Leesburg, Georgia 31763



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College of Agricultural and Environmental Sciences

Cooperative Extension

Lee County Ag Newsletter

January 2022, Volume 22, Number 1

Crop Production Meetings (Doug Collins)

January 31, Monday	8:00 a.m.	Weed Meeting		
February 2, Wednesday	noon	Corn/Soybean/Wheat Production	Meeting	
February 7, Monday	noon	Irrigation Meeting		
February 10, Thursday Office Meeting Room	noon	Cotton Production Meeting		Lee County Extension
February 16, Wednesday Office Meeting Room	noon	Crop Disease Meeting		Lee County Extension
March 17, Thursday Club Fairgrounds	7:00 p.m.	Dougherty/Lee Pecan Production	Meeting	SW Georgia Exchange
August 2, Tuesday Room	noon	Pecan Update Le	ee County Ext	ension Office Meeting

Sausages will be served 30 minutes before each noon meeting <u>except</u> the Lee County Pecan Update. All meetings will be held at the Lee County Extension Meeting Room except the Dougherty/Lee Pecan Production Meeting, which will be held at the SW Georgia Exchange Club Fairgrounds. The address of the Lee County Governmental Building Meeting Room is 109 Main St., Leesburg, GA 31763. The Southwest Georgia Exchange Club Fairgrounds are located at the corner of Westover and Oakridge in Albany. A social time with sausages will start at 6:30 p.m. before the Dougherty/Lee Pecan Production Meeting. If you have questions, concerns, or need special accommodation, please call our office at 759-6025.

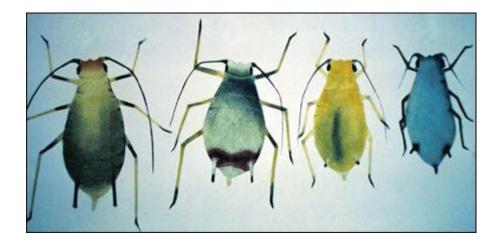
Aphids and Weeds in Wheat

Now's the time to be scouting wheat for aphids and weeds.

Aphids can cause direct feeding damage and transmit disease in small grains. Today (Jan 3, 2022), in Seminole County, I found Bird cherry-oat aphids reproducing in wheat, see the female and 6 young offspring in my photo. Although all aphids can potentially transmit barley yellow dwarf virus, infections in the Southeast US are mostly associated with infestations of bird cherry-oat aphid and rice root aphid. 6 per row foot is the treatment threshold for this growth stage, tillering. We are about at that level in this field and grower also needs to apply a herbicide now, so he will treat both pests together.



Bird Cherry-Oat aphids



Aphids (from left): English grain aphid, bird cherry-oat aphid, greenbug and corn leaf aphid.

The following is from Dr. David Buntin, UGA Entomologist:

A single, well-timed insecticide application of the insecticide lambda cyhalothrin (Warrior II, Silencer, and similar products) or gamma cyhalothrin (Declare) also can control aphids, reduce the incidence of BYD, and increase yields. The best time for treatment in northern Georgia usually is about 25 - 35 days after planting, although an application in the winter until full tiller also may be beneficial. In southern Georgia, the best treatment time usually is at full-tiller stage in late January to mid-February. But, scout fields for aphids at 25 - 35 days after planting and during warm periods in January to determine if an insecticide application is needed.

A lambda cyhalothrin or gamma cyhalothrin treatment at full tiller can be applied with top-dress nitrogen. Two new insecticides, Sivanto Prime and Transform WG, also will provide useful control but its effect on BYD infection has not determined. OP insecticides, such as dimethoate, also will control aphids but are not effective in preventing barley yellow dwarf infection. To sample aphids, inspect plants in 12

inches of row in fall and 6 inches of row in winter. In spring, inspect 10 grain heads (+ flag leaf) per sample. Count all aphids on both the flag leaf and head for making control decisions. Sample plants at 5 to 10 locations per field.

