



2011 Love County Peanut Variety Trial Summary



Location: Thackerville, OK

Date Planted: 5/18/2011

Date Dug and Harvested: 10/31/2011 and 11/3/2011

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

Average yield for the runner test was 4847 lbs/A with an average grade of 63% (Table 1). Red River Runner and Florida 107 had a higher yield when compared to the other varieties and also had relatively higher yields than other varieties.

In 2011, average yield and grade for the Spanish test were 4387 lbs/A and 62% TSMK, respectively. In the Spanish test, AT98-99-14 was the top yielding variety along with two breeding lines.

Average yield and grade in the Virginia test was 5571 lbs/A and 63% TSMK, respectively. Very little pod rot was observed. No differences were found between Virginia varieties.

Table 1. Peanut yields and grades from Love County variety tests in 2011.

Variety	Yield (lb/A)	Percent of Trial Average	Grade (% TSMK) ²	Revenue (\$/A)
Runner¹				
Red River Runner	5749	119%	67.8	980
Florida 107	5489	113%	64.9	897
GA-09B	4878	101%	65.4	800
ARSOK-R29-3	5038	104%	59.5	765
ACI149	4671	96%	63.4	750
ARSOK-R36-1	4683	97%	61.3	728
Flavorunner 458	4569	94%	62.5	727
Tamrun OL 07	4486	93%	58.6	677
ARSOK-R34-1	4060	84%	59.8	622
CV	12		3	
LSD 0.05	657		3.2	
Spanish¹				
AT 98-99-14	5390	123%	64.0	862
WT 09-0243	4433	101%	65.7	740
Tamspan 90	4630	106%	61.9	723
WT 09-0240	4322	99%	64.6	709
Tamnut 06	4104	94%	58.6	603
140-1OL	3997	91%	58.7	588
Olin	3834	87%	59.4	575
CV	11		4.0	
LSD 0.05	838		4.2	
Virginia¹				
GA-08V	6036	108%	70.0	1108
N08081	5744	103%	63.0	947
N0807	5881	106%	60.7	933
Champs	5356	96%	62.9	883
AT-07V	5434	98%	60.1	850
Jupiter	4977	89%	62.6	814
CV	10		4.2	
LSD 0.05	ns ³		4.1	

¹ Market type.² % TSMK = Percent total sound mature kernels.³ Not significantly different at a probability level of 5%.