

Barley cultivars response to herbicides in the Northern Region 1999-2009

This research has been conducted across the Northern Region 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:

- not tested or insufficient data
- ✓ no significant yield reductions at recommended rates or higher than recommended rates in 2+ trials

N (w/z) narrow margin, significant yield reductions at higher than recommended rate, but not 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

x% (1/z) yield reduction (warning) significant yield reduction at recommended rate in 1 trial only in z years of testing

x-y% (w/z) yield reductions (warning) significant yield reductions at recommended rate in w years out of z years tested.

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	Achieve WG		Ally	Ally+MCPA	Amicide	Axial 100 EC	Boxer Gold	Bromicide MA	
Cultivar	(tralkoxydim)		(metsulfuron)	(metsulfuron + MCPA LVE)	(24D amine)	(pinoxaden)	metolachlor + prosulfocarb	(bromoxynil + MCPA)	
	Years tested		1999, 2004-2009	1999-2003, 2005-2009	2000, 2005-2006	1999-2003, 2005-2009	2001, 2005, 2009	2005-2006	2003-2004
		Site	ABC	AC	AC	AC	CD	CD	C
Baudin	2008-2009	C	✓(2)	✓(2)	-	✓(2)	-	-	-
Binalong	2000-2009	ABCD	N (1/3)	✓(6)	✓(3)	✓(5)	✓(3)	✓(2)	✓(2)
Buloke	2008-2009	C	✓(2)	✓(2)	-	✓(2)	-	-	-
Capstan	2006-2007	BC	✓(2)	✓(2)	-	✓(2)	-	-	-
Commander	2007-2009	C	✓(3)	✓(3)	-	✓(3)	-	-	-
Cowabbie	2003-2006	BCD	✓(4)	✓(4)	✓(2)	✓(3)	✓(1)	✓(2)	✓(2)
Fitzroy	2004-2009	BCD	N (1/5)	✓(4)	✓(2)	✓(3)	✓(2)	✓(2)	N (1/1)
Flagship	2008-2009	C	✓(2)	✓(2)	-	✓(2)	-	-	-
Fleet	2006-2009	BCD	✓(2)	✓(2)	-	✓(2)	✓(1)	-	-
Gairdner	2000-2009	ABCD	N (1/3)	✓(6)	✓(3)	✓(5)	✓(3)	✓(2)	N (1/2)
Gilbert	1999-2002	AC	✓(1)	N (1/4)	✓(1)	✓(4)	✓(1)	-	-
Grimmett	1999-2009	ABCD	N (1/4)	N (2/7)	✓(3)	✓(6)	✓(3)	✓(2)	N (1/2)
Grout	2003-2009	BCD	✓(7)	✓(7)	✓(2)	✓(6)	✓(2)	✓(2)	N (1/2)
Hindmarsh	2008-2009	C	✓(2)	✓(2)	-	✓(2)	-	-	-
Kaputar	1999-2003	AC	✓(1)	✓(5)	✓(1)	✓(5)	✓(1)	-	✓(1)
Lindwall	1999-2003	AC	✓(1)	N (1/5)	✓(1)	✓(5)	✓(1)	-	✓(1)
Lockyer	2009		✓(1)	✓(1)	-	✓(1)	-	-	-
Mackay	2000-2009	ABCD	N (1/4)	✓(7)	✓(3)	✓(6)	✓(3)	✓(2)	✓(2)
Roe	2009		✓(1)	✓(1)	-	✓(1)	-	-	-
Schooner	1999	A	✓(1)	✓(1)	-	✓(1)	-	-	-
Shepherd	2007-2009	BCD	✓(2)	✓(2)	-	✓(2)	✓(1)	-	-
Skiff	1999-2001	AC	✓(1)	✓(3)	✓(1)	✓(3)	✓(1)	-	-
Tallon	1999-2006	ABCD	✓(4)	N (1/7)	✓(3)	✓(6)	✓(2)	✓(2)	N (1/2)
Tantangara	1999-2005	ABC	✓(4)	✓(6)	✓(2)	✓(6)	✓(2)	✓(1)	✓(2)
Vlamingh	2007-2008	BC	✓(2)	✓(2)	-	✓(2)	-	-	-
Yarra	2009		✓(1)	✓(1)	-	✓(1)	-	-	-
Rates (product/ha)			380-430g	7g	Ally 7g MCPA 0.75L	500 0.85L 625 0.65L	150-200mL	2.5L	1.4L
Crop stage at spraying			3-7 leaf + 1-6 tiller	3-7 leaf + 1-6 tiller	3-7 leaf + 1-6 tiller	6-7 leaf + 3-7 tiller	3-5 leaf + 1-3 tiller	1BS	5-7 leaf + 3-4 tiller

