



CORN • COTTON • GRAIN SORGHUM • SOYBEANS • WHEAT

## ISSUE HIGHLIGHTS

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## Keep an eye out for nematode damage in cotton, soybeans

BY CHARLIE OVERSTREET

In Louisiana, cotton and soybeans are subject to severe damage from the Southern root-knot and reniform nematodes. Damage from these nematodes can start showing up within a month of planting on either plant type and can become more evident by midsummer.

Generally, the first symptoms are areas in a field that are stunted and not developing as fast as the rest of the field. These areas can be small or large, and they are easily recognized as having some type of problem.

Oftentimes, the damage presents itself as plants that are very uneven in height down a row. Thin stands also can occur from plant death due to nematodes, either alone or in combination with seedling diseases.

These symptoms appear because large numbers of nematodes have built up from the previous year and successfully survived in high numbers for the next crop. Usually, high numbers of nematodes can build up on either cotton or soybeans and can be a problem if one of these is planted the next year.

Populations of Southern root-knot nematodes don't usually get as high on corn as soybeans and cotton, making corn a reasonably



Nematode damage in parts of a soybean field. LSU AGCENTER PHOTOS

good rotation crop for this nematode. However, I have seen cases where cotton was still severely damaged by Southern root-knot following corn. Corn is an excellent rotation crop for the reniform nematode because it is basically a non-host crop and can reduce nematode populations fairly well in a year.

Soil type can influence where reniform or Southern root-knot nematodes occur and cause injury to plants. Root-knot nematodes are usually found in coarse-textured soils such as sands, sandy loams and even silt loams. The greatest injury from this nematode is always in the areas of a field with the most sand. For producers who have had their fields measured with apparent electrical conductivity (ECa) using Veris technology, areas in a field with the lowest ECa values are where the damage is usually the greatest. Reniform nematodes tend to reach the highest population levels in more fine-textured soils. But they cause the greatest injury to plants in coarse-textured soils.

Even if you have not seen any symptoms of nematodes yet, populations can still reach very high levels during the early summer months, and damage can be expressed late in the growing season. Both cotton and soybeans may mature early or senesce when high levels of nematodes have built up in a field and some type of stress, such as drought, occurs. These early-maturing areas may yield poorly or begin to deteriorate before the rest of the field is ready for harvesting.

If you are experiencing nematode damage this year, be sure to plan ahead and develop some type of management plan for the future. Rotation is usually the best plan for dealing with nematode issues, but nematicides can also be used. §



Stunted area in cotton field from Southern root-knot nematode. Notice healthy cotton elsewhere in the field.



The combination of Southern root-knot nematode and Fusarium wilt on early cotton.



**ABOVE**, Southern root-knot nematode and galling on early cotton plants. **AT LEFT**, large numbers of egg masses of the reniform nematode on cotton roots, stained slightly red for visibility.



# Get ready for more bollworms in La. cotton

BY SEBE BROWN

## Cotton

Bollworm trap catches are highly variable across much of the cotton-growing regions of Louisiana. Trap catches at the Northeast Research Station, Macon Ridge Research Station and Red River Research Station are beginning to slightly increase from week to week. Louisiana typically experiences a large bollworm flight the week of July 4, and it appears this year will be no exception. However, Louisiana's corn acreage is staggered in maturity, which may create a longer — but less intense — bollworm flight.

Insecticide sprays based on egg lay may be prudent for some technologies and not others. Bollgard 3, TwinLink Plus and Widestrike 3 all contain the VIP3A gene. These insect-protection packages do not offer complete protection against bollworms; however, they do offer better protection than their second-generation counterparts (Bollgard 2, TwinLink and Widestrike). Sprays based on egg lay for the third-generation cottons are not recommended.

For producers who planted second-generation Bt cottons, the decision to spray based on egg lay is more difficult. Bollgard 2 and TwinLink both experienced field control failures with bollworms last year. Yet last year's bollworm pressure was very intense from the first week of July until August.

Individual fields and pressure may vary, but as a general rule, we need to give the technology a chance to work before making automatic applications, especially under light pressure. Bollgard 2 and TwinLink both contain Cry2 proteins. Insect bioassays conducted last year indicate a very high level of resistance to Cry1 but varying levels of resistance to Cry2. These pockets of resistance may or may not be experienced again this year, and Cry2 resistance does not appear to be widespread across our populations.

Ultimately, the decision to make an application based on egg lay should be made on the amount

of eggs and the presence of live worms in cotton. Be aware that as the season progresses and corn continues to mature, moths moving out of corn into cotton may have been exposed to multiple Bt toxins, so control in cotton may decrease. The LSU AgCenter bollworm threshold for cotton is 6 percent fruit injury with the presence of live worms.

