

**Irwin County Peanut Variety Replicated Trial – Dryland Single Row Pattern - Floyd and Frank Tucker Farm – Waterloo**

**Principal Investigator and Cooperator**

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**Objective**

Peanut farmers are excited to get a chance to grow the newly released peanut varieties such as Georgia-06G, Florida-07, Georgia-07W, Tifgard and Georgia Greener this year. The larger seed size is a concern for peanut farmers who do not irrigate. The objective is to plan, conduct, complete and share information from an on-farm large plot peanut variety trial. Additionally the objective is to evaluate stand, yield, and grade comparing GA Green and possibly Georgia-02C to these newer varieties in a replicated dryland trial

**Plan of Action**

Use randomized complete block with three to four replications with assistance from farmer cooperators and members of the UGA Extension Peanut Team and Irwin County Extension Office Staff.

**Plans for how funds are to be used**

Funds will be used for purchase of seed (that are not donated) soil testing, pegging zone test, peanut sampling of each plot for grade, field monitoring, newsletters, rainfall recording, and documentation of variety trial (through paper, newsletter, handouts, signs, poster presentation at county and local production meetings, professional meetings and other applicable educational functions).

**Results**

## 2009 Dry Land Evaluation of Seven Peanut Varieties in Irwin County, Georgia

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TRIAL COMBINED RESULTS – TUCKER FARM							
Variety	Stand Count	Leaf Spot	White Mold	TSWV	Grade	Yield	Loan Value Per Acre
GeorgiaO2C	5.44	1	1.5	1.9	75	2407.0	\$417.84
Florida O7	4.22	1	6.2	2.95	73	2993.0	\$531.86
Georgia Greener	3.38	1	2.6	4.3	75	3166.0	\$579.49
Georgia O7W	4.13	1	7.0	2.56	68	2956.4	\$502.20
Tifgard	4.03	1	3.0	3.9	74	2946.6	\$539.30
Georgia O6G	3.64	1	4.4	3.6	74	2833.0	\$520.49
Georgia Green	5.1	1	10	10	70	2407	\$421.85
LSD (P=.05)	-----	-----	5.09	2.887	-----	222.28	

ABSTRACT

Research was conducted to evaluate seven planted peanut varieties. Farmers continue to look for successful peanut varieties comparable to Georgia Green as well as the best value. A large portion of peanut acreage planted is dry land and this test provided valuable information. The field selected for this study was planted using conventional tillage methods and was dry land. Varieties that were assessed included: Georgia Green, Georgia Greener, Georgia O2C, Georgia O6G, Florida O7, Georgia O7W, and Tifgard. The planting date was May 19, 2009, and the digging date was determined based on maturity sampling. The experimental design was a randomized complete block. Each of the five replications contained seven plots. The trial was planted with John Deere air planter. Each of the four single row plots were planted on 36 inch row centers with similar row lengths across the trial. The plot lengths were measured using GPS. Stand counts were taken after emergence. Each plot was rated for leaf spot, white mold, and tomato spotted wilt virus (TSWV). These diseases did not significantly impact yield or grade. Yield was determined on each plot. Each variety was graded.

PRODUCTION INFORMATION

- ▶ Rotation: Peanut, Cotton, Cotton, Peanut
- ▶ Fertilizer applied: 250 lb. 9-18-27, lime and gypsum applied
- ▶ Land Prep: Land turned, bedded, and planted
- ▶ Herbicides: Sonalan -PPI, Valor -Pre, ,Cadre, and 2,4-D,B-Post
- ▶ Insecticides: Temik - in-furrow
- ▶ Fungicide Applications: 4 - Chlorthalonil for leaf spot, 2 Artisan and 1 Folicur for soil borne diseases
- ▶ Rainfall record for trial showed 4.3 inches received during critical pod fill which is 25% of needed rainfall in this critical time period

MATERIALS AND METHODS

- ▶ Planted on May 19/ Harvesting completed on October 26
- ▶ Soil Test and Pegging Zone Samples pulled
- ▶ Plots marked by colored flags, and row length determined by GPS
- ▶ Stand Counts made June 8
- ▶ Rated visually for leaf spot and TSWV on September 15, and white mold immediately after digging
- ▶ Peanuts dug based on maturity
- ▶ Each plot individually weighed and samples pulled on each plot

CONCLUSIONS

- ▶ Variety with lowest stand count had highest yield
- ▶ Newer varieties had less TSWV and white mold than Georgia Green
- ▶ Greatest value resulted from better grades, not maximum yield
- ▶ Cold temperatures could have impacted Georgia O2C maturity, yield and grade
- ▶ Larger seeded peanuts compared favorably with smaller seeded varieties

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