



2011 Caddo County Peanut Variety Trial Summary



Location: Fort Cobb, OK

Date Planted: 5/27/2011

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.

Caddo County

The trial was planted on May 27 into a strip-till seedbed. No significant foliar diseases were observed during the growing season.

Average yield for the runner test was 4057 lbs/A with an average grade of 59% (Table 1). Red River Runner and Florida 107 had a higher yield when compared to the other varieties. Red River Runner, Florida 107, and GA-09B had higher grades when compared to the other varieties.

In 2011, average yield and grade for the Spanish test were 3489 lbs/A and 61% 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 3379 lbs/A and 63% TSMK, respectively. Very little pod rot was observed. Champs and GA-08V had the highest yields at Fort Cobb.

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

Variety	Yield (lb/A)	Percent of Trial Average	Grade (% TSMK) ²	Revenue (\$/A)
Runner¹				
Florida 107	4614	116%	63.1	734
Red River Runner	4497	113%	63.5	720
GA-09B	4080	102%	62.8	638
ARSOK-R36-1	4378	110%	55.0	620
Flavorunner 458	3968	100%	57.6	584
ACI149	3993	100%	57.5	584
Tamrun OL 07	3884	98%	54.8	551
ARSOK-R29-3	3558	89%	56.4	518
ARSOK-R34-1	3539	89%	57.5	517
CV	7		5.9	
LSD 0.05	496		4.5	
Spanish¹				
WT 09-0243	4044	116%	64.0	652
WT 09-0240	4048	116%	63.0	643
AT 98-99-14	3739	107%	60.6	564
Tamspan 90	3380	97%	60.7	516
140-10L	3238	93%	61.1	493
Olin	3002	86%	60.9	457
Tamnut 06	2973	85%	58.7	437
CV	11		3.6	
LSD 0.05	542		2.9	
Virginia¹				
Champs	4048	120%	63.2	674
GA-08V	3717	110%	63.8	625
Jupiter	3430	102%	65.7	592
N0807	3132	93%	63.4	520
AT-07V	3492	103%	55.5	508
N08081	2454	73%	66.6	430
CV	16		3.9	
LSD 0.05	758		3.2	

¹ Market type.

² % TSMK = Percent total sound mature kernels.