

## **2008 EARLY-PLANTED MAXIMUM AND MINIMUM GEORGIA PEANUT BREEDING LINE AND VARIETY TRIALS**

### **W. D. Branch – University of Georgia Coastal Plain Experiment Station**

This report represents only one-year results. Multiple-year comparisons are recommended for more comprehensive breeding line and variety evaluations. Early-Planted Maximum and Minimum Georgia Peanut Breeding Line and Variety Trials are annually conducted at two locations in the state (Coastal Plain Experiment Station at Tifton and the Southwest Georgia Research and Education Center near Plains.) The maximum irrigated test involves all recommended production practices, i.e. fertilization, irrigation, and pesticide applications; whereas, the minimum nonirrigated test excludes irrigation, insecticides, and only three fungicide sprays are used during the whole growing season.

#### **Coastal Plain Experiment Station – Early Planted Sp/VaL Max. Irrigated Test**

During 2007 and 2008, the same two advanced Georgia breeding lines (GA 042634-6 and GA 042634-11) topped the tests each year in yield, and both were significantly higher in yield than all other spanish and valencia-type breeding lines and varieties when planted early in mid-April. Georgia Browne and Georgia-04S were similar in yield and grade. Even though Georgia Browne and Georgia-04S were significantly lower in yield than GA 042634-6 and GA 042634-11, each were significantly higher in yield than the other spanish-types, except GA 042635-4.

Georgia Valencia had significantly higher yield than all other valencia-type varieties. It also has a larger seed size as denoted by fewer seed number (count) per pound than these other valencia varieties.

#### **Coastal Plain Experiment Station – Early Planted Ru/Va Max. Irrigated Test**

The 2008 growing season received very low rainfall, especially during April, May, and June. Irrigation was needed throughout the growing season. Spotted wilt disease caused by Tomato spotted wilt virus (TSWV) was again quite high later in the season. Disease ratings were taken during mid-season and just prior to harvest (see accompanying tables).

Georgia-06G, topped the early-planted Ru/Va max. irrigated test in yield; however it was not significantly higher in yield than Georgia-07W, the advanced Georgia breeding lines GA 032913, GA 052529, and GA 032902, Florida-07, Georgia Greener, Georgia-03L, Georgia-02C, York, and Tifguard. Georgia-08V (tested previously as GA 012535) topped the test in yield among the virginia-types, but it was not significantly higher in yield than the above mentioned runner-types and the virginia-types, NC-V 11 and Georgia Hi-O/L.

Georgia-02C, Georgia-05E, and the advanced Georgia breeding line GA 052529 had the highest TSMK grade at 80%. Georgia-05E had the highest percentage of extra large kernels (ELK) with 67% among the virginia-types. Georgia-08V had the largest seed size as denoted by the fewest seed no./lb at 418.

### **Coastal Plain Experiment Station – Early Planted Ru/Va Min. Nonirrigated Test**

Thrips damage was quite severe early in the growing season, but by mid-season plants seemingly recovered. In general, leafhopper burn was not as prominent and severe as in the past for this test.

Maturity was delayed approximately two weeks because of the hot and dry conditions during 2008 at this location. However, a few timely and scattered rains produced better yields than expected, but still much lower yields as compared to the maximum irrigated test. Under these stress conditions, Georgia-02C and Georgia-07W had the highest yields, but these were not significantly different from eight other runner-type varieties and two virginia-type varieties.

Georgia-05E had the highest yield among the virginia-types, but it was not significantly different from CHAMPS. Georgia-01R, Georgia-02C, and Georgia-05E had the highest TSMK grade at 77%. Georgia-05E also had the highest ELK percentage at 56%.

