MISSISSIPPI PEANUT VARIETY TRIALS, 2019

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MISSISSIPPI'S OFFICIAL VARIETY TRIALS



MISSISSIPPI STATE UNIVERSITY MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION

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Mississippi Peanut Variety Trials, 2019

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Find variety trial information online at mafes.msstate.edu/variety-trials.



Mississippi Peanut Variety Trials, 2019

PROCEDURES

Peanut variety trials were conducted at four locations in Mississippi in 2019. Trials were conducted on Experiment Station land to attempt to represent the different geographic regions of the state in which peanuts are grown. The same commercially available varieties of peanuts were tested at all four locations.

Plots consisted of two 38-inch-wide, 30-foot-long twin rows. Weeds were controlled by cultivation and/or herbicides. Only herbicides currently registered for use on peanuts were used in these studies, with strict adherence to all label instructions.

All varieties were treated with a fungicide seed treatment and an in-furrow insecticide. Experimental design was a randomized complete block with four replications at each location.

All varieties were planted with a two-row, twin-drill, Monosem plot planter at a uniform seeding rate of six seeds per foot. Fertilizer was applied according to soil test recommendations.

The plots were dug with a KMC two-row peanut digger. After proper drying, the total plot area was harvested with a KMC two-row, pull-type, peanut combine fitted with a bagging attachment. The harvested plots were weighed, moisture was determined, and yields were converted to pounds per acre, following statistical analysis. All plots weights were adjusted to a standard moisture of 13%.

USE OF DATA TABLES AND SUMMARY STATISTICS

The yield potential of a given variety cannot be predicted with complete accuracy. Consequently, replicate plots of all varieties are evaluated for yield, and the yield of a given variety is estimated as the mean of all replicate plots of that variety. Yields vary somewhat from one replicate plot to another, which introduces a certain degree of error to the estimation of yield potential. This natural variation is often responsible for yield differences among different varieties. Thus, even if the mean yields of two varieties are numerically different, they are not necessarily significantly different in terms of yield potential. In other words, the ability to measure yield is not precise enough to determine whether such small differences are observed purely by chance or because of superior performance. The least significant difference (LSD) is an estimate of the smallest difference between two varieties that can be declared to be

the result of something other than random variation in a particular trial. Consider the following example for a given trial:

Variety	Yield
Abe	6,000 lb/A
Bill	5,600 lb/A
Charlie	. 4,900 lb/A
LSD	500 lb/A

The difference between variety Abe and variety Bill is 400 pounds per acre (6,000 - 5,600 = 400). This difference is **smaller** than the LSD (500 pounds per acre). Consequently, it is concluded that variety Abe and variety Bill have the same yield potential since the observed difference occurred purely due to chance. The difference between variety Abe and variety Charlie is 1,100 pounds per acre (6,000 - 4,900 = 1,100), which is **larger**

1

than the LSD (500 pounds per acre). Therefore, it is concluded that the yield potential of variety Abe is superior to that of variety Charlie since the difference is larger than would be expected purely by chance. The coefficient of variation (CV) is a measure of the relative precision of a given trial and is used to compare the relative precision of different trials. The CV is generally considered to be an estimate of the amount of unexplained variation in a given trial. This unexplained variation could be the result of variation between plots with respect to soil type, fertility, insects, diseases, weather stress, etc. In general, the higher the CV is, the lower the precision in a given trial. The coefficient of determination (R^2) is another measure of the level of precision in a trial and is also used to compare the relative precision of different trials. The R^2 is a measure of the amount of variation that is explained, or accounted for, in a given trial. For example, an R^2 value of 90% indicates that 90% of the observed variation in the trial has been accounted for, with the remaining 10% being unaccounted. The higher the R^2 value is, the more precise the trial. The R^2 is generally considered to be a better measure of precision than the CV for comparison of different trials.

TERMS USED

SMKRS count per pound (number per pound of sound, whole, mature kernels riding screen) — Number of sound whole mature kernels from 1 pound of the shelled sample riding a $15/64 \times 1$ -inch slotted screen or a $16/64 \times 3$ -inch slotted screen for Virginia or Runner varieties, respectively.

Pct. SMKRS (sound mature kernels riding screen) — Portion of shelled sample as described above.