Herbicide		Bromicide 200	Cadence	Conclude	Decision	Hotshot	MCPA amine 500 (MCPA)	MCPA LVE (MCPA)	
Cultivar		(bromoxynil)	(dicamba)	(florasulam)	(diclofop + sethoxydim)	(aminopyralid + fluroxypyr)			
	Years tested	2000-2003, 2006	2000-2003	2009	2003-2005	2003-2006	2002	1999-2009	
	Site	AC	AC	B	BC	C	C	ABC	
Baudin	2008-2009	C	-	-	-	-	-	✓(2)	
Binalong	2000-2009	ABCD	11 (1/5)	11 (1/4)	✓(1)	N (1/4)	N (2/4)	✓(1)	N (2/6)
Buloke	2008-2009	C	-	-	-	-	-	✓(2)	
Capstan	2006-2007	BC	-	-	-	-	-	✓(2)	
Commander	2007-2009	C	-	-	-	-	-	✓(3)	
Cowabbie	2003-2006	BCD	✓(2)	N (1/1)	-	N (1/3)	N (1/4)	-	12 (1/4)
Fitzroy	2004-2009	BCD	✓(1)	-	✓(1)	✓(3)	N (1/3)	-	N (1/4)
Flagship	2008-2009	C	-	-	-	-	-	✓(2)	
Fleet	2006-2009	BCD	-	-	✓(1)	-	-	-	N (1/2)
Gairdner	2000-2009	ABCD	N (1/5)	✓(1-4)	N (1/1)	✓(4)	✓(4)	✓(1)	N (1/6)
Gilbert	1999-2002	AC	10 (1/3)	✓(3)	-	-	-	✓(1)	N (1/4)
Grimmett	1999-2009	ABCD	13 (1/5)	11-15 (2/4)	✓(1)	✓(4)	✓(4)	✓(1)	16 (1/7)
Grout	2003-2009	BCD	✓(2)	N (1/1)	✓(1)	✓(4)	N (1/4)	-	N (2/7)
Hindmarsh	2008-2009	C	-	-	-	-	-	✓(2)	
Kaputar	1999-2003	AC	N (2/4)	✓(4)	-	✓(1)	✓(1)	✓(1)	N (1/5)
Lindwall	1999-2003	AC	✓(4)	N (1/4)	-	✓(1)	✓(1)	✓(1)	N (1/5)
Lockyer	2009		-	-	-	-	-	✓(1)	
Mackay	2000-2009	ABCD	13 (1/5)	7-13 (2/4)	✓(1)	✓(3)	N (1/4)	✓(1)	5-16 (2/7)
Roe	2009		-	-	-	-	-	✓(1)	
Schooner	1999	A	-	-	-	-	-	✓(1)	
Shepherd	2007-2009	BCD	-	-	✓(1)	-	-	-	✓(2)
Skiff	1999-2001	AC	✓(2)	N (1/2)	-	-	-	-	✓(3)
Tallon	1999-2006	ABCD	N (1/5)	8 (1/4)	-	✓(2)	N (1/4)	✓(1)	13 (1/7)
Tantangara	1999-2005	ABC	✓(4)	N (1/4)	-	✓(2)	✓(3)	✓(1)	N (2/7)
Vlamingh	2007-2008	BC	-	-	-	-	-	✓(2)	
Yarra	2009		-	-	-	-	-	✓(1)	
Rates (product/ha)		1.4L	200g	700mL	1.0L	0.75L	0.75L	0.75L	
Crop stage at spraying		5-7 leaf + 3-7 tiller	4-7 leaf + 2-5 tiller	4-5 leaf, 2-3 tiller	3-6 leaf + 1-4 tiller	4-7 leaf + 2-6 tiller	3-5 leaf + 1-3 tiller	3-7 leaf + 1-6 tiller	

