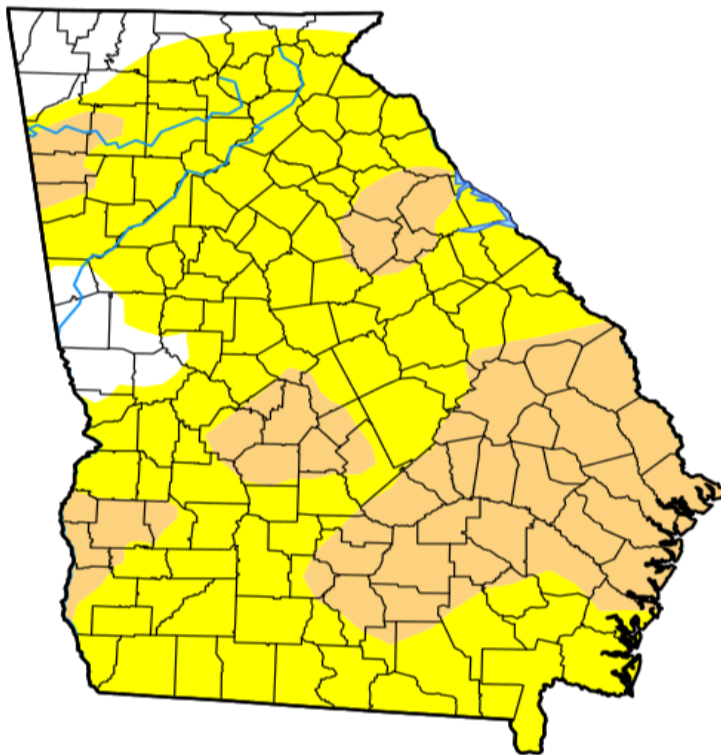


In This Issue

- US Drought Monitor
- Where to Report Drought Impacts (Knox)
- Pegging Zone Sampling in Runner Peanut
- Layby Directed and Hooded Row Middle Applications of Engenia, FeXapan, and XtendiMax Approved for Use By Georgia Cotton and Soybean Growers. (A.S. Culpepper - UGA and T. Gray - GDA).
- Weekly Water Use By Peanut...
- Scout Schools: Tifton June 10, 2019 and Midville June 18, 2019
- Insect Update: Pecan Bud Moth and Nut Casebearers
- Corn Irrigation Schedule
- Cotton Water Requirments
- Pecan Water Requirements and Heat (Lenny Wells)

**U.S. Drought Monitor
Georgia**

May 28, 2019
(Released Thursday, May. 30, 2019)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	7.43	92.57	30.18	0.00	0.00	0.00
Last Week 05-21-2019	32.11	67.89	17.85	0.00	0.00	0.00
3 Months Ago 02-26-2019	98.20	1.80	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 09-25-2018	70.95	29.05	6.72	0.00	0.00	0.00
One Year Ago 05-29-2018	99.17	0.83	0.00	0.00	0.00	0.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Richard Heim
NCEI/NOAA



<http://droughtmonitor.unl.edu/>

Where to Report Drought Impacts (Knox)

Several years ago we were impacted by an extreme drought. If you've been following the drought posts on this blog, you know that moderate drought is expanding across the Southeast. But sometimes the map doesn't capture the full picture of what is going on in the ground because no one is there to report it. The Drought Monitor authors would love to have more information to help them make the best possible maps. You can help by reporting your impacts in one of several ways. If you are a CoCoRaHS observer, then there is a place on their web page <http://www.cocorahs.org> to report your

conditions (note that you can also report wet conditions there, they just want to know whatever you are seeing. And if you are not an observer, now is a great time to get started!) Another place to report drought impacts is on the Drought Reporter at <http://droughtreporter.unl.edu/map/>. Just click on the “Submit a Report” link on the top menu. During the growing season, Extension agents can also report by submitting comments to the weekly reporter for the National Ag Statistics Service – which many of us did several years ago as well.

Join the Climate and Agriculture in the South East “On the CASE” blog at <https://site.extension.uga.edu/climate/author/pknox/>

Pegging Zone Sampling in Runner Peanut

Peanuts have a high calcium requirement. Calcium must be available to the developing peg and pod in a water soluble form in the pegging zone area. If you need to apply calcium (in the form of gypsum, landplaster) it needs to be applied at early flowering. Pull the sample slightly offset of the peanut row about 3 inches deep. Pegging zone samples need to show 500 pounds of soil test calcium. If you are at the 500 mark or better and you have a 3 to 1 calcium to potassium ratio then calcium requirements should be met. If you do not meet EITHER of these requirements then you need to apply 1000 lb/a gypsum at early bloom. Also, all peanuts grown for seed should automatically receive this gypsum application, regardless of soil test calcium levels. Soil sample bags are available at the Extension Office if you would like to do pegging zone tests.

