

Catchweed bedstraw control in winter wheat with Sentrallas™ and Travallas™

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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 two new herbicide premixtures, Sentrallas™ and Travallas™. Each product contains one or two active ingredients in the sulfonylurea family within the acetolactate synthase (ALS) inhibitor group (Group 2) and fluroxypyr a product in the synthetic auxin group (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 3 inches tall at the time of application and at a density of 12 plants per square foot.

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. The vigorous wheat growth likely contributed to the excellent weed control observed in this study. No crop injury was observed. In general, when Sentrallas or Travallas were tank mixed with either Huskie® or Brox®-M, control symptoms were seen sooner than when the two compounds were tank mixed with Starane® Flex. The treatment of Travallas + Starane Flex + Axial® Star was the exception. On the final evaluation date, all treatments provided excellent control of catchweed bedstraw. Huskie Complete and Sentrallas alone were the only treatments to provide less than 95% visual control.

Treatment ¹	Rate fl oz/a	Catchweed bedstraw control		
		5/12	5/24	6/15
		15 DAT	27 DAT	49 DAT
		-----%-----		
Nontreated Check	--	--	--	--
Travallas + Huskie + Axial Star	10 + 13.5 + 16.4	88 a ²	90 a	100 a
Sentrallas + Huskie	10 + 13.5	84 ab	89 a	100 a
Travallas + Huskie + PowerFlex [®] HL	10 + 13.5 + 2 oz	84 ab	89 a	100 a
Sentrallas + Brox-M	10 + 24	84 ab	86 a	100 a
Travallas + Starane Flex + Axial Star	10 + 13.5 + 16.4	82 a-c	90 a	100 a
Travallas + Brox-M	10 + 24	82 a-c	85 a-c	100 a
Travallas + Huskie + Osprey [®]	10 + 13.5 + 4.75 oz	81 a-c	84 a-c	97 bc
Travallas + Huskie	10 + 13.5	80 a-c	86 a	99 ab
Sentrallas + Starane Flex	10 + 13.5	76 b-d	83 a-d	100 a
Travallas + Starane Flex	10 + 13.5	74 b-d	86 ab	100 a
Travallas + Starane Flex + PowerFlex HL	10 + 13.5 + 2 oz	74 b-d	84 a-c	99 ab
Huskie Complete + AMS	13.7 + 1 lb	74 b-d	75 e	91 e
Travallas + Starane Flex + Osprey	10 + 13.5 + 4.75 oz	72 c-e	86 ab	100 a
Travallas	10	72 c-e	85 a-c	100 a
Sentrallas	10	67 d-f	80 b-e	92 de
WideMatch [®]	16	63 ef	77 c-e	95 c
Goldsky [®] + AMS	16 + 1.5 lb	60 f	76 de	97 bc

¹ All treatments except WideMatch included 0.25% v/v 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.