

## IRWIN COUNTY EXTENSION AGRICULTURE NEWS - Vol. 24 Wed. June 9, 2021

Phillip Edwards Irwin County Extension Coordinator

*In this issue: Recent, Peanut Rx Survey, Row Crop Disease, Corn Silage and Stored Forage, Beginner Pecan Course, Crop Comparison Tool, Cotton Aphid Management, Cotton Agronomic Update*

### Recent

*Hello, I heard a plane flying this morning, and I assume it was a fungicide application on corn. Please see Dr. Kemerait's comments below concerning our most recent row crop recent disease update. We are still doing Using Pesticides Wisely Trainings at our office when requested. Please call a day ahead so we can set up and be ready for you. We will submit your registration so you can receive your 2 hours pesticide credit. Next week is the Beginners Pecan Course at UGA Tifton Campus Conference Center on June 15<sup>th</sup> from 9 am-4. Upcoming events in July include the Southern Peanut Growers Conference July 15-17 and 2021 Sunbelt Expo Field Day on July 22.*



So thankful for the rain



Recent rain will help finish planting but many small grain fields remain



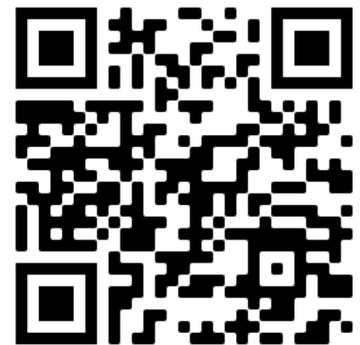
4-H members at Junior Senior Project at Rock Eagle this weekend



Help with UGA Extension On-Farm Cotton Trial in Wilcox County

### Peanut Rx Survey Bell

Kaleb Bell, our summer intern, has created the QR Code on the right to open a confidential survey that lets us assess the Peanut Rx disease/risk index for Irwin County. The survey is a simplified form of the survey on page 3. Please take a moment to complete the survey. If your phone allows, turn on the camera and hover over the icon to open the the survey. Otherwise, [click here](#) to access the survey. If you have not completed the survey, we may ask that you do so when we visit in person. You may also print and complete the survey on page 2, then return it to the Irwin County Extension Office. Again, *all information gathered is confidential.* We kindly ask that you only complete the survey once. Thank you in advance.



## Peanut RX Survey:

Peanut Variety or Varieties:

\_\_\_\_\_

Plant Date: (Circle One)

June 10    After June 10

Before May 1    May 1-10    May 10-25    May 26-

Peanuts Acres Grown

\_\_\_\_\_

Final Stand Count Average (Circle One)  
plants/ft.

Less than 3 plants/ft    3-4plants/ft.    More than 4

At Plant Insecticide Use (Circle One)

Velum    Thimet 20G    Other    None

Twin or Single Row? (Circle One)

Twin Row    Single Row

Tillage Type: (Circle One)

Conventional Tillage    Reduced Tillage

Did you use Classic Herbicide? (Circle One)

Yes    No

Years Between Peanut Rotation (Circle One)

0 years    1 year    2 years    3 or more years

Issues with disease? (Circle all that Apply)  
rot

Spotted wilt    leaf spot    white mold    limb

Is the field irrigated? (Circle One)

Yes    No

[extension.uga.edu](http://extension.uga.edu)

# Assess Disease Risk in Your Field and Develop a Peanut Rx



This worksheet will lead you through the four-step process of determining your disease risk level in order to customize a Peanut Rx for your individual field using the reverse side of this worksheet and with the assistance of your BASF representative.

For each of the risk index factors, identify which option best describes the situation for your field and add the index value associated with each choice to obtain your overall disease risk value. This worksheet does not contain all of the varieties included in the 2019 Peanut Rx or the notes that accompany each factor. To view the complete 2019 Peanut Rx, visit the University of Georgia peanut website at [www.ugapeanutteam.com](http://www.ugapeanutteam.com).

