

8. CANOLA VARIETY TRIALS

8.1 CANOLA VARIETY DEMONSTRATION TRIAL - GNARWARRE

Location: Gnarwarre

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Background:

The demonstration blocks are designed to view commercial varieties on a relatively large scale. They are used to complement the varietal evaluation work being undertaken by Department of Primary Industries.

Fertiliser: 100 kg/ha MAP at sowing and
100 kg/ha Urea at early stem
elongation.

Aims:

- To test a range of canola varieties (TT and non TT) for yield
- To assess the impact of seed treatment (Maxim ® and Jockey ®) on yield

Design:

3 x 1.7 metre wide beds of each variety were sown with a plot length of 27.5 metres. The inside bed was windrowed and harvested using a plot harvester. A nearest neighbour design was used to compare varieties to a standard check.

Sowing Date: 17th May (sown dry)

Sowing Rate: 5 kg/ha

Results:

Table 67: Canola Variety Trial Results – Triazine Tolerant

Variety	Yield kg/ha	% Grace	% Untreated	% Site Mean
AG111	2,257	110%		100%
Grace	2,056	100%		91%
Beacon	2,290	111%		102%
Beacon + Jockey	2,642	145%	115%	117%
Grace	1,822	100%		81%
NS04397	2,591	142%		115%
Grace + Jockey	2,725	129%	129%	121%
Grace	2,107	100%		94%
Pac TT 2015	1,973	94%		88%
501 TT	1,689	74%		75%
Grace	2,274	100%		101%
603 CL	2,591	114%		115%
Average	2,251			

Table 68: Canola Variety Trial Results – Non Triazine Tolerant

Variety	Yield T/Ha	% Sapphire	% Untreated	% Site Mean
Sapphire + Jockey	1,689	79%	79%	73%
Sapphire	2,140	100%		92%
Ag Castle	2,658	124%		115%
P98125	2,608	134%		113%
Sapphire	1,939	100%		84%
46C04	3,126	161%		135%
Sapphire + Jockey	1,689	70%	70%	73%
Sapphire	2,408	100%		104%
Hyola 60	1,889	78%		82%
Hyola 60 + Maxim	2,307	110%	122%	100%
Sapphire	2,107	100%		91%
45C05	3,227	153%		139%
Average	2,316			

Discussion:

It must be remembered that this is a demonstration trial, so statistical analysis cannot be applied to the trial results.

Whilst the trial was dry sown, emergence and plot evenness was excellent. A dry finish to the year contributed to lower than expected yields, particularly with the later maturing varieties on the newly formed beds.

It would appear that there are a number of new varieties showing promise in relation to yield. Beacon, 603 CL and NS04397 are stand out varieties in the TT category and Ag Castle, P98125, 46C04 and 45C05 in the non TT category.

The seed treatment Jockey® appeared to give a yield increase to the varieties Beacon and Grace, although depressed the yield of Sapphire. This cannot be explained.

Whilst yield is an important factor in choosing a canola variety, attention should also be paid to the disease ratings, maturity and other agronomic traits before making a final selection.

Triazine Tolerant SURPASS 501TT

Surpass501TT (tested as PacN147) is an early-mid season variety from Pacific Seeds. It has very high blackleg resistance and has very high oil for a TT variety.

Triazine Tolerant Tornado 555TT (tested as T2015)

Tornado 555TT is a new mid season triazine tolerant variety from Pacific Seeds which has performed very well in 2003 variety trials. It is blackleg rated to 7.0 (p) and features conventional multi-gene blackleg resistance. Its outstanding feature is its vigour (extremely good for a TT variety) and its compact manageable height. Oils range from 42-46% and yields around 107% Beacon.

CLEARFIELD Surpass 603CL

"The number one choice in Clearfield Canola"

Surpass 603CL has very high yield and oil potential. Many growers in 2003 achieved oil percentages of 48-50%. Surpass 603CL can be grown as a conventional or a Clearfield variety in the medium to high rainfall areas. Farmers can then use Onduty to take out weeds if need be. Surpass 603CL also has excellent seedling vigour to ensure an even crop.

Hyola 60

Hyola 60 was the first hybrid canola variety commercialised in Australia. Hyola 60 combines even plant height with excellent seedling vigour to ensure the crop maintains its even maturity. Hyola 60 is well suited to medium and high rainfall regions of the Western districts with its exception yields and oil content. As with all Pacific Seeds canola hybrids, they only need to be sown at 3kg/ha.

Hyola 61 (tested as H1480)

Hyola 61 is a new high yielding, mid maturing hybrid variety. Features conventional multi-gene blackleg resistance, exhibits good resistance, rating is currently under evaluation. Suits medium to high rainfall areas, more compact in height than Hyola 60 and has excellent vigour. Early results are very promising with average yields of 106% rainbow and oils ranging consistently from 41-44%.

All canola varieties sold in 2004 from Pacific Seeds will be treated with Jockey at no additional cost to the farmer.



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