

CANOLA YIELD RESULTS FROM THE SOUTH-EAST AND VARIETIES AVAILABLE IN SA FOR 2013

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Key Points:

- Latest information on canola variety yield performance can be found at www.nvtonline.com.au
- Growers should be encouraged to change canola varieties every two or three years to reduce the risk of blackleg
- Variety selection should be made inconjunction with the latest version of the blackleg risk assessor (available at www.grdc.com.au)

Why do this research?

The choice of most suitable canola variety for any situation will often follow a consideration of maturity, herbicide tolerance, blackleg resistance and early vigour together with relative yield and oil content. In relation to some of these issues the following points can be made:

- The weed species expected may dictate the need for a herbicide tolerant production system (e.g., triazine tolerant or Clearfield). Remember that a triazine tolerant variety will incur a yield and oil penalty when grown in situations where they are not warranted.
- Varietal blackleg resistance and/or fungicide use should be considered, particularly when rotations are close.

Site Details for South-East NVT sites

	Keith	Bordertown	Frances	Moyhall
Date sown	29-May	6-Jun	7-Jun	10-May
Soil type	L	CL	SL	CL
pH (water)	7.9	6.1	6.1	7.4
Apr-Oct rain (mm)	306	340	343	448
Previous Year	Beans	Pasture	Wheat	Beans
Site stress factors		dl		

Where L = Loam, CL= clay loam, SL=sandy loam

dl=dry post-flowering moisture stress

Due to the high levels of blackleg in many areas in SA, it is very important that canola crops are grown at least 500 metres away from last year's canola paddock. As well, if you have used the same variety for three years or more there is an increased chance of blackleg that can attack that variety. Therefore it is even more important to keep the same variety at least 500 metres away from stubble of that variety.

There has been a wide range of new varieties available for 2012 sowings. Many of these varieties are hybrids and the likelihood is that in future many more hybrids will be released. When you make your choice about new varieties you should rely on NVT data from the NVT website and any of your own ideas from observing trials in 2012.

Notes on recently released canola varieties (grown in 2012)

Official blackleg resistance ratings from 2012 are now included for varieties released for 2012.

Ratings for varieties being released in 2013 are still being determined so comments from companies are included.

Table 1: South-East Conventional NVT Canola Yields

Variety	SOUTH EAST				Conventional
	2012 (expressed as % site mean)				
	Keith	Bordertown	Frances	Moyhall	
AV Garnet	121	104	104	96	
AV Zircon	100	111	94	118	
CB Agamax	88	86	106	101	
CB Tango C	105	88	91	95	
Hyola 50	105	113	109	99	
SARDI515M	84	-	-	-	
Victory V3001	104	88	93	-	
Victory V3002	100	99	107	-	
Victory V3003	-	112	96	90	
Site Av. Yield (t/ha)	1.47	2.00	1.93	3.15	
LSD (%)	22	15	NS	16	

Conventional varieties

CB Agamax New Release 2011. Early-mid maturing hybrid. Canola Breeders indicate excellent yield in low to medium rainfall, excellent early vigour and good oil content. Blackleg resistance rating MS. Tested in NVT trials since 2010. Marketed by Canola Breeders.

CB Taurus First released 2009. Very late maturing, "winter" type canola hybrid. Winter grazing option in high rainfall zones. Canola Breeders indicate excellent yield, excellent

early vigour and good oil content. Blackleg resistance rating MR (P). Marketed by Canola Breeders.

Conventional specialty varieties

Victory V3001 (tested as 06H932) Early to mid-maturing specialty hybrid developed by Cargill Specialty Canola Oils and Vic. DPI. Good blackleg resistance (MR) and yield potential and has performed well in 2007 and 2008 NVT trials. Victory V3001 will be grown

under contract production for Cargill and

marketed by Cargill Specialty Canola Oil.

