshold for southern rust because of differences in hybrid susceptibility, conditions that favor disease, crop maturity, and yield potential. If we make several assumptions like crop is susceptible (more are), conditions favor disease (this is a big IF), crops is between VT and R3, and has excellent yield

potential AND they do find southern rust in the field then a producer would benefit from a fungicide application. At and after R4 this becomes less clear, but after R5 there is no benefit from a fungicide. They can also use the IMP PIPE to monitor SR.

Also, I have had several calls where common rust has been

misidentified as southern rust, so just because they see rust does not mean its southern rust. We do not spray for common rust.

The cost varies depending on fungicide, but a good rule of thumb for the premix is \$17-19/A including application cost. Triazoles like Tilt can be cheaper \$10/A, but they are less effective.

Southwestern Corn Borer

*A guide for scouting insects of field corn in the mid-south U.S. by Scott Akins, Assistant Extension & Research Professor, UofA
 Division of Agriculture*

The Southwestern Corn Borer (SWCB) can cause economic damage in field corn, they can cause significant late-season

lodging, even more so than the European corn borer. The Whorl stage corn is normally affected by first-generation borers across the Southern region. Populations that occur during the first generation are generally more isolated. The second generation and perhaps

even the third generation (the latter in late-planted corn) are more likely to cause economic damage.



SWCB Moth
 – Photo credit: OSU entoweb

Southwestern Corn Borer – Management and Control

Apply control with 10% of the plants show shothole feeding in whorl. Little River County folks should start seeing SWCB traps in refuge corn fields. But if you would like to check them too, that is ok too. Treatment levels for the first generation are 50 moths per week,

second generation are 100 moths per week. Earlier planted corn should not have the damage as our later planted corn. There are several chemicals available to control SWCB. They are listed in our MP144. Be mindful to use recommended rates and the

number of days an application can be made before harvest.



SWCB larvae –
Photo credit:
University of
Missouri -
entomology

Red Banded Stinkbug in Soybeans

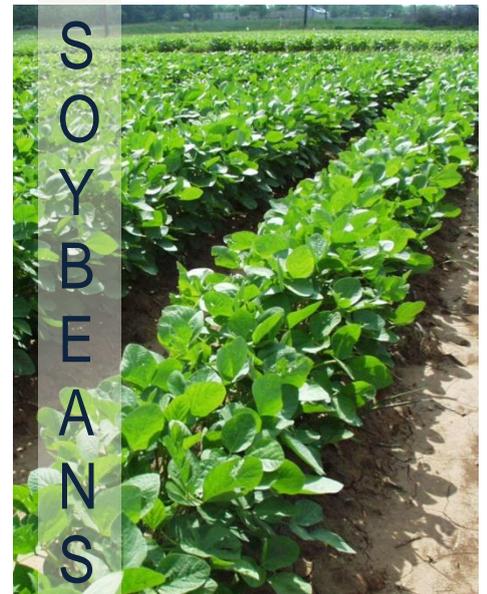
Red Banded Stinkbugs (RBSB) fall primarily into the pod feeding category, although they can and will feed on stems and foliage as well. This pest is highly mobile and is generally more difficult to control with insecticides than the more common stink bugs typically found in Arkansas soybeans. Because of the damage potential and the reinfestation capabilities of this pest, growers and consultants need to recognize the redbanded stink bug when it is present.

While soybeans are in vegetative stages, these pests generally prefer other legumes (e.g. clover), where populations begin to build. Later in the growing season, adults will typically migrate to podding soybeans. It appears that RBSB are very sensitive to cold winters which reduce their numbers dramatically in our area.

Unfortunately, we are further south so we do not have as cold of winter as some. Additionally, this year our winter was abnormally warmer than

usual which could cause an increase in population for this year.

When generations overlap, eggs, nymphs and adults are present simultaneously, making insecticidal control challenging in terms of timing of insecticide application. More importantly, the inherent mobility of red banded stink bug results in even more complex management decisions, as few insecticides labeled in soybeans have more than a few days of residual activity. Because scouting intervals in soybeans tend to be on a weekly basis at minimum, more red banded stink bugs can infest a field after an insecticide has lost its effectiveness. This is often perceived as insecticide failure, and multiple insecticide applications are typically recommended in this scenario. As is the case with other insect pests, sequential rotation or tank-mixing of insecticide classes is highly recommended for overall efficacy as well as resistance management.



Cultural and Chemical Control of RBSB in Soybeans

Cultural Control: Because redbanded stink bugs tend to be a late-season pest, planting earlier-maturing varieties during early planting windows may help manage stink bug populations, regardless of species. As redbanded stink bugs are highly mobile and selective, they readily infest temporarily isolated fields that may be the last fields with green pods (e.g., soybeans planted following wheat). Thus, fields planted earlier will likely have a chance to fully mature before stink bug populations arrive.