Pct. SS (sound splits) — Portion of shelled sample split or broken but not damaged.

Pct. TSMK (total sound mature kernels) — Portion of the shelled sample comprised of sound mature kernels plus sound splits.

Pct. OK (other kernels) — Kernels that pass thorough a $15/64 \times 1$ -inch slotted screen or $16/64 \times \frac{3}{4}$ -inch slotted screen for Virginia or Runner varieties, respectively.

Pct. DK (damaged kernels) — Kernels that are moldy, decayed, or affected by insects or weather conditions, resulting in seed coat or cotyledon discoloration or deterioration.

Pct. TK (total kernels) — All shelled sample kernels including TSMK, OK, and DK.

Pct. Hulls — All hulls from the shelled sample.

		Table yield	1. 2019 M and grade	/lississipp e summa	oi Peanut ry for sho	Official Variation of the other of the other of the other of the other o	ariety Tria varieties	l		
Variety	Beau	mont	Rayn	nond	Ston	eville	Ver	ona	Overall a	average
	Yield	TSMK	Yield	TSMK	Yield	TSMK	Yield	TSMK	Yield	TSMK
	lb/A	%	lb/A	%	lb/A	%	lb/A	%	lb/A	%
IPG 914	4751.0	70.0	2602.0	70.9	4294.3	71.8	5756.7	69.2	4351.0	70.5
IPG QR-14	4516.9	70.7	2456.2	69.7	4490.2	69.0	6776.2	71.0	4559.9	70.1
Jupiter	4994.4	69.5	3146.3	67.2	5631.9	66.0	9067.1	71.1	5709.9	68.4
Ole	3334.2	65.6	2049.6	68.2	3291.7	67.8	5488.3	65.1	3540.9	66.7
Schubert	2561.9	61.4	2331.7	68.0	4104.3	60.6	6312.0	60.6	3827.4	62.6
MS SB304 *	_	_	_	_	6132.8	75.7	8487.4	60.8	7310.1	68.3
MS SB305 *	_	_	—	_	6228.0	75.2	6387.2	76.0	6307.6	75.6
MS SB307 *	_	_	—	_	6530.0	75.5	6766.2	73.4	6648.1	74.5
MS SB310 *	_	_	—	_	6833.8	74.6	6482.1	75.1	6657.9	74.9
MS SB313 *	_	_	—	_	6752.3	74.5	5562.4	74.5	6157.3	74.5
MS SB316 *	_	_	—	_	5682.8	72.1	6856.8	72.9	6269.8	72.5
Mean	4031.7	67.4	2517.1	68.8	5452.0	71.2	6722.0	70.0	5576.4	70.8
CV	18.8		16.2		8.3		16.8			
LSD	1168.0		627.9		650.4		1625.0			
R ²	72.7		63.9		91.1		65.3			
error df	12		12		30		30			

* The lines followed by an asterisk originated from 2016-2018 grants provided by the Mississippi Peanut Promotion Board for a disease nursery located in the Hamilton vicinity. The lines were selected by and from material provided by Dr. Dylan Wann from the International Peanut Group/Algrano Seed and by Dr. Alan Henn, Mississippi State University Extension plant pathologist. Lines were selected for 120-day maturity, early leaf spot, and soil-borne disease characteristics, as well as for yield.

