

Postemergence Control of Crabgrass - 1998

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Objective

Our objective was to determine effectiveness of commercially available and experimental postemergence herbicides for crabgrass control.

Rationale

Postemergence control of crabgrass offers an option to turf managers that choose not to use preemergence herbicides for crabgrass control and on turf sites where all crabgrass plants were not controlled by the preemergence herbicide that was applied.

How It Was Done

A stand of Kentucky bluegrass turf at the Agronomy Research Center that has a known history of crabgrass invasion was selected as the site for this experiment. The turf was mowed twice each week at a height of 2 inches with clippings returned. No fertilizer was applied during the course of the experiment and the turf was irrigated to prevent any sign of drought stress. The initial date of herbicide application was 13 July and split (sequential) applications, where specified, were made on 1 Aug 1998. All herbicide treatments were applied using a three nozzle hand held boom in 2 gals of water per 1000 sq ft. Data collected were phytotoxicity to the Kentucky bluegrass turf and visual ratings of percent of the plot covered by crabgrass on 27 July, 13 Aug and 2 Sep 1997.

Results

- None of the treatments caused unacceptable phytotoxicity damage to the Kentucky bluegrass turf.
- Crabgrass cover in the untreated check ranged from 14 to 25% depending on rating date. This indicates a fairly large crabgrass population was present on the site.
- On this test site, any treatment providing 5% or less crabgrass cover on all rating dates was deemed acceptable. Several treatments provided acceptable or better postemergence control of crabgrass (Table 1).

Table 1. Crabgrass cover following the application of commercially available postemergence herbicides.

Treatment	Application rate lbs ai/A	% Crabgrass cover ^a		
		27 July	13 Aug	2 Sep
Acclaim Extra 0.57EW	0.04	1.0	1.7	1.3
Acclaim Extra 0.57EW	0.09	0.7	0.7	0.7
Acclaim Extra 0.57EW + Daconate 6 ^b	0.04 1.0	3.7	3.3	3.3
Acclaim Extra 0.57EW + Daconate 6 ^b	0.09 1.0	1.7	1.3	2.7
Acclaim Extra 0.57EW + Daconate 6 ^b	0.04 2.0	5.3	7.7	7.7
Acclaim Extra 0.57EW + Daconate 6 ^b	0.09 2.0	3.7	5.0	5.0
Daconate 6	2.0	4.7	9.3	12.3
Daconate 6	1.0	7.3	17.7	19.0
Daconate 6	2.0	15.0	11.3	10.0
Daconate 6 ^c	2.0			
Check	---	14.0	25.0	25.0
LSD (0.05)		8.5	10.4	9.9

^a Percent of plot covered by crabgrass.

^b Denotes products applied as a tank mix.

^c Denotes treatment applied as a split application with the first application made on 13 July and the second application on 1 Aug.