

Articles in this month's issue include:

1. Cotton Jassid Update (*Phillip Roberts*)
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Cotton Jassid Update (*Phillip Roberts*): Cotton Jassid or two-spot cotton leafhopper, *Amrasca biguttula*, is an invasive insect from the Indian subcontinent. It was first detected in the US in Florida in 2024 and we have currently detected the Jassid in 27 south Georgia counties (we are waiting for official identification but are confident this is cotton jassid). Cotton jassid is a potential pest of cotton as it requires management in cotton where the pest is native. The Florida Department of Agriculture and Consumer Services released a Pest Alert in December 2024 and provides good information on this invasive bug, see online at: <https://ccmedia.fdacs.gov/content/download/117692/file/two-spot-cotton-leaf-hopper-pest-alert.pdf>

Cotton Jassids are small leafhoppers, about 1/10 inch in length. They are sucking insects and feed on the underside of leaves. This insect typically infest edges and ends of fields (similar to whiteflies) and in most cases infestations are low. However, we need to be aware of this new potential pest. When scouting be sure you are 8-10 rows from edges or 30-40 feet from ends. To scout, turn an individual expanded main stem leaf from one of the top 5 nodes and count immatures on the underside of the leaf (see pic below). We cannot identify species of nymphs but adults are easily recognized by two black spots on the wings (see pic below). Plant injury includes yellowing of leaves on the outer edges or hopper burn or leaf puckering (see pics below). If you detect jassids in the field please contact your county agent for the most current information on thresholds and insecticide selection. This is an evolving situation and management strategies are subject to change.



1. Cotton Jassid adult (left) and nymph (right). Images by Justin Odom



2. Cotton Jassid plant injury: hopperburn (left) and leaf puckering (right). Images by Jeremy Kichler



3. Jassid adult and numerous nymphs on underside of leaf. Image by Hunt Sanders

Cotton Irrigation Considerations for August (Wesley Porter): Driving across the state I have seen cotton from about shin high up to full green canopies about chest high. This spread makes it hard to nail down exact water requirements. This does make it difficult to answer questions on irrigation recommendations without the answers to the standard questions of when was your cotton planted, what stage is it at right now, how much rain have you gotten or missed, what is your estimated rooting depth, have you irrigated up to this point, how much, or when was the last application? We have had a mix of rainfall, but with some extreme hot and dry weather over the months of June and July and a majority of our crop should be in peak water usage now, if not moving on through it, as shown in Figure 1.

Even though perhaps peak water demand may have past if the crop was planted during late April or early May, it is critical not to fall behind on irrigation during bloom. It is critical that we continue to monitor the weather and make smart irrigation decisions. Even though water requirements in some fields may be starting to move out of the peak demand, don't get too comfortable, it's always difficult to catch up with irrigation alone. The hot dry weather, and areas that have not received rainfall have depleted deep soil moisture that is near impossible to replenish with irrigation. Thus, over the next month, keeping up with the water requirements is very important. The water demand will be lowering as we move on into the season, but it is still critical to have adequate soil moisture during the entire period of bloom. Based on planting date, the weekly water requirement of the crop can range between about 1.0 to 1.5 inches per week based on the UGA Extension checkbook method for cotton. Please keep in mind the weather conditions and how much of an impact they can have on water requirements. In other words, the checkbook method is there to give you a reference as a guide, but this alone should not be used for the final decision. We are entering the tropical storm season and have opportunities for large rain events and even some hit or miss showers. Some days can be of intense heat with low humidity, leading to high evapotranspiration rates and cause the need for higher than recommended water requirements for that week. Conversely, we can receive hot days with very high humidity and overcast conditions which will mean the plant is still using water but the evapotranspiration rate is very low. Plus, with a good canopy closure the ground is well shaded. It's really amazing to see crop water use through moisture sensors. The graphical representations of plant water demand and environmental conditions can be an eye-opening experience to witness throughout a growing season. It's human nature at times to question sensor readings when it comes to irrigation scheduling. While it's true that moisture sensors do not last forever and can fail to give accurate data a majority of the time the sensors are correct. With most Watermark sensors, accuracy can be simply checked by attaching a meter to the individual sensor probe wires to verify the current readings. The old school method of drilling down with a 1-3-inch auger near the probe, monitoring soil moisture as you drill down, can assist to determine if the sensor is faulty, or giving erroneous readings. If you don't have access to moisture sensors, walking your fields with a shovel or soil probe to investigate available moisture is highly recommended. Again, the checkbook method is just one tool of many tools that can be used to assist in scheduling irrigation.

