

2014

Grant Report
Account 367413 (Fund APPA-RIA03-PID 22 BID 1298)
July 8, 2015

*Annual Report +
Summary*

Title: Integrated management of tomato spotted wilt, leaf spot rust, white mold, and CBR in peanut

Peanut plant pathology and nematology field trials are being conducted in 2015 at the Brewton Agricultural Research Unit (2), the Chilton Regional Research and Extension Center (1), Gulf Coast Research and Extension Center [GCREC] (10), Plant Breeding Unit (2), and Wiregrass Research and Extension Center [WREC] (15). In addition, trials assessing the efficacy of thrips control treatments on thrips populations, TSW incidence, and peanut yield are being conducted at the Wiregrass Research and Extension Center (2). Data collection has been initiated on the thrips control trials. Sizable differences in insecticide efficacy for protecting peanut from thrips have been observed. Tomato spotted wilt has been observed primarily in Flavorrunner 458 but disease incidence does not appear to be treatment-related. Summary reports for 2014 trials listed below at the GCREC, PBU, and WREC have been published or accepted for publication in the e-journal Plant Disease Management Reports. Abstracts summarizing peanut research projects have been submitted for presentation at the Annual Meeting of the American Peanut Research and Education Society and American Phytopathological Society.

Abstracts and Technical Reports Submitted in 2015

Chen, C. Y., M. L. Wang, L. Dean, N. A. Barkley, A. K. Hagan, P. Dang, C. C. Holbrook, C. Butts, M. Lamb, and T. Sanders. Genetic variation in the US peanut mini-core collection for agronomy, seed chemistry, and nutrient quality, traits in peanut. Annual Meeting of the Agronomy Society.

Hagan, A. K., H. L. Campbell, and H. B. Miller. 2015. Yield response and reaction of commercial peanut cultivars to diseases in Southwest Alabama, 2014.

Hagan, A. K., H. L. Campbell, K. L. Bowen, and B. Gamble. 2015. Yield response and reaction of peanut cultivars to foliar and soilborne diseases in Southeast Alabama, 2014.

Hagan, A. K., H. L. Campbell, K. L. Bowen, and B. Gamble. 2015. Disease reaction and yield response of experimental peanut lines in Southeast Alabama, 2014.

Hagan, A. K., H. L. Campbell, K. L. Bowen, M. Pegues, and J. Jones. 2015. Performance of recommended fungicide programs on two peanut cultivars in Southwest Alabama, 2014.

Hagan, A. K., H. L. Campbell, K. L. Bowen, M. Pegues, and J. Jones. 2015. Yield response and disease control as impacted by two fungicide programs on commercial runner peanut cultivars, 2014.

Hagan, A. K., H. L. Campbell, K. L. Bowen, and L. Wells. 2015. Standard- and high-input fungicide program impact on disease control and yield of selected peanut cultivars, 2014.

Hagan, A. K., H. L. Campbell, K. L. Bowen, and L. Wells. 2015. Impact of recommended fungicide programs on leaf spot and stem rot control in Southeast Alabama.

Hagan, A. K., H. L. Campbell, K. L. Bowen, and L. Wells. 2015. Yield response, as well as disease and nematode control with Velum Total on Peanut. Proc. Am. Pnut Res. Ed. Soc. 47.

Technical Reports Published in 2015

Campbell, H. L., A.K. Hagan, K.L. Bowen, and L. Wells. 2015. Evaluation of Fontelis and Azaka for peanut disease control in southeast Alabama, 2014. Plant Disease Management Reports 9:FC039. <https://www.plantmanagementnetwork.org/pub/trial/PDMR/reports/2015/FC059.pdf>

Campbell, H. L., A.K. Hagan, K.L. Bowen, and L. Wells. 2015. Evaluation of Elatus for peanut disease control in southeast Alabama, 2014. Plant Disease Management Reports 9:FC060. <https://www.plantmanagementnetwork.org/pub/trial/PDMR/reports/2015/FC060.pdf>

Campbell, H. L., A.K. Hagan, K.L. Bowen, and L. Wells. 2015. Evaluation of Propulse and Velum Total for peanut disease control in southeast Alabama, 2014. Plant Disease Management Reports 9:FC061. <https://www.plantmanagementnetwork.org/pub/trial/PDMR/reports/2015/FC061.pdf>

Campbell, H. L., A.K. Hagan, K.L. Bowen, and L. Wells. 2015. Evaluation of Convoy and Artisan for peanut disease control in southeast Alabama, 2014. Plant Disease Management Reports 9:FC062. <https://www.plantmanagementnetwork.org/pub/trial/PDMR/reports/2015/FC062.pdf>

Campbell, H. L., A.K. Hagan, K.L. Bowen, and L. Wells. 2015. Evaluation of Custodia and Cupro Fix Ultra Disperse for peanut disease control in Alabama, 2014. Plant Disease Management Reports 9:FC041. <https://www.plantmanagementnetwork.org/pub/trial/PDMR/reports/2015/FC041.pdf>

Campbell, H. L., A.K. Hagan, K.L. Bowen, and L. Wells. 2015. Evaluation of SA-0040304 and Priaxor for peanut disease control in southeast Alabama, 2014. Plant Disease Management Reports 9:FC040. <https://www.plantmanagementnetwork.org/pub/trial/PDMR/reports/2015/FC040.pdf>