Widestrike cotton (499, 312, etc.) — but not Widestrike 3 — should be managed similarly to conventional cotton. Widestrike contains Cry1Ac and Cry1F. Our bollworm populations are highly resistant to Cry1, and Cry1F is marginally effective against bollworms. All commercial Bt cottons are very effective against tobacco budworms.

Bioassay results from 2018 indicate that populations collected in late April from clover were highly resistant to Cry1 but highly susceptible to Cry2. These populations weren't selected in corn, and results may change as the cropping season continues.

Another thing to consider is the natural mortality of bollworm eggs. Bollworm eggs, when exposed to hot, dry weather, may desiccate before they become viable. Although this phenomenon isn't guaranteed, it may offer some welcome relief to cotton undergoing bollworm moth flights.

If an insecticide application is warranted, the use of pyrethroids is strongly discouraged. Louisiana bollworm populations have the highest level of pyrethroid resistance in the United States, and pyrethroid applications may not provide adequate control.

The LSU AgCenter recommends the diamide chemistry (Prevathon, Besiege) for control of bollworms in cotton. Beware that Besiege contains a pyrethroid. Using it may inadvertently flare secondary pests. Keep in mind that bollworms are cryptic feeders, and worms that have established in squares and bolls may not be controlled by diamides.

Finally, all insecticide applications, including ones targeting bollworms, benefit from adequate gallonage

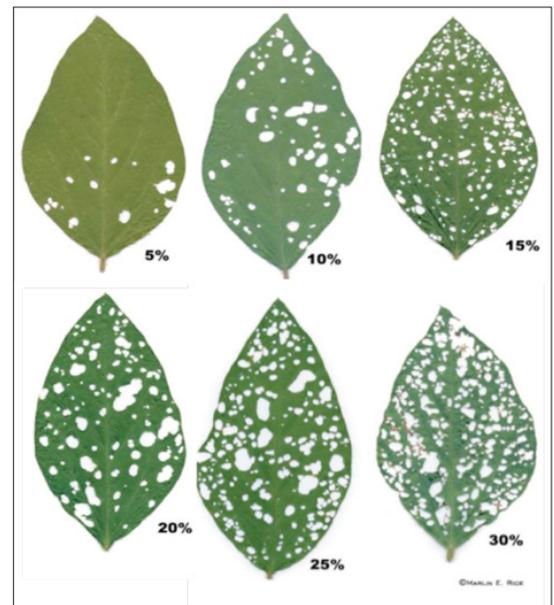
and correct nozzles. The proliferation of auxin-tolerant crops has forced many producers to adopt coarse-droplet nozzles. These nozzles work well for herbicide applications but limit efficacy of insecticides by reducing coverage.

The vast majority of our insecticides are coverage dependent, so investing in a set of hollow cones will help increase insect control in all crops. Insecticide applications should be made at a minimum of 10 gallons per acre by ground and 3 to 5 by air.

### Soybeans

Insect issues in soybeans have been minor thus far. There have been scattered reports of sub-threshold corn earworms in northeast Louisiana. Redbanded stink bug numbers have been very low in north Louisiana, and I've received one report of sub-threshold populations in soybeans from a field south of Interstate 10.

On a final note, soybeans can tolerate up to 20 percent defoliation once they reach the R1 growth stage. §



This illustration shows varying levels of insect damage to soybean leaves. COURTESY IOWA STATE UNIVERSITY EXTENSION

## Dry, hot summer keeping diseases at bay — but stay vigilant, watch for signs of trouble

BY TREY PRICE AND BOYD PADGETT

To this point, it has been a very quiet year on the foliar disease front in soybeans, which is likely due to hot and dry weather throughout much of the state. Soybeans currently range from vegetative stages to R5 in Louisiana. Hopefully the year will remain quiet, as producers have been battling weeds and drought.

Target spot has been observed in a few fields in northeast Louisiana; however, the disease has not elevated to alarming levels as it did in the northeastern corner of the state in 2016 (**Figure 1A**).



**Figure 1A.** Severe defoliation caused by target spot. LSU AGCENTER PHOTOS



Figure 1B.



Figure 1C.



Figure 1D.



Figure 1E.

Target spot symptoms include concentric rings within lesions surrounded by yellow halos (**Figure 1B**). Affected leaflets may turn yellow and fall off, with defoliation progressing from the lowest leaves upward (**Figure 1C**). Petioles in the lower canopy may exhibit small, purple, oval-shaped lesions caused by the target spot pathogen that closely resemble *Cercospora* leaf blight (**Figure 1D**). Symptomology may vary widely by variety (**Figure 1E**).

Target spot can be a problem when very susceptible varieties are subjected to optimal conditions, such as frequent rainfall events, for disease development. We were able to obtain target spot ratings in 2017 at the Macon Ridge and Northeast research stations. Please [click here](#) to consult these ratings to determine if your varieties are at risk.

