*"Analysis of Crop Insurance as a Risk Management Strategy for Georgia Peanut Producers Utilizing the Representative Peanut Farm Database."*; **A.S. Luke-Morgan\*, S.M. Fletcher, Z. Shi, Abraham Baldwin Agricultural College.**

**Issue:** By nature, agricultural production is a risky venture facing uncertainty from multiple factors, many of which cannot be controlled. Economic stability is vital to Georgia's peanut producers to ensure long-run viability. Catastrophic events in recent years provide harsh examples of the economic impact Georgia agriculture faces from uncertainty in production and marketing. Many producers utilize risk management tools to mitigate the economic impact of uncertainty. Crop insurance is one risk management tool often regarded as providing a safety net for producers. This study continued to investigate the effectiveness of crop insurance in providing a safety net for peanut producers in the state. This study expanded prior research to a whole farm scenario utilizing representative peanut farm data.

**Response:** In July 2021, the representative peanut farm database was updated through focus group meetings throughout the southeast, with 3-6 representatives for each representative farm location. One consistent revelation throughout these meetings is that crop insurance selection for a specific enterprise within a whole farm continues to be multi-faceted. Decisions are made on policy type for a range of coverage levels and pricing options. In addition, there is considerable variability within the individual group members, which often exacerbated determining a consensus value. As a result, the focus was shifted to the county level values with models considering the different policy options and levels to determine the impact.

**Methods:** Historical crop insurance data was analyzed for peanuts, cotton, corn, and soybeans to provide a foundation of trends over time in the number and types of policies sold and indemnified for each commodity. Similarities and differences between commodities, regions, insurance types, and resulting indemnities are being analyzed. Next, the expected and payment yields are considered for peanuts, cotton, and corn. Using the historical t-yields by county combined with representative farm data, the types and levels of crop insurance coverage and the resulting premium will be considered for each enterprise of a representative farm.

**Preliminary Findings:** The findings show great variability across crop insurance decisions for representative peanut farms. The 2021 update of the farms continued to show this variability. As we visited the different locations, most producers relayed that even within their farms, they either did not know exactly what type/level of coverage they had (many suggested we talk with their insurance agent or local FSA) or reported that it was a case-by-case decision. In addition, a mix of policy types and coverage levels were reported, both within and across farms. Similar trends remain evident in national data.

The average per acre cost across all commodities ranged from $6.01 to $61.50, which points to the variability in the perceived value of crop insurance as a safety net. When considering the county 10-year irrigated T-yields for each farm, the yields range from 70% to 120% of the expected yields for peanuts. The average coverable yield across all farms is 90%, meaning across the counties covered by the representative farms, on average the T-yield is ninety percent of what the representative farms expect to produce. This means that producers are managing crops based on the expected yields, but in case of insurable loss, the potential coverage is on a lower yield for 16 of the 20 farms. It is interesting to note that the t-yields have seen increases in recent years with increased county averages.

A review of the indemnities and COL continue to be highly variable between years, commodities, and regions. This analysis, coupled with discussions with RMA, has emphasized the importance of a knowledgeable crop insurance agent as farm management decisions are being made.

**Moving Forward:** As preparations are underway for the next Farm Bill, it is vital to obtain a clear understanding of the relevance of crop insurance for peanut producers. While crop insurance is considered the primary risk management tool for producers to recover from natural disasters and volatile market fluctuations, research indicates that the reliability of crop insurance as a safety net varies for many peanut producers when considering the total operating costs for the enterprise. The cause of the differences in the effectiveness of crop insurance as a risk management tool for different crops, regions, and crop insurance products continues to be investigated to allow decision-makers to be better prepared for the next round of Farm Bill negotiations as related to the effectiveness of crop insurance as a safety net for peanut producers.