## Assess Your Disease Risk

| Variety Selection            |                     |                  |                         |
|------------------------------|---------------------|------------------|-------------------------|
| Variety <sup>1</sup>         | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Point |
|                              |                     |                  | White Mold              |
| AJ NPL 17 <sup>2</sup>       | 10                  | 15               | 15                      |
| Bailey <sup>3</sup>          | 10                  | 25               | 10                      |
| Florida Fancy <sup>2</sup>   | 25                  | 20               | 20                      |
| FloRun™ 331 <sup>2</sup>     | 15                  | 20               | 15                      |
| Georgia-06G                  | 10                  | 20               | 20                      |
| Georgia-07W                  | 10                  | 20               | 15                      |
| Georgia-09B <sup>2</sup>     | 20                  | 25               | 25                      |
| Georgia-12Y <sup>6</sup>     | 5                   | 15               | 10                      |
| Georgia-14N <sup>4</sup>     | 5                   | 15               | 15                      |
| Georgia-18H <sup>2</sup>     | 10                  | 25               | 20                      |
| Georgia-18R <sup>1</sup>     | 10                  | 25               | 20                      |
| Georgia Green                | 30                  | 20               | 25                      |
| Sullivan <sup>2</sup>        | 10                  | 25               | 15                      |
| Tifguard <sup>2</sup>        | 10                  | 15               | 15                      |
| TifNV-HIOL <sup>2,4</sup>    | 5                   | 15               | 15                      |
| TUFFRunner™ 297 <sup>2</sup> | 10                  | 25               | 20                      |
| TUFFRunner™ 511 <sup>2</sup> | 20                  | 30               | 15                      |

| Planting Date        |                     |                  |                          |          |
|----------------------|---------------------|------------------|--------------------------|----------|
| Peanuts are planted: | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|                      |                     |                  | White Mold               | Limb Rot |
| Prior to May 1       | 30                  | 0                | 10                       | 0        |
| May 1 to May 10      | 15                  | 5                | 5                        | 0        |
| May 11 to May 25     | 5                   | 10               | 0                        | 0        |
| May 26 to June 10    | 10                  | 15               | 0                        | 5        |
| After June 10        | 15                  | 15               | 0                        | 5        |

| Plant Population (final stand, not seeding rate) |                     |                  |                          |          |
|--|---------------------|------------------|--------------------------|----------|
| Plant stand:                                     | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|  |                     |                  | White Mold               | Limb Rot |
| Less than 3 plants/ft                            | 25                  | NA               | 0                        | NA       |
| 3 to 4 plants/ft (3)                             | 10 (15)             | NA               | 0 (0)                    | NA       |
| More than 4 plants/ft                            | 5                   | NA               | 5                        | NA       |

| At-plant Insecticide   |                     |                  |                          |          |
|------------------------|---------------------|------------------|--------------------------|----------|
| Insecticide used       | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|                        |                     |                  | White Mold               | Limb Rot |
| None                   | 15                  | 5                | NA                       | NA       |
| Other than Thimet® 20G | 15                  | 5                | NA                       | NA       |
| Velum Total            | 15                  | 0                | NA                       | NA       |
| Thimet 20G             | 5                   | 0                | NA                       | NA       |

| Row Pattern             |                     |                  |                         |          |
|-------------------------|---------------------|------------------|-------------------------|----------|
| Peanuts are planted in: | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Point |          |
|                         |                     |                  | White Mold              | Limb Rot |
| Single rows             | 10                  | 0                | 5                       | 0        |
| Twin rows               | 5                   | 0                | 0                       | 0        |

| Tillage      |                     |                  |                          |          |
|--------------|---------------------|------------------|--------------------------|----------|
| Tillage type | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|              |                     |                  | White Mold               | Limb Rot |
| Conventional | 15                  | 10               | 0                        | 0        |
| Reduced      | 5                   | 0                | 5                        | 5        |

| Classic® Herbicide |                     |                  |                          |          |
|--------------------|---------------------|------------------|--------------------------|----------|
| Classic usage      | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|                    |                     |                  | White Mold               | Limb Rot |
| Classic applied    | 5                   | NA               | NA                       | NA       |
| No Classic applied | 0                   | NA               | NA                       | NA       |

| Crop Rotation (with a non-legume crop) |                     |                  |                          |          |
|--|---------------------|------------------|--------------------------|----------|
| Years between peanut crop              | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|  |                     |                  | White Mold               | Limb Rot |
| 0                                      | NA                  | 25               | 25                       | 20       |
| 1                                      | NA                  | 15               | 20                       | 15       |
| 2                                      | NA                  | 10               | 10                       | 10       |
| 3 or more                              | NA                  | 5                | 5                        | 5        |

| Field History                                      |                     |                  |                          |          |
|--|---------------------|------------------|--------------------------|----------|
| Have you had a problem controlling these diseases? | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|  |                     |                  | White Mold               | Limb Rot |
| No   | NA                  | 0                | 0                        | 0        |
| Yes  | NA                  | 10               | 15                       | 10       |

| Irrigation                         |                     |                  |                          |          |
|------------------------------------|---------------------|------------------|--------------------------|----------|
| Does the field receive irrigation? | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points |          |
|                                    |                     |                  | White Mold               | Limb Rot |
| No                                 | NA                  | 0                | 0                        | 0        |
| Yes                                | NA                  | 10               | 5                        | 10       |

## Develop Your Peanut Rx

Once you have calculated your total risk for each fungal disease, utilize the most conservative fungicide program as your guide for customizing a per-field prescription spray program.

