

# Peanut Pointers

July, 2022



UNIVERSITY OF  
**GEORGIA**

*Peanut Team*

## **July Weather & Climate Outlook**

**Pam Knox, Agricultural Climatologist, UGA**

In the month of June, drought increased across Georgia significantly, going from just 9% at the end of May to 54% by the end of the month. Many of you have told me you think even that is an underestimate of how bad things are. One of the problems with the Drought Monitor's depiction of drought is that they are required to make a single map that balances both short- and long-term water deficits, and that does not reflect the rapid changes we see in water availability for plants, especially in our sandier soils with very high temperatures.

Fortunately, we have switched from the dome of high pressure that suppressed most showers to a more typical summertime pattern with humid air and frequent afternoon thunderstorms. Rainfall from those showers can be spotty and I know it is frustrating when it rains a mile away while you get nothing, but hopefully over time the moisture will spread around the area as the storms come and go. A few areas have even received above-normal rainfall in the last 30 days, but most of the state got less than they expected, which is especially tough when temperatures are so high. The outlook for July shows that temperatures are expected to be warmer than normal but there is no indication at this time that we are going to see very hot conditions. Precipitation is also expected to be wetter than normal, with early July seeing wetter conditions and then dropping into a drier pattern by mid-month. There will be some dry days scattered in, so you should be able to get into the fields to work, just watch your local forecasts for timing. That is also the expected pattern for July through September, so at least for now no big pattern shifts are expected.

The tropics gave us a surprise with Tropical Storm Colin, which formed from a low that tracked up along the East Coast and formed briefly over South Carolina before dissipating in North Carolina less than 24 hours later. Colin did bring some showers to eastern parts of Georgia and did not have enough wind to do much damage, especially since the strongest part of the storm stayed offshore. The long-range models do not show much tropical activity for at least the next couple of weeks, so that should not be a big concern for the first half of July. The main season really does not get going until mid-August, so there is plenty of time for the tropics to impact us later this summer.

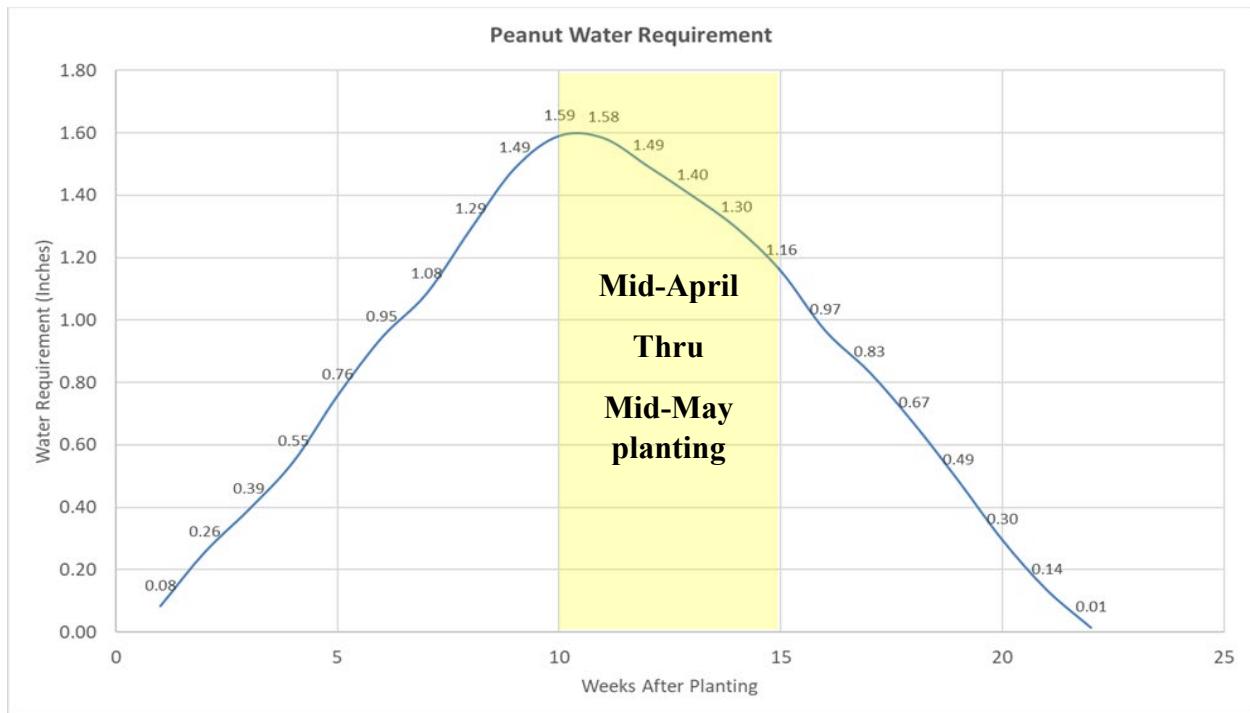
**Wesley Porter, Extension Precision Ag and Irrigation Specialist, UGA**  
**David Hall, Extension Water Educator, UGA**  
**Jason Mallard, Extension Water Agent, UGA**