Thresholds from UGA Pest Control Handbook:

Inspect fields 25–35 days after planting, full tiller, and heading. Yield-reducing transmission of Barley Yellow Dwarf virus can occur during first two periods; transmission at heading is too late to reduce yield.

Aphid treatment thresholds are:

- Seedlings (2/rowft)
- 6-10 inch plants (6/row ft)
- Stem elongation (2/stem)
- Flag leaf (5/flag)
- Heading (10/head to includeflag)
- Soft/Hard Dough stages (Do not treat)

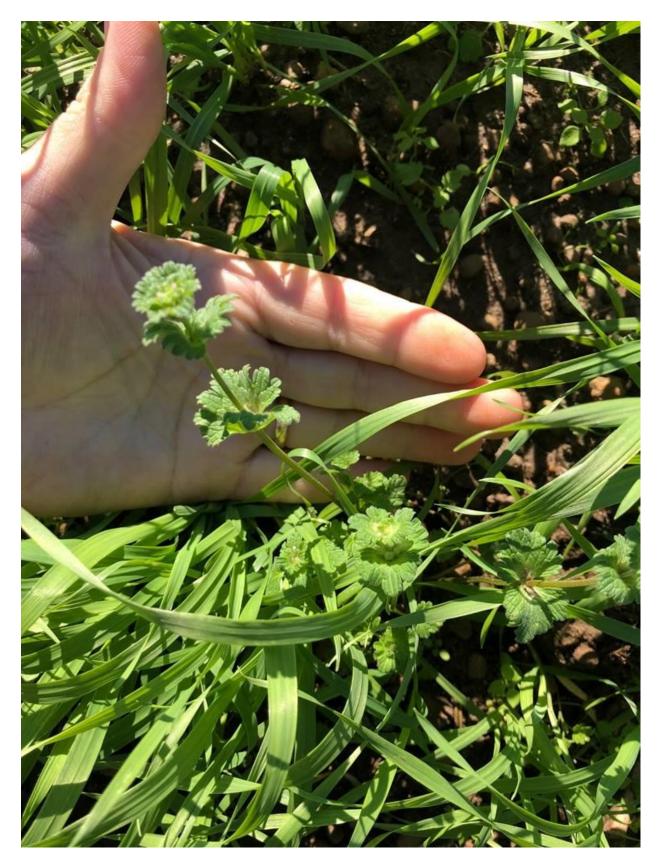
It's a good time for weed control in most wheat fields. In an earlier newsletter I had the Wheat Weed guide by Dr. Stanley Culpepper, so see it for details. https://site.extension.uga.edu/colquittag/files/2021/11/2021-2022-Wheat-Circular-002.pdf

I'm seeing Wild mustard in many fields which is the main reason for spraying. Also seeing Chickweed and Henbit in abundance and wheat has a few tillers on it, so it's a good time for a Harmony extra and MCPA mix in many fields. This is much better than the old standby 2,4-D, which has a very narrow spray time interval or it can hurt your yield and doesn't do as much on the variety of weeds we have.

