Weed control and barley tolerance with Axial Star

The objective of the study was to evaluate barley tolerance to Axial Star as well as control of broadleaf weeds. Axial Star is a premix of Axial + Starane. Axial Star was tank mixed with various standard broadleaf herbicides. We also evaluated barley tolerance to Group 2 herbicides (GoldSky, Everest, and Rimfire Max). Axial Star tank mixes caused minimal barley injury. GoldSky, Everest, and Rimfire caused severe injury to barley soon after application (chlorosis, stunting). Barley maturity was delayed in these treatments and reduced yield only slightly. They did not cause enough injury that they could be relied upon to provide volunteer barley control in a wheat crop. Most treatments provided good to excellent control of common mallow, wild buckwheat, and redroot pigweed. It should be noted that the barley crop was very competitive and that weed density was generally low.

Table. Weed control and barley tolerance with Axial Star. (1110)

Table. Weed control and b	,	Barley			Weed Control ^c						Barley	
		Injury			Coma		Wibw		Rrpw		Yield	TW
Treatment ^b	Rate	25-Jun 8-Jul 22-Jul		8-Jul	22-Jul	8-Jul	22-Jul	8-Jul	22-Jul	15- <i>A</i>	∖ug	
		%%								bu/A	lb/bu	
Untreated		0	0	0	0	0	0	0	0	0	69.6	42.2
Orion + Axial Star	17 fl oz + 1.03 pt	8	4	0	95	95	99	99	98	98	74.8	42.9
Affinity TM + Axial Star	0.60 oz + 1.03 pt	3	1	0	95	95	99	99	99	99	72.5	42.5
Affinity BS + Axial Star	0.4 oz + 1.03 pt	4	2	0	95	95	99	99	99	99	72.1	42.4
Bronate Adv. + Axial Star	0.6 pt + 1.03 pt	3	2	0	87	86	99	99	93	93	74.6	43.2
Huskie + Axial Star + AMS	11 fl oz + 1.03pt + 1.5%	1	1	0	93	93	99	99	99	99	76.3	42.3
Wolverine	1.7 pt	0	0	0	91	90	99	99	99	99	71.8	41.9
Goldsky + NIS	1 pt + 0.25%	63	52	21	93	95	99	99	99	99	55.7	39.7
Everest 2.0 ^a	0.75 oz	62	55	22	79	63	99	99	99	99	59.6	40.0
Rimfire Max ^a	3 oz	57	40	18	85	88	99	99	97	99	69.5	40.8
LSD (0.05)		3	7	1	5	8	NS	NS	6	6	7.7	1.4
CV		8	25	12	4	6	0	0	4	4	6	2

^aApplied with Basic Blend (1%); Bronate (1 pt) applied 7 days after POST treatment

^bAll treatments applied to 5- 5.5-leaf barley

^cComa=Common mallow; Wibw=Wild buckwheat; Rrpw=Redroot pigweed