### **Southwest Georgia Research and Education Center – Early Planted Ru/Va Max. Irrigated Test**

Yields and grades at this location were not as high as at the Coastal Plain Experiment Station for some unknown reason. Both of these two tests received good moisture (irrigation and rainfall), and management practices were also very similar. Liken to the Coastal Plain Experiment Station max. irrigated test, Georgia-06G also topped this test in yield, but it was not significantly different from ten other runner-type varieties and five virginia-type varieties. CHAMPS had the highest yield among the virginia-types, but it was not significantly different from Georgia-08V, Georgia-05E, Gregory, and Perry in yield.

Georgia-05E and the advanced Georgia breeding line GA 052529 had the highest TSMK grade at 79%. Georgia-01R and Georgia-08V had the highest percentage of jumbo runner and ELK at 59% and 58%, respectively.

### **Southwest Georgia Research and Education Center – Early Planted Ru/Va Min. Nonirrigated Test**

Similar to the early-planted Ru/Va minimum nonirrigated test at the Coastal Plain Experiment Station, this test experienced significant reduction in plant growth due to drought stress. Thrips damage was likewise uniformly widespread throughout the early growing season.

Late-season rains appeared to benefit the later-maturing varieties and breeding lines. Highest yields were produced during the October 1 digging date. The advanced Georgia breeding line, GA 052529 had the highest yield, but it was not significantly different from C-99R and Georgia-01R.

GA 052529 also had the highest percentage of TSMK at 77%, but it was followed closely by Georgia-02C and Georgia-05E at 76% TSMK. Georgia-08V had the highest percentage of ELK at 53%.

### **Coastal Plain Experiment Station – Early Planted Ru/Va Disease Rating**

These tests were purposely planted in mid-April to evaluate the same set of breeding lines and varieties for TSWV and total disease (TD) ratings in the max. irrigated test and min. nonirrigated test. On the average in 2008, the min. nonirrigated test had more TD at the end of the growing season as compared to the max. irrigated test.

In the max. irrigated test, Georgia-06G, Georgia-07W, and Georgia-03L had the lowest TSWV percentages of 6% at midseason. Whereas, Georgia-06G, Georgia-07W, and the advanced Georgia breeding line GA 052529 had the lowest TD percentages of 12% prior to digging.

In the min. nonirrigated test, GA 052529 had both the lowest percentage of TSWV and TD at 3% and 16%, respectively. However, it was not significantly lower in TSWV compared to Georgia Greener, Georgia-06G, and Georgia-07W.

### **Southwest Georgia Research and Education Center – Early Planted Ru/Va Disease Rating**

On the average at this location during 2008, TSWV and TD ratings were fairly similar between the max. irrigated test and the min. nonirrigated test. Similar to the Coastal Plain Experiment Station, the TSWV ratings were relatively low at midseason but increased later in the growing season for the total disease (TD) ratings.

In the max. irrigated test, the advanced Georgia breeding line GA 052529 had the lowest percentage of TSWV at 4%, but it was not significantly different from Georgia Greener, Georgia-06G, Georgia-03L, Georgia-07W, and GA 032902. Georgia-07W and GA 052529 had the lowest percentage of TD at 27%, but were not significantly different from Georgia-03L, Georgia-06G, York, Georgia Greener, and Georgia-02C.

In the min. nonirrigated test, GA 052529 again had the lowest percentage of TSWV at 4%, but it was not significantly different from Georgia-07W, Georgia-03L, Georgia-06G, Georgia Greener, Georgia-02C, Tifguard, and GA 032913. The advanced Georgia breeding line GA 052529 also had the lowest TD percentage at 18%, but it was not significantly different from York.

