

# **2021 Berrien County Peanut Research Report**

## **I. Introduction**

Berrien County is a large producer of peanuts in South Central Georgia. According to the most recent data there was close to 25,000 acres planted in 2020, with an economic value of close to \$22 million. One of the main yield limiting factors in peanuts is disease. Due to this, there are a variety of different fungicides available to our local farmers. Additionally, the development of new varieties is important as it provides higher yielding cultivars for Berrien County farmers.

## **II. Materials & Methods**

In 2021 Berrien County Extension conducted an on-farm trial in an irrigated peanut field, testing 6 different fungicide programs. The trial was evaluated for leaf spot and white mold incidence and yield. Additionally, Berrien County Extension evaluated 9 different commercially relevant peanut varieties for yield in both an irrigated field and a dryland field. All trials were replicated.

## **III. Results**

### **a. Fungicide Trial**

Yields in the fungicide trial for each program were as follows: Syngenta (6,610 lb/a), Sipcam (6,566 lb/a), Valent (6,293 lb/a), Bayer (6,263 lb/a), FMC (6,128 lb/a) and Nichino (5,769 lb/a). The Nichino program was statistically similar to the FMC program. The FMC, Bayer and Valent programs were all statistically similar. Lastly, the Sipcam, Syngenta, Bayer and Valent programs were all statistically similar.

The white mold results (number of 1 foot hits per 100 feet of row) showed that the Syngenta program had the numerically lowest amount of white mold, however it was not statistically different from any of the programs, except Bayer. The leaf spot ratings showed that the Syngenta program had a statistically higher amount of leaf spot than all other programs. The Sipcam, Bayer, FMC and Nichino programs all performed similarly and the Valent program performed similar to the FMC program.

### **b. Variety Trials**

In the non-irrigated variety trial yields were as follows: GA 18RU (7,414 lb/a), GA 20VHO (7,199 lb/a), FLORUN 331 (7,175 lb/a), GA 06G (7,151 lb/a), GA 12Y (7,058 lb/a), Tift NV HG (7,029 lb/a), GA 16HO (7,025 lb/a), AUNPL 17 (6,823 lb/a) and TiftNV hiol (6,148 lb/a). When applying statistics, TiftNV hiol was significantly lower than all other varieties, while GA 18RU was statistically similar to all other varieties with the exception of AUNPL 17.

In the irrigated trial yields were as follows: GA 06G (7,807 lb/a), Tift NV HG (7,649), GA 12Y (7,383 lb/a), GA 18RU (7,362 lb/a) GA 16HO (7,319), FLORUN 331 (7,190), AU NPL 17 (7,158 lb/a), GA 20VHO (7,124 lb/a) and TiftNV hiol (6,220). TiftNV hiol was statistically lower than all other varieties. GA 06G and Tift NVHG were statistically similar, and all other varieties were statistically similar.

#### **IV. Discussion**

The results from the fungicide trial show that there are several programs that can work for growers depending on their situation. It should be noted that white mold pressure was low in this trial. Due to this, timely applications of leaf spot material appear to be the main catalyst at overall disease management. Additionally, this field was deep turned prior to planting, which aided in lower disease pressure.

Regarding the variety trials, GA 06G has been the recent high yielding benchmark for growers, and it has performed consistently in UGA variety trials. However, the results here show that Berrien County growers have several newer high yielding options available. However, it is important to keep testing these varieties to establish their consistency in producing top end yields.