Study Name: Evaluation of lentil tolerance to BAS 800 applied same day as planting (0706)

**Objectives:** Evaluate lentil tolerance to BAS 800 applied 0 DPP (days prior to planting)

## Results:

Prowl H2O + glyphosate were applied after planting to reduce weed competition. Approximately 13 inches of rain fell in May and June, which resulted in abnormally high lentil injury from Prowl. In June evaluations, we observed approximately 30% crop injury from Prowl that was applied 3 days after planting. BAS 800 caused severe crop injury, which may have been exacerbated by the presence of Prowl. In study 0707, BAS 800 alone (2.85 fl oz) caused only 16% lentil injury. However, in this study (0706), BAS 800 + Prowl caused as much as 81% lentil injury. We observed a similar phenomenon in 2004 where Spartan (another PPO inhibitor like BAS 800) was tank mixed with a Group 3 herbicide such as Prowl or Sonalan, which caused more injury than when the herbicides were applied separately.

			Lentil		
			% injury		
Treatment <sup>a</sup>	Rate	Timing	Jun 9	Jun 21	Jul 11
Prowl H20 + Glyphosate	2.6pt + 0.75lb	PRE	28	30	15
Roundup Original + Agridex / Prowl H20 + Glyphosate	32fl oz + 1% <b>/</b> 2.6pt + 0.75lb	0 DPP / PRE	30	30	15
BAS 800 03H + Roundup Original + Agridex /	2.85fl oz + 32fl oz + 1% /	0 DPP /	0.4	22	00
Prowl H20 + Glyphosate	2.6pt + 0.75lb	PRE	81	80	60
BAS 800 03H + Roundup Original + Agridex /	5.7fl oz + 32fl oz + 1% /	0 DPP /			
Prowl H20 + Glyphosate	2.6pt + 0.75lb	PRE	94	94	87
LSD (0.05)			5	5.7	10.4
CV			4.29	4.91	11.78

<sup>&</sup>lt;sup>a</sup> All treatments applied with AMS at 2.5g/100g