### **Acknowledgements**

**Early-Planted Maximum and Minimum Georgia Peanut Breeding line and Variety Trials are supported in part through grants from the Georgia Peanut Commission. Mention of a trademark, proprietary product, or vendor does not constitute a guarantee or warranty of a product by the University of Georgia and does not imply its approval to the exclusion of other products or vendors that may also be available.**

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Coastal Plain Experiment Station**  
**-Early Planted Sp/Val Maximum Irrigated Test-**

<b>Breeding Line and Variety</b>	<b>Digging Date</b>	<b>Yield (lb/a)</b>	<b>TSMK (%)</b>	<b>OK (%)</b>	<b>DK (%)</b>	<b>ELK (%)</b>	<b>Seed (no./lb)</b>
<b><u>Spanish-Types</u></b>							
GA 042634-6 <sup>1</sup>	8/29	5178 a*	76.9	2.7	0.4	6.5	1045
GA 042634-11 <sup>1</sup>	8/29	5121 a	77.0	2.3	0.5	12.7	999
GA 042635-4 <sup>1</sup>	8/29	4709 b	78.7	0.5	0.2	19.9	922
Georgia Browne	8/21	4649 b	75.5	0.7	0.0	5.6	982
Georgia-04S	8/21	4523 b	73.5	1.8	0.1	9.8	1040
Tamnut OL06	8/07	3730 c	66.2	2.5	0.9	7.7	937
Tamspan 90	8/07	3629 cd	67.2	4.9	0.3	2.6	1085
OLin	8/07	3324 de	69.1	3.8	0.2	5.4	1106
Spanco	7/31	2992 ef	64.6	5.9	0.3	0.9	1112
Pronto	7/31	2708 f	67.7	5.6	0.3	0.9	1065
<b><u>Valencia Types</u></b>							
Georgia Valencia	8/07	3188 e	59.1	3.2	2.3	10.7	769
Georgia Red	8/07	2113 g	65.6	3.2	1.8	4.9	909
H & W Valencia 136	7/04	1781 gh	51.2	12.7	0.1	0.2	1175
N. M. Valencia C	7/04	1735 gh	56.1	10.5	0.2	0.2	1172
N. M. Valencia A	7/04	1692 h	51.0	13.7	0.0	0.0	1175
Valencia McRan	7/04	1643 h	52.3	12.3	0.4	0.2	1191

\* Yields within the column followed by the same letter are not significantly different at P≤0.05.

<sup>1</sup> Advanced Georgia breeding line.

Planting Date:	April 11, 2008.				
Seeding Rate:	Six seed/foot in two-row plots.				
Soil Type (Previous Crop):	Tifton loamy sand (corn).				
Management:	Herbicide = Sonalan + Dual @ ppi. Insecticide = Temik @ planting; Lannate (2-sprays); and Karate (1-spray). Fungicide = Headline (2-sprays); Provost (2-sprays); and Abound (1-spray).				
Digging Date:	July 24	July 31	Aug. 7	Aug. 21	Aug. 29
Rainfall (in.):	5.12	9.52	9.85	11.87	19.94
Irrigation (in.):	6.40	6.40	6.40	7.00	7.00
Total (in.):	11.52	15.92	16.25	18.87	26.94

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Coastal Plain Experiment Station**  
**-Early Planted Ru/Va Maximum Irrigated Test-**

