



Lee County Ag Newsletter

July 2022, Volume 22, Number 9

Lee County Pecan Update (Doug Collins)

The Lee County Pecan Update will be held Tuesday, August 2 at noon in the Lee County Extension Office Meeting Room. A sponsored meal will be served. Although not required, please call Courtney at 759-6025 or email her at Courtney.Wingfiled@uga.edu to let us know you are coming so we can plan for the meal.

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.

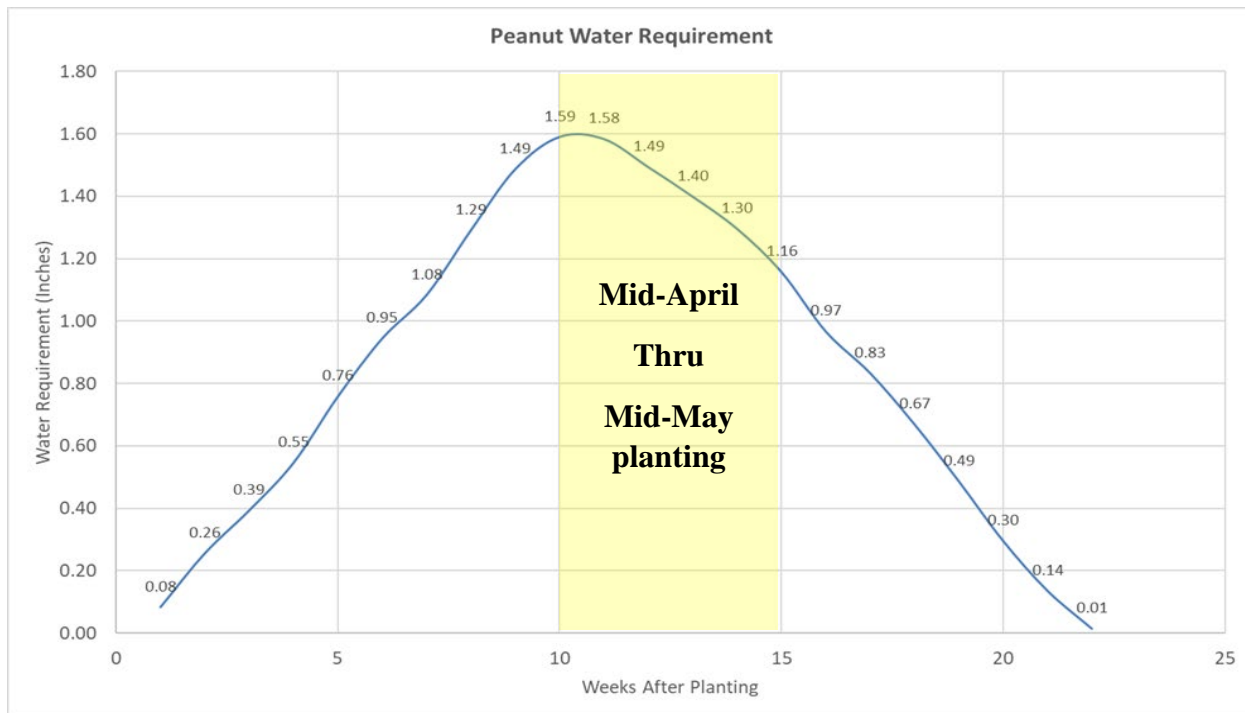
Wesley Porter, Extension Precision Ag and Irrigation Specialist, UGA David Hall, Extension Water Educator, UGA Jason Mallard, Extension Water Agent, UGA

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 31st 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 Kemerait, 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 it 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 a 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 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.

Georgia Grain News 7-15-22

Soybeans

The revised 2022 Soybean Guide is now on the web at

<https://grains.caes.uga.edu/content/dam/caes-subsite/soybeans/docs/2022-Soybean-Production-Guide.pdf>

Pods filling on soybeans now in many cases, so time to watch close for insects and diseases and provide plenty of water if you have the capability.





