Foxtail and broadleaf herbicide combinations at Rosemount, MN – 2010. Durgan, Beverly R. and Douglas W. Miller. The objective of this experiment was to evaluate foxtail control with several herbicides alone and in combination with broadleaf herbicides. The experiment was conducted at Rosemount, MN on a Waukegon silt loam soil. Following soybeans, the experimental area was fall chisel plowed. In the spring, the area was fertilized with 50 lbs/A N and 75 lbs K. The field was disked once and field cultivated twice. 'RB-07' hard red spring wheat was seeded on April 27 at 85 lbs/A. The experimental design was a randomized complete block with three replications. Plot size was 10 by 24 ft. All herbicide treatments were applied with a backpack type sprayer delivering 10 gpa at 35 psi using 11001 flat fan nozzles. A broadcast application of Buctril (bromoxynil) at 1.0 pt/A (0.25 lb ai/A) was applied on May 25 to control broadleaf weeds. Application data and environmental conditions are listed below. Crop injury and foxtail control were rated visually and data are presented in the table below. Yields were not measured.

## **Treatment Date**

## May 28

Foxtail (giant and yellow) stage height (inch) density (#/ft²)	1 - 5 leaf (majority 3 to 4 leaf) 0.33 - 2 (majority 1 to 1.5) 26.8
Wheat stage tillers height (inch)	4.25 - 4.5 leaf (Zadoks Z14-15, 21-23) 1-3 5-7
Air temperature (°F) Relative humidity Sky Wind Soil conditions Soil temperature (°F)	75 26% clear SE 0-7 moist at 1.5" 69
Rainfall before Application Week 1 (inch) Rainfall after Application Week 1 (inch) Week 2 (inch)	0.55 1.66 1.86

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Treatment		Foxtail Control		Wheat Injury	
	Rate	6/18	7/18	6/18	7/18
	Product/A	(%)	(%)	(%)	(%)
Wolverine	27.4 oz	97	99	0	0
				0	0
Puma + Huskie	0.67 pt + 11 oz	96	99	0	0
Puma + Orion	0.5 pt + 17 oz	82	85		
Puma + Bronate Advanced	0.5 pt + 0.8 pt	87	83	0	0
Puma + Widematch	0.5 pt + 1 pt	94	88	0	0
Puma + Bronate Advanced	0.33 pt + 0.8 pt	89	75	0	0
Puma + Huskie	0.33 pt + 11 oz	95	90		
Puma + Orion	0.33 pt + 17 oz	87	70	0	0
Puma	0.5 pt	93	96	0	0
Puma	0.33 pt	96	92	0	0
Axial XL	16.4 oz	96	93	0	0
Axial XL + Orion	16.4 oz + 17 oz	88	93	0	0
Axial XL + Huskie	16.4 oz + 11 oz	91	94	0	0
Axial XL + Bronate Advanced	16.4 oz + 0.8 pt	91	94		
Axial XL + Pulsar + MCPA ester	16.4 oz + 8.3 oz + 0.5 pt	91	94	0	0
Axial XL + Widematch + MCPA ester	16.4 oz + 1 pt + 0.5 pt	91	94		
Axial TBC + Adigor Adjuvant	8.85 oz + 9.6 oz	92	93	0	0
Axial TBC + Adigor Adjuvant + Starane	8.85  oz + 9.6  oz + 0.8  pt	91	93	0	0
Axial TBC + Adigor Adjuvant + Widematch	8.85 oz + 9.6 oz + 1 pt	88	94	0	0
Axial TBC + Adigor Adjuvant + Bronate Advanced	8.85  oz + 9.6  oz + 0.8  pt	92	92		
Axial TBC + Adigor Adjuvant + Pulsar	8.85 oz + 9.6 oz + 8.3 oz	92	95	0	0
				0	0
Rimfire Max + Destiny HC	3 oz + 1.5 pt	85	85	0	0
Rimfire Max + Huskie + Quad 7	3 oz + 11 oz + 12.8 oz	73	85	· ·	· ·
Talling Max + Hadida + Quad +	0 02 1 11 02 1 12.0 02	7.0	00	0	0
GoldSky + Newtone	16 oz + 12.8 oz	91	91	0	0
Weedy Check				0	0
LSD (0.05)		8	5	ns	ns

Wolverine 1.38E = fenoxaprop-p-ethyl (0.38 lb ai/gal) & pyrasulfotole (0.17 lb ai/gal) & bromoxynil octanoate (0.41 lb ai/gal) & bromoxynil heptanoate (0.42 lb ai/gal).

Puma 1EC = fenoxaprop and safener

Huskie 2.08 EC = pryrasulfotole & bromoxynil & safener.

Orion 2.37 SE = florasulam (0.033 lb ai/gal) & MCPA (2.34 lb ae/gal).

Bronate Advanced 5E = bromoxynil (2.5 lb ai/gal) & MCPA (2.5 lb ae/gal).

Widematch 1.5 E = clopyralid (0.75 lb ae/gal) & fluroxypyr (0.75 lb ae/gal).

Axial XL 0.053 EC = pinoxaden and adigor adjuvant.

Pulsar 1.67 L = dicamba (0.7275 lb ae/gal) + fluroxypyr (0.9455 lbs ae/gal).

MCPA Ester 4E.

Axial TBC 0.838 EC = pinoxaden (0.774 lb ai/gal) & florasulam (0.0645 lb ai/gal) & safener.

Adigor Adjuvant = emulsifable oil adjuvant.

Starane 1.5 E = fluroxypyr.

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

 $\label{eq:Destiny HC} \textbf{Destiny HC} = \textbf{methylated soybean oil}, \textbf{high fructose corn syrup}, \textbf{sorbitan fatty acid esters}.$ 

Quad 7 = ammonium salt, buffering agent, and surfactant blend.

 $GoldSky\ 1.53L = pyroxsulam\ (0.11\ lb\ ai/gal)\ \&\ fluroxypyr\ (0.71\ lb\ ae/gal)\ \&\ florasulam\ (0.018\ lb\ ai/gal).$ 

Newtone = surfactant blend and ammoniated salts.