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Tarnished Plant Bug Management (*Phillip Roberts*): Tarnished plant bug has long been considered an occasional pest of cotton in Georgia and the lower Southeast. However, plant bug infestations have been more common in recent years potentially requiring management prior to bloom and after bloom.

Pre-Bloom Management: management is focused on adult plant bugs migrating into cotton from alternate host plants. In addition to monitoring square retention, a 15-inch diameter sweep net should also be used to sample adult plant bugs. Historically, early planted cotton is at higher risk of pre-bloom plant bug infestations. The goal of plant bug management prior to bloom is to maintain 80 percent retention as we enter bloom. Plants with over 80 percent retention at first bloom have maximum yield potential.

Square Retention Threshold: apply insecticide when plants are retaining less than 80 percent of pinhead squares and numerous plant bugs are observed. It is a good habit to periodically pull up plants and monitor whole plant retention.

Sweep Net Threshold: first 2 weeks of squaring: 8 plant bugs per 100 sweeps, beginning the 3rd week of squaring the threshold is raised to 15 plant bugs per 100 sweeps.

Insecticide Use Pre-Bloom: primary insecticides used for plant bugs during squaring include Transform, Centric, and imidacloprid. When targeting plant bugs, aphid populations should also be considered. Transform provides the most consistent control of both plant bugs and aphids, followed by Centric, and then imidacloprid which provides fair control of each pest. In situations where a second application targeting adult plant bugs is made, Diamond at 6 ozs/acre should be added to the adulticide targeting the migrating adults. Diamond only has activity on immature plant bugs and the 6 oz rate will provide about 2 weeks residual activity and suppress hatching plant bug nymphs. A second application of Diamond should be applied 2 weeks later. Diamond is not a cure all, but is an important tool for plant bug management programs. The use of organophosphates should be reserved until after bloom. In ThryvOn cotton, adult plant bugs may cause economic damage so scouting is still important when using this technology. Depending on the intensity and duration of adult migration, it is possible to have threshold populations reinfest fields relatively quickly. Don't assume you had a treatments failure if you see plant bugs in the field 7 days after application. Most insecticides we use for control of adult tarnished plant

bugs only have a few days of residual activity. If you are maintaining good retention following a spray then your treatment was a success and an additional treatment would be justified.

Post Bloom Management: management is focused on some migration of adults into cotton during bloom, but primarily management of immature plant bugs or reproducing populations in a given field. Plant bug control with pyrethroids was poor in 2024 and results of bioassays conducted in 2025 suggests pyrethroids will not provide acceptable control of plant bugs in the Coastal Plain of Georgia. Drop cloths are the best sampling tool for monitoring immature plant bugs. In addition to feeding on small squares, plant bugs may feed on larger squares and small bolls. Large squares which are damaged will result in "dirty" blooms. Dirty blooms suggest you have immature plant bugs and a drop cloth should be used to sample populations. Plant bug feeding on small bolls results in callous growths or warts in the inner surface of the boll wall and in severe cases boll abortion.

Drop Cloth Threshold: 3 plant bugs per 6 row feet.

Insecticide Use: pyrethroids are commonly used for stink bug control during bloom but will not provide acceptable control of plant bugs. For low to moderate infestations, a low rate of an organophosphate (0.5 lb Orthene or 4 ozs Bidrin) should be added to highest labeled rates of a pyrethroid. If thresholds are exceeded and immature plant bugs are observed Diamond should be added. In high pressure situations full rates of Bidrin or Orthene should be used. Transform is also an option but will need to be tank-mixed with a pyrethroid to achieve stink bug control. Coverage and penetration of the canopy is important, especially when dealing with "embedded" immature plant bug populations. In problematic fields, back to back applications on a 4-5 day interval may be needed.