Japanese beetles are a real problem in the north half of Georgia and we saw some high levels last week, but we go by the defoliation level before treating as shown below in the UGA Pest control guide section by Phillip Roberts. We can stand some foliage damage before bloom but once the plant blooms we need to watch the defoliation closely.



Photos taken last week in Middle Georgia.

Japanese Beetles	<i>alpha-cypermethrin</i> Fastac CS	3A	2.8–3.8 oz	0.018–0.025	12 H/ 21 D	Japanese beetles are foliage feeders and are most often observed in areas of Georgia. Defoliation Threshold: Treat when 30% foliage loss has occurred and beetles are in bloom, or when 15% foliage loss has occurred and beetles are present.
	<i>carbaryl</i> Sevin 4F	1A	1–2 pt	0.5–1	12 H/ 21 D	
	<i>beta-cyfluthrin</i> Baythroid XL 1	3A	1.6–2.8 oz	0.0125–0.022	12 H/ 21 D	
	<i>gamma-cyhalothrin</i> Declare 1.25	3A	1.28–1.54 oz	0.0125–0.015	24 H/ 45 D	

UGA Extension Special Bulletin 28 • Georgia Pest Management Handbook

SOYBEAN INSECT CONTROL

PEST	INSECTICIDE	MOA	FORMULATION PER ACRE	LBS. ACTIVE PER ACRE	REI/PHI (Hours or Days)	REMARKS AND PRECAUTIONS
Japanese Beetles (continued)	<i>lambda-cyhalothrin</i> Warrior II Zeon 2.08 Silencer 1	3A	1.6–1.92 oz 3.2–3.84 oz	0.025–0.03	24 H/ 30 D	Japanese beetles are foliage feeders and are most often observed in areas of Georgia. Defoliation Threshold: Treat when 30% foliage loss has occurred and beetles are in bloom, or when 15% foliage loss has occurred and beetles are present.
	<i>zeta-cypermethrin</i> Mustang Maxx .8EC	3A	2.8–4 oz	0.0175–0.025	12 H/ 21 D	

Corn

Special Agent Cale Cloud of Grady County just sent me this photo showing denting corn where they had limited irrigation during late pollination(R1) and blister(R2) and perhaps milk(R3) stages. That was when we were having extreme heat and dry weather. On the very tip there was no pollination then as we go down the ear we see the shrunken, aborted kernels. Kernel abortion can only occur through the Blister and Milk stages.

(Cale's special because he was my 4-H'er once upon a time.... and he's a great ag agent.)



Some of the oldest corn is maturing and reaching $\frac{3}{4}$ milkline so if you have good moisture at that point the irrigation can be cut off as you are 5-7 days from black layer. Remember its best to harvest corn before it drops below 20% moisture and dry it, so many folks will begin soon.

Some folks plant late corn behind vegetables or even corn. Here's a photo I took this week of some planted after snap bean harvest and boy is it growing fast. Planted 6-20 and photo taken 7-11 so 21 days old and already at R6. Late corn needs special attention given to water, getting fertilizer sidedress on timely, and watching for worse disease and insect problems.

Here below is an info sheet I wrote up concerning late corn care.



Late Corn after Corn

Rome Ethredge

Late irrigated corn planted after corn in the same field can be done in July in South Georgia. Corn planted very late is risky and will yield lower, of course and have some other problems, but may be profitable.

Usually, we get about a half yield, so 100 bushels per acre or so but sometimes more. We start off with long hot days and end up with short cool days.

Normal corn maturity is in about 130 days but late corn can be ready in 95 days or so. Corn needs about 2700 heat units to make and that's the difference. I did a study at our Donalsonville, Seminole county weather station for several years and we see from July 20 to Oct 31 you get real close to that heat unit accumulation to get corn mature. A problem can be getting corn to the final phase and ready for harvest as the days are short and can be cool. It will likely need to be dried after harvest. If we have warmer weather in the fall that really helps.