Target spot is one of the most common foliar soybean diseases in the southern United States. It is observed annually, usually during late stages (R6 and beyond) and is rarely yield-limiting. Target spot usually does not occur until after canopy closure. Based on very limited data, fungicides — particularly SDHI compounds — may be effective on target spot.

However, applications must be made prior to canopy closure to deliver the product low enough in the canopy to slow upward progression. Based on ongoing research in other states, it is very likely that resistance to strobilurin fungicides exists in this pathogen population. The odds of a return on investment are low when treating for target spot, as severe disease pressure is the exception, not the rule.

Frogeye leaf spot (FLS) has not been found yet this year in Louisiana soybeans. However, susceptible varieties are still at risk. Selecting a variety with genetic resistance is key to managing FLS. Although

even the most resistant varieties may have a few spots, the disease will not get severe enough to reduce yields.

FLS ratings for the past several years are available by [clicking here](#) or from your regional specialist, research station or nearest pathologist. Using these resources, you can determine if your varieties are resistant or susceptible. Varieties resistant to FLS do not require fungicide applications for management.

A reactive approach is appropriate for managing FLS in susceptible varieties, as many available products containing triazole fungicides (Topguard, Domark, Quadris TopSBX and others) or thiophanate-methyl (Topsin and generics) are effective at delaying disease development and preserving yield. According to data collected from 2014 to 2017 at the Dean Lee, Northeast and Macon Ridge research stations, fungicides will significantly preserve yield if FLS severity only reaches 8 to 10 percent in the upper half of the canopy (**Figure 2**). This could indicate that,

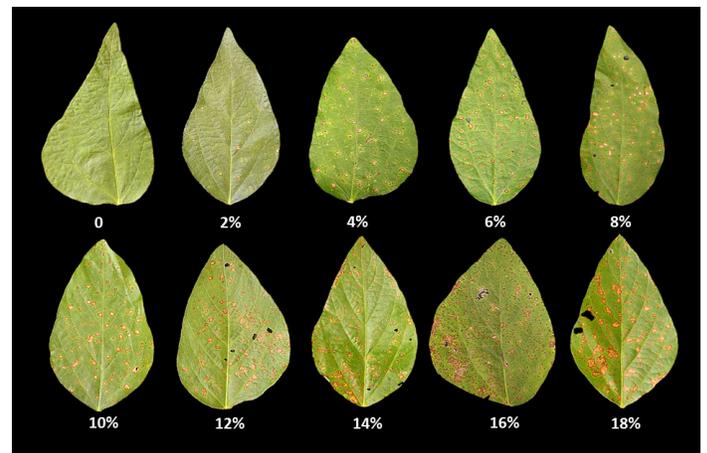


Figure 2. A frogeye leaf spot severity rating scale.

with disease severities lower than 8 to 10 percent, applications for FLS management may be delayed or avoided in susceptible varieties, depending on crop stage, prevailing environmental conditions and potential economic returns. Scouting is key to managing FLS. Note that strobilurin fungicide resistance exists in the FLS pathogen population; therefore, this fungicide type is not recommended for management.

*Cercospora* leaf blight (CLB) has not been observed yet in Louisiana. CLB symptoms are not observed until after R5. Symptoms usually start with purplish petiole lesions and leathery, purplish or bronze leaves in the upper canopy (**Figures 3A and 3B**). Leaves may be significantly blighted, and severe defoliation can occur (**Figure 3C**).

There are multiple species of *Cercospora* associated with CLB, and the distribution of these species in a given area is largely unknown. Also, the pathogens latently infect soybeans. That is, plants are infected long before symptoms occur, which complicates control measures.

We know *Cercospora* species are seedborne. But according to recent research, seed transmission does not appear to be a major contributing factor to disease initiation and development. Alternative hosts — including pokeweed, cotton and mulberry — have been discovered, which may play a larger role in epidemiology. The pathogens overwinter on soybean debris, so fields in soybean monoculture and reduced tillage systems may be at greater risk.

Approximately 90 percent and 33 percent of the CLB pathogen population, respectively, is resistant to strobilurin and thiophanate-methyl fungicides. Therefore, applications of products containing these actives alone are not recommended. Unfortunately, other fungicides (pre-mixes of strobilurins, SDHIs and triazoles) have not been consistent in reducing CLB incidence and severity.

No products are confidently recommended for management. Products that we have seen provide activity in the past, albeit inconsistently, include Approach Prima, Domark, Priaxor, Quadris Top SBX, Topguard and Trivapro. There are no guarantees that



**AT LEFT, Figure 3A**, petiole lesions.

**BELOW LEFT, Figure 3B**, early foliar symptoms.

**BELOW RIGHT, Figure 3C**, severe blighting.



All damage pictured here was caused by *Cercospora* leaf blight, also known as CLB.

any product will prevent or reduce the effects of CLB.

