

Barley variety response to herbicides in South Australia

This research has been conducted across the mid north of South Australia to determine if new and existing varieties of barley vary in tolerance to commonly used herbicides

The sensitivity of the variety is summarised, using the following symbols based on the yield responses across all trials:

✓ (z) no significant yield reductions at higher than recommended rates in (z) trials

N (w/z) narrow margin, significant yield reductions at higher than recommended rate, but not tested at recommended rate significant event occurring w years out of z years tested. Eg. (2/5) = tested for 5 years, 2 returning a significant yield loss

Always follow label recommendations. All pesticide applications must accord with the currently registered label for that particular pesticide, crop, pest and region. Any research regarding pesticides of their use reported in this website does not constitute a recommendation for that particular use by the authors, the author's organisations of ACAS. It must be emphasised that crop tolerance and yield responses to herbicides are strongly influenced by seasonal conditions.

Herbicide	Years Tested	2,4-D Amine 500/625	Achieve	Affinity	Ally	Axial	Banvel M	Boxer Gold
		2,4-D Amine	Tralkoxydim	Carfentrazone - Ethyl	Metsulfuron-methyl	Pinoxaden + Cloquintocet-Methyl	Dicamba + MCPA	Prosulfocarb + S-Metolachlor
Variety	Years Tested	2009-2010	2009	2009-2010	2009-2010	2009-2010	2010	2009-2010
Baudin	2009-2010	✓(2)	✓(1)	✓(2)	✓(2)	✓(2)	✓(1)	✓(2)
Hannan	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-	✓(1)
Lockyer	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-	✓(1)
Oxford	2009-2010	✓(2)	✓(1)	✓(2)	✓(2)	✓(2)	N (1/1)	✓(2)
Roe	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-	✓(1)
Scope	2010	✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Sloop SA	2009-2010	✓(2)	✓(1)	✓(2)	✓(2)	✓(2)	✓(1)	✓(2)
Vlamingh	2009-2010	✓(2)	✓(1)	✓(2)	✓(2)	✓(2)	✓(1)	✓(2)
Rates (product/ha)		>1.4L	>380g	>60g	>7g	>250ml	>1.4L	>2.5L
Crop stage at spraying		2 node	4 leaf	4 leaf	4 leaf	4 leaf	6 leaf	IBS

Herbicide	Years Tested	Broadstrike®	Bromoxynil MCPA	Cadence	Decision	Diuron/MCPA Amine	Glean	Tigrex
		Bromoxynil + MCPA	Bromoxynil + MCPA	Dicamba	Diclofop-methyl + Sethoxydim	Diuron + MCPA Amine	Chlorsulfuron	MCPA + Diflufenican
Variety	Years Tested	2010	2009-2010	2009-2010	2009-2010	2009-2010	2009	2009-2010
Baudin	2009-2010	✓(1)	✓(2)	N (1/2)	✓(2)	✓(2)	✓(1)	✓(2)
Hannan	2009	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Lockyer	2009	-	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)
Oxford	2009-2010	✓(1)	✓(2)	✓(2)	✓(2)	✓(2)	✓(1)	✓(2)
Roe	2009	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Scope	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-	✓(1)
Sloop SA	2009-2010	✓(1)	✓(2)	✓(2)	✓(2)	✓(2)	✓(1)	✓(2)
Vlamingh	2009-2010	✓(1)	✓(2)	✓(2)	✓(2)	✓(2)	✓(1)	✓(2)
Rates (product/ha)		>25g	>1.4L	>200g	>1.0L	>500ml/350 ml	>20g	1L
Crop stage at spraying		6 leaf	4 leaf	6 leaf	4 leaf	4 leaf	4 leaf	6 leaf

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Research site location: *Mallala Lower Mid-North 2010/ Bocconoc Park, Mid North 2009*

Site soil type : *Grey mallee loam / Friable light clay loam overlying carbonate at varying depths*

Site pH :

Site annual average rainfall: *400 mm*



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