## Programs developed through the cooperation of:



## Calculate Your Severity Points

Fill in the following table to calculate your severity points for each of the four major peanut diseases given the 10 determining factors. Total each column to establish your disease index values.

|                          | Spotted Wilt | Leaf Spot | White Mold | Rhizoctonia Limb Rot |
|--------------------------|--------------|-----------|------------|----------------------|
| Variety                  |              |           |            |                      |
| Planting Date            |              |           |            |                      |
| Plant Population         |              |           |            |                      |
| At-plant Insecticide     |              |           |            |                      |
| Row Pattern              |              |           |            |                      |
| Tillage                  |              |           |            |                      |
| Classic Herbicide        |              |           |            |                      |
| Crop Rotation            |              |           |            |                      |
| Field History            |              |           |            |                      |
| Irrigation               |              |           |            |                      |
| <b>Total Index Value</b> |              |           |            |                      |

## Interpret Your Risk Total

Point total range for tomato spotted wilt = 35-155.  
 Point total range for leaf spot = 10-105.  
 Point total range for white mold = 10-95.  
 Point total range for Rhizoctonia limb rot = 15-75.

|  | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Point |          |
|--|---------------------|------------------|-------------------------|----------|
|  |                     |                  | White Mold              | Limb Rot |
| <b>High Risk</b>   | ≥ 115               | 65-105           | 55-80                   | TBD      |
| High Risk for fungal diseases: Growers should always use full fungicide input program in a high-risk situation.  |                     |                  |                         |          |
| <b>Moderate Risk</b>   | 70-110              | 40-60            | 30-58                   | TBD      |
| Medium Risk for fungal diseases: Growers can expect better performance from standard fungicide programs. Reduced fungicide programs in research studies have been successfully implemented when conditions are not favorable for disease spread.   |                     |                  |                         |          |
| <b>Low Risk</b>  | ≤ 65                | 10-35            | 10-25                   | TBD      |
| Low Risk for fungal diseases: These fields are likely to have the least impact from fungal disease. Growers have made the management decisions which offer maximum benefit in reducing the potential for severe disease; these fields are strong candidates for modified disease management programs that require a reduced number of fungicide application. |                     |                  |                         |          |

When tomato spotted wilt virus incidence is high statewide or in your region, even fields with a low risk level may experience significant losses.

Consider the following recommendations to reduce your spotted wilt risk level:

- Use less susceptible varieties
- Adjust your planting date
- Consult the complete Peanut Rx for additional options that may also provide limited benefit

1. Adequate research data is not available for all varieties with regards to all diseases. Additional varieties will be included as data to support the assignment of an index value are available.
2. High oleic variety.
3. Bailey has increased resistance to *Cyathovirus* black rot (CBR) compared to other varieties commonly planted in Georgia.
4. Tifguard, TifNV-HIOL and Georgia 14-N have excellent resistance to the peanut root-knot nematode.
5. Georgia-12Y appears to have increased risk to Rhizoctonia limb rot and precautions should be taken to protect against this disease.

### Row Crop Disease Update

Soybeans - We know soybean rust is active now in kudzu across southern Georgia. That is the “spark”. This weather is like “gasoline” to that spark, so I expect soybean rust to spread further in kudzu and eventually to soybeans. Growers will need to be prepared when their beans start to bloom.

Corn - Still no southern corn rust found in Georgia, but I will be surprised if we don’t find it soon. Much of our corn is approaching tassel, a critical stage for protecting the crop IF rust or other diseases threaten.

Peanuts - Much of our peanut crop is approaching (or has reached) 30 days after planting. 30-45 days after planting is CRITICAL for initiating a fungicide program, especially now.

Whether you start at 30 days or wait until 45 days after planting depends on:

1. Peanut Rx Risk Index scores, especially variety and rotation factors
2. What products you will spray first (some need to be sprayed at 30, some can wait until 45)
3. Whether or not Velum was used in furrow

Given that conditions are favorable, it wouldn’t hurt to include something early-season for white mold control, though most major white mold programs begin at 60 days.