Official variety trial ratings ([posted online here](#)) may be available for your area, and there may be somewhat tolerant varieties available commercially. A multi-state effort is currently underway among breeders from three universities in the Mid-South to identify sources of varietal resistance to CLB. A variety trial with 45 candidates was planted this year in 15 locations in six states in the Mid-South.

The trial is currently being monitored for CLB development at four locations in Louisiana. In addition to these trials, two sets of 460 plant introductions (PIs) have been planted at the Dean Lee and Red River research stations to expand the search for sources of genetic resistance to CLB. There are four more sets in surrounding states that also are being monitored for CLB resistance. We hope to discover new sources of resistance and develop CLB-resistant varieties for Louisiana growers.



**AT LEFT, Figure 4A,** early aerial blight symptoms.  
**AT RIGHT, Figure 4B,** severe symptoms.

When we have frequent rainfall events, aerial blight can be a significant issue in some areas, particularly in fields with soybeans in rotation with rice (**Figures 4A and 4B**). Disease incidence and severity will be higher in fields where seed was drilled or broadcasted, resulting in thick canopies. Scouting also is key to managing aerial blight. Symptoms will first appear in the lower to midcanopy and are usually not evident in the upper canopy until disease is severe.

Some areas of southern Louisiana have strobilurin resistance in the aerial blight pathogen population, so a product containing an SDHI will be warranted for management. In cases where resistance is not present, most strobilurin fungicides are effective at slowing aerial blight and preserving yield. Generally, fungicide applications are not recommended after R6, but exceptions may be made in severe cases and optimal environmental conditions for disease development.

[Click here](#) to see a soybean fungicide efficacy table. §

## Why nitrogen matters, how to fix deficiencies

BY TODD SPIVEY

*This is the fourth in a 13-part series about the function of the essential nutrients in soybeans. Previous installments are posted at [louisianacrops.com](http://louisianacrops.com).*

### In the plant

Nitrogen (N) accounts for the greatest concentration of all mineral elements found in plants, ranging from 1 percent to 6 percent N by weight. However, in the minds of many, N use in soybeans often takes a back seat to many of the other essential nutrients due to the presence of biological N fixation in legume crops. Producers will often check for active nodulation in young soybeans, which typically indicate adequate N, and then forget about N for the remainder of the season.

Nitrogen fixation, or the act of converting atmospheric N (N<sub>2</sub>) into the plant-usable form of ammonium (NH<sub>4</sub><sup>+</sup>), is economically essential to soybean production. Soybeans use up to 5 pounds

of N per bushel per acre. This means that a crop yielding 50 bushels per acre could require up to 250 pounds of actual N. Nitrogen fixation occurs when bacteria (*Bradyrhizobium japonicum*) infect soybean root hairs, around which the soybean will develop a nodule (**Figure 1**, on next page).

Inside the nodule, the plant will supply energy in the form of sugars, carbohydrates and adenosine triphosphate (ATP) as needed for the fixation process. In return, the plant receives ammonium from the bacteria. This process can account for up to 80 percent of the N required by the plant.

Once in the plant, N is a constituent of many plant cell components, including chlorophyll and other proteins and amino acids. Adequate N is necessary for optimum photosynthetic activity and vegetative growth. Excess N, however, can reduce uptake of phosphorus, potassium and sulfur, and can delay maturity in many crops.

