



2011 Blaine County Peanut Variety Trial Summary



Location: Weatherford, OK

Date Planted: 5/12/2011

Date Dug and Harvested: 10/24/2011 and 10/26/2011

All variety tests were conducted under an extensive pest management program. The objective was to prevent as much outside influence from pest pressures (weed, disease, and insect) on yield and grade as possible. All test plots were planted using two 36-inch rows that were 20 feet long. Plots were seeded at a rate of five seeds per row foot (139,392 seeds/A). At planting, liquid inoculant formulation was applied with the seed. Tests were conducted using randomized, complete block design with five replications. The entire plot was dug and then thrashed three to four days later. Peanuts were placed in a drier until moisture reached 10%. Total sound mature kernels (TSMK) was determined on a 200 g sample from each plot.

Interpreting data

Details of establishment and management of each test are listed in footnotes below the tables. Least significant differences, or LSD, are listed at the bottom of all but the Performance Summary tables. Differences between varieties are significant only if they are equal to or greater than the LSD value. If a given variety out yields another variety by as much or more than the LSD value, then we are 95% sure the yield difference is real, with only a 5% probability the difference is due to chance alone. For example, if variety X is 500 lbs/A higher in yield than variety Y, then this difference is statistically significant if the LSD is 500 or less. If the LSD is 500 or greater, then we are less confident that variety X really is higher yielding than variety Y under the conditions of the test.

The coefficient of variation, or CV value, listed at the bottom of each table is used as a measure of the precision of the experiment. Lower CV values will generally relate to lower experimental error in the trial. Uncontrollable or immeasurable variations in soil fertility, soil drainage, and other environmental factors contribute to greater experimental error and higher CV values.

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The trial was planted on May 12 into a strip-till seedbed. No significant foliar diseases were observed during the growing season.

Average yield for the runner test was 4216 lbs/A with an average grade of 57% (Table 1). Red River Runner, Florida 107, and GA-09B had a higher yield when compared to the other commercially available varieties. Grade of Red River Runner was higher than all other varieties.

In 2011, average yield and grade for the Spanish test were 4297 lbs/A and 62% TSMK, respectively. In the Spanish test, AT98-99-14 was the top yielding variety.

Average yield and grade in the Virginia test was 4502 lbs/A and 59% TSMK, respectively. Very little pod rot was observed. No differences were found between yields in the Virginia varieties.

Table 1. Peanut yields, pod rot observations, and grades from Blaine County variety tests in 2011.

Variety or line	Yield (lb/A)	Percent of Trial Average	Grade (% TSMK) ²	Revenue (\$/A)
Runner¹				
Red River Runner	4784	113%	67	803
Florida 107	4970	118%	61	763
GA-09B	4821	114%	60	724
ARSOK-R36-1	4291	102%	55	608
Tamrun OL 07	4095	97%	55	584
ACI149	4149	98%	54	577
Flavorunner 458	3899	92%	53	548
ARSOK-R29-3	3764	89%	56	535
ARSOK-R34-1	3169	75%	57	458
CV	15		9	
LSD 0.05	823		6	
Spanish¹				
AT 98-99-14	5295	123%	59	787
140-10L	4545	106%	63	712
Tamspan 90	4294	100%	62	678
Olin	3557	83%	66	598
Tamnut 06	3793	88%	60	572
CV	14		4	
LSD 0.05	802		4	
Virginia¹				
Jupiter	5046	112%	61	806
Champs	4842	108%	60	762
N08081	4792	106%	59	747
AT-07V	4454	99%	54	640
N0807	3884	86%	60	614
GA-08V	3993	89%	58	608
CV	18		5	
LSD 0.05	ns		4	

¹ Market type.

² % TSMK = Percent total sound mature kernels.

³ Not significantly different at a probability level of 5%.

Table 2. Peanut yields and grades from Blaine-Custer County variety tests in 2009-2011 and 2-3 year averages.

Variety or line	Yield (lb/A)	Grade (% TSMK)	Yield (lb/A)	Grade (% TSMK)	Yield (lb/A)	Grade (% TSMK)	Yield (lb/A)	Grade (% TSMK)	Yield (lb/A)	Grade (% TSMK)
	----- 2009 -----		----- 2010 -----		----- 2011 -----		----- 2 yr Avg. -----		----- 3 yr Avg. -----	
Runner¹										
Florida 107	-- ³	--	--	--	4970	61	--	--	--	--
GA-09B	--	--	6679	68.5	4821	61	5750	64.8	--	--
Red River Runner	6530	72.4	6552	69.4	4784	67	5668	68.2	5955	70
ARSOK-R36-1	--	--	--	--	4291	55	--	--	--	--
ACI 149	--	--	--	--	4149	54	--	--	--	--
Tamrun OL 07	6716	68.2	7162	68.4	4095	55	5629	61.7	5991	64
Flavorrunner 458	6135	66.0	7184	70.0	3899	53	5541	61.5	5739	63
ARSOK-R29-3	--	--	--	--	3764	56	3764	56.0	--	--
ARSOK-R34-1	--	--	--	--	3169	57	--	--	--	--
LSD 0.05	735	3.8	ns	ns	823	6				
Spanish¹										
AT 98-99-14	7743	70.3	6803	64.9	5295	59	6049	62.0	6614	65
140-10L	--	--	--	--	4545	63	--	--	--	--
Tamspan 90	5550	68.0	6244	64.3	4294	62	5269	63.2	5363	65
Tamnut 06	6312	67.5	5852	65.3	3793	60	4822	62.7	5319	64
OLin	6248	69.9	5427	65.3	3557	66	4492	65.7	5077	67
LSD 0.05	976	ns	598	2.5	802	4	700	3.3	792	
Virginia¹										
Jupiter	6636	65.9	6701	67.3	5046	61	5874	64	6128	65
Champs	--	--	5844	64.7	4842	60	5343	62	5343	62
N08081	--	--	--	--	4792	59	--	--	--	--
AT-07V	--	--	--	--	4454	54	--	--	--	--
GA-08V	--	--	--	--	3993	58	--	--	--	--
LSD 0.05	435	ns	ns	ns	ns	4				

¹Market type.

²% TSMK = Percent total sound mature kernels.

³Data was not available because variety was not included in the trial.