

## **Pre and Postemergence Control of Crabgrass - 1998**

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### **Objective**

Our objective was to determine effectiveness of commercially available and experimental pre- and 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.

### **How It Was Done**

A stand of Kentucky bluegrass turf at the William H. Daniel Turfgrass Research and Diagnostic Center was overseeded with crabgrass in Oct 1997 and 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. Preemergence herbicides were applied 22 Apr and postemergence herbicides were applied on 1 July. All herbicide treatments were applied using a three nozzle hand held boom. Preemergence herbicides were applied in 4 gal of water per 1000 sq ft and postemergence herbicides were applied 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 1 Aug and 4 Sep 1998.

### **Results**

- None of the treatments caused unacceptable phytotoxicity damage to the Kentucky bluegrass turf.
- Crabgrass cover in the untreated check was 3.0% on 1 Aug and 2.3% on 4 Sep (Table 1).
- It is difficult to interpret the results with such low coverage of crabgrass in the check plots.
- Drive 75DF appears to perform better as a postemergence herbicide than as a preemergence herbicide for crabgrass control (Table 1).

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

Treatment	Application rate lbs ai/A	Application timing <sup>b</sup>	% Crabgrass cover <sup>a</sup>	
			1 Aug	4 Sep
Drive 75DF	0.75	PRE	6.7	4.3
Drive 75DF	0.5	PRE	13.3	7.3
Drive 0.57G	0.75	PRE	11.0	8.0
Drive 0.57G	0.5	PRE	6.0	4.3
Pendulum 3.3EC	3.0	PRE	2.3	1.0
Check	---	---	3.0	2.3
Drive 75DF	0.75	3-4 leaf	0.7	0.7
+ methylated seed oil <sup>c</sup>	1.0 <sup>d</sup>			
Drive 75DF	0.5	3-4 leaf	1.0	2.0
+ methylated seed oil <sup>c</sup>	1.0 <sup>d</sup>			
Drive 0.57G	0.75	3-4 leaf	2.7	1.7
Drive 0.57G	0.5	3-4 leaf	6.0	3.7
Dimension 1EC	0.5	3-4 leaf	0.7	0.7
+ nonionic surfactant <sup>c</sup>	0.5 <sup>d</sup>			
LSD (0.05)			5.3	4.1

<sup>a</sup> Percent of plot covered by crabgrass.

<sup>b</sup> Application timing based of crabgrass growth stage where PRE = pregermination and 3-4 leaf = crabgrass at the 3 to 4 leaf stage.

<sup>c</sup> Denotes products applied as a tank mix.

<sup>d</sup> Application rate was percent volume by volume.