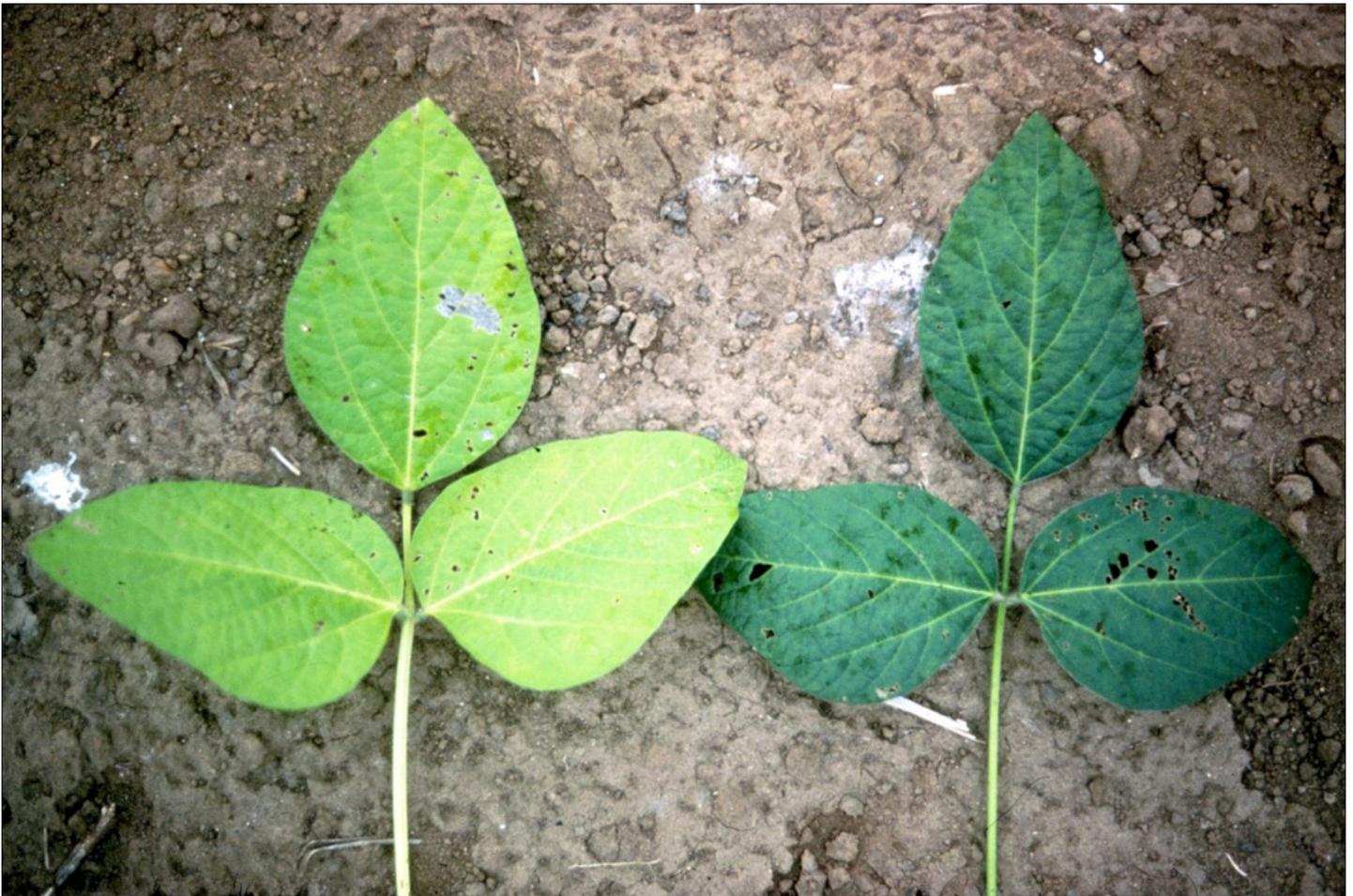


**Figure 1.** Active nitrogen-fixing nodules on soybean roots. COURTESY NORTH DAKOTA STATE UNIVERSITY

### ***In the soil***

Plants can use two forms of nitrogen from the soil: nitrate ( $\text{NO}_3^-$ ) and ammonium ( $\text{NH}_4^+$ ). The presence of either of these depends on a variety of factors, including pH and soil moisture, although nitrate is typically found at greater concentrations in most environments. Nitrogen is ever-changing in the soil, especially in the southern regions of the United States, and has a high potential to be lost due to leaching of nitrate, fixation of ammonium in clay minerals, immobilization by the decomposing of organic residues or volatilization of ammonia ( $\text{NH}_3$ ). For these reasons, soil N is rarely included in soil tests unless specifically requested. It should be assumed that supplemental N is required annually for most crops.

Although a legume crop such as soybeans can take up either nitrate or ammonium, the majority of N the plant will use will come from N fixation in the form of ammonium. The N-fixing bacteria can either be found in the soil if there is a history of soybean production or can be supplied on the seed at planting



**Figure 2.** Soybean nitrogen deficiency symptoms appear as chlorosis, beginning on the older leaves. COURTESY IPNI, N.R. USHERWOOD

through various commercial inoculants. Infection of the roots, nodulation and subsequent N fixation can be affected by myriad factors, including soil salinity, low pH, extremely low or high temperatures and drought stress.

### **Deficiency symptoms, corrections**

Symptoms of N deficiency in soybeans typically begin in older leaves as the available N is remobilized in the plant to young tissues. Symptoms include light green to yellow foliage on older growth, with progressing symptoms on new growth as the deficiency worsens. Nitrogen-deficient soybeans will have markedly reduced vegetative growth and fewer leaves, resulting in reduced yield and quality.

Because the majority of the plants' N will come from N fixation, a deficiency may not always directly stem from a lack of N. In some cases, it is because of a lack of nodulation. This often is a result of poor inoculation due to low pH, ineffective seed inoculation prior to planting or poor environmental conditions at planting. Regardless of the underlying cause, supplemental N must now be provided to maintain the remaining yield potential. With the understanding that soybeans require up to 5 pounds of N per bushel per acre, producers must decide how much N to provide based on the realistic yield potential of their individual field. If an N application is to be made due to poor nodulation, multiple applications will often be required throughout the growing season. Please reach out to your local AgCenter agent for help with these decisions on a field-to-field basis.

