

**CONTROL OF TARNISHED PLANT BUG IN MISSISSIPPI DELTA WITH FOLIAR INSECTICIDES****Nick Bateman****Angus Catchot****Jeff Gore****Don Cook****Fred Musser****Mississippi State University****Starkville, Mississippi****Abstract**

The tarnished plant bug, *Lygus lineolaris* (Palisot de Beauvois), is the most important insect pest of cotton in the Mid-South. Tarnished plant bugs feed on the squares, blooms, and young bolls of cotton plants with piercing sucking mouthparts. This feeding will cause the fruiting structures to shed leading to direct yield losses. While the main control method for the tarnished plant bug is foliar sprays, there are several other options associated with variety selection and planting date that can optimize management. Early planting dates and selection of early maturing varieties can be useful in managing the tarnished plant bug. Research has shown that promoting earliness through planting date and variety selection can reduce the input costs associated with tarnished plant bug control. The use of a hairy cotton variety has also been shown to reduce the impact of tarnished plant bug compared to a smooth leaf variety. Although these factors have been shown to reduce the impact of tarnished plant bug in cotton, foliar insecticide sprays remain the primary tool used to manage this pest. However, a single application of any insecticide will rarely reduce populations below the economic threshold. Research has shown that 2 sequential applications that are applied 4-5 days apart provide better control than intervals of 6-7 days. Also, early season applications of Diamond insecticide provide long term benefits and improve tarnished plant bug control. All of the control tactics currently available should be incorporated into an integrated approach to maximize tarnished plant bug management.