Table 2. 2019 Mississippi Peanut Official Variety Trialyield and grade summary for full-season varieties.										
Variety	Beau	mont	Rayn	nond	Stor	eville	Ver	ona	Overall	average
_	Yield	TSMK	Yield	TSMK	Yield	TSMK	Yield	TSMK	Yield	TSMK
	lb/A	%	lb/A	%	lb/A	%	lb/A	%	lb/A	%
AU-NPL-17	6197.3	75.0	3045.0	69.5	2369.3	74.4	4896.9	74.0	4127.1	73.2
Georgia-06G	5657.9	78.9	3393.4	74.7	3568.9	76.8	5664.1	78.5	4571.1	77.2
Georgia-09B	5610.7	72.7	2963.3	73.9	1637.4	74.7	5660.0	78.1	3967.9	74.8
Georgia-12Y	6398.3	74.8	3431.2	73.2	3903.0	74.2	5664.4	75.0	4849.2	74.3
Georgia-14N	5074.3	76.4	2711.8	77.5	1796.6	73.0	5099.4	78.7	3670.5	76.4
Georgia-16HO	6261.7	79.1	3877.4	74.8	1583.9	70.9	6330.6	78.2	4513.4	75.8
Georgia-18RU	5696.0	69.5	3550.5	76.1	1372.2	72.7	6343.4	78.4	4240.5	74.2
LARIAT	4255.8	76.3	3675.9	76.9	1405.2	74.5	5188.3	78.2	3631.3	76.5
TIF-NV-HIGH										
O/L	5667.3	75.8	3506.9	72.9	2224.1	72.3	5996.3	77.5	4348.7	74.6
TUFRunner™										
'297'	6481.0	78.2	3761.9	76.7	1942.9	75.4	5854.7	78.8	4510.1	77.3
FloRun™ '331'	5506.6	72.9	3533.2	73.2	2728.6	72.8	6086.2	75.5	4463.6	73.6
T1	_	_	2430.0	71.7	—	_	_	_	2430.0	71.7
T2	_	_	2080.4	70.9	—	_	_	_	2080.4	70.9
T3	_	_	1566.0	69.5	—	_	_	_	1566.0	69.5
Mean	5709.7	75.4	3109.1	73.7	2230.2	73.8	5707.7	77.4	3783.6	74.3
CV	12.8		14.3		24.8		7.6			
LSD	1056.0		636.5		799.5		623.7			
R ²	54.1		76.7		76.8		65.7			
error df	30		39		30		30			

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Table 3. Two-	year (2018 and 20 [.]	19) yield summary	v of short-season pe	eanut variety trial	s in Mississippi.
Variety	Beaumont	Raymond	Stoneville	Verona	Overall avg.
IPG 914	<i>Ib/A</i> 4894.8	<i>lb/A</i> 4428.9	<i>lb/A</i> 5343.0	lb/A 5729.3	<i>lb/A</i> 5099.0
IPG QR-14	3980.9	3814.1	4750.7	5462.6	4502.1
Overall mean	4437.9	4121.5	5046.8	5595.9	4800.5

Table 4. Two-ye	ear (2018 and 20)19) yield summaı	y of full-season pe	anut variety trials	in Mississippi.
Variety	Beaumont	Raymond	Stoneville	Verona	Overall avg.
	lb/A	lb/A	lb/A	lb/A	lb/A
AU-NPL-17	5870.0	4875.3	4549.6	5266.2	5140.3
FloRun™ '331'	5431.8	5307.8	4939.2	6323.1	5500.5
Georgia-06G	5811.4	4915.3	5653.8	5982.0	5590.6
Georgia-09B	4894.9	4857.3	3674.7	5701.0	4782.0
Georgia-12Y	5704.4	5266.2	5620.3	5630.8	5555.4
Georgia-14N	4589.8	4262.4	3559.8	4630.7	4260.7
Georgia-16HO	5794.8	5316.0	4657.6	6314.4	5520.7
TIF-NV-HIGH O/L	5202.1	5017.1	3859.5	6037.4	5029.0
TUFRunner™ '297'	5919.4	4832.8	4390.4	5984.6	5281.8
Overall mean	5468.7	4961.1	4545.0	5763.4	5184.5

Table 5. Three-year (2017, 2018, and 2019) yield summaryof short-season peanut variety trials in Mississippi.				
Variety	Raymond	Stoneville	Overall average	
	Ib/A	Ib/A	Ib/A	
IPG 914	5199.0	5645.0	5422.0	
IPG QR-14	5016.8	5350.8	5183.8	
Overall mean	5107.9	5497.9	5302.9	

	Table 6. Three-year (of full-season pe	2017, 2018, and 2019) yield su anut variety trials in Mississig	ımmary opi.
Variety	Raymond	Stoneville	Overall average
	Ib/A	Ib/A	lb/A
AU-NPL-17	5670.9	5011.4	5341.1
FloRun™ '331'	6093.9	5650.1	5872.0
Georgia-06G	5681.5	5941.5	5811.5
Georgia-09B	5868.9	4680.1	5274.5
Georgia-12Y	5860.5	5957.9	5909.2
Georgia-14N	4893.3	3958.2	4425.7
Georgia-16HO	6102.6	5601.7	5852.2
TIF-NV-HIGH O/L	5667.7	4564.3	5116.0
TUFRunner™ '297'	5858.5	5190.3	5524.4
Overall mean	5744.2	5172.8	5458.5

