Study Name: Dry pea tolerance to linuron, diuron, and KIH-485 (0717)

Objectives: Evaluate no-till dry pea tolerance to experimental soil-applied herbicides.

Results:
'Majoret' dry pea was seeded April 25 at 150 lb/A into 7.5-inch rows into standing stubble. Herbicide treatments were applied preemergence (PRE) on May 1. Individual plots were 10 x 30 ft and replicated three times.

The objective of this study was to determine dry pea tolerance to experimental herbicides applied PRE. All herbicides in this study are experimental and not labeled for PRE use, except for Spartan. Approximately 13 inches of rain fell in May and early June. Diuron and KIH-485 caused moderate to severe dry pea injury. Linuron and Atrazine caused minor crop injury. Diuron treatments caused a 200-800 lb/A yield reduction. KIH-485 treatments also caused a slight yield reduction. Linuron and Atrazine treatments were similar in yield to Prowl and Spartan.

		Dry pea					
		Stand[b]	----------% injury----------			Yield	Test wt.
Treatment[a]	Rate	sq ft	Jun 2	Jun 21	Jul 9	lb/A	lb/bu
Prowl H2O	2.6 pt	5.4	1	0	0	2814	65.9
Linuron + Prowl H2O	1 lb + 2.6 pt	5.3	3	3	1	2784	66.0
Linuron + Prowl H2O	1.5 lb + 2.6 pt	5.1	3	4	1	2639	65.7
Linuron + Prowl H2O	2 lb + 2.6 pt	5.2	3	8	4	2797	65.9
Diuron + Prowl H2O	1.5 lb + 2.6 pt	4.9	13	32	21	2510	65.8
Diuron + Prowl H2O	2 lb + 2.6 pt	4.1	36	48	41	2255	65.8
Diuron + Prowl H2O	2.5 lb + 2.6 pt	4.1	67	78	70	1900	65.4
Spartan + Prowl H2O	3 oz + 2.6 pt	4.8	5	7	3	2809	65.7
KIH-485 + Prowl H2O	0.15 lb ai + 2.6 pt	4.6	14	24	20	2592	65.6
KIH-485 + Prowl H2O	0.225 lb ai + 2.6 pt	5.9	18	32	27	2466	65.8
KIH-485 + Prowl H2O	0.3 lb ai + 2.6 pt	5.1	21	37	28	2346	65.4
Atrazine + Prowl H2O	0.38 lb ai + 2.6 pt	5.1	7	11	4	2738	65.6
Atrazine + Prowl H2O	0.5 lb ai + 2.6 pt	5.3	8	17	12	2788	65.5
Untreated Check		6.3	0	0	0	2426	65.6
LSD (0.05)		NS	6.1	14.1	17.7	261.2	NS
CV		19.1	25.5	39.1	63.7	6.1	0.6

[a] *All treatments applied preemergence*
[b] *Dry pea stand counts measured on June 8*