<b>Breeding Line and Variety</b>	<b>Digging Date</b>	<b>Yield (lb/a)</b>	<b>TSMK (%)</b>	<b>OK (%)</b>	<b>DK (%)</b>	<b>ELK (%)</b>	<b>Seed (no./lb)</b>
<b>Runner-Types</b>							
Georgia-06G	9/04	6543 a*	78.1	1.7	0.2	51.7	602
Georgia-07W	9/11	6524 ab	78.2	1.5	0.5	50.0	606
GA 032913 <sup>1</sup>	9/04	6519 ab	79.0	1.0	0.4	49.1	657
GA 052529 <sup>1</sup>	9/23	6379 abc	79.9	2.2	0.6	46.6	630
GA 032902 <sup>1</sup>	9/04	6264 a-d	77.3	1.0	1.9	52.8	651
Florida-07	9/11	6079 a-e	72.2	2.4	1.3	42.2	584
Georgia Greener	9/04	6004 a-f	78.6	1.4	0.3	45.9	644
Georgia-03L	9/04	5954 a-g	74.3	0.5	0.2	48.4	616
Georgia-02C	9/11	5830 a-g	80.2	1.1	0.5	59.9	698
York	9/23	5703 a-h	74.0	2.2	0.0	29.0	761
Tifguard	9/11	5689 a-h	74.6	2.6	0.8	49.1	599
Georgia Green	9/04	5475 d-i	77.8	2.4	0.1	27.4	756
AP-4	9/04	5268 e-i	76.6	1.7	0.3	43.4	630
AP-3	9/04	5190 f-i	73.2	1.7	0.1	44.0	702
AT-3081R	9/04	5160 f-i	72.5	1.3	0.4	35.5	641
McCloud	9/04	5123 ghi	75.0	1.7	0.8	44.8	577
C-99R	9/23	5097 ghi	74.7	3.2	0.7	40.2	615
AT-3085RO	9/04	4896 hi	72.5	1.7	1.5	41.2	630
Georgia-01R	9/23	4643 i	75.7	2.5	1.0	47.7	669
<b>Virginia Types</b>							
Georgia-08V	9/04	6121 a-e	76.2	0.5	0.7	60.6	418
NC-V 11	8/20	5704 a-h	70.1	0.2	0.7	50.3	434
Georgia Hi-O/L	8/20	5692 a-h	77.4	0.4	1.4	55.2	517
Georgia-05E	9/11	5658 b-h	79.9	0.4	0.8	66.7	499
CHAMPS	8/20	5536 c-h	71.0	1.0	0.9	32.2	482
Gregory	8/20	5531 c-h	70.8	0.9	0.7	35.6	529
Perry	8/20	5393 d-i	72.2	0.7	0.5	37.0	505

\* Yields within the column followed by the same letter are not significantly different at  $P \leq 0.05$ .

<sup>1</sup> Advanced Georgia breeding line.

Planting Date: April 14, 2008.  
 Seeding Rate: Six seed/foot in two-row plots.  
 Soil Type (Previous Crop): Tifton loamy sand (corn).  
 Management:: Herbicide = Sonalan + Dual @ ppi.  
 Insecticide = Temik @ planting; Lannate (2-sprays); and Karate (1-spray).  
 Fungicide = Headline (2-sprays); Provost (4-sprays); and Abound (1-spray).

Digging Date:	Aug. 20	Sept. 4	Sept. 11	Sept. 23
Rainfall (in.):	11.58	19.87	20.37	20.45
Irrigation (in.):	7.10	7.10	7.10	7.10
Total (in.):	18.68	26.97	27.47	27.55

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Coastal Plain Experiment Station**  
**-Early Planted Ru/Va Minimum Nonirrigated Test-**

