

Australian canola production 2005/06

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(Taken from The Quality of Australian Canola 2005/06).

Weather and Production review

The Season

For the third consecutive year, the 2005 growing season across Australia began with a variable start.

Following excellent autumn rain in April and May Western Australia experienced an almost perfect start to the growing season which enabled the crop to be sown on time. The favourable start also resulted in 5% increase in the area sown compared to the previous season with the biggest increase occurring in the higher rainfall zone around the Geraldton region. Good winter and spring rainfall and generally mild temperatures for most of the growing season, ensured near ideal growing conditions for crops in all canola areas resulting in Western Australia experiencing its best canola season in recent years with above average yields. Oil contents were also excellent with a final state average of 45%.

However, extremely dry conditions and failure of the autumn break resulted in the majority of crops not being sown until the seasonal break finally occurred in early June in South Australia and Victoria and mid June in New South Wales where 91% of the state was drought declared at the beginning of June. The very late break impacted on intended plantings with only a very small proportion of the expected crop being sown in the low rainfall zones and a reduced area in the higher rainfall zones in each of the states. In NSW the final area sown was only half of the area estimated to have been sown in the previous season whilst sowings in South Australia and Victoria were reduced by about 15% and 5% respectively.

Mild winter temperatures combined with above average rainfall across South Australia and the Eastern states enabled the majority of crops to establish well and make better than expected winter growth given the lateness of sowing. The late sowing also reduced the flowering period by up to two weeks in some districts in the Eastern states particularly in NSW. However, this was offset by unusually mild and favourable spring conditions which prolonged pod fill and delayed harvest but assisted in increasing the yield potential of crops in NSW and South Australia. Although oil contents were lower than normal in both states they were satisfactory given the late start to the season and the fact that many growers opted to reduce or not undertake their nitrogen top dressing program of canola crops.

Unfortunately, in Victoria crops in the usually high yielding western districts where a significant portion of the crop was grown in 2005 did not perform up to early

expectations impacting on the overall performance of the state's canola crop. However, similar to NSW and South Australia oil contents were reasonable given the seasonal conditions experienced.

In all states the reported incidence of seedling diseases, especially blackleg, was very low. In NSW the wet conditions during flowering resulted in an increased incidence of sclerotinia in some districts, particularly on the eastern side of the south west slopes, with some reports of estimated yield losses of between 5 and 10%.

Although there were some isolated reports of insect pests such as red legged earth mite and lucerne flea, the general level of insect pest problems was also below normal throughout the winter in all states. Several districts in central NSW reported problems with heliothis caterpillars in crops during the late stages of pod fill with control measures being required in some situations. A late outbreak of Rutherglen bug along the upper slopes districts in NSW caused initial concern in some crops but they did not require control and did not cause damage to crops.

Despite the difficulties experienced in NSW, South Australia and Victoria the 2005 canola crop finished better than expected. Final yields in all states were better than achieved in the previous season whilst oil contents in the eastern states were satisfactory given the late sowing. The Western Australia crop averaged one of its highest ever oil contents.

Yield

The 2005 canola harvest was slightly lower than 2004 with 1,438,750 tonnes harvested from 960,000 hectares across the country. The yield varied from a state average of 1.4 t/ha in Western Australia to 1.8 t/ha in New South Wales. The national yield of 1.5 t/ha was 0.1 t/ha higher than the 2004 average.

Table 1 : Canola production in Australia by state 2005

State	Production (kilotonnes)	Area (kilohectares)	Average Yield (tonnes/hectare)
NSW	254	145	1.8
Victoria	338	225	1.5
SA	218	150	1.5
WA	630	440	1.4
Australia	1439	960	1.5

Source:

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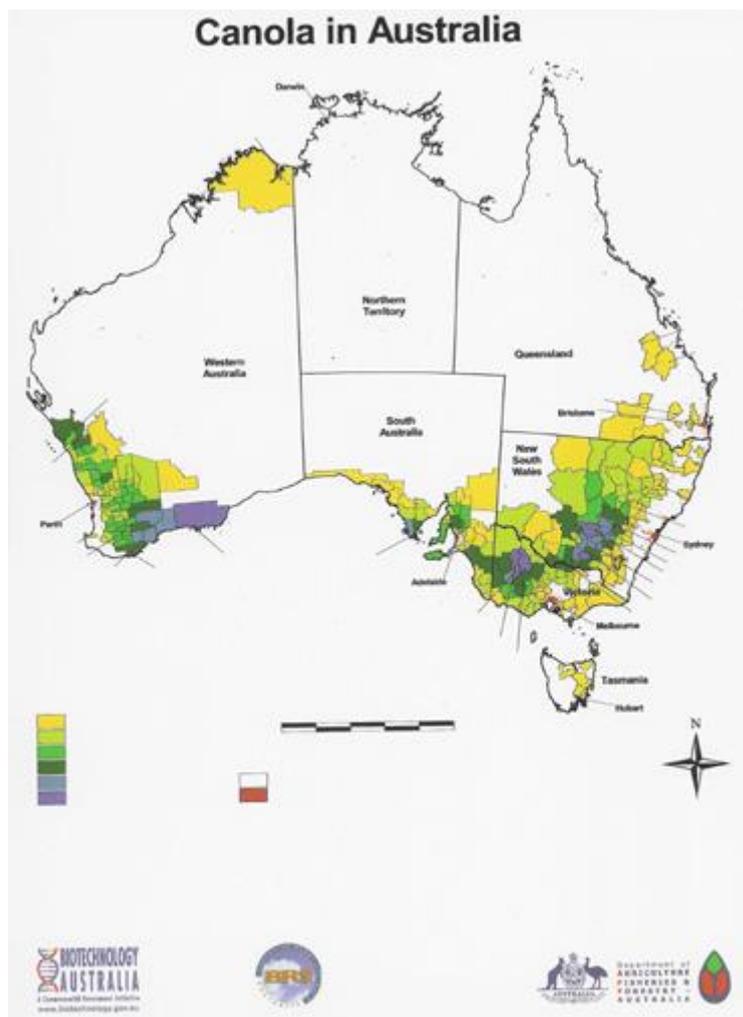


Figure 1. Areas of canola production in Australia (published with approval of Biotechnology Australia).

