Evaluation of weed control and dry pea tolerance to different Basagran:Raptor ratios

The objective of this study was to compare different ratios of Basagran:Raptor combinations for dry pea tolerance and weed control. Basagran and Raptor were evaluated alone and as a tank mix with Basagran at four rates and Raptor always at 4 fl oz. Redroot pigweed was 0.5-1.0 inch with 25 plants/ft². Wild buckwheat was cotyledon to 2-leaf with 2 plants/ft². Common lambsquarters was 0.5-1.0 inch with 2 plants/ft². Treatments were applied on June 2 to 5- to 6-inch peas. Raptor caused moderate to severe crop injury within 2 weeks after treatment. Raptor injury was visible as chlorosis and stunting. However, by mid-July the crop recovered and the injury was no longer distinguishable from other treatments. Crop injury from Basagran:Raptor combinations caused 8% injury or less 2 weeks after treatment. No injury was visible with the combinations 4 weeks after treatment. The treatments provided similar weed control. All combinations of Basagran:Raptor provided excellent control of all weeds. Raptor and Basagran alone provided excellent control of pigweed and lambsquarters, but about 82% control of wild buckwheat. It should be noted that we believe wild buckwheat control was good to excellent due to the small weed size at application. Previous research has shown poor wild buckwheat control when it is larger than 2-leaf.

Table. Evaluation of weed control and dry pea tolerance to different Basagran:Raptor ratios. (1037)

		Weed Control ^c					Dry pea						
		Rrpw		Wibw		Colq		Injury				Yield	TW
ah		Jun	Jul	Jun	Jul	Jun	Jul	Jun	Jun	Jul	Jul	Aug	Aug
Treatment ^{ab}	Rate	9	6	9	6	9	6	9	16	3	14	6	6
		%%						%				lb/A	lb/bu
Untreated		0	0	0	0	0	0	0	0	0	0	4018	65.2
Raptor	4 oz	91	99	80	83	88	99	23	42	19	0	3806	64.7
Basagran	24 oz	97	99	88	82	97	99	3	3	0	0	3674	65.0
Basgran + Raptor	16 oz + 4 oz	95	99	90	96	97	99	6	8	0	0	4220	65.1
Basgran + Raptor	21 oz + 4 oz	97	99	91	96	97	99	4	7	0	0	4012	65.7
Basgran + Raptor	24 oz + 4 oz	97	99	92	99	98	99	4	6	0	0	3926	65.2
Basgran + Raptor	28 oz + 4 oz	97	99	92	99	97	99	4	5	0	0	4181	65.3
BAS 762	24 oz	97	99	91	96	97	99	4	5	0	0	4060	65.4
LSD (0.05)		4	NS	3	3	1	NS	1	2	1	NS	NS	NS
CV		3	0	2	2	1	0	13	15	35	0	10	1

^aAll treatments applied to 5- to 6-inch peas

^bAll treatments applied with COC + 28% N (1% + 2%).

^cRrpw=Redroot pigweed; Wibw=Wild buckwheat; Colq=Common lambsquarters