Ventenata and Bulbous Bluegrass Control in Winter Wheat Following CRP Takeout

A field study was conducted in association with Steve VanVleet, Whitman County Extension Educator, to evaluate several grass herbicides for the control of ventenata in winter wheat. The study was placed on the Tom Appleford farm in Asotin County near Anatone, WA. The winter wheat was direct-seeded into ground that had been in CRP. Glyphosate was applied twice to the CRP grass in the fall at a rate of 2 quarts/acre each time. A wheat mix containing 'Xerpha' and 'WB528' winter wheat was planted on November 6, 2012 at 82 pounds per acre, using a drill set-up with 12-inch row spacing. N-P-S fertilizer was applied at a rate of 70, 10, and 15 pounds/acre, respectively. The experimental design was a randomized complete block with four replications. Herbicide treatments were applied on April 9, 2013 when the wheat was tillering and about 4-6 inches tall. A CO_2 backpack sprayer was used and set to deliver 10 gpa at 35 psi and 3 mph. Heavy infestations of bulbous bluegrass and ventenata were present. Bulbous bluegrass and ventenata were 1-2 inches tall and in the 2-3 leaf stage. Winter wheat stands were poor, so this trial was not taken to yield.

Axial XL (pinoxaden), Discover NG (clodinafop), and PowerFlex (pyroxsulam) provided excellent control of ventenata and bulbous bluegrass in this study. Olympus (propoxycarbazone) and Osprey (mesosulfuron) provided very good control of bulbous bluegrass, but poor control of ventenata. We failed to add an ammonium nitrate fertilizer to the Osprey treatment, which may have reduced its efficacy on ventenata. We will avoid that error in the future. The good news is that it appears that there are several herbicides, including both Group 1 and Group 2 mechanisms of action, that provide effective control of ventenata and bulbous bluegrass. Both of these weeds can be problematic in wheat that is direct-seeded into CRP ground.

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Treatment	Rate	9-May-13	3-Jun-13		17-Jun-13
		B. bluegrass control	Ventenata control	B. bluegrass control	Ventenata control
	oz/a	---------- % ----------			
PowerFlex	3.5	85	86	89	90
NIS	0.25% v/v				
Olympus	0.9	70	15	90	44
NIS	0.25% v/v				
Osprey	4.75	80	15	86	56
NIS	0.25% v/v				
Axial XL	16.4	89	99	99	96
Hoelon	42.56	25	0	10	5
COC	16				
Puma	0.66	5	0	0	1
Discover NG	16	86	94	98	95
MSO	0.25% v/v				
Everest 2.0	1	48	18	69	64
NIS	0.25% v/v				
Nontreated check		0	0	0	0
LSD (5%)*		19	24	28	23

*Treatment differences less than the LSD value are not considered significant because we do not feel confident that the difference is due to the treatment rather than to experimental error or random variation associated with the experiment.