

Canada Thistle and Horsenettle Control in Cool-Season Pastures

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smooth brome, and Kentucky blue. Grasses were 6–12 inches tall. Canada thistle was 4–24 inches tall with numerous leaves. Growth stage was vegetative to reproductive. Horsenettle was 4–12 inches tall with numerous leaves.

Introduction

The purpose of this study was to evaluate herbicides for Canada thistle and horsenettle control in a cool-season pasture.

Materials and Methods

A randomized complete block design with four replications was used. Herbicides were applied in 20 gallons of water/acre. Visual estimates of percentage weed control were made three times following treatment. These observations are compared with an untreated control and made on a 0–100 rating scale (0% = no control; 100% = complete control).

Herbicide treatments were applied on July 2, 2001, to a grass pasture mixture of orchard,

Results and Discussion

Summarized in Table 1 are the results of the study. Grazon P+D, Redeem R&P, Hi-Dep and Banvel provided good to excellent Canada thistle control when observed on July 26 and August 23, twenty-four and forty-seven days after treatment, respectively. On September 28, Grazon P+D and Banvel at 2 pints/acre continued to give 91% or better control. Weedone LV4 did not effectively control Canada thistle when observed on September 28. Horsenettle control was 90% or better with Grazon P+D and Banvel on the three evaluation dates. No other herbicide gave acceptable control of this species.

Table 1. Evaluation of herbicides for Canada thistle and horsenettle control in a cool-season pasture at the McNay Research and Demonstration Farm, Chariton, IA, 2001.

Treatment	Rate Product/acre	Appl time	Canada thistle			Horsenettle		
			July 26	Aug 23	Sep 28	July 26	Aug 23	Sep 28
			----- (% weed control) -----					
Control	–	–	0	0	0	0	0	0
Grazon P+D 2.5SL + NIS ^a	2.0 pt + 0.25 % v/v	POST	96	92	91	93	92	92
Grazon P+D 2.5SL + NIS	3.0 pt + 0.25 % v/v	POST	98	93	91	92	97	97
Redeem R&P 3SL + NIS	1.5 pt + 0.25 % v/v	POST	96	88	81	70	68	67
Redeem R&P 3SL + NIS	2.0 pt + 0.25 % v/v	POST	98	92	89	71	70	70
Weedone LV4 3.8EC + NIS	2.0 pt + 0.25 % v/v	POST	78	76	69	23	20	20
Hi-Dep 3.8 SL + NIS	2.0 pt + 0.25 % v/v	POST	93	86	81	70	66	66
Banvel 4SL + NIS	2.0 pt + 0.25 % v/v	POST	97	95	93	95	90	90
Banvel 4SL + NIS	4.0 pt + 0.25 % v/v	POST	98	92	86	98	97	97
LSD (0.05)			26	10	14	13	30	30

^a NIS = Activator 90, a nonionic surfactant penetrant from Loveland Industries.