Layby Directed and Hooded Row Middle Applications of Engenia, FeXapan, and XtendiMax Approved for Use By Georgia Cotton and Soybean Growers. (A.S. Culpepper - UGA and T. Gray - GDA).

A state Section 24(c) Special Local Need Label has been approved by the U.S. EPA and Georgia Department of Agriculture (GDA) allowing directed and hooded applications for Engenia, FeXapan, and XtendiMax.

Label Information:

1. Applicators must have attended (and registered) a 2019 Using Pesticide Wisely training and must be a certified applicator.
2. Each applicator must have the label of the product they decide to use in their possession during the application. Labels can be obtained at the GDA web site: <http://agr.georgia.gov/24c.aspx>. Once on the website, click “go to dicamba page”; then select the “24C label” for the product of choice. These labels will provide detailed information needed to make a proper application.
3. Hooded applications: May use any standard spray tip as long as droplets are coarse or larger in size (>341 microns VMD₅₀). Hoods must remain in contact with soil while making the application. A maximum of 6 mph sprayer speed. Tolerant cotton or soybeans must be at least 15 inches in height at time of application.
3. Directed Layby applications: May use any standard spray tip as long as droplets are coarse or larger in size (>341 microns VMD₅₀). Spray release point must not be more than 10 inches from the soil and the cotton or soybean must be at least 20 inches in height. Spray tip must be angled downward toward the soil making sure no spray droplets remain in the air. A maximum of 6 mph sprayer speed is required.
4. Engenia, FeXapan, and XtendiMax can be mixed with any other labeled cotton or soybean herbicides approved on the manufactures websites (www.engeniatankmix.com; www.xtendimaxapplicationrequirements.com; <https://www.corteva.us/products-and-solutions/crop-protection/fexapan.html>).

Do not tank-mix with AMS or glufosinate products (Liberty, etc.)

A few questions and answers:

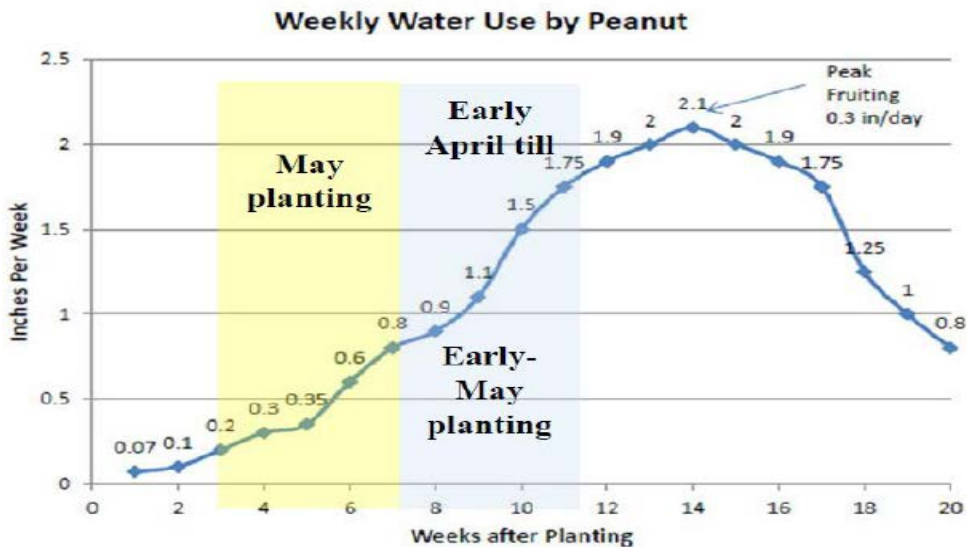
1. *Do hood or layby applications reduce the buffer requirements currently required for topical applications?* NO!

2. Do hood or layby applications increase the application window for these dicamba formulations? Yes. Hooded or directed applications can be made in-crop up until 7 days pre-harvest for cotton and up to beginning bloom in soybean.

Special thanks: The authors would like to thank the U.S. EPA for their willingness to discuss and ultimately support these new labels. The opportunity for Georgia agriculture to further steward pesticides by reducing off-target drift while simultaneously improving weed control through improved spray coverage of weeds is a result of sound science and cooperation.

Weekly Water Use By Peanut...

I have been receiving phone calls about irrigating peanuts. Below is a chart that provides water use in inches per week.



Scout Schools: Tifton June 10, 2019 and Midville June 18, 2019 Insect scouting schools will be conducted on June 10, 2019 in Tifton and June 18, 2019 in Midville. Crops to be covered include cotton, peanuts, and soybean. These programs offer basic information on insect pest identification and damage, natural enemies, and scouting procedures. The training will serve as an introduction to insect monitoring for new scouts and as a review for experienced scouts and producers. Program topics include, Bug and Larval Insect Pests, Beneficial Insects, Scouting Procedures, Safety, and an In-Field Review. Each program will begin at 9:00 a.m. and conclude at 12:30 p.m. If you want more info please go to the link below.

