

Southwest Uniform Peanut Performance Test

2024 Plot Results



Contributing Authors

Dr. John Cason, Peanut Breeder, AgriLife Research, Stephenville, TX
Dr. Kelly Chamberlin, Peanut Breeder, USDA-ARS, Stillwater, OK
Dr. Naveen Puppala, Peanut Breeder, New Mexico State University, Clovis, NM
Dr. Waltram Ravelombola, Organic Breeder AgriLife Research, Vernon, TX
Dr. Mark Burow, Peanut Breeder AgriLife Research and Texas Tech University, Lubbock, TX
Brian Bennett, Research Associate, AgriLife Research, Stephenville, TX
Jaime Shumaker, Greenhouse Manager, Stephenville, TX
Emily Green, Program Coordinator, AgriLife Research, Stephenville, TX
Alex Faith, Technician, AgriLife Research, Stephenville, TX
Kelli Ressiman, Technician, AgriLife Research, Stephenville, TX

<http://varietytesting.tamu.edu/peanuts/>



OKLAHOMA PEANUT
COMMISSION

Table of Contents

Table of Contents.....	i
Introduction.....	1
Cooperators.....	2
Entries.....	3
Location Information.....	4
Definition of Terms.....	6
Stephenville, TX (Loc 63).....	7
Fort Cobb, OK (Loc70).....	10
Vernon, TX (Loc 75).....	13
Lingo, NM (Loc 76).....	15

Beginning in 2024, the Southwest Uniform Peanut Performance Test (SWUPPT) was established to provide a regional evaluation of advanced peanut breeding lines specifically suited for production in the Southwest. This initiative shifts the focus from a broad national testing program to a regionally tailored model that prioritizes cultivars best adapted to the environmental and production challenges of the Southwest. The SWUPPT is designed to facilitate a more targeted approach to peanut breeding by ensuring that selections are tested under conditions representative of key production areas in this region.

The SWUPPT is conducted across five locations in three states and involves participation from 2 university systems as well as the United States Department of Agriculture-Agricultural Research Service. This structure enables comprehensive, multi-environment testing while maintaining efficiency in regional adaptability assessments. The primary objective of the SWUPPT is to evaluate new breeding lines for their yield potential, disease resistance, and overall agronomic performance under the specific climatic and soil conditions of the Southwest.

While the focus has shifted to regional adaptability, the SWUPPT remains connected to the broader national peanut research network. The program continues to collaborate with other regions by participating in cooperative shelling data analysis, ensuring that promising lines from the Southwest can still be benchmarked against those tested elsewhere in the U.S. This cooperative data sharing enhances the broader peanut breeding efforts and provides valuable insights into the performance of breeding lines beyond the Southwest.

Each year, a carefully curated selection of advanced breeding lines is evaluated in the SWUPPT alongside appropriate check cultivars representative of the region's market needs. New entries are accepted for a designated period, with preliminary selection based on multi-year yield and agronomic performance. This ensures that only the most promising cultivars advance in the breeding pipeline, ultimately benefiting Southwest peanut growers with varieties tailored to their specific production environments.

By focusing on regionally adapted peanut cultivars while maintaining a national connection through shared data and cooperative research, the SWUPPT aims to enhance peanut breeding efficiency and support sustainable peanut production across the Southwest.

2024 SWUPPT Cooperators

- Location 62 Mark Burow
Professor, Peanut Breeding and Genetics
Texas A&M AgriLife Research and Texas Tech University
Department of Plant and Soil Science
Texas A&M AgriLife Research and Extension Center
1102 East FM 1294
Lubbock, TX 79403
Phone: (806)-746-6101
email: mburow@tamu.edu
- Location 63 John Cason
Associate Professor of Peanut Breeding and Genetics
Texas A&M AgriLife Research
1229 N. Hwy 281
Stephenville, TX 76401
Office: 254-974-9419
Cell: 254-396-0653
- Location 70 Kelly D. Chamberlin
Research Leader/Supervisory Research Biologist
Plains Area | USDA ARS Oklahoma and Central Plains Research Center (OKPARC) (PSGRU)
Agricultural Research Service
1301 N. Western Rd., Stillwater, Oklahoma 74075
w: (405) 714-5535 | c: (405) 762-1244
- Location 75 Waltram Ravelombola, Ph.D.
Assistant Prof. Organic & Specialty Crop Breeding
Institute for Advancing Health Through Agriculture-Affiliate Member
Texas A&M AgriLife Research - Vernon Center
11708 Hwy 70 S, Vernon, TX 76364
Phone: (940) 647-3911
- Location 76 Naveen Puppala, Ph. D
Peanut Breeder
New Mexico State University
2346 SR 288
Clovis - New Mexico; USA 88101
Tel: 575-693-9094 (WhatsApp)

2024 Entries

- 1 . ARSOK R106-9L
- 2 . ARSOK R109-1L
- 3 . ARSOK S104-2E
- 4 . ARSOK S58-B[R]
- 5 . ARSOK V99
- 6 . Comrade (ck)
- 7 . Georgia-09B (ck)
- 8 . Lariat (ck)
- 9 . NM MO-1
- 10 . NM MO-2
- 11 . NM MO-3
- 12 . NM MO-4
- 13 . Schubert (ck)
- 14 . Span17 (ck)
- 15 . TP200625-3-2
- 16 . TP210656-2-1
- 17 . TP220694-5-1
- 18 . Tx144370
- 19 . TXL 100212-03-03
- 20 . Valencia C (ck)

