

2023 Berrien County Peanut Research Report

I. Introduction

Berrien County is a large producer of peanuts in south central Georgia. According to the most recent UGA Farm Gate Census data, annual peanut acreage is approximately 22,000 at an economic value of close to \$24 million. There are several different peanut varieties growers can choose from in Berrien County, but predominantly Georgia 06-G is planted. Recent grower concern due to disease incidence and lower yields in this variety have caused increased interest in planting other varieties. Due to this, it is imperative to have local yield, grade, and disease data on these varieties to support farming decisions.

II. Materials & Methods

In 2023 Berrien County Extension collaborated with UGA Peanut Agronomist Dr. Scott Monfort in evaluating 12 runner type peanut varieties in an irrigated on-farm trial in Brookfield, GA. The following varieties were evaluated for yield, total sound mature kernels (TSMK) and spotted wilt incidence: Georgia 06G; Georgia 12Y; Georgia 16HO; Georgia 18RU; Georgia 21GR; Georgia 22MPR; CB1; CB7; FloRun 331; FloRun T61; TifNV HG; AUNPL 17.

III. Results

Yield data from the trial resulted in the following (lb/acre): Georgia 06G (5,142); Georgia 12Y (5,059); Georgia 16HO (4,911); Georgia 18RU (5,141); Georgia 21GR (5,084); Georgia 22MPR (4,878); CB1 (5,428); CB7 (5,239); FloRun 331 (4,971); FloRun T61 (4,997); TifNV HG (5,113); AUNPL 17 (4,513) (Fig. 1). Statistically, CB1 was the highest yielding, but was similar to CB7. In this trial, AUNPL 17 yielded statistically the least (Fig. 1).

TSMK results from the trial resulted in the following: Georgia 06G (70%); Georgia 12Y (67%); Georgia 16HO (71%); Georgia 18RU (74%); Georgia 21GR (73%); Georgia 22MPR (68%); CB1 (71%); CB7 (72%); FloRun 331 (70%); FloRun T61 (69%); TifNV HG (67%); AUNPL 17 (68%) (Fig. 2). Georgia 18RU was found to have statistically the highest percentage of TSMK in this trial, whereas Georgia 12Y and TifNV HG were statistically the lowest (Fig. 2).

Evaluating the varieties for spotted wilt resulted in the following disease incidences: Georgia 06G (2.6%); Georgia 12Y (0.6%); Georgia 16HO (4.6%); Georgia 18RU (1.8%); Georgia 21GR (2.6%); Georgia 22MPR (2%); CB1 (1.6%); CB7 (0.8%); FloRun 331 (4.4%); FloRun T61 (0.8%); TifNV HG (1.7%); AUNPL 17 (1.8%) (Fig. 3). Georgia 12Y, CB7 and FloRun T61 had statistically the least amount of spotted wilt and were statistically similar, whereas Georgia 16HO and FloRun 331 had the highest and were statistically similar (Fig. 3).

IV. Discussion

The research conducted in this trial shows that the industry standard Georgia 06G is still capable of producing high yields. This is valuable information for growers to see, as there has been some concern that this variety wasn't performing as well as in years past. This data, combined with other statewide trials shows that Georgia 06G still produces consistently high yields amongst its varietal counterparts. However, this research also shows that there are several other high yielding options available. Included in these are Georgia 12Y, Georgia 18RU, CB1, Georgia 21GR, TifNV HG and CB7, all of which produced over 5,000 pounds of peanuts per acre (Fig. 1). This research also shows that there are several varieties that effectively suppressed spotted wilt incidence compared to the industry standard Georgia 06G. These include Georgia 12Y, FloRun T61 and CB7. This is important data, as spotted wilt incidence has increased over the last 2 years in Berrien County. Control options for this disease are limited, so evaluating potential resistant varieties will be important if spotted wilt incidence continues to increase. However, it should be mentioned that spotted wilt pressure was low in this field. It will be important to keep screening these varieties in diverse conditions, including fields with higher disease pressure.

