Evaluation of Generic Sulfonylurea Herbicides in Winter Wheat

A field study was conducted to evaluate the efficacy of several generic sulfonylurea herbicides. The study was conducted on the Ray Franzen farm, adjacent to the High Plains Agricultural Laboratory near Sidney, NE. The experimental design was a randomized complete block with four replications. Plots were 10 feet wide by 25 feet long. Herbicide treatments were applied with an ATV-mounted sprayer set to deliver 12 gallons/acre at 3 miles/hour and 15 psi. Winter wheat was seeded into fallow ground in late September 2007 at a rate of 60 pounds/acre. The study was located on an Rosebud loam soil with an organic matter content of 2.1% and a pH of 7.0. Herbicide treatments were applied on May 5, 2008 to winter wheat plants that had 1 to 3 tillers and were 5 to 6 inches in height. Russian thistle plants were 1 to 3 inches in height at the time of application. Weed density was light to moderate and mostly uniform across the study area.

No crop injury was observed with any of the herbicide treatments. There was a high proportion of sulfonylurea-resistant Russian thistle present at this site, which can explain the relatively poor weed control obtained by all the herbicide treatments in this study. However, we can still compare the various generic products with the Ally XP plus 2,4-D ester treatment to ascertain relative performance compared to this long-term standard treatment. On May 27, two of the nine generic treatments provided significantly less visual control of Russian thistle than the Ally XP plus 2,4-D ester treatment. These two treatments were the Nimble and Edition BroadSpec treatments. Three weeks later, on June 18, visual weed control had declined for all treatments compared to the May 27 rating date. This may have been the result of new weed emergence and/or weed recovery from the earlier treatments. On June 18, three of the nine generic treatments had significantly lower visual control ratings than the Ally XP plus 2,4-D ester treatment. These three treatments were the Accurate, Edition TankMix plus 2,4-D ester, and Edition BroadSpec treatments. Wheat grain yields were not affected by the herbicide treatments.

Although more testing is needed, it does appear that many of the generic sulfonylurea herbicides evaluated in this study provide similar control of Russian thistle as the long-term standard treatment of Ally XP plus 2,4-D ester. We need to evaluate these products on other weed species and with typical tank mix partners to have a better feel for their usefulness in western Nebraska winter wheat production. At a time of increasing input costs, the availability of effective generic herbicides will be welcomed by many farmers.

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Treatment	Rate[a]	Russian thistle control		Yield
		May 27	June 18	
	oz product/A	%		bu/A
Accurate	0.1	70	45	33.0
Accurate Extra	0.4	68	65	31.5
Nuance	0.33	70	50	33.7
Nimble	0.6	65	48	32.4
Harass	0.6	70	55	30.6
Report	0.33	68	53	36.6
Report Extra	0.4	66	60	33.1
Edition TankMix 2,4-D Ester	0.8 0.25 pt/A	66	45	36.9
Edition BroadSpec	1.0	65	40	36.8
Ally XP 2,4-D Ester	0.1 0.25 pt /A	80	68	38.0
Nontreated check		0	0	34.5
LSD (5%)		14	22	4.3

[a]NIS was added to all herbicide treatments at a rate of 0.25 % v/v.