To ensure adequate inoculation and nodulation prior to the growing season, producers should consider the following situations when deciding whether they need to inoculate the seed before planting. Molybdenum should always be added as a seed treatment when pH falls below 6.2, and a commercial inoculant is recommended in fields with a pH of 6.0 or less. Growers should include seed treatment inoculants in fields without a history of soybeans in the previous two to three years and in environments that are not conducive to bacterial survival. In Louisiana, soybeans grown in three-year

rotations with sugarcane or in flooded rotations with rice and crawfish should have a commercial inoculant at each planting.

There are conflicting opinions on using supplemental N and its effect on soybean yield. Research from the LSU AgCenter has shown that supplemental N does not consistently provide increased yields. Research also has shown high levels of soil nitrate can reduce nodulation and N fixation. The concern is that fertilizer N at any amount greater than the small rates used in some starter fertilizers can delay the development of active nodules beyond the amount of time in which the starter fertilizer is used, resulting in less plant-available N in the interim.

To check for active nodules, begin scouting when plants have two to three fully unfurled trifoliates. Plants should be dug and not pulled out of the ground because nodules will easily be knocked off the plant. To remove excess soil, rinse the plants in water. Plants should have at least five to 10 nodules at this stage and at least 15 to 20 nodules just prior to R1 (first bloom). Nodules that are actively fixing N will be pink to red when cut open, while those that are green to brown are not. §

## **Takeaways**

- ✓ N is found in the greatest concentration of all mineral elements in plants and is necessary for photosynthetic activity and vegetative growth.
- ✓ Nitrogen is ever-changing in the soil and has a high potential to be lost. Nitrogen fixation is necessary for adequate supplies in soybeans and can be reduced by high soil salinity, low pH, extreme temperatures and drought stress.
- ✓ Nitrogen deficiency symptoms include chlorosis of older foliage.
- ✓ Talk with your local AgCenter agent to develop a season-long plan to correct N deficiencies due to inoculation failure. Set a realistic yield goal before deciding how much N to apply.
- ✓ Soybeans grown in rotation with sugarcane or rice and crawfish need an inoculant at each planting.

# Learn about the 8 soybean ‘R’ growth stages

BY TODD SPIVEY

Understanding soybean growth stages is critical to managing the crop and planning inputs and applications. Being knowledgeable of each growth stage will allow you to tell others — like consultants and AgCenter agents and specialists — how your crop is progressing and help them better understand what your crop may be facing.

## R1 (beginning bloom)

Three to five days to R2



LSU AGCENTER PHOTOS

Open flower at any node on the main stem. Indeterminate plants start flowering toward the bottom and flower upward. Determinate plants flower closer to the top and in both directions.

## R2 (full bloom)

10 to 15 days to R3



The plant now has one open flower in the uppermost (youngest) two nodes with a fully developed leaf.

## R3 (beginning pod)

Seven to 9 days to R4



Pods are 3/16 inch (5mm) long on one of the four uppermost (youngest) nodes with a fully developed leaf.

## R4 (full pod)

Eight to 10 days to R5



Pods are 3/4 inch (2cm) long on one of the four uppermost nodes on the main stem with a fully developed leaf. Almost 50 percent of N uptake occurs around this stage.

## R5 (beginning seed)

15 to 20 days to R6



Seeds now 1/8 inch (3mm) on one of the four uppermost nodes on the main stem with a fully developed leaf. Shallower roots will begin to die back, while deep roots will grow until past R6.

## R6 (full seed)

20 days to R7



Pod contains green seed that fill the pod cavity on one of the four uppermost nodes on the main stem with a fully developed leaf. Most nutrients taken up at this point. N fixation continues until R6.

## R7 (beginning maturity)

Eight to 10 days to R8



One pod on the main stem has reached mature pod color.

## R8 (full maturity)



95 percent of the pods on the plant have reached mature pod color. Five to 10 days before optimum harvest moisture is reached. §

# Follow progression of corn milk line to blacklayer

BY DAN FROMME

Staging kernels within R5 is possible by identifying the milk line on the non-embryo side of the kernel or by slicing the kernel longitudinally and looking inside. The starchy solid interior portion moves from the top of the kernel toward the cob as the kernel matures. Kernels within R5 are specifically designated by the progression of the milk line: one-quarter, one-half or three-quarters. Progression of the milk line and time required between each quarter vary due to temperature, available moisture and hybrid maturity with an expected trend. The time needed in each R5 stage is not the same for each of the quarter milk line positions (**Table 1**).