<b>Breeding Line and Variety</b>	<b>Digging Date</b>	<b>Yield (lb/a)</b>	<b>TSMK (%)</b>	<b>OK (%)</b>	<b>DK (%)</b>	<b>ELK (%)</b>	<b>Seed (no./lb)</b>
<b>Runner-Types</b>							
Georgia-02C	9/19	4262 a*	76.7	2.4	0.9	45.8	718
Georgia-07W	9/19	4235 ab	75.6	2.2	1.3	38.8	626
York	10/3	4123 abc	72.7	1.6	0.8	20.6	751
Georgia-03L	9/11	3970 a-d	72.0	1.1	0.6	35.4	637
GA 052529 <sup>1</sup>	10/3	3875 a-e	76.4	1.5	4.9	39.6	665
Georgia-01R	10/3	3874 a-e	77.0	1.2	2.2	46.7	664
Georgia-06G	9/11	3797 a-f	76.0	2.0	2.0	48.2	594
Tifguard	9/19	3766 a-f	72.1	3.6	1.9	48.2	610
AT-3081R	9/11	3763 a-f	69.8	2.8	0.5	19.5	770
Florida-07	9/19	3744 a-f	70.2	2.3	3.3	40.8	602
AP-3	9/11	3706 b-f	70.9	2.7	0.2	47.0	650
AT-3085RO	9/11	3703 b-f	69.9	3.1	0.5	23.7	706
AP-4	9/11	3630 c-g	71.3	3.2	2.2	34.0	639
GA 032913 <sup>1</sup>	9/11	3575 c-g	73.0	1.9	4.5	40.0	683
GA 032902 <sup>1</sup>	9/11	3568 c-g	75.1	1.5	3.4	43.0	702
Georgia Greener	9/11	3496 d-g	74.8	1.9	3.0	38.8	667
McCloud	9/11	3403 e-h	74.1	1.3	1.8	41.0	569
Georgia Green	9/11	3265 f-i	75.1	2.7	1.6	22.1	777
C-99R	10/3	2867 hij	72.3	2.1	3.3	34.4	654
<b>Virginia Types</b>							
Georgia-05E	9/19	4209 ab	76.6	0.5	4.0	55.7	564
CHAMPS	9/04	3711 a-f	71.1	1.1	0.7	38.1	457
Georgia-08V	9/11	3614 c-g	72.2	0.7	5.1	53.6	429
NC-V 11	9/04	3488 d-g	69.0	0.6	2.9	44.3	436
Gregory	9/04	3120 g-j	71.8	1.2	0.8	34.7	535
Georgia Hi-O/L	9/04	2799 ij	75.9	0.6	3.1	49.9	507
Perry	9/04	2586 j	70.2	1.7	2.2	30.6	576

\* Yields within the column followed by the same letter are not significantly different at P≤0.05.

<sup>1</sup> Advanced Georgia breeding line.

Planting Date: April 14, 2008.  
 Seeding Rate: Six seed/foot in two-row plots.  
 Soil Type (Previous Crop): Tifton loamy sand (corn).  
 Management:: Herbicide = Sonalan + Dual @ ppi.  
 Insecticide = None.  
 Fungicide = Headline (1-spray); Provost (1-spray); and Bravo + Moncut (1-spray).

Digging Date:	Sept. 4	Sept. 11	Sept. 19	Oct. 3
Rainfall (in.):	19.87	20.37	20.37	20.45
Irrigation (in.):	None	None	None	None

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Southwest Georgia Research and Education Center**  
**-Early Planted Ru/Va Maximum Irrigated Test-**

<b>Breeding Line and Variety</b>	<b>Digging Date</b>	<b>Yield (lb/a)</b>	<b>TSMK (%)</b>	<b>OK (%)</b>	<b>DK (%)</b>	<b>ELK (%)</b>	<b>Seed (no./lb)</b>
<b>Runner-Types</b>							
Georgia-06G	9/03	4452 a*	75.9	1.9	0.3	54.3	573
Georgia-07W	9/03	4304 abc	76.1	1.6	0.5	49.8	580
Georgia-03L	9/03	4296 abc	72.8	1.1	0.2	47.7	583
Florida-07	9/09	4239 a-d	73.4	1.2	0.4	48.7	550
Georgia Greener	9/03	4126 a-e	75.8	2.2	0.0	44.6	651
GA 032902 <sup>1</sup>	9/03	3972 a-f	77.4	1.6	0.6	52.0	639
AT-3085RO	9/03	3967 a-f	73.4	1.2	0.1	53.3	567
Georgia-02C	9/09	3959 a-f	77.7	1.2	0.1	51.8	649
McCloud	9/03	3943 a-f	72.7	2.1	0.2	41.1	559
AP-3	9/03	3907 a-g	72.2	1.1	0.3	52.6	583
GA 032913 <sup>1</sup>	9/03	3876 a-g	76.9	1.4	0.8	49.6	637
GA 052529 <sup>1</sup>	9/24	3734 b-g	79.2	1.5	0.3	52.9	602
Georgia-01R	9/24	3732 b-g	77.3	0.9	0.4	58.9	611
AP-4	9/03	3687 c-g	75.6	1.7	0.3	49.3	583
Georgia Green	9/03	3640 d-h	75.0	2.8	0.3	31.4	744
AT-3081R	9/03	3632 d-h	73.4	1.7	0.1	46.3	603
C-99R	9/24	3581 e-h	74.5	2.0	0.5	44.4	626
Tifguard	9/09	3479 fgh	76.7	1.5	0.1	55.1	566
York	9/24	3321 gh	73.8	2.0	0.1	31.0	711
<b>Virginia Types</b>							
CHAMPS	9/03	4334 ab	72.0	1.0	0.5	50.0	426
Georgia-08V	9/03	4269 abc	74.0	0.7	0.6	57.9	431
Georgia-05E	9/09	4150 a-e	79.0	0.4	0.5	56.9	518
Gregory	9/03	3997 a-f	71.5	0.9	0.8	46.8	474
Perry	9/03	3882 a-g	74.2	0.8	2.0	52.5	474
NC-V 11	9/03	3802 b-g	66.4	1.2	2.3	49.7	428
Georgia Hi-O/L	9/03	3042 h	76.8	1.1	1.2	49.8	529