**Table 1. US States Peanut Insured Acres and Shares by Types, 2018-2022**

| 2018-2022 U.S. States Peanut Insured Acres and Shares By Types | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **States** | **RP** | | | **YP** | | GRAND | RP | YP | CAT |
| | RP | RPHPE | RP-TOTAL | YP | CAT | TOTAL | Share(%) | Share(%) | Share(%) |
| **AL** | 73,366 | 838 | 74,204 | 99,384 | 7,814 | 181,401 | 41% | 55% | 4% |
| **AR** | 10,430 | - | 10,430 | 10,259 | 2,286 | 22,975 | 45% | 45% | 10% |
| **FL** | 68,312 | 709 | 69,021 | 87,932 | 11,810 | 168,763 | 41% | 52% | 7% |
| **GA** | 401,140 | - | 401,140 | 367,421 | 52,005 | 820,566 | 49% | 45% | 6% |
| **LA** | 727 | - | 727 | 1,044 | 117 | 1,888 | 38% | 55% | 6% |
| **MO** | 776 | - | 776 | 2,097 | 1,295 | 4,167 | 19% | 50% | 31% |
| **MS** | 9,095 | - | 9,095 | 8,154 | 44 | 17,293 | 53% | 47% | 0% |
| **NC** | 31,947 | 1,317 | 33,264 | 61,218 | 2,948 | 97,431 | 34% | 63% | 3% |
| **NM** | 5,725 | - | 5,725 | 530 | 152 | 6,406 | 89% | 8% | 2% |
| **OK** | 4,271 | - | 4,271 | 5,000 | 485 | 9,756 | 44% | 51% | 5% |
| **SC** | 44,454 | - | 44,454 | 30,927 | 4,410 | 79,791 | 56% | 39% | 6% |
| **TX** | 111,371 | - | 111,371 | 34,321 | 8,244 | 153,936 | 72% | 22% | 5% |
| **VA** | 4,020 | 263 | 4,283 | 19,227 | 10 | 23,520 | 18% | 82% | 0% |
| **GRAND TOTAL** | **765,633** | **3,127** | **768,760** | **727,514** | **91,620** | **1,587,894** | **48%** | **46%** | **6%** |
| **SE(AL,FL,GA,MS)** | 551,912 | 1,547 | 553,459 | 562,891 | 71,673 | 1,187,657 | 47% | 47% | 6% |
| **SW(AR,LA,MO,NM,OK,TX)** | 132,525 | - | 132,525 | 51,154 | 11,283 | 194,962 | 68% | 26% | 6% |
| **VC(NC,SC,TN,VA)** | 80,421 | 1,580 | 82,001 | 111,372 | 7,369 | 199,895 | 41% | 56% | 4% |
| | | | | | | | | *Source: Risk Management Agency, USDA* | |

**Table 2. Comparison of County T-Yield and Expected Yields for Representative Peanut Farms**

| FARM | 10-Yr Irrigated T-YLD /Expected YLD | 85% Coverage | % of Expected | 65% Coverage | % of Expected |
| --- | --- | --- | --- | --- | --- |
| A | 89% | 4,131 | 76% | 3,159 | 58% |
| B | 80% | 3,230 | 68% | 2,470 | 52% |
| C | 81% | 3,162 | 69% | 2,418 | 53% |
| D | 89% | 3,196 | 76% | 2,444 | 58% |
| F | 88% | 3,672 | 75% | 2,808 | 57% |
| G | 121% | 3,332 | 103% | 2,548 | 79% |
| H | 97% | 3,417 | 83% | 2,613 | 63% |
| I | 102% | 3,383 | 87% | 2,587 | 66% |
| J | 97% | 4,216 | 83% | 3,224 | 63% |
| K | 95% | 3,621 | 80% | 2,769 | 62% |
| N | 74% | 2,822 | 63% | 2,158 | 48% |
| O | 107% | 3,553 | 91% | 2,717 | 70% |
| P | 70% | 2,669 | 59% | 2,041 | 45% |
| Q | 79% | 2,006 | 67% | 1,534 | 51% |
| R | 80% | 3,043 | 68% | 2,327 | 52% |
| S | 83% | 3,145 | 70% | 2,405 | 54% |
| T | 77% | 2,839 | 65% | 2,171 | 50% |
| U | 95% | 4,148 | 81% | 3,172 | 62% |
| V | 105% | 3,298 | 89% | 2,522 | 68% |
| W | 82% | 3,468 | 70% | 2,652 | 54% |
| *Average across all* | *90%* | | *76%* | | *58%* |

Source: USDA and Representative Peanut Farm Database