

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

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	Years Tested	2,4-D Amine 625	Achieve®	Affinity® + MCPA	Ally® + MCPA	Axial®	Boxer Gold®	Bromoxynil MCPA	Cadence® + MCPA
		2,4-D Amine	Tralkoxydim	Carfentrazone - Ethyl + MCPA	Metsulfuron-methyl + MCPA	Pinoxaden + Cloquintocet-Methyl	Prosulfocarb + S-Metolochlor	Bromoxynil + MCPA	Dicamba + MCPA
		2009-2015	2009-2015	2009-2015	2009-2015	2009-2015	2009-2015	2009-2015	2009-2015
Axe	2012-2015	N(1/3)	✓(3)	✓(3)	✓(3)	✓(3)	✓(3)	✓(3)	14-35(2/3)
Bolac	2011-2012	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Caparoi	2011	✓(1)	✓(1)	✓(1)	N(1/1)	✓(1)	✓(1)	✓(1)	✓(1)
Chara	2011-2012	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Cobra	2013-2015	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Corack	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Correll	2012-2015	N(1/3)	16(1/3)	✓(3)	✓(3)	N(1/3)	✓(3)	✓(3)	N(1/3)
Dart	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Elmore CL Plus	2014-2015	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	21(1/1)
Emu Rock	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Espada	2013	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N(1/1)
Estoc	2011-2012	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Forrest	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Frame	2010-2011	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Gasgoine	2011	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N(1/2)	✓(1)	N(1/1)
Gauntlet	2011-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Gazelle	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)	N(1/2)
Gladius	2011-2013	✓(2)	N(1/2)	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	60(1/2)
Grenade CL Plus	2014-2015	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)
Harper	2012-2015	✓(3)	✓(3)	✓(3)	✓(3)	✓(3)	✓(3)	✓(3)	26(1/3)
Hatchet CL Plus	2014-2015	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	18(1/1)
Hypemo	2010-2012	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Impala	2011-2013	N(1/2)	✓(2)	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	N(1/2)
Justica CL Plus	2012-2013	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	23(1/2)
Kord CL Plus	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	17-36(2/2)
Lancer	2013-2015	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	19(1/2)
Lincoln	2010-2011	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Merlin	2011-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	21(1/2)
Orion	2011-2012	✓(2)	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Phantom	2012-2013	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(2/2)
QAL2000	2012-2013	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Saintly	2011-2012	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Scout	2011	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Sentinel	2010-2012	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	16-32(2/2)
Shield	2014-2015	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	34(1/1)
Spitfire	2011-2012	✓(2)	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Sunguard	2012	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	30(1/1)
Suntop	2012-2013	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Tjilkuri	2011-2012	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Trojan	2013-2015	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	19-37(2/2)
Viking	2014-2015	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N(1/1)
Wakelin	2012	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	N(1/1)
Wallup	2012-2013	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	N(1/2)
Wyalkatchem	2014-2015	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	✓(1)	8(1/1)
Yawa	2011-2012	N(1/2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Yitpi	2011-2012	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)	✓(2)
Rates (product/ha)		1.4 L	380 g	100 mL + 330 mL	7 g + 330 mL	250 mL	2.5 L	1.4 L	200 g + 330 mL
Crop stage at spraying		2 node	3 leaf	3 leaf	3 leaf	3 leaf	IBS	3 leaf	5 leaf

Herbicide Variety	Years Tested	Diuron + MCPA	Glean	Hussar®	Sakura®	Tigrex®
		Diuron + MCPA Amine	Chlorsulfuron	Iodosulfuron- Methylsodium	Pyroxasulfone	MCPA + Diffenican
		2009-2015	2009-2011	2009-2015	2012-2015	2009-2015
Axe	2012-2015	✓(3)	-	N(1/3)	✓(3)	✓(3)
Bolac	2011-2012	✓(2)	✓(1)	✓(2)	✓(1)	✓(2)
Caparoi	2011	✓(1)	✓(1)	N(1/1)	-	✓(1)
Chara	2011-2012	✓(2)	N(1/1)	N(1/2)	✓(1)	✓(2)
Cobra	2013-2015	✓(2)	-	✓(2)	✓(2)	✓(2)
Corack	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Correll	2012-2015	✓(3)	-	✓(3)	✓(3)	✓(3)
Dart	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Elmore CL Plus	2014-2015	✓(1)	-	✓(1)	✓(1)	✓(1)
Emu Rock	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Espada	2013	✓(1)	-	✓(1)	✓(1)	✓(1)
Estoc	2011-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Forrest	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Frame	2010-2011	✓(2)	✓(2)	✓(2)	-	✓(2)
Gasgoine	2011	N(1/1)	✓(1)	✓(1)	-	✓(1)
Gauntlet	2011-2013	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Gazelle	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Gladius	2011-2013	N(1/2)	✓(1)	✓(2)	✓(1)	✓(2)
Grenade CL Plus	2014-2015	✓(1)	-	✓(1)	✓(1)	✓(1)
Harper	2012-2015	✓(3)	-	19(1/3)	✓(3)	✓(3)
Hatchet CL Plus	2014-2015	✓(1)	-	✓(1)	✓(1)	✓(1)
Hypemo	2010-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Impala	2011-2013	N(1/2)	N(1/1)	✓(2)	✓(1)	✓(2)
Justica CL Plus	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Kord CL Plus	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Lancer	2013-2015	✓(2)	-	✓(2)	✓(2)	✓(2)
Lincoln	2010-2011	✓(2)	✓(2)	✓(2)	-	✓(2)
Merlin	2011-2013	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Orion	2011-2012	✓(2)	✓(1)	✓(2)	✓(1)	N(1/2)
Phantom	2012-2013	✓(2)	-	✓(2)	✓(2)	N(1/2)
QAL2000	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Saintly	2011-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Scout	2011	✓(1)	N(1/1)	✓(1)	-	✓(1)
Sentinel	2010-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Shield	2014-2015	✓(1)	-	✓(1)	✓(1)	✓(1)
Spitfire	2011-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Sunguard	2012	✓(1)	-	✓(1)	✓(1)	✓(1)
Suntop	2012-2013	N(1/2)	-	✓(2)	✓(2)	✓(2)
Tjilkuri	2011-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Trojan	2013-2015	✓(2)	-	✓(2)	✓(2)	✓(2)
Viking	2014-2015	✓(1)	-	✓(1)	✓(1)	✓(1)
Wakelin	2012	✓(1)	-	✓(1)	✓(1)	✓(1)
Wallup	2012-2013	✓(2)	-	✓(2)	✓(2)	✓(2)
Wyalkatchem	2014-2015	✓(1)	-	✓(1)	✓(1)	✓(1)
Yawa	2011-2012	✓(2)	✓(1)	✓(2)	✓(1)	✓(2)
Yitpi	2011-2012	✓(2)	✓(1)	N(1/2)	✓(1)	✓(2)
Rates (product/ha)		500 mL + 330 mL	20 g	200 g	118 g	1 L
Crop stage at spraying		3 leaf	3 leaf	3 leaf	IBS	5 leaf

Site Manager: **Cameron Taylor**, Birchip Cropping Group , 0427 116 582
Trial coordinator: **David Brunton**, SARDI Research Officer (Herbicide Tolerance) (08) 8303 9479
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Trial location: Birchip/Culgoa, Victoria.
Texture: Sandy Mallee Loam.
pH: 7.6 - 8.6 at depth
Average Rainfall: 374mm



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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.