

Update of Released Variety and New Breeding Line on Horizon



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2024 GEORGIA PEANUT FARM SHOW
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This is the work that
makes the world **WORK.**



THIS IS AUBURN.



Breeding Goals

Farmer	Yield, Grade, Disease Resistances (Leaf Spot, TSWV and White Mold), Drought tolerance
Sheller	Uniform Size, Easy to Shell and Process
Manufacturer	Uniformity, Blanching, Roasted Flavor, Oil Chemistry
Consumer	Flavor and Healthiness

AU-NPL 17

- Runner-type Peanut
- High yield and maturity in 145 days
- **Strong** Resistance to TSWV, leaf spot tolerance, white mode tolerance.
- Prostrate growth habit with main stem
- High oleic acid content
- Superior shelling character
- Good flavor

Research Top Yield Group %				OVT			2023 Averages		2021 - 2023 Averages	
☐ Varieties	Source	BARU	WREC - IRR	GCREC	WREC - DRY	EVSRC	OVT	Total	OVT ↓	Total
Georgia-12Y	University of Georgia	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	83.3% ^{Y3}	83.3% ^{Y3 L12}
AU-NPL 17	Auburn	100.0%	100.0%	100.0%	100.0%	0.0%	80.0%	80.0%	83.3% ^{Y3}	83.3% ^{Y3 L12}
Georgia-21GR	University of Georgia	100.0%	100.0%	0.0%	100.0%	0.0%	60.0%	60.0%	60.0% ^{Y1}	60.0% ^{Y1 L5}
Georgia-06G	University of Georgia	0.0%	0.0%	100.0%	0.0%	100.0%	40.0%	40.0%	50.0% ^{Y3}	50.0% ^{Y3 L12}
Georgia-16HO	University of Georgia	100.0%	0.0%	0.0%	100.0%	0.0%	40.0%	40.0%	41.7% ^{Y3}	41.7% ^{Y3 L12}
Georgia-20VHO	University of Georgia	100.0%	0.0%	100.0%	0.0%	0.0%	40.0%	40.0%	41.7% ^{Y3}	41.7% ^{Y3 L12}
Georgia-19HP	University of Georgia	0.0%	0.0%	100.0%	0.0%	100.0%	40.0%	40.0%	40.0% ^{Y1}	40.0% ^{Y1 L5}
ACI N 104	ACI Seeds	100.0%	0.0%	0.0%	0.0%	100.0%	40.0%	40.0%	40.0% ^{Y1}	40.0% ^{Y1 L5}
AU 20-27	Auburn	0.0%	0.0%	100.0%	100.0%	0.0%	40.0%	40.0%	40.0% ^{Y1}	40.0% ^{Y1 L5}
17-223	USDA	0.0%	0.0%	100.0%	100.0%	0.0%	40.0%	40.0%	40.0% ^{Y1}	40.0% ^{Y1 L5}
FloRun 331	U Florida	0.0%	0.0%	100.0%	0.0%	100.0%	40.0%	40.0%	33.3% ^{Y3}	33.3% ^{Y3 L12}
FloRun T61	U Florida	100.0%	100.0%	100.0%	100.0%	0.0%	80.0%	80.0%	33.3% ^{Y3}	33.3% ^{Y3 L12}
TifNV-HG	USDA	0.0%	0.0%	100.0%	100.0%	0.0%	40.0%	40.0%	33.3% ^{Y3}	33.3% ^{Y3 L12}
ACI-212	ACI Seeds	100.0%	0.0%	0.0%	100.0%	0.0%	40.0%	40.0%	33.3% ^{Y3}	33.3% ^{Y3 L12}
CB 1	USDA	100.0%	0.0%	100.0%	100.0%	0.0%	60.0%	60.0%	33.3% ^{Y2}	33.3% ^{Y2 L9}
CB 7	USDA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	33.3% ^{Y2}	33.3% ^{Y2 L9}
TifNV-High O/L	USDA	0.0%	0.0%	0.0%	0.0%	100.0%	20.0%	20.0%	25.0% ^{Y3}	25.0% ^{Y3 L12}
Georgia-18RU	University of Georgia	100.0%	0.0%	0.0%	0.0%	0.0%	20.0%	20.0%	25.0% ^{Y3}	25.0% ^{Y3 L12}
CB 20	USDA	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.2% ^{Y2}	22.2% ^{Y2 L9}
FloRun 52N	U Florida	0.0%	0.0%	100.0%	0.0%	0.0%	20.0%	20.0%	20.0% ^{Y1}	20.0% ^{Y1 L5}
ACI-3321	ACI Seeds	0.0%	0.0%	100.0%	100.0%	0.0%	40.0%	40.0%	16.7% ^{Y3}	16.7% ^{Y3 L12}
AU 20-41	Auburn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% ^{Y2}	0.0% ^{Y2 L9}
ACI 222	ACI Seeds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% ^{Y2}	0.0% ^{Y2 L9}
AU 18-35	Auburn	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% ^{Y1}	0.0% ^{Y1 L5}
ACI 1453	ACI Seeds	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0% ^{Y1}	0.0% ^{Y1 L5}
Mean		40.0%	16.0%	52.0%	44.0%	24.0%	35.2%	35.2%	33.1%	33.1%
Standard Deviation		49.0%	36.7%	50.0%	49.6%	42.7%	26.7%	26.7%	21.4%	21.4%

