INTRODUCTION

Accent® (nicosulfuron), marketed by DuPont, has been used for postemergence weed control in field corn since 1991. In 2009, generic formulations of nicosulfuron were introduced into the U.S. corn herbicide market by Cheminova (NIC-IT™) and UPI (Samson™). Additionally, Steadfast® Q [Resolve + Accent + crop safener (isoxadifen)], was aggressively promoted in Georgia. The objective of this research was to compare the performance of Accent, Steadfast Q, NIC-IT, and Samson.

MATERIALS AND METHODS

Small-plot field trials were conducted in 2009 at the Ponder Research Farm located near Ty Ty, Georgia, and the Attapulgus Research and Education Center. Field corn (Pioneer 33M57) was planted in early April. Postemergence herbicide treatments were applied 16-20 days after planting to annual grass weeds that were 0.5-1” tall. Treatments included the following: Accent 75DG @ 0.67 oz/A; NIC-IT 2SC @ 2.0 oz/A; Samson 0.33SC @ 12.0 oz/A; and Steadfast Q 37.7WDG @ 1.5 oz/A. All treatments included Atrazine 4L @ 1.5 qt/A + Agrioil @ 1% v/v. A non-treated control was included for comparison. Treatments were arranged in a randomized complete block design with four replications. All data were subjected to ANOVA and means were separated using Fischer’s Protected LSD Test (P = 0.10).

RESULTS AND DISCUSSION

1) There were no differences in corn response to the various formulations of nicosulfuron (data not reported).

2) Annual grass weed control between the different formulations of nicosulfuron was equivalent (Figures 1, 2, and 5).

3) At the Ponder Farm location, corn yields were not influenced by any treatment (Figure 3).

4) At the Attapulgus location, all treatments significantly improved corn yields when compared to the non-treated control. However, there were no differences in yield between the various formulations of nicosulfuron (Figure 4).

Figure 5. Weed Control on June 4 (35 DAT), Ponder Farm.