

Assessment of Evolving Peanut Fungicide Programs for Yield and Value in Southwest Georgia

B. W. HAYES*, University of Georgia Cooperative Extension, Mitchell County, Camilla Georgia 31730; **B. A. WARD**, University of Georgia Cooperative Extension, Miller County, Colquitt Georgia, 39837; **R.C. KEMERAIT**, Department of Plant Pathology, University of Georgia, Tifton, Georgia 31793.

Peanuts (*Arachis hypogea*) are the second largest agronomic commodity in Georgia. Fungicides are heavily applied in peanut production for the protection of the crop from *Sclerotium rolfsii*, *Cercospora arachidicola*, and *Cercosporidium personatum*. Today's peanut fungicide programs can greatly vary in cost. Careful selection of these programs can bring more profit to an agronomic operation, even if the cost of the program is higher. In 1994, the standard program for peanut fungicides was a tebuconazole/chlorothalonil based program, but over the years newer premium products have been developed. The objective of this experiment was to evaluate the yield potential of peanuts using past and presently labeled fungicide programs.

In 2017 at two commercial field sites (Miller and Decatur Counties), Georgia-06G was planted on May 10th (Miller) and June 10th (Decatur). At each location, five commonly used fungicide programs were initiated approximately 30 DAP with continuous applications every 2 weeks until approximately 115 DAP. This experiment had 3 replications of each treatment at both locations. Peanuts at each location were harvested at maturity (~145 DAP) and plot weights (lb ac⁻¹) were collected and averaged over each fungicide treatment replication. Both locations displayed higher yield potential for the most current fungicide program of ELATUS (azoxystrobin + benzovindiflupyr/solatenol) plus chlorothalonil when compared to all other fungicide programs. Similarly, the 1994 standard fungicide program of tebuconazole/chlorothalonil displayed the lowest yield potential of all tested programs. Future research is focusing on replicating this experiment. Growers in Southwest Georgia expectations for yield are much greater than they were in 1994; therefore, growers should be willing to invest in programs that protect that yield expectation.