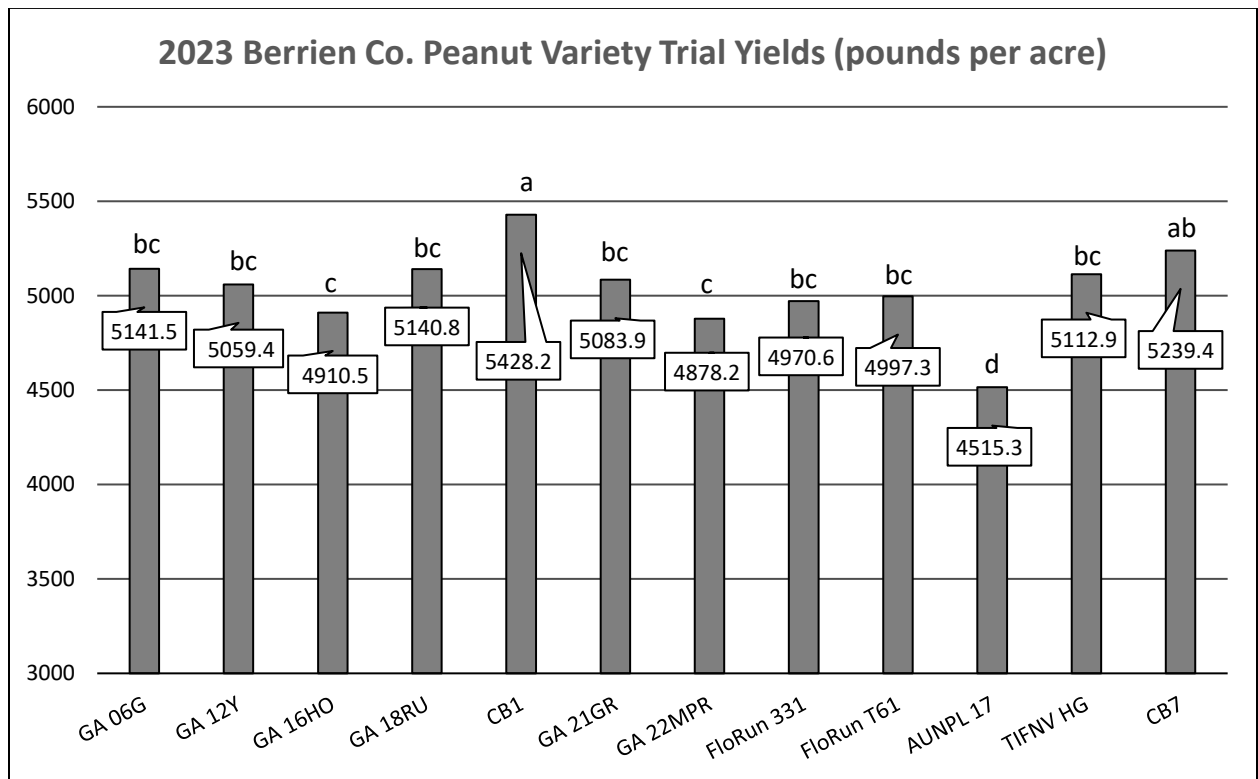


Fig. 1. Yield (pounds per acre) results from the 2023 Berrien County Peanut Variety Trial.

