



# Old Canola Variety Performance

William Tan, Research Agronomist, Kalyx Australia

## Key Messages

- Latest released variety ATR Snapper recorded the greatest yield and had the highest oil content at 0.95 t/ha and 45% oil content.
- Tanami (released 2006) recorded the lowest yield and also the lowest oil content, averaging 0.57 t/ha and 41.5% oil.
- Older varieties Tanami and Cobbler yielded significantly less than Snapper, demonstrating how newer varieties with similar agronomic attributes can be more profitable.

## Aim

To compare the performance of older TT canola varieties (Tanami, Cobbler, Crusher and Snapper) under normal growing conditions in the Ballidu region.

## Background

Some canola varieties which are no longer commercially available are still popular in WA, particularly in low rainfall areas. Tanami (2006 release) was bred for these lower rainfall areas and, along with Telfer, is still being grown despite the release of newer varieties Sturt and Stingray. Cobbler, which was released in 2008, is another variety that has maintained popularity mostly due to its elastic flowering window, but has been superseded by several varieties. Snapper and Crusher are the newest of the varieties tested in this trial released in 2011 and 2010 respectively. Snapper and Cobbler are early-mid maturing, while Crusher is a mid-maturing line and Tanami is a variety of early maturity.

## Trial Details

<b>Property</b>	Ardoch, east Ballidu		
<b>Plot size &amp; replication</b>	10m x 1.32m x 3 replications		
<b>Soil type</b>	Sandy loam		
<b>Soil pH (CaCl<sub>2</sub>)</b>	0-10cm: 4.4	10-20cm: 4.3	20-30cm: 4.5
<b>EC (dS/m)</b>	0-10cm: 0.178	10-20cm: 0.088	20-30cm: 0.114
<b>Sowing date</b>	05/05/2015		
<b>Seeding rate</b>	50 plants/m <sup>2</sup>		
<b>Paddock rotation</b>	2012 wheat, 2013 lupins, 2014 wheat		
<b>Fertiliser</b>	05/05/2015: 150 kg/ha MAXam, 100 kg/ha Gusto Gold banded 17/07/2015: 100 kg/ha urea		
<b>Herbicides, Insecticides &amp; Fungicides</b>	04/05/2015: 2 L/ha Spray.Seed, 3 L/ha Trifluralin, 0.3 L/ha Alpha-cypermethrin, 1 L/ha Chlorpyrifos 05/05/2015: 100 kg/ha Gusto Gold + Impact 08/06/2015: 1.1 kg/ha Atrazine, 400 mL/ha Clethodim, 0.3 kg/ha Clopyralid, 300 mL/ha Quizalofop, 2% Enhance 30/06/2015: 300 mL/ha Alpha-cypermethrin, 1.1 kg/ha Atrazine, 2% Hasten		
<b>Growing season rainfall</b>	243mm		

## Results

**Table 1:** Average yield and quality results of old canola varieties, east Ballidu 2015.

Variety	Oil (%)	Yield (t/ha)	Admix (%)	Best Grade
Tanami	41.5 <sup>b</sup>	0.57 <sup>c</sup>	1.92	CAN1
Cobbler	42.6 <sup>b</sup>	0.77 <sup>b</sup>	1.76	CAN1
Crusher	42.0 <sup>b</sup>	0.84 <sup>ab</sup>	2.55	CAN1
Snapper	45.1 <sup>a</sup>	0.95 <sup>a</sup>	2.64	CAN1
<i>LSD</i>	1.98	0.13		
<i>P value</i>	0.022	0.004		
<i>Site Mean Oil (%)</i>	42.8			
<i>Site Mean Yield (t/ha)</i>	0.78			
<i>Site Mean Admix (%)</i>	2.22			

## Comments

The trial was sown dry on the 5<sup>th</sup> May and rainfall was limited for the remainder of May with the monthly total at about half the long term average (22mm in 2015). These conditions resulted in a low germination rate. Although plant numbers were below the target of 50 plants/m<sup>2</sup> this was typical of what growers in the area reported this year and plant numbers were considered compatible with farmer expectations for 2015. The total rainfall for the 2015 growing season (April-October) was 243mm compared to the long term average of 265mm. The season was punctuated by heavy rainfall events on the 22<sup>nd</sup> June and 31<sup>st</sup> July, which were critical times for the canola. The lack of rainfall in September and October limited yields and differences between varieties would most likely have increased had there been more rainfall during the flowering/pod fill period.

The two newer varieties, Snapper and Crusher, provided the greatest yield; Snapper had the highest yield at 0.95 t/ha and was significantly greater than both Cobbler and Tanami but not significantly different to Crusher, which yielded 0.84 t/ha. Tanami was significantly lower yielding than all other varieties. These yield results and variety rankings are consistent with the long term NVT data for Agzone 2.

All canola made CAN1 grade with all plots recording oil well over 40%. Snapper resulted in the highest oil content at 45.1%, these improvements in oil content are further reason for growers to consider newer varieties. All varieties, with the exception of Tanami, would have received premiums based on the oil content.

## Acknowledgements

Kalyx Australia would like to thank David Hood for the use of his land and the Liebe Group for their cooperation throughout the year.

**Paper reviewed by:** Steven Tilbrook, Kalyx Australia.

## Contact

Angela Hampson, Kalyx Australia.  
ahampson@kalyx.com.au  
1300 525 992