ThryvOn and Plant Bugs: in addition to thrips, ThryvOn also has activity on tarnished plant bugs. Insecticide resistance and other changes in the landscape have increased plant bug pressure in some areas of the southeast. Like thrips, adult avoidance plays a role in the reduced plant bug populations and limited injury in ThryvOn cotton. In addition to feeding less, adult plant bugs likely deposit fewer eggs in ThryvOn. However, threshold populations and economic damage from tarnished plant bugs in ThryvOn cotton have been observed. As a result, growers must maintain scouting activities for plant bugs in ThryvOn cotton and be prepared to make timely insecticide applications if thresholds are exceeded.

Considerations for side-dress nitrogen application in cotton (*Henry Sintim*): Although nitrogen (N) is a primary essential nutrient, it is not included in routine soil test analyses in Georgia. The sandy soil nature and high rainfall conditions in the state cause the available forms of N, especially nitrate, to readily leach and not accumulate in the soil. It needs to be mentioned though that soil nitrate levels above 50 lbs/ac have been observed in fields with a prolonged history of organic amendment, coupled with other integrated soil health management systems. As N is susceptible to losses, the University of Georgia Extension recommendation is to split-apply N in cotton. The total N rate for cotton is based on soil type, previous crop, growth history, and yield potential. The base N rate for 750; 1,000; 1,250; and 1,500 lb/ac lint yield is 60, 75, 90, and 105 lb/ac N, respectively, with the recommendation for 1,250 and 1,500 lb/ac lint yield assuming irrigated conditions. Recommended adjustment to the base rate is as follows:

Factors to increase the base N rate by 25%	Factors to decrease the base N rate by 25%
<ul style="list-style-type: none"> Farming in deep sandy soils. 	<ul style="list-style-type: none"> Cotton following a leguminous crop such as peanuts or soybeans.
<ul style="list-style-type: none"> The previous crop was cotton. 	<ul style="list-style-type: none"> Cotton following a good establishment of winter legumes, such as clover or vetch.
<ul style="list-style-type: none"> There is a history of inadequate stalk growth. 	<ul style="list-style-type: none"> There is a history of rank or excessive vegetative growth.

The current recommendation is to apply between 25% to 33% of the total N rate at planting, and the remainder as side-dress between the square and 1st week of bloom stages. Make side-dress application closer to the square stage if the plant is showing stunted growth and the leaves are chlorotic (pale, yellow, or yellow-white). Side-dress application closer to the 1st week of bloom is suggested if the crops show good vigor with dark green foliage. If possible, a two-way side-dress application (half at the square stage and the remaining half between the 1st and 2nd week of bloom) would work fine. This would be beneficial in seasons of intensive rainfall conditions at critical stages.

Studies conducted across six production conditions in Midville and Camilla showed cotton can tolerate early-season nutrient stress. Skipping initial fertilizer application until the square stage did not significantly affect cotton yield at all production conditions. The previous crop was peanut under four production conditions and corn under two production conditions. However, skipping at-planting N is not recommended if the previous crop was not a well-established legume crop or the initial soil inorganic N (sum of nitrate-N and ammonium-N) level within one week of planting is not above 20 lbs/ac. The figure below shows the seasonal N uptake of cotton in Texas (A) and California (B). As can be seen, N uptake is very marginal at the early growth stages and increases rapidly after the square stage. The ability to tailor N availability with crop demand will enhance N use efficiency.

