

## Evaluation of GoldSky<sup>®</sup>, OpenSky<sup>™</sup>, PerfectMatch<sup>™</sup>, Starane<sup>®</sup> Flex and tank mix partners for the control of common lambsquarters in ‘Seahawk’ spring wheat

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A study was conducted to evaluate Corteva’s herbicide premixtures for common lambsquarters control in spring wheat. GoldSky contains florasulam, fluroxpyr and pyroxsulam. OpenSky contains fluroxpyr and pyroxsulam. PerfectMatch contains clopyralid, fluroxpyr and pyroxsulam. Starane Flex contains florasulam and fluroxpyr. Tank mix partners for these products included Quelex<sup>®</sup> (halauxifen-methyl + florasulam) and 2,4-D ester.

The spring wheat variety ‘Seahawk’ was seeded at the rate of 90 lb/A with a John Deere drill on a 7-inch row spacing at 1.5 inch depth on April 19<sup>th</sup>. Soil at this site is a Thatuna silt loam with 3.0% organic matter and a pH of 5.0. On May 24<sup>th</sup>, treatments were applied with a CO<sub>2</sub>-powered backpack sprayer set to deliver 10 gpa at 48 psi at 2.3 mph. Wheat was at the two tiller stage and was 10 inches tall. The air temperature was 79°F, relative humidity was 32% and the wind was out of the west at 4 mph.

There was no significant crop injury observed among any treatments evaluated in this study. Fourteen days after application, OpenSky or PerfectMatch tank mixed with 2,4-D ester were providing the best control of common lambsquarters. One month after application, OpenSky, PerfectMatch or Starane Flex tank mixed with 2,4-D provided excellent control of common lambsquarters. Prior to use, the labels of GoldSky, OpenSky and PerfectMatch should be read carefully if pulse crops are part of your planned rotation.

Treatment	rate	Common lambsquarters control		
		6/7	6/15	6/22
	fl oz/a	-----0 to 100%-----		
Nontreated Check	--	--	--	--
GoldSky <sup>1</sup>	16	64 bc <sup>3</sup>	70 b	73 c
OpenSky <sup>1</sup>	16	65 bc	75 b	84 b
OpenSky + 2,4-D Ester LV <sup>2</sup>	16 + 8	73 a	91 a	100 a
OpenSky + Quelex <sup>1</sup>	16 + 0.75 oz	63 bc	76 b	86 b
PerfectMatch <sup>1</sup>	16	60 c	79 ab	90 b
PerfectMatch + 2,4-D Ester LV <sup>2</sup>	16 + 8	70 ab	89 a	100 a
Starane Flex + 2,4-D Ester LV	13.5 + 8	63 bc	89 a	99 a

<sup>1</sup> Treatment was tank mixed with NIS and AMS (0.5% v/v and 1.52 lb/A)

<sup>2</sup> Treatment was tank mixed with AMS (1.52 lb/A)

<sup>3</sup> Means, based on four replicates, within a column, followed by the same letter are not significantly different at P = 0.05 as determined by Fisher's protected LSD test, which means that we are not confident that the difference is the result of treatment rather than experimental error or random variation associated with the experiment.