Based on Louisiana growing conditions, you still need about 3.8 inches of water from the R5 to R6 time period. At one-half milk line, only 90 percent of total dry matter has been accumulated. Running out of water at this time would result in a 10 percent yield reduction.

Following the progression of the milk line during R5 is a good way to estimate when a field will reach physiological maturity or blacklayer. Once this stage is reached, any type of stress has little effect on grain yield. §



**FROM LEFT**, R5/dent; R5.5/half milk line; R6/physiological maturity or blacklayer. LSU AGCENTER PHOTOS

**Table 1.** Progression of milk line during R5 with approximate percent moisture, dry matter, growing degree days (GDD) and days for each substage.

R Stage	% Moisture	Dry Matter (% of Total Dry Weight)	Average per Substage		Water Use to Maturity (inches)
			GDD <sup>1</sup>	Days <sup>2</sup>	
5.0 (Dent)	60	45	75	3	3.80
5.25 (1/4 milk line)	52	65	120	4	2.85
5.5 (1/2 milk line)	40	90	175	6	1.90
5.75 (3/4 milk line)	37	97	205	7	.95
6.0 (Physiological Maturity)	35	100			0.0
Total (Average)			575	20	

<sup>1</sup>Growing degree days. Number of growing degrees days per substage based on corn growth and development publication, Iowa State University, PMR 1009, March, 2011.

<sup>2</sup>Average number of days for each substage based on Louisiana growing conditions and temperatures.

## Estimating corn yield potential

BY DAN FROMME

Every year around the milk or “roasting ear” stage, we begin to wonder how good the corn crop is going to be. This especially holds true in years that corn yields are looking really good.

[Click here](#) to see how to estimate yield potential of corn. §

## Cotton market news: Texas, China, more

BY MICHAEL DELIBERTO

The June U.S. Department of Agriculture World Agricultural Supply and Demand Estimates (WASDE) report was fairly neutral to cotton, eliciting a slightly bullish reaction in the market. Cotton exports for the 2017-18 crop were raised to 16 million bales, strongly signaling the market’s demand for high-quality cotton.

The USDA cited above-average late-season shipments of old-crop cotton as one of the principal drivers for the revision in cotton export levels. With the increase in use (exports), ending stocks for 2017-18 were reduced to 4.2 million bales. Some experts in the cotton trade have suggested the USDA’s export number could climb slightly higher, thus further reducing the level of domestic ending stocks.

As prices for both July and December contracts rise, the issue of persistent, sustained demand arises. It could be surmised that speculative interests are driving the cotton price based on global demand needs rather than market fundamentals. Therefore, increased speculative interests could underpin price and increase the possibility for downside price risk.

With that being said, growers should consider having a majority of their expected production booked at current price levels as the market has presented this opportunity.

Demand for old-crop cotton has slowed, and some industry analysts think this is a result of the increase in price. High-quality cotton is being sold, but lower-grade cotton is overvalued at current prices.

Weather in West Texas is the big question mark on the balance sheet for the 2018-19 crop. Will recent rainfall in Texas help the germination of the dryland crop? It will certainly help, but the effects on cotton production will not be known until the USDA National Agricultural Statistics Service crop report is published in August. This uncertainty in the rain’s effect on Texas cotton may suggest the market is building a weather premium into itself — but one cannot ignore the aforementioned speculative interests coming into the cotton market.

Futures prices on the December contract are supported above the \$0.80 level sustained in mid-May and the \$0.85 level heading into June. These support levels may change as growing conditions improve domestically, thus easing market fears of possible tightened cotton supplies. The contract high occurred in early June at \$0.938.

This sharp run-up in prices can be attributed to ongoing drought conditions in West Texas and speculative interest on increased Chinese demand. Production conditions (weather) will be a key market driver, with robust exports sustaining the momentum. Beginning the week of June 18, cotton-producing areas in West Texas received much-needed rain, potentially spurring growth.

However, time will tell. As weather premiums erode in the futures market, the potential for prices to retreat from high levels previously exhibited could come about. The season average farm price for new-crop cotton was raised in the June 2018 WASDE report by \$0.05 on both ends of the price range, producing a midpoint farm price of \$0.70 per pound. This farm price is \$0.02 higher than the 2017-18 estimate.

Because China continues to sell cotton from its reserves, that country's demand for high-quality cotton is projected to increase. This increase in demand, coupled with concerns over production conditions in cotton-producing provinces, are fueling speculative interest in the market. In recent weeks, the USDA Foreign Agricultural Service has reported cotton sales to China, a development that lends credence to China's increase in demand for high-quality cotton.

If China imports additional cotton — specifically, U.S. cotton — this could reaffirm trade negotiations pressuring China into importing more U.S. farm goods. With trade rhetoric dominating the news, this would be a much-needed dose of positivity for the domestic farming sector, albeit shrouded in uncertainty.