\* Yields within the column followed by the same letter are not significantly different at P≤0.05.

<sup>1</sup> Advanced Georgia breeding line.

Planting Date:	April 18, 2008.		
Seeding Rate:	Six seed/foot in two-row plots.		
Soil Type (Previous Crop):	Greenville sandy clay loam (corn).		
Management::	Herbicide = Sonalan + Dual + Strongarm @ ppi. Insecticide = Temik @ planting; Orthene (1-spray); and Lorsban. Fungicide = Headline (2-sprays); Provost (3-sprays); and Abound (1-spray).		
Digging Date:	Sept. 3	Sept. 9	Sept. 24
Rainfall (in.):	20.38	22.06	22.11
Irrigation (in.):	3.70	3.70	3.70
Total (in.):	24.08	25.76	25.81

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Southwest Georgia Research and Education Center**  
**-Early Planted Ru/Va Minimum Nonirrigated Test-**

<b>Breeding Line and Variety</b>	<b>Digging Date</b>	<b>Yield (lb/a)</b>	<b>TSMK (%)</b>	<b>OK (%)</b>	<b>DK (%)</b>	<b>ELK (%)</b>	<b>Seed (no./lb)</b>
<b>Runner-Types</b>							
GA 052529 <sup>1</sup>	10/1	3798 a*	76.6	2.0	1.7	50.6	642
C-99R	10/1	3525 ab	73.0	2.9	0.4	37.6	687
Georgia-01R	10/1	3438 abc	71.5	2.6	1.3	45.5	675
York	10/1	3315 bcd	69.5	4.4	0.4	23.5	761
Georgia-06G	9/18	3260 bcd	73.6	3.5	0.6	46.8	621
Georgia-03L	9/18	3220 b-e	70.5	2.4	0.5	36.7	653
Florida-07	9/24	3208 b-e	70.8	1.4	3.6	44.5	591
Tifguard	9/24	3121 b-f	75.0	1.6	0.6	48.8	613
Georgia-07W	9/18	3110 c-f	71.2	3.7	0.6	36.2	648
Georgia-02C	9/24	3090 c-f	76.1	2.2	0.3	41.4	718
AT-3085RO	9/18	3063 c-g	67.6	4.6	0.6	27.0	734
GA 032902 <sup>1</sup>	9/18	3035 c-g	72.9	4.0	1.2	38.4	725
AP-3	9/18	3009 d-g	69.2	3.1	0.2	45.5	630
McCloud	9/18	2998 d-g	70.6	3.4	1.0	37.7	626
AP-4	9/18	2908 d-i	72.0	4.2	0.1	35.6	663
Georgia Greener	9/18	2752 f-j	74.3	2.7	0.7	40.5	680
GA 032913 <sup>1</sup>	9/18	2736 f-j	74.0	3.3	0.6	37.4	713
Georgia Green	9/18	2664 g-j	73.2	3.8	0.8	27.0	779
AT-3081R	9/18	2571 h-k	68.3	4.2	0.6	31.3	727
<b>Virginia Types</b>							
Georgia-05E	9/24	3042 c-g	75.9	0.8	2.8	48.8	591
Gregory	9/18	2928 d-h	68.0	2.6	6.5	32.0	550
Georgia-08V	9/18	2833 e-i	72.9	0.9	5.2	53.1	467
NC-V 11	9/09	2510 ijk	63.0	3.0	3.8	42.0	482
CHAMPS	9/09	2377 j-k	61.9	3.9	4.8	35.0	483
Perry	9/09	2239 k	67.6	2.6	2.8	37.6	541
Georgia Hi-O/L	9/09	1791 l	67.3	2.8	5.8	39.2	543