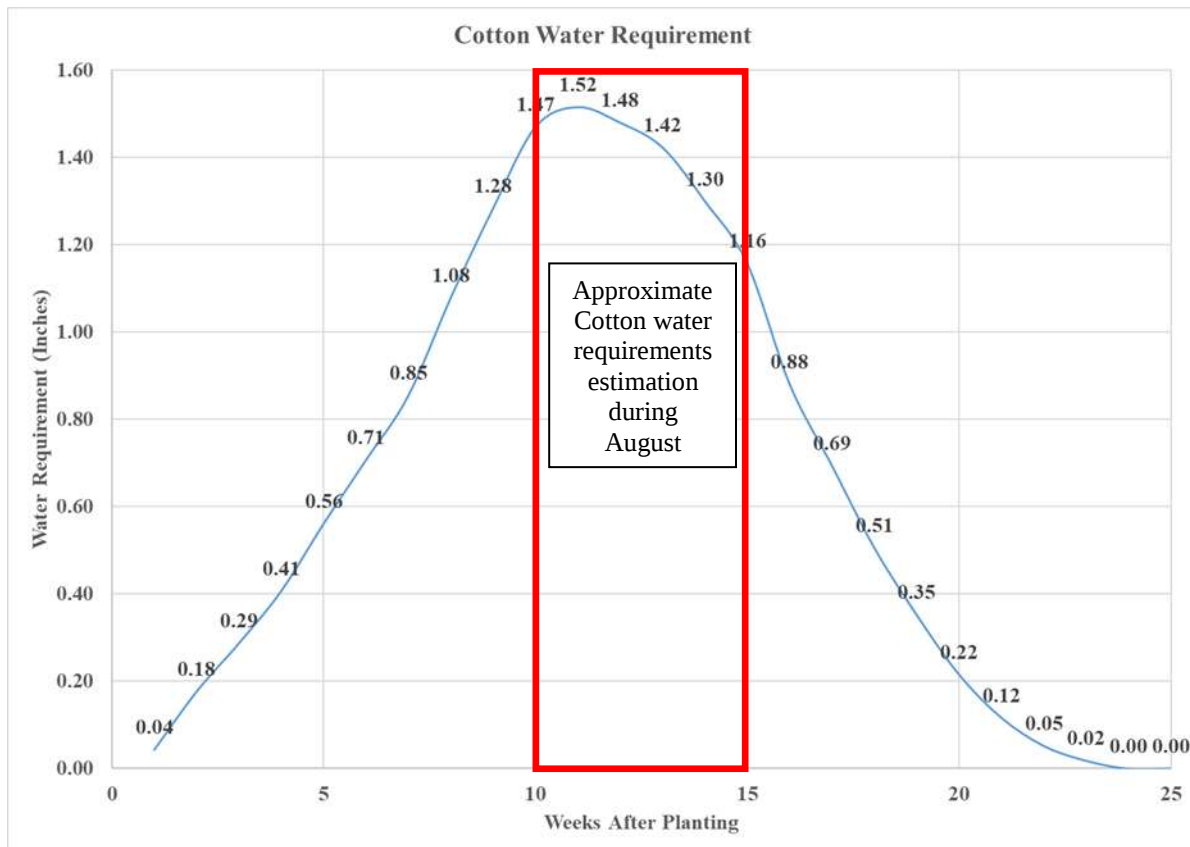


Figure 1. UGA Cotton Checkbook, with the estimated water use period highlighted.

With the recent sporadic heavy rainfalls we have received, many may think we are good for a while. However, with heavy rain events there are a few questions to ask in relation to your soil, how much rain ran off and how much infiltrated? And how much will my soil hold? Both questions are related to the characteristics of your soil which will vary from farm to farm and field to field across the state (data on soils can be found in the UGA Cotton Production Guide Irrigation Chapter). The point is that just because we received 2.5 inches, we may not have but 0.75" or 1" of soil moisture in plant available water according to rainfall intensity and soil conditions.

Another important consideration is root development early in plant development. During extreme variations in weather root development may vary. It is important to maintain adequate moisture within the active root zone. If you aren't seeing moisture being utilized from the deeper depths, be sure to maintain good moisture where the plants are utilizing moisture.