[UGA Scout schools](#)

Insect Update: Pecan Bud Moth and Nut Casebearers

It's that time of the year again that these moth pests are out and about.

Bud Moth. There have been calls regarding bud moth problems with young trees recently. Symptoms include rolled leaves and dead terminals (pictures below). To confirm infestation, check the rolled leaves and you would find a caterpillar inside. Bud moth adults lay eggs on leaves and buds, and once the eggs hatch out, the larvae feed on leaves and buds and will eventually tunnel into the shoots. Early season attack can seriously damage young trees by killing terminals which causes multiple branching. Time application before caterpillars bore into the shoots. Here are the options: Intrepid, Dimilin, Spintor, Altacor and Minecto Pro. Bad infestations may necessitate treatment using chlorpyrifos (Lorsban) but be aware that using this product is detrimental to beneficial insects.

[READ MORE](#)

Corn Irrigation Schedule

Growth Stage	Days After Planting	Inches Per Day
Four to six leaves expanding. Growing point near surface. Other leaves and roots developing	23-27	0.12
	28-32	0.14
	33-36	0.17
Six to eight leaves Tassel Developing. Growing Point Above Ground.	37-41	0.19
	42-45	0.21
Ten to twelve leaves expanded. Bottom 2-3 leaves lost. Stalks growing rapidly. Ear shoots developing. Potential kernel row number determined.	46-50	0.23
	51-54	0.25
Twelve to sixteen leaves. Kernels per row and size of ear determined. Tassel not visible but about full size. Top two ear shoots developing rapidly.	55-59	0.27
	60-64	0.29
Tassel emerging, ear shoots elongating	65-69	0.31
Pollination and Silk emerging.	70-74	0.32
	75-79	0.33
Blister Stage	80-84	0.33
Milk Stage	85-89	0.34
Early Dough Stage	90-94	0.34
Dough Stage	95-99	0.33
Early Dent	100-104	0.30
Dent	105-109	0.27
Beginning Black Layer	110-114	0.24
Black Layer	115-119	0.21

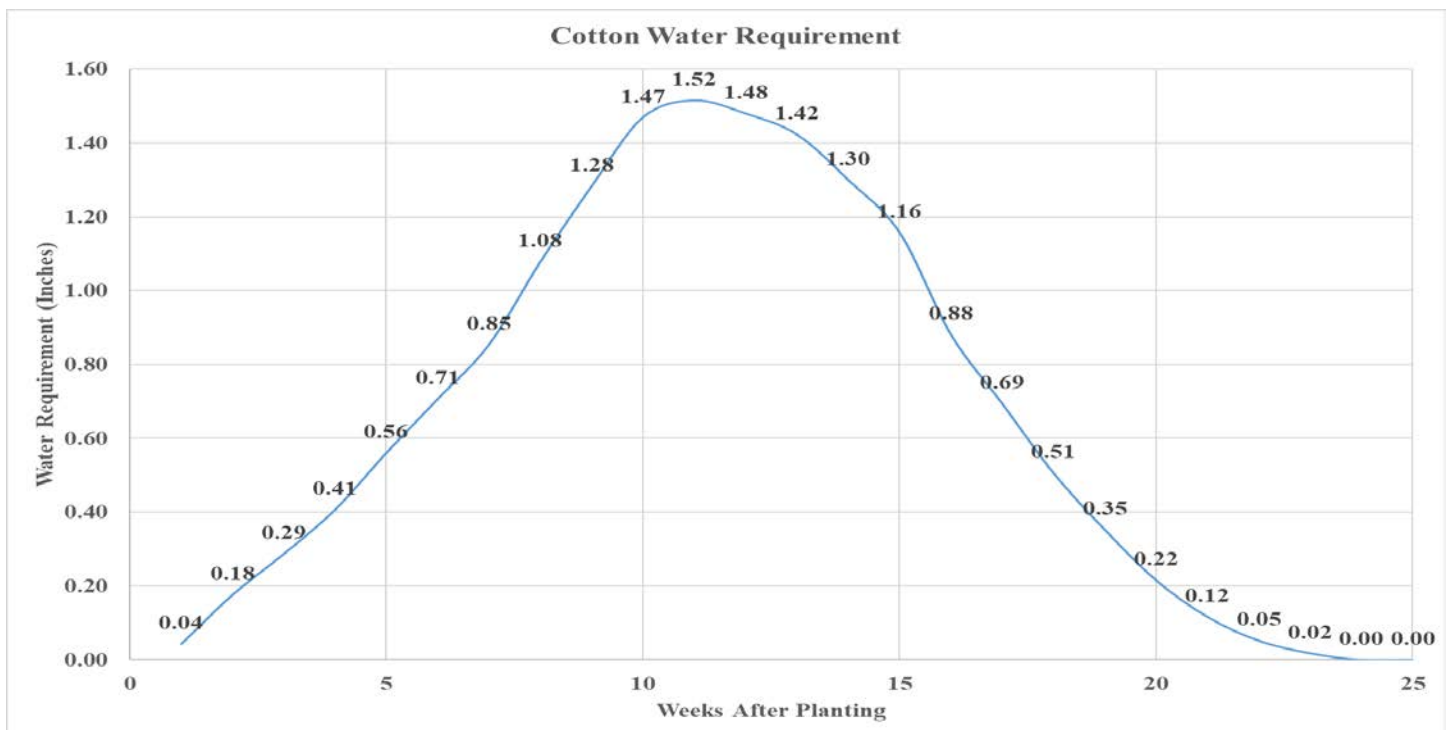
I have been getting questions about the effects of drought on corn yield. In some areas, producers have been having challenges irrigating corn as the crop reaches tassel stage and other reproductive stages of development. The table 1 below shows the effect of drought on corn yield at different stages of development.