MAFES SOUTH MISSISSIPPI BRANCH, BEAUMONT

Crop Summary

The plots were planted into a seedbed that had been hipped earlier that spring. The rows were harrowed down to expose good soil moisture at the time of planting. The soil moisture at planting was ideal for germination, and all plots quickly emerged to a good stand. Timely rains that fell during the summer allowed for ample soil moisture throughout the season. The soil was extremely dry at the time the short-season varieties were dug, making the digging process difficult. The later-maturing varieties received a rain before being dug, which allowed for much easier digging and inverting. All plots were harvested in a timely manner.

Planting date	May 7
Digging dates	September 18 (short-season varieties), October 9 (full-season varieties)
Harvest dates	September 23 (short-season varieties), October 24 (full-season varieties)
Soil type	McLaurin sandy loam
Soil pH	6.1
Soil fertility	P = M, K = M
Previous crop	Daikon Radish
Fertilizer	Preplant — 13-13-13 @ 200 lb/A
Herbicides	Preemergence — Dual II Magnum @ 24 oz, Valor @ 1.5 oz/A, and Liberty @ 40 oz/A on May 7
	Postemergence – Zidua @ 2 oz, Section (clethodim) at 16 oz, and Cadre @ 4 oz/A on June 26
Fungicide/Insecticide	Convoy @ 32 oz and Echo @ 24 oz/A on June 26; Manzinga @ 32 oz/A on July 25;
-	Manzinga @ 32 oz/A on August 12: Miravis @ 3.4 oz and Convov @ 16 oz/A

on August 29





Rainfall Summary

	Inches
Мау	3.70
June	3.46
July	6.57
August	4.53
September	8.08
October	0.79
Total	27.13

	Table 7. Yi peanut varietie	eld, average seed seed set the MAFES Sc	size, and grade of s outh Mississippi Br	short-season anch, Beaumont.	
Variety	2019 yield	2-year avg.	3-year ¹ avg.	TSMK	Seed avg.
	Ib/A	lb/A	lb/A	%	no./lb
Jupiter	4994.4	_	_	69.5	460
IPG 914	4751.0	4894.8	_	70.0	741
IPG QR-14	4516.9	3980.9	_	70.7	880
Ole	3334.2	_	_	65.6	810
Schubert	2561.9	-	_	61.4	930
Mean	4031.7			67.4	764
CV	18.8				
LSD	1168.0				
R ²	72.7				
error df	12				
¹ No 3-year average	e.				

	Table 8. peanut variet	Yield, average seed ies at the MAFES So	size, and grade o uth Mississippi Br	f full-season anch, Beaumont.	
Variety	2019 yield	2-year avg.	3-year ¹ avg.	TSMK	Seed avg.
	Ib/A	lb/A	Ib/A	%	no./Ib
TUFRunner™ '297'	6481.0	5919.4	_	78.2	520
Georgia-12Y	6398.3	5704.4	-	74.8	650
Georgia-16HO	6261.7	5794.8	-	79.1	520
AU-NPL-17	6197.3	5870.0	-	75.0	510
Georgia-18RU	5696.0	_	-	69.5	630
TIF-NV-HIGH O/L	5667.3	5202.1	-	75.8	500
Georgia-06G	5657.9	5811.4	-	78.9	540
Georgia-09B	5610.7	4894.9	_	72.7	580
FloRun™ '331'	5506.6	5431.8	_	72.9	610
Georgia-14N	5074.3	4589.8	—	76.4	580
LARIAT	4255.8	_	—	76.3	530
Mean	5709.7				
CV	12.8				
LSD	1056.0				
R ²	54.1				
error df	30				
¹ No 3-year average.					

