

# Peanut Pointers

June, 2023



UNIVERSITY OF  
**GEORGIA**

*Peanut Team*

## Entomology

- Mark Abney, UGA

June is typically a pretty quiet month in terms of insect pressure in Georgia peanut, but growers need to be watching for potential problems that could cost them yield at the end of the season. Lesser cornstalk borer (LCB) is almost always found in SW Georgia peanut fields in late May, and this year is no exception. Whether or not LCB populations reach damaging levels and require treatment will depend mostly on temperature and precipitation over the next several weeks. Hot, dry conditions will favor LCB development, while cool and/or wet conditions will hinder populations. What should we be watching most closely? If we see a hot, dry start to June, keep an eye on sandy fields...especially ones with skippy stands. These will be at the highest risk for infestation.

Under heavy pressure, no field is immune to LCB infestation. Irrigated fields are much less likely to reach threshold once the vines lap the row middles, but we cannot irrigate enough to make LCB go away before the vines lap. Our research last year clearly showed the benefit of an insecticide application in June when thresholds are reached. There are two critical parts of the previous statement: 1. Benefit of insecticide and 2. When thresholds are reached. Spraying preventatively for LCB is not a good idea. Effective treatments are not cheap, and not every field will need to be sprayed even in an “outbreak” year. Likewise, not treating when the threshold is reached is a bad idea. A UGA on-farm trial in 2022 showed a significant yield loss when the LCB threshold was reached in early June, and the pest was not treated. The bottom line for LCB is simple: scout and treat when the threshold is reached.

It has been a while since early season tobacco budworm (TBW) infestations have occurred over a large area in Georgia, but we should be keeping an eye on our peanuts for this pest in June. A couple weeks of “not paying attention” when peanuts are 30-60 days old can result in a field of stems if TBW is present. Peanut has an extraordinary ability to compensate for early season defoliation, but I don’t like to see them get stripped just as they are starting to peg.

The name of the game for effective insect management in peanut is “scout”. If all goes well, June will be nice and quiet, and we can all rest up and get ready for the circus that is probably coming to town in July and August.

## Spraying Tips

- Simer Virk, UGA and Eric Prostko, UGA

Timely and effective pesticide applications in peanut production are important to stay on top of weed, insect and disease control throughout the growing season. Achieving both desired spray coverage and efficacy while keeping off-target movement of pesticides to a minimum is a challenging but an important task. Several factors during spray applications can influence the coverage and efficacy required for proper pest and disease management in peanut. Below are several spray considerations to maximize the effectiveness of pesticide applications with boom sprayers:

**Timeliness:** Being timely with pesticide applications is the most important factor in determining the success of any pest management program. Late applications usually will require higher use rates or split applications and are more often than not, less effective.

**Nozzle Selection:** Check pesticide labels carefully for recommended spray volume, droplet size, and any other conditions needed to maximize pesticide efficacy. Based on the application type and pesticide mode of action, select the nozzle that provides both the desired output (in gallons per acre or GPA) and the droplet size. Nozzle selection will also depend on the ground speed and pressure required to achieve the desired GPA.

**Spray Pressure:** Spray pattern and droplet size changes with spray pressure. Lower pressures result in larger droplets whereas higher pressures produce smaller droplets for a given nozzle size. Based on the application type, consider selecting a nozzle that provides the required droplet size in the 30 – 50 PSI pressure range. Both medium and coarser droplets are effective for herbicide applications whereas fungicide applications generally require medium to finer droplets for increased coverage and efficacy.

**Ground Speed:** Application speed plays an important role in achieving the desired application rate. A higher travel speed will require a higher nozzle flow rate to achieve the given application rate and vice-versa. Spray at ground speeds of or less than 10 mph to obtain consistent and more uniform coverage across the field. Faster speeds also cause excessive boom bounce and spray inversion sending finer droplets higher in the air and increasing drift potential.

**Boom Height:** Boom height influences overlap and uniformity of spray application at a selected nozzle spacing and spray angle. Lower boom height (20 to 24 inches from the target) is recommended for maintaining a proper spray overlap and application uniformity across the boom. Make sure to use nozzles that have a 110° angle to allow spraying at lower boom heights without effecting spray coverage.

**Environment:** Weather conditions such as wind speed and temperature also play a role in achieving the desired spray coverage and on-target application. Avoid spraying when wind speeds are more than 10 mph to reduce off-target movement of pesticides. Wind direction should be also considered to avoid spraying towards sensitive crops, homes, etc. Avoid spraying when the conditions for temperature inversions are favorable – from later in the day until early in the morning.