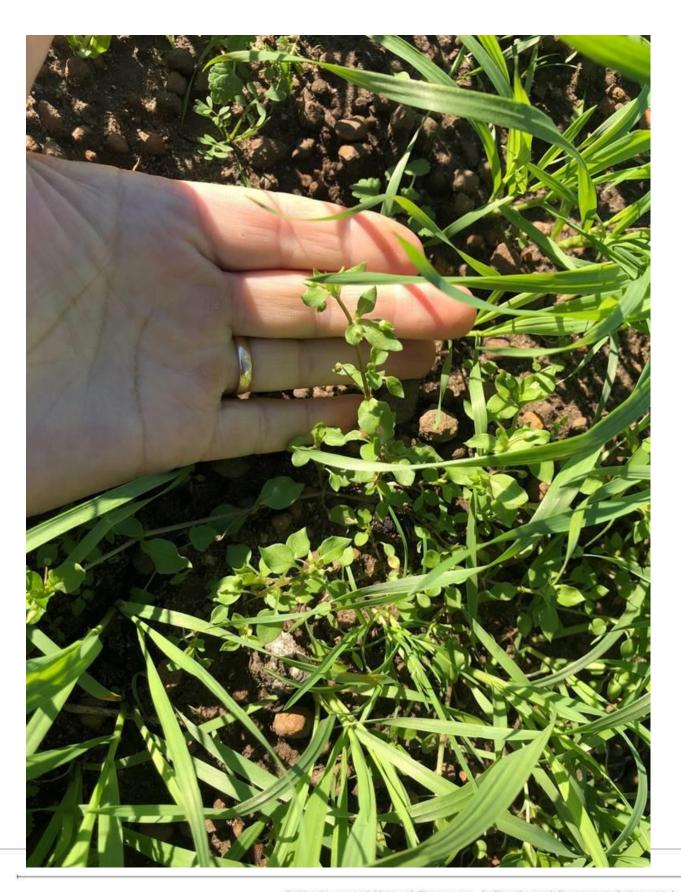


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Wild Mustard Needs to be controlled.						



Henbit, about to have purple blooms.



Agriculture and Natural Resources | Family and Consumer Sciences | 4-H Youth

Chickweed	
Grain News 1-12-22 (Rome Ethredge)	

2021/22 Wheat Market Situation and Outlook

Amanda R. Smith

Wheat Supply and Demand Highlights

- Acreage Up U.S. wheat plantings increased 5.1% from 2020 to 46.7 million acres in 2021; the first
 increase in planted acres since 2018. However harvested acres were expected up only 1.0% to 37.2
 million due to drought impacting wheat growth in much of the western and southern U.S. In Georgia,
 wheat growers (Figure 1) planted nearly 15.8% more acres in 2021 for a total of 220,000 acres and
 harvested 110,000 acres, up 30% from 2020. These were the highest wheat acres planted in Georgia
 since 2015 and harvested since 2016.
- Wheat Production Up in GA; not U.S. With much of the crop impacted by drought conditions in
 other states, U.S. wheat production in 2021 is projected to be 1.65 billion bushels; down 10% from
 2020. The U.S. average yield is projected to be 44.3 bushels per acre; down 5.4 bushels from last
 year. Georgia production is projected to increase 31.8% to 6.2 million bushels. The Georgia average
 yield for 2021 is projected at 56 bushels per acre, up 1 bushel from last year (Figure 1).

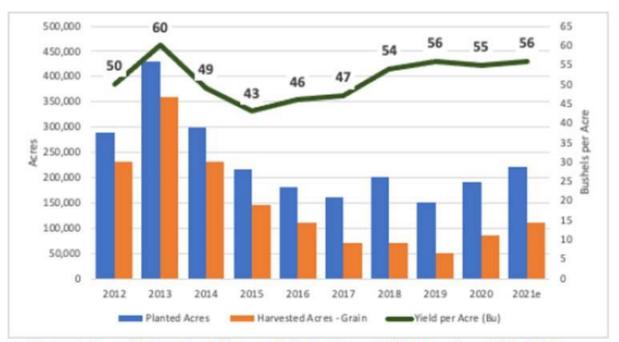


Figure 1. Georgia Planted and Harvested Wheat Acres and Yield per Acre, 2012-2021p.

 Wheat Use Mixed - Seed use is forecast up 3.1% to 66 million bushels based on expectations for higher plantings in the upcoming 2022/23 crop year. Total U.S. food use is expected to be stable at 962 million bushels. Feed and residual use of wheat is expected up 42.1% to 135 million bushels as livestock and poultry producers look for alternative feeds to the more expensive corn and soybeans. Total domestic wheat use for the 2021/22 marketing year is projected at 1.16 billion bushels, up 40 million bushels from the previous marketing year (Figure 2). Total domestic use for the 2020/21 marketing year was estimated at 1.12 billion bushels.