PLEASE! Do not wait beyond 45 days to begin your program; growers who wait beyond that may be playing “catch up” for the rest of the season.

### Corn Silage and Stored Forage

Baxter

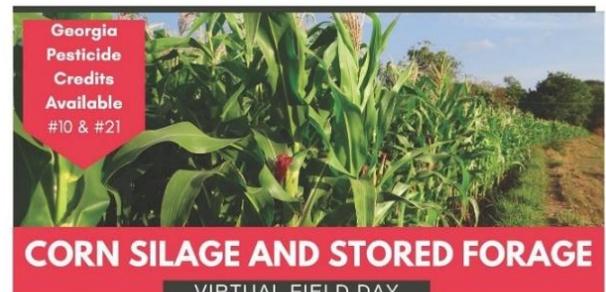
Need more pesticide credits? Here's your opportunity. These events are free but pre-registration is required. Register by scanning the code on the flyer or visiting below links. The event is free but pre-registration is required. Producers can register by scanning the code on the flyer below or visiting Corn Silage and Stored Forage June 25th from 9-12 am. [https://ugeorgia.ca1.qualtrics.com/.../SV\\_aav6NAc9QrZDYKW](https://ugeorgia.ca1.qualtrics.com/.../SV_aav6NAc9QrZDYKW)

### Beginner’s Pecan Course

Wells

Good

news! The University of Georgia Pecan Team will be holding its Beginner’s Pecan Course on June 15, 2021 in-person at the UGA Tifton Campus Conference Center in Tifton, Georgia. This course is held every other year and covers all you need to know about pecan production including production costs, cultivar selection, fertilization, irrigation, cultural management, insect, disease, and weed control, equipment, and market overview. The event is a day long course from 8:30 am-4:00 pm with morning and afternoon refreshment breaks and lunch served on-site sponsored by Savage Equipment. Pesticide credits will be available. Click [here](#) to register. Please pre-register at the website so that we can get a head count for the meal. There is a registration fee to offset the cost of the program. There is no charge for county agent registration.



 June 25, 2021  
9:00 AM – Noon (Eastern)  
Online (via Zoom)

 Free  
Pre-registration is required

 Scan the QR code or visit our website to register  
[www.GeorgiaForages.com](http://www.GeorgiaForages.com)



**Presentations**

- Best planting practices**  
Carey Bryant, UGA Extension
- Disease control options**  
Bob Kemmeritt, UGA Extension
- Incorporating new precision ag technology**  
Simer Virk, UGA Extension
- Weed control options**  
Eric Prostko, UGA Extension
- Hay research update**  
Lisa Baxter, UGA Extension
- Baleage & summer forage alternatives**  
Jennifer Tucker, UGA Extension

[extension.uga.edu](http://extension.uga.edu)

**Crop Comparison Tool – Updated May 2021**  
**Conventional**

Smith

Estimate of 2021 Relative Row Crop Costs and Net Returns  
 By A. R. Smith and Yanqwan Liu, UGA Extension Economists, Department of Agricultural & Applied Economics