Chemical Control: The most consistently effective insecticides in

this class contain the active ingredient bifenthrin. Higher rates of acetophate are generally effective, but mixtures of 2 single active ingredients are highly effective for efficacy as well as resistance management. Data from division extension entomologist suggest the most effective single-labeled product for redbanded stink bugs has been Endigo® (Syngenta Crop Protection), which is a pre-mix of lambda-cyhalothrin (e.g., Karate Z®) & thiamethoxam (Centric®). In general, deploying a combination of insecticides with 2 modes of action is better than using a single chemistry when seeking control of this pest.

Scouting

The best method for redbanded stink bug sampling is with a 15-inch diameter sweep net. The successful economic threshold in Louisiana and Arkansas is 6 bugs in 25 sweeps (36/100). It is important to sweep deeper in the canopy when temperatures are high, as stink bugs tend to move lower into the canopy when hot. If this technique cannot be done consistently, sampling should be restricted to early morning or late evening during periods of high temperatures



Adult: Photo courtesy of Dr. Mo Way, Texas A&M AgriLife Research - Beaumont

Frogeye Leaf Spot

Frogeye leaf spot is a common fungal disease in Arkansas. If not managed properly, severe yield losses can occur on a susceptible cultivar when conditions favor disease development.

Infection can occur at any stage of soybean development, but most often occurs after flowering. Leaf symptoms begin as dark brown, water-soaked spots and mature into lesions with tan or brown centers and a narrow reddish-brown to purple margin. Older lesions are

translucent and have whitish centers containing black dots (stromata). In severely infected plants, several lesions may coalesce into larger irregular shaped spots. When leaves are heavily infected (>30% severity), they may wither quickly and prematurely shed, a condition called blighting. The causal agent is a fungal pathogen which overwinters on soybean residue and seed.



Control of Frogeye Leaf Spot

Host resistance is the most effective and economical management practice for frogeye leaf spot.

Fungicides can be effective in managing the disease, and are most effective when applied preventatively to protect new growth when conditions favor

disease development. The most favorable environmental conditions often occur from full bloom to beginning seed (R2 to R5) in Arkansas. Fungicide seed treatments can reduce the risk of infection. Spray applications of fungicides after growth stage R1 can reduce disease severity. But applications made at stage R3 are

considered most effective in southern states.

Cultural management practices consist of planting high quality disease-free seed & implementing tillage practices that improve crop residue decomposition. Rotating out of infected soybean for at least two years will help reduce the frogeye leaf spot risk.

State Plant Board Approves Emergency Rule to Ban Use and Sale of Dicamba Herbicides

The Arkansas State Plant Board has voted to pass a proposed emergency rule to ban the use of in-crop dicamba, with an exemption for pastureland, and to expedite the rule increasing civil penalties for dicamba misuse.

The proposed rule is the first step in the process of establishing an emergency rule. The next step includes a review of the proposed rule by the governor before being submitted to the Executive Subcommittee of the Arkansas Legislative Council for approval.

“Governor (Asa) Hutchinson has followed this issue closely and previously tasked Secretary (Wes) Ward and ASPB Director (Terry) Walker with visiting farmers in areas with heavy dicamba damage.

As of June 23, the board had received 242 complaints about dicamba drift across 19 counties in the state – and the number continues to grow daily. The complaints are what triggered the vote.

Bob Scott, professor and weed

scientist at the University of AR Cooperative Extension Service, spent about two weeks on the road to take a look at the damaged fields and offer growers help. He says a majority of the drift damage reported up until about 10 days ago was on soybeans that were in the vegetative stage, when the crop is still able to recover somewhat if irrigated & sprayed properly thereafter. When injury occurs in this stage, “it does not usually result in big yield loss, according to our limited data. There is really nothing you can do except give them time to recover,” he says.

He is more concerned about complaints that have popped up in the last week, because despite the tropical depression that had moved through and delayed plantings, more plants would have still moved into the reproductive stage, where impact on seed production, plant development, and yield loss is much more severe.

Scott blames the drift problems on wind movement and possibly inversions, as opposed to volatility.

In a state where about 35-40% of soybeans are Roundup Ready 2 Xtend, there were about a half-million acres of dicamba-tolerant soybean crops as of last week that either hadn't been sprayed or could possibly need a second application of dicamba, according to an unscientific study Scott's extension service team conducted. But that figure will decline each day as growers continue to spray until the governor reviews the rule. This number includes acres where Flexstar might still work and PPO resistance to pigweed has yet to develop.

“The bottom line is, if a farmer planted Xtend soybeans because he has PPO-resistant pigweed, he would be left without an option to control pigweed, so (a ban) would be a bad deal for those guys.”

We're a pretty diverse state. We've got conventional soybean growers; guys that like LibertyLink; and guys that made the switch from Roundup to Xtend or Liberty to Xtend, and we've got vegetable growers.