- Exports Weakened Exports are forecast down to 860 million bushels, a 13.3% decrease from last year. The pace of wheat exports and shipments weakened toward the latter part of 2021 (Figure 2).
- Ending Stocks Tighten –The projected smaller wheat crop combined with the expected increase in
 domestic use (food, feed and seed) will result in tighter ending stocks, reaching levels we have not
 seen in over 14 years. Ending stocks are projected at 583 million bushels, down 31.0% from last year
 (Figure 2). This coupled with strong futures and farm gate prices has pushed wheat prices up higher.
 USDA has projected season-average U.S. farm prices for 2021/22 wheat at \$6.90 per bushel.

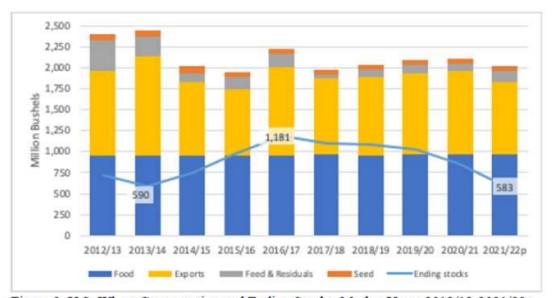


Figure 2. U.S. Wheat Consumption and Ending Stocks, Market Years 2012/13-2021/22p

 2022 Crop Outlook- The 2022 crop is likely to increase in acreage given historically low ending stocks, strong prices, and stable domestic demand. USDA projects U.S. planted wheat acres to increase in 2022. As of November 2021, U.S. wheat futures for 2022 are trading between \$8.15 and \$8.55 per bushel providing an opportunity for the price of wheat in Georgia to range between \$7.10 and \$7.90.

Sources

United States Department of Agriculture Economic Research Service, Wheat Outlook, November 17, 2021.

United States Department of Agriculture Foreign Agricultural Service, Grain: World Markets and Trade, November 2021.

In the Field (Rome Ethredge)

This week in many grain fields we are seeing aphids. But thankfully seeing some parasitism by tiny wasps laying eggs into the aphids and they plump up turn brown and die. Aphid in this photo still had immature wasp still in it as we see no tiny exit trapdoor yet.



Seeing some aphid predation by ladybugs. They are good predators.



Also, seeing some of the older leaves turning yellow and brown due to running out of nitrogen. N in the plant is being translocated to the new growth. Not a big problem but we will take this into account when considering whether to split our sidedressing soon, as it can affect tillering.



I'm seeing and hearing of lots of growth on weeds, seems worse with the weather we've had.

An Equal Opportunity, Affirmative Action, Veteran, Disability Institution

Grain News 1-21-22 (Rome Ethredge)

This week we are seeing grains growth slowdown due to cold temperatures. Oats, photo below, especially showing some effects of the cold as oats are more sensitive to cold temperatures, especially temperature swings.



Time to Evaluate Tillering

Next week, the last week in January, will be time to count total stems in wheat and oats to then decide whether to split sidedress N or just wait and apply all of it the second week of February or a little later in North Georgia. See below, modified from Wheat UGA top 10 sheet. https://grains.caes.uga.edu/content/dam/caes-subsite/grains/docs/wheat/critical-management-inputs-2021.pdf

Topdress wheat with nitrogen in a timely manner in late winter and early spring.

During the later days of January, begin counting tillers to determine the need for additional nitrogen applications for the proper tiller production. If total stem counts counts (a stem with at least three leaves) exceed 80 or more per square foot, then apply all remaining nitrogen at stem elongation. Usually this occurs during early to mid-February in the southern half of Georgia. In extreme N. Ga, stem elongation may not occur till early March.

