



Knockdown and residual control of broadleaf weeds in winter cereals

Trial location: North Star Rd, Warialda

Objectives of the trial

Many herbicides are registered for knockdown control of small milk thistle or fleabane in winter cereals. The objective of this trial was to evaluate early weed control in-crop and then again post-harvest early in the fallow.

Weed target: Mixed population of milk thistle and fleabane

Application: 100L/ha Rainwater 110015 AIXR @ 2 Bar 6km/hr 4 Reps

Date	Weed size at application	Time	Temp	RH%	Delta T
3/7/2025	rosette	11am	11°C	73%	2.8



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Treatment list

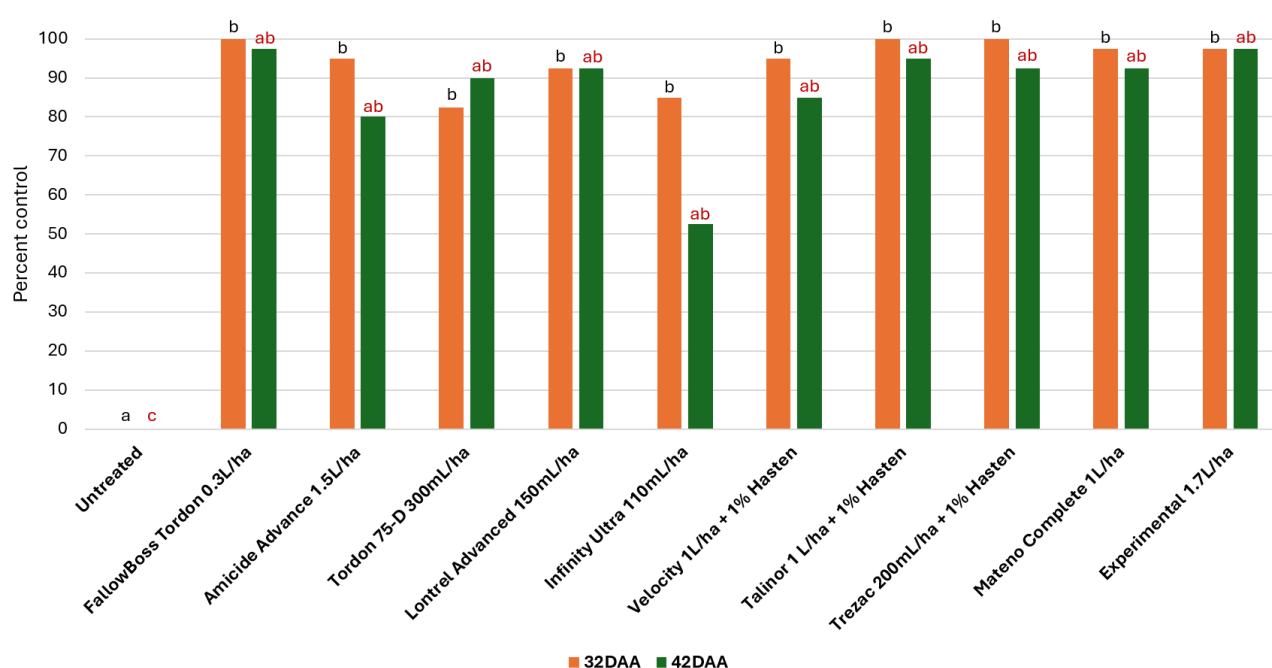
Treatments selected are common broadleaf herbicides used across northern NSW for a range of broadleaf weeds in winter cereals. The weed population was a mix of flaxleaf fleabane and milk thistle. Not all herbicides below are labelled for control of both species.

			Registration in wheat	
			Fleabane	Milk thistle
1	Untreated			
2	FallowBoss® Tordon® @ 0.3 L/ha (no longer commercially available)	300 g/L 2,4-D + 75 g/L picloram + 7.5 g/L aminopyralid	✓	✓
3	Amicide Advance® @ 1.5 L/ha	700g/L 2,4-D amine	✓	✓
4	Tordon® 75-D @ 300 mL/ha	300 g/L 2,4-D + 75 g/L picloram		✓
5	Lontrel® Advanced @150 mL/ha	600 g/L clopyralid	✓	
6	Infinity® Ultra @ 110 mL/ha	250 g/L pyrasulfotole + 125 g/L diflufenican + 62.5 g/L mefenpyr		✓
7	Velocity® @ 1 L/ha + 1% Hasten®	37.5 g/L pyrasulfotole + 210 g/L bromoxynil + 9.4 g/L mefenpyr		✓
8	Talinor® @ 1 L/ha + 1% Hasten®	37.5 g/L bicyclopyrone + 175 g/L bromoxynil + 9.4 g/L cloquintocet	✓	✓
9	Trezac® @ 200 mL/ha + 1% Hasten®	25g/L aminopyralid + 30g/L halauxifen + 30g/L cloquintocet	✓	
10	Mateno® Complete @ 1 L/ha	400 g/L aclonifen + 100 g/L pyroxasulfone + 66 g/L diflufenican	✓	
11	Experimental @ 1.7 L/ha			

Results

Broadleaf weed control (combined sowthistle and fleabane) was assessed in-crop twice, at 32 (orange) and 42 (green) days after application (DAA).

