

Wild oat control with Everest 2.0, GoldSky and Rimfire Max with various adjuvants at Crookston, MN - 2011. Durgan, Beverly R., Jochum Wiersma, Jim Cameron, and Douglas Miller.

The objective of this experiment was to evaluate wild oat control with Everest 2.0 (flucarbazone-sodium & safener), GoldSky (pyroxsulam & fluroxypyr & florasulam) and Rimfire Max (propoxycarbazone & mesosulfuron) alone and with various adjuvants. The experiment was conducted at Crookston, MN on a Donaldson and Wheaton loam soil. Following weedy fallow, the experimental area received 100 lb/A of N and was fall plowed. In the spring of the following year, the experimental area was disked and harrowed. 'RB07' hard red spring wheat was seeded on May 17 at 1.5 Bu/A. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 30 psi using 80015 flat fan nozzles. The experimental design was a randomized complete block with three replications and plot size was 10 by 16 ft. Application data and environmental conditions are listed below. Crop injury and wild oat control were visually rated. Yields were measured. All data are presented in the table below.

Treatment Date	June 9
Target wild oat stage	3-5 leaf
Air temperature (°F)	65
Soil temperature (°F)	60
Relative humidity (%)	35
Wind	E 3.5 mph
Sky	clear
Rainfall before Application	
Week 1 (inch)	0.25
Rainfall after Application	
Week 1 (inch)	0.22
Week 2 (inch)	1.28

All herbicides (applied alone or with adjuvants) provided excellent control of wild oats. June 17 injury symptoms were crop chlorosis and stunting. Injury symptoms at the later rating dates were noted as growth reduction. Everest 2.0 applied alone did not result in any injury symptoms and when applied with an adjuvant, caused only slight injury symptoms. Both GoldSky and Rimfire Max caused slight injury when applied alone and more moderate injury when applied with adjuvants. The greatest injury with GoldSky and Rimfire Max was observed when applied with 'Class Act NG + AG 02013' and 'AG 8034G + AG 02013'.

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Treatment	Rate Product/A	Wild Oat Control			Wheat Injury				Wheat
		7/8	7/15	7/29	6/17	7/8	7/15	7/29	Yield
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(Bu/A)
Everest 2.0	0.75 oz	99	99	99	0	0	0	0	60
Everest 2.0 + Class Act NG	0.75 oz + 2 pt	99	99	99	8	0	2	0	57
Everest 2.0 + Class Act NG + AG 02013	0.75 oz + 2 pt + 4 oz	99	99	99	7	5	5	0	55
Everest 2.0 + AG 8034	0.75 oz+ 1.6 pt	99	99	99	7	0	2	0	61
Everest 2.0 + AG 8034 + AG 02013	0.75 oz + 1.6 pt + 4 oz	99	99	99	5	0	0	0	64
Everest 2.0 + Superb HC	0.75 oz + 1 pt	99	99	99	7	0	0	0	61
Everest 2.0 + Destiny HC	0.75 oz + 1 pt	99	99	99	7	0	0	0	63
Everest 2.0 + AG 10021	0.75 oz + 0.8 pt	99	99	99	8	2	2	0	60
Everest 2.0 + AG 09012	0.75 oz + 0.8 pt	99	99	99	5	0	0	0	60
Everest 2.0 + AG 09053	0.75 oz + 1.2 pt	99	99	99	5	0	2	0	60
GoldSky	1 pt	99	99	99	8	3	0	0	63
GoldSky + Class Act NG + AG 02013	1 pt + 2 pt + 4 oz	99	99	99	23	25	5	0	52
GoldSky + AG 8034 + AG 02013	1 pt + 2 pt + 4 oz	99	99	99	27	23	2	0	52
GoldSky + Destiny	1 pt + 1.5 pt	99	99	99	17	22	0	0	48
GoldSky + Destiny HC	1 pt + 0.75 pt	99	99	99	13	8	2	0	59
GoldSky + Destiny HC	1 pt + 1 pt	99	99	99	12	12	2	0	57
GoldSky + AG 10021	1 pt + 0.8 pt	99	99	99	10	10	3	0	57
Rimfire Max	3 oz	99	99	99	8	5	2	0	64
Rimfire Max + Class Act NG + AG 02013	3 oz + 2 pt + 4 oz	99	99	99	22	33	3	0	56
Rimfire Max + AG 8034 + AG 02013	3 oz + 2 pt + 4 oz	99	99	99	20	25	2	0	59
Rimfire Max + Destiny	3 oz + 1.5 pt	99	99	99	18	12	3	0	58
Rimfire Max + Destiny HC	3 oz + 0.75 pt	99	99	99	15	15	0	0	63
Rimfire Max + Destiny HC	3 oz + 1 pt	99	99	99	17	17	2	0	60
Rimfire Max + AG 10021	3 oz + 0.8 pt	99	99	99	13	12	2	0	62
Axial XL	16.4 oz	99	99	99	2	2	0	0	66
Weedy Check	--	--	--	--	0	0	0	0	42
LSD (0.05)		ns	ns	ns	7	7	ns	ns	7

Everest 2.0 3.5SC = flucarbazone-sodium & cloquintacet (safener).

Class Act NG = ammonium sulfate and nonionic surfactant blend.

AG 02013 = experimental adjuvant from Agrilience.

AG 8034 = experimental adjuvant from Agrilience.

Superb HC = patented crop oil concentrate (high fructose corn syrup, petroleum oil, and nonionic surfactant emulsifier).

Destiny HC = methylated soybean oil, high fructose corn syrup, sorbitan fatty acid esters.

AG 10021 = experimental adjuvant from Agrilience.

AG 09012 = experimental adjuvant from Agrilience.

AG 09053 = experimental adjuvant from Agrilience.

GoldSky 0.84L = pyroxsulam (0.11 lb ai/gal) & fluroxypyr (0.71 lb ae/gal) & florasulam (0.018 lb ai/gal).

Destiny = methylated soybean oil and nonionic surfactant blend.

Rimfire Max 6.67WDG = propoxycarbazone-sodium (4.76%) & mesosulfuron-methyl (1.91%).

Axial XL 0.42EC = pinoxaden and adigor adjuvant.