If the tiller count is less than 80 per square foot, then apply 30 to 40 lbs of N per acre to encourage tiller production prior to the onset of stem elongation. Complete the topdressing prior to 1st node stage. Nitrogen rates will vary according to the soil type, variety lodging resistance, irrigation capability, previous crop, etc. In general, total N rates range from 100 lbs N per acre to 120 lbs N. Be sure to include sulfur with the nitrogen. Sulfur deficiencies occur when the ratio of nitrogen in a tissue test exceeds 18:1. Tank mix an approved pyrethroid if aphids are present to reduce the risk to the barley yellow dwarf virus. Supply 15 to 20 lbs of S per acre if soils are sandy.

Each stem produces a grain head, so we want plenty for a good grain yield. If seed were broadcast then count stems in a 12 inch X 12 inch area. If drilled in rows, do the math to figure out how far down the row to count. For example on 7.5 inch rows, go 19 inches down the row to get a square foot. Make counts in several representative areas of the field.

Tillers = Grain Heads

- Count tillers last week in January
- If not 80 per square foot split sidedress in 2 applications
- If 80 or more just sidedress 2nd week in February

This plant has 3 total stems. Some plants will have 5 or more.



Corn Fertilizer Use

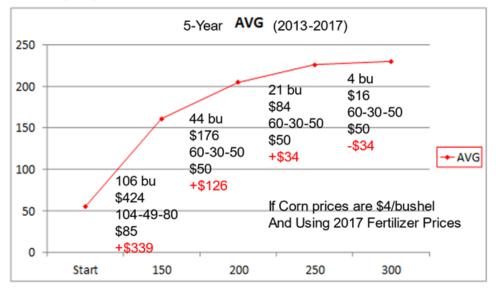
Dr. Glen Harris, UGA Scientist, has done the research and developed these 2 interesting graphics concerning fertilizer rates in corn at different yield goals. UGA soil test recommendations are for 1.2 pounds of Nitrogen for each bushel of corn you plan to make. Note how it tracks pretty close to that in the yields in this 5 year Georgia study. One lesson here is you can't cut N without affecting yield on our soils. On the first slide Glen has our typical Nitrogen costs and corn price. The second slide has recent N cost and projected corn price for 2022 crop.

Across the bottom of both slides he has the yield goal he fertilized for and on the side the actual yields. He also adjusted phosphorus and potassium for the different yield goals. The numbers in red are how much money per acre he made by the increase in fertilizer for the higher yield goals. Why didn't going for 300 bushels make money? There was some other factor keeping yield from climbing, not fertilizer. Could be irrigation amount or timing, soil, disease... many possibilities. It is interesting that even with high fertilizer prices, it still paid to fertilize to 250 Bu goal but we lost much more money when overfertilizing to the 300 level.

Fertilizing Corn (N-P-K) By Yield Goal

Dr. Glen Harris, UGA

Actual Yield (bu/a)

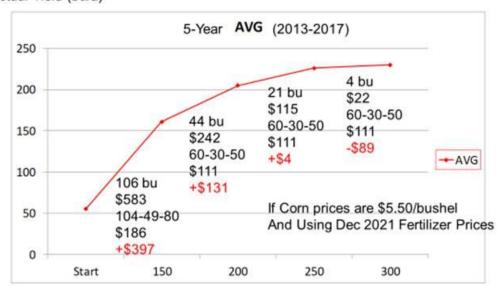


Yield Goal (bu/a)

Fertilizing Corn (N-P-K) By Yield Goal

Actual Yield (bu/a)

Dr. Glen Harris, UGA



Yield Goal (bu/a)

Georgia Corn Growers Blog

The Georgia Corn Growers Association, led by Dr. Dewey Lee, retired UGA scientist, has a blog you may like subscribing to as it has some very useful information posted throughout the year. Here's the link https://georgiacorngrowersblog.com/

Georgia Grain News 1-25-22 (Rome Ethredge)

Oat disease

Looking at some Oats being grown for grain this week, I'm seeing treatable levels of weeds and aphids in some fields and some **Leaf Blotch disease** (aka Drechslera leaf spot) developing. This is pretty common on oats in the winter and according to Dr. Alfredo Martinez, UGA Plant pathologist, it usually isn't bad enough for chemical control, it usually slows down with warming temperatures. Here 2 photos I took.



