



## **2022 Berrien County Peanut Research Report**

### **I. Introduction**

Berrien county is a large producer of peanuts in south central Georgia. According to the most recent farm gate data there was over 22,000 acres planted in 2021, with an economic value of close to \$22 million. Peanuts deal with a variety of insect pests throughout the growing season. Lesser cornstalk borer (LCB) is the most economically devastating of these. The pest can wreak havoc, especially under hot and dry conditions. Another challenge facing Berrien county peanut farmers is variety selection. There are several different varieties available and choosing one with the best disease resistance and high yield potential will often prove to be beneficial.

### **II. Materials & Methods**

In 2022 Berrien County Extension conducted an on-farm trial assessing early season insecticide applications of Vantacor and Diamond for LCB control. The trial was replicated in a dry corner of an irrigated peanut field. The trial was evaluated for yield and LCB larval presence using pitfall trap captures. Additionally, Berrien County Extension evaluated 11 peanut varieties in both a dryland and irrigated peanut field. These variety trials were evaluated for yield, quality and Tomato Spotted Wilt Virus (TSWV) incidence.

### **III. Results**

#### **a. LCB Trial**

In the LCB trial, yield results showed that both Vantacor (5,832 lb/a) and Diamond (6,032 lb/a) yielded higher than a non-treated control (4,475 lb/a) and that both treatments yielded statistically higher than the control. The Vantacor and Diamond treatments were statistically the same. Additionally, the pitfall trap captures showed that larval presence in Vantacor treated peanuts was close to non-existent. Diamond treated peanuts performed similarly but were not able to completely eliminate LCB larvae.

#### **b. Variety Trials**

In the irrigated peanut variety trial yields (lb/a) were as follows: GA-06G (5,628), GA-16HO (5,647), GA-18RU (5,813), GA-20VHO (5,927), AUNPL-17 (5,635), Florun-331 (5,483), FLA-T61 (5,751), GA-12Y (6,483), TiftNV (5,227), TiftNVHG (5,721) and GA-09B (5,885). Regarding TSWV incidence, GA-09B had the most (19.9%) with GA-20VHO (7.4%) and GA-12Y (7.3%) having the least. GA-06G, the industry standard, had 10.3% TSWV incidence.

In the dryland peanut variety trial yields (lb/a) were as follows: GA-06G (5,796), GA-16HO (6,222), GA-18RU (6,479), GA-20VHO (6,128), AUNPL-17 (5,729), Florun-331



(6,412), FLA-T61 (6,340), GA-12Y (5,977), TiftNV (5,731), TiftNVHG (6,206) and GA-09B (6,096). Regarding TSWV incidence, GA-06G (28.3%), GA-16HO (27.5%), Florun-331 (26.3%) and GA-09B (28.5%) had the most. Conversely, GA-20VHO (11.5%), GA-12-Y (12.5%) and FLA-T61 (13.3%) had the least.

#### IV. Discussion

The results from the Berrien county LCB trial show that spraying either Diamond or Vantacor preserve a substantial amount of peanut yield, as both treatments yielded at least 1,300 pounds more than not spraying anything. This trial was in a field with very high LCB pressure, so it is possible these results may not be duplicated in fields with lower pressure. However, when visiting with growers experiencing high LCB numbers in the future, the results here will help to reinforce to them that they are getting a sound return on spraying these two insecticides for LCB.

The results from the Berrien County peanut variety trials show that there are several high yielding peanut varieties for growers to choose from. GA-06G has been the industry workhorse for some time now. There has been some concern about its level of disease resistance recently. These results show that GA-12Y and GA-20VHO are good alternatives with very good TSWV resistance while also having 3-ton yield potential for dryland or irrigated acres. However, GA-06G is still providing consistently high yield results in these trials.