MAFES BROWN LOAM BRANCH, RAYMOND

Crop Summary

The plots were planted into a stale, wide seedbed (76inch) that had been hipped in late winter. Soil moisture at planting was ideal for germination, and all plots quickly emerged to an acceptable stand. Timely rains fell during the first half of summer; however, the remainder of the growing season was very dry. This dry weather continued up until the time the peanuts were dug. The soil was extremely dry at the time the plots were dug, making the digging process very difficult. The decision was made to dig all varieties at one time, based on the calendar date and the weather forecast. A rainy period set in after the peanuts were inverted, but before they could be combined. The exposure to this rainy weather made harvest difficult and reduced yield potential at this location.

Planting date	May 16
Digging date	October 1 (all varieties)
Harvest date	October 18 (all varieties)
Soil type	Loring silt loam
Soil pH	6.3
Soil fertility	$\dots P = M, K = M$
Previous crop	Wheat
Fertilizer	Solubor @ 12 oz/A on July 2
Herbicides	Preemergence – Dual II Magnum @ 32 oz, Valor @ 2 oz/A, and Buccaneer
	(glyphosate) @ 40 oz/A on May 16
	Postemergence - Zidua @ 2 oz, Volunteer (clethodim) at 16 oz, and Dual II Magnum

@ 24 oz/A on June 19; Volunteer (clethodim) @ 16 oz/ A on July 10; Section (clethodim) @ 14 oz/A on August 2

Fungicide/Insecticide . . .Convoy @ 32 oz and Echo @ 24 oz/A on June 19; Muscle @ 32 oz/A on July 10; Manzinga @ 32 oz/A on August 2; Miravis @ 3.4 oz on September 5





Rainfall Summary

	Inches
Мау	1.33
June	4.64
July	5.45
August	3.70
September	0.00
October	4.41
Total	19.53

7

Table 9. Yield, seed size, and grade of short-season peanutvarieties at the MAFES Brown Loam Branch, Raymond.

Variety	2019 yield	2-year avg.	3-year avg.	TSMK	Seed avg.
	lb/A	lb/A	lb/A	%	no./Ib
Jupiter	3146.3	—	-	67.2	510
IPG 914	2602.0	4428.9	5199.0	70.9	590
IPG QR-14	2456.2	3814.1	5016.8	69.7	780
Schubert	2331.7	_	_	68.0	730
Ole	2049.6	—	—	68.2	580
Mean	2517.1				
CV	16.2				
LSD	627.9				
R ²	63.9				
error df	12				

Table 10. Yield, average size, and grade of full-season peanut varieties at the MAFES Brown Loam Branch, Raymond.					
Variety	2019 yield	2-year avg.	3-year avg.	TSMK	Seed avg.
	lb/A	lb/A	Ib/A	%	no./lb
Georgia-16HO	3877.4	5316.0	6102.6	74.8	470
TUFRunner™ '297'	3761.9	4832.8	5858.5	76.7	520
LARIAT	3675.9	_	-	76.9	570
Georgia-18RU	3550.5	—	—	76.1	630
FloRun™ '331'	3533.2	5307.8	6093.9	73.2	550
TIF-NV-HIGH O/L	3506.9	5017.1	5667.7	72.9	530
Georgia-12Y	3431.2	5266.2	5860.5	73.2	620
Georgia-06G	3393.4	4915.3	5681.5	74.7	520
AU-NPL-17	3045.0	4875.3	5670.9	69.5	480
Georgia-09B	2963.3	4857.3	5868.9	73.9	620
Georgia-14N	2711.8	4262.4	4893.3	77.5	620
T1	2430.0	_	_	71.7	540
T2	2080.4	_	_	70.9	590
T3	1566.0	_	_	69.5	540
Mean	3109.1				
CV	14.3				
LSD	636.5				
R ²	76.7				
error df	39				

Crop Summary

The plots were planted into a seedbed that had been hipped earlier that spring. The rows were do-alled down to expose good soil moisture at the time of planting. The soil moisture at planting was ideal for germination. The plots received heavy rains immediately after planting, which crusted the soil and slowed emergence somewhat. However, all plots emerged to a good stand. Timely rains during the summer allowed for ample soil moisture throughout the season. The soil conditions were ideal at the time the short-season varieties were dug, making for an efficient digging process. The later-maturing varieties received a large amount rain before being dug, which delayed the digging and inverting process. The short-season varieties were harvested in a timely manner, but fall rains delayed the entire harvest operation of the full-season varieties, which had a negative impact on their yield potential at this location.