Table 2: South-East Herbicide Tolerant NVT Canola Yield

Variety	SOUTH EAST				
	2012 (expressed as % site mean)				
	Keith	Bordertown	Frances	Moyhall	
Archer	121	99	105	103	Clearfield
Carbine	103	99	-	-	
Hyola 474CL	100	100	99	104	
Hyola 575CL	96	109	111	99	
Pioneer 43C80 (CL)	81	-	-	-	
Pioneer 43Y85 (CL)	101	-	-	-	
Pioneer 44Y84 (CL)	83	95	95	94	
Pioneer 45Y82 (CL)	117	100	107	97	
Pioneer 45Y86 (CL)	-	96	94	105	
Xceed Oasis CL	-	-	-	-	
Site Av. Yield (t/ha)	1.59	2.11	2.08	3.01	
LSD (%)	21	15	NS	NS	
ATR Cobbler	88	77	53	75	Triazine Tolerant
ATR Gem	106	103	103	103	
ATR Snapper	98	84	109	100	
ATR Stingray	94	100	105	100	
Bonanza TT	84	-	-	-	
CB Atomic HT	112	110	98	101	
CB Henty HT	-	92	103	119	
CB Jardee HT	115	90	92	113	
CB Junee HT	107	92	98	88	
Crusher TT	-	116	113	106	
CB Sturt TT	105	85	-	-	
CB Telfer	88	94	-	-	
Hyola 555TT	-	112	108	104	
Hyola 559TT	109	99	99	103	
Hyola 656TT	-	115	111	114	
Jackpot TT	105	113	107	116	
Monola 413TT	99	99	104	89	
Monola 506TT	93	104	104	96	
Monola 605TT	-	89	89	80	
Thumper TT	-	98	93	102	
Site Av. Yield (t/ha)	1.38	1.94	1.67	2.74	
LSD (%)	23	16	21	18	

HERBICIDE TOLERANT

Clearfield varieties

Hyola 575CL (tested as K9317). Mid-early season hybrid. Pacific Seeds indicate high grain yield and oil content about 1% more than Hyola 571CL. Medium plant height. Blackleg resistance rating R. Tested in SA NVT trials since 2010. Bred and marketed by Pacific Seeds.

44Y84 CL Early/early-mid season hybrid. Blackleg resistance rating MR if treated with a fungicide, MR-MS if bare seed. Included in NVT trials in 2010, tested ever since. Bred and marketed by Pioneer Hi-Bred.

Hyola® 474CL Mid-early maturing CL Hybrid. Pacific Seeds indicate higher yield than Hyola 571CL, very high oil and high protein content. Medium-tall plant height. Ideally fits medium-low to high rainfall areas including irrigation, and exhibits excellent hybrid vigour. Blackleg resistance rating R (P). Tested in NVT trials in 2011 and 2012. Bred and marketed by Pacific Seeds. New release for 2012.

43Y85CL (tested as 08N102I). Early maturing hybrid Clearfield canola. Blackleg resistance MR, and equivalent oil content to 44C79. Selected for short plant height and standability. Tested in NVT trials in 2011 and 2012. Bred and marketed by Pioneer Hi-Bred.

Triazine tolerant varieties

CB Junee HT™ (trialled as CHYB-127). New release 2011. Early-maturing TT hybrid. Canola Breeders indicate excellent yield, good early vigour and good oil content. Blackleg resistance rating MS-S. Tested in NVT trials in 2010 for the first time. Bred and marketed by Canola Breeders.

Crusher TT Mid maturing OP TT variety. Pacific Seeds indicate good oil and good protein content. Medium-tall plant height. Ideally fits medium to very high rainfall areas including irrigation, exhibits good early vigour and good standability. Blackleg resistance rating MS. Tested in NVT trials since 2010. Bred and marketed by Pacific Seeds.

Thumper TT (tested as T2214). Mid to mid-late maturing double haploid OP TT variety. Pacific Seeds indicate very high yield, excellent oil and good protein content. Medium plant height. Ideally fits high to very high rainfall areas including irrigation, exhibits good early vigour and excellent standability. Blackleg resistance rating R-MR. Tested in NVT trials since 2010. Bred and marketed by Pacific Seeds.