The international outlook for cotton is currently focused on production (supply). Projected production

is lowered for China, Pakistan and Australia. These reductions offset, in part, higher production for Brazil. The USDA is forecasting no increase in India's cotton production for 2018-19, but weather concerns (late monsoon) warrant some consideration. World ending stocks also are lowered from a year earlier; however, stocks outside of China are expected to rise for the third consecutive year.

Currently, the news cycle is dominated by trade headlines, particularly U.S. trade tensions with China. One must bear in mind that China purchases a sizeable amount of cotton from the U.S. Any tensions between the two nations could affect the trading patterns that are extant between the U.S. and China, possibly even causing China to source large amounts of their cotton demand elsewhere. This could allow other global market producers of cotton, such as India, to increase their market access for cotton in the Chinese market. §

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## It's time for decisions on programs, base acres

BY MICHAEL DELIBERTO

For the 2018 crop year, cotton producers and farm owners will be faced with multiple decisions that center on program choice and base acre allocation for cotton. These decisions will be somewhat familiar, as they will be similar to decisions made prior to the 2014 farm bill as regards base reallocation and covered commodity program election. The key difference is these decisions pertain solely to cotton, and even more specifically, seed cotton.

The LSU AgCenter Department of Agricultural Economics and Agribusiness has developed two interactive decision tools for cotton producers. One decision tool is a seed cotton price loss coverage (PLC) payment estimator, and the second is a generic base allocation calculator.

These Microsoft Excel worksheets allow producers to input their own price expectations, program yields and base acreages so the potential payment estimate and generic base acreage configuration obtained reflect their personalized data. Additional

information on the seed cotton program can be found by [clicking here](#).

In April, the U.S. Department of Agriculture Farm Service Agency provided information on a projected timeline for generic base acre allocation and yield update for the seed cotton program. The tentative timeframe for farm owners to make final base allocation and yield update decisions was set for late summer 2018. Program election will take place in the fall. It is imperative that producers check with their local FSA offices for updates.

This contribution provides an update on the yield update process for seed cotton. Recall that the seed cotton program is a combination of cotton lint and cottonseed. Lint and seed therefore must be calculated as a single commodity with a singular price and yield component.

The current farm owner has decision-making authority during the seed cotton program yield

update process, with the decision being applicable to the 2018 crop year. The payment yield update can be made regardless of the subsequent program selection (PLC or ARC) for seed cotton.

Two yield update options are presented, the first being to retain the farm's countercyclical (CC) yield as of Sept. 30, 2013, multiplied by a factor of 2.4. The second option allows the yield to be updated to 90 percent of the simple average of upland cotton yield per planted acre on the farm for each of the 2008 to 2012 crop years multiplied by 2.4. Years when cotton was not planted are not considered for the update calculation.

Under current farm bill provisions, the PLC program does not permit the establishment of yield by practice (irrigated and non-irrigated). The seed cotton PLC program yield is based on the farm's total production divided by the total irrigated and non-irrigated planted acres. The yield will only be used under the PLC program to calculate any potential PLC payments for seed cotton base acres on the farm.

The 2018 crop year also signals the end of generic base acres. As an amendment, farm owners have a one-time option to convert or reallocate the generic

acres on their farm. There are two options. The first option is to convert 80 percent of the generic acres on the farm to seed cotton base acres. The remaining 20 percent of generic acres would then be classified as unassigned base. Note that in some instances, those farms that have overplanted their generic base for the 2009 to 2012 period may allocate 100 percent of their generic base to seed cotton base.

The second option is to allocate generic acres on the farm based on the farm's proportionate four-year planted history from 2009 to 2012, including cotton. A farm cannot increase the total amount of base acres through this process.

For farms that have no planting history of covered commodities from 2009 to 2016, generic acres will be converted to unassigned base.

Per the USDA FSA, "only generic base acres are allowed the opportunity to allocate base acres and update PLC yields. At least .01 acres of the farm in the years 2009 through 2016 must have been planted or prevented planted to a covered commodity, including upland cotton, to be allowed the opportunity to allocate base acres and update PLC yields." §

## 160 attend new field day expo in Winnsboro

The LSU AgCenter hosted its first-ever field day expo earlier this month (June 19) in Winnsboro, expanding the concept of a traditional row crop field day to include information on horticulture programs, wildlife and other topics.

"One of our main goals of the event was to provide a variety of educational programs and bring as many of our clientele and stakeholders through the station as possible," said Tara Smith, director of the central and northeast regions of the AgCenter.

[Read more here.](#) §



AgCenter weed scientist Donnie Miller, right, listens as field day expo attendees try to guess what kind of herbicide caused the injury to the soybeans seen at left. LSU AGCENTER PHOTO

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