

Peanut Pointers

August, 2024



UNIVERSITY OF
GEORGIA

Peanut Team

Irrigation Update

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Each season brings its own challenges and farmers must find the best strategy, tools, techniques, and technology to help address these challenges. Thus far, 2024 saw an extremely wet May, drier than normal June and a July of scattered rain events more typical of our normal rainfall (see US Drought Monitor pictures below). Drought conditions persist in many areas of the peanut belt, but overall peanuts seem to have turned the corner in many areas. The 2024 crop is varied in planting dates with a larger than usual portion of the peanut crop planted later in the window. This makes estimating exact irrigation requirements on a broad basis difficult. Seasons such as this are perfect for using an advanced irrigation scheduling method, such as an app or a sensor to let you know exactly when and how much to water your crop.

For weekly peanut water requirements, please refer to the graph in figure 1 (the UGA Checkbook). Keep in mind that these requirements are for peanuts that were planted between mid-April and mid-May and that they are to be considered for both irrigation and rainfall. This graph should give you a good idea on where we stand for the month of August. Most growers that planted in this time frame will reach peak water use during the month of August and then the daily water use will slowly start to decline. **DO NOT** get behind on irrigation as the weather can just as easily become hot and dry over the month of August. If you fall behind with hot and dry weather it is difficult to catch up with irrigation only during peak demand. For those of you using a soil moisture sensor or Irrigator Pro as your irrigation scheduling method, they will provide critical data that can aid in the prevention of both falling behind and losing deep moisture and over-irrigating. Most of the irrigated peanut crop has achieved canopy closure and that will help keep soil temperatures moderated and utilize irrigation and/or rainfall more efficiently.

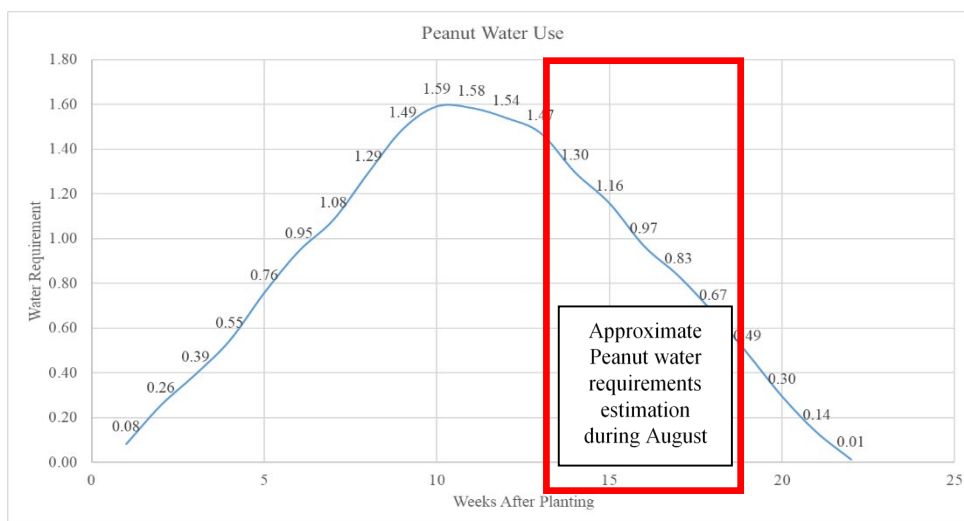
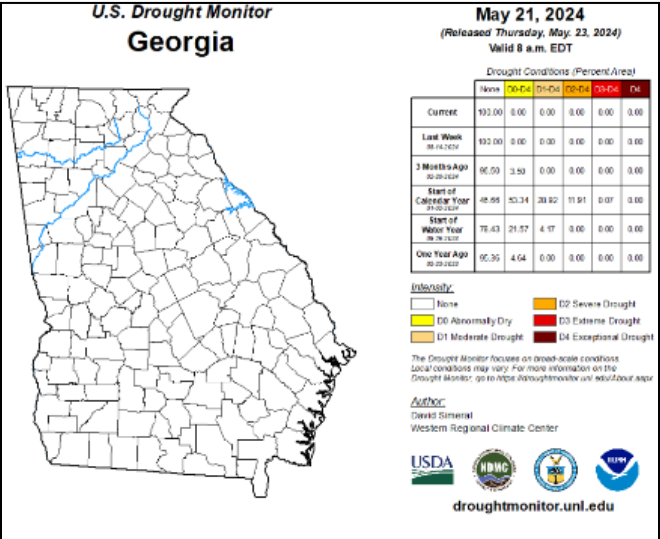
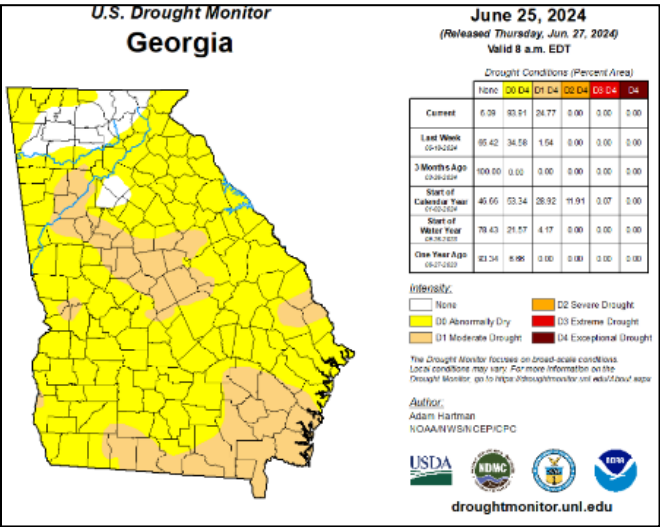


