

Evaluation of Mesotrione for Broadleaf Weed Control in Kentucky Bluegrass

Richard Affeldt, Brad Holliday, and Jim Carroll

Introduction

Mesotrione (Callisto[®], Syngenta) is an herbicide that has been shown to have some safety on Kentucky bluegrass. According to the Callisto label, mesotrione controls a variety of broadleaf weeds. The objective of this trial was to evaluate efficacy of mesotrione on broadleaf weeds, particularly mayweed chamomile (*Anthemis cotula*) compared with commonly used broadleaf herbicides in Kentucky bluegrass.

Methods and Materials

One trial was conducted in a commercial field of 'Shamrock' Kentucky bluegrass near Madras, Oregon. The trial had five herbicide treatments and a check; all herbicide treatments included crop oil concentrate at 1.0 percent v/v. The treatments were (1) mesotrione at 0.25 lb ai/acre, (2) mesotrione at 0.5 lb ai/acre, (3) bromoxynil + MCPA [Bronate] at 0.5 lb ai + 0.5 lb ae/acre, (4) 2,4-D at 0.6 lb ae/acre, and (5) 2,4-D + dicamba at 0.6 + 0.125 lb ae/acre.

Treatments were applied April 25, 2006 to 10-ft by 25-ft plots with four replications arranged as randomized complete blocks. Treatments were applied with a CO₂ backpack sprayer delivering 20 gal/acre operating at 20 psi and 3 mph. Crop injury and weed control were determined by making visual evaluations on a percentage scale.

Results and Discussion

Unfortunately broadleaf weed populations in the trial were insufficient for data collection. Visual evaluations were made at 16 days and 2 months after application and no crop injury was observed (data not shown).