

## **Management Efficacy of Late Leaf Spot in Two Peanut Fields with Fungicides Applied at Varying Sprayer Ground Speeds**

**J. VARN\***, Clemson University, Barnwell, SC 29812; J. CROFT, Clemson University, Orangeburg, SC 29115; and W. NIX, D. HUTTO, and D. J. ANCO, Clemson University, Blackville, SC 29817.

Surveys conducted in early 2017 listed South Carolina peanut growers as applying fungicides at ground speeds ranging from approximately 5 mph to 17.5 mph. To examine the possible effect of fungicide sprayer ground speed on late leaf spot management efficacy, on-farm trials were conducted in two Bailey peanut fields planted in Barnwell and Orangeburg Counties in 2017. Grower fungicide programs were applied at 7.5, 10 and 15 mph in plots 24 rows wide by 150 foot (Orangeburg County) or 1500 foot (Barnwell County) in length and replicated three times according to a randomized complete block design. Growing conditions in both fields favored production of rank canopies. End of season defoliation was not observed to appreciable amounts in either field. Late leaf spot severity in the Barnwell County field was low overall and not significantly different among sprayer speeds ( $P = 0.666$ ), though a general trend could be seen for slightly higher severity with increased sprayer speed. In the Orangeburg County field, there was a marginally significant ( $P = 0.0983$ ) effect of sprayer speed on late leaf spot severity, with a trend for slower speeds to be associated with less late leaf spot severity. At the 0.10 significance level, 15 mph had significantly more severity than the 7.5 mph speed (2.6 vs. 1.2%, respectively), though practically speaking all disease levels were considerably low. This evidence warrants conducting the study under another set of conditions, including somewhat higher disease pressure to determine if a substantial difference in disease management occurs that result in grower economic impact.