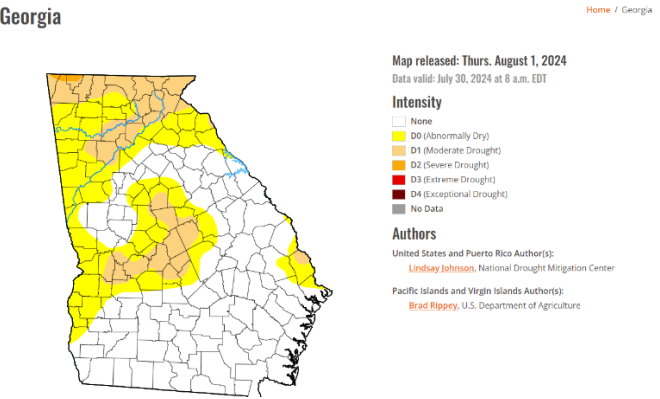
Figure 1. UGA Checkbook for Peanuts with the estimated August water requirements highlighted.



May



June



July

Figure 1. Production season U.S. Drought Monitor conditions for Georgia.

One point to keep in mind about using Irrigator Pro, especially if you're a new user and this is your first year running it, if you planted in the mid-April – mid-May window, you will hit the "R3 – Drying Out" growth stage during the month of August, if you haven't already. According to the crop model, this growth stage will occur at roughly 95 DAP. You will notice that the app will tell you to stop irrigating for about a week. This is to intentionally withhold water once a maximum fruit load occurs on the plant and to stress the peanut plants so that it will stop flowering and allocate resources to maturing the peanuts that are already on the plant. So, if you see this occur and feel like your field is getting dry, don't panic its part of the model. This is how the soil moisture needs to be handled to ensure the plant reacts appropriately physiologically.

When we have very wet conditions during plant development plant roots sometimes do not enter those deeper depths. It is important to maintain adequate moisture within the active root zone. Through monitoring soil moisture sensors in certain areas, we are noticing, a majority of moisture is being utilized from the shallower depth sensors. In this situation if you aren't seeing moisture being utilized from the deeper depths be sure to maintain good moisture where the plants are utilizing moisture. It's times like these situations when one may question the accuracy of a moisture sensor. Watermark sensors, for example, can be checked to ensure confidence in the readings. If it's a volumetric sensor or you simply do not have a meter, the tried and tested method of using a 1-3-inch diameter auger and drilling down near the sensor while noting the moisture level can help validate the data being logged and transmitted.

It seems this season as we have received rainfall several times it has been in large rain events. When these heavy downpours happen, we need to keep in mind two things which impact how much of that rainfall we capture and are able to utilize for our crops. They are the water intake rate and water holding capacity of our soils. When we receive those 3" rainfall events we may only "bank" 0.75" or 1" of it according to rainfall intensity and soil conditions.

If you have further questions about irrigation requirements, scheduling, or other related questions reach out to your local UGA County Extension Agent.