Australian Quality Parameter Summary

The division, state and Australian mean values for all analysis are calculated on the basis of the tonnage that each site represents. However, due to tonnages being confidential information, no individual site tonnages can be reported.

Table 2 : Average quality data of Australian canola 2005

Quality Parameter	Australian Mean
Oil content, % in whole seed @ 6 % moisture	42.2
Protein content, % in oil-free meal @ 10 % moisture	36.3
Glucosinolates, $\mu\text{moles/g}$ in whole seed @ 6 % moisture	7
Volumetric grain weights, lbs/b	53.2
kg/hL	64.1
Oleic acid concentration (C18:1), % in oil	60.9
Linoleic acid concentration (C18:2), % in oil	19.9

Linolenic acid concentration (C18:3), % in oil	10.8
Erucic acid concentration (C22:1), % in oil	0.1
Saturated fatty acid concentration, % in oil	7.0
Iodine Value	116.2

Oil Content

The average oil content for the 2005 harvest was 42.2 %. This was 1 % higher than the 2004 harvest and the highest since 1996. Oil content ranged from a low of 36.5 % at Ardlethan in New South Wales to a high of 46.1 % at Borden in Western Australia.

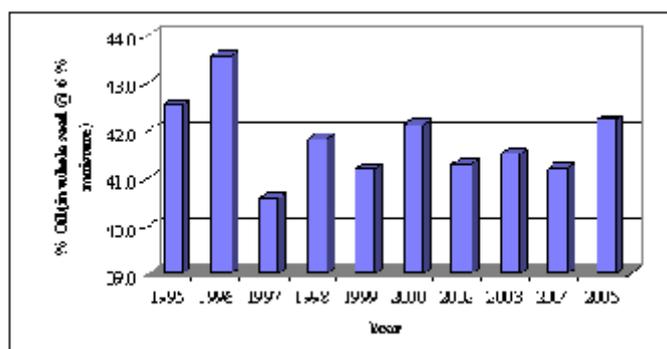


Figure 2: Average Australian oil content in canola 1995-2005

Protein Content

The average protein content for the 2005 harvest was 36.3 % in oil free meal. This was a decrease of 5.3 % from the 2004 harvest and the lowest since 1999. Protein content ranged from 32.1 % at Milbrulong in New South Wales to 40.2 % at Raywood in Victoria.

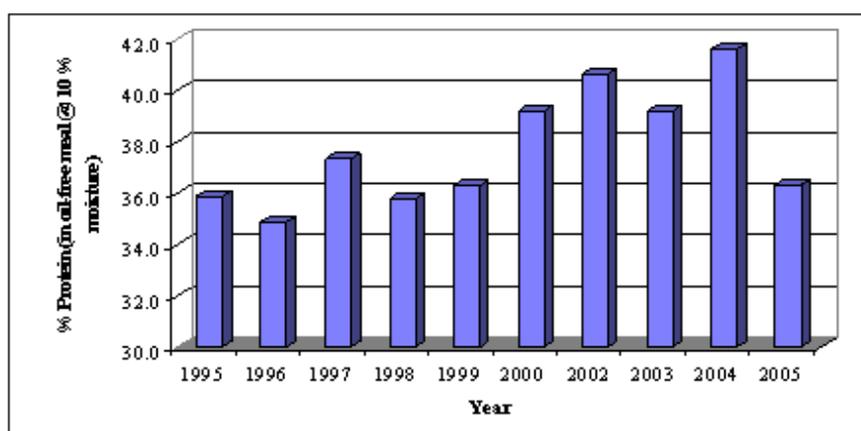


Figure 3: Average Australian protein content in canola meal 1995-2005

Glucosinolate Concentration

The average glucosinolate content for the 2005 harvest was 7 mmol/g. This was a decrease of 3 mmol/g from the 2004 harvest and the lowest since 1998. Glucosinolate content ranged from 3 mmol/g at Pt Lincoln in Western Australia, Goroke in Victoria and Henty West in New South Wales to 12 mmol/g at Moolort and Dunolly in Victoria and Harden in New South Wales.

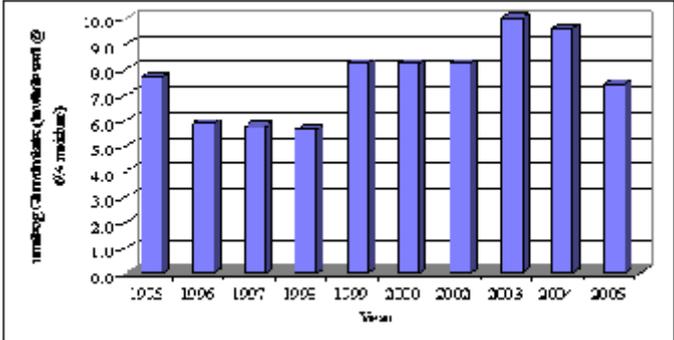


Figure 4: Average Australian glucosinolate concentration in canola 1995-2005