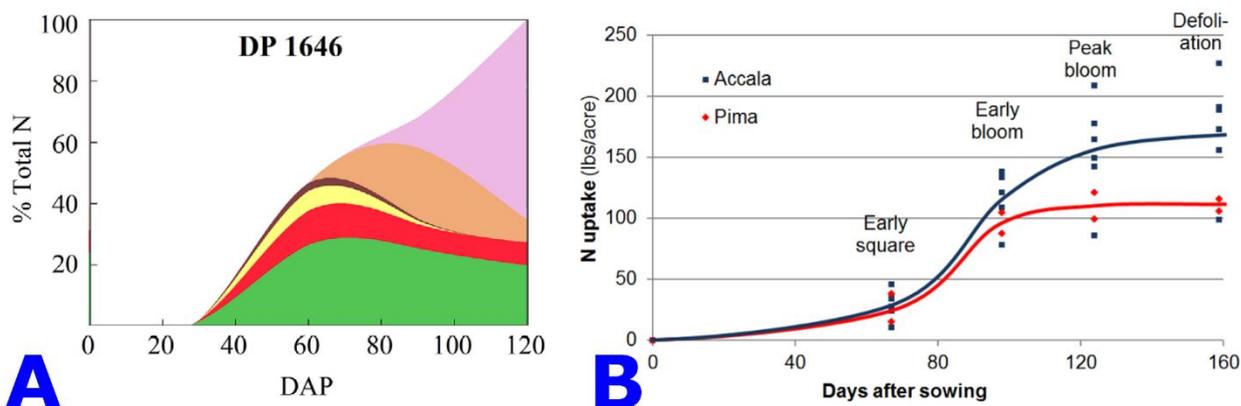


Figure: Seasonal N uptake in cotton reported (A) Texas [5] and (B) California [6].

Crops under the combined application of nitrate and ammonium sources of N tend to perform better than the application of either source. Urea ammonium nitrate (UAN), ammonium nitrate, and urea are common sources of N for side-dress application. Due to potential hazards, ammonium nitrate is sometimes blended with other compounds, such as sulfur (S). Thus, there are various formulations of ammonium nitrate, which all tend to work fine. The choice of side-dress fertilizer should be based on accessibility, cost, efficacy, and ability to safely handle the product. As S application is routinely recommended, the value of S should be accounted for in determining the cost of side-dressed N sources.

Plant nutrient uptake is regulated by several abiotic and biotic factors. While not often, N deficiency could occur regardless of applying the recommendation rate. It is important to therefore monitor the nutritional health of the crop, especially between the square stage and 3rd week of bloom with tissue test analysis. The recommended tissue N level is between 3 to 4.5%. Low N rates can reduce yield and quality while excessive N rates can cause rank growth, boll rot, delayed maturity, difficult defoliation, and poor quality and yield. Thus, ensuring an optimum supply of N is critical. Nitrogen deficiency in cotton occurs as chlorosis of the leaves and red leaf blades when deficiency becomes severe. Deficiency appears first on older (lower) leaves, and plants show reduced growth, height, boll size, and an increase in boll drop.



Figure: Photos of N deficiency symptoms in cotton. Photo credits: Yara US (A and B), and North Carolina State University (C).

Be prepared – Areolate Mildew and Target Spot (*Bob Kemeraït*): The Boy Scout motto is “Be Prepared”. We do not need to worry about target spot or areolate mildew until the cotton begins to bloom, and likely not until several weeks after first-bloom. However, because both diseases can easily take yield from a cotton crop and because fungicides (which can be costly) are often used to protect against yield loss, it doesn’t hurt to begin to prepare now for a fungicide program that may, and I emphasize “may”, be deployed later. When is “later”? “Later” occurs no earlier than first-bloom for all growers and not until target spot is found in a field or until areolate mildew is reported locally for most growers.



I have observed **Areolate mildew** nearly every year since I arrived in Georgia 25 years ago, but it has been especially severe in Georgia since 2017. Areolate mildew has historically been confined to southeastern Georgia east of I-75; however, it can now be a problem for cotton growers across the Coastal Plain. In the past I had assumed that the fungus *Ramulariopsis gossypii* was the causal agent, as that was the pathogen listed in the literature at the time. However, it seems that the pathogen *Ramulariopsis pseudoglycines*, reportedly originating from Brazil, is the more important pathogen now. The reason for the expansion of Areolate mildew is unclear; however, it may be related to the introduction of a new pathogen or wide-spread planting of more-susceptible varieties.

Areolate mildew is generally not observed in Georgia's cotton until later in July or in early August; however this disease can develop quickly after initial infection. Until 2017 this disease typically arrived too late in the season to cause any damage (in fact, late-season defoliation may have been a benefit), and use of fungicides had not been warranted. Today, based upon data from recent field trials, judicious use of the same fungicides used to control target spot is warranted in the management of areolate mildew. Note that while azoxystrobin has been a good fungicide for management of areolate mildew, that has changed in recent years for some locations because of fungicide resistance. Growers within four weeks of defoliating their cotton need not worry about managing areolate mildew. Where areolate mildew occurs in a crop with anticipated defoliation a month or more away, and weather is favorable for continued development and spread of the disease, use of a fungicide is beneficial to protect yield. Timely use of a fungicide has protected between 100 and 250 lb/lint per acre in large-plot, on-farm studies.



