

2011 BASF Clearfield Spring Wheat Trial

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'ND901CL' HRSW was seeded no-till on May 9. Treatments were applied on June 8 to 4 leaf wheat and to 2 leaf volunteer RR canola (vcan), 1 inch kochia (kocz), 1 inch Russian thistle (ruth), 1 inch common mallow (cmal), 4 inch wild buckwheat (wibw) and tillering Japanese brome (jabr) with 45° F, 91% RH, cloudy sky and north wind at 10 mph. Treatments were applied with a tractor mounted CO₂ propelled plot sprayer delivering 10 gpa at 30 psi through PK-01E80 nozzles to a 5 foot wide area the length of 10 by 28 foot plots. The soil is classified as a silt-loam with a pH of 6.2 and OM of 3.2%. The trial was a randomized complete block design with three replications. 8 oz/A Headline fungicide was applied on June 18 to control foliar diseases. Weed populations for volunteer canola, kochia, Russian thistle, common mallow, wild buckwheat and Japanese brome were 4, 6, 3, 2, 4 and 0.75 plants per square foot, respectively. Plots were evaluated for crop injury on June 14 and for weed control on June 22 and July 18. The trial was harvested on August 20.

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Treatment	Product rate oz/A	6/14	June 22						July 18				Test weight lbs/bu	Grain yield bu/A	
		inj	vcan	wibw	kocz	ruth	dand	cmal	wibw	plet	kocz	vcan			jabr
1 Untreated		0	0	0	0	0	0	0	0	0	0	0	0	55.6	19.7
2 Beyond + MSO	4 + 20	0	90	47	25	98	53	90	0	0	10	99	99	55.8	26.5
3 Beyond + MSO	6 + 20	1	93	50	30	95	37	90	0	17	17	99	--	54.6	24.0
4 Beyond+Bronate+NIS	4+16+0.25%	1	93	95	40	88	47	88	93	50	99	99	99	55.5	28.3
5 Beyond+Bronate+NIS	6+16+0.25%	0	88	85	63	95	60	90	90	50	99	99	99	55.0	27.0
6 Beyond+WideMatch+NIS	4+12+0.25%	1	92	47	80	93	67	85	93	99	93	99	99	55.6	27.4
7 Wolverine	27.2	5	95	93	60	99	63	70	83	--	99	90	0	56.3	25.3
8 Everest 2.0+WideMatch+ MCPA ester + Basic Bl.	0.75 + 12 + 8 + 1%	0	90	60	90	95	52	12	93	--	99	96	99	54.5	25.8
9 Axial XL + WideMatch + MCPA ester	16.5 + 12 + 8	4	90	67	90	67	80	27	93	--	99	99	0	55.9	24.1
C.V. %		67	3	15	40	8	43	15	12	106	16	4	0	3.1	6.2
LSD .05		1	4	16	37	11	38	16	12	NS	19	6	1	NS	2.7

NS = no statistical difference between treatments

Summary

Crop injury was relatively minor and diminished quickly. All herbicide treatments provided excellent season long control of volunteer canola. Beyond alone treatments (trts 2 & 3) were relatively ineffective at controlling wild buckwheat and kochia, however, the addition of Bronate or WideMatch to these treatments provided excellent season long control of these weeds. All herbicide treatments with the exception of Axial XL (trt 9) provided good control of Russian thistle. All herbicide treatments provided marginal control of dandelion (dand). Beyond treatments (trts 2 – 6) were the only treatments to provide good to excellent control of common mallow. Beyond + WideMatch (trt 6) provided excellent control of prickly lettuce (plet) although observations were not conclusive for all treatments. As would be expected, Wolverine (trt 7) and Axial XL (trt 9) had no efficacy on Japanese brome.