White Mold and the Dog Days of August

Bob Kemeraït

Peanut growers have now entered a period of time the “heart” of the white mold season. I have been contacted multiple times over the past couple of weeks with questions about diagnosis and management for white mold. As much of our crop is now beyond 60 days after planting, hopefully growers have already implemented a sound management program (often centered on crop rotation and judicious use of fungicides) to protect their crop from white mold and other diseases. August is when growers and consultants are most likely to report outbreaks of white mold and to ask for help in fighting the disease.

Why are outbreaks of white mold abundant in late July and early-to-mid August? There are a number of reasons as to why white mold is frequently reported now. The growth of the peanut crop typically results in a dense cover of leaves which extends the period of moisture within the canopy and also traps humidity, both of which favor growth of the white mold fungus, *Sclerotium rolfsii*. This same leaf canopy that creates an environment favorable for white mold also blocks fungicides from reaching the crown of the plant where white mold develops. Scattered rain events and threat of the tropical storms provide moisture to further fuel the disease and warm (hot) temperatures during the “dog days” (and nights) of summer are critical for a white mold explosion. The final ingredient to create the “perfect” white mold storm is time. White mold has quietly smoldered in many fields over much of the season to date. However, it is this combination of crop development, time, and ideal environment that causes the disease to seemingly appear overnight.

What do growers need to do NOW about white mold? Each grower who calls you when he or she finds white mold in a field is looking for answers and recommendations. Growers have a healthy fear of white mold and recognize that failure to control this disease can have a substantial, negative impact on yield. Here are my suggestions for you when you receive questions about white mold from growers.

1. Determine that the problem truly is white mold and not some other problem that is causing wilt or, as in the case of “false white mold”, the presence of a white fungal growth in the field. Diseases like tomato spotted wilt and Diplodia collar rot can cause similar symptoms as can “droughty” areas of a field. “False white mold”, caused by the fungus *Phanerochaete*, looks much the same as “true” white mold but later turns yellow-orange; false white mold does not damage the crop.
2. Determine the extent of the disease. In 2024, some level of white mold is likely to be present in nearly every field. Finding a small amount of white mold is not unusual and does not mean that there is a problem with a fungicide program. For example, it is difficult for ANY fungicide program to stop individual plants from being affected; the mark of a problem with white mold control occurs when the disease spread, “burns”, down the row. “Hits” of white mold about the size of a dinner plate indicate that the

disease is at least contained. A “jailbreak” has occurred when the disease begins to run up and down a row.

3. Recognize that poor management of white mold does not always mean that the fungicide that has been applied is ineffective. Here are some important factors that can limit the control of white mold, despite use of an effective fungicide. A) The timeliness of fungicide applications. Delays in applying fungicides for any reason to manage white mold can result in outbreaks of the disease. B) The weather at time of application. Dry weather, especially in fields without irrigation, can inhibit the fungicide from reaching the target (crown and limbs of the plant). The fungicide is there and is effective, but without some help for movement, may not come in contact with the white mold fungus. Hot and dry conditions may also push the white mold fungus underground which makes managing white mold even more difficult.
4. Growers can maximize control of white mold by timely applications of effective fungicides. Critical components of a “timely” application include the number of days since the last application (typically 14 days) and the time until the next rain or irrigation event. When white mold becomes problematic, growers may “tighten” the spray interval from 14 days down to 10-12 days between applications. Irrigation is most helpful in redistributing fungicides for white mold control when it occurs within 12 to 24 hours after application.
5. Growers can maximize white mold control by increasing spray volume (I believe that 10 gal/A is a minimum) and by applying fungicides at night when leaves are folded up. Such allows a better penetration of the canopy.
6. Should growers switch fungicides? The “cornerstones” of white mold control tend be the applications that are made at approximately 60 and 90 days after planting. Where growers are on a long rotation, e.g., peanuts last in a field 5 or more years ago, or where a more resistant variety like ‘Georgia-12Y’ is planted, growers have the option of a wide variety of “white mold” fungicides to choose from. Where other varieties are planted, or on shorter rotations, growers should consider fungicides like Elatus, Excalia, Convoy, and Umbra at appropriate rates. Between 60 and 90 days, and after 90 days, growers may want to consider fungicides like tebuconazole, azoxystrobin, Fontelis, Provost Silver, and others for additional control. If a grower feels that he or she is not getting the control of white mold that is expected, the grower should consider conditions at time of applications and perhaps adjusting the rate of the fungicide and the fungicide itself.