July 20 to Oct 31 Heat Unit Accumulation, Seminole County, Donalsonville, GA

2021	2672 GDD
2020	2737 GDD
2019	2927 GDD
2018	2753 GDD
2017	2645 GDD
2016	2759 GDD
2015	2600 GDD
2014	2597 GDD

Everything moves real fast with a late crop so we need to have fertilizer and herbicide out early and start watering harder, earlier. We want to grow the best plant we can, early for the

best yield, and it takes lots of water. Usually we have short, less beefy corn that's planted very late.

Variety selection is important as a disease and insect resistant hybrid will be needed as insects and diseases are worse that time of year. NCLB and SCLB disease resistance is a must and we'll still have to spray fungicides several times mainly for Southern Rust. Any Bt hybrid with the Vip3A gene, Syngenta Viptera, Pioneer Leptra, or Dekalb Trecepta will be good. On your seed at least the 500 level seed treatment such as Avicta complete or Poncho Vitivo would be good. Some have used tropical corns but it can be hard to get them dried down in time but would be good for silage.

We would plant less seed, maybe 26,000 seeds per acre. And we may need to plow out volunteer corn if planted right after corn. Directed herbicide may help as well as planting a Liberty resistant hybrid after a nonresistant one but most are resistant to glyphosate and Liberty now and it doesn't work that well anyway.

In furrow insecticides/nematicides will help. Avoid fields with bad nematode problems. Stinkbugs will likely have to be sprayed at least twice. Sometimes caterpillar sprays are needed as well.

We wouldn't need as much fertilizer as our yield goal is less, maybe fertilize for 140 Bushels. But we do need to put some at planting and quickly sidedress. Pop up fertilizer will help as we may have a lot of organic matter breaking down around the roots. Maybe a third of the popup with 10-34-0 and 2/3rds Nitrogen since we aren't facing the early cool season Phosphorus need.

Southern rust will already be here so start fungicides by V8, maybe earlier, scouting is important, (combo fungicides best). Disease can be a big problem in late corn and will require frequent sprays. Early sprays by a ground rig will work, and then move to the airplane.

Need to watch for Tar spot too but same fungicides should work on it as well.

Corn after corn is somewhat risky business and yields in Georgia aren't high but has worked for some folks especially in deep south Georgia, especially if you have on-farm drying and good irrigation. Check with who you plan to sell the corn to, to make sure it will have a home once harvested.

Georgia Grain News 7-20-22

Ultra Late Soybeans

With corn harvest beginning, some folks will immediately plant some irrigated, Ultra Late soybeans. It's a bit risky but usually they make at least 30 Bushels in south Georgia, but sometimes much less and sometimes 50 Bu or so. How early cold weather comes in and insect problems can make a big difference. Here's our write-up below in the UGA Soybean production guide concerning this.

Old photos below of ultra late soybeans drilled into corn stubble emerging and then nearing maturity.





Ultra-Late Soybean Production System

Corey Bryant & Rome Ethredge

Growers in South Georgia are able to take advantage of a unique soybean production system where soybean is planted in late July to early August following corn harvest. Adoption of the ultra-late soybean production system has been driven by the ability to control late season weed pressure while also producing a marketable crop. The ultra-late soybean production system is also most widely adopted when soybean prices are above \$12/bushel. Current maturity group recommendations are to plant a VI or VII variety that will get some good height quickly. Go to the UGA Variety site, <https://swvt.uga.edu/> for research results from Ultra Late plantings in Camilla. Yields are variable with this system and can be very low or high as seen here.

