EVALUATIONS OF IN-FURROW AND FOLIAR APPLICATIONS OF FIPRONIL AND IMIDACLOPRID FOR CONTROL OF EARLY-SEASON PESTS AND BOLL WEEVIL

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Abstract

Fipronil and Imidacloprid represent two new classes of insecticides that have the potential to improve cotton pest management strategies. These compounds have demonstrated good activity against aphids, thrips, tarnished plant bugs and boll weevil. Imidacloprid, as a seed treatment (Gaucho 480), and fipronil 80WG, as an infurrow treatment, provided control of thrips immatures similar to that for the standards acephate and aldicarb (Orthene 90S and Temik 15G), but not significantly better, in tests conducted in 1994 and 1995. Imidacloprid (Admire 2F and Provado 1.6F) and fipronil 80WG, applied as foliar treatments, were generally as effective as the standard insecticides acephate and dicrotophos (Orthene 90S and Bidrin 8E) in controlling thrips immatures in tests conducted in 1992-1994. In 1994, foliar treatments of imidacloprid provided control of aphids similar to the standard chlorpyrifos (Lorsban 4E) at 2 and 4 days after treatment (DAT). However in 1995, control of aphids was significantly less than that of the standard endosulfan In 1993, fipronil 80WG provided (Phaser 3E). significantly better control of boll weevils than the standard azinphos-methyl (Guthion 2L). However in 1994 and 1995, control of boll weevils with fipronil was not significantly different from that of the standard dicrotophos (Bidrin 8E).