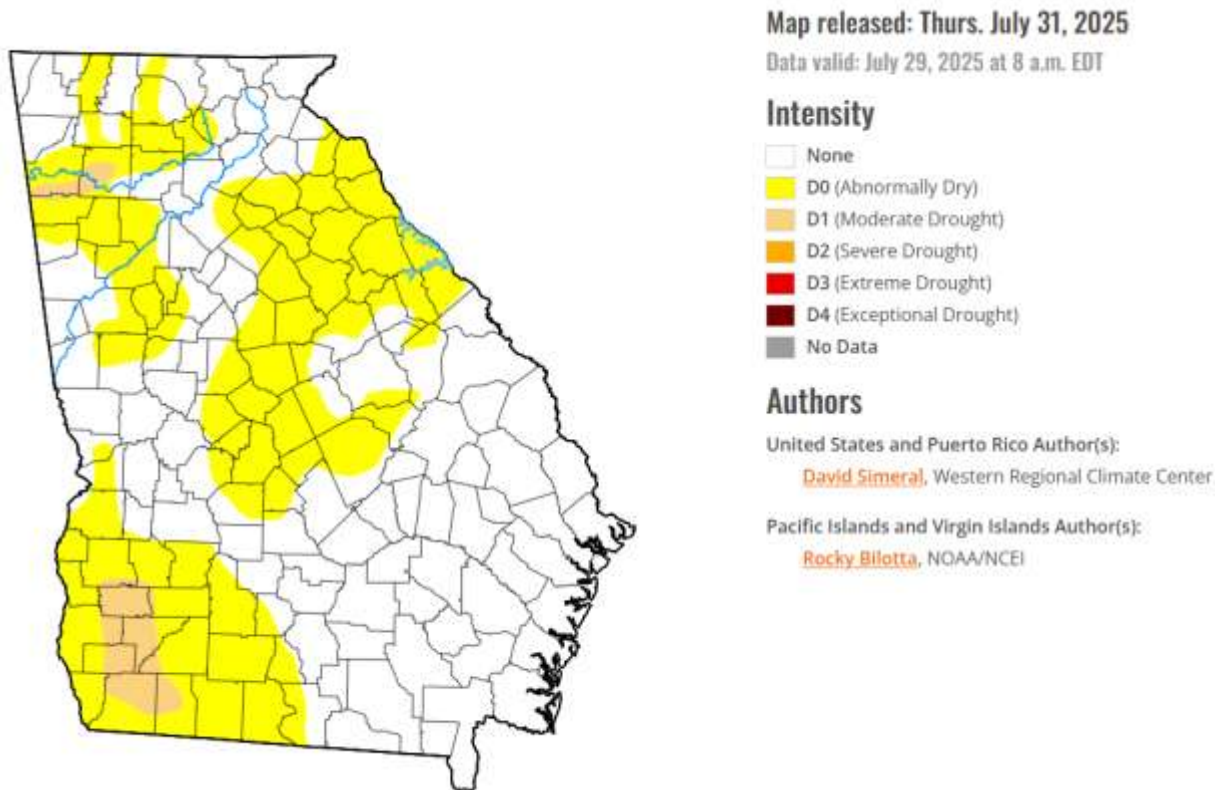


Figure 2. The current drought conditions in Georgia as of the end of July.

Just to reiterate, as shown in the current drought monitor map, there are portions of SW Georgia in an abnormally dry to moderate drought classification. While that can change quickly, these areas have reached this classification, meaning that there was most likely drought stress induced on crops. Earlier planted cotton may be moving into the cutout and irrigation termination phase. While, I will write an entire article and blog post on irrigation termination, it is critical ensure there is adequate soil moisture moving into the cutout and first open boll stage. At this point irrigation should be terminated and not continued, especially after 10% open boll. Research has shown that irrigation after this point is wasted water and profit, other research that will be more thoroughly shared later, has shown that irrigation after cutout does not provide yield benefits.

If you have further questions about irrigation requirements, irrigation scheduling or current water requirements for cotton reach out to your local UGA County Extension Agent.

An East Georgia Perspective (*Wade Parker*): On occasion, especially when severe weather hits, a common call I get is, “How is the crop in East Georgia?” Many times, media outlets, industry partners and even lending institutions will be on the other end of the phone. Well, the best way to answer this question is with the traditional answer, “it depends.” While the entire crop has been hit with excessive heat for the past two weeks, rainfall has been more erratic. The northern part of the district has

experienced more isolated and spotty showers, while from Tattnall County and below the showers have been more widespread. It is fair to say the crop can be rated as fair or average. Many of the irrigated fields are good - excellent with normal physiological fruit shed with the dryland crop condition depending on where you are standing.

