Peanut varieties for 2019 (and you might cut costs)

Panhandle Row Crops Meeting March 7, 2019

Barry L. Tillman



Can we reduce costs?

Seed size

- Managing planting density
- ✓ Seed cost
- ✓ Impacts on gypsum
- Varieties for 2019- what's available?
- ***** Variety Performance
- Managing varieties
 - ✓ Disease resistance / susceptibility
 - Can we reduce costs?
 - Disease management
 - Cultural practices
 - Fungicides



Plant Stand, Replanting, and Seed Costs

Yield usually maximized at 2.5 plants/ft



With high germination (90%+), between 65% and 75% of seed will survive to a healthy plant



Plant stand and replanting

1st priority- get adequate stand on first planting

- Avoid risky situations
 - Cool soils, wet soils, dry soils
 - Planting ahead of/after cold front
 - Cool irrigation water
- Replant if stand less than 2.0 to 2.5 plants/ft
 - Depends on uniformity
 - Large skips = more likely replant pays
- Complete replanting usually lower yield
 - Unless complete or near complete stand failure
- Replant within 3 weeks of initial planting
 - Add seed proportional to initial stand for supplemental replanting

<u>SEED COST</u>: Seed size can cause up to \$26 range in seed cost per acre (\$0.75/lb.)



Seed calcium- Impact Factors

- Variety
- Seed size
 - Medium seeded runner varieties
 - ✓ Georgia Green- surface lime sufficient
 - ✓ ? Better scavenger of Ca
 - Large seeded runner varieties
 - ✓ Do they require more Ca?
 - Probably not, but much more important
- Irrigation
 Soil Calcium



Variety and irrigation affect seed calcium concentration



Seed Availability



Varieties available based on Sheller survey

Variety	Birdsong	Brooks	Forrester	Golden	McClesky	Cunningham	Sessions	Total Certified Acreage
AU-NPL 17								464
FloRun 107								55
FloRun 331		Seed	R	R			R	2,362
Georgia Greener								93
Georgia-06G	R,C	R,C	R,C	R,C	R,C	R,C	R,C	126,347
Georgia-07W								334
Georgia-09B	R			С				9,253
Georgia-12Y					R		R,C	1,545
Georgia-14N				R				1,186
Georgia-16HO					R	R	R	2,064
Tifguard	С							1,349
TifNV-High O/L	С			R				1,289
TUFRunner 297		R,C	R	R				2,489
TUFRunner 511				R				708

Certified Seed Production, AL, FL, GA 2018



Variety Performance Yield and grade

University of Florida SWVT

2016-2018 University of Florida Variety Tests



University of Florida SWVT



University of Georgia SWVT

2017-2018 University of Georgia Variety Tests (Source:



Disease Resistance

Peanut Rx 2019 Version

Variety ¹	Spotted Wilt	Leaf Spot	White mold
FloRun™ '107'	20	25	20
FloRun™ '331'	10	20	15
Georgia-06G	10	20	20
Georgia-07W	10	20	15
Georgia-09B	20	25	25
Georgia-12Y	5	15	10
Georgia-14N	5	15	15
Georgia-16HO	10	25	20
Tifguard	10	15	15
TifNV-HiOL	5	15	15
TUFRunner™ '297'	10	25	20
TUFRunner™ '511'	20	30	15





Spotted Wilt

White Mold



UGA Disease Evaluations, 2016-18

Multi-State Disease Evaluations, 2016-18

Yield

Entries	TSWV ⁴	Leaf Spot ³	White Mold ²	(lb/A)
FloRun 331	19.2	7.1	25.4	4334
TIFNV HI O/L	8.4	5.2	25.3	4238
Georgia-12Y	7.2	7.4	31.2	4187
Georgia-14N	14.4	6.2	19.1	4062
TUFRunnner 297	17.5	8.1	71.4	3297
Georgia-06G	16.0	8.2	66.9	2979
Georgia-13M	12.0	9.2	78.4	2971