Most of our peanut crop in the state should be pegging and putting on pods by now and approaching peak water use. Please refer to the graph below to indicate where you are at with weekly water use in your crop. Remember this requirement is IRRIGATION and RAINFALL with historical evapotranspiration rates figured into the equation. Hopefully, July and August will be kinder to us, environmentally speaking, than June was. We experienced some of the hottest and driest days of the year with extremely high evapotranspiration rates. Due to years of research, peanut water demands during different stages have been identified but one of the variables in irrigation scheduling are ET rates. A free tool is available to help in determining how much water is lost on a daily basis to evapotranspiration. Go online and search UGA Weather stations to see data like evapotranspiration. Just pick a site and enter a timeline on the water balance tab. It should be noted that this is Evapotranspiration is not directly equal to crop water usage. To calculate actual crop water usage, the ET value must be multiplied by the current crop coefficient. As mentioned earlier, UGA Extension's Checkbook method of irrigation scheduling was developed by multiplying the peanut crop coefficient by the average historical ET rates and therefore there is a good chance the water being applied may be insufficient due to this year's current weather conditions. It is a good tool but soil moisture sensors or apps are far superior in irrigation scheduling.

Once peanuts begin blooming and pegging, they will use roughly 0.2" of water daily for ~20 days. By the middle of July, those early/mid-May planted peanuts can use up to 0.3" of water per day on days that it is hot, windy, with low humidity, so it is important to not get behind on irrigation. It is also important to not let your soil temperature get too high with peanuts pegging as high soil temperatures can burn off pegs.

Below is the estimated current Checkbook water use for peanuts across most of the state for the month of July.

If you are using a computer based scheduling models such as Irrigator Pro in combination with soil thermometers, it has a maximum soil temperature notification that will alert you whenever your soil temperature reaches threshold, informing you that irrigation may be required to cool your soil temperature, even if there is adequate soil moisture.



For the producers who have installed soil moisture sensors, please take note of these few comments. Be mindful that skips or gaps can occur during the growing season due to disease or washouts. Once a stand is established and sensors are placed in an appropriate location in the field, we can often be guilty of taking for granted that the sensors will remain in an optimum location and supply accurate readings for the entire season. If you are not the one making trips across the field spraying or scouting, it would be wise to double check your sensor locations. Seedlings present after emergence can be nonexistent weeks later. The lack of plants will result in bare ground and the lack of roots near the sensor causing false water use data to be recorded since nothing will be using water near the sensor. Thus, the sensor will be providing erroneous soil moisture data. If you are utilizing Irrigator Pro, a lack of canopy will cause 2-inch soil temp readings to be flawed, leading to the program suggesting irrigation applications due to the high soil temperature. Early to mid-season soil temperatures and moisture availability readings can be affected greatly with poor sensor location. Fruiting and pegging in peanuts are critical periods for water requirements. Don't be fearful to pull the sensor up and reinstall it in a more suitable crop area. You have made an investment in utilizing the sensor and are expecting to receive accurate and quality data from your sensor, but this will only occur if you have your sensor placed where peanuts are present. As can be seen in the image below, the sensor is in a location that has no plants or canopy nearby to accurately read information from. This sensor needs to be removed and reinstalled between two plants that have adequate canopy and rooting development.