Local Options

- 21 . TP220688-6-1

Location Information

Location:	Loc 62	Loc 63	Loc 70	Loc 75	Loc 76
Contributing Author:	Mark Burow Texas A&M AgriLife Research , Stephenville, TX	John Cason Texas A&M AgriLife Research , Stephenville, TX	Kelly Chamberlin Oklahoma Ag. Exp. Stn. , Ft. Cobb, OK	Waltram Ravelombola Texas A&M AgriLife Research , Vernon, TX	Naveen Puppala Lingo, NM
Location:	Spanish, Runner, Valencia, Virginia	Spanish, Runner, Valencia, Virginia	Spanish, Runner, Valencia, Virginia	Spanish, Runner, Valencia, Virginia	Spanish, Runner, Valencia, Virginia
Type:					
Year:	-	2024	2024	2024	2024
Planted:	-	6/20/2024	5/7/2024	5/28/2024 11/22/2024	5/14/2024
Dug:	-	11/4/2024, 11/13/2024 11/12/2024, 11/20/2024	10/04/2024 (Spanish, Val); 10/18/2024 (Runner, Virginia) 10/07/2024; 10/21/2024	(* rain delayed digging)	9/25/2024, 10/16/2024 9/30/2024, 11/22/2024
Picked:	-				
Design:	RCB	RCB	RCB	RCB	RCB
# Reps:	4	4	4	4	4
Plot Dimensions:	20	20	15 ft rows	20	12 ft
Row Pattern:	twin	twin	twin	twin	twin
Seeding Rate:	5 sd/ft	5 sd/ft	5 sd/ft	5 sd/ft	5 sd/ft
Yield/Acre Conversion (Plot):	-	-	484	-	-
Digging Method:	twin row digger	twin row digger	twin row digger	twin row digger	twin row digger
Windrow Type:	twin	twin	twin	twin	twin
Field Drying Time:	-	8 days, 7 days	3 days	-	5 days
Curing Method:	-	forced air dryer	forced air dryer	forced air dryer	forced air dryer

	Loc 62	Loc 63	Loc 70	Loc 75	Loc 76
Curing Time:	-	3 days	3 days	-	-
Rainfall (inches):	-	5.4	9.29	-	-
Irrigation (inches):	-	13.5	14.65	-	-
Irrigation Dates:	-	-	see attached	-	-
Soil Series:	-	-		-	-
		Windthorst			
		Fine Sany			
Soil Type:	-	Loam	sandy clay loam	-	-
pH Level:	-	7.8	7.3	-	-
Phosphorus (lb/acre):	-	25lbs	36 (18 ppm)	-	-
Potassium (lb/acre):	-	30lbs	170 (85 ppm)	-	-
Calcium (lb/acre):	-	-	1818	-	-
Magnesium (lb/acre):	-	-	179	-	-
Gypsum:	-	-	-	-	-
Boron:	-	-	-	-	-
Lime:	-	-	-	-	-
Plant Growth Regulators:	-	-	-	-	-
		Prowl, Cadre,			
Herbicides:	-	Select	-	-	-
Fungicides:	-	Bravo	-	-	-
Insecticides:	-	-	-	-	-
Nematicides:	-	-	-	-	-
:	-	-	-	-	-
Miticides:	-	-	-	-	-
Other:	-	-	-	-	-

SWUPPT Grading Information - Definition of Terms

Sample weight of grading samples (g):

Grade sample reps (#):

% Fancy Pods = % wt. of pods riding rollers spaced 34/64" apart.

% TSMK (SMK + SS)= Total % Sound Mature Kernels, including sound splits, that ride appropriate minimum grade screen.

% OK = % Other Kernels passing 15/64" X 1" slotted screen for Virginias, 15/64" X 3/4" for Spanish, or 16/64" X 3/4" for Runner. (Sound splits and damaged splits have been removed from the "pass thru").

% DK = % Visually damaged (VD), % Concealed damage (CD), and their sum = % Total Damage (TD), including damaged splits.

% Meats = Everything but the shells. (Including OK + SS + TD + SMK). Sometimes called "Shelling %".

% ELK = % Kernels riding a 21.5/64" X 1" slotted screen for virginia and 21/64" X 3/4" screen for runner.

% Medium = % Kernels riding a 18/64" but falling through a 21.5/64" or 21/64" screen.

% No. 1 = % Kernels riding a minimum grade screen (16/64" for runner and 15/64 for virginia) but falling through a 18/64".

g/100 SMK = Gram-weight per 100 sound and mature kernels riding appropriate screen.

