

Preliminary and Advanced Evaluation Wheat variety response to herbicides in NSW 2008-2010

This research has been conducted at the Wagga Wagga Agricultural Institute to determine if new varieties of wheat vary in tolerance to commonly used herbicides.

The sensitivity of the variety compared to unsprayed controls of the same 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 higher than recommended rates in (z) 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 or their use reported in this website does not constitute a recommendation for that particular use by the authors, the author's organisations or ACAS. It must be emphasised that crop tolerance and yield responses to herbicides are strongly influenced by seasonal conditions.

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Research site location: *Wagga Wagga, New South Wales*

Site soil type : Red Brown earth

Site pH : 4.3 - 4.5

Site annual average rainfall: *523 mm*

Updated: March 2011



**Industry &
Investment**



DISCLAIMER: While every care has been taken in preparing this publication, the organisations involved accept no responsibility for decisions or actions taken as a result of any data or interpretation contained in this report

ACAS seeks to avoid putting information regarding unregistered pesticides or unregistered use of pesticides on this website. However it is possible that occasionally ACAS may unintentionally include such information.

All pesticide applications must accord with the currently registered label for that particular pesticide, crop, pest and region.

Herbicide	Variety	Years Tested	TriflurX® IBS	Logran® IBS	Boxer Gold® IBS	Achieve®	Ally®	Affinity® + MCPA	Axial®
			Trifluralin 480	Triasulfuron	S-Metolachlor	Tralkoxydim	Metsulfuron methyl	Carfentrazone + MCPA	Pinoxaden
			2008-2010	2008-2009	2009-2010	2008-2010	2008-2010	2008-2009	2008-2009
Axe	2008-2010		✓(3)	N (1/2)	N (1/3)	N (2/4)	N (1/3)	✓(2)	✓(2)
Barham	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Bellaroi	2008-2010		N (1/4)	N (1/2)	N (1/3)	N (2/4)	N (1/3)	N (1/3)	✓(2)
Bolac	2008-2010		✓(3)	✓(2)	N (1/3)	N (1/4)	✓(3)	✓(2)	✓(2)
Caparoi	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Chara	2010		✓(1)	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Correll	2010		✓(1)	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Cunningham	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	N (1/1)	✓(1)
Derrimut	2008-2010		✓(2)	✓(2)	N (1/2)	N (1/2)	N (1/2)	✓(1)	✓(1)
Diamondbird	2008-2010		✓(2)	N (1/2)	N (1/2)	N (2/2)	N (1/2)	✓(2)	✓(2)