Remember to do a good job staying on top of your irrigation during the month of July since it is during peak water use. There are many irrigation scheduling tools available to help with this task. If you have more questions about irrigation scheduling or crop water usage reach out to your local UGA Extension Agent and general water usage can be found here: [Irrigation Reference Guide for Corn, Cotton, Peanuts, and Soybeans | UGA Cooperative Extension](#)

## **July Peanut Pointers: Entomology**

**Mark Abney, UGA**

The major insect concern in peanut in July will continue to be lesser cornstalk borer. This pest is capable of causing significant yield loss, and late season feeding increases the risk of aflatoxin and Seg 3 peanuts. Scattered rains at the end of June will have some folks wondering if the LCB infestation is over...it is not. Fields that are at threshold should be treated promptly. At this point in the season, we need to be setting pods and making peanuts. LCB feeds on developing pegs and pods; now is not the time to be timid with management decisions. Scout and spray when needed.

Irrigated fields that have lapped the row middles should be pretty safe from LCB as long as they receive adequate water. Non-irrigated fields will remain at risk for the remainder of the season. Fields that haven't lapped and/or those with wilted plants will be at highest risk. Not spraying LCB when they are at threshold would be about the same as deciding to stop applying fungicides.

In spite of all of our best efforts, I am pretty sure there are non-irrigated peanut fields in Georgia that have been (or will be) treated with at least one pyrethroid insecticide application. This will put those fields at increased risk for two spotted spider mites. For those of you who have heard me talk about mite outbreaks in peanut but have never seen it, it is not pretty. We want to be sure that if/when mites start to show up in peanut we advise growers to avoid bifenthrin. Bifenthrin can be a very useful insecticide, and it has spider mite on its label. DO NOT USE IT. Whether or not we have a problem with mites will come down to the weather and making good decisions. If hot, dry conditions continue, expect mites to start showing up by late July/early August. Fields where infestations are "missed" are likely to be obvious from the road by the end of August. Let us all hope this does not happen. Portal and Comite are miticides registered for use in peanut.

Many growers will be looking to treat foliage feeding caterpillars this month. We should continue to encourage folks to scout and treat only when necessary.

The first three UGA ANR agents who send me an email with the subject line "I read your July PP article" will receive either six pack of cold drinks, or a UGA Tifton hat, or a Benelli shotgun. Only winners will be notified by return email.

## July Peanut Pointers Scott Monfort, UGA

The peanut crop in Georgia has already gone through some tough times with the high heat and lack of wide-spread rain in late May and June. The question is “Will this extreme weather continue through July and August?”. I am optimistic growers will get some needed rain over the next few weeks. Even if we get rain, I would encourage growers to make sure have all peanut fields scouted on a weekly basis. One rain will not reduce the potential problems with lesser cornstalk borer and spider mites.

Over the last two weeks, I have received numerous phone calls regarding the use of the growth regulator – Kudos or Apogee on irrigated peanuts. A majority of the questions have been related to application timings and mixing with other products. Prohexadione calcium should not be applied until the canopy is 90%+ lapped for singles and 100% for twin. Sequential applications (3.6 to 5.4 ounces per acre followed by 3.6 to 5.4 ounces per acre) spaced two weeks apart are recommended in Georgia on runner peanuts. Include a crop oil concentrate (COC, 1 qt/A) and nitrogen solution (UAN) or ammonium sulfate (AMS) at 1pt or 1lb/A to help with plant uptake and consistency of performance.

Kudos/Apogee requires eight hours for absorption by the peanut foliage to be effective. Kudos/Apogee is not recommended on plants that are under stress due to lack of moisture, disease pressure, or other stress conditions. With this in mind, Kudos/Apogee is only recommended in irrigated fields.