2016 UGA Disease Evaluations- Dr. Brenneman

MULTI-STATE DISEASE EVALUATION, 2016

	TSWV ¹	LEAF SPOT ²		WHITE MOLD ³		Percent ⁴	YIELD
GENOTYPE	31-Aug	21-Sep	11-Oct	NO ZEROES	ALL	Zeroes	(LB/A)
FloRun™ '331'	27.5	2.6	6.9	27.7	25.1	8.3	5389
TIFNV HIO/L	10.0	2.4	4.6	27.8	26.5	8.3	5348
Georgia-12Y	4.2	2.6	6.5	28.1	30.8	8.3	4833
TUFRunner' 297'	19.1	3.4	7.8	49.6	44.6	8.3	4271
Georgia-14N	16.7	2.8	5.3	22.7	21.5	8.3	4247
TUFRunner ' 511'	24.1	5.1	9.5	56.7	54.2	8.3	3766
Georgia-13M	15.0	4.6	9.0	57.5	57.5	0.0	3497
Georgia-06G	19.1	2.9	7.8	54.0	54.0	0.0	3465
LSD (P<0.05)	10.4	0.7	1.1	21.2	21.8	11.7	916

2017 UGA Disease Evaluations- Dr. Brenneman

Multi-State Disease Evaluations, 2017

	TSWV ⁴	Leaf S	Spot ³	White Mold ²		Percent ¹	Yield
Entries		14-Sep	4-Oct	No Zeroes	All	Zeroes	(lb/A)
Georgia-12Y	10.3	5.3	6.9	38.4	31.9	16.7	4158
TIFNV HI O/L	6.9	3.9	5.4	27.2	20.8	25.0	4058
FloRun 331	10.9	5.9	7.6	29.0	26.3	12.5	3678
Georgia-16HO	15.3	5.1	7.7	49.3	46.5	12.5	3606
Georgia-14N	12.2	4.3	6.6	24.8	22.7	12.5	3219
Georgia-17SP	12.3	4.4	5.9	33.3	25.0	33.3	3025
TUFRunnner 297	15.9	4.8	7.8	76.3	76.3	0.0	2473
Georgia-06G	12.8	5.9	8.3	90.4	90.4	0.0	2386
Georgia-13M	9.1	8.0	9.1	83.8	83.8	0.0	2210
AU-NPL 17	16.3	3.4	5.3	26.0	21.7	20.8	2178
LSD (P<0.05)	8.5	4.7	1.0	25.2	24.9	19.7	925

UGA Disease Evaluations, 2018- Dr. Brenneman

Multi-State Disease Evaluations, 2018

	Leaf Spot ³	Black	White N	White Mold ²		Yield
Entries		Pods	No Zeroes	All	Zeroes	(lb/A)
Georgia-14N	6.8	2.5	15.5	13.0	16.7	4719
AU-NPL 17	6.3	35.0	24.5	23.5	12.5	4296
FloRun 331	6.9	18.8	26.8	24.7	8.3	3933
Georgia-12Y	8.9	0.0	35.8	31.0	12.5	3570
Georgia-16HO	8.1	8.8	71.7	71.7	0.0	3509
TIFNV HI O/L	5.5	8.0	28.6	28.6	0.0	3307
Georgia-13M	9.5	1.3	94.0	94.0	0.0	3207
TUFRunnner 511	9.4	6.3	98.3	82.5	0.0	3207
TUFRunnner 297	8.7	11.3	93.5	93.5	0.0	3146
Georgia-06G	8.5	12.5	56.3	56.3	0.0	3086
LSD (P<0.05)	1.2	15.2	24.4	24.7	16.0	1009

White mold tests sprayed with Bravo 7-8 times

2016-2017 University of Florida White Mold Tests



Leaf spot tests- 0, 4, and 8 sprays

2017-2018 University of Florida *leaf spot* Tests



Disease Resistance

Peanut Rx 2019 Version

Variety ¹	Spotted Wilt	Leaf Spot	White mold
FloRun™ '107'	20	25	20
FloRun™ '331'	10	20	15
Georgia-06G	10	20	20
Georgia-07W	10	20	15
Georgia-09B	20	25	25
Georgia-12Y	5	15	10
Georgia-14N	5	15	15
Georgia-16HO	10	25	20
Tifguard	10	15	15
TifNV-HiOL	5	15	15
TUFRunner™ '297'	10	25	20
TUFRunner™ '511'	20	30	15

