Evaluation of Huskie™ in Winter Wheat

A field study was conducted to evaluate the efficacy of Huskie herbicide in winter wheat. 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 three replications. Plots were 10 feet wide by 40 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 2009 at a rate of 60 pounds/acre. The study was located on an Duroc loam soil with an organic matter content of 2.6% and a pH of 6.7. Herbicide treatments were applied on May 15, 2010 to winter wheat plants that had 1 to 3 tillers and were 6 to 8 inches in height. Winter wheat was jointed at the time of application with the joint located just above the ground surface. Russian thistle and slimleaf lambsquarters were 1 to 2 inches in height at the time of application. Russian thistle plant density was light to moderate, while slimleaf lambsquarters plant density was light.

Two weeks after application, Russian thistle control was greatest with Huskie treatments containing MCPA ester or 2,4-D ester. Slimleaf lambsquarters control was similar among all Huskie treatments. Ally + 2,4-D ester provided the least control of Russian thistle and slimleaf lambsquarters two weeks after application. Five weeks after application, Russian thistle control was excellent for all Huskie treatments. Slimleaf lambsquarters control was excellent for all treatments except Huskie + 2,4-D ester. Grain yields were significantly greater than the nontreated check for three treatments: Huskie, Huskie + Starane, and Ally + 2,4-D ester. The grain yield for Huskie + Starane was significantly greater than all other treatments. This treatment contained 11 ounces of Huskie per acre rather than the 13 ounces of Huskie in the other three Huskie treatments. It is not clear in this study how Huskie rate affected grain yield.

Huskie provides good to excellent control of a range of common broadleaf weeds in winter wheat. It provides a new mode of action (pyrasulfotole, 4-HPPD inhibitor, Group 27) for winter wheat, which should help with the management of herbicide-resistant weeds.

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Treatment[a]	Rate	Weed control May 27		Weed control June 22		Yield
		Russian thistle	Slimleaf lambsqu.	Russian thistle	Slimleaf lambsqu.	
	oz prod/A	%				bu/A
Huskie UAN 28%	13 32	95	98	98	100	61.6
Huskie MCPA ester UAN 28%	13 12 32	100	100	98	100	58.3
Huskie Starane UAN 28%	11 4 32	95	100	100	100	65.8
Huskie 2,4-D ester UAN 28%	13 6 32	100	100	98	95	60.1
Ally XP 2,4-D ester	0.1 8	83	88	92	100	62.2
Nontreated check		0	0	0	0	57.4
LSD (5%)		2	3	5	1	3.2

[a]All treatments included NIS at 0.5% v/v.