

Project Title: Evaluation of Herbicides in Winter Wheat – 2013

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Objective: Evaluate crop tolerance and weed control efficacy of several broadleaf and grass herbicides in winter wheat.

Results:

Seven herbicide treatments were compared in order to evaluate crop injury and weed control. The experimental design was a randomized complete block with three replications. Norris winter wheat was planted with a no-till drill into minimally tilled ground on September 20, 2012. Herbicide applications were made at jointing on May 8, 2013.

Crop injury was not observed among any of the treatments. All herbicide treatments provided comparable control of wild buckwheat, common lambsquarters, common chickweed and henbit (Table 2). Treatments that contained thiencazone (Huskie Complete and Varro) provided the greatest level of quackgrass control. No significant differences were observed in yield, protein or test weight.

Table 1. Materials and Methods - herbicide evaluation in winter wheat - 2013

Seeding Date:	9/20/12	Soil Type:	Kalispell vfst
Julian Date:	264	Soil Test:	79.5-40-380
Seeding Rate:	80 lb/A	Fertilizer:	10-35-90-8.5-0.85/ TD 60-0-0
Previous Crop:	Peas	Pesticide:	NA
Tillage:	Minimal till	Harvest Date:	7/31/13
Irrigation:	None	Julian Date:	212

Table 2. Herbicide evaluation for crop tolerance and grain quality in winter wheat- 2013

Treatment	Rate	CI	CI	POLCO	CHEAL	STEME	LAMAM
		5/15	6/3	6/3	6/3	6/3	6/3
		-----%-----		-----%-----			
1 Check		0.0	0.0	0.0	0.0	0.0	0.0
2 Huskie	13.5 FL OZ/A	0.0	0.0	96.0	99.0	84.7	99.0
Axial XL	16.4 FL OZ/A						
AMS	0.5 LB/A						
3 Huskie	13.5 FL OZ/A	0.0	0.0	92.7	99.0	76.3	96.0
Axial XL	16.4 FL OZ/A						
AMS	0.5 LB/A						
NIS	0.25 % V/V						
4 Widematch	1 PT/A	3.3	0.0	99.0	99.0	99.0	94.3
Axial XL	16.4 FL OZ/A						
MCPA Ester	0.5 PT/A						
5 Huskie	13.5 FL OZ/A	0.0	0.0	94.3	99.0	88.0	99.0
Starane	5 FL OZ/A						
Axial XL	16.4 FL OZ/A						
AMS	0.5 LB/A						
NIS	0.25 % V/V						
6 Wolverine	27.4 FL OZ/A	0.0	0.0	94.7	99.0	94.7	99.0
7 Huskie	13.7 FL OZ/A	3.3	0.0	84.7	99.0	86.0	99.0
Complete							
AMS	0.5 LB/A						
8 Varro	6.85 FL OZ/A	0.0	0.0	99.0	99.0	97.7	99.0
Carnivore	1 PT/A						
Mean		0.8	0.0	82.5	86.6	78.3	85.7
CV		320.7	0.0	11.4	0.0	17.5	3.7
LSD		4.7	0.0	16.5	0.0	24.0	5.6
Pr>F		0.4706	1	0.0001	1	0.0001	0.0001

AMS: ammonium sulfate, NIS: non-ionic surfactant, CI: crop injury, POLCO: wild buckwheat, CHEAL: common lambsquarters, STEME: common chickweed, LAMAM: henbit

Table 2. continued.

Treatment	Rate	POLCO	CHEAL	STEME	AGRRE	YLD	PRO	TWT
		7/4	7/4	7/4	7/4	bu/A	%	lb/bu
1 Check		0.0	0.0	0.0	0.0	61.2	13.4	55.4
2 Huskie	13.5 FL OZ/A	80.0	99.0	86.0	62.7	58.8	13.5	54.9
Axial XL	16.4 FL OZ/A							
AMS	0.5 LB/A							
3 Huskie	13.5 FL OZ/A	76.3	96.0	59.7	0.0	55.5	13.6	53.8
Axial XL	16.4 FL OZ/A							
AMS	0.5 LB/A							
NIS	0.25 % V/V							
4 Widematch	1 PT/A	97.7	96.0	82.7	16.7	56.1	14.0	53.3
Axial XL	16.4 FL OZ/A							
MCPA Ester	0.5 PT/A							
5 Huskie	13.5 FL OZ/A	81.7	96.0	66.0	46.7	58.6	13.6	54.5
Starane	5 FL OZ/A							
Axial XL	16.4 FL OZ/A							
AMS	0.5 LB/A							
NIS	0.25 % V/V							
6 Wolverine	27.4 FL OZ/A	88.0	97.7	86.0	49.7	62.9	13.6	55.1
7 Huskie	13.7 FL OZ/A	92.7	99.0	92.7	92.7	60.9	13.5	55.2
Complete								
AMS	0.5 LB/A							
8 Varro	6.85 FL OZ/A	99.0	99.0	96.0	99.0	64.2	13.6	56.0
Carnivore	1 PT/A							
Mean		76.9	85.3	71.1	45.9	59.8	13.6	54.8
CV		18.8	4.1	29.4	57.6	8.3	3.5	3.4
LSD		25.3	6.1	36.6	46.3	8.7	0.8	3.2
Pr>F		0.0001	0.0001	0.0013	0.0017	0.3882	0.8383	0.6913

AMS: ammonium sulfate, NIS: non-ionic surfactant, CI: crop injury, POLCO: wild buckwheat, CHEAL: common lambsquarters, STEME: common chickweed, ACRRE: quackgrass, YLD: yield, PRO: protein, TWT: test weight