Target spot is a foliar disease of cotton caused by the fungal pathogen *Corynespora cassiicola*. The symptom most characteristic of this disease are numerous lesions, often with concentric rings (hence the name “target spot”) that develop first on the leaves lower in the canopy. The target-like spots initially develop lower in the canopy for several reasons. First, these are older leaves have had longer exposure to the fungal spores. Second, the pathogen survives in the debris from previous cotton crops, so the spores can be spread from the debris to the lower leaves through rain splash and irrigation. Third, spores of *Corynespora cassiicola* require a prolonged leaf-wetness periods (perhaps as long as 12-14 hours) for infection to occur, which is most likely deeper in the canopy where humidity is higher. Significant defoliation can happen within two weeks after the first spots are observed if conditions are favorable (warm, humid, and moist). Boll development can be affected when pre-mature defoliation removes the leaves feeding younger bolls.

The initial development of target spot disease deeper in the canopy helps to differentiate this disease from other foliar diseases that affect cotton. Ascochyta “wet weather” blight can also produce spots with concentric rings; however this disease often develops in younger cotton and is not restricted to leaves in the lower canopy. Stemphylium leaf spot and Cercospora leaf spot are most often associated with a nutrient deficiency in the plant (typically a potassium deficiency) and appear first in the upper leaves (often associated with reddening and yellowing of the leaves) rather than in lower leaves. Frequent rains can increase the risk for all types of spots on cotton, but potentially for different reasons. Rain and high-humidity increase create more-favorable conditions for infection and spread of target spot. Heavy rains can leach potassium from the root-zone of the cotton crop, thus increasing the risk for Stemphylium leaf spot and Cercospora leaf spot. Target spot is a disease that most often affects cotton with a thick canopy and high yield potential; target spot rarely (very rarely) affects cotton with poor growth or cotton under drought stress.

While some cotton varieties may be more susceptible to target spot than others, no cotton varieties are resistant to this disease. As previously mentioned, target spot is most likely to affect a crop when conditions (irrigation, rainfall, soil fertility) produce lush plants with substantial canopies. One of the biggest challenges in protecting a cotton crop with a fungicide against target spot is that coverage is needed deep the canopy. However, getting sufficient fungicide coverage there is a real challenge but can be improved by 1) increasing spray volume, 2) increasing spray pressure, and 3) making the first fungicide application early enough before the canopy of leaves is fully closed.

UGA Extension does not have a blanket recommendation for treating a cotton crop with a fungicide to control target spot (or areolate mildew), though when this disease occurs early enough, growers can expect losses of lint to reach 200 lb/A (or more). Growers are advised to begin carefully scouting a cotton crop at the approach of the first week of bloom, checking the lower canopy for tell-tale symptomatic leaves. If target spot is not identified after careful scouting, growers may delay a fungicide application and scout again in the coming weeks. From our research, the best timing of a fungicide application is often during the third week of bloom; where disease pressure is high, a second application may be beneficial two weeks later. Fungicides are not needed after the sixth week of bloom.

As in the slide below, there are a number of fungicides labeled for use on cotton to protect against target spot and areolate mildew. For target spot, Priaxor has been the most important fungicide for growers to consider. Headline has also been quite effective and now Miravis Top seems to be among the most effective fungicides for management of target spot.