| May 2021                                 |            |            |            |             |               |               |            |            |             |               |                |            |
|--|------------|------------|------------|-------------|---------------|---------------|------------|------------|-------------|---------------|----------------|------------|
| Conventional Tillage                     | IRRIGATED  |            |            |             |               | NON-IRRIGATED |            |            |             |               |                |            |
|  | Cotton     | Peanuts    | Corn       | Soybeans    | Grain Sorghum | Cotton        | Peanuts    | Corn       | Soybeans    | Grain Sorghum | Int Mgmt Wheat | Wheat      |
| EXPECTED YIELD per ACRE                  | 1,200 lbs  | 4,700 lbs  | 200 bu     | 60 bu       | 100 bu        | 750 lbs       | 3,400 lbs  | 85 bu      | 30 bu       | 65 bu         | 75 bu          | 55 bu      |
| EXPECTED SEASON AVG PRICE                | \$0.80 /lb | \$463 /ton | \$5.70 /bu | \$12.50 /bu | \$5.40 /bu    | \$0.80 /lb    | \$463 /ton | \$5.70 /bu | \$12.50 /bu | \$5.40 /bu    | \$6.00 /bu     | \$6.00 /bu |
| GROSS RETURN per ACRE                    | \$960      | \$1,087    | \$1,140    | \$750       | \$540         | \$600         | \$786      | \$485      | \$375       | \$351         | \$450          | \$330      |
| VARIABLE COSTS per ACRE                  |            |            |            |             |               |               |            |            |             |               |                |            |
| Seed                                     | 94         | 126        | 121        | 60          | 24            | 94            | 126        | 76         | 60          | 15            | 59             | 33         |
| BWEP                                     | 2          |            |            |             |               | 1             |            |            |             |               |                |            |
| Fertilizer & Lime*                       | 143        | 67         | 310        | 76          | 171           | 106           | 67         | 121        | 76          | 108           | 139            | 100        |
| Chicken Litter                           |            |            |            |             |               |               |            |            |             |               |                |            |
| Chemicals                                | 93         | 187        | 41         | 57          | 28            | 82            | 156        | 41         | 32          | 28            | 32             | 19         |
| Custom Application                       |            |            |            |             |               |               |            |            |             |               |                |            |
| Hand Weeding                             | 15         | 15         |            |             |               | 15            | 15         |            |             |               |                |            |
| Scouting                                 | 10         | 10         |            |             |               | 10            | 10         |            |             |               |                |            |
| Fuel and Lube**                          | 28         | 43         | 19         | 17          | 19            | 28            | 43         | 19         | 17          | 19            | 28             | 17         |
| Repairs and Maintenance                  | 39         | 54         | 22         | 20          | 22            | 39            | 54         | 22         | 20          | 22            | 24             | 15         |
| Irrigation***                            | 69         | 52         | 69         | 48          | 35            |               |            |            |             |               |                |            |
| Labor                                    | 19         | 34         | 14         | 13          | 15            | 19            | 34         | 14         | 13          | 15            | 18             | 10         |
| Insurance                                | 16         | 27         | 16         | 11          | 28            | 30            | 38         | 28         | 18          | 22            | 9              | 12         |
| Land Rent                                |            |            |            |             |               |               |            |            |             |               |                |            |
| Other                                    |            |            |            |             |               |               |            |            |             |               |                |            |
| Interest on Operating Capital            | 15         | 17         | 17         | 8           | 9             | 12            | 15         | 9          | 6           | 6             | 8              | 6          |
| Gin & Warehouse [net after cottonseed]   | 47         |            |            |             |               | 30            |            |            |             |               |                |            |
| Drying and Cleaning                      |            | 63         | 61         |             | 31            |               | 45         | 26         |             | 20            | 7              | 5          |
| Marketing and Fees                       |            | 15         |            |             |               |               | 11         |            |             |               |                |            |
| TOTAL VARIABLE COSTS per ACRE            | \$589      | \$710      | \$691      | \$305       | \$382         | \$465         | \$615      | \$356      | \$242       | \$255         | \$324          | \$217      |
| RETURN ABOVE VARIABLE COST per ACRE      | \$371      | \$377      | \$449      | \$445       | \$158         | \$135         | \$171      | \$128      | \$133       | \$96          | \$126          | \$113      |
| BREAKEVEN PRICE (Variable Cost)          | \$0.49 /lb | \$302 /ton | \$3.46 /bu | \$5.09 /bu  | \$3.82 /bu    | \$0.62 /lb    | \$362 /ton | \$4.19 /bu | \$8.06 /bu  | \$3.92 /bu    | \$4.32 /bu     | \$3.95 /bu |
| BREAKEVEN YIELD per ACRE (Variable Cost) | 737 lbs    | 3,071 lbs  | 121 bu     | 24 bu       | 71 bu         | 581 lbs       | 2,660 lbs  | 62 bu      | 19 bu       | 47 bu         | 54 bu          | 36 bu      |
| FIXED COSTS per ACRE                     |            |            |            |             |               |               |            |            |             |               |                |            |
| Machinery and Equipment                  | 157        | 162        | 81         | 74          | 79            | 157           | 162        | 81         | 69          | 79            | 81             | 54         |
| Irrigation                               | 130        | 130        | 130        | 130         | 130           |               |            |            |             |               |                |            |
| Buildings                                |            |            |            |             |               |               |            |            |             |               |                |            |
| Miscellaneous Overhead                   | 29         | 36         | 35         | 15          | 19            | 23            | 31         | 18         | 12          | 13            | 16             | 11         |
| TOTAL SPECIFIED FIXED COSTS per ACRE     | \$316      | \$327      | \$246      | \$219       | \$228         | \$180         | \$193      | \$99       | \$81        | \$92          | \$97           | \$64       |
| TOTAL COST EXCL. LAND & MGT per ACRE     | \$906      | \$1,038    | \$937      | \$524       | \$610         | \$645         | \$808      | \$455      | \$323       | \$346         | \$422          | \$282      |
| RETURN TO LAND AND MGT per ACRE          | \$54       | \$49       | \$203      | \$226       | -\$70         | -\$45         | -\$22      | \$29       | \$52        | \$5           | \$28           | \$48       |
| BREAKEVEN PRICE (Total Costs)            | \$0.75 /lb | \$442 /ton | \$4.69 /bu | \$8.74 /bu  | \$6.10 /bu    | \$0.86 /lb    | \$475 /ton | \$5.36 /bu | \$10.77 /bu | \$5.33 /bu    | \$5.62 /bu     | \$5.13 /bu |
| BREAKEVEN YIELD per ACRE                 | 1,132 lbs  | 4,487 lbs  | 164 bu     | 42 bu       | 113 bu        | 806 lbs       | 3,493 lbs  | 80 bu      | 26 bu       | 64 bu         | 70 bu          | 47 bu      |