Comparison of all trials from 2021 to 2023 for top two cultivars

	AU-NPL 17	Georgia-12Y	Georgia-06G (CK)
Years	2021 2022 2023	2021 2022 2023	2021 2022 2023
Variety Records	75	68	81
% Yield Mean	107.4%	108.7%	102.8%
Yield	5340	5478	5295
Dig Days	146	150	142
Hulls	23.9%	24.3%	21.5%
LSK	1.50%	2.00%	2.20%
TSMK	72%	71%	74%
Seed/Pound	666	718	637
Leaf Spot	23.3%	17.4%	26.0%
TSWV Top Group	66.7%	77.8%	11.1%
Tomato Spotted Wilt	9.34	7.05	12.79
CBR	0.1	0.1	0.3
Loan Value Ton	\$340	\$339	\$355
Value Per Acre	\$894	\$874	\$921

Georgia 16HO



Georgia 06G



2024 Rx Disease Index

AU NPL 17



TUFRunner 511



Florunner 331



TSW	10
Leaf Spot	15
White mold	15

AU 17 variety from one of our seed growers for Highnote Peanuts.

This variety has a lot of desirable characteristics to mitigate challenging growing conditions from year to year. Only after growing and observing this variety for 4 plus years have I come to these observations:

Some include -

- Hurricane weather / wet fall disease tolerant package to hold leaves
- disease package allows one less fungicide application in your spray program. What is this worth in fungicide and a less of a trip across the field?
- Late season Drought tolerance is being evaluated.
- good stem strength
- larger vine to cover the ground well
- good variety for hay production
- tolerant to a certain degree of TSWV

- Larger vines compensate for potential yield loss if a skippy stand occurs. I have had a grower tell me that in 2018 with 2 plants per foot he made 6,000 lbs per acre.
- it is slower to get a stand. Be patient. Not as quick emerging as an 06 G.
- a little thicker hull like the Ga 07 W which has shown to reduce seg 2 grades from Burrowing bug damage.
- on a normal year the grade has been comparable to 06 G on average. However, I do not expect this variety to out grade other varieties as a whole. Typically (70 to 75) if harvested at maturity and no environmental blip like the 100 degree weather has impacted all varieties in 2023.
- 145 to 155 days maturity but as some growers have indicated this variety has yielded as well at 165 to 170 days if weather was a problem.
- in the Auburn University large block replicated state regional on farm variety trials this variety has stayed with 06 G and other varieties. University data has indicated this as well.

The certified seeds of 'AU-NPL 17' are available for 2024 growing season

For request of the seeds, please contact:

Dr. Jim Bostick

Executive Vice President of Alabama Crop Improvement Assn. &
Southern Seed Certification Assn. Headland, AL 36345

334-693-3988 Office

334-693-2212 Fax

334-701-7383 Cell

AU22-37



Yield (lbs/Acre) and LS disease ratings for AU22-37 in 2022

ID'22	Tallassee AL	Brewton AL	Headland AL	Average	LS rating
AU22-37	7215	5640	3861	5572	4.3
AU22-32	7528	4456	3503	5162	4.3
AU-NPL17	7292	4510	3566	5123	3.3
AU22-43	7455	3948	3072	4825	4.5
AU22-26	7333	3902	3199	4811	6.3
AU22-33	6484	4633	3167	4761	3.5
AU22-34	6824	4365	3095	4761	5.0
AU22-03	6815	3998	3417	4743	4.7
AU22-35	6402	4093	2977	4491	5.3
G06G	6139	4315	2804	4420	3.8

Yield (lbs/Acre) Performance for AU22-37 in 2023

	Headland	EVS	Dawson	Brewton	Average
AU22-37	5572	7001	4111	4583	5317
G06G	5064	6098	2151	4483	4449
AU-NPL 17	4955	6883	2432	4987	4814
Mean based on (50 lines)	5233	6513	2521	4632	4725