Hyola 555TT (tested as T2522) Mid-Early maturing TT Hybrid. (TT version of Hyola 433) Pacific Seeds indicate excellent yield, excellent oil and high protein content. Ideally fits medium-low right through to high rainfall areas. This Hybrid exhibits good TT Hybrid vigour, medium plant height and excellent standability. Blackleg resistance rating MR. Tested in NVT trials since 2010. Bred and marketed by Pacific Seeds.

Hyola 444TT (tested as T98002) Early maturing TT Hybrid. Pacific Seeds indicate excellent yield, excellent oil and high protein content. Medium-short plant height. Ideally fits low to medium-high rainfall areas and exhibits good TT Hybrid vigour and good standability. Blackleg resistance rating MR. Tested in NVT trials since 2010. Bred and marketed by Pacific Seeds.

ATR-Snapper (tested as NT0049). Early-mid maturing medium-short height. High oil and protein content. Blackleg resistance rating MS. Bred by Canola Alliance. Marketed by Nuseed Pty Ltd.

ATR-Stingray (tested as NT0045). Early maturing. Short height. High oil and protein content. Blackleg resistance rating MR. Bred by AgSeed Research and DPI Victoria. Marketed by Nuseed Pty Ltd.

Jackpot TT Mid-early maturing OP TT variety. Pacific Seeds indicate very high yield, very high oil and very high protein content. Medium-short height. Ideally fits low to medium-high rainfall areas, exhibits good

early vigour. Blackleg resistance rating of MR (P). Tested in NVT trials since 2011. Bred and marketed by Pacific Seeds.

Bonanza TT Early maturing double haploid OP TT variety. Pacific Seeds indicate good yield for maturity. Good oil and very high protein content. Short plant height suited for direct heading. Ideally fits low to medium rainfall areas, exhibits excellent early vigour similar to some TT Hybrids. Blackleg resistance rating of

MR (P). Tested in NVT trials in 2011 and 2012. Bred and marketed by Pacific Seeds.

ATR Gem (tested as NT0107). Early-mid maturity triazine tolerant open pollinated variety with better blackleg resistance and vigour than TawrifficTT (MR(P)). Slightly shorter than TawrifficTT and with slightly higher oil content. Bred and marketed by Nuseed. Tested in NVT trials since 2011.

Table 3: Conmurra TT Mid-season Canola Variety Trial

Variety	Yield kg/ha
CB Jardee HT	4016
Hyola 555TT	3933
Hyola 559TT	3868
CB Atomic HT	3824
Jackpot TT	3703
Hyola 656TT	3563
CB Junee HT	3537
CB Henty HT	3508
ATR Snapper	3383
NT0184	3337
Pioneer01TT	3336
Thumper TT	3209
ATR Stingray	3054
NT0183	3036
Monola 605TT	3027
NL0606	3024
Monola 506TT	3022
NT0174	3012
ATR Cobbler	2984
Crusher TT	2568
ATR Gem	2318
lsd	705

Notes on new varieties released for 2013

Conventional varieties

CBTM Tango C (tested as CHYB-187). Early-mid maturing conventional hybrid. Vigorous early growth. Expected to be grown in low rainfall regions. Blackleg resistance rating MR (P) if treated with fungicide, and medium-high seed oil content. First year NVT testing in 2011. Bred by Canola Breeders.

Hyola® 930 Winter hybrid canola with oil levels similar to Hyola® 50. Provisional Blackleg rating of R. Matures 4 to 5 weeks later than Hyola® 50. Suitable for autumn, early winter or spring sowing. Suited to grazing in winter. Marketed by Pacific Seeds.

Conventional specialty varieties

Victory® V3002 - Breeders code 08H5061C

Early-mid conventional specialty hybrid variety, slightly later than V3001. Good early vigour, good yield potential and high oil content. Blackleg resistance rating R-MR. Expected release in 2013, bred by Cargill and DPI- Victoria, marketed by Cargill, marketed by AWB in closed loop program

Victory® V3003 - Breeders code 08H5067C

Mid conventional specialty hybrid variety. Good early vigour and high yield potential and oil content. Blackleg resistance rating MR . Expected release in 2013, bred by Cargill and DPI-Victoria, marketed by Cargill, marketed by AWB in closed loop program.

