2012 Caddo County Peanut Variety Trial Summary

Location: Fort Cobb, OK
Date Planted: 5/15/2012
Date Dug and Harvested: 10/20/2012 and 11/25/2012

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 15 into a strip-till seedbed. No significant foliar diseases were observed during the growing season.

Average yield for the runner test was 4357 lbs/A with an average grade of 69% (Table 1). McCloud, Red River Runner and Florida 107 had a higher yield when compared to the other varieties.

In 2012, average yield and grade for the Spanish test were 3630 lbs/A and 66% TSMK, respectively. No significant differences were detected between varieties.

Average yield and grade in the Virginia test was 4469 lbs/A and 68% TSMK, respectively. Very little pod rot was observed. AT-07V had the highest yields at Fort Cobb.

Table 1. Peanut yields and grades from Caddo County variety tests in 2012.

Variety or line	Yield (lb/A)	Percent of Trial Average	Grade (% TSMK)[2]	Revenue ($/A)
Runner[1]				
McCloud	5264	121%	68	903
Red River Runner	4828	111%	71	861
Florida-07	5009	115%	68	849
FlavorRunner 458	4601	106%	71	820
ARSOK-R35	4501	103%	71	800
GA-09B	4287	98%	72	770
Flo-Run '107'	4534	104%	64	727
Tamrun OL07	4116	94%	69	710
ACI 149	4211	97%	66	694
Mean	4357		69	
CV	14		5	
LSD 0.05	781		4	
Spanish[1]				
AT 98-99-14	3924	103%	67	655
ARSOK-S140-1OL	3917	103%	64	626
Tamnut 06	3743	98%	66	618
Olin	3621	95%	66	590
ACI-WT09-243	3318	76%	71	592
ACI-WT09-240	3256	75%	71	577
Mean	3630		66	
CV	13		2	
LSD 0.05	ns[3]		2	
Virginia[1]				
AT-07V	5598	125%	65	951
ARSOK-V30B[4]	*4792*	*107%*	*70*	*867*
Gregory	4668	104%	67	812
GA-11J	4646	104%	65	794
Jupiter	4342	97%	68	765
N08070ol JC	4077	91%	70	745
ARSOK-V30A[4]	*4029*	*90%*	*69*	*722*
N08081ol JC	3597	81%	69	649
Mean	4469		68	
CV	9		2	
LSD 0.05	533		2	

[1] Market type.

[2] % TSMK = Percent total sound mature kernels.

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

[4]Seed limited to only one rep so varieties were excluded from statistical analysis.

Table 2. Peanut yields and grades from Caddo County variety tests in 2010-2012 and 3 year average.

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)
	- - - - 2010 - - - -		- - - - 2011 - - - -		- - - - 2012 - - - -		- - - - 2 yr Avg. - - - -		- - - - 3 yr Avg. - - - -	
Runner[1]										
Red River Runner	4519	71.7	4497	63.5	4828	71	4662	67	4615	69
GA-09B	4559	69.6	4080	62.8	4287	72	4184	67	4309	68
Flavorunner 458	4116	69.4	3968	57.6	4601	71	4285	64	4228	66
ACI 149	-	-	3993	57.5	4211	66	4102	62	4102	62
Tamrun OL 07	4218	68.9	3884	54.8	4116	69	4000	62	4073	64
ARSOK-R29-3	-	-	3558	56.4	-	-	3558	56	3558	56
ARSOK-R34-1	-	-	3539	57.5	-	-	3539	58	3539	58
Florida-07	-	-	4614	63.1	5009	68	4812	65	-	-
LSD 0.05	452	1.9	496	4.5	781.0	4.0				
Spanish[1]										
AT 98-99-14	3989	65.8	3739	60.6	3924	67	3832	64	3884	65
Tamnut 06	3881	64.2	2973	58.7	3743	66	3358	63	3532	63
OLin	3441	63.4	3002	60.9	3621	66	3312	63	3355	63
WT 09-0240	-	-	4048	63.0	3256	71	3652	67	-	-
WT 09-0243	-	-	4044	64.0	3318	71	3681	68	-	-
ARSOK-S140-1OL	-	-	3238	61.1	3917	64	3578	63	-	-
LSD 0.05	459	1.7	542	2.9	ns	2.0				
Virginia[1]										
Jupiter	3599	62.7	4048	63.2	4342	68	4195	65	3996	65
N08081ol JC	-	-	3492	55.5	3597	69	-	-	3545	62
N08070ol JC	4273	67.8	2454	66.6	4077	70	3265	68	3601	68
AT-07V	-	-	3132	63.4	5598	65	-	-	4365	64
LSD 0.05	706	1.3	758	3.2	533.0	2.0				

[1] Market type.

[2] % TSMK = Percent total sound mature kernels.

[3] Data was not available because variety was not included in given year.