

## **Disease and Yield Response of Selected Peanut Cultivars to Low and High Input Fungicide Programs in Southwest Alabama**

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The reaction of nine peanut cultivars to late leaf spot (LLS) caused by *Cercosporidium arachidicola*, rust caused by *Puccinia arachidis*, and white mold (WM) caused by *Sclerotium rolfsii* as influenced by fungicide program was assessed in southwest Alabama at the Gulf Coast Research and Extension Center (GCREC). The low input program included seven applications of chlorothalonil and the high input program included Mazinga, Miravis + Elatus, Muscle ADV, and chlorothalonil. LLS intensity was evaluated using the Florida leaf spot scoring system. Rust was evaluated using the ICRISAT scale. WM incidence was assessed immediately after plot inversion by counting the number of disease loci per row. Yields were reported at <10% moisture.

Due to late season drought, LLS defoliation, which significantly differed across cultivars and fungicide programs, was lower than that observed in prior years with defoliation exceeding 45% and 31% for the untreated Florunner 331 and Georgia-16HO respectively. All cultivars had similar defoliation levels in both the intensive and standard input fungicide programs. Rust intensity, however, differed across cultivars with Georgia-18RU having a greater rust rating than all other cultivars. Both the standard and intensive input fungicide programs controlled rust compared to the no fungicide control. WM incidence was higher on TUFRunner 297 and Georgia-18RU than all other cultivars while Georgia-14N had the lowest incidence. Yield for both fungicide regimes were higher than that recorded for the nontreated control. The highest yields were recorded for AU-NPL 17, while lowest yields were noted for TUFrunner 297 and Georgia-06G. Overall, significant yield gains were recorded for AU-NPL 17, Georgia-09B, Georgia-16HO, and Georgia-18RU with the intensive compared with standard fungicide input programs.