Table 1. Southwest Uniform Peanut Performance Test Stephenville, TX (Loc 63) analysis for all lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med%		No.1%		DK%		OK%		100 sd wt.	
Cultivar																		
ARSOK R109-1L	4706	A	66.7	BCDE F	72.1	ABC DE	15.1	DEF	38.7	CD	7.0	FGH	0.7	CDE	4.7	ABC	62.6	CD
Tx144370	4106	AB	65.6	CDEF	72.1	ABC DE	11.0	F	39.2	C	10.4	EF	0.5	CDE	5.9	A	55.8	DEF
Georgia-09B (ck)	4005	AB	66.2	BCDE F	71.1	CDE	18.3	CDE	33.2	DE	7.7	FGH	0.8	CD	4.1	BCDE	57.2	DE
TP220694-5-1	3626	BC	64.2	EF	67.4	GH	28.4	B	24.9	F	6.4	FGH	0.7	CDE	2.6	EFG	68.8	BC
TP200625-3-2	3534	BC	64.4	EF	70.7	CDEF G	13.8	EF	36.6	CDE	7.3	FGH	1.0	BC	5.3	AB	58.1	DE
ARSOK S58-B[R]	3527	BC	72.8	A	74.6	AB	20.8	C	40.8	ABC	5.2	GH	0.0	E	1.7	G	54.1	EFG
TP210656-2-1	3368	BC	70.4	AB	74.5	AB	18.8	CD	36.5	CDE	9.3	EFG	0.2	DE	3.9	BCDE	54.3	EFG
TP220688-6-1	3319	BC	65.3	CDEF	69.5	DEFG H	11.1	F	40.5	ABC	8.8	EFGH	0.4	CDE	3.9	BCDE	63.0	CD
ARSOK V99	3132	C	63.3	F	67.2	H	26.5	B	22.6	F	9.3	EFG	0.7	CDE	3.1	DEFG	71.1	B
Comrade (ck)	3073	C	65.3	CDEF	67.7	FGH	34.8	A	21.1	F	4.8	H	0.6	CDE	1.9	FG	87.4	A
Span17 (ck)	2929	CD	69.3	ABC	73.8	ABC	3.1	GH	46.5	A	13.0	DE	0.2	DE	4.2	BCD	49.2	FGH
Schubert (ck)	2194	DE	67.6	BCDE	70.7	CDEF G	3.3	GH	39.3	C	21.0	B	0.3	CDE	2.8	DEFG	43.6	H
Valencia C (ck)	2188	DE	63.3	F	69.8	DEFG H	2.3	GH	40.2	BC	18.9	BC	2.3	A	4.2	BCD	42.0	H
NM MO-2	2039	E	66.9	BCDE F	71.0	BCD EF	5.8	G	35.6	CDE	22.4	B	0.9	BCD	3.2	CDEFG	43.8	H
NM MO-3	1795	E	70.0	AB	74.7	A	0.6	H	34.9	CDE	28.7	A	1.6	AB	3.1	DEFG	32.7	I
ARSOK S104-2E	1711	E	69.2	ABCD	72.7	ABC D	2.7	GH	45.6	AB	15.6	CD	0.5	CDE	3.1	DEFG	47.8	GH
NM MO-1	1619	E	65.4	CDEF	69.3	EFGH	2.9	GH	39.0	CD	20.7	B	0.7	CDE	3.2	CDEF	43.4	H
NM MO-4	1433	E	65.1	DEF	70.1	DEFG H	2.7	GH	32.5	E	27.5	A	1.0	BC	4.0	BCDE	41.9	H
Mean	2918		66.7		71.1		12.4		36.0		13.4		0.7		3.6		54.4	
CV	35.5		5.9		4.4		85.7		21.9		61.0		96.8		39.0		25.2	
Entry F	<.0001		0.0005		<.0001		<.0001		<.0001		<.0001		<.0001		<.0001		<.0001	

*Values with the same letter are statistically equal.

Table 2. Southwest Uniform Peanut Performance Test Stephenville, TX (Loc 63) analysis for runner lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med %		No.1%		DK%		OK%		100 sd wt.	
Cultivar																		
ARSOK R109-1L	4706	A	66.7	A	72.1	A	15.1	AB	38.7	A	7.0	B	0.7	A	4.7	A	62.6	A
Tx144370	4106	B	65.6	A	72.1	A	11.0	B	39.2	A	10.4	A	0.5	A	5.9	A	55.8	B
Georgia-09B (ck)	4006	BC	66.2	A	71.1	A	18.3	A	33.2	B	7.7	B	0.8	A	4.1	A	57.2	B
TP200625-3-2	3534	C	64.4	A	70.7	A	13.9	AB	36.6	AB	7.3	B	1.0	A	5.3	A	58.1	AB
Mean	4088		65.7		71.5		14.5		36.9		8.1		0.8		5.0		58.4	
CV	12.8		3.0		2.0		28.1		8.9		22.6		64.9		25.8		6.6	
Entry F	0.0041		ns		ns		ns		0.02		0.01		ns		ns		ns	

*Values with the same letter are statistically equal.

Table 3. Southwest Uniform Peanut Performance Test Stephenville, TX (Loc 63) analysis for Virginia lines in 2024.

