

Peanut Variety Trials, 2011

Brad Burgess

INTRODUCTION

Trials were conducted on Mississippi Agricultural and Forestry Experiment Station land in two geographical areas in the hill region of Mississippi. Commercially available peanut varieties were planted at both locations.

Plots consisted of four 36-inch-wide, 52-foot long, twin rows. Weeds were controlled by cultivation and/or herbicides. Only herbicides currently registered for use on peanuts were used in these studies, with strict adherence to all label instructions.

All varieties were treated with a fungicide seed treatment and an in-furrow insecticide. Experimental design was a randomized complete block with three replications at each location.

All varieties were planted at a uniform seeding rate of six seeds per foot and planted with a two-row, twin-drill, Monosem vacuum planter. Fertilizer was applied according to soil test recommendations. All these plots were grown under dryland conditions.

All plots were dug with a two-row peanut digger. After proper drying, the total plot area was harvested with a two-row, pull-type peanut combine. The harvested plots were weighed, moisture was determined, and yields were converted to pounds per acre, following statistical analysis.

Plots were planted at the R.R. Foil Plant Science Research Center (North Farm) at Mississippi State University and at the Brown Loam Branch Experiment Station in Raymond. Results from the MSU site are reported in this information sheet.

The plots planted at the Raymond location had inadequate soil moisture at the time of planting and suffered from severe drought stress in combination with high temperatures for several weeks following planting. Some plots emerged to fair stand while others germinated and then died, due to the lack of soil moisture. This location was abandoned because insufficient stands were achieved to conduct a yield trial.

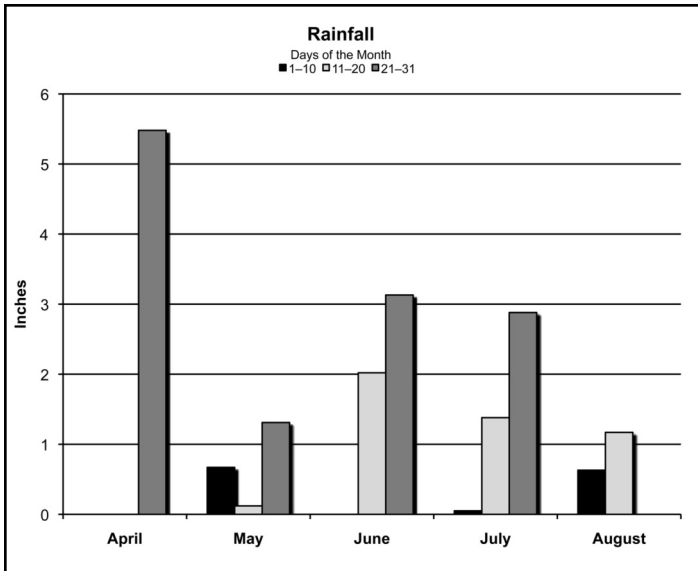
MISSISSIPPI STATE UNIVERSITY CROP SUMMARY

Peanut plots were planted into a well-prepared seedbed with adequate soil moisture for germination. Timely rains after planting resulted in all plots emerging quickly to a uniform stand. The growing season was hot

and dry, resulting in very little disease pressure. However, occasional showers throughout the growing season allowed for decent yields. Harvest was completed with no problems.

Burgess is operations manager of MAFES Variety Evaluations. Recognition is given to Jake Bullard and Jerry W. Nail, Research Technicians for the Variety Testing Program, for their assistance in packaging, planting, harvesting, and recording plot data; and Dennis Rowe for Statistical Analyses. This publication was prepared by Dixie Albright, Office Associate for MAFES Research Support Units. It was published by the Office of Agricultural Communications, a unit of the Division of Agriculture, Forestry, and Veterinary Medicine at Mississippi State University.





Soil type..... Adaton Silt Loam
 Soil pH..... 5.4
 Soil fertility..... P=H, K=H
 Fertilizer added..... Preplant — K₂O @ 100 lb/A and Poultry litter @ 2 T/A
 Postemergence — Borsol @ 12.8 oz/A on July 29 and August 24
 Herbicide application Preemergence — Dual II Magnum @ 24 oz/A on May 24
 Postemergence — Select @ 12 oz/A on July 29 and August 24
 Fungicide application Provost @ 7.2 oz/A on July 29
 Headline @ 20 oz/A on August 24
 Previous crop Corn
 Planting date May 24
 Digging date October 19
 Harvest date October 24

Rainfall Summary

	Inches
April	5.48
May	2.10
June	5.15
July	4.31
August	1.80
Total	18.84

Table 1. Results from six peanut varieties grown without irrigation on an Adaton silt loam soil at the MSU MAFES Headquarters, Starkville, 2011.¹

Brand	Variety	Yield <i>lb/A</i>	Seed <i>no./lb</i>	Moisture <i>%</i>
Georgia	Greener	3,243.3	810	8.3
Florida	07	3,984.7	640	8.0
Georgia	06G	3,845.7	630	8.5
Georgia	09B	2,455.7	760	9.0
TamNut	0L08	2,780.0	910	8.9
Georgia	07W	3,058.0	840	8.5
Mean		3,227		
LSD .1		636		
Error df		10		
CV		25.5		
R square		53.5		

¹Planted May 24; Dug October 19; Harvested October 24



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