EGA Burke	2008-2010		✓(3)	N (1/2)	N (1/3)	N (1/4)	N (1/3)	✓(2)	✓(2)
EGA Gregory	2008-2010		✓(3)	N (1/2)	N (1/3)	N (1/4)	8 (1/4)	✓(2)	✓(2)
EGA Stampede	2010		N (1/1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
EGA Wills	2010		N (1/1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
EGA Wylie	2008-2010		N (1/4)	N (1/2)	N (1/3)	✓(3)	✓(3)	✓(2)	✓(2)
ELD-03SB52	2009		✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	N (1/1)
Ellison	2008-2010		N (1/4)	✓(2)	N (1/3)	✓(3)	N (1/4)	✓(2)	✓(2)
Espada	2008-2010		N (1/3)	✓(2)	N (1/3)	N (2/3)	N (1/3)	✓(2)	✓(3)
GBA Ruby	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Gladius	2008-2010		✓(3)	✓(2)	N (1/3)	N (3/4)	N (2/4)	✓(3)	✓(3)
Hyperno	2010		✓(1)	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Jandaroi	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Janz	2008-2010		✓(2)	✓(2)	N (1/2)	N (2/2)	N (1/2)	✓(1)	✓(2)
Lang	2010		✓(1)	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Livingston	2008-2010		✓(4)	✓(2)	N (1/3)	✓(3)	N (1/3)	✓(2)	✓(2)
LPB Crusader	2008-2010		✓(3)	✓(2)	N (1/3)	✓(3)	N (2/4)	✓(2)	✓(2)
LPB Dakota	2008-2010		N (1/4)	✓(2)	N (1/3)	✓(3)	N (1/3)	✓(3)	✓(3)
LPB Lincoln	2008-2010		✓(3)	✓(2)	N (1/3)	✓(3)	N (2/4)	✓(2)	✓(2)
Magenta	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Merinda	2008-2010		N (1/4)	✓(2)	N (1/3)	✓(3)	N (1/3)	✓(2)	✓(2)
Naparoo	2008-2009		✓(2)	✓(2)	✓(1)	✓(2)	✓(2)	✓(1)	✓(1)
Orion	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Peake	2008-2010		N (2/4)	N (1/2)	N (1/3)	N (1/4)	N (1/3)	✓(2)	✓(2)
SQP Revenue	2009-2010		✓(2)	✓(1)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Strezelecki	2008-2010		✓(2)	N (1/2)	N (1/1)	✓(2)	✓(2)	✓(1)	✓(2)
Sunco	2010		✓(1)	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Sunstate	2010		✓(1)	-	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Sunvale	2010		✓(1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Sunvex	2008-2010		✓(3)	N (1/2)	N (1/3)	✓(3)	N (3/4)	✓(2)	✓(2)
Sunzell	2010		N (1/1)	-	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Ventura	2008-2010		✓(3)	✓(2)	N (1/3)	✓(3)	N (1/3)	✓(2)	N (1/3)
Waagan	2008-2009		✓(2)	N (1/2)	N (1/1)	✓(2)	✓(2)	✓(1)	✓(1)
Yenda	2008-2010		✓(3)	✓(2)	N (1/3)	✓(3)	✓(3)	✓(3)	✓(3)
Yitpi	2008-2010		✓(3)	✓(2)	N (1/3)	✓(3)	N (1/4)	N (1/3)	✓(2)
Young	2008-2009		✓(2)	✓(2)	N (1/1)	✓(2)	✓(2)	✓(1)	✓(1)
Zebu	2008-2009		N (1/2)	✓(2)	N (1/1)	N (1/2)	N (1/2)	✓(1)	✓(1)
Zulu	2008-2009		✓(2)	✓(2)	N (1/1)	✓(2)	✓(2)	✓(1)	✓(1)
Rates (product/ha)			1.5 L	35g	2.5 L	0.38 kg	7 g	60g + 500ml	300ml
Crop stage at application			IBS	IBS	IBS	3 L	3-leaf	3-leaf	3L