	Pods/Ac. Lbs.		FP		TSMK%		TK%		ELK%		Med%		No.1%		DK%		OK%		100 sd wt.	
Cultivar																				
TP220694-5-1	3626	A	67.2	A	64.2	A	67.4	A	28.4	AB	24.9	B	6.4	AB	0.7	A	2.6	AB	68.8	B
TP220688-6-1	3319	A	16.9	B	65.3	A	69.5	A	11.1	C	40.5	A	8.8	A	0.4	A	3.9	A	63.0	B
ARSOK V99	3132	A	59.0	A	63.3	A	67.2	A	26.5	B	22.6	B	9.3	A	0.7	A	3.1	AB	71.1	B
Comrade (ck)	3074	A	88.6	A	65.3	A	67.7	A	34.8	A	21.1	B	4.8	B	0.6	A	1.9	B	87.4	A
Mean	4088		65.7		71.5		14.5		36.9		8.1		0.8		5.0		58.4		72.6	
CV	12.8		3.0		2.0		28.1		8.9		22.6		64.9		25.8		6.6		14.6	
Entry F	0.0041		ns		ns		ns		0.0238		0.0125		ns		ns		ns		0.0003	

*Values with the same letter are statistically equal.

Table 4. Southwest Uniform Peanut Performance Test Stephenville, TX (Loc 63) analysis for Spanish and Valencia lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med %		No.1%		DK%		OK%		100 sd wt.	
Cultivar																		
ARSOK S58-B[R]	3526	A	72.8	A	74.6	A	20.8	A	40.8	ABC	5.2	G	0.0	D	1.7	B	54.1	A
TP210656-2-1	3367	A	70.4	AB	74.5	A	18.8	A	36.5	CD	9.3	FG	0.2	D	3.9	A	54.3	A
Span17 (ck)	2927	AB	69.3	ABC D	73.8	AB	3.1	BC	46.5	A	13.0	EF	0.2	D	4.2	A	49.2	B
Schubert (ck)	2192	BC	67.6	BCD E	70.7	BCD	3.3	BC	39.3	BCD	21.0	C	0.3	CD	2.8	AB	43.6	D
Valencia C (ck)	2186	BC	63.3	E	69.8	CD	2.3	BC	40.2	ABC	18.9	CD	2.3	A	4.2	A	42.0	D
NM MO-2	2054	BC	66.9	BCD E	71.1	BCD	5.8	B	35.6	CD	22.4	BC	0.9	BCD	3.2	AB	44.0	CD
NM MO-3	1794	C	70.0	ABC	74.7	A	0.6	C	34.9	CD	28.7	A	1.6	AB	3.1	AB	42.7	D
ARSOK S104-2E	1709	C	69.2	ABC D	72.7	ABC	2.7	BC	45.6	AB	15.5	DE	0.5	CD	3.1	AB	47.8	BC
NM MO-1	1617	C	65.4	CDE	69.3	D	2.9	BC	39.0	BCD	20.6	CD	0.7	CD	3.2	AB	43.4	D
NM MO-4	1431	C	65.1	DE	70.2	CD	2.7	BC	32.5	D	27.5	AB	1.0	BC	4.0	A	41.9	D
Mean	2286		68.0		72.2		6.3		39.2		18.1		0.8		3.4		46.3	
CV	39.9		5.9		4.2		117.0		15.5		45.8		110.5		35.3		11.2	
Entry F	0.0002		0.0121		0.0038		<.0001		0.0083		<.0001		<.0001		ns		<.0001	

*Values with the same letter are statistically equal.

