Title: Peanut Profitability and Sustainability in Ben Hill County - Ben Hill County Peanut On-Farm Variety Trial

Geographic Scope: Multi-County & State

County: Ben Hill County

Peanut Programming

Situation

Ben Hill County is an agriculturally-driven county in southwest Georgia. The county currently has a farm gate value of over \$47 million annually, which primarily comes from row crops, timber, and livestock. In 2020 there were over 10,000 peanut acres reported in Ben Hill County. For years peanut variety GA-06G has been the standard variety in Georgia. GA-06G was planted on almost 100% of peanut acres in 2019. GA-06G has been the standard for so long, Georgia growers have extensive experience with the variety. It has been a consistent high yielding peanut, but growers are looking for the new standard for various reasons. In recent years, germination and disease issues have been on the rise in Georgia peanuts. Growers have started looking to Extension for answers on new varieties that could be profitable in Ben Hill County. In order to provide growers a firsthand look on how other varieties could be incorporated into their programs, Holly began a peanut variety trial in Ben Hill County in 2020.

Response

An on farm variety trial was implemented to assess yield potential of different varieties. Priority of these trials are to look at input cost and yield. A variety's abilities to yield well in local conditions is more likely to be adopted by other growers. Until a producer can see a variety grown in a similar environment as their own they are hesitant to move forward. Varieties that perform well and demonstrate the potential for cost savings are likely to be utilized by growers.

An in-person field meeting was hosted by the ag agent at the location of the trial each year. Growers from Ben Hill and surrounding counties are invited to come and listen to specialist talk about fertility, harvesting, insect, and disease pressure while being able to see growing conditions of each variety. Maturity samples were taken and a small area of each variety was inverted to examine peg strength and nut load.

Impact

Results of the trials (shown on next page in table) indicated that all varieties evaluated had high yielding potential in Ben Hill County. The highest yielding variety in 2020 GA-16HO had an average yield of over 7,000 lbs per acre. The standard GA06G yield averages out to 6,182 lbs per acre. GA-16HO was also the highest grading variety in the trial with a grade of 74. Weather conditions, chemical application, and fertilization were consistent over the entire plot. Average contract price for the 2020 growing season was \$400 a ton. When looking at an almost 1,000lb yield increase from the GA06G to GA-16HO that is a dollar increase of almost \$200-\$237 (based on 2021 contract price) an acre in this field.

2022 Variety	Yields lbs /A	Mean in the same column followed by the same letter are not significantly different (p=0.05)
Georgia 06G	5206	ab
Georgia 12Y	5253	ab
Georgia 18RU	5359	ab
Georgia 16HO	5537	а
AUNPL-17	5168	ab
ACI N 104	4577	С
ACI .3331	4943	bc

The agent evaluated grower interest in new varieties in 2021 after the harvest of the 2020 variety trial. Of the 9 growers evaluated 6 of them decided to plant a variety of peanuts other than GA06G on small acreage based on seed availability. Over 500 acres in Ben Hill county was planted in varieties other than GA06G in 2021. Growers in Ben Hill County elected to increase in 12y acreage on dryland and irrigated fields in 2022. With the increase in TSWV during the 2022 growing season this seemed to be a good choice. More will be known after harvest and yields are evaluated. The variety with the highest increase of acreage in Ben Hill County for both the 2021 and 2022 growing season is GA-16HO which is a High Oleic variety and eligible for a premium increase. Seed availability is the most limiting factor on varieties at this point.

Program Function(s): Research & Extension

Program Area(s): ANR