

Catchweed bedstraw control in winter wheat with GF-3122

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A field study was conducted at the WSU Palouse Conservation Field Station near Pullman, WA to generate weed control data with an herbicide premixture, GF-3122. The product contains pyroxsulam (Group 2) and halauxifen-methyl (Group 4).

The soil at this site is a Thatuna silt loam with 5.9% organic matter and a pH of 5.2. On November 13, 2015, 'Puma' winter wheat was planted using a Horsch air drill with 12-inch row spacing. Post-emergence treatments were applied on April 27th with a CO₂-powered backpack sprayer set to deliver 10 gpa at 42 psi at 2.3 mph. Conditions were an air temperature of 64°F, relative humidity of 33% and the wind out of the NW at 6 mph. Wheat was at the first node stage and was 20 inches tall. Catchweed bedstraw was 5 inches tall at the time of application and at a density of 6 plants per square foot.

No crop injury was observed. Both min. and max. air temperatures were above average while precipitation was slightly below average. This resulted in significant wheat growth and plants were much taller and further along in their development than typical at the time of application. At the initial rating, GF-3122 exhibited better catchweed bedstraw control than PowerFlex[®] HL. Over time, all treatments except Olympus[®] and Osprey[®], provided very good control of catchweed bedstraw.

Treatment ¹	Rate	Catchweed bedstraw control		
		5/12 15 DAT	5/24 27 DAT	6/15 49 DAT
	fl oz/a	-----%-----		
Nontreated Check	--	--	--	--
GF-3122 + Huskie	1.0 oz + 13.5	86 a ²	84 a	100 a
GF-3122 + Starane [®] Flex	1.0 oz + 13.5	82 a	86 a	100 a
GF-3122 + WideMatch [®]	1.0 oz + 16.0	79 ab	85 a	100 a
GF-3122	1.0 oz	72 b	80 a	99 a
Osprey	4.75 oz	47 c	52 b	66 b
Olympus	0.6 oz	40 cd	62 b	76 b
PowerFlex HL	2.0 oz	37 d	76 a	95 a

¹ Treatments were tank mixed with 0.5% NIS and 1.52 lb AMS/A, except Olympus was tank mixed only with 0.5% NIS

² Means, based on four replicates, within a column, followed by the same letter are not significantly different at P = 0.05 as determined by Fisher's protected LSD test, which means that we are not confident that the difference is the result of treatment rather than experimental error or random variation associated with the experiment.

Some of the pesticides discussed in this presentation were tested under an experimental use permit granted by WSDA. Application of a pesticide to a crop or site that is not on the label is a violation of pesticide law and may subject the applicator to civil penalties up to \$7,500. In addition, such an application may also result in illegal residues that could subject the crop to seizure or embargo action by WSDA and/or the U.S. Food and Drug Administration. It is your responsibility to check the label before using the product to ensure lawful use and obtain all necessary permits in advance.