23ID	TSW		23ID	TSW	
AU23-34	0.0	a	AU23-24	1.0	a
AU23-06	0.0	a	AU23-19	1.0	a
AU23-33	0.3	a	AU23-35	1.0	a
AU23-44	0.3	a	AU23-07	1.0	a
AU23-39	0.3	a	AU23-32	1.0	a
AU23-31	0.3	a	AU23-20	1.0	a
AU23-43	0.3	a	AU23-01	1.3	a
AU23-26	0.3	a	AU23-28	1.3	a
AU23-38	0.3	a	AU23-03	1.3	a
AU23-07	0.3	a	AU23-48	1.3	a
AU23-09	0.3	a	AU23-42	1.3	a
AU23-14	0.3	a	AU23-22	1.3	a
AU22-37	0.3	a	AU23-46	1.7	a
AU23-29	0.7	a	AU23-37	1.7	a
AU23-17	0.7	a	AU23-27	1.7	a
AU23-04	0.7	a	AU23-40	1.7	a
AU23-25	0.7	a	G06G	1.7	a
AU23-41	0.7	a	AU-17	1.7	a
AU23-18	0.7	a	AU23-36	1.7	a
AU23-21	0.7	a	AU23-45	2.0	a
AU23-30	0.7	a	AU23-11	2.0	a
AU23-23	0.7	a	AU23-05	2.3	a
AU23-02	1.0	a	AU23-13	2.3	a
AU23-47	1.0	a	AU23-10	3.0	a
AU23-15	1.0	a	AU23-12	3.0	a

Multiple comparisons TWV disease ratings for 50 advanced breeding lines in 2023

23ID	% Def LS		23ID	% Def LS	
AU23-28	19.2	a	AU23-41	65.6	b-g
AU23-01	24.8	a	AU23-39	66.8	b-g
AU23-46	24.8	a	AU23-24	66.8	b-g
AU23-29	28.9	a	AU23-18	70.0	b-g
AU23-05	28.9	a	AU23-19	70.8	b-g
AU23-03	36.0	a	AU23-42	72.0	c-g
AU23-02	36.2	a	AU23-36	72.0	b-g
AU23-37	41.1	a	AU23-31	75.1	c-g
AU23-27	42.9	a	AU23-43	75.1	c-g
AU23-45	42.9	a	AU23-22	75.1	c-g
AU23-17	43.0	a	AU23-21	76.3	defg
AU23-48	43.3	a	AU23-35	78.3	defg
AU23-47	44.0	bcde	AU23-26	79.5	defg
AU23-11	44.0	bcde	AU23-07	79.5	defg
AU23-10	44.0	ab	AU23-38	80.3	defg
AU23-33	55.5	bcde	AU23-34	82.6	defg
AU23-15	57.5	bcde	AU23-07	82.6	defg
AU23-40	57.5	bcde	AU23-32	82.6	defg
AU23-13	57.5	bcde	AU23-09	84.6	defg
AU23-12	58.1	bcde	AU23-14	84.6	defg
G06G	61.0	b-f	AU23-06	87.8	efg
AU23-04	62.5	b-f	AU22-37	87.8	efg
AU-17	63.2	b-f	AU23-30	87.8	efg
AU23-44	65.0	b-f	AU23-23	87.9	fg
AU23-25	65.0	b-f	AU23-20	92.2	g

Multiple comparisons LS disease ratings for 50 advanced breeding lines in 2023

23ID	WM		23ID	WM	
AU23-10	3.7	a	AU23-27	7.7	a-i
AU23-41	3.7	a	AU23-15	8.0	a-i
AU23-40	4.0	abc	AU23-26	8.0	a-i
AU23-33	4.7	abc	AU23-09	8.0	a-i
AU23-25	5.0	abc	AU23-38	8.3	a-i
AU23-35	5.0	abc	AU23-18	8.7	a-i
AU23-34	5.0	abc	AU23-30	8.7	a-j
AU-17	5.3	a-e	AU23-23	8.7	a-j
AU23-05	5.3	a-e	AU23-47	9.0	a-j
AU23-17	5.3	a-e	AU23-12	9.3	b-j
AU23-21	5.3	a-e	AU23-11	10.0	c-j
AU23-01	5.7	a-f	AU23-22	10.0	c-j
AU23-02	5.7	a-f	AU23-29	10.3	c-j
AU23-03	6.0	a-g	AU23-36	10.3	c-j
AU23-46	6.3	a-g	G06G	10.7	c-k
AU23-45	6.3	a-g	AU23-06	10.7	c-k
AU23-39	6.3	a-g	AU23-04	11.0	d-k
AU23-42	6.7	a-g	AU22-37	11.0	d-k
AU23-07	7.0	a-g	AU23-19	11.3	f-k
AU23-28	7.3	a-g	AU23-20	11.7	g-k
AU23-37	7.3	a-g	AU23-44	12.3	g-k
AU23-48	7.3	a-h	AU23-43	12.3	g-k
AU23-31	7.3	a-h	AU23-14	13.3	ijk
AU23-07	7.3	a-i	AU23-13	14.3	jk
AU23-32	7.3	a-i	AU23-24	16.0	k

Multiple comparisons WM disease ratings for 50 advanced breeding lines in 2023

Alabama
Peanut Producers Association



Acknowledgments



National Peanut BoardSM

www.nationalpeanutboard.org

 **AMERICAN** PEANUT SHELLERS ASSOCIATION



United States Department of Agriculture
National Institute of Food and Agriculture

