Evaluation of barley variety sensitivity to Beyond carryover

The objective of the study was to evaluate barley variety sensitivity to Beyond carryover from the previous year. In 2010, Beyond was applied postemergence to Clearfield lentil at 2, 3, 4, 6, and 8 fl oz. Tradition, Celebration, Pinnacle, and Conlon were planted in 2011 into the treated blocks. Each variety was evaluated for visual injury, height, yield, test weight, and percent plump and thin. All Beyond rates were compared to an untreated. No visual injury was observed with any treatment. There were no differences between treatments for height, yield, test weight, or percent plump and thin. Excessive rainfall flooded out the Conlon block, so no data is presented for Conlon. This study was also conducted by Vision Research (Berthold) with similar results.

Table 1. Evaluation of barley variety sensitivity to Beyond carryover. (1111)

		Barley										
		Visual injury							Height			
		Trad	ition	Celebration		Pinnacle		Tradition	Celebration	Pinnacle		
Treatment ^{ab}	Rate	14-Jul	4-Aug	14-Jul	4-Aug	14-Jul	4-Aug	5-Aug				
				9	cm							
Untreated		0	0	0	0	0	0	92.2	101.6	91.7		
Beyond	2 fl oz	0	0	0	0	0	0	88.8	102.5	91.7		
Beyond	3 fl oz	0	0	0	0	0	0	89.3	99.3	91.8		
Beyond	4 fl oz	0	0	0	0	0	0	92.6	102.8	93.5		
Beyond	6 fl oz	0	0	0	0	0	0	89.9	102.8	93.3		
Beyond	8 fl oz	0	0	0	0	0	0	91.6	100.4	90.5		
LSD (0.05)		NS	NS	NS	NS	NS	NS	NS	NS	NS		
CV		0	0	0	0	0	0	4	2	3		

^aAll treatments applied postemergence to Clearfield lentil in 2010 with NIS (0.25%) + 28% N (2.5%)

Table 2. Evaluation of barley variety sensitivity to Beyond carryover. (1111)

		Barley											
		Tradition		Celebration		Pinnacle		Tradition		Celebration		Pinnacle	
Treatment ^{ab}	Rate	Plump	Thin	Plump	Thin	Plump	Thin	Yield	TW	Yield	TW	Yield	TW
		%						bu/A	lb/bu	bu/A	lb/bu	bu/A	lb/bu
Untreated		87.5	3.6	93.3	6.6	94.8	2.7	79.7	44.8	78.8	42.0	72.8	43.1
Beyond	2 fl oz	88.1	3.7	93.6	6.3	94.3	2.6	73.0	44.2	83.1	42.8	79.0	43.9
Beyond	3 fl oz	84.3	5.1	89.3	6.5	96.7	2.1	70.5	43.6	77.6	42.1	75.8	43.9
Beyond	4 fl oz	81.6	5.8	94.7	5.2	96.4	2.4	85.2	44.3	81.4	42.8	80.3	43.9
Beyond	6 fl oz	82.5	5.2	94.6	5.4	94.5	2.5	79.2	44.0	87.7	42.3	78.6	43.6
Beyond	8 fl oz	84.3	5.5	95.7	4.2	93.5	2.8	78.8	43.4	82.5	42.7	76.8	44.4
LSD (0.05)		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
CV		5	34	3	34	2	23	8	2	7	2	6	2

^aAll treatments applied postemergence to Clearfield lentil in 2010 with NIS (0.25%) + 28% N (2.5%)