Table 5. Southwest Uniform Peanut Performance Test Fort Cobb, OK (Loc 70) analysis for all lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK%		OK%		100 sd wt.	
Cultivar																		
TP200625-3-2	6187	A	69.8	GHIJ	73.8	FGH	61.5	FG	39.0	BCDE	3.3	EFG	2.0	AB	3.5	AB	67.8	GH
Lariat (ck)	6168	AB	76.3	A	79.3	A	63.8	DEF	33.8	EF	2.5	EFGH	1.0	CDE	3.5	AB	76.0	AB
Comrade (ck)	6037	ABC	72.8	CDE	74.3	EFG	83.8	B	13.8	H	2.0	GH	1.0	CDE	1.5	EF	74.3	ABCD
TP210656-2-1	5882	ABC	75.3	AB	77.5	ABC	90.8	A	7.8	I	2.0	GH	1.0	CDE	1.8	DEF	77.0	AB
Tx144370	5811	ABCD	72.3	DEF	75.5	DEF	56.5	GHI	41.0	BCD	2.3	FGH	2.0	AB	3.3	ABC	69.0	FGH
Span17 (ck)	5757	ABCD	75.8	A	77.8	AB	73.8	C	24.0	G	2.0	GH	0.5	E	1.5	EF	77.3	A
TP220694-5-1	5735	ABCD	71.3	EFGH	73.5	GHI	83.3	B	13.3	H	3.5	EFG	1.8	ABC	2.0	CDEF	73.5	BCDE
TXL 100212-03-03	5649	ABCD	71.5	EFGH	75.5	DEF	63.0	EFG	33.3	F	3.3	EFG	2.0	AB	4.0	A	70.5	EFG
ARSOK V99	5554	BCD	74.8	ABC	75.8	CDE	88.3	AB	10.5	HI	1.3	H	0.8	DE	0.8	F	75.8	AB
Georgia-09B (ck)	5515	CDE	73.0	BCDE	76.3	BCD	70.0	CD	27.0	G	3.0	EFGH	1.8	ABC	3.3	ABC	70.0	EFGH
ARSOK R109-1L	5437	CDE	74.5	ABCD	77.3	BCD	60.3	FGH	36.0	DEF	4.0	DEF	1.0	CDE	2.8	ABCDE	76.3	AB
ARSOK R106-9L	5194	DEF	71.8	EFG	75.8	CDE	50.3	IJ	44.0	AB	5.8	CD	2.0	AB	3.5	AB	66.8	H
ARSOK S58-B[R]	4909	EF	73.3	BCDE	75.8	CDE	82.8	B	10.0	HI	2.3	FGH	1.3	BCDE	2.8	ABCDE	75.3	ABC
ARSOK S104-2E	4633	FG	70.0	FGHI	72.5	GHIJ	68.8	CDE	27.3	G	4.3	DE	0.8	DE	2.8	ABCDE	71.8	CDEF
Schubert (ck)	4083	GH	67.5	J	70.3	K	40.8	K	48.3	A	11.0	A	1.5	ABCD	2.5	BCDE	69.5	FGH
NM MO-2	3976	HI	68.5	IJ	72.0	HIJK	50.3	IJ	42.3	BC	7.5	BC	2.3	A	2.3	BCDE	70.3	EFGH
NM MO-3	3911	HI	68.8	IJ	71.8	IJK	44.0	JK	48.5	A	7.8	B	1.8	ABC	3.0	ABCD	70.5	EFG
NM MO-1	3766	HI	68.5	IJ	71.5	JK	57.8	FGH	33.3	F	9.0	B	1.8	ABC	2.8	ABCDE	70.5	EFG
NM MO-4	3427	IJ	69.3	HIJ	72.5	GHIJ	57.5	FGH	36.8	DEF	5.8	CD	2.3	A	3.3	ABC	70.8	DEFG
Valencia C (ck)	3121	J	68.3	IJ	71.5	JK	54.3	HI	38.3	CDEF	7.5	BC	1.5	ABCD	3.3	ABC	70.5	EFG
Mean	5037		71.60		74.50		65.10		444.00		4.50		1.50		2.70		72.2	
CV	20.9		4.3		3.6		23.5		44.0		66.1		53.5		44.1		5.3	
Entry F	<.0001		<.0001		<.0001		<.0001		<.0001		<.0001		0.0037		0.0011		<.0001	

*Values with the same letter are statistically equal.

Table 6. Southwest Uniform Peanut Performance Test Fort Cobb, OK (Loc 70) analysis for runner lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK%		OK%		100 sd wt.	
Cultivar																		
TP200625-3-2	6187	A	69.8	B	73.8	B	61.5	A	39.0	ABC	3.3	B	2.0	A	3.5	A	67.8	B
Tx144370	5811	AB	72.3	AB	75.5	AB	56.5	AB	41.0	AB	2.3	B	2.0	A	3.3	A	69.0	B
TXL 100212-03-03	5649	AB	71.5	AB	75.5	AB	63.0	A	33.3	C	3.3	B	2.0	A	4.0	A	70.5	AB
ARSOK R109-1L	5437	AB	71.8	AB	77.3	A	60.3	A	36.0	BC	4.0	AB	1.0	A	2.8	A	76.3	A
ARSOK R106-9L	5194	B	74.5	A	75.8	AB	50.3	B	44.0	A	5.8	A	2.0	A	3.5	A	66.8	B
Mean	5655		72.0		75.6		58.3		38.7		3.7		1.8		3.4		70.1	
CV	11.0		3.6		2.8		13.1		14.5		48.1		42.7		32.2		7.2	
Entry F	0		0.09		0.24		0.06		0.02		0.10		0.36		0.61		0.0	

*Values with the same letter are statistically equal.

Table 7. Southwest Uniform Peanut Performance Test Fort Cobb, OK (Loc 70) analysis for Virginia Lines in 2024.

	Pods/Ac. Lbs.		FP%		TSMK%		TK %		ELK%		Med.%		No.1%		DK%		OK%		100 sd wt.	
Cultivar																				
Comrade (ck)	6037	A	94.8	A	72.8	B	74.3	B	83.8	B	13.8	A	2.0	B	1.0	A	1.5	AB	74.3	B
TP220694-5-1	5735	AB	90.3	B	71.3	B	73.5	B	83.3	B	13.3	A	3.5	A	1.8	A	2.0	A	73.5	B
ARSOK V99	5554	B	95.3	A	74.8	A	75.8	A	88.3	A	10.5	B	1.3	B	0.8	A	0.8	B	75.8	A
Mean	5775		93.4		72.9		74.5		85.1		12.5		2.3		1.2		1.4		74.5	
CV	8.4		3.4		2.4		1.7		3.9		19.7		50.6		71.6		56.0		1.7	
Entry F	ns		ns		0.0039		0.02		0.01		0.02		0.00		ns		ns		0.0	

*Values with the same letter are statistically equal.

