

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

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The reaction of eleven peanut cultivars to early leaf spot (ELS) caused by *Cercospora personatum* and late leaf spot (LLS) caused by *Cercosporidium arachidicola* along with white mold (WM) caused by *Sclerotium rolfsii* as influenced by fungicide program was assessed in southeast Alabama at the Wiregrass Research and Extension Center (WREC). Leaf spot intensity was evaluated using the Florida leaf spot scoring system. Stem rot incidence was assessed immediately after plot inversion by counting the number of disease loci per row. Yields were reported at <10% moisture.

Leaf spot defoliation, which significantly differed across cultivars and fungicide programs, exceeded 41% with the standard fungicide programs for Georgia-13M and TUFRunner 511. All remaining cultivars had similar defoliation levels in both the intensive and standard input fungicide programs. White mold incidence was lower on FloRun 311 than Georgia-06G, Georgia-09B, Georgia 13M, and AU 16-28 but similar to the remaining cultivars. Yield for both fungicide regimes were higher than that recorded for the non-treated control. Highest yields were recorded for Georgia-16HO, while similarly low yields were noted for Georgia-13M and TUFRunner 511. Despite superior white mold control obtained with the intensive fungicide program, yields were similar for fungicide programs. Noticeable leaf spot incited defoliation was noted on Georgia-06G, the current industry standard, which may have resulted in lower yields for this cultivar. Georgia-16HO along with FloRun 331 produced higher yields than the majority of cultivars. Overall, no yield benefit was recorded for any peanut cultivar with the intensive compared with standard fungicide input programs.