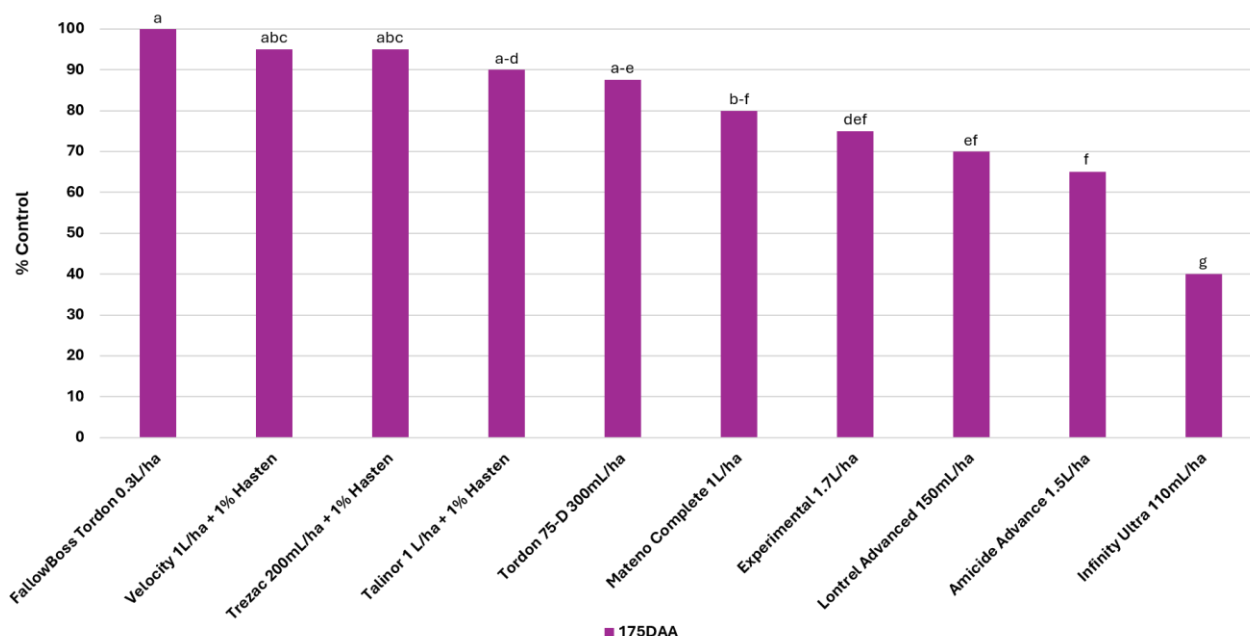
Statistically the knockdown control of all treatments was better than the untreated, but herbicides were not statistically different between treatments. Numerically, Infinity Ultra appears to be behind other treatments at the 42-day rating, however there was some variability in weed pressure across replicates which may have influenced results.



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A final assessment of control was undertaken in December 2025, 175 days after application.



Plots treated with FallowBoss Tordon continued to be free of sowthistle and fleabane. Velocity, Trezac, Talinor and Tordon 75-D treatments all continued to provide statistically similar extended control.

By 175 days after application, Infinity Ultra and Amicide Advanced treatments were showing new weed emergences at this last assessment timing.

The rate of pyrasulfotole applied as Infinity Ultra was 27.5 gai/ha, whereas the rate of pyrasulfotole applied at Velocity was 37.5 gai/ha. This difference in application rate may explain the difference in residual control between these herbicides.

Lontrel Advanced was showing signs that residual activity was not as long as the picloram based treatments. This is to be expected, as this in-crop rate of clopyralid (as Lontrel Advanced) is less persistent than in-crop application rates of picloram applied in this trial.

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Disclaimer: This document is based on the results from individual trials. Variability in product performance is expected across trials and environments. Different outcomes are possible under different trial situations; brand of herbicide applied; environmental conditions before, at and following application; sprayer setup; adjuvant choice; water quality and spray volume; weed size and weed stress; and herbicide resistance status of the population. Trials seek to build on current knowledge – therefore this summary may contain experimental use patterns that are currently not specifically labelled for all of the weed(s) targeted in the trial, or treatments applied at a weed growth stage or application timing that may differ to the product label. In some circumstances, inclusion of a particular treatment is included to demonstrate why this product should not be used in that particular situation. Any research with unregistered agricultural chemicals or of unregistered products, rates or use patterns reported in this document does not constitute a recommendation for that particular use by the authors or the authors' organisations. All agricultural chemical applications must accord with the currently registered label for that particular agricultural chemical, crop and region.

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