

Title: Herbicide Performance in Peas - 2016

Objective: To evaluate the efficacy of Dual II containing products for weed control in peas.

Materials and Methods:

Seven herbicide treatments were evaluated for weed control and crop safety in peas. The experimental design was a randomized complete block with three replications. The herbicide treatments were applied preplant and then double incorporated with a field cultivator on April 12. Hi-line peas were planted on six inch row spacings, to a depth of three inches on April 21, at a rate of 220 lb/A. Foxtail, canola, wild buckwheat and common lambsquarters were seeded in the center of each plot on April 21.

Results:

No crop injury was observed. The most complete weed control was observed with Pursuit plus Prowl. The other treatments failed to provide adequate control of volunteer canola, which was the main weed present. Yield differences were significant at the 10% level of significance.

Summary:

Overall, the products containing Dual II did not perform as well as Pursuit plus Prowl H2O.

Table 1. Materials and Methods.

Seeding Date:	4/21/2016	Harvest Date:	8/17/2016
Julian Date:	112	Julian Date:	230
Seeding Rate:	220 lb/A	Soil Type:	Creston SiL
Previous Crop:	Barley	Soil Test:	116-22-250-46
Tillage:	Conventional	Fertilizer:	BC: 6-30-30

Table 2. Effect of herbicides on weed control in peas, Kalispell, MT - 2016.

Treatment	Rate	percent weed control				YLD ¹	TWT ¹
		BRARA	AMARE	THLAR	CHEAL	bu/ac	lb/bu
Check		0.0	0.0	0.0	0.0	33.9	64.1
Broadaxe XC	19 fl oz/a	23.3	95.0	94.3	96.0	61.1	64.5
Broadaxe XC + Dual II	10 fl oz/a 8 fl oz/a	0.0	95.0	93.3	95.0	42.9	65.4
Broadaxe XC	26 fl oz/a	16.7	93.3	95.0	95.0	52.4	64.7
Broadaxe XC + Dual II	10 fl oz/a 13 fl oz/a	0.0	95.0	93.3	95.0	53.9	64.8
Dual II	16 fl oz/a	0.0	95.0	88.3	95.0	37.6	64.5
Dual II	30 fl oz/a	0.0	85.0	86.7	95.0	37.0	64.7
Pursuit + Prowl H2O	3 fl oz/a 2 pt/a	75.0	96.0	96.0	96.0	87.7	63.5
Mean		14.4	81.8	80.9	83.4	50.8	64.5
CV		107.2	6.0	4.2	1.0	37.2	0.9
LSD		27.0	8.6	6.0	1.4	33.1	1.0
Pr>F		0.0004	0.0001	0.0001	0.0001	0.0584	0.0484

BRARA: canola, AMARE: redroot pigweed, THLAR: field pennycress,
CHEAL: common lambsquarters, YLD: yield, TWT: test weight.

¹ adjusted to 13% moisture.