

Project Title: Alfalfa Weed Control with Prowl H2O

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Objective: To evaluate postemergence applications of Prowl H2O for weed control and crop safety in alfalfa.

Results:

This study was conducted to evaluate postemergence applications of ProwlH2O for weed control and crop tolerance in established alfalfa. Roundup Ready alfalfa (cv. DKA41-18RR) was planted on May 9, 2006. Treatments included two rates of ProwlH2O applied alone, applied as a tank-mix with Raptor, Pursuit and Roundup Weather Max, and an untreated check. The herbicides were applied on April 23, 2007 using a backpack sprayer with Teejet XR11002 nozzles in 20 GPA. The alfalfa plants were about 2 inches with 6-7 trifoliate leaves at application.

Weed populations were minimal, which prevented an assessment of herbicide efficacy. However, the alfalfa stand was uniform, thereby allowing for an evaluation of crop tolerance by the herbicide treatments. All treatments demonstrated excellent crop tolerance. Visual injury symptoms were minimal to nonexistent. In addition, first cutting alfalfa yields failed to show any difference among the treatments.

Summary:

These results demonstrate that Prowl H2O can be applied postemergence to alfalfa without fear of crop injury.

Table 1. Effects of Prowl H2O and tank-mix partners on alfalfa injury and first cutting yield, and weed biomass.

Treatment	Conc	Type	Rate lb ai/ac	Chlorosis (%)			Necrosis (%)			Stunt (%)			Hay	Weed
				4/30/07	5/7/07	5/14/07	4/30/07	5/7/07	5/14/07	4/30/07	5/7/07	5/14/07	Ton/A 6/15/07	
Prowl H2O	3.8	CS	1.66	0	0	0	0	0	0	0	0	0	2.0	0
Prowl H2O	3.8	CS	2.85	1.7	0	0	0	0	0	0	0	0	1.9	0.005
Prowl H2O	3.8	CS	1.66	4.0	1.7	0	0	0	0	0	0	0	2.2	0
Raptor	1	EC	0.0312											
Prowl H2O	3.8	CS	1.66	3.3	0	0	0	0	0	0	0	0	1.9	0
Pursuit DG	70	WDG	0.048											
Prowl H2O	3.8	CS	1.66	0	0	0	0	0	0	0	0	0	2.0	0
Roundup	4.5	EC	1.5											
W.Max														
Untreated				0	0	0	0	0	0	0	0	0	2.2	0
LSD (P=.05)				4.39	2.14	0	0	0	0	0	0	0	0.35	0.01
CV				161.02	424.26	0	0	0	0	0	0	0	9.56	424.26
Treatment F				1.69	1.00	0	0	0	0	0	0	0	1.72	1.00
Treatment Prob(F)				0.23	0.47	1	1	1	1	1	1	1	0.22	0.47

Roundup W. Max: Roundup Weather Max.