I have not seen any yet this year, but our most serious disease in oats is **Crown Rust,** *Puccinia coronate f. sp. avenae,* and often fungicide sprays are needed for it. Some oat varieties are resistant but we can't always rely on that as the disease shifts over time so we can loose that protection. It can get real bad and really affect yield. File photo below.



Soybean Varieties

I've attached new 2021 season UGA Soybean variety information. It is on the UGA Variety at this link. https://swvt.uga.edu/content/dam/caes-subsite/statewide-variety-testing/docs/performance-trials/2021/2021-soybean-prelim.pdf

Remember we have 3 distinct soybean growing systems in Georgia; **Early System** where we plant Indeterminate maturity group 3,4 or sometimes 5, **Full Season** where we use group 5 through 8, and **Ultra Late**, usually group 6 or 7 that are tall growing . We could add another one if you count **Double crop beans** which is late Full season, use group 6 or 7.

Here's an excerpt from the UGA Soybean guide concerning variety selection.

"Soybean development is controlled by the determinate or indeterminate growth habit of the particular variety. Determinate soybean varieties are typically range from maturity group (MG) V to MG X; however, some late MG IV soybean varieties are

also determinate. Indeterminate varieties typically range from MG 000 to MG IV; however, some early MG V soybean varieties are also indeterminate.

The primary difference between determinate and indeterminate soybean varieties is the termination of vegetative growth and production of nodes on the main stem. **Determinate** varieties will cease vegetative growth and node production shortly after flowering begins; however, node production on branches will continue until seed fill (R5).

Conversely, **indeterminate varieties** will continue vegetative growth and node production on the main stem until seed fill begins. Georgia soybean producers may select one of four soybean production systems depending on their specific capabilities and goals. Please read the chapters for each individual soybean production system for agronomic practices and considerations specific to that production system."

Here's a link to the 2021 UGA Soybean guide, it's in the process of being updated for 2022. https://grains.caes.uga.edu/content/dam/caes-subsite/grains/docs/soybean/2021-Soybean-Production-Guide.pdf