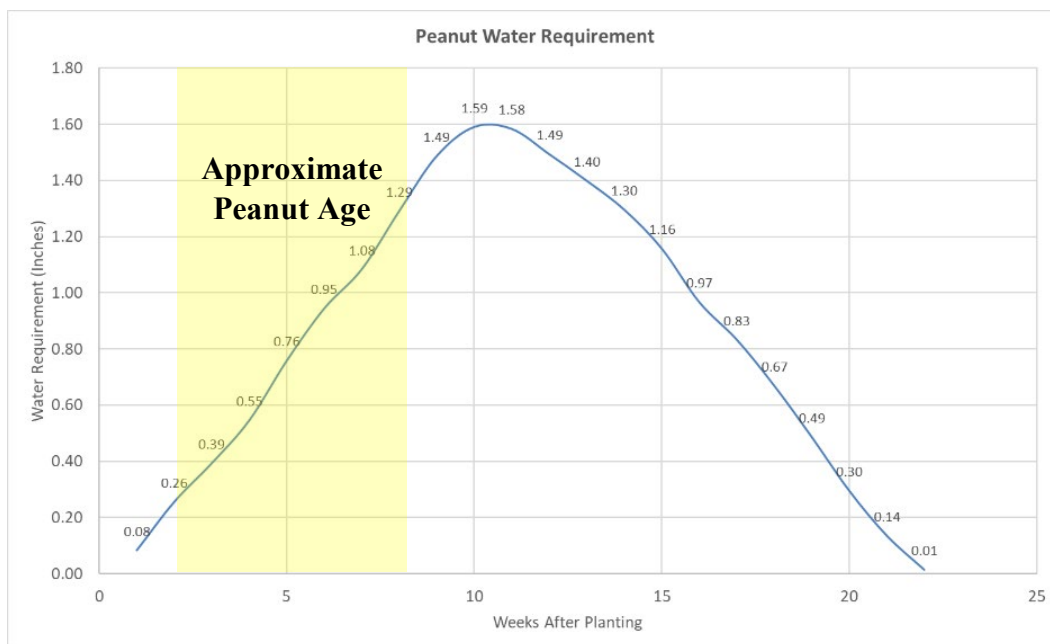
**Sprayer Calibration:** Proper sprayer calibration is important to verify the desired spray volume (GPA) based on the selected ground speed and nozzle spacing. During calibration, make sure to check the spray volume at multiple locations across the boom and perform a thorough sprayer inspection to ensure proper functioning of all sprayer components.

**Spray Technology:** Consider using spray technologies such as a rate controller and section or individual nozzle control which helps in maintaining application accuracy across the whole field by minimizing off-target applications. Advanced technologies such as pulse width modulation (PWM) technology and automatic boom height control systems are also currently available to utilize on boom sprayers for improving precision and accuracy of pesticide applications.

## Early to Mid-Season Irrigation for Peanuts

- Phillip Edwards, UGA
- David Hall, UGA
- Daniel Lyon, UGA
- Jason Mallard, UGA
- Wesley Porter, UGA

Luckily unlike May of 2022 which was very hot and dry, we have had some cooler weather and rainfall across most of the state during the end of May. This has put most of the state into a no drought status, but we do still have part of the southwestern portion of the state in the abnormally dry category according to the U.S. Drought Monitor. Keep track of the graph below or use our [Irrigation Reference Guide for Corn, Cotton, Peanuts, and Soybeans | UGA Cooperative Extension](#) in the field throughout the month of June, stay on top of your irrigation requirements. Contact your local Extension office if you need a copy of the irrigation reference guide. If you planted your peanuts during late April or early May, most of these earlier planted peanuts will be beginning to bloom, so expect water usage to gradually increase. Peanuts will begin flowering on average around 40 days after planting.



Remember the water requirement is IRRIGATION and RAINFALL! Also consider irrigation efficiency especially on hot dry days. A typical pivot is 85% efficient, so don't under-irrigate, but at the same time don't over-irrigate either as research has shown reductions in yield just as significant for over-irrigating as for under-irrigating. The problem with over irrigation is that it brings a larger loss in profitability due to the additional cost of non-needed irrigation. Good record keeping and a sound irrigation scheduling strategy can aid significantly in increasing profitability in multiple ways, including reductions in irrigation applications, correlating to reductions in energy requirements, and potentially increases in yield.

A couple of quick reminders regarding irrigation of peanuts. Early irrigation applications can tell you very valuable information regarding your water application uniformity. If a Mobile Irrigation Lab test was not conducted, pay close attention to the way your soils dry out after an irrigation application. If your peanuts were planted into conventional tillage, this will be easy to see especially prior to full canopy closure. Visible bands drying out quickly or bands staying wet for longer periods are signs of poor uniformity. Go to these areas of your pivot and address them now. As the peanut canopy develops and laps, the obvious signs will not be visible. Hot dry weather makes it easy to see if your pivot was working properly due to the extreme heat and drought. The under applying nozzles are easy to see by the evidence presented as stressed crops in bands under the pivot. Doing the same thing twice expecting different results is never good.

