

## **Efficacy of Select Insecticides Against Threecornered Alfalfa Hopper in Peanut**

**T.N. TORRANCE\***, Grady County ANR Agent, The University of Georgia, Cairo, GA 39828; **M.R. ABNEY**, Department of Entomology, The University of Georgia, Tifton, GA 31793

Threecornered alfalfa hopper (TCAH), *Spissistilus festinus*, is an insect commonly found in Georgia peanut fields. TCAH has a wide host range, but little is known concerning the economic impact of its feeding in peanut. Though the insect is often treated with insecticides, efficacy data from trials conducted in Georgia are limited. To address this concern, an on-farm insecticide efficacy trial was established in an irrigated peanut field in Grady County, GA in 2019. The abundance of TCAH nymphs was assessed using a 1m beat sheet immediately prior to the application of experimental treatments and 3 and 6 days after treatment (DAT). Pre-treatment populations averaged 6.56 nymphs per row meter. Four insecticides were evaluated in this study: Bifenture EC (bifenthrin), Sivanto 200 SL (flupyradifurone), Warrior II w Zeon 2.08 CS (lambda-cyhalothrin) and Diamond 0.83 EC (novaluron). The peanut cultivar GA-16HO was planted on 25 April 2019, and insecticide treatments were applied 47 days after planting.

At 3 DAT the mean number of TCAH nymphs in Diamond, Bifenture and Warrior II w Zeon treatments did not differ significantly from the untreated check. Sivanto significantly reduced TCAH nymphs compared to untreated check (95% control) but not compared to the other insecticides at 3 DAT. At 7 DAT the mean number of TCAH nymphs in Diamond and Warrior II w Zeon treatments did not differ from that in the untreated check. Bifenture and Sivanto significantly reduced nymph abundance compared to the untreated check at 7 DAT (73 and 100% respectively). The mean number of TCAH nymphs was significantly lower in the Sivanto treatment compared to all other treatments at 7 DAT.