

Study Name: Comparison of PRE and POST weed control options in dry pea (0731)

Objectives: Compare PRE and POST herbicides for weed control in dry pea

Results:

Very little crop injury was observed from Prowl, Spartan, or Sencor. The tank mix of Basagran + Poast + Raptor did cause moderate dry pea injury (~20%) about two weeks after treatment (WAT). This crop injury was mostly in the form of stunting with some short-lived chlorosis. By 4 WAT, crop injury was slightly lower at 8-14% on July 8. For weed control, the soil-applied herbicides (Prowl, Spartan, Sencor) followed by Assure II did not control weeds as effectively as the POST treatment of Basagran + Poast + Raptor. However, weed pressure in the trial was low and the weeds were not overly competitive with the crop, although the untreated check yielded slightly lower. Even though the Basagran + Poast + Raptor treatments provided slightly better weed control, their yields tended to be lower, likely due to the moderate crop injury they caused shortly after application.

Treatment ^{ab}	Rate	Timing	Dry Pea		Wibw ^c		Rrpw ^c		Grft ^c		Dry Pea			
			% injury		-----% control-----								Yield lb/A	Test lb/bu
			Jun 21	Jul 8	Jun 21	Jul 8	Jun 21	Jul 8	Jun 21	Jul 8	Jun 21	Jul 8		
Prowl H2O / Basagran + Poast + Raptor	3pt / 2pt + 1pt + 2oz	PRE / POST	21	12	94	93	99	99	94	94	2675	65.5		
Spartan / Basagran + Poast + Raptor	4fl oz / 2pt + 1pt + 2oz	PRE / POST	21	11	95	93	99	99	91	91	2867	65.8		
Prowl H2O / Basagran + Poast + Raptor	3pt / 0.39pt + 0.21pt + 4oz	PRE / POST	22	8	96	92	99	99	99	96	2570	65.7		
Basagran + Poast + Raptor	2pt + 1pt + 2oz	POST	20	14	93	89	97	98	93	90	2677	66.3		
Prowl H2O / Assure II	3pt / 8fl oz	PRE / POST	6	5	63	57	79	75	81	73	2723	65.7		
Spartan + Prowl H2O / Assure II	4fl oz + 3pt / 8fl oz	PRE / POST	5	3	90	91	89	88	80	78	2937	65.8		
Spartan + Sencor / Assure II	4fl oz + 0.25lb / 8fl oz	PRE / POST	3	3	82	85	80	75	71	70	2814	66		
Untreated Check			0	0	0	0	0	0	0	0	2350	65.7		
LSD (0.05)			5.6	7.4	9.9	7.9	6.8	8	4.8	9.9	238.5	NS		
CV			26	61	7.4	6	4.8	5.8	3.6	7.6	5	0.6		

^a Glyphosate applied PRE to all treatments (24 fl oz of 4.5 lb ae formulation)

^b Basagran + Poast + Raptor treatments applied with 28% N + COC (1 qt + 1%). Assure II applied with COC (1%).

^c Wibw = Wild buckwheat; Rrpw = Redroot pigweed; Grft = Green foxtail