		Variety			THE RESERVE OF			(he			
Soybean Variety Performance, 2021 (Continued) ompany or Midville Statewide Aver					erage						
Brand Name	Variety	Rome	Athens	Griffin	Early	Late	Plains	Tifton	2021	2-Yr	3-Yr
		100000				bu/acr	And the second second				
Maturity Group V											
Local Seed	LS6206X	73.9	126.5	41.8	82.6	82.8	104.3	49.9	80.3	25	12
Asgrow	AG54XF0 XF/SR	69.5	119.5	54.7	84.0	77.7	93.0	56.4	79.3		
NK Brand	S53-F7X	67.2	118.2	62.9	73.3	85.0	87.0	53.7	78.2		
Pioneer	P59A11SX	75.0	113.1	52.4	76.4	76.6	102.5	50.4	78.1	2	
Dyna-Gro	S58XT30	71.2	126.0	51.3	76.4	81.1	87.1	42.5	76.5	69.9	12
Pioneer	P55A49x	65.9	109.1	39.6	81.8	84.5	87.3	58.7	75.3	70.1	65.2
Progeny	P 5554RX	65.2	109.7	58.8	75.7	75.2	85.2	53.2	74.7		
Asgrow	AG56XF2 XF	62.0	109.1	58.4	72.6	76.7	85.3	56.7	74.4	20	
Asgrow	AG53XF2 XF/SR	62.3	102.3	66.7	74.6	77.3	83.3	53.1	74.3	18	12
MorSoy	MS 5491 XF	72.6	99.4	63.4	70.6	76.8	81.6	46.9	73.1		
MorSoy	MS 5640 XF	68.3	111.9	64.0	61.6	72.0	84.1	48.9	73.0		
UniSouth	USG 7571XT	65.0	112.2	53.8	76.9	79.1	82.4	53.7	72.9	68.9	
MorSoy	MS 5461E E3	66.9	105.3	50.1	71.4	75.3	82.3	58.3	72.8	25	100
MU	S16-14801C	65.7	94.0	54.2	77.2	85.0	78.3	54.7	72.8		
DonMario Seeds	DM59E01	64.6	110.0	38.9	67.9	80.4	89.9	54.0	72.2		
UniSouth	USG 7562XF	78.1	113.8	55.0	71.9	72.1	81.0	43.0	71.5	2	
VA Tech	V15-2261ST	68.9	106.5	51.3	66.1	72.0	87.6	48.2	71.5	65.5	12
Progeny	P 5424XF	63.9	104.9	46.5	72.3	84.1	82.9	45.9	71.5		
Local Seed	LS5614XF	62.9	112.2	56.3	75.7	69.7	82.5	40.4	71.4		
Credenz	CZ 5859LL	79.2	105.1	46.0	69.0	80.0	81.2	50.0	71.3	67.8	62.0
VA Tech	V17-2933R	77.5	94.4	51.5	71.2	62.5	82.2	57.5	71.0	25	12
Progeny	P 5003XF	69.7	99.5	64.0	65.2	75.8	69.8	48.5	70.4		
Local Seed	LS5418XFS	68.7	98.9	46.8	70.7	71.0	76.7	53.0	69.4		
Dyna-Gro	S56XF01	56.4	102.7	50.1	62.5	66.1	90.7	56.8	69.3	20	
MU	S16-15170C	70.9	97.2	50.8	63.8	64.6	83.4	53.6	69.2	67.4	12
Local Seed	LS5909XFS	69.3	94.7	39.1	66.9	70.6	87.0	54.9	68.9	20	
Local Seed	LS5119XF	59.4	101.1	70.7	58.3	67.1	67.1	55.8	68.5		1.0

Question of the Week

Last week I had photos of mounds in a sandy wheat field near Brinson, Georgia. At first glance they look like fire ant mounds but there's no opening at the top.

Calhoun County Agent Luke Crosson submitted this photo and answer "Since it's Friday this is my guess:)"



First **correct** answer was from Jeff Cook ,Taylor/Peach County Ag & Natural Resources Agent, "**Got to kick them to know for sure but I say Pocket Gophers, or salamanders**."

Often called Sandy Mounders which got changed in our language to Salamanders over time, but is no relation to the amphibian, this is a rodent that chews on roots.

Here's a photo from Jeff of one they caught. He said tastes like chicken. lol



Here's a link to a video I made of one forming a mound last year in this same field. https://youtu.be/NkXSw13Zaqq



Here's a link to some good info on these rodents. "Southeastern pocket gophers (*Geomys pinetis*) are found in northern and central Florida, southern Georgia, and southeastern Alabama."



Figure 4c. Range of the southeastern pocket gopher (Geomys pinetis) (dark) and southern pocket gopher (Thomomys umbrinus) (light) in North America.

EPA Approves Enlist One/Enlist Duo Labels (Prostko)

On January 11, 2022, the EPA approved the registrations for Enlist One (2,4-D choline) and Enlist Duo (glyphosate + 2,4-D choline) for an additional 7 years (2029). However, there will be significant label changes to help further protect the environment, pollinators, and endangered species. The following are some (not all) of the important label changes for the Enlist One/Enlist Duo herbicide labels:

- 1) Do not apply this product when soil is saturated or at field capacity, or when a storm event likely to produce runoff from the treated area is forecasted (by NOAA/National Weather Service, or other similar forecasting service) to occur within 48 hours following application.
- 2) Do not irrigate treated fields within 48 hours of application.
- 3) For land with Hydrologic Soil Groups A & B: The land manager/applicator must effectively implement runoff mitigation measures in the following table to equal a minimum of 4 credits. For land with Hydrologic Soil

Groups C & D: The land manager/applicator must effectively implement runoff mitigation measures in the following tables to equal a minimum of 6 credits.