Herbicide	Broadstrike® + Bucril200							
	Glean®	Wildcat®	Hussar®	Banvel M®	Tigrex®	Amicide 625®	Broadstrike® + Bucril200	
	Chlorsulfuron	Fenoxaprop-p-ethyl	Iodosulfuron-methyl-sodium	MCPA + Dicamba	Diflufenican + MCPA	2,4-D Amine	Flumetsulam + Bromoxynil	
Variety	Years Tested	2008-2010	2008-2010	2008-2009	2008-2010	2008-2010	2008	
Axe	2008-2010	✓(3)	N (1/4)	N (2/3)	N (2/4)	✓(3)	N (1/4)	✓(1)
Barham	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-
Bellaroi	2008-2010	✓(3)	N (2/4)	N (1/2)	✓(3)	✓(3)	✓(3)	✓(1)
Bolac	2008-2010	✓(3)	N (1/4)	N (1/3)	N (1/4)	N (2/4)	N (2/4)	✓(1)
Caparoi	2010	N (1/1)	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	-
Chara	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-
Correll	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-
Cunningham	2010	N (1/1)	✓(1)	N (1/1)	N (1/1)	✓(1)	N (1/1)	-
Derrimut	2008-2010	✓(2)	N (1/2)	✓(1)	✓(2)	N (1/2)	✓(2)	✓(1)
Diamondbird	2008-2010	N (1/2)	✓(3)	✓(2)	N (2/2)	N (1/2)	N (2/2)	✓(1)
EGA Burke	2008-2010	N (2/4)	✓(3)	N (1/3)	N (3/4)	✓(4)	N (2/4)	✓(1)
EGA Gregory	2008-2010	11 (1/4)	N (1/4)	N (2/3)	N (2/4)	14 (1/4)	N (2/4)	✓(1)
EGA Stampede	2010	N (1/1)	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	-
EGA Wills	2010	✓(1)	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)	-
EGA Wylie	2008-2010	N (3/4)	N (1/4)	N (1/3)	N (1/4)	N (1/4)	N (1/4)	✓(1)
ELD-03SB52	2009	N (1/1)	✓(1)	N (1/1)	✓(1)	✓(1)	N (1/1)	-
Ellison	2008-2010	✓(3)	N (1/4)	N (1/3)	N (1/4)	N (1/4)	N (2/4)	✓(1)
Espada	2008-2010	N (1/3)	✓(3)	N (1/2)	N (1/3)	✓(3)	N (1/3)	✓(1)
GBA Ruby	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-
Gladius	2008-2010	11 (1/4)	N (1/4)	✓(2)	N (2/4)	✓(4)	N (2/4)	✓(1)
Hyperno	2010	✓(1)	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)	-
Jandaroi	2010	N (1/1)	N (1/1)	N (1/1)	N (1/1)	✓(1)	N (1/1)	-
Janz	2008-2010	✓(2)	N (1/3)	N (1/2)	N (1/3)	✓(3)	✓(2)	✓(1)
Lang	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	-
Livingston	2008-2010	✓(3)	N (1/4)	N (1/3)	N (3/4)	10 (1/4)	N (1/4)	✓(1)
LPB Crusader	2008-2010	✓(3)	✓(4)	13 (1/3)	N (2/4)	N (1/4)	N (2/4)	✓(1)
LPB Dakota	2008-2010	12 (1/4)	✓(4)	N (1/2)	N (1/4)	10 (1/4)	N (2/4)	✓(1)
LPB Lincoln	2008-2010	N (2/4)	✓(4)	✓(2)	N (1/4)	10 (1/4)	N (1/4)	✓(1)
Magenta	2010	✓(1)	✓(1)	N (1/1)	N (1/1)	✓(1)	N (1/1)	-
Merinda	2008-2010	✓(3)	✓(4)	N (1/2)	N (2/4)	N (3/4)	N (2/4)	✓(1)
Naparoo	2008-2009	✓(2)	✓(2)	✓(1)	N (1/2)	✓(2)	✓(2)	✓(1)
Orion	2010	N (1/1)	✓(1)	N (1/1)	N (1/1)	✓(1)	N (1/1)	-
Peake	2008-2010	✓(3)	N (1/4)	N (1/3)	✓(3)	N (1/4)	✓(3)	✓(1)
SQP Revenue	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N (1/2)	-
Strezelecki	2008-2010	✓(2)	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)	✓(1)
Sunco	2010	✓(1)	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)	-
Sunstate	2010	✓(1)	✓(1)	N (1/1)	N (1/1)	✓(1)	✓(1)	-
Sunvale	2010	✓(1)	✓(1)	✓(1)	N (1/1)	✓(1)	N (1/1)	-
Sunvex	2008-2010	✓(3)	✓(3)	✓(2)	N (2/4)	✓(4)	✓(3)	✓(1)
Sunzell	2010	✓(1)	✓(1)	✓(1)	✓(1)	N (1/1)	N (1/1)	-
Ventura	2008-2010	✓(3)	✓(3)	✓(3)	N (1/4)	✓(3)	✓(3)	✓(1)
Waagan	2008-2009	N (1/2)	✓(2)	✓(1)	N (1/2)	N (1/2)	N (1/2)	✓(1)
Yenda	2008-2010	✓(4)	✓(4)	✓(3)	✓(3)	N (1/4)	✓(3)	✓(1)
Yitpi	2008-2010	✓(3)	✓(3)	✓(2)	N (2/4)	✓(3)	N (1/3)	✓(1)
Young	2008-2009	✓(2)	✓(2)	✓(1)	N (1/2)	N (1/2)	✓(2)	✓(1)
Zebu	2008-2009	N (1/2)	✓(2)	✓(1)	N (1/2)	N (1/2)	N (1/2)	✓(1)
Zulu	2008-2009	✓(2)	✓(2)	✓(1)	✓(2)	✓(2)	✓(2)	✓(1)
Rates (product/ha)		20 g	0.5 L	200 g	1.7 L	0.75 L	1.7 L	20g + 700ml
Crop stage at application		3-leaf	4 L	3-leaf	5-leaf	5-leaf	5-6 L	5-leaf

