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2008 Yellow Nutsedge Control Trial

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Abstract
The objective of this study was to observe the effectiveness of Sedgehammer 75WDG (Halosulfuron) and Dismiss 4F (Sulfentrazone) on yellow nutsedge (Cyperus esculentus) control. It was conducted at the Iowa State University turfgrass research area in a non-irrigated area of mixed grass species that contained a high population of yellow nutsedge. The Sedgehammer was combined with the X77 surfactant at 0.25% v/v. No surfactant was used with the Dismiss. Plots measured 5 × 5 ft for a total of 25 ft^2 and the study was replicated three times. Treatments were applied in the equivalent of three gallons of water/1000 ft^2.

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Introduction

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Data were collected on phytotoxicity to grass on the site on June 9 (Table 1). The Sedgehammer had no detrimental effect on the grass, although Dismiss did cause some initial phytotoxicity. Phytotoxicity on nutsedge was rated from June 6 to June 27 to observe the progressive effects of the herbicides on the sedge. Dismiss had the most effect on sedge initially, although the damage from Sedgehammer developed more slowly (Table 1). Final sedge counts were made on July 3 (Table 1). All treatments significantly reduced sedge counts as compared with the untreated control. However, control was not as good as observed with these materials in studies conducted in previous years, which was likely due to the very wet conditions during the trial.

Table 1. Phytotoxicity on grass and sedge, and final sedge counts during the 2008 yellow nutsedge trial.

		Phyto to grass	Phytotoxicity on Sedge							Sedge Count
Product	Rate/A	6/9	June 6	June 9	June 12	June 14	June 17	June 21	June 27	7/3
Control	-	0	0	0	0	0	0	0	0	80
Sedgehammer	1 oz	0	3	3	3	2	13	16	20	54
Sedgehammer	1.33 oz	0	3	2	8	7	17	18	20	23
Dismiss	8 oz	22	40	20	35	75	90	95	83	8
LSD (0.05)		3	6	6	9	7	7	4	14	21

All phytotoxicity ratings were made on a scale of 0 to 100, where 0 is no damage and 100 is dead plants.