The majority of my calls lately have been about late season applications of mepiquat chloride (PIX). Most of our crops were planted from May 15-June 10. Therefore, most fields have had at least one and maybe two applications of mepiquat (12-16 ozs/A). Many people have different methods of determining whether a crop needs an application of growth regulator. My favorite method is to determine the cut-out status of the plant. To keep it simple, count the number of nodes that are above the white flower. When this number is 3, the plant is cut-out and does not need any more growth regulator. There is some debate on the number, as some say 5, particularly outside of Georgia. Nevertheless, when the plant reaches cut-out, the plant has reached its capacity for supporting fruiting positions and likely will not develop any, if there are no additional fruiting sites. When the plant is blooming out the top, then new fruiting positions will totally cease. When a plant is physiologically cut-out no additional growth regulators are usually needed. If the plant has not reached cut-out and appears to have a lot of horsepower left, then an additional application of a growth regulator is warranted, rate dependent on many variables. I do not like to recommend over 16 ounces in any situation as I think more is not always good or will result in more positive outcome. In drought-stressed fields that still have unused Nitrogen, it is possible these fields will need to be revisited, especially if the plant starts growing and putting on additional fruit. The decision to try and control growth will be dependent on crop and yield potential plus the current date, which will give a rough estimate of future yield potential.

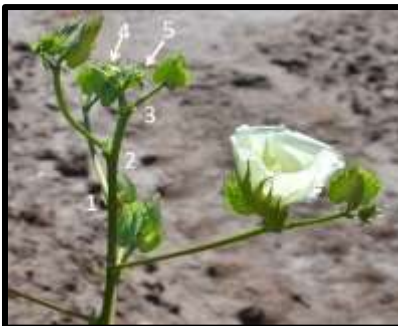


Figure 1. Counting the nodes above white flower to determine plant cut-out (*Seth Byrd Oklahoma State*)

Mid-Year Cotton Meeting

We have just completed the third year of the Mid-Year Cotton Meeting this past month in Statesboro. Even with the challenges and hardships facing the industry, the meeting went well. I want to thank the Cotton Commission and Cotton Team for all their work and the agents that attended and worked to get growers registered. I realize it is an effort to help make these meetings successful, but at the end of the day, it is our job to educate our clients on agricultural concepts and principles. No better way to do that than in a room or in a field.

Crop Status and Considerations Approaching the Finish Line (*Camp Hand*): In many parts of the cotton belt my counterparts say that August will make or break a cotton crop – and I believe that is true for our earlier planted cotton. But we still need a good September and October to make and gather the crop. Overall, I would say that the first full week of August has been good to cotton growers across Georgia. Toward the end of July we were extremely hot and dry in all areas of the state. Rain in recent days has been welcome. Below are rainfall maps from August 4th and August 5th, and it looks like significant rainfall has occurred across the cotton producing regions of Georgia which was much needed. A county agent mentioned to me that it was a “million dollar rain” in his part of the state. I wonder if it’s still a million dollar rain when cotton is listed at \$0.66?

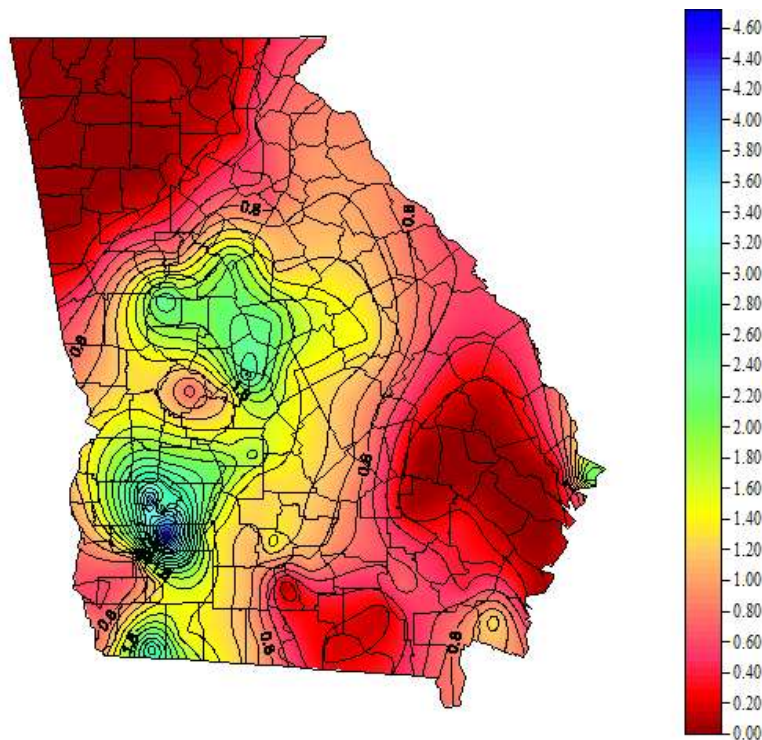


Figure 1. Rainfall across Georgia on August 4, 2025. Map courtesy of the UGA Weather Monitoring Network.