Yield Summary: Ultra-Late Production
Soybean Variety Performance at Camilla, 2021

Company or Brand Name	Variety	Planting date		Statewide Average		
		8-2	8-12	2021	2-Yr	3-Yr
bushels/acre						
Multiple Maturity Groups						
Pioneer	95Y70	55.1	11.7	33.4	-	-
INTEGRA	77052N	52.0	7.5	29.7	-	-
Maxon Seed	AGS 6777C	50.5	17.0	33.7	-	-
MorSoy	MS 5640 XF	49.8	11.5	30.6	-	-
NK Brand	NK57-A3XF	49.1	11.7	30.4	-	-
INTEGRA	SXF10167	46.9	4.1	25.5	-	-
Local Seed	LS56140F	46.3	7.9	27.1	-	-
SCCIA	Musen @250k	45.1	4.7	24.9	-	-
MorSoy	MS 5461E E3	44.8	12.9	28.8	-	-
Asgrow	AG56XF2 XF	43.9	11.4	27.6	-	-
NK Brand	NK55-M9XF	43.9	13.5	28.7	-	-
Credenz	CZ 5859LL	43.9	16.1	30.0	26.4	30.5
MorSoy	MS 5491 XF	43.0	16.4	29.7	-	-
NK Brand	NK59-Q4XF	42.9	12.5	27.7	-	-
SCCIA	Musen @275k	42.9	9.1	26.0	-	-
Credenz	CZ 6362XF	42.6	9.1	25.8	-	-
Asgrow	AG54XF0 XF/ISR	42.2	5.3	23.7	-	-
Local Seed	LS46060FS	40.9	16.7	28.8	-	-
MU	MO 4901D GT (Public)	40.6	5.1	22.9	23.1	-
Credenz	CZ 7570LL	40.2	10.9	25.6	25.2	-
Dyna-Gro	S46XS60	39.5	5.8	22.6	-	-

Row Spacing

The ultra-late soybean production system is the most responsive soybean production system to row spacing. Current UGA recommendations are to drill seed on 7.5-inch spacings. The primary benefit to this row spacing is the ability to reach canopy closure and shade the soil surface in a production system where soybeans will not get very tall. Drill seeding on 7.5-inch spacing also allows for easier no-till planting into corn residue as most grain drills are already setup for no-tillage applications. Row spacings as wide as 30 inches have been used with some success.

Planting Date

As with the double crop soybean production system, your planting date in the ultra-late soybean production system will be dependent on harvest timing of the preceding crop. Current UGA recommendations are to avoid planting soybean after the first week of August. No-till planting into the corn residue allows for more timely planting of soybean as time is not squandered by land preparation operations. Furthermore, land preparation operations may lead to accelerated evaporation of valuable soil moisture.

Seeding Rate and Population

Increased soybean seeding rates have demonstrated the greatest yield potential in the ultra-late soybean production system. Seeding rates should be at least 175,000 seed/acre and current UGA research has demonstrated additional yield benefits from seeding rates that exceeded 200,000 seed/acre. Target soybean plant populations should not fall below 150,000 plants/acre in order to achieve maximum yield.

Irrigation Capabilities

Irrigation is a must for the ultra-late soybean production system to be successful. When planting this late in the year irrigation may be needed for both germination and growth. Ensure that soybeans planted in the ultra-late soybean production system do not become drought stressed, significant yield loss will occur.

Fertility

Growers who have successfully adopted the ultra-late soybean production system apply additional N fertilizer at or close to planting. This additional N increases early-season vegetative growth which is necessary to get the first node as high off the ground as possible so that all pods may be combined. 30 to 50 units of additional N should be sufficient to increase both plant height and soybean yield.

Get the Corn Out

High temperatures and frequent showers and poor shuck cover, (husk not completely covering the ear), that I'm seeing in many fields this year is a problem. Insect damage is also common, especially near the edges. All these things add up to the possibility we'll see more aspergillus mold problems, which can lead to aflatoxin in the grain. Here's an ear I saw this week with Aspergillus, confirmed by Dr. Kemerait, from a field just black layering, mature. This was under the irrigation end gun where less water got to it.

We need to get this corn harvested quickly. Best to harvest corn before it hits 20% moisture and dry it, but I'm not buying the propane lol, but you'll get better yield and quality.



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