

**Albaugh quinclorac comparison**  
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**Background/Objective:** To determine if different formulations of quinclorac have comparable efficacy.

**Site Information**

<b>Location:</b>	William H. Daniel Research and Diagnostic Center
<b>Soil Type:</b>	Starks-Fincastle silt loam
<b>Soil pH:</b>	7.2
<b>Turfgrass Species:</b>	Kentucky bluegrass blend
<b>Turf Condition:</b>	good
<b>Turf Management:</b>	<b>Mowing Height in:</b> 1
	<b>Fertilization:</b> 1 lb N/M/YR
	<b>Irrigation:</b> To prevent moisture stress
<b>Testing on Site Previous Year:</b>	none
<b>Target Pest:</b>	Crabgrass ( <i>Digitaria</i> sp.)
<b>Growth Stage:</b>	4 leaf and 3 tiller

**Application Information**

<b>Application Date:</b>	20 Jun	11 Jul
<b>Application Time:</b>	9:00am	9:30am
<b>Air Temperature F<sup>o</sup>:</b>	73	94
<b>Relative Humidity(%):</b>	52	76
<b>Wind Speed mph:</b>	1	1
<b>Soil Temperature(3 in depth) F<sup>o</sup>:</b>	70	73
<b>Soil Moisture:</b>	moist	moist
<b>Spray Volume gal 1000 ft<sup>-2</sup>:</b>	2	
<b>Spray Pressure:</b>	30psi	
<b>Spray Nozzle:</b>	8001.5	
<b>Spray Equipment:</b>	CO <sub>2</sub> backpack	
<b>Irrigation After Application:</b>	None	
<b>Experimental Design:</b>	Randomized complete block	
<b>Replications:</b>	3	
<b>Plot Size ft:</b>	5 X 5	

**Results:**

- Crabgrass pressure on the experimental area was intense because of intentionally low-mowed and under-fertilized turf. In spite of this, control from the quinclorac-containing products was very acceptable especially with 3-leaf stage applications. Sequential applications would have likely improved the control of all applications, but were outside the scope of this study. Barricade was included in all treatments to limit germination after the postemergence herbicide was applied and give a more accurate measurement of control.
- There was no difference in control among the treatments applied at the 3-leaf stage with the expected exception of Barricade applied by itself.
- Similarly with the 4-tiller stage applications, there was no difference in control among the treatments with the exception of Barricade applied by itself.
- Phytotoxicity was not observed at anytime during this study.
- The Albaugh formulation of Quinclorac 4SC provided equivalent control to Drive 75DF in this study.

**Table 1.** Percent cover<sup>a</sup> of crabgrass after application of various pre and postemergence herbicides.

Treatment	Rate of application	Application timing <sup>b</sup>	16 Jul	24 Jul	29 Jul	8 Aug
	a.i./A					
Quinclorac 4SC	0.75	4L	3	5	6	14
Barricade 4F	0.65					
Drive 75DF	0.75	4L	2	3	5	7
Barricade 4F	0.65					
Quinclorac 4SC	0.75	4L	2	5	5	10
MSO	1.5 <sup>c</sup>					
Barricade 4F	0.65					
Drive 75DF	0.75	4L	2	3	3	9
MSO	1.5 <sup>c</sup>					
Barricade 4F	0.65					
Barricade 4F	0.65	4L	18	47	37	47
Check		4L	33	65	70	72
Quinclorac 4SC	0.75	3T	10	5	15	27
Barricade 4F	0.65					
Drive 75DF	0.75	3T	9	3	7	19
Barricade 4F	0.65					
Quinclorac 4SC	0.75	3T	12	4	7	22
MSO	1.5 <sup>c</sup>					
Barricade 4F	0.65					
Drive 75DF	0.75	3T	6	4	4	15
MSO	1.5 <sup>c</sup>					
Barricade 4F	0.65					
Barricade 4F	0.65	3T	35	65	75	80
Check		3T	33	62	67	88
LSD (0.05)			14	24	20	20

<sup>a</sup> Cover is percent of the plot area covered by crabgrass.

<sup>b</sup> Application timing: 4L is 4 leaf stage of growth with application 20 Jun and 3T is 3 tiller stage of growth with application 11 Jul.

<sup>c</sup> Rate of application was pints per acre.