Planting date	May 8
Digging dates	September 19 (short-season varieties), October 24 (full-season varieties)
Harvest dates	September 26 (short-season varieties), November 5 (full-season varieties)
Soil type	Bosket very fine sandy loam
Soil pH	6.7
Soil fertility	P = H, K = H
Previous crop	Grain Sorghum
Herbicides	Preemergence – Strongarm @ .045 oz and Prowl @ 3 pt/A on May 8
	Postemergence - Select Max @ 12 oz/A + crop oil @ 1% on June 25; Select Max
	@ 12 oz/A + crop oil @ 1% on August 5
Fungicide/Insecticide	Provost @ 8 oz/A on June 25; Fontellis @ 24 oz/A on July 12; Echo @ 24 oz/A
-	on July 31; Elatis @ 9.5 oz/A on August 22





Rainfall Summary

	Inches
May	10.94
June	7.87
July	4.99
August	3.33
September	0.20
October	10.38
Total	37.71

Table 11. Yield, average seed size, and grade of short-seasonpeanut varieties at the MAFES Delta Branch, Stoneville.

Variety	2019 yield	2-year avg.	3-year ¹ avg.	TSMK	Seed avg.
	Ib/A	lb/A	lb/A	%	no./lb
MS SB310 *	6833.8	_	_	74.6	650
MS SB313 *	6752.3	_	-	74.5	540
MS SB307 *	6530.0	_	-	75.5	570
MS SB305 *	6228.0	_	-	75.2	660
MS SB304 *	6132.8	_	-	75.7	640
MS SB316 *	5682.8	_	-	72.1	510
Jupiter	5631.9	_	-	66.0	460
IPG QR-14	4490.2	4750.7	5350.8	69.0	720
IPG 914	4294.3	5343.0	5645.0	71.8	680
Schubert	4104.3	_	-	60.6	1030
Ole	3291.7	_	-	67.8	780
Mean	5452.0				
CV	8.3				
LSD	650.4				
R ²	91.1				
error df	30				

* The lines followed by an asterisk originated from 2016-2018 grants provided by the Mississippi Peanut Promotion Board for a disease nursery located in the Hamilton vicinity. The lines were selected by and from material provided by Dr. Dylan Wann of the International Peanut Group/Algrano Seed and by Dr. Alan Henn, Mississippi State University Extension plant pathologist. Lines were selected for 120-day maturity, early leaf spot, and soil-borne disease characteristics, as well as for yield.

Table 12. Yield, average seed size and grade of full-seasonpeanut varieties at the MAFES Delta Branch, Stoneville.					
Variety	2019 yield	2-year avg.	3-year ¹ avg.	TSMK	Seed avg.
	lb/A	lb/A	lb/A	%	no./Ib
Georgia-12Y	3903.0	5620.3	5957.9	74.2	650
Georgia-06G	3568.9	5653.8	5941.5	76.8	570
FloRun™ '331'	2728.6	4939.2	5650.1	72.8	680
AU-NPL-17	2369.3	4549.6	5011.4	74.4	600
TIF-NV-HIGH O/L	2224.1	3859.5	4564.3	72.3	600
TUFRunner™ '297'	1942.9	4390.4	5190.3	75.4	590
Georgia-14N	1796.6	3559.8	3958.2	73.0	790
Georgia-09B	1637.4	3674.7	4680.1	74.7	740
Georgia-16HO	1583.9	4657.6	5601.7	70.9	670
LARIAT	1405.2	—	_	74.5	680
Georgia-18RU	1372.2	—	_	72.7	630
Mean	2230.2				
CV	24.8				
LSD	799.5				
R ²	76.8				
error df	30				

NORTHEAST MISSISSIPPI BRANCH, VERONA

Crop Summary

The plots were planted into a seedbed that had been prepared earlier that spring with a bedder/roller. The soil moisture at planting was ideal for germination, and all plots quickly emerged to a good stand. Timely rains during the summer allowed for ample soil moisture throughout the season. The soil was extremely dry at

the time the short-season varieties were dug, making the digging process difficult. The later-maturing varieties received rain before being dug, which allowed for much easier digging and inverting. All plots were harvested in a timely manner, and good yields were observed at this location.