\* Yields within the column followed by the same letter are not significantly different at P≤0.05.

<sup>1</sup> Advanced Georgia breeding line.

Planting Date:	April 18, 2008.			
Seeding Rate:	Six seed/foot in two-row plots.			
Soil Type (Previous Crop):	Greenville sandy clay loam (corn).			
Management:	Herbicide = Sonalan + Dual + Strongarm @ ppi. Insecticide = None Fungicide = Headline (1-spray); Provost (1-spray); and Abound (1-spray).			
Digging Date:	Sept. 9	Sept. 18	Sept. 24	Oct. 1
Rainfall (in.):	22.06	22.11	22.11	22.11
Irrigation (in.):	None	None	None	None

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Coastal Plain Experiment Station**  
**-Early Planted Ru/Va Disease Rating-**

Breeding Line and Variety	Max. Irrigated Test		Min. Nonirrigated Test	
	TSWV <sup>1</sup> (%)	TD <sup>2</sup> (%)	TSWV <sup>1</sup> (%)	TD <sup>2</sup> (%)
Perry	17.0 ab	46.5 a	21.0 a	77.0 a
AP-4	13.0 cde	41.5 ab	15.0 cd	57.5 bc
AT-3081R	13.0 cde	38.0 bc	15.5 cd	50.5 cde
CHAMPS	14.5 bc	37.5 bc	10.0 ef	53.0 cd
McCloud	13.0 cde	35.5 bcd	16.0 bc	58.0 bc
C-99R	11.5 def	35.0 bcd	12.5 de	46.5 de
NC-V 11	14.0 cd	32.0 cde	15.0 cd	59.5 bc
Gregory	17.5 a	31.5 cde	19.0 ab	65.5 b
Georgia-05E	10.5 e-h	31.0 c-f	10.0 ef	32.0 gh
Georgia-01R	11.0 efg	28.0 d-g	8.0 fgh	27.0 h
Georgia Green	8.0 h-k	27.0 efg	8.5 fgh	45.0 def
AT-3085RO	8.5 g-k	24.5 e-h	10.5 ef	46.0 def
Tifguard	9.5 f-j	23.5 f-i	8.0 fgh	28.5 h
Florida-07	9.5 f-j	23.3 g-j	9.0 fg	45.0 def
Georgia Hi-O/L	8.5 g-k	22.5 g-j	10.0 ef	46.0 def
Georgia-08V	7.5 ijk	22.0 g-j	8.0 fgh	41.5 efg
GA 032902 <sup>3</sup>	8.0 h-k	21.5 g-j	7.5 fgh	41.5 efg
Georgia-02C	10.0 f-i	20.5 g-k	8.5 fgh	30.5 h
AP-3	9.5 f-j	19.0 h-l	9.0 fg	44.0 def
GA 032913 <sup>3</sup>	7.0 jk	16.0 i-l	8.0 fgh	36.0 fgh
York	8.5 g-k	15.5 jkl	9.0 fg	26.5 h
Georgia-03L	6.0 k	13.5 k-l	8.0 fgh	31.0 h
Georgia Greener	9.5 f-j	13.0 kl	5.5 hi	27.0 h
Georgia-06G	6.0 k	12.5 l	6.0 ghi	32.5 gh
Georgia-07W	6.5 k	12.5 l	6.0 ghi	30.5 h
GA 052529 <sup>3</sup>	7.5 ijk	12.5 l	3.0 i	16.0 i
Mean	10.2	25.2	10.2	42.1

<sup>1</sup> Percentage of tomato spotted wilt virus (TSWV) incidence at about mid-season.