\* Expected fertilizer \$/lb. of nutrient: N= \$0.65 P= \$0.50 K= \$0.40

\*\* Season Average Diesel fuel price: \$2.50 per Gallon

\*\*\* Weighted average of diesel and electric irrigation application costs. Electric is estimated at \$7/appl and diesel is estimated at \$11.50/appl when diesel cost \$2.50/gal.

## Strip-tillage

Estimate of 2021 Relative Row Crop Costs and Net Returns

By A.R. Smith and Yangxuan Liu, UGA Extension Economists, Department of Agricultural & Applied Economics

May 2021

| Strip-Tillage                            | IRRIGATED  |            |            |             |               | NON-IRRIGATED |            |            |             |               |
|--|------------|------------|------------|-------------|---------------|---------------|------------|------------|-------------|---------------|
|  | Cotton     | Peanuts    | Corn       | Soybeans    | Grain Sorghum | Cotton        | Peanuts    | Corn       | Soybeans    | Grain Sorghum |
| EXPECTED YIELD per ACRE                  | 1,200 lbs  | 4,700 lbs  | 200 bu     | 60 bu       | 100 bu        | 750 lbs       | 3,400 lbs  | 85 bu      | 30 bu       | 65 bu         |
| EXPECTED SEASON AVG PRICE                | \$0.80 /lb | \$463 /ton | \$5.70 /bu | \$12.50 /bu | \$5.40 /bu    | \$0.80 /lb    | \$463 /ton | \$5.70 /bu | \$12.50 /bu | \$5.40 /bu    |
| GROSS RETURN per ACRE                    | \$960      | \$1,087    | \$1,140    | \$750       | \$540         | \$600         | \$786      | \$485      | \$375       | \$351         |
| VARIABLE COSTS per ACRE                  |            |            |            |             |               |               |            |            |             |               |
| Seed                                     | 103        | 126        | 121        | 60          | 24            | 103           | 126        | 76         | 60          | 15            |
| Cover Crop Seed*                         |            |            |            |             |               |               |            |            |             |               |
| BWEP                                     | 2          |            |            |             |               | 1             |            |            |             |               |
| Fertilizer & Lime**                      | 143        | 67         | 310        | 76          | 171           | 106           | 67         | 121        | 76          | 108           |
| Chicken Litter                           |            |            |            |             |               |               |            |            |             |               |
| Chemicals                                | 111        | 199        | 49         | 65          | 28            | 96            | 168        | 45         | 35          | 28            |
| Custom Application                       |            |            |            |             |               |               |            |            |             |               |
| Handweeding                              | 15         | 15         |            |             |               | 15            | 15         |            |             |               |
| Scouting                                 | 10         | 10         |            |             |               | 10            | 10         |            |             |               |
| Fuel and Lube***                         | 27         | 33         | 15         | 14          | 16            | 27            | 33         | 15         | 14          | 16            |
| Repairs and Maintenance                  | 38         | 45         | 19         | 16          | 18            | 38            | 45         | 19         | 15          | 18            |
| Irrigation****                           | 61         | 43         | 61         | 35          | 26            |               |            |            |             |               |
| Labor                                    | 16         | 28         | 12         | 10          | 12            | 16            | 28         | 12         | 10          | 12            |
| Insurance                                | 16         | 27         | 16         | 11          | 28            | 30            | 38         | 28         | 18          | 22            |
| Land Rent                                |            |            |            |             |               |               |            |            |             |               |
| Other                                    |            |            |            |             |               |               |            |            |             |               |