Planting date	May 8
Digging dates	September 20 (short-season varieties), October 11 (full-season varieties)
Harvest dates	September 25 (short-season varieties), October 17 (full-season varieties)
Soil type	Leeper fine sandy loam
Soil pH	6.4
Soil fertility	P = M, K = M
Previous crop	Cotton
Fertilizer	Preplant — 0-30-60 @ 100 lb/A
Herbicides	Preemergence – Dual II Magnum @ 32 oz and Gramoxone @ 32 oz/A on May 8
	Postemergence – Zidua @ 2 oz, Volunteer (clethodim) at 16 oz, Ultra Blazer @ 20 oz
	and Dual II Magnum @ 16 oz/A on June 18; Volunteer (clethodim) at 14 oz/A
	on August 29
Fungicide/Insecticide	eConvoy @ 32 oz and Echo @ 24 oz/A on June 25; Manzinga @ 32 oz/A on July 25;
	Manzinga @ 32 oz/A on August 12: Miravis @ 3.4 oz and Convoy @ 16 oz/A

on August 29





Rainfall Summary

	Inches
May	3.34
June	3.53
July	8.43
August	5.90
September	0.04
October	1.56
Total	22.80

Table 13. Yield, average seed size and grade of short-season peanut varieties at the MAFES Northeast Mississippi Branch, Verona.					
Variety	2019 yield	2-year avg.	3-year ¹ avg.	TSMK	Seed avg.
	Ib/A	lb/A	lb/A	%	no./Ib
Jupiter	9067.1	_	_	71.1	450
MS SB304 *	8487.4	_	—	60.8	1002
MS SB316 *	6856.8	_	—	72.9	550
IPG QR-14	6776.2	5462.6	—	71.0	680
MS SB307 *	6766.2	_	—	73.4	720
MS SB310 *	6482.1	_	—	75.1	740
MS SB305 *	6387.2	_	—	76.0	710
Schubert	6312.0	_	—	60.6	980
IPG 914	5756.7	5729.3	—	69.2	650
MS SB313 *	5562.4	_	—	74.5	650
Ole	5488.3	-	—	65.1	840
Mean	6722.0				
CV	16.8				
LSD	1625.0				
R ²	65.3				
error df	30				
* The lines follows	d by an actorial ariginat	ad from 0016 0010 grant	a provided by the Missie	inni Deenut Dremetian D	aard far a diaaaaa

* The lines followed by an asterisk originated from 2016-2018 grants provided by the Mississippi Peanut Promotion Board for a disease nursery located in the Hamilton vicinity. The lines were selected by and from material provided by Dr. Dylan Wann of the International Peanut Group/Algrano Seed and by Dr. Alan Henn, Mississippi State University Extension plant pathologist. Lines were selected for 120-day maturity, early leaf spot, and soil-borne disease characteristics, as well as for yield. 1No 3-year average.

Table 14. Yield, average seed size and grade of full-seasonpeanut varieties at the MAFES Northeast Mississippi Branch, Verona.					
Variety	2019 yield	2-year avg.	3-year ¹ avg.	TSMK	Seed avg.
	Ib/A	lb/A	Ib/A	%	no./lb
Georgia-18RU	6343.4	_	_	78.4	460
Georgia-16HO	6330.6	6314.4	-	78.2	490
FloRun™ '331'	6086.2	6323.1	-	75.5	520
TIF-NV-HIGH O/L	5996.3	6037.4	_	77.5	470
TUFRunner™ '297'	5854.7	5984.6	_	78.8	472
Georgia-12Y	5664.4	5630.8	_	75.0	580
Georgia-06G	5664.1	5982.0	_	78.5	550
Georgia-09B	5660.0	5701.0	_	78.1	590
LARIAT	5188.3	_	_	78.2	560
Georgia-14N	5099.4	4630.7	_	78.7	590
AU-NPL-17	4896.9	5266.2	_	74.0	480
Mean	5707.7				
CV	7.6				
LSD	623.7				
R²	65.7				
error df	30				
¹ No 3-year average.					





FORESTRY EXPERIMENT STATION

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George M. Hopper, Director

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