Clearfield varieties

Pioneer® 45Y86(CL) New release (coded 07N406I). Mid maturing hybrid. Pioneer indicate high yielding with excellent standing ability and high oil. Replacement for 46Y83 (CL). Suited for dual-purpose (graze & grain) option in full-season environments. Pioneer Research blackleg rating of MR. Tested in NVT trials 2010-2012. Bred and marketed by DuPont Pioneer.

XCEED™ VT X121 CL Hybrid Clearfield® tolerant juncea canola. Four days later than VT Oasis CL. Excellent early vigour and branching ability and has high oil content. VT X121 CL has excellent pod shattering tolerance and is suitable for direct harvest. Bred by Viterra in conjunction with GRDC. Viterra anticipate a blackleg resistance rating of R (resistant).

Hyola® 971CL Winter hybrid canola with oil levels similar to Hyola® 50. Provisional Blackleg rating of R. Matures 4 to 5 weeks later than Hyola® 50. Suitable for autumn, early winter or spring sowing. Suited to grazing in winter. Marketed by Pacific Seeds.

Archer (coded SMHC105CL). Mid-late maturing hybrid. Heritage Seeds indicate high yield and high-very high oil content. Medium plant height. Heritage Seeds also indicate blackleg resistance rating MR. Tested in NVT trials 2011 and 2012. Marketed by Heritage Seeds.

Carbine (coded SMHC111CL). Early-mid maturing hybrid. Heritage Seeds indicate high yield and high-very high oil content. Medium plant height. Heritage Seeds also indicate blackleg resistance rating MR. Tested in NVT trials 2011 and 2012. Marketed by Heritage Seeds.

Triazine tolerant varieties

CB™ Henty HT (tested as CHYB-148 HT®). Mid-maturity TT hybrid for medium to high rainfall regions. CB trials indicate blackleg resistance rating is likely to be MR(P) if treated with a fungicide. First year NVT testing in 2011 but not tested in 2012. Bred by Canola Breeders.

CB™ Sturt TT (tested as CBWA-106 TT). Early maturity open-pollinated variety for low to medium rainfall regions to replace Tanami. Canola Breeders suggest the blackleg resistance rating will be MS(P) when treated with a fungicide. First year NVT testing in 2011. Bred by Canola Breeders.

CB™ Nitro HT (tested as CHYB1380TT). Early-mid maturity variety, under evaluation. Similar maturity to CB™ Junee HT. Canola Breeders suggest the blackleg resistance rating will be MR(P) when treated with a fungicide. First year NVT testing in 2012. Bred by Canola Breeders.

CB™ Atomic HT (tested as CHYB1368TT). Mid maturity variety, under evaluation. Slightly earlier than CB™ Jardee HT. Canola Breeders suggest the blackleg resistance rating will be MR(P) when treated with a fungicide. First year NVT testing in 2012. Bred by Canola Breeders.

Hyola 559TT. Mid to early mid TT hybrid. Medium plant height and good early plant vigour. Pacific Seeds suggest blackleg resistance rating of R-MR(P). Tested in NVT trials in 2011 and 2012. Bred and marketed by Pacific Seeds.

Hyola 656TT. Mid to mid-late TT hybrid. Medium to tall plant height, suited to early sowing. Pacific Seeds suggest blackleg resistance rating of R-MR(P). Tested in NVT trials in 2012. Bred and marketed by Pacific Seeds.

Triazine tolerant specialty varieties

Monola 413TT (tested as NLO 606TT). New release. Early to early mid maturing Monola™ open pollinated variety, alternative to Tawriffic TT and Crusher TT. Nuseed suggest blackleg resistance rating MR. Developed by Nuseed, grown under contract with a premium to Nuseed Crop Network.

Outclassed, but still available:

ATR-Cobbler, CB Tanami, Tawriffic TT, Hyola® 76, Monola™ 76TT and Monola™ 77TT, Hyola 444TT, Hyola 433, Fighter TT, CB Junee HT, CB Mallee HT, CB Scaddan.

Withdrawn

Pioneer® 46Y83(CL)

Acknowledgements:

