INTRODUCTION:

Tropical spiderwort (TSW) has become one of the most troublesome weeds in Georgia. Since the majority of TSW does not emerge until after June 1, it is rarely an in-season field corn weed problem. However, TSW becomes a major concern after corn harvest since it can produce seed in approximately 40 days after emergence. Limited studies have been conducted on the post-harvest control of TSW.

MATERIALS AND METHODS:

A field trial was conducted at the Mark Whigam Farm in Grady County to evaluate the effect of various herbicide treatments for the control of TSW. Combinations of 2,4-D amine 3.8SL (1.5 pt/A), Aim 2EC (1.5 oz/A), and Gramoxone Inteon 2SL (1 qt/A) were applied after corn harvest. A crop oil concentrate (Agri-Oil) was included with all Gramoxone Inteon and Aim treatments at 1% v/v. POST1 applications were made to 8-10" tall TSW. POST2 applications were applied 2 weeks after the POST1 applications (2-4" TSW re-growth). Traditional small plot techniques were utilized. All herbicide treatments were applied with a back-pack sprayer calibrated to deliver 15 GPA using 11002DG flat-fan nozzle tips. The treatments were arranged in a randomized complete block design with four replications. Visual control ratings were obtained on a weekly basis using a scale of 0 to 100% (0 = no control, 100 = complete control). All data were subjected to ANOVA and means separated using Duncan’s Multiple Range Test at P = 0.10. Mean comparisons are appropriate within time after application.

RESULTS:

Single applications of 2,4-D, Aim, or Gramoxone Inteon were not effective in controlling TSW (data not reported). At 1 week after the POST2 treatments, the split application of 2,4-D provided less control than 2,4-D followed by Gramoxone or Gramoxone followed by Gramoxone. At 4 weeks after the POST2 treatments, the split application of Aim provided less control than the other split treatments. No other statistical differences in control were observed.

CONCLUSIONS:

Growers who want to manage TSW after corn harvest with herbicides should consider the following treatments:

1) 2,4-D followed by 2,4-D, Aim, or Gramoxone Inteon
2) Split applications of Gramoxone Inteon
3) Split applications of Aim

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