BE PREPARED

Fungicides for Foliar Diseases of Cotton

- **Headline (pyraclostrobin) (6 fl oz/A)** 
- **Twinline (pyraclostrobin + metconazole) (7-8.5 fl oz)** 
- **Quadris (azoxystrobin) (6 or 9 fl oz/A)** 
- **AzoxyStar (azoxystrobin) (6 or 9 fl oz/A)** 
- **Tebuzol 3.6F (tebuconazol) (6-8 fl oz/A)**
 - Labeled for control of southwestern cotton rust
 - *Puccinia cacabata*
- **PROLINE (prothioconazole) (5.0-5.7 fl oz/A)** 
- **PRIAXOR (4.0-6.0 fl oz/A)** 
- **MIRAVIS TOP (13.6 fl oz)** 
- **Elatus** 
- **TOPGUARD (flutriafol)** 

Fallow fields and summer covers (Taylor Singleton): By the time this newsletter reaches you, hopefully you are close to finishing planting for 2025. With predictions of a tough year ahead, I've heard of several fields that will remain fallow this growing season, and some folks have expressed interest in learning more about summer cover crop options to help keep the soil covered.

Like planting cool-season cover crops in the fall, if you're thinking about planting a summer cover crop, you need to understand what your goals are with the field, as they are likely a little bit different than a fall cover crop planting:

- **Soil erosion** – The most obvious reason to keep the soil covered is to ensure that the soil remains in place. When we lose topsoil, we lose organic matter and soil structure, which impacts our ability to grow a crop over time. [A loss of only 1/32 inch of topsoil can represent a 5 ton/acre soil loss](#) (link to USDA fact sheet). Think about all the time (and money) it takes to “rebuild” your field...this is one factor that can significantly impact our ability to remain profitable over time!
- **Organic matter** – Having (and adding) organic matter to the soil whenever we can is hugely beneficial for our cash crop systems. Not only does organic matter feed the earthworms and microorganisms (= soil health benefits), but it also improves the overall physical condition of the soil, including tilth, soil aggregation, water infiltration, reduces soil crusting, improves nutrient cycling, and improves nutrient retention.
- **N cycling** – In a field that would likely remain fallow otherwise, this is one of the biggest values that a summer cover can bring to the table...helping keep the N around that would normally be lost to leaching. While actively growing, the summer cover crop can take up N (and excess water) from the soil and add it to its tissues. Over time as the residue decomposes or is incorporated at the end of the growing season, that N is then returned to the soil and is available (mostly) for future crops.
- **Pest suppression** – The cover crop-pest dynamic can be tricky when considering a summer cover crop, especially since the warm/wet/humid summer months are typically when we see our biggest pest pressures overall. Having a ground cover will greatly help with weed suppression, suppressing growth of weeds that would normally be adding weed seed back to the soil seed bank during this fallow period. Once terminated, the residues themselves can also act as a mulch to continue the suppression benefits. For insects and diseases however, cover crops can positively or negatively benefit these pest cycles. Often this is species dependent, so careful consideration should go into understanding the species being planted and how it may impact pests that have been observed historically in the field.
- **Wildlife benefits** – If you are a wildlife enthusiast, summer cover crops can offer a way to support wildlife populations through food and shelter. (Just remember to always follow state wildlife and hunting regulations when it comes to planting and management.)

Choosing a summer cover crop species to plant will depend greatly on your budget and overall goal for the field. If N benefits are the objective, then legume species (alone or in a mixture) will be the best choice; if weed suppression or heavy residues are your goal, broadleaves or grasses will provide the greatest benefit.

There are many options to choose from, however several commonly utilized species in the Southeast are included in the table below, along with broadcast and drilled seeding rates (lb/a; use these as a starting place and adjust up or down as desired). Clicking the species name in the table (below) will take you to a fact sheet compiled by the Southern Cover Crop Council, providing a more in depth look at the species and its characteristics.

Grains/Grasses		
	<i>Broadcast (lb/a)</i>	<i>Drilled (lb/a)</i>
Browntop Millet	25-30	14-20
Japanese Millet	12-15	10-12
Sorghum	25-30	15-20
Sorghum Sudangrass	25-30	15-20
Pearl Millet	12-15	10-12
Legumes		
	<i>Broadcast (lb/a)</i>	<i>Drilled (lb/a)</i>
Cowpeas	80-100	30-90
Sunn Hemp	25-48	20-40
Velvetbean	Not recommended*	20-40
Broadleaves		
	<i>Broadcast (lb/a)</i>	<i>Drilled (lb/a)</i>
Buckwheat	90-100	40-60
Sunflower	Not recommended*	10-40

*Not recommended unless timely moisture is available for stand establishment. Excellent seed to soil contact is essential for establishment.