<sup>2</sup> Percentage of total disease (TD) incidence prior to digging, primarily TSWV and some soilborne diseases, primarily white mold.

<sup>3</sup> Advanced Georgia Breeding Line.

**2008 GEORGIA PEANUT BREEDING LINE AND VARIETY TRIAL**  
**Southwest Georgia Research and Education Center**  
**-Early Planted Ru/Va Disease Rating-**

Breeding Line and Variety	Max. Irrigated Test		Min. Nonirrigated Test	
	TSWV <sup>1</sup> (%)	TD <sup>2</sup> (%)	TSWV <sup>1</sup> (%)	TD <sup>2</sup> (%)
Gregory	13.3 a	68.8 a	12.5 ab	56.7 bcd
CHAMPS	11.7 abc	66.7 a	15.4 a	66.7 a
NC-V 11	12.9 ab	65.4 a	11.7 bc	58.3 abc
Perry	11.2 a-d	63.3 ab	11.2 bcd	63.8 ab
McCloud	12.1 abc	55.4 bc	10.0 b-g	48.8 def
AT-3081R	11.2 a-d	55.4 bc	8.8 c-i	48.3 d-g
Georgia Green	8.8 d-h	51.2 cd	8.3 d-j	51.2 cde
Georgia Hi-O/L	9.6 c-g	51.2 cd	11.2 bcd	42.1 e-i
AP-4	8.3 e-i	50.8 cde	10.4 b-f	39.2 g-k
GA 032902 <sup>3</sup>	5.8 ijk	45.8 def	7.5 f-k	44.6 e-h
C-99R	11.2 a-d	43.8 def	11.2 bcd	39.2 g-k
Georgia-08V	10.4 b-e	42.9 def	10.8 b-e	41.7 f-i
GA 032913 <sup>3</sup>	6.7 hij	42.5 efg	6.7 h-l	36.2 h-m
Florida-07	8.3 e-i	42.1 fg	7.9 e-k	37.5 h-l
Georgia-05E	8.3 e-i	41.2 fg	8.3 d-j	35.0 i-m
AP-3	7.5 f-j	41.2 fg	7.5 f-k	40.8 f-j
Tifguard	7.5 f-j	41.2 fg	5.8 i-l	35.4 h-m
Georgia-01R	8.8 d-h	39.2 fgh	7.1 g-k	30.8 k-n
AT-3085RO	10.0 c-f	37.9 f-i	9.6 b-h	37.9 h-k
Georgia-02C	7.1 g-j	34.2 g-j	5.4 jkl	27.9 mn
Georgia Greener	5.8 ijk	32.1 hij	5.8 i-l	33.3 i-n
York	7.5 f-j	30.8 hij	7.5 f-k	24.6 no
Georgia-06G	6.2 h-k	30.4 ij	5.0 kl	28.3 lmn
Georgia-03L	5.4 jk	30.0 ij	5.4 jkl	32.1 j-n
GA 052529 <sup>3</sup>	3.8 k	27.1 j	3.8 l	18.3 o
Georgia-07W	5.4 jk	26.7 j	5.0 kl	30.4 k-n
Mean	8.6	44.5	8.5	40.4

<sup>1</sup> Percentage of tomato spotted wilt virus (TSWV) incidence at about mid-season.

<sup>2</sup> Percentage of total disease (TD) incidence prior to digging, primarily TSWV and some soilborne diseases, primarily white mold.

<sup>3</sup> Advanced Georgia Breeding Line.