Table 1. Effect of drought on corn yield

Stage of development	Percent yield reduction (from 4 consecutive days of visible wilting)
Early vegetative	5-10
Tassel emergence	10-25
Silk emergence, pollen shedding	40-50
Blister	30-40
Dough	20-30
Classen, M.M., and R.H. Shaw. 1970. Water deficit effects on corn. II. Grain components. Agron. J. 62:652	

Water Requirements: Cotton

Growth Stage	DAP	Weeks after Planting	Inches/Week	Inches/Day
Emergence	1 - 7	1	0.04	0.01
	8 - 14	2	0.18	0.03
Emergence to First Square	15 - 21	3	0.29	0.04
	22 - 28	4	0.41	0.06
	29 - 35	5	0.56	0.08
	36 - 42	6	0.71	0.10
First Square to First Flower	43 - 49	7	0.85	0.12
	50 - 56	8	1.08	0.15
	57 - 63	9	1.28	0.18
First Flower to First Open Boll	64 - 70	10	1.47	0.21
	71 - 77	11	1.52	0.22
	78 - 84	12	1.48	0.21
	85 - 91	13	1.42	0.20
	92 - 98	14	1.30	0.19
	99 - 105	15	1.16	0.17
	106 - 112	16	0.88	0.13
	113 - 119	17	0.69	0.10
First open boll to >60% Open Bolls	120 - 126	18	0.51	0.07
	127 - 133	19	0.35	0.05
	134 - 140	20	0.22	0.03
	141 - 147	21	0.12	0.02
	148 - 154	22	0.05	0.01
	155 - 161	23	0.02	0.00
Harvest	162 - 168	24	0.00	0.00
	169 - 175	25	0.00	0.00



Pecan Water Requirements and Heat (Lenny Wells)

We have some very high temperatures in the forecast for the next several days. With this in mind, I wanted to provide some irrigation suggestions. The irrigation schedule below is the recommended schedule for drip and microsprinkler on pecan in Georgia. As you can see you should move up to 35-40% of the maximum amount in June. It is probably a good idea to go ahead and move to that June rate at this point with the high temps and the onset of nut sizing coming up. With temperatures up around 100 degrees for several days growers will be tempted to increase the irrigation further. However, this is not necessary. Pecans are adapted to heat, and in fact, need it. Photosynthesis begins to shut down in many plants once temps get above 94 degrees. Pecan, however, can still function normally at temps of 106 degrees as long as they have the water they need. The June rate of 35-40% of maximum is adequate for mature pecan trees on drip or micro-sprinkler at this time. For solid set systems you should be at 1" per week.

For non-bearing trees, I would go up to as much as 170 gallons/week during the heat wave and dry weather on sandy soils.

Pecan Irrigation Schedule

Month	Gallons/tree/day	Gallons/acre/day	Percent of Full Capacity
April	48-70 gal/tree/day	576-840 gal/acre/day	16-20%
May	75-105 gal/tree/day	900-1260 gal/acre/day	25-30%
June	90-140 gal/tree/day	1080-1680 gal/acre/day	35-40%
July	120-158 gal/tree/day	1440-1896 gal/acre/day	40-45%
August	300-350 gal/tree/day	3600-4200 gal/acre/day	100%
September	300-350 gal/tree	3600-4200 gal/acre/day	100%
October	90-140 gal/tree/day	1080-1680 gal/acre/day	35-40%

**Turn Irrigation off for 3 days when receiving ≥ 1 " of rain

Sandy Soils=Use higher end of rate
Clay Soils=Use lower end of rate

Thanks for your time,

Jeremy M. Kichler
UGA Cooperative Extension
Colquitt County Extension Coordinator
229-921-1977