Lastly, if you are using soil moisture sensors there are a few things to consider early on. Many times, sensors are “soaked in or wetted up” during installation and require a little time for moisture levels around the sensor to return to field conditions. Keep in mind that we begin to use the individual sensors on the probe as the roots reach the particular depths, therefore sensor readings should be weighted in making decisions early during the season. If you have “weighted” the sensors, be sure to adjust accordingly as the root systems develop. Consider using other tools in conjunction with your moisture sensors. Irrigator Pro (<https://irrigatorpro.org/>) integrated with a soil moisture sensor system through UGA trials has repeatedly shown higher yields than the Checkbook method. For more assistance and information on Irrigator Pro usage or any other irrigation scheduling tool for peanuts, contact your local UGA Extension ANR Agent.

## **Climate outlook for June and beyond**

- Pam Knox, Agricultural Climatologist

We are starting June relatively dry with seasonal temperatures. Next week, I expect to see cooler and wetter than normal conditions. After that, a pattern shift is likely to bring warmer than normal temperatures for the rest of June and well into July. Rainfall will be variable but should increase by mid-June. So far there is no sign that a drought will occur, although of course there will be some dry periods. NOAA's prediction through the end of August is for the average temperature to be warmer than normal throughout the Southeast. Precipitation is also expected to be wetter than normal, which is good for plant growth but could increase the likelihood of some fungal diseases.

El Nino is not here officially yet, but appears to be coming on strong, and I expect to see it declared in the next month or two. Some climatologists are already pointing to the current pattern of high pressure in the northern states and an active storm pattern across the South as an El Nino signal, but that pattern is not likely to last, so I do not put too much credence in it. However, if the El Nino does become established soon, we are likely to see a wetter than usual fall, especially late in the season if the winter pattern becomes established early. This may impact your harvest activities. Make sure you are watching for dry periods to get your crops out. This is probably not going to be a year when you can leave your crops in the field for a long time without losing quality.

The tropics are expected to be near normal in number this year. The El Nino would normally suppress the development of storms, but very warm sea surface temperatures in much of the Gulf of Mexico and the Atlantic Ocean will provide ample energy for storms that do form to develop. They could spin up pretty quickly, so you will need to keep an eye on the tropics, especially in fall as harvest approaches. Hurricane Michael formed in a year when an El Nino was developing, although we are not likely to see a repeat of that storm anytime soon. We have already had an unnamed subtropical storm and TS Arlene, which developed in the Gulf but did not last long and did little other than drop some needed rain in southern Florida. Early and late storms often form in the Gulf in contrast to the storms that occur in late August through October which often start from tropical waves off of Africa.

## Delayed Early Peanut Growth

- R. Scott Tubbs, UGA

The peanut planting season has been cooler than average in South Georgia in 2023. In Tifton, GA from April 22 to May 6, daily high temps did not go above 81 F with low temps typically in the mid- to upper 50's including below 50 F from May 2-4. While temps rebounded for most of the primary planting window during the first 3 weeks of May, another unseasonable dip occurred from May 22 to May 28 when the high temp did not even reach 80 F for an entire week. These temps caused delays in emergence for many peanuts, or very slow growth for young emerged peanuts in most fields.

With that said, the measured radiation (or amount of direct sunlight) received during May 2023 was relatively average. Thus, the drops in temperature were not as a result of cloudy/overcast/rainy days for the most part, it was just cooler-than-normal sunny days. The decreased heat units and delayed emergence should cause a resultant delay in blooming, which could cause peanut maturity to be delayed this year.

As a frame of reference, since 2017, only two years had average maximum daily temperatures below 84 F and average minimum daily temperatures below 61 F. In both of those years, the majority of my research plots planted before May 15 were dug at 150-154 days after planting on average, based mostly on the peanut maturity profile board (but adjusted around weather). In the other four years during that span when temperatures were 84+ for a max and 61+ for a min, my early research plots were on average dug at 145-148 days after planting. Hence, the early season trend is that peanut maturity could be one to two columns (3-7 days) behind in maturity, with respect to the peanut maturity profile board.

There's a long way to go and a lot can happen between now and harvest. But be sure to track maturity closely heading into harvest season this year, as the leading edge of the peanut maturity profile is likely behind this year compared to the average. For growers that typically pull the trigger on digging based on an average number of days after planting will most likely dig peanuts that have not reached full maturity and will lose both yield and grade that could be gained by leaving them in the ground a little longer than usual.



