THE PIERCING/SUCKING BUG COMPLEX IN SC Dan Robinson Clemson University, Edisto Research & Education Center Blackville, SC Mike Sullivan and Sam Turnipseed Clemson University, Edisto Research & Education Center Blackville, SC

Abstract

Current piercing/sucking bug thresholds on boll damage in the Southeastern cotton production area is 15-20%. Studies were conducted in South Carolina over the last three years to determine if the 20% threshold is valid. Treatments were: 1) weekly beginning at first bloom, 2) 20% threshold, and 3) untreated. Lint yields were used to determine differences among treatments. Treatments in 2003 and 2004 were Bidrin; in 2005 pyrethroids were used at the high rates. In two early planted tests in 2003, lint yields were increased an average of 206 lbs. comparing the 20% threshold (sprayed 2X) to the untreated. The weekly treatment (sprayed 6X) provided an additional 310 lbs. of lint. This increase was due to the lack of a third treatment in the 20% threshold. A late planted test provided similar results; a 186 lb. lint increase in the 20% treatment (sprayed 2X) vs. the untreated and a 253 lb. lint increase in the weekly (sprayed 3X). In 2004, piercing/sucking bug numbers were low throughout the season and no differences were seen among the three treatment threshold (sprayed 2X or 3X depending on location) increased yields an average of 165 lbs. of lint compared to the untreated. An additional 64 lbs. of lint was acquired by the weekly treatment (sprayed 5X or 6X). The yields from these studies over a three year period indicate the established 20% boll damage threshold for piercing/sucking bugs is valid.