We are currently working to update cover crop resources available through UGA Extension, for both cool-season and warm-season species. Please contact your county extension agent if you have any questions.

Investigating the use of Artificial Intelligence to monitor cotton insects (*Wade Parker*): While I usually write my article on any given agronomic concept or situation occurring in East Georgia; I want to take a few minutes to discuss an entomology project in-progress. About 18 months ago, a group of researchers from Georgia Southern approached me about the use of AI in pest monitoring for cotton. The project uses traps that are equipped with lures to attract species of specific moths i.e., beet/fall armyworms and stink bugs. The armyworm lures were always a given, but I strongly encouraged them to modify the traps for stink bugs. Once the moths fly through the trap, AI reads and identifies the moth and

sends the information to a database. The grower then checks the dashboard of the program and acts accordingly. This system resembles the water sensor technology that we all are accustomed to. This sounds a lot easier than it is, as there are a lot of moving parts, including getting everything synchronized in the process. However, we officially have our first trap set up and it does seem to be working. It is neat to be able to look at the dashboard and see moth activity. In two weeks, we will have at least 5-6 additional traps set up and operating. A team of technical professionals out of California are tasked with the technological piece and UGA is providing the pest management information needed to make this project work. The reason I chose to write about this is to make a point concerning what could be the future of pest management. Unfortunately, crop scouts are becoming harder to find, and this could be a supplement to physical scouting. If anything, the grower can be more aggressive in checking a specific field, if he sees the moth numbers escalating. This has a long way to go, but it is worth sharing. This project is a collaboration with Jenkins County Extension/UGA/GSU and we will keep you updated.



June Cotton Irrigation Update (Phillip Edwards, David Hall, Jason Mallard, Wes Porter): It's hard to predict what the weather is going to be and how you want to manage your irrigation. The best you can do is follow a sound and scientific method that works well into your operation and allows you to be both proactive and reactive as much as possible. Parts of the state have been getting significant rainfall, it seems mainly more in the middle and northern regions. While many of these weather systems have

moved across southern Georgia we have missed a lot of the rainfall. I strongly urge growers to track rainfall and irrigation and make decisions based on weather conditions and put as much trust as you can in forecasts when determining on when to turn pivots on. We did not see the extreme heat or extreme cool wet weather during May that we have in the past, so most of planting should be wrapped up by the time you read this article. Thus, depending on when the cotton crop was planted, you'll either be in the first month (late-May/early-June planting) and have lower water requirements, or moving into squaring (late-April/May planting) in which water requirements will increase rapidly.

While we do not want to keep an overabundance of moisture (keeping the moisture level at field capacity or "full"), we do want to keep adequate moisture to maintain the crop. As we have seen in the past and are rapidly seeing on corn currently, once we fall behind on moisture, it's hard to catch on irrigation alone, unless an adequate amount of rainfall is received. I have watched this happen on cotton year after year during the month of July when it's in peak bloom and really requiring water, time to be proactive now. When crops are utilizing moisture as fast as we apply it, it's hard, if not impossible, to bring soil moisture levels back to an adequate level. For example, allowing an 8" depth soil moisture sensor to fully deplete and then irrigating will sometimes (according to application rate), provide very little increase in moisture at the sensor's 8" level, as shallower depths are refilled first. The crop often utilizes moisture as fast as we apply it, highlighting the importance of not getting behind in soil moisture. Also, it is near impossible effect deeper soil moisture sensors with irrigation alone in our region, so as deep moisture is lost it may not be possible to replenish it with irrigation.

