## COMPARISON OF BT (BACILLUS THURINGIENSIS) TRAITS FOR COTTON BOLLWORM (HELICOVERPA ZEA) CONTROL IN THE LOWER GULF COAST OF TEXAS G. Berger S. Hopkins M. Treacy Hopkins Agricultural Services, Inc.

Portland, TX

## <u>Abstract</u>

A small plot study was planted in 2017 to evaluate the efficacy of Bt (*Bacillus thuringiensis*) traits for controlling the cotton bollworm (*Helicoverpa zea*) in the Lower Gulf Coast of Texas. A non-Bt cotton (*Gossypium hirsutum*) variety, UA222, was included in the study, as well as cotton varieties containing Widestrike, Widestrike3, Bollgaurd2 and TwinLink Plus traits, which are widely grown in the Lower Gulf Coast. Plots were planted in a split-plot design to allow for an application of Prevathon for an additional comparison of damage between treated and untreated plots. Beginning at the first week of bloom, plots were monitored weekly for bollworm damage. At the third week of bloom, Prevathon (22 fl. Oz/A) was applied to the designated treated plots. Overall, bollworm pressure was very low in the study. The conventional variety, UA222, was at the 5% economic threshold level during the fourth week of bloom. Damage in the Bt plots ranged from 0 to 1.5%, which is well below economic thresholds for the area. Based on seasonal averages, the untreated UA222 plots had more square and total fruit damage than other plots. There was no observable yield difference between untreated and Prevathon treated plots for yield in the study.