August Peanut Pointers

Scott Monfort

The peanut crop across the state has improved over the last week. The crop ranges from 110 days old to around 45 days old. This means we are going to have another long harvest. There are several things to keep in mind over the next month. First, I would encourage everyone to participate in the Cotton Defoliation, Peanut Maturity, and Machinery & Precision Ag training on **September 4th** in Tifton (after the cotton and peanut research field day) and on **September 9th** in Midville. These trainings will be a great opportunity for you to get up to speed with how the crop is progressing and the best way for you to address the multitude of potential maturity issues this year. Please make sure to bring some samples to the training. Second, remind your growers that DAY After Planting may not perfectly correspond to actual maturity. The early planted crop went through several weeks of wet weather in May and hot dry weather in June which slowed down initial blooming. This could extend the maturity by a week or so. Replanted fields and some dry land fields will likely have to be evaluated differently as they will have some older and younger plants due to age differences in the plants or split crops. You can always send me pictures of the maturity board as long as all the peanuts are laid out completely. Finally, growers need to keep on track with their pest management control and irrigation throughout the season. We had several cases last year where growers quit watering late planted after they started harvesting the early planted crop. This cost them some yield and quality by letting them go without the needed moisture to finish filling out pods.

Please call if you need assistance or need to discuss a specific issue. We will continue to update everyone on the “All About The Pod” POD Cast.

Dates to Remember:

- September 4th – Cotton and Peanut Research Field Day in Tifton
- September 4th - Cotton Defoliation, Peanut Maturity, and Machinery & Precision Ag training (after the research field day) in Tifton
- September 9th - Cotton Defoliation, Peanut Maturity, and Machinery & Precision Ag training (after the research field day) in Midville
- September 17-19th – Ga Peanut Tour - stationed in Americus
- December 10th – Annual Peanut Update Training in Tifton, GA

Entomology

Mark Abney

The 2024 peanut growing season has been filled with insect management challenges for many of our growers, and we still have a long way to go. Over the coming days and weeks county agents are almost certain to get calls about three-cornered alfalfa hoppers (TCAH), potato leaf hoppers (PLH), foliage feeding caterpillars, and spider mites in peanut.

While the TCAH and PLH can cause yield loss, I do not consider them serious pests of peanut, and I do not get excited when I see them in the field. PLH infestations cause hopper burn which appears as the yellowing of leaf tips in a “v” shaped pattern. We should consider treating with an insecticide when hopper burn is spreading in the field AND the immature (nymph) stage of the insect is present. There is no value in spraying a field with hopper burn if the insects are already gone. There is not much data out there about the effect of hopper burn on yield, and I have seen fields with severe hopper burn yield just fine. Occasionally, severe hopper burn will result in the shedding of leaves; while rare, this is a scenario we want to avoid. PLH is easy to kill with a pyrethroid, but using this class of insecticide will increase the risk for spider mite infestation.

Almost every peanut field in Georgia will have TCAH, and growers often have questions about what, if anything should be done about them. I would almost never recommend an insecticide for TCAH in non-irrigated peanuts due to the relatively low yield loss potential of the insect and the risk of flaring spider mites. A cheap pyrethroid application in irrigated fields, where mite infestations are uncommon, could pay for itself in a tank mix with fungicides. The problem is that pyrethroids have short residual activity, and fields can very quickly be reinfested. In the end, it comes down to what the grower wants to do...TCAH is not a “lose the farm” pest.

Foliage feeding caterpillar management or lack thereof is where we could really leave money in the field in the last third of the season. I know that some growers have sprayed caterpillars three or more times, and they are tired of it. We also have a lot of late planted peanuts that will be at especially high risk to infestation by velvetbean caterpillars. There will be a mix of VBC, soybean looper, earworm, budworm, and several species of armyworm in fields at least through September. Pest identification is important, and preventing severe defoliation during pod fill is critical. Peanut can tolerate a lot of defoliation with minimal yield loss, but getting “stripped” will cost us.

How important spider mites will be in peanut depends a lot on how much rain we get over the next six weeks. There are plenty of mites in other crops, and dry weather would greatly increase our chances of seeing damaging infestations in peanut. Growers without a scout or consultant should pay close attention to non-irrigated fields and dry corners around pivots while they are spraying or doing other tasks. Yellow or brown “hot spots” near field margins are usually the first sign that mites are present. Fields where a pyrethroid insecticide was applied will be at the greatest risk. Managing mites effectively depends on effective timing and proper

application of miticide. Spray coverage is critical, and increasing spray volume will help achieve good control.