Table 8. Southwest Uniform Peanut Performance Test Fort Cobb, OK (Loc 70) analysis for Spanish and Valencia lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK%		OK%		100 sd wt.		
Cultivar																			
TP210656-2-1	5882	A	75.3	AB	77.5	A	90.8	A	7.8	F	2.0	E	1.0	BCD	1.8	BC	77.0	A	
Span17 (ck)	5757	A	75.8	A	77.8	A	73.8	C	24.0	E	2.0	E	0.5	D	1.5	C	77.3	A	
ARSOK S58-B[R]	4909	B	73.3	B	75.8	B	82.8	B	10.0	F	2.3	E	1.3	BCD	2.8	AB	75.3	B	
ARSOK S104-2E	4633	B	70.0	C	72.5	C	68.8	C	27.3	E	4.3	D	0.8	CD	2.8	AB	71.8	C	
Schubert (ck)	4083	C	67.5	D	70.3	D	40.8	G	48.3	A	11.0	A	1.5	ABC	2.5	AB	69.5	D	
NM MO-2	3976	C	68.5	CD	72.0	C	50.3	EF	42.3	B	7.5	BC	2.3	A	2.3	AB	70.3	CD	
NM MO-3	3911	C	68.8	CD	71.8	C	44.0	FG	48.5	A	7.8	B	1.8	AB	3.0	AB	70.5	CD	
NM MO-1	3766	CD	68.5	CD	71.5	CD	57.8	D	33.3	D	9.0	B	1.8	AB	2.8	AB	70.5	CD	
NM MO-4	3427	DE	69.3	CD	72.5	C	57.5	D	36.8	CD	5.8	CD	2.3	A	3.3	A	70.8	CD	
Valencia C (ck)	3121	E	68.3	CD	71.5	CD	54.3	DE	38.3	BC	7.5	BC	1.5	ABC	3.3	A	70.5	CD	
Mean	4347		70.5		73.3		62.1		31.6		5.9		1.5		2.6		72.3		
CV	21.3		4.6		3.7		26.6		44.9		55.3		56.2		38.2		4.2		
Entry F	<.0001		<.0001		<.0001		<.0001		<.0001		<.0001		0.01		ns		<.0001		

*Values with the same letter are statistically equal.

Table 9. Southwest Uniform Peanut Performance Test Vernon, TX (Loc 75) analysis for all lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK%		OK%		
Cultivar																	
ARSOK R109-1L	5842	A	70.2	A	70.9	A	30.5	ABC	36.3	A	1.4	AB	1.1	ABC	1.6	AB	
ARSOK V99	4553	AB	65.6	A	62.2	ABC	33.6	A	23.7	BC	1.5	AB	1.5	ABC	1.9	AB	
NM MO-2	4499	AB	61.2	AB	65.5	AB	13.9	E	44.1	A	2.1	AB	1.2	ABC	4.3	A	
TP210656-2-1	4462	AB	66.3	A	66.0	AB	26.9	ABCD	34.1	AB	2.4	AB	0.9	ABC	1.7	AB	
TP220694-5-1	4390	ABC	63.4	AB	61.0	ABC	32.4	AB	21.7	C	2.7	A	1.0	ABC	3.2	AB	
TXL 100212-03-03	4334	ABC	50.5	B	50.5	C	25.0	ABCD	22.8	BC	0.9	B	1.0	ABC	0.9	B	
ARSOK S104-2E	4118	ABC	65.6	A	66.7	AB	20.3	CDE	42.4	A	1.6	AB	0.8	BC	1.7	AB	
Tx144370	3628	ABC	68.9	A	70.0	AB	23.9	ABCDE	41.6	A	1.7	AB	0.5	C	2.3	AB	
NM MO-1	3555	BC	62.4	AB	64.1	ABC	21.9	BCDE	36.9	A	2.0	AB	1.7	ABC	1.6	AB	
NM MO-3	2974	BC	64.0	AB	64.8	AB	22.8	ABCDE	36.9	A	2.2	AB	0.8	BC	2.1	AB	
NM MO-4	2665	BC	63.7	AB	68.6	AB	19.2	DE	41.2	A	2.9	A	3.2	A	2.1	AB	
Comrade (ck)	2629	BC	62.0	AB	56.0	BC	28.8	ABCD	21.2	C	1.4	AB	3.1	AB	1.6	AB	
ARSOK S58-B[R]	2611	BC	66.5	A	67.2	AB	29.4	ABCD	32.8	ABC	1.7	AB	0.7	C	2.6	AB	
Valencia C (ck)	2593	BC	62.9	AB	66.2	AB	22.1	BCDE	37.9	A	2.0	AB	1.8	ABC	2.3	AB	
Mean	3657		64.1		64.7		64.7		34		1.8		1.3		2.1		
CV	46.0		15.3		64.7		34.8		31.9		58.3		127.2		85.9		
Entry F	ns		ns		ns		ns		0.0008		ns		ns		ns		

*Values with the same letter are statistically equal.