### Tank-Mix Considerations

Based on communication with Fine-Americas and BASF, Kudos/Apogee has been shown to be compatible with many of the fungicides and insecticides growers utilize in peanut. However, I would encourage growers to leave out the crop oil when mixing with fungicides and insecticides. I did notice a

problem last with chlorothalonil and tebuconazole causing some burn when mixed with Kudos/Apogee + AMS + COC. I would not mix Kudos/Apogee with herbicides, fertilizers or biological stimulants. We do not know what will happen when these products are mixed with the growth regulator. At the cost of the growth regulator, I would not want to minimize the growth control and/or yield response to save a trip across the field.

Please call me if you need help or have any questions.

- **Sunbelt Expo Field Day**
  - The annual Sunbelt Expo Field Day will be held July 21st at Spence Field near Moultrie.
- **UGA Cotton Defoliation and Peanut Maturity Clinic (Locations may Change)**
  - Tuesday August 30th in East Georgia, Location - Midville REC Station
  - Wednesday August 31<sup>st</sup> in West Georgia, Location in Tifton REC
- **UGA Cotton and Peanut Research Field Day**
  - The annual field day will be on Wednesday September 7, 2022.



## Two Words: White Mold

Bob Kemeraït, UGA

In my 22 years as an Extension specialist at the University of Georgia, I cannot remember a season more favorable for white mold on peanuts than this one. (White mold, also known as “stem rot” and “southern blight”, is caused by the fungal pathogen *Sclerotium rolfsii*.) From pictures sent to me by county agents and consultants, it is clear that white mold is quickly developing not only on peanuts but, in some cases, on soybeans as well in Georgia. Conditions are perfect for the development of white mold and growers MUST be prepared to protect their crop in order to protect yield and profitability.

### Current Conditions

Conditions are perfect now for development of white mold in the peanut crop for several important reasons.

1. Hot daytime temperatures favor development of white mold.
2. Dry conditions can make white mold more difficult to control because of lack of rainfall to wash the fungicide from the leaves to the crown of the plant. Also, white mold tends to go “underground” during hot and dry conditions where is even more difficult to control.
3. High humidity favors development and spread of white mold.
4. Intermittent rain showers tends to increase severity of white mold because a) these showers increase humidity and b) typically do not “beat” the white mold fungus down as often occurs in more prolonged downpours.
5. Perhaps MOST importantly, white mold THRIVES during warm nights (above 75°F) with near 100% humidity. Such conditions are perfect for development and spread of white mold.
6. Growth and development of the peanut crop supports and thick canopy of foliage. Individual “hits” of white mold begin with one plant that is infected, but with the thick canopy of leaves, the white mold fungus can move efficiently from one plant to the next. To minimize losses to white mold, it is critical to protect the plants from this spread with the effective use of fungicides.

Conditions in the 2021 season were less favorable for white mold than they are now. Why is that?

1. Daytime and nighttime temperatures were generally cooler in 2021 than in 2022 and were less favorable for development and spread of white mold.
2. Abundant rainfall in in 2021 not only cooled temperatures but also mechanically beat back the fungal pathogen, *Sclerotium rolfsii*, which helped to slow the spread of the disease.

What growers should be doing now.

1. Scout fields for detection of white mold. Growers or scouts should check crown of wilted plants for presence of active white mold.
2. Stay on a timely fungicide program. The choice of “best” product to use is a combination of level of risk to white mold in a field and cost of material.
3. Time fungicide applications to capture irrigation or rainfall within 8 to 24 hours following application.
4. Recognize that no fungicide program will eliminate individual “hits” of white mold but an effective fungicide program must stop white mold from spreading. An effective white mold

program includes a) choice and rate of product, b) timing of application, and c) timing of irrigation or rainfall following the fungicide application.

5. Best white mold products include Elatus, Excalia, Umbra, and Convoy then Fontelis and Provost Silver and then followed by Lucento, Priaxor, azoxystrobin and tebuconazole.