

## Pre and Post Emergence Crabgrass Control

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The intense weather of 1995 once again piqued interest in crabgrass control. Many regions of the state experienced crabgrass outbreaks in areas that had been quiet for several years. Preemergence grass control products were put to the test and depending when and where they were applied, many treatments failed miserably. As a result, postemergence crabgrass herbicides were enlisted in 1995 to help control crabgrass in high profile areas.

Postemergence crabgrass control is also receiving attention from agrochemical companies. Agrevo has introduced Acclaim Extra (a single isomer formulation), a product that should lessen Acclaim's potential for turf damage. Pendulum Post, a premix of Pendulum and Acclaim, will be released in 1997. This product would allow for one application per year. Treating with Pendulum Post will eliminate emerged crabgrass and provide a preemergence barrier for the remainder of the growing season. Pendulum Post will be marketed against Dimension which is currently the only product with both Pre and Post activity. BASF has renewed their interest in quinchlorac. If developed it would be sold as Drive and would add another option to postemergence crabgrass control arsenal. Demonstration plots were started at the HTRC and these products were applied to 1-3 tiller crabgrass on July 22 to evaluate their late postemergence activity (Table 1).

The crabgrass pressure in 1996 has been moderate. The spring temperatures were cool and the soil temperatures remained below the optimum germination temperature for crabgrass well into May. Once the crabgrass did germinate, the weather became dry and the explosive growth of 1995 did not repeat. Rain at the end of July was just the shot-in-the-arm that the crabgrass needed. A moist August could help to produce a second consecutive year of bumper crop seed production.

In November of 1994 a study was started at the HTRC to determine the effectiveness of applying preemergence crabgrass control products in the fall for the following year. The tremendous crabgrass pressure of 1995 resulted in most products breaking down before the end of the 1995 season. This study was expanded in the fall of 1995 to include more product rates and split applications. This year has proved to be a more typical crabgrass season and the fall applied products are performing very well (Table 2).

An additional preemergence study is being conducted at Evergreen Cemetery in April of 1996 and results will be presented at the 1997 turf conference.

**Table 1. Postemergence Crabgrass Control**

<u>TREATMENT</u>	<u>FORM</u>	<u>RATE</u> Lbsai/A	<u>% CRAB CONTROL</u> 10 DAT
Control			0
Pendulum Post	3.09 EC	2.06	67
Acclaim	1 EC	0.25	99
Acclaim Extra	0.57 EW	0.12	67
Drive (BAS 514)	75 DG	0.75	83
Dimension	1 EC	0.5	5
Control			0
LSD(p=0.05)			60

Treatments applied at 1-3 tiller crabgrass timing.

**Table 2. 1995 Late Fall Crabgrass Control**

<u>TREATMENT</u>	<u>FORM</u>	<u>RATE/A</u>		<u>% CRAB COVER</u>
		Fall	Spring	7/31/96
Control				42
Control				48
Dimension as AD445	G	0.25		12
Dimension as AD446	G	0.38		0
Dimension as AD449	G	0.5		0
Dimension as AD445+AD444	G	0.25	0.12	0
Dimension as AD445	G	0.25	0.25	0
Dimension as AD446+AD444	G	0.38	0.12	0
Dimension as AD446+AD445	G	0.38	0.25	0
Dimension as AD449+AD444	G	0.5	0.12	0
Dimension as AD449+AD445	G	0.5	0.25	0
Dimension as AD444	G		0.12	1
Dimension as AD445	G		0.25	3
Dimension as AD446	G		0.38	0
Fertilizer Blank	G	--		22
Fertilizer Blank	G		--	21
Barricade	65 WDG	0.75		0
Barricade	65 WDG		0.65	0
Barricade	65 WDG	0.5		0
Barricade	65 WDG	0.65		0
VPX-1-290	G	0.506		1
VPX-1-290	G	0.646		0
Dimension	1 EC	0.375		0
Dimension	1 EC	0.5		0
Pendulum	60 WDG	1.5		1
Pendulum	60 WDG	2.0		1
LSD(p=0.05)				16

Fall treatments were applied on 11/20/95, spring treatments were applied on 4/22/96.