

2012 Grassy Weed Control with Spring Herbicide Applications in Winter Wheat

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‘Jerry’ HRWW was seeded no-till into dry soil on October 10, 2011. Persistent dry fall conditions resulted in less than 1% winter wheat emergence prior to freeze up and a very poor crop stand during the growing season. Spring post-emergence treatments were applied on April 14, 2012 to 2 ½ leaf wheat and to tillering downy brome (dobr), 2 leaf Japanese brome (jabr), 1 leaf wild oat (wiot) and 1 leaf Persian danel (peda) with 55° F, 45% RH, cloudy sky, moist soil conditions and a south wind at 7 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 soil is classified as a silt-loam with a pH of 6.2, OM of 3.2% and had 85% fall hrsw residue ground cover (4300 lbs/A). The trial was a randomized complete block design with four replications. The trial had an application of 21 oz/A WideMatch herbicide on June 2 to control broadleaf weeds. Weed populations for downy brome, Japanese brome, wild oat and Persian danel were 3, 6, 0.5 and 0.25 plants /ft² respectively. Plots were evaluated for crop injury on April 23, May 18, June 2 and July 7, and for weed control on June 2 and July 7. The trial was not harvested.

Treatment	Product rate oz/A	4/23	5/18	- June 2 -		----- July 7 -----					
		inj	inj	inj	dobr	inj	dobr	jabr	wiot	peda	
		----- Percent control -----									
1	PowerFlex HL+Act. 90+AMS	2 + 0.5% +1.5 lb	0	0	0	85	0	95	96	32	99
2	Olympus Flex+Act. 90+AMS	3.5 + 0.5% + 1.5 lb	0	0	0	75	0	90	97	65	0
3	Olympus + Act. 90	0.9 + 0.5%	0	0	0	90	0	97	99	62	3
4	Maverick + Act. 90	0.67 + 0.5%	0	0	0	45	0	91	94	9	33
5	Untreated		0	0	0	0	0	0	0	0	0
6	Axial XL	16.4	0	0	0	10	0	1	2	84	99
7	Osprey + Act. 90 + AMS	3.25+0.5%+64	0	0	0	67	0	21	46	1	3
C.V. %			0	0	0	26	0	27	31	39	66
LSD .05			NS	NS	NS	20	NS	23	29	21	28

NS = no statistical difference between treatments

Summary

Crop injury (leaf speckling) was minor when observed (less than 1%) and diminished quickly. PowerFlex HL, Olympus Flex, Olympus and Maverick treatments provided very good season long control of downy brome and Japanese brome. None of the treatments were very effective on wild oat, however, Olympus Flex, Olympus and Axial XL treatments provided significantly better control than the other treatments. PowerFlex HL and Axial XL treatments provided excellent season long control of Persian danel.