INFLUENCE OF EARLY-SEASON NEMATICIDES/INSECTICIDES ON B.T. AND CONVENTIONAL COTTONS H. L. Crooks, J. D. Mueller and M. J. Sullivan Clemson University Edisto Research and Education Center Blackville, SC

Abstract

Effects of applications of two nematicides on beneficial arthropods and Columbia lance nematodes were studied in DPL 5415 and DPL NuCOTN 33^b. Plots consisted of 24 rows 75 ft. long in four randomized complete blocks. Temik 15-G was applied in-furrow at planting at insecticidal rates (3.5 lb./ac) and nematicidal rates (7 lb./ac). Vydate was applied as a foliar spray (8 oz./ac) at 9 weeks after planting. A side-dress application of Temik 15-G (14 lb./ac) was made on 12 rows of those plots treated with Vydate. Beat cloth samples were used to determine predator populations. Soil samples were taken three times to measure nematode pressure. Results indicated at-planting applications of Temik 15-G had no effect on beneficials. Vydate applications reduced all beneficials except spiders. The side-dress application of Temik 15-G reduced only predators with piercing/sucking mouthparts (Gecoris, Orius). Spiders and lady beetles were not effected. Both varieties of cotton tested were susceptible to Columbia lance nematode; both post-emergence applications of Temik 15-G and Vydate alone as well as the combination of both materials reduced nematode levels.