				White mold program		
Variety	Planting	Thimet	Twin Rows	Early season	Mid season	Leaf spot program
Georgia-06G	- May 1-31	if planting earlier than May 10	Yes, especially if planting before May 10	Yes, especially if planting early	May need more than folicur if weather conditions warrant: Convoy, Elatus, Fontelis, Alto+Abound, Evito, Provost,etc.	Bravo and Folicur (or generic equivalents) are okay especially if rotation is 2 years or more
Georgia-12Y	April 15- May 25 (late maturity)	if planting earlier than May 10	Probably not needed for spotted wilt control	May not be needed	Okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	Bravo and Folicur (or generic equivalents) are okay especially if rotation is 2 years or more

				White mo	old program	
Variety	Planting	Thimet	Twin Rows	Early season	Mid season	Leaf spot program
Georgia-09B	May 10- 31	use on all plantings	Yes, especially if planting before May 10	Yes, especially if planting early	Will likely benefit from Convoy, Elatus for WM control	Will likely benefit from fungicides with better activitiy on LS: Priaxor, Elatus, Alto+Abound, Fontelis, Evito, Provost, etc.
Georgia-16HO	April 15- May 25 (medium- late + 7 days)	if planting earlier than May 10	Yes, especially if planting before May 10	Yes, especially if planting early	Will likely benefit from Convoy, Elatus for WM control	Need to use fungicides with better activitiy on LS: Priaxor, Elatus, Alto+Abound, Fontelis, , Evito, Provost, etc

				White mo	old program	
Variety	Planting	Thimet	Twin Rows	Early season	Mid season	Leaf spot program
TUFRunner 511	May 10- 25	use on all plantings	Yes, especially if planting before May 10	Probably needed only if high risk of white mold	Probably okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	Need to use fungicides with better activity on LS: Priaxor, Elatus, Alto+Abound, Fontelis, Evito, Provost, etc
TUFRunner 297	May 1-25	if planting earlier than May 10	Yes, especially if planting before May 10	Probably needed only if high risk of white mold	Probably okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	If risk is high, will benefit from fungicides with better activity on LS: Priaxor, Elatus, Alto+Abound, Fontelis, Evito, Provost, etc. If risk is low, may be okay with Bravo, Folicur or

				White m	nold program	
Variety	Planting	Thimet	Twin Rows	Early season	Mid season	Leaf spot program
Georgia-14N	May 1- May 31 (late maturity)	if planting earlier than May 10	Yes, especially if planting before May 10	Probably needed only if high risk of white mold	Probably okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	Bravo and Folicur (or generic equivalents) are okay espeically if rotation is 2 years or more
Tifguard	May 1- May 31	if planting earlier than May 10	Yes, especially if planting before May 10	Probably needed only if high risk of white mold	Probably okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	Bravo and Folicur (or generic equivalents) are okay especially if rotation is 2 years or more

				White m	nold program	
Variety	Planting	Thimet	Twin Rows	Early season	Mid season	Leaf spot program
FloRun TM '331'	May 10- May 31	if planting earlier than May 10	Yes, especially if planting before May 10	Probably needed only if high risk of white mold	Probably okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	Bravo and Folicur (or generic equivalents) are okay especially if rotation is 2 years or more, but will benefit from stronger fungicides
TifNV-HiOL	May 1- May 31	if planting earlier than May 10	Yes, especially if planting before May 10	Probably needed only if high risk of white mold	Probably okay with Bravo and Folicur (or generic equivalents), especially if rotation is 2 years or more	Bravo and Folicur (or generic equivalents) are okay especially if rotation is 2 years or more

Peanut Field Day- Marianna August 15, 2019