Table 10. Southwest Uniform Peanut Performance Test Vernon, TX (Loc 75) analysis for Runner lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK%		OK%	
Cultivar																
ARSOK R109-1L	5824	A	70.1	A	70.8	A	30.6	AB	43.5	A	1.5	A	1.1	A	1.6	A
ARSOK R106-9L	5194	B	74.5	A	75.8	AB	50.3	B	44.0	A	5.8	A	2.0	A	3.5	A
TXL 100212-03-03	4364	AB	67.5	A	67.5	A	33.1	A	30.9	B	1.0	A	1.3	A	1.2	A
Tx144370	3610	B	68.8	A	69.9	A	24.0	B	41.5	A	1.7	A	0.5	A	2.3	A
TP200625-3-2	2158	B	68.7	A	70.1	A	22.7	B	36.1	B	1.1	A	0.6	A	2.3	A
Mean	3964		68.9		69.7		27.2		38.5		1.3		0.8		1.9	
CV	46.1		5.6		5.2		22.9		15.3		62.3		90.2		74.5	
Entry F	0		ns		ns		ns		0.00		ns		ns		ns	

*Values with the same letter are statistically equal.

Table 11. Southwest Uniform Peanut Performance Test Vernon, TX (Loc 75) analysis for Virginia Lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK%		OK%	
Cultivar																
ARSOK V99	4556	A	65.6	A	62.2	A	33.6	A	23.7	A	1.5	B	1.5	A	1.9	A
TP220694-5-1	4392	A	63.4	A	61.0	A	32.4	A	21.7	A	2.7	A	1.0	A	3.2	A
Comrade (ck)	2632	A	62.0	A	56.0	A	28.8	A	21.2	A	1.4	B	3.1	A	1.6	A
Mean	3860		63.6		63.6		31.6		22.2		1.8		1.9		2.2	
CV	49.7		6.0		6.0		14.2		27.0		44.9		105.2		58.5	
Entry F	1		ns		ns		ns		ns		0.07		ns		ns	

*Values with the same letter are statistically equal.

Table 12. Southwest Uniform Peanut Performance Test Vernon, TX (Loc 75) analysis for Spanish and Valencia Lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		DK %		OK%	
Cultivar																
NM MO-2	4501	A	61.2	A	65.5	A	13.9	B	44.1	A	2.1	A	1.2	A	4.3	A
TP210656-2-1	4465	A	66.3	A	66.0	A	26.9	A	34.1	A	2.4	A	0.9	A	1.7	A
ARSOK S104-2E	4120	A	65.6	A	66.7	A	20.3	AB	42.4	A	1.6	A	0.8	A	1.7	A
NM MO-1	3557	A	62.4	A	64.1	A	21.9	AB	36.9	A	2.0	A	1.7	A	1.6	A
NM MO-3	2977	A	64.0	A	64.8	A	22.8	AB	36.9	A	2.2	A	0.8	A	2.1	A
NM MO-4	2668	A	63.7	A	68.6	A	19.2	AB	41.2	A	2.9	A	3.2	A	2.1	A
ARSOK S58-B[R]	2614	A	66.5	A	67.2	A	29.4	A	32.8	A	1.7	A	0.7	A	2.6	A
Valencia C (ck)	2596	A	62.9	A	66.2	A	22.1	AB	37.9	A	2.0	A	1.8	A	2.3	A
Mean	3437		64.1		66.2		22.0		38.3		2.1		1.4		2.3	
CV	44.8		8.2		7.3		37.9		23.7		54.1		133.2		94.9	
Entry F	0		ns		ns		ns		ns		ns		ns		ns	

*Values with the same letter are statistically equal.

Table 13. Southwest Uniform Peanut Performance Test Lingo, NM (Loc 76) analysis for all lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		100 sd wt.	
Cultivar														
TP200625-3-2	5466	A	74.4	EFGH	74.4	EFGH	48.1	BC	39.5	D	6.7	DEFG	68.0	DE
TP220694-5-1	5067	AB	71.7	J	71.7	J	53.2	AB	24.1	G	5.8	EFG	59.1	G
ARSOK R109-1L	5012	ABC	77.5	A	77.5	A	54.4	AB	38.0	DE	3.7	G	73.4	AB
TXL 100212-03-03	4964	ABCD	76.2	ABCD	76.2	ABCD	60.1	A	33.3	DEF	4.7	FG	73.7	A
Comrade (ck)	4476	BCDE	73.7	GHI	73.7	GHI	43.2	C	28.6	FG	11.3	BCD	60.8	FG
Txl44370	4455	BCDE	75.8	BCDE	75.8	BCDE	46.8	BC	36.8	DE	7.1	DEFG	67.3	E
ARSOK V99	4283	BCDEF	73.2	HU	73.2	HU	51.1	BC	28.0	FG	7.5	CDEFG	62.7	F
Span17 (ck)	4132	BCDEFG	75.4	CDEF	75.4	CDEF	21.1	DE	64.1	B	9.9	BCDE	70.4	BCD
TP210656-2-1	4118	BCDEFG	77.4	AB	77.4	AB	28.5	D	51.2	C	9.1	BCDEF	67.7	DE
ARSOK S104-2E	4091	CDEFG	75.0	DEFG	75.0	DEFG	12.7	EF	72.8	A	9.3	BCDEF	69.6	CDE
ARSOK S58-B[R]	4049	DEFG	76.7	ABC	76.7	ABC	53.9	AB	31.2	EFG	6.0	EFG	68.6	CDE
NM MO-2	3864	EFG	75.0	DEFG	75.0	DEFG	7.4	F	74.2	A	13.1	B	69.2	CDE
NM MO-1	3816	EFG	72.7	U	72.7	U	14.5	EF	68.8	AB	13.0	B	68.4	CDE
NM MO-4	3726	EFG	76.0	ABCDE	76.0	ABCDE	12.0	F	69.9	AB	13.1	B	70.1	CDE
Georgia-09B (ck)	3719	EFG	75.3	CDEF	75.3	CDEF	53.5	AB	31.6	DEFG	9.5	BCDEF	69.9	CDE
NM MO-3	3719	EFG	75.0	DEFG	75.0	DEFG	7.4	F	69.4	AB	20.3	A	71.3	ABC
Schubert (ck)	3403	FG	72.9	HU	72.9	HU	16.0	EF	69.2	AB	12.2	BC	69.8	CDE
Valencia C (ck)	3211	G	74.1	FGHI	74.1	FGHI	9.6	F	72.7	A	12.9	B	69.0	CDE
Mean	4198		74.90		74.9		32.9		50		9.8		68.6	
CV	20.1		2.5		2.5		61.6		38.9		50.7		6.2	
Entry F	0.0005		<.0001		<.0001		<.0001		<.0001		<.0001		<.0001	