## June Peanut Pointers

- Scott Monfort, UGA

The planting season has been a little crazy with the cool weather and seed quality issues (Seed Vigor). The good news is a majority of the crop is up and looking good so far. There are several things to note with the crop at this point – 1.) Several fields had a tough time reaching adequate stands due to low vigor seed and cool wet weather. In the first part of May I would say weather caused most of the issues but as we moved into late May poor seed quality (seed vigor) became more evident; 2.) The cool weather also slowed the growth and delayed blooming across most of Georgia.; and the cool wet weather also delayed planting by 1-2 weeks causing a majority of the plantings to be in mid to late May with about 15-20 % being planted in June. Please keep these delays in mind as we go through the season as maturity will be impacted. Also, remind your growers that yield potential of peanuts planted in June will be reduced 10-15% depending on the weather in September and October. June Planted peanut will need a very warm fall to maximize yield potential.

One new addition to the seed treatments this year has been the liquid polymer seed treatment. At first, it looked like the liquid polymers were causing the skins to come off leaving a bare peanut and/or causing an increase in splits. Based on the conversations I have had and what I have observed, I am leaning more to a seed issue and not the liquid polymer treatment. We observed loose skins across both liquid polymer products and with the dry formulation. I will keep you posted as I learn more information.

### Important Dates:

Agent Field Day --- June 8<sup>th</sup> in Tifton

American Peanut Research and Education Society Meeting --- July 10-13<sup>th</sup> in Savannah, GA

SE Peanut Growers Conference – July 27-29<sup>th</sup> in Sandestin Resort in Miramar Beach, Florida

Midville Research Field Day – August 9<sup>th</sup>, Midville, GA

Cotton and Peanut Research Field Day – in Tifton on September 6<sup>th</sup>

Cotton Defoliation and Peanut Maturity -- Scheduled for September 6 and 7<sup>th</sup> but will likely need to be changed to the following week of September (TBD)

I wanted to express my thanks for all the agents that put in a variety trial this year. For many of the trials, I was able to provide the newest releases for you to evaluate in the counties. I am sharing the county and variety list planted in each county for your information. I would be up to doing a tour at some of these trials for the newer agents in the latter part of June or in July. Please let me know if a group of you are interested. **See Table Below.**

<b>Agent Name and County</b>	<b>Peanut Varieties</b>
Madison Warbington - Macon	Florun 331, AUNPL-17, GA-12Y, GA-16HO, GA-18RU, GA-06G
Jeremey Kichler - Colquitt	FloRun -T61, GA-21GR, TiftNV-HG, GA-22MPR, GA-06G
Cody Powell - Miller	Florun-52N, TifNV-HG, GA-22MPR, GA-06G
Brian Cresswell - Early	FloRun-T61, GA-21GR, GA 22MPR, FloRun 52N, GA-06G, TIFNV-HG
Jay Porter - Pulaski	Aunpl-17, GA-16HO, GA-18RU, GA-06G, GA-12Y
Cole Moon - Bleckley & Twiggs	GA-06G, GA-20VHO, GA-18RU, AUNPL-17, GA-12Y
Bill Tyson - Bulloch	GA-16HO, Ga-06G, GA-21GR, TifNV HG
Derrick Bowen - Tattnall	GA-06G, GA-20VHO, GA-18RU, FR-331
Cale Cloud - Grady	GA-06G, GA-12Y, GA-18RU, AUNPL-17, TiftNV-hiol
Ashley Smith - Coffee	FloRun T61, Aunpl-17, GA-20VHO, GA-21GR, TifNV-HG
Holly Anderson -Ben Hill	FloRun-T61, GA-16HO, AUNPL-17, GA-21GR, TifNV-HG, GA-06G, GA-12Y
Luke Crosson and Taylor McDaniel - Randolph County	GA-16HO, Florun -T61, AUNPL-17, GA-20VHO
Brian Hayes - Mitchell/Decatur	GA-06G, GA-16HO, AUNPL-17, GA-20VHO, and TifNV-hiol
Tucker Price. Cook.	GA-12Y, FloRun-331, FloRun-T61, GA-20VHO, and GA-18RU
Braxton Crews- Marion/Webster	FloRun 52N, TifNV-HG, GA-22MPR, TifNV-hiol
Wade Parker, Midville Station	Ga-06G, GA-12Y, Ga-16HO, Ga-18RU, GA-20VHO, GA-21GR, GA-22MPR, TiftNV-HG, FloRun-331, FloRun-T61, AUNPL-17, DGX0718, DGX0913, CP1, CP2, & CP7
Will Brown - Brooks	GA-06G, GA-16HO, GA-18RU, GA-12Y
Ben Reeves, Berrien	Ga-06G, GA-12Y, Ga-16HO, Ga-18RU, GA-21GR, GA-22MPR, CP1, CP7, TiftNV-HG, FloRun-331, FloRun-T61, and AUNPL-17 <b>All varieties with be tested with and without Apoge/Kudos</b>