With all that stated, remember that young cotton plants do not require a lot of moisture for the first few weeks, but it is important not to stress the crop. Earlier planted cotton will be moving into first flower by the end of June. Thus, staying on top of water requirements will become critical throughout the month of June and into July for the entirety of the crop regardless of planting date. Additionally, even later planted cotton may need some irrigation to ensure there is enough soil moisture available for the crop. Remember, that if there is no rainfall, the water requirements need to come from somewhere, in this case irrigation. Our [Irrigation Reference Guide for Corn, Cotton, Peanuts, and Soybeans | UGA Cooperative Extension](#) shows estimated water requirements in both days after planting and estimated growth stage, based on the physiological progression of the crop it may be better to look at the growth stage and not the DAP. Now is a good time to review the cotton irrigation schedule, determine where you currently are and decide what your water requirements are.

Cotton Irrigation Schedule				
Growth Stage	DAP	Weeks after Planting	Inches/Week	Inches/Day
Emergence	1 - 7	1	0.04	0.01
Emergence to First Square	8 - 14	2	0.18	0.03
	15 - 21	3	0.29	0.04
	22 - 28	4	0.41	0.06
	29 - 35	5	0.56	0.08
First Square to First Flower	36 - 42	6	0.71	0.10
	43 - 49	7	0.85	0.12
	50 - 56	8	1.08	0.15
First Flower to First Open Boll	57 - 63	9	1.28	0.18
	64 - 70	10	1.47	0.21
	71 - 77	11	1.52	0.22
	78 - 84	12	1.48	0.21
	85 - 91	13	1.42	0.20
	92 - 98	14	1.30	0.19
	99 - 105	15	1.16	0.17
	106 - 112	16	0.88	0.13
	113 - 119	17	0.69	0.10
First open boll to >60% Open Bolls	120 - 126	18	0.51	0.07
	127 - 133	19	0.35	0.05
	134 - 140	20	0.22	0.03
	141 - 147	21	0.12	0.02
	148 - 154	22	0.05	0.01
	155 - 161	23	0.02	0.00
Harvest	162 - 168	24	0.00	0.00
	169 - 175	25	0.00	0.00

Based on planting observations and where most of the crop is, most farmers should fall within the first square to first flower stage (or the yellow highlighted area) throughout the month of June. If you did not plant your cotton until later May or early June then you will fall into the emergence to first square stage (highlighted in red). Crop water requirements increase dramatically from squaring and flowering. From 30 days to 50 days after planting, water consumption almost doubles. Keep this in mind as we move into middle and late June, and into early-July. Don't fall behind on your irrigation once the crop reaches squaring and into flowering. As a reminder don't forget that typically as water use increases is in late-June through July, usually so does very hot and dry weather, so keep this in mind and stay on top of your irrigation applications. Conversely, don't over-irrigate the crop as there are yield penalties for doing so. Remember that if you have been using soil moisture sensors, be sure you are irrigating based on the crops actual root zone and not the entire length of the sensor. Root growth and water usage will dramatically increase at deeper depths as the cotton moves through squaring and into bloom during mid to late June and early July. As we move through the season, we will need to be more balanced as the season progresses and root growth increases. One last consideration, top dressing all cotton and our first dose of growth regulator on irrigated aggressive growing cotton will soon or has already occurred. Don't go into this stage with the mindset of "I'm going to hold back on the water now because I don't want it to take off". If proper growth regulator is applied, it will prevent vegetative growth as it should. If rain chances are low, irrigation will be required to get the fertilizer in the plant by irrigating it in and allowing the plant to uptake the nutrients. For further questions about mid-season cotton irrigation management contact your local county Extension Agent.

June thoughts – Replanting cotton and early PGR applications (*Camp Hand*): I just walked into my office after leaving an interesting field troubleshoot – the “interesting” ones are always something... there isn't an easy answer for why something happened but its almost like the stars align and something crazy can happen in one field and the next is totally fine. Regardless, it is always good to get out of the office and walk cotton with county agents, growers, and industry. But I do much prefer the “easy” troubleshoots personally.