Herbicide	Years Tested	Bromicide®	Hoegrass ®	Diuron + MCPA	Eclipse® + LVE MCPA	Tordon 242®	Mataven® SST
		bromoxynil	Diclofop - methyl	Diuron + MCPA	Metosulam + LVE MCPA	Picloram + MCPA	Flamprop-methyl
Variety	Years Tested	2008	2008	2008	2008-2009	2008-2010	2008
Axe	2008-2010	✓(1)	N (1/1)	✓(1)	N (1/2)	N (2/2)	N (1/1)
Barham	2010	-	-	-	-	-	-
Bellaroi	2008-2010	✓(1)	✓(1)	✓(1)	✓(2)	N (2/2)	N (1/1)
Bolac	2008-2010	✓(1)	✓(1)	✓(1)	N (1/2)	N (1/2)	N (1/1)
Caparoi	2010	-	-	-	-	-	-
Chara	2010	-	-	-	-	-	-
Correll	2010	-	-	-	-	-	-
Cunningham	2010	-	-	-	-	-	-
Derrimut	2008-2010	✓(1)	N (1/1)	✓(1)	N (1/2)	✓(2)	N (1/1)
Diamondbird	2008-2010	✓(1)	N (1/1)	✓(1)	N (1/2)	N (2/2)	N (1/1)
EGA Burke	2008-2010	✓(1)	✓(1)	✓(1)	N (2/2)	N (2/2)	✓(1)
EGA Gregory	2008-2010	✓(1)	N (1/1)	✓(1)	✓(2)	✓(2)	N (1/1)
EGA Stampede	2010	-	-	-	-	-	-
EGA Wills	2010	-	-	-	-	-	-
EGA Wylie	2008-2010	✓(1)	✓(1)	✓(1)	N (1/2)	✓(2)	N (1/1)
ELD-03SB52	2009	-	-	-	✓(1)	✓(1)	-
Ellison	2008-2010	✓(1)	N (1/1)	N (1/1)	✓(2)	N (1/2)	N (1/1)
Espada	2008-2010	✓(1)	✓(1)	✓(1)	✓(2)	✓(2)	N (1/1)
GBA Ruby	2010	-	-	-	-	-	-
Gladius	2008-2010	✓(1)	N (1/1)	N (1/1)	✓(2)	N (1/2)	N (1/1)
Hyperno	2010	-	-	-	-	-	-
Jandaroi	2010	-	-	-	-	-	-
Janz	2008-2010	✓(1)	N (1/1)	✓(1)	✓(2)	✓(2)	✓(1)
Lang	2010	-	-	-	-	-	-
Livingston	2008-2010	✓(1)	N (1/1)	✓(1)	✓(2)	N (1/2)	✓(1)
LPB Crusader	2008-2010	✓(1)	✓(1)	N (1/1)	N (1/2)	N (1/2)	✓(1)
LPB Dakota	2008-2010	✓(1)	✓(1)	✓(1)	✓(2)	✓(2)	N (1/1)
LPB Lincoln	2008-2010	✓(1)	N (1/1)	✓(1)	N (2/2)	N (1/2)	N (1/1)
Magenta	2010	-	-	-	-	-	-
Merinda	2008-2010	✓(1)	✓(1)	N (1/1)	N (1/2)	✓(2)	N (1/1)
Naparoo	2008-2009	✓(1)	✓(1)	✓(1)	✓(2)	✓(2)	N (1/1)
Orion	2010	-	-	-	-	-	-
Peake	2008-2010	✓(1)	N (1/1)	N (1/1)	N (2/2)	✓(2)	N (1/1)
SQP Revenue	2009-2010	-	-	-	✓(1)	✓(1)	-
Strezelecki	2008-2010	✓(1)	✓(1)	✓(1)	✓(2)	N (1/2)	✓(1)
Sunco	2010	-	-	-	-	-	-
Sunstate	2010	-	-	-	-	-	-
Sunvale	2010	-	-	-	-	-	-
Sunvex	2008-2010	✓(1)	N (1/1)	✓(1)	✓(2)	✓(2)	N (1/1)
Sunzell	2010	-	-	-	-	-	-
Ventura	2008-2010	✓(1)	✓(1)	✓(1)	N (1/2)	N (2/2)	N (1/1)
Waagan	2008-2009	N (1/1)	N (1/1)	N (1/1)	N (1/2)	✓(2)	✓(1)
Yenda	2008-2010	✓(1)	N (1/1)	✓(1)	N (1/2)	✓(2)	N (1/1)
Yitpi	2008-2010	✓(1)	✓(1)	N (1/1)	✓(2)	✓(2)	N (1/1)
Young	2008-2009	✓(1)	✓(1)	N (1/1)	N (1/2)	N (1/2)	N (1/1)
Zebu	2008-2009	N (1/1)	N (1/1)	N (1/1)	N (2/2)	✓(2)	N (1/1)
Zulu	2008-2009	✓(1)	✓(1)	✓(1)	✓(2)	✓(2)	N (1/1)
Rates (product/ha)		2 L	2.0 L	0.5 + 0.5 L	5 g + 0.5 L	1.0 L	2.25 L
Crop stage at application		3 L	4-5 L	3-leaf	3-leaf	5 L	spray-top