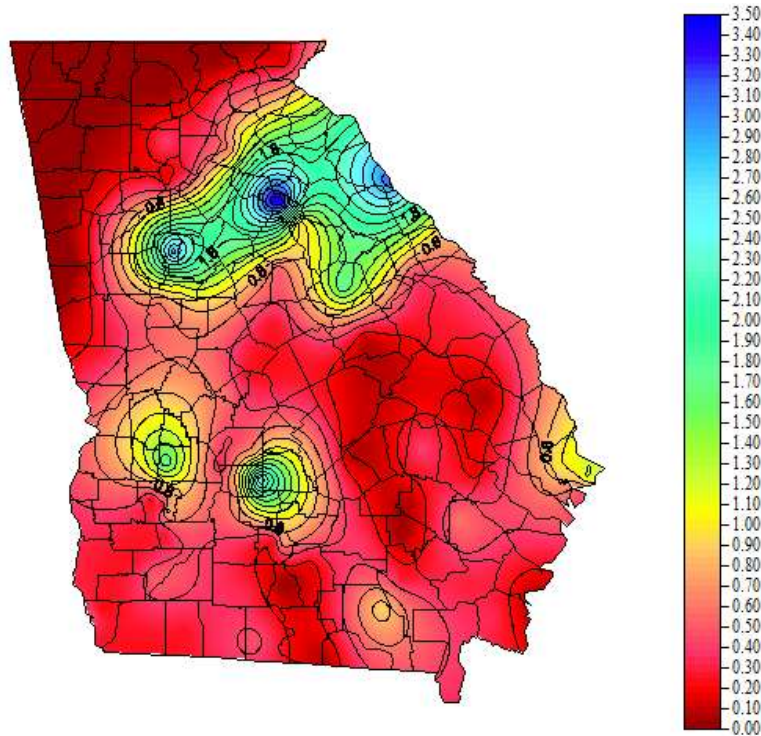


Figure 2. Rainfall across Georgia on August 5, 2025. Map courtesy of the UGA Weather Monitoring Network.

A few things to consider following the rains in the first part of August. First, some cotton was significantly hampered by the extreme heat and dry weather we had over the last couple of weeks. However, in cotton that has started back actively growing, we may need to utilize PGRs to slow it down a hair. If choosing where to spray or not, I would use a cutoff of 7 NAWF. Where cotton has 7 NAWF or more, let's be aggressive. Where it is 7 NAWF or less we can probably hold off (unless you are aiming to shorten your season). Much of our June cotton has started blooming in the last couple of weeks, so I would be aggressive in those situations. I told a grower earlier today, it is more about timing than rate.

I am getting a couple of calls about nutrient deficiency issues (mainly potash deficiency). Some of the calls revolve around how the soil test levels are normal but potash levels in leaf tissue are low. There is a likely explanation for this. Throughout May and June we saw significant rainfall across our state, and cotton is not a big fan of wet feet. When cotton has extremely wet conditions early on as we did this year, it is not as likely to put down a good tap root because it doesn't have to. Thus leading to potential for compromised root systems. I believe that is why we may be seeing potash deficiency where the soil test levels are adequate. The best solution (although not a silver bullet) in situations where we are seeing deficiencies like this is to foliar feed, and the best option is potassium nitrate (10 lbs/acre in at least 15 GPA). This product is not much fun to handle since it is a dry product, but it gives you almost 5 lbs of potassium per application, which is more than you can get than any other product (without having a lot of

burn). Depending on how long the crop has to go will determine how many times you need to foliar feed, but in problem situations I have always done it with our stinkbug sprays and it seems to do well for us.

Lastly – this crop is moving quickly and has good potential. Let's keep doing what we are doing, trust your scouting, and don't spend money where you don't need to. We need to make (and gather) this crop. As always, if you have questions please don't hesitate to reach out.

Important Dates:

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