Over the last nearly three weeks I have gotten quite a few phone calls on replanting. I did write a short anecdote on seeding rates in the [May newsletter](#), which applies to replanting in June. However, we have had two contrasting situations in our state over the last month – WAY too much rain (I've heard over 10" in places), and then just enough to get the seed sprouted and die (0.1" or so). Most of the replant questions I get are fairly straight forward in my opinion. I spoke with an agent in East Georgia a while back and my call with her was quick and straight forward – go ahead and replant (seed died from too much rain and it was 9 days after planting). But others are more complex and take a little more discussion. However, we are now in the first week of June and it is getting to the point where we need to take what we can get. So – here are my thoughts on replanting. If it needs to be replanted, your county agent won't even have to call me – it'll be so straight forward and easy that they (and you) will know it needs to be replanted ASAP. But, if you say “Hey maybe we should call Camp on this one” it is pretty likely that the stand is good enough to keep. The call I left today was like that – I spent some time with the growers but at the end of the day, the stand was acceptable and I think the take home message was to let it ride. Even if the dealer

covered the seed with a replant, would it be worth the time, diesel fuel, and the risk of losing moisture/lack of rainfall (in dryland)? If you can step on a plant in any direction as you walk across the field, let it ride!

Now – personally, I do not like really early PGR applications, particularly on early planted cotton. However, I do understand that PGRs are starting to go out, particularly on squaring cotton (April and first of May planted cotton is now squaring). PGRs consistently do two things – keep cotton short, and hasten maturity. The end. Yield responses are inconsistent, and other touted benefits entirely relate to the two things that PGRs consistently do (keep plants short and hasten maturity). So, keep that in mind as we are applying PGRs to this early planted cotton. One thing we have going for us in Georgia is the length of our season, but it does become more important on later planted cotton to ensure we use PGRs correctly to get the crop off in a timely manner.

I discussed variety selection and PGR management in the April newsletter as a way to potentially reduce trips across the field by choosing a less aggressive (yet high yielding) variety. But for those that missed it, it is below again. Just a reminder that this chart is all relative!!! Varieties listed in a category will respond similarly to PGRs based on data I have collected over the last four years. And while everyone may not exactly agree with where I have varieties placed, I do have the data to back it up.

PGR Responsiveness of Varieties

Responsiveness to PGRs	Variety
Least Responsive (i.e. Highest growth potential)	DG 3615 B3XF, DG 3799 B3XF, DG H959 B3XF, DG 4484 B3TXF DP 2055 B3XF NG 5430 B3XF
Varieties with similar growth potential as first group, but slightly more responsive to PGRs	DP 1646 B2XF, DP 2012 B3XF, DP 2038 B3XF, DP 2127 B3XF, DP 2131 B3TXF, DP 2141 B3XF, DP 2211 B3TXF, DP 2328 B3TXF, DP 2349 B3XF PHY 475 W3FE, PHY 545 W3FE ST 5091 B3XF, ST 6000 AXTP NG 4190 B3XF AR 9371 B3XF, AR 9831 B3XF
Varieties that may need PGRs, but pre-bloom applications not typically necessary	ST 4595 B3XF, ST 4990 B3XF DG 3528 B3XF NG 3195 B3XF, NG 4936 B3XF, NG 3299 B3XF DP 2020 B3XF, DP 2239 B3XF, DP 2333 B3XF, DP 2317 B3TXF PHY 411 W3FE, PHY 415 W3FE
Most Responsive (i.e. Lowest growth potential)	PHY 360 W3FE, PHY 400 W3FE DP 2115 B3XF

As always, if you have questions or need anything, don't hesitate to reach out. We are here to help!

Important Dates:

Georgia Cotton Commission Mid-Year Meeting - Statesboro, GA – July 23, 2025

Stripling Irrigation Research Park Field Day – Camilla, GA – July 24, 2025

Southeast Research and Education Center Field Day – Midville, GA – August 6, 2025

Southwest Research and Education Center Field Day – Plains, GA – August 13, 2025

Cotton and Peanut Research Field Day – Tifton, GA – September 3, 2025

Georgia Cotton Commission Annual Meeting and UGA Cotton Production Workshop - Tifton, GA – January 28, 2026