| Interest on Operating Capital            | 15         | 16         | 17         | 8           | 9             | 12            | 15         | 9          | 6           | 6             |
| Gin & Warehouse (net after cottonseed)   | 47         |            |            |             |               | 30            |            |            |             |               |
| Drying and Cleaning                      |            | 63         | 61         |             | 31            |               | 45         | 26         |             | 20            |
| Marketing and Fees                       |            | 15         |            |             |               |               | 11         |            |             |               |
| TOTAL VARIABLE COSTS per ACRE            | \$604      | \$687      | \$680      | \$294       | \$363         | \$484         | \$600      | \$350      | \$235       | \$245         |
| RETURN ABOVE VARIABLE COST per ACRE      | \$356      | \$400      | \$460      | \$456       | \$177         | \$116         | \$186      | \$135      | \$140       | \$106         |
| BREAKEVEN PRICE (Variable Cost)          | \$0.50 /lb | \$292 /ton | \$3.40 /bu | \$4.90 /bu  | \$3.63 /bu    | \$0.65 /lb    | \$353 /ton | \$4.12 /bu | \$7.83 /bu  | \$3.77 /bu    |
| BREAKEVEN YIELD per ACRE (Variable Cost) | 756 lbs    | 2,969 lbs  | 119 bu     | 24 bu       | 67 bu         | 605 lbs       | 2,597 lbs  | 61 bu      | 19 bu       | 45 bu         |
| FIXED COSTS per ACRE                     |            |            |            |             |               |               |            |            |             |               |
| Machinery and Equipment                  | 154        | 132        | 71         | 63          | 68            | 154           | 132        | 71         | 63          | 68            |
| Irrigation                               | 130        | 130        | 130        | 130         | 130           |               |            |            |             |               |
| Buildings                                |            |            |            |             |               |               |            |            |             |               |
| Miscellaneous Overhead                   | 30         | 34         | 34         | 15          | 18            | 24            | 30         | 17         | 12          | 12            |
| TOTAL SPECIFIED FIXED COSTS per ACRE     | \$315      | \$296      | \$235      | \$208       | \$216         | \$179         | \$162      | \$88       | \$75        | \$80          |
| TOTAL COST EXCL. LAND & MGT per ACRE     | \$919      | \$983      | \$915      | \$502       | \$579         | \$663         | \$763      | \$438      | \$310       | \$325         |
| RETURN TO LAND AND MGT per ACRE          | \$41       | \$104      | \$225      | \$248       | -\$39         | -\$63         | \$24       | \$46       | \$65        | \$26          |
| BREAKEVEN PRICE (Total Costs)            | \$0.77 /lb | \$418 /ton | \$4.58 /bu | \$8.37 /bu  | \$5.79 /bu    | \$0.88 /lb    | \$449 /ton | \$5.15 /bu | \$10.33 /bu | \$5.00 /bu    |
| BREAKEVEN YIELD per ACRE                 | 1,149 lbs  | 4,250 lbs  | 161 bu     | 40 bu       | 107 bu        | 829 lbs       | 3,297 lbs  | 77 bu      | 25 bu       | 60 bu         |

\* Value only if cover crop is not harvested, i.e. wheat for grain, etc.

\*\* Expected fertilizer \$/lb. of nutrient: N= \$0.65 P= \$0.50 K= \$0.40

\*\*\* Weighted average of diesel and electric irrigation application costs. Electric is estimated at \$7/appl and diesel is estimated at \$11.50/appl when diesel cost \$2.50/gal.

\*\*\*\* Season Average Diesel Fuel Price: \$2.50 per Gallon

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## Cotton Aphid Management

Roberts

Cotton aphid is a fairly consistent and predictable pest of cotton in Georgia. Aphids feed on plant juices and secrete large amounts of “honeydew”, a sugary liquid. The loss of moisture and nutrients by the plants has an adverse effect on growth and development. This stress factor can be reduced with the use of an aphid insecticide. However, research conducted in Georgia fails to consistently demonstrate a positive yield response to controlling aphids. Invariably, some fields probably would benefit from controlling aphids during some years. Prior to treatment, be sure there is no indication of the naturally occurring fungus in the field or immediate vicinity. Also consider the levels of stress plants are under, vigorous and healthy plants are able to tolerate more aphid damage than stressed plants.