Mitigation Measures				
Reduce number of applications - Reduced number of 3 applications			0	
applications of Enlist products per year. Applications may be made at any time during crop development but must maintain a minimum 12-day retreatment interval.		2 applications	2	
		1 application	4	
Residue Tillage Management: no-till, strip-till, ridge-till, and mulch-till				
Vegetative Filter Strips	30 ft off-field vegetative buffer	HSG A or B	2	
18 10 10 10 10 10 10 10 10 10 10 10 10 10	on down slope	HSG C or D	0	
	100 ft off-field vegetative buffer	HSG A or B	4	
	on down slope	HSG C or D	1	
Field border: border with dense vegetative stands with a minimum width of 30 ft.				
Cover Crop	5500		2	
Vegetative Barrier: Permane field with a minimum width of 3	nt strips of dense vegetation along the 3 ft.	contours of the	2	
Contour Buffer Strips or Terrace			2	
Grassed Waterway			2	
Water and Sediment Basin			1	
Contour Farming or Contour Strip Cropping			1	

^{*}Hydrologic Soil Group (HSG) definitions: A = Sand, loamy sand, or sandy loam; B = Sandy clay loam; C = Silt loam or loam; D = Clay loam, silty clay loam, sandy clay, silty clay or clay.

- 4) <u>For soybeans (POST)</u>: Apply when weeds are no larger than 6 inches and any time after soybean emergence through the R1 growth stage. Do not apply after the R1 growth stage.
- 5) <u>For cotton (POST):</u> Apply when weeds are no larger than 6 inches and any time after cotton emergence up to first white bloom. Do not apply after first white bloom.
- 6) Restrictions prohibiting their use in certain counties in certain states due to endangered species.

Enlist One is not prohibited in any GA counties.

Enlist Duo use is prohibited in 11 counties in GA (Baker, Berrien, Brooks, Burke, Calhoun, Early, Irwin, Lee, Miller, Screven, and Worth).

7) A complete copy of these new herbicide labels can be obtained at the following locations:

Enlist One: https://s3-us-west-1.amazonaws.com/agrian-cq-fs1-production/pdfs/Enlist One 180122.pdf

Enlist Duo: https://s3-us-west-1.amazonaws.com/agrian-cg-fs1-production/pdfs/Enlist_Duo_Label1h.pdf

Row Crop Disease Update January 13, 2022 (Bob Kemerait)

The rapidly approaching cold(er) weather could provide a "teachable moment" for you to your growers and home-gardeners, especially in SW and SE Districts where cotton regrowth is blooming and volunteer corn and soybeans are not uncommon.

While Pam Knox is our "guru" on stuff like this (weather, climate, forecasts, predictions), I can tell you from my "wheelhouse" that we need a hard freeze to kill volunteers and kudzu and to send soil temperatures plummeting. This could have an affect on insects as well. I'll let Philip and Stormy comment. Or not.

Volunteers and regrowth can serve as "green bridge" between disease and nematode problems from last season into next season. Warm(er) soil temperatures (65F) too early coupled with susceptible hosts (even some cover crops) is like having a buffet for nematodes that stays open 24-7. We don't need that and our growers don't need that. A hard freeze is like turning your phone off or unplugging your computer- it can be a "re-start".

If I still talked about climate, I don't, I would tell you that the winter we haven't had this season fits nicely into predictions of a La Niña ENSO phase for the Southeast and one cold snap won't change that. But I don't talk about that; Pam does....

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