Herbicide			Starane 200/ Advanced	Tordon 242	Tordon 75D + 24D	Torpedo	Triflur X	Tristar Advance
Cultivar			(fluroxypyr)	(picloram + MCPA)	(picloram + 24D)	florasulam + clopyralid	(Triflurin)	(diclofop + fenoxaprop)
	Years tested		2000-2009	1999-2003, 2005-2009	1999-2002	2004	2005-2006	2002-2003, 2005
		Site	AC	ABC	AC	C	CD	C
Baudin	2008-2009	C	✓(2)	N (1/2)	-	-	-	-
Binalong	2000-2009	ABCD	12 (1/6)	✓ (5)	N (1/3)	N (1/1)	✓ (1)	30 (1/2)
Buloke	2008-2009	C	✓(2)	✓ (2)	-	-	-	-
Capstan	2006-2007	BC	✓(2)	N (1/2)	-	-	-	-
Commander	2007-2009	C	✓(3)	N (1/3)	-	-	-	-
Cowabbie	2003-2006	BCD	N (1/4)	✓ (3)	-	✓ (1)	✓ (1)	✓ (1)
Fitzroy	2004-2009	BCD	✓(4)	N (1/3)	-	N (1/1)	✓ (1)	-
Flagship	2008-2009	C	✓(2)	N (1/2)	-	-	-	-
Fleet	2006-2009	BCD	✓(2)	N (1/2)	-	-	-	-
Gairdner	2000-2009	ABCD	N (1/6)	✓ (5)	N (1/3)	N (1/1)	✓ (1)	✓ (2)
Gilbert	1999-2002	AC	✓(3)	✓ (4)	N (1/4)	-	-	N (1/1)
Grimmett	1999-2009	ABCD	✓(6)	15 (1/6)	N (1/4)	✓ (1)	✓ (1)	N (1/2)
Grout	2003-2009	BCD	N (1/7)	N (2/6)	-	✓ (1)	✓ (1)	✓ (1)
Hindmarsh	2008-2009	C	✓ (2)	✓ (2)	-	-	-	-
Kaputar	1999-2003	AC	✓(4)	✓ (5)	✓ (4)	-	-	✓ (2)
Lindwall	1999-2003	AC	✓(4)	✓ (5)	10 (1/4)	-	-	✓ (2)
Lockyer	2009		✓ (1)	✓ (1)	-	-	-	-
Mackay	2000-2009	ABCD	N (1/7)	N (1/6)	N (1/3)	N (1/1)	✓ (1)	11-21 (2/3)
Roe	2009		✓ (1)	✓ (1)	-	-	-	-
Schooner	1999	A	-	✓(1)	✓ (1)	-	-	-
Shepherd	2007-2009	BCD	✓(2)	✓(2)	-	-	-	-
Skiff	1999-2001	AC	✓(2)	✓ (3)	✓ (3)	-	-	-
Tallon	1999-2006	ABCD	N (2/6)	✓ (6)	✓ (4)	✓ (1)	✓ (1)	✓ (2)
Tantangara	1999-2005	ABC	✓(6)	✓ (6)	✓ (4)	✓ (1)	-	✓ (2)
Vlamingh	2007-2008	BC	✓(2)	✓ (2)	-	-	-	-
Yarra	2009		✓ (1)	✓ (1)	-	-	-	-
Rates (product/ha)			1.0L/0.6L	1.0L	75D 300mL 24D 470mL	100mL	1.5L	1.5L
Crop stage at spraying			5-7 leaf + 3-6 tiller	4-5 leaf + 1-3 tiller	5-7 leaf + 3-6 tiller	3 leaf + tiller	1 pre-plant	2-6 leaf + 1-4 tiller

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Research site location:		A Dalby	B Gatton	C Warwick	D Oakey	E Warwick
Site soil type :		black earth	black earth	black earth	black earth	black earth
Site pH :		7.35	7.8	5.5-8.0	6.5-8.5	6.7-7.4
Site annual average rainfall mm:		676	790	670	645	670



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