

Pulse variety response to herbicides in Victoria

This research has been conducted across regional Victoria 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	(narrow margin) significant yield reductions at higher than recommended rate in 1+ trials, but not at recommended rate
x%	yield reduction (warning) significant yield reduction at recommended rate in 1 trial only
x-y%	yield reductions (warning) significant yield reductions at recommended rate in 2+ trials

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.

Field Peas

Herbicide		Trifluralin	Spinnaker® 240/700	Lexone®	Diuron 500/900	Raptor®	Brodal®	Brodal® + MCPA
		trifluralin	imazethapyr	metribuzin	diuron	imazamox	diflufenican	diflufenican + MCPA
Variety	Years Tested	2003-2004	2003-2004	2003-2004	2003-2004	2003-2004	2003	2004
	Site	AB	AB	AB	AB	AB	A	B
Dundale	2004	A	-	-	-	-	-	-
Kaspa	2003-2004	AB	✓	✓	✓	✓	✓	✓
Parafield	2004	A	-	-	-	-	-	-
Snowpeak	2004	A	-	-	-	-	-	-
Moonlight	2004	B	-	N	-	-	-	-
Sturt	2003-2004	AB	✓	N	✓	✓	✓	✓
Rates (ai/ha)		576-720g	48-70g	210g	600-765g	31.5	75g	75g + 75g
Rates (product/ha)		1200-1500ml	200(240)- 100(700)	280 (Lex) 435 (Sen)	1200 (500) - 850 (900)	45g	150ml	150ml + 150ml
Crop stage at spraying		IBS	PSPE	PSPE	PSPE	3-4 node	3-4 node	3-4 node

Herbicide		Broadstrike®	Verdict®	Select®
		Flumetsulam	Haloxypop	Clethodim
Variety	Years Tested	2003-2004	2003-2004	2004
	Site	AB	AB	AB
Dundale	2004	A	-	-
Kaspa	2003-2004	AB	✓	✓
Parafield	2004	A	-	-
Snowpeak	2004	A	-	-
Moonlight	2004	B	-	-
Sturt	2003-2004	AB	✓	✓
Rates (ai/ha)		20g	52g	96g
Rates (product/ha)		25g	75ml	400ml
Crop stage at spraying		3-4 node	z14 grass weeds	z14 grass weeds

Lentils

Herbicide			Trifluralin	Metalachlor 720	Simaquest/Gesa top	Lexone	Diuron 500/900	Gesatop + Lexone	Simaquest +Metribuzin
			trifluralin	metalochlor	simazine	metribuzin	diuron	simazine + metribuzin	simazine + prometryn
Variety	Years Tested	Site	2003,2005	2005	2003,2005	2003,2005	2003,2005	2003	2005
Nugget	2003,2005	AC	✓	-	✓	✓	✓	-	-
Northfield	2003	AC	✓	-	✓	✓	✓	-	-
Boomer	2005	C	-	-	-	-	-	-	-
Nipper	2005	C	-	-	-	-	-	-	-
Rates (ai/ha)			480g	720g	600-900g	210g	600-765g	600+90g	720+210g
Rates (product/ha)			1000ml	1000ml	1000ml/g	280g	1200 (500) - 850 (900)	1000ml + 120g	800g + 280g
Crop stage at spraying			IBS	IBS	PSPE	PSPE	PSPE	PSPE	PSPE

Herbicide			Simaquest +Gesaguard	Brodal	Broadstrike	Verdict 520
			simazine + prometryn	diflufenican	flumetsulam	Haloxfop
Variety	Years Tested	Site	2005	2003,2005	2003,2005	2005
Nugget	2003,2005	AC	-	✓	✓	-
Northfield	2003	AC	-	✓	✓	-
Boomer	2005	C	-	-	-	-
Nipper	2005	C	-	-	-	-
Rates (ai/ha)			720g + 750g	75g	20g	52g
Rates (product/ha)			800g + 1500ml	150ml	25g	75ml
Crop stage at spraying			PSPE	3-4 node	3-4 node	z14 grass weeds

Chickpeas

Herbicide			Trifluralin	Metalachlor 720	Simaquest	Metribuzin	Simaquest +Diuron 900	Simaquest + Balance	Simaquest +Gesaguard
			trifluralin	metalochlor	simazine	metribuzin	simazine + diuron	simazine + isoxaflutole	simazine + prometryn
Variety	Years Tested	Site	2005	2005	2005	2005	2005	2005	2005
		CD	CD	CD	CD	CD	CD	CD	CD
Genesis 090	2005	CD	N	✓	✓	✓	N	N	✓
Genesis 509	2005	CD	9	✓	✓	✓	✓	N	✓
Genesis 508	2005	C	-	-	-	-	-	-	-
Howzat	2005	D	N	-	-	-	-	-	-
Rates (ai/ha)			576g	720g	720g	210g	720g + 405g	720g + 75g	720g + 750g
Rates (product/ha)			1200ml	1000ml	800g	280g	800g + 450g	800g + 100g	800g + 1500ml
Crop stage at spraying			IBS	IBS	PSPE	PSPE	PSPE	PSPE	PSPE

Herbicide			Simaquest +Spinnaker	Broadstrike
			simazine + imazethapyr	flumetsulam
Variety	Years Tested	Site	2005	2005
		CD	CD	CD
Genesis 090	2005	CD	18	21-33
Genesis 509	2005	CD	N	25
Genesis 508	2005	C	-	-
Howzat	2005	D	N	-
Rates (ai/ha)			720g +31.5g	20g
Rates (product/ha)			800g + 45g	25g
Crop stage at spraying			PSPE	3-4 node

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Research site location:

A	B	C	D
Kalkee03	Birchip04	Kalkee05	Beulah05
Black cracking clay	Calcareous loam over a sodic calcareous medium clay	Black cracking clay	Alkaline loam over a calcareous medium clay
8.4	8.5	8.4	7.8
440mm	375mm	440mm	375mm

Site soil type :

Site pH :

Site annual average rainfall mm:



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