Study Name: Lentil tolerance to linuron, diuron, and KIH-485 (0716)

**Objectives:** Evaluate no-till lentil tolerance to experimental soil-applied herbicides.

## **Results:**

'Pennell' lentil was seeded May 9 at 85 lb/A into 7.5-inch rows into standing stubble. Herbicide treatments were applied preemergence (PRE) on May 11. Individual plots were 10 x 30 ft and replicated three times.

The objective of this study was to determine lentil tolerance to experimental herbicides applied PRE. None of the treatments in this study are labeled for use, including Prowl applied PRE. Approximately 13 inches of rain fell in May and early June. Severe lentil injury was observed in June with most treatments. Lentil recovered significantly by mid-July in Prowl and Linuron treatments. The study was not harvested due to heavy late-season weed pressure. None of the treatments provided acceptable weed control.

Treatment	Rate	Timing	Lentil	
			Jun 21	Jul 9
			% injury	
Prowl H2O	2.6 pt	PRE	34	8
Linuron + Prowl H2O	1 lb + 2.6 pt	PRE	39	11
Linuron + Prowl H2O	1.5 lb + 2.6 pt	PRE	44	13
Linuron + Prowl H2O	2 lb + 2.6 pt	PRE	47	17
Diuron + Prowl H2O	1.5 lb + 2.6 pt	PRE	71	43
Diuron + Prowl H2O	2 lb + 2.6 pt	PRE	82	54
Diuron + Prowl H2O	2.5 lb + 2.6 pt	PRE	86	71
KIH-485 + Prowl H2O	0.15 lb ai + 2.6 pt	PRE	62	30
KIH-485 + Prowl H2O	0.225 lb ai + 2.6 pt	PRE	62	33
Prowl H2O	2.6 pt	PRE	32	5
Prowl H2O	2.6 pt	PRE	43	5
Linuron	1 lb	PRE	10	5
Diuron	2 lb	PRE	58	39
KIH-485	0.15 lb ai	PRE	27	17
Untreated Check			0	0
LSD (0.05)			12.8	22.9
CV			16.5	58.3