

Stop #4b: Postemergence control of *Oxalis* in Bermudagrass Turf

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Objectives:

This study was conducted to evaluate and determine the potential of various herbicides to control yellow woodsorrel (*Oxalis stricta*) postemergence in bermudagrass turf maintained as a golf course fairway or athletic field.

Materials and Methods:

The study was conducted on mature 'GN-1' bermudagrass turf mowed 3 days/wk at 0.5 inches. Soil was a Hanford fine sandy loam. Turf received no fertilizer in 2017 before the study began. Herbicide treatments were applied on 24 August 2017 using a CO₂-powered bicycle sprayer with TeeJet 8003VS nozzles calibrated to deliver 1 gal/1000 ft². Experimental design was a randomized block with 3 replications. Plot size was 7 ft x 10 ft with 4-ft alleys. Plots were evaluated for turf quality, injury to turf and *Oxalis* caused by treatments, and *Oxalis* cover at 4 days, one week, and every two weeks after application.

Results:

Triplet SF, NUP-17033, NUP-16011 and 4speedXT caused a significant decrease in turf quality compared to untreated control 4 days after application and persisted up to one week after spraying (Table 2). Turf recovered from herbicides one week after application except for NUP-16011 and 4speedXT. One week after application, injury to *Oxalis* was greatest from Monument and NUP-16011; however, the extent of *Oxalis* control could not yet be determined for this report.

Acknowledgments:

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Table 1. Treatment list for Oxalis herbicide study. Riverside, CA. 2017.

No.	Treatment	Rate	
		oz/A	g/A
1	Untreated Control	-	-
2	Triplet SF	48	-
3	NUP-17033	48	-
4	NUP-16011	28	-
5	4speedXT	48	-
6	Monument NIS	- 0.25% v/v	15
7	Tribute Total NIS	3.2 0.25% v/v	-

Plot Plan:

12 G 1 E Plot Plan

↑N

101 Trt 2
102 Trt 6
103 Trt 1
104 Trt 4
X
106 Trt 3
107 Trt 5
108 Trt 7

201 Trt 2
202 Trt 4
203 Trt 3
204 Trt 5
205 Trt 7
206 Trt 1
207 Trt 3
208 Trt 6

301 Trt 4
302 Trt 5
303 Trt 1
304 Trt 2
305 Trt 6
306 Trt 7
X
X

Table 2. Effect of herbicides on turf quality, oxalis cover and injury caused by treatments.

No.	Treatment	Turf quality [1-9] 08/27/2017		Turf quality [1-9] 09/01/2017		Oxalis cover [%] 08/27/2017		Oxalis cover [%] 09/01/2017		Oxalis Injury [%] 09/01/2017		Turf Injury [%] 09/01/2017	
1	Untreated Control	5.3	A	6.3	A	37	A	33	A	0	B	2	BC
2	Triplet SF	4.0	BCD	4.0	CD	23	A	27	A	25	AB	13	B
3	NUP-17033	3.7	CD	4.7	BC	30	A	22	A	25	AB	13	BC
4	NUP-16011	3.0	D	3.0	D	38	A	35	A	33	A	28	A
5	4speedXT	3.0	D	3.0	D	35	A	33	A	30	AB	27	A
6	Monument + NIS	5.0	AB	6.3	A	28	A	32	A	40	A	1	C
7	Tribute Total + NIS	4.3	ABC	5.7	AB	30	A	28	A	28	AB	7	BC

Means followed by the same letter in a column are not significantly different ($P \leq 0.05$).