

2010 Rimfire Max on Winter Wheat, Eric Eriksmoen, Hettinger, ND

‘Jerry’ HRWW was seeded on October 17, 2009 into cool dry soil. Fall pre-emergence treatments (PRE) were applied on October 25 with 37° F, 64% RH, clear sky and NW wind at 5 mph to 1 leaf downy brome (dobr). Winter wheat survival was excellent. Spring post-emergence treatments (SPOST) were applied on May 23 to 4 leaf winter wheat and to downy brome in the late boot stage and tillering Japanese brome with 68° F, 39% RH, mostly clear sky and SE wind at 5 mph. Treatments were applied with a tractor mounted CO₂ propelled plot sprayer delivering 10 gpa at 30 psi through PK-01E80 nozzles to a 5 foot wide area the length of 10 by 28 foot plots. The trial was a randomized complete block design with four replications. The soil is classified as a silt-loam with a pH of 6.2 and OM of 3.2%. Downy brome populations averaged 7 / ft² in the fall and 10 /ft² in the spring. Japanese brome, Persian darnel and wild oat populations averaged 2, 0.8 and 0.5 / ft² respectively. Plots were evaluated for crop injury and weed control on May 3, June 8, June 24 and July 28. The trial was harvested on August 2.

Treatment	Product rate	App. timing	- May 3 -		- June 8 -		----- June 24 -----				----- July 28 -----				Test weight	Grain yield		
			inj	dobr	inj	dobr	inj	jabr	wiot	peda	inj	dobr	jabr	wiot			peda	
oz/A		----- % Control -----															lbs/bu	bu/A
1	Untreated		0	0	0	0	0	0	0	0	0	0	0	0	0	0	55.4	46.2
2	Olympus + NIS	0.6 + 0.5%	PRE	0	82	0	73	0	71	94	66	0	93	99	0	0	55.1	46.1
3	Olympus + NIS	0.9 + 0.5%	PRE	0	92	0	87	0	87	83	50	0	91	99	60	0	56.5	50.6
4	Rimfire Max + MSO	3.0 + 20	PRE	0	84	0	60	0	40	66	0	0	71	72	37	0	54.2	47.4
5	Olympus + NIS / Rimfire Max + MSO	0.6 + 0.5% / 3.0 + 20	PRE / SPOST	5	90	9	97	3	98	99	99	0	98	99	90	99	56.4	48.3
6	Olympus + NIS / Rimfire Max + MSO	0.9 + 0.5% / 3.0 + 20	PRE / SPOST	0	90	10	96	5	99	99	99	0	97	99	99	99	56.6	48.4
7	Rimfire Max + MSO	3.0 + 20	SPOST	0	0	1	92	0	84	99	87	0	96	99	99	50	57.1	51.3
8	Osprey+ NIS+ UAN	4.75+0.5%+64	SPOST	0	0	0	94	0	82	99	99	0	84	94	96	99	56.2	53.6
9	PrePare + NIS / Everest + NIS	0.3 + 0.5% / 0.3 + 5%	PRE / SPOST	0	92	0	85	0	70	99	0	0	92	99	99	0	56.1	49.4
C.V. %				342	11	284	24	398	34	19	44	275	16	11	53	--	1.6	15.6
LSD 5%				3	9	NS	27	NS	35	22	35	NS	18	13	47	--	1.3	NS

NS = no statistical difference between treatments.

Summary

Crop injury was relatively minor or non-existent except for Olympus / Rimfire Max split applications (trts 5 & 6) which caused crop stunting. Fall applied Olympus (trts 2 & 3) provided excellent season long control of downy and Japanese brome but did not provide season long control of wild oats or Persian darnel. Fall applied Rimfire Max (trt 4) provided marginal control of downy and Japanese brome, poor control of wild oat and no control of Persian darnel. Olympus/Rimfire Max split applications (trts 5 & 6) provided excellent season long control of downy & Japanese brome, wild oat and Persian darnel. Spring applied Rimfire Max (trt 7) provided excellent season long control of downy brome, Japanese brome and wild oat but only marginal season long control of Persian darnel. Spring applied Osprey (trt 8) provided excellent season long control of Japanese brome, wild oat and Persian darnel but was a little weak at controlling downy brome. PrePare / Everest split application (trt 9) provided very good season long control of downy brome, Japanese brome and wild oats but did not control Persian darnel.