*Values with the same letter are statistically equal.

Table 14. Southwest Uniform Peanut Performance Test Lingo, NM (Loc 76) analysis for runner lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		100 sd wt	
Cultivar														
TP200625-3-2	5466	A	74.4	B	74.4	B	48.1	B	39.5	A	6.7	AB	68.0	BC
ARSOK R109-1L	5012	AB	77.5	A	77.5	A	54.4	AB	38.0	A	3.7	B	73.4	A
TXL 100212-03-03	4964	AB	76.2	AB	76.2	AB	60.1	A	33.3	A	4.7	AB	73.7	A
Tx144370	4455	AB	75.8	AB	75.8	AB	46.8	B	36.8	A	7.1	AB	67.3	C
Georgia-09B (ck)	3719	B	75.3	B	75.3	B	53.5	AB	31.6	A	9.5	A	69.9	B
Mean	4723		75.8		75.8		52.6		35.8		6.3		70.4	
CV	22.4		1.9		1.9		15.2		18.0		55.5		4.5	
Entry F	0		0.03		0.03		ns		ns		ns		0.00	

*Values with the same letter are statistically equal.

Table 15. Southwest Uniform Peanut Performance Test Lingo, NM (Loc 76) analysis for Virginia lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.%		No.1%		100 sd wt	
Cultivar														
TP220694-5-1	5067	A	71.7	B	71.7	B	53.2	A	24.1	A	5.8	A	59.1	A
Comrade (ck)	4476	A	73.7	A	73.7	A	43.2	A	28.6	A	11.3	A	60.8	A
ARSOK V99	4283	A	73.2	AB	73.2	AB	51.1	A	28.0	A	7.5	A	62.7	A
Mean	4609		72.8		72.8		49.2		26.9		8.2		60.8	
CV	16.2		1.8		1.8		16.7		17.1		52.8		4.9	
Entry F	1		ns		ns		ns		ns		ns		ns	

*Values with the same letter are statistically equal.

Table 16. Southwest Uniform Peanut Performance Test Lingo, NM (Loc 76) analysis for Spanish and Valencia lines in 2024.

	Pods/Ac. Lbs.		TSMK %		TK %		ELK%		Med.		No.1		100 sd wt	
Cultivar														
Span17 (ck)	4132	A	75.4	BC	75.4	BC	21.1	C	64.1	B	9.9	BC	70.4	AB
TP210656-2-1	4118	A	77.4	A	77.4	A	28.5	B	51.2	C	9.1	BC	67.7	B
ARSOK S104-2E	4091	A	75.0	BC	75.0	BC	12.7	DE	72.8	A	9.3	BC	69.6	AB
ARSOK S58-B[R]	4049	AB	76.7	AB	76.7	AB	53.9	A	31.2	D	6.0	C	68.6	AB
NM MO-2	3864	ABC	75.0	BC	75.0	BC	7.4	E	74.2	A	13.1	B	69.2	AB
NM MO-1	3816	ABC	72.7	D	72.7	D	14.5	CDE	68.8	AB	13.0	B	68.4	AB
NM MO-4	3726	ABC	76.0	AB	76.0	AB	12.0	DE	69.9	AB	13.1	B	70.1	AB
NM MO-3	3719	ABC	75.0	BC	75.0	BC	7.4	E	69.4	AB	20.3	A	71.3	A
Schubert (ck)	3403	BC	72.9	D	72.9	D	16.0	CD	69.2	AB	12.2	B	69.8	AB
Valencia C (ck)	3211	C	74.1	CD	74.1	CD	9.6	DE	72.7	A	12.9	B	69.0	AB
Mean	3813		75.0		75.0		18.3		64.3		11.9		69.4	
CV	13.1		2.4		2.4		77.6		21.3		39.1		3.1	
Entry F	ns		<.0001		<.0001		<.0001		<.0001		0.0003		ns	

*Values with the same letter are statistically equal.