

Weed Control in Dry Pea with Preemergence Burndown Herbicide Combinations.

A trial was conducted to evaluate preemergence herbicide options for weed control in dry pea. Dry pea were planted on April 28, 2021. Herbicide treatments were applied on May 6. Dry pea emerged on May 17. All treatments included glyphosate and were compared with glyphosate alone and an untreated control (no herbicide). There were few weeds present at time of application. Wild buckwheat control was best with sulfentrazone + metolachlor (Spartan Elite) and with sulfentrazone plus saflufenacil (Spartan + Sharpen). Kochia control was reduced only with the pyroxasulfone + sulfentrazone (Authority Edge) and carfentrazone (Aim) alone. Dry pea yield was highest with the Spartan Elite, Spartan Charge, Sharpen, and Anthem Flex treatments.

Treatment ^{ab}	Rate	Wild buckwheat	Kochia	Height	Stand	Yield
	oz/A	———— % control ————	————	cm	No./m ²	LB/A
1 Authority Supreme Aim Roundup PowerMax	5.8 1 0.77	50 bc	100 a	30 -	52 bcd	507 bcd
2 Spartan Elite Aim Roundup PowerMax	19 1 0.77	99 a	98 ab	31 -	51 bcd	709 a
3 Spartan Charge Roundup PowerMax	3.75 0.77	75 ab	100 a	31 -	58 a	709 a
4 Sharpen Roundup PowerMax	2 0.77	76 ab	95 ab	31 -	44 e	604 ab
5 Spartan Sharpen Roundup PowerMax	2.28 2 0.77	100 a	100 a	30 -	52 bcd	534 bc
6 Authority Edge Aim Roundup PowerMax	4.4 1 0.77	55 bc	80 bc	30 -	57 ab	509 bc
7 Anthem Flex Aim Roundup PowerMax	4 0.47 0.77	21 cd	100 a	31 -	50 cde	713 a
8 Roundup PowerMax Aim	0.77 1	29 cd	64 c	29 -	55 abc	518 bc
9 Roundup PowerMax	0.77	0 d	0 d	29 -	51 bcd	446 cd
10 Untreated		0 d	0 d	29 -	48 de	361 d
LSD P=.10		35.6	17.1	1.9	6.0	147.0
Treatment Prob(F)		0.0001	0.0001	0.1174	0.0196	0.0029

^a Authority Supreme, pyroxasulfone (2.08 lb/gal) plus sulfentrazone 2.08 lb/gal); Aim, carfentrazone (2 lb/gal); Roundup PowerMax, glyphosate (4.5 lb/gal); Spartan Elite, sulfentrazone (0.7 lb/gal) plus metolachlor (6.3 lb/gal) Spartan Charge, sulfentrazone (3.15 lb/ga) plus carfentrazone (0.35 lb/gal); Spartan, sulfentrazone (4 lb/gal); Sharpen, saflufenacil (2.85 lb/gal); Authority Edge, pyroxasulfone (1.52 lb/gal) plus sulfentrazone (2.73 lb/gal); Anthem Flex, carfentrazone (0.267 lb/gal) plus pyroxasulfone (3.733 lb/gal).

^bAll treatments included ammonium sulfate (AMS), 8.5 lb/100 gal and Methylated Seed Oil (MSO), 1% v/v.