

2006 Gowan Nutsedge Study
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Objectives:

The objective of this study was to compare Sledge Hammer (halosulfuron) to Basagran (bentazon) for yellow nutsedge control in Kentucky bluegrass turf.

Materials and Methods:

The study was conducted at Terrace Hills golf course east of Des Moines, Ia in a Kentucky bluegrass rough area. Treatments are listed in table 2. The first treatment was made on 6/2/06. It was 82 F and the area was relatively dry. Plots were 5 X 5 ft=25 ft² each. The study was conducted as a randomized complete block with 3 replications. The yellow nutsedge population was well dispersed through the area. The control averaged 115 yellow nutsedge in a 25 ft² plot. The SledgeHammer was applied with 0.25% V/V nonionic surfactant (X-77).

Results:

A count of nutsedge was made on 6/22 and % cover of nutsedge was made on 7/21. There were no statistically significant results from the initial treatment, although numerically the SledgeHammer at the 1.33 oz/A rate had the greatest effect. The summer of 2006 was very dry and hot and weather conditions were likely responsible for the lack of significant results from the first treatment.

A second application was made to the study area on 8/4/06. At this time, the area had received sufficient rain and the turf and weeds were growing normally. Phytotoxicity ratings on the nutsedge was made on 8/11, followed by final counts of nutsedge on 8/26. The Basagran and the highest rate of SledgHammer were both observed to be damaging nutsedge at 7 days after treatment. The final count showed that all SledgHammer treatments significantly reduced nutsedge at all rates with the highest rate 1.33 oz/A being the most effective. That treatment reduced nutsedge by 88% (5 weeds/plot vs 40 weeds/plot in the control). Basagran did not significantly reduce nutsedge as compared to the control.

			Count 6/22	% Cover 7/21	Phyto on weeds 8/11	Count 8/26
	Treatments	Rate				
1.	SledgeHammer	0.5 oz/A	66	15	9	19
2.	SledgeHammer	0.66 oz/A	55	13	9	18
3.	SledgeHammer	1.0 oz/A	51	20	9	12
4.	SledgeHammer	1.33 oz/A	32	8	7	5
5.	Basagran	.75 oz/1000 ft ²	56	16	4	25
6.	Control	-	115	30	9	40
	LSD 0.05		NS	NS	2	19