

**REPORT ON A MIDSOUTH REGIONAL PLANT BUG EFFICACY TRIAL 2009-2010****Gus Lorenz****Scott Akin****Glenn Studebaker****University of Arkansas Division of Agriculture, Cooperative Extension Service****Lonoke, AR****S. D. Stewart****The University of Tennessee****Jackson, TN****B. R. Leonard****Louisiana State University, LSU Ag Center****Winnsboro, LA****K. Tindall****University of Missouri, Delta Center****Portageville, MO****A. Catchot****J. Gore****D. Cook****F. Musser****Mississippi State University****Mississippi State, MS****Abstract**

During 2010, nine trials were conducted across Arkansas, Louisiana, Mississippi, Missouri, and Tennessee to evaluate the efficacy of labeled insecticides for control of tarnished plant bug. At one to four days after treatment one (DAT1), none of the treatments lowered plant bug numbers below the threshold of 6 plant bugs per 10 row feet. At 5-10 DAT1 only acephate reduced numbers below threshold. At 1-4 DAT2 and 5-10 DAT2, none of the insecticides reduced plant bug numbers below threshold. Only four of the compounds maintained square retention  $\geq 80\%$ , which is considered the minimum level for maintaining yield, after the first application. At 11-15 days after the first application no product maintained square retention above 70%. The results of these trials indicate that none of the treatments were effective at managing plant bug infestations. Square retention indicated that yield reductions occurred with all treatments. Products considered standards for plant bug management such as Orthene (acephate), Bidrin (dicofol), and Centric (thiamethoxam) did not perform as well as in the past. This study indicates the need for additional products and new classes of chemistry to provide effective control, and also shows the need for rotation of existing chemistries to maintain the current level of activity.