

Wheat variety response to herbicides in Victoria

This research has been conducted across the Victorian Mallee to determine if new and existing varieties of wheat vary in tolerance to commonly used herbicides

Preliminary Evaluation - herbicides applied at greater than recommended rates to identify cultivar herbicide combinations which may lead to yield loss.

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

- not tested or insufficient data
- ✓ (z) no significant yield reductions at recommended rates or 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 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	Variety	Years Tested	2,4-D Amine 500	Achieve®	Affinity®	Ally®	Axial®	Boxer Gold®	Bromoxynil MCPA	Cadence®
			2,4-D Amine	Tralkoxydim	Carfentrazone - Ethyl	Metsulfuron-methyl	Pinoxaden + Cloquintocet-Methyl	Prosulfocarb + S-Metalochlor	Bromoxynil + MCPA	Dicamba
			2009-2010	2009-2010	2009-2010	2009-2010	2009-2010	2009-2010	2009-2010	2009-2010
Barham	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Bolac	2010	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Caparoi	2010	✓(1)	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Chara	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Currawong	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
EGA Bounty	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N (1/1)
EGA Burke	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Estoc	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Frame	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N (1/2)
Frelon	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Gascoigne	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N (1/1)
GBA Sapphire	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Gladius	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N (1/1)
Hartog	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Hyperno	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N (1/2)
Kunjin	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Lincoln	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N (1/2)
Mackellar	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Naparoo	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Mace	2010	✓(1)	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Orion	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Preston	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Rudd	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Saintly	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Scout	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Sentinel	2009-2010	N (1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N (1/2)
Spitfire	2009-2010	✓(2)	N (1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Tennant	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Tjilkuri	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Ventura	2009	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N (1/1)
Yenda	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Yitpi	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Rates (product/ha)		> 1.4L	> 380g	> 60g	> 7g	> 250ml	> 2.5L	> 1.4L	> 200g	
Crop stage at spraying		2 node	3 leaf	3 leaf	3 leaf	3 leaf	IBS	3 leaf	5 leaf	

Herbicide	Variety	Years Tested	Diuron(500SC)/MCPA	Glean	Hussar®	Tigrex®
			Diuron + MCPA Amine	Chlorsulfuron	Iodosulfuron-Merhylsodium	MCPA + Diflufenican
			2009-2010	2009-2010	2009-2010	2009-2010
Barham	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Bolac	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Caparoi	2010	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Chara	2010	✓(1)	N (1/1)	N (1/1)	✓(1)	✓(1)
Currawong	2009	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)
EGA Bounty	2009	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)
EGA Burke	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Estoc	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)
Frame	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Frelon	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Gascoigne	2009	N (1/1)	✓(1)	✓(1)	✓(1)	✓(1)
GBA Sapphire	2010	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Gladius	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Hartog	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Hyperno	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)
Kunjin	2010	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Lincoln	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Mackellar	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Naparoo	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Mace	2010	✓(1)	N (1/1)	N (1/1)	✓(1)	✓(1)
Orion	2009-2010	✓(2)	✓(2)	✓(2)	N (1/2)	✓(2)
Preston	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Rudd	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Saintly	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)
Scout	2009-2010	✓(2)	N (1/2)	✓(2)	✓(2)	✓(2)
Sentinel	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)
Spitfire	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)
Tennant	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Tjikuri	2009-2010	✓(2)	✓(2)	N (1/2)	✓(2)	✓(2)
Ventura	2009	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Yenda	2009-2010	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Yitpi	2010	✓(1)	✓(1)	N (1/1)	✓(1)	✓(1)
Rates (product/ha)		> 500ml/ 350ml	> 20g	> 200g	> 1L	
Crop stage at spraying		3 leaf	3 leaf	3 leaf	5 leaf	

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Birchip/Culgoa, Victoria.
 Texture: Sandy Mallee Loam.
 pH: 7.6 - 8.6 at depth
 Site Rainfall 2010: 518 mm
 Average Rainfall: 373.8mm



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.