

Everest Herbicide + Tank Mix Additives in Spring Wheat at Hettinger

Reeder hard red spring wheat was seeded on April 15. Treatments were applied to 3 ½ leaf wheat and to tillering Japanese brome, downy brome that was heading and to 2 ½ leaf wild oats on May 20 with 43°F, 94 % RH, clear sky and 2 mph NW wind. Treatments were applied with a tractor mounted CO² propelled plot sprayer delivering 10 gpa at 40 psi through 8001.5 flat fan nozzles to a 5 foot wide area the length of 10 by 28 foot plots. The experiment was a randomized complete block design with four replications. 10 oz/A 2,4-D + 0.5 oz/A Aim was applied on May 28 to control broadleaf weeds. The trial sustained frost on May 13 (16°F) and on June 18 (25°F), and received a total of 5.4 inches of growing season rainfall (April 1 - July 31). Populations of downy brome and wild oats were not uniform across the trial. Evaluations for crop injury were on June 3, and for weed control on June, 17 and July 13. The trial was not harvested.

Treatment	Rate	June 6	June 17		July 13			
		HRSW	Jabr	dobr	Jabr	dobr	wiot	
Product + Additive*	oz/A		----- % Control -----					
1 Everest	0.30	2.5	99	74	96	75	98	
2 Everest	0.15	0.5	99	99	93	65	96	
3 Everest + NIS	0.15 + 0.25%	3.8	99	70	95	90	96	
4 Everest + MVO	0.15% + 1%	0.5	99	20	96	25	96	
5 Everest + AMS	0.15 + 1%	2.5	98	70	93	50	90	
6 Everest + UAN	0.15 + 1%	1.2	99	80	99	85	99	
7 Everest + NIS + AMS	0.15 + 0.25% + 1%	5.0	94	85	99	80	99	
8 Everest + MSO + AMS	0.15 + 1% + 1%	2.5	99	50	99	25	99	
9 Everest + Puma	0.15 + 2.0	3.8	99	90	95	90	99	
10 Everest + Discover NG	0.15 + 3.0	2.5	98	58	98	65	99	
11 Everest + Silverado	0.15 + 0.6	1.2	99	80	98	90	99	
12 Untreated	0	0	0	0	0	0	0	
C.V. %		104	3.1	58.0	4.9	36.0	4.2	
LSD 5%		NS	4	NS	7	NS	6	

*Tank mix additive: NIS = non-ionic surfactant, MVO = methylated vegetable oil, AMS = ammonium sulfate, UAN = urea ammonium nitrate.

Summary

Crop injury was relatively minor for all herbicide treatments. All Everest treatments provided excellent season long Japanese brome and wild oat control regardless of tank mix additive. The addition of Puma or Silverado to Everest may enhance the control of downy brome.