Aphids will typically build to moderate to high numbers and eventually crash due to a naturally occurring fungus, *Neozygites fresenii*. This fungal epizootic typically occurs in early to mid-July depending on location. Once the aphid fungus is detected in a field (gray fuzzy aphids) we would expect the aphid population to crash within a week. Typically, the fungus starts in the southernmost counties of southwest Georgia and moves north and east in time. Cotton aphids also vector or transmit Cotton leafroll virus (CLRDV). During 2019 and 2020 aggressive control of aphids (weekly sprays) did not reduce the incidence of CLRDV. However, aggressive aphid sprays did flare spider mites in these trials. A closer look at a cotton aphid infested leaves and identification of the cotton aphid fungus (*Neozygites fresenii*) and other interesting things:



**Figure 1.** Cotton aphid fungus present and aphids are crashing. Note the gray fuzzy aphids which is indicative of the fungus. Also note the aphid cast skins which are white in color; aphids molt or shed their exoskeleton (skin) as they grow.

**Figure 2.** Zoomed in on a fungus killed winged aphid. See the fungal growth and sporulation.



**Figure 3.** No fungus in this infested terminal. The brown balls (aphid mummies) are aphids which have been parasitized by a small wasp. Also, lots of aphid cast skins in this pic.



**Figure 4.** Four leaf cotton with a heavy aphid infestation. Note the high number of winged aphids which invaded this field. If aphids slow seedling growth that may delay maturity which could be an issue on late planted cotton. No fungal infected aphids in this pic.

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## Cotton Agronomic Update

## Hand

In many parts of the cotton producing regions of Georgia, the last two to three weeks of May were particularly harsh relative to planting conditions. Temperatures quickly escalated, soil moisture left, and little rainfall occurred for two to three weeks. I was getting many calls about “dusting” cotton in because the general feeling was that our backs were against the wall. But over the last two weeks, we have been fortunate in that across the cotton producing regions of our state there has been a good amount of rainfall, with the majority of that occurring in the past week. This was very much needed, as some of our dryland acres and double-cropped cotton needed moisture to be planted and have the best chance to achieve an optimal stand. Although we still have a few acres to be planted, I feel good about where we are.

I have been hearing very little about replants thus far, with many folks telling me it has only happened on 5 to 10% of the acres in their counties. Time will tell with some of the acres that were planted in the harsh conditions discussed above, but we are now getting into “crunch time”. In general, based on previous research done at the University of Georgia, yield penalties can occur for cotton planted after the first week of June.

Now it is time to shift from planting into growth management. Some of our earlier planted cotton is now beginning to square, with USDA reporting that nearly 10% of the crop in GA is squaring. Prebloom PGR applications may be necessary for aggressive varieties with high growth potential (i.e. high fertility, irrigated, etc.). A major key to plant growth regulation is timeliness, as it gets more difficult to regulate cotton growth the bigger the plant gets.

## June Expected to be Wetter than Normal; Tropics Quiet so far

## Knox

Now that the Bermuda high has shifted back to the east, the Gulf of Mexico is sending more moisture our way. This means that we should see a return to more regular showers for the foreseeable future, with up to 4 inches predicted in some places over the next three weeks. The Climate Prediction Center gives us slightly better odds than usual of above-normal rainfall in June and in the June-August period. We need it!

As you know, the start of the Atlantic tropical season was June 1, although we had one storm, Ana, in May, that developed over the central Atlantic Ocean. Most of the storms in June develop over the Gulf of Mexico and the Caribbean, where the water is warmest, but nothing looks imminent for the beginning of June. Mid-June may see some increased activity, but of course at this point we don't know where any storms that develop might go. September through October is also leaning towards wetter than normal conditions, based largely on the expected active tropical season. The rainfall we actually get later in the summer will depend in large part on where the tropical storms and hurricanes go. Last year, it seemed like they all went over Louisiana, dropping a lot of rain to their east along the Gulf Coast, but this year, even if active, could be quite different and Texas or the East Coast could be the “lucky” recipients of the rain. Based on our neutral ENSO conditions, warm sea surface temperatures, and other factors, this year is expected to be more active than normal again, although not likely as busy as last year, which had a record 30 named storms.

*As always for more information please contact your Irwin County Extension Office at 468-7409.*

*Thank You, God Bless You,  
Phillip Edwards - Irwin County Agent*



*The mention of trade names in this newsletter does not imply endorsement by the Georgia Extension Service, nor criticism of similar ones not mentioned.*

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