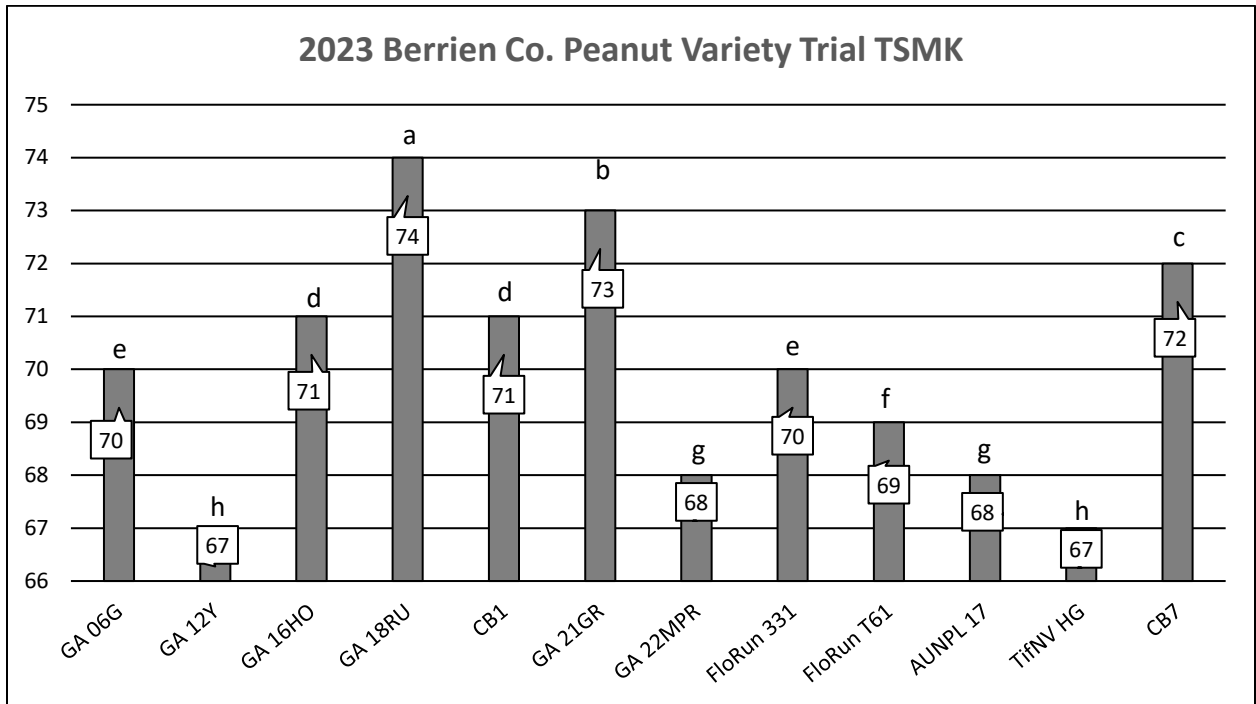


Fig.2. Percentage total sound mature kernel (TSMK) from the 2023 Berrien County Peanut Variety Trial.

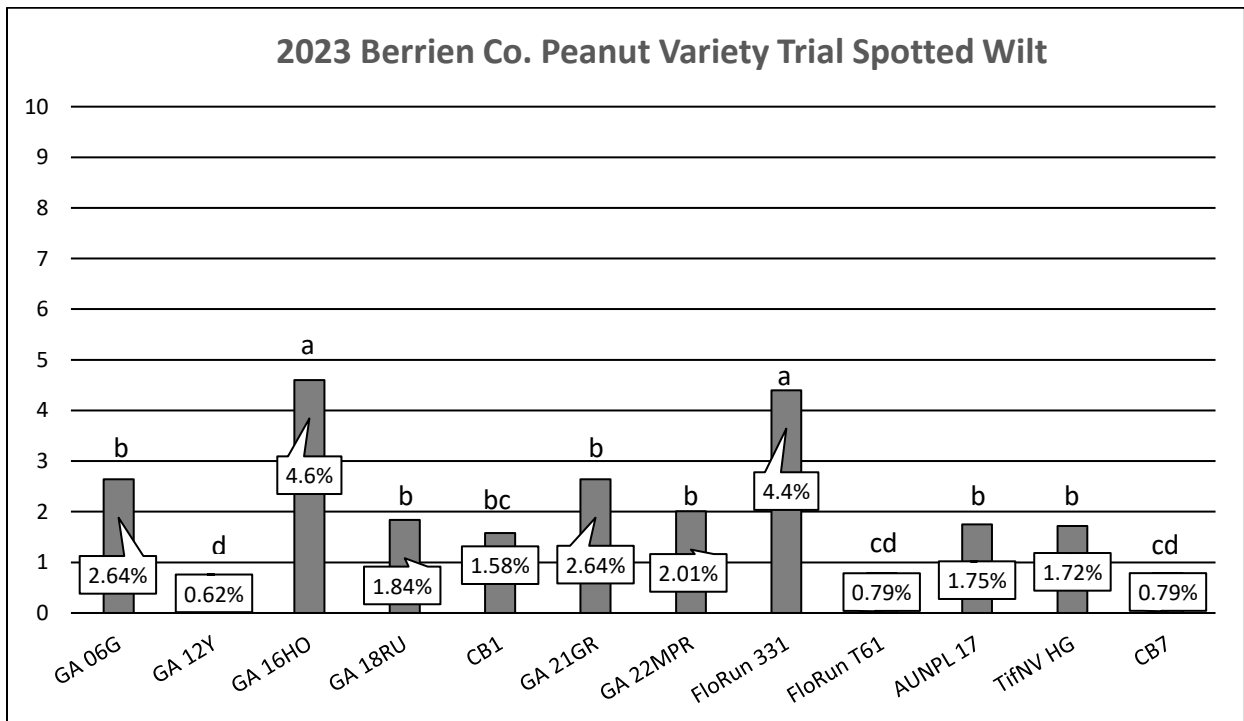


Fig. 3. Percentage spotted wilt infected peanuts from the 2023 Berrien County Peanut Variety Trial.