

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 twelve peanut cultivars to early leaf spot *Passalora arachidicola*, late leaf spot *Novopassalora personatum*, and rust *Puccinia arachidis* along with white mold *Athelia 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 1-10 leaf spot scoring system and rust was evaluated using the ICRISAT 1-9 rating scale. Stem rot incidence was assessed immediately after plot inversion by counting the number of disease loci per row. Yields were reported at <10% moisture.

For the no-fungicide control, leaf spot-incited defoliation differed significantly across cultivars with AU-NPL 17, and Georgia-14N, and TifN/V High O/L having lowest defoliation. While rust was sporadic throughout the plots, highest rust intensity was with Georgia-16HO. With the standard fungicide program, Georgia-18RU, TUFRunner 511, AU 16-28, TUFRunner 297, and Georgia-09B had significantly greater defoliation levels than AU-NPL 17 and TifN/V High O/L. While significant differences in defoliation were noted with the intensive fungicide program, defoliation levels were low across all cultivars. White mold incidence was greater for Georgia-09B than Georgia-16HO along with TifN/V High O/L, Georgia-12Y, FloRun 331, and Georgia-14N with the latter four cultivars having similarly low disease indices. The intensive fungicide program greatly reduced this incidence of this disease compared with the standard fungicide program and the nontreated-fungicide control. While the high yield recorded for Georgia-14N was equaled by Georgia-16HO, Georgia-06G, and TifN/V High O/L, similarly low yield was recorded for Georgia-09B, TUFRunner 511, and TUFRunner 297. Pod yield reported for the intensive fungicide program was significantly greater compared with the standard and no fungicide control with the latter having the lowest yield.