

Australian Oilseeds Federation

# Quality of Australian Canola 2002/2003

A. McFadden, R.J. Mailer & Paul Parker  
Volume No .9  
ISSN 1322-9397



---

# ***Index***

---

Introduction.....	3
Weather and Production Review.....	4
Australian Quality Parameter Summary.....	5
Quality Data by State - New South Wales.....	10
- South Australia.....	11
- Victoria.....	12
- Western Australia.....	13
Fatty Acid Composition by State - New South Wales.....	15
- South Australia.....	16
- Victoria.....	17
- Western Australia.....	18
National Brassica Improvement Project - Oil.....	20
- Protein.....	21
- Glucosinolate .....	22
- Fatty Acid Composition .....	23
Methods and Definitions.....	34

---

## ***Acknowledgments***

---

The Australian Oilseeds Federation would like to thank Graincorp Operations Limited, Ausbulk Limited and Cooperative Bulk Handling Limited for providing the canola samples from the 2002 harvest. Samples from the National *Brassica* Improvement Project were provided by N. Wratten, T. Potter and T. Trent. The assistance from all those involved in the analysis of these samples and compilation of the book is greatly appreciated particularly V. Woodbury and R. Stooke.

# **Introduction**

---

Welcome to the 9<sup>th</sup> edition of the Quality of Australian Canola Publication.

Canola samples representing the 2002 harvest were received from the bulk handlers in New South Wales, South Australia, Victoria and Western Australia. These samples are representative of the seed collected at each of their receival points and cumulatively represent the Australian harvest. The Oils Research Laboratory has no control over the collection of the samples and all data given is based on the analysis of the samples provided.

Each sample was analysed for oil, protein and glucosinolate concentrations, fatty acid profiles and volumetric grain weights according to the methods outlined in the back of this book. All analyses were performed by the Oils Research Laboratory by Wagga Wagga with the exception of the Western Australian volumetric grain weights which were provided by Cooperative Bulk Handling Limited. The division, state and Australian mean values for all analysis are calculated on the basis of the tonnage that each site represents.

An excerpt of the 2002 trial results for the “National *Brassica* Improvement Project” funded by the Grains Research and Development Corporation has been included. The project involves trials of potential new cultivars at various sites across New South Wales, South Australia, Victoria and Western Australia. Yield and quality data is collected and used to evaluate a cultivar’s performance under a range of conditions. The quality parameters analysed by the Oils Research Laboratory were oil, protein and glucosinolate concentrations and fatty acid profiles. The results from one site from each state have been included to give an indication of the ranges for each cultivar. The Western Australian mid conventional and mid Triazine tolerant quality data is from a different site to the fatty acid profile data due to limited data availability. Data for the Victorian sites are not available this year due to the trials being drought affected.

**Table 1. Average Quality Data of Australian Canola 2002**

<b>Quality Parameter</b>	<b>Mean</b>
Oil Content, % in whole seed @ 8.5% moisture	40.2
Protein Content, % in oil-free meal @ 13%, moisture (N x 6.25)	39.3
Glucosinolates, µM/g whole seed @8.5% moisture	8.0
Volumetric Grain Weights, lbs/bl kg/hL	56.80 66.21
Oleic Acid Content (C18:1), % in oil	61.5
Linoleic Acid Content (C18:2), % in oil	20.1
Linolenic Acid content (C18:3), % in oil	9.6
Eruic Acid Content (C22:1), % in oil	0.0
Saturated Fatty Acid Content, % in oil	7.3
Iodine Value	114.1

---

# ***Weather and Production Review***

---

## ***The Season***

The 2002 growing season across Australia had a variable start with Western Australia benefiting from a good general break in early May which enabled planting in most districts to begin on time. However, in the Eastern States a lack of soil moisture delayed planting beyond the optimum sowing window resulting in reduced plantings in New South Wales and Victoria with growers changing to cereal crops in place of canola. The variable soil moisture levels and patchy falls of rain caused a staggered emergence and establishment in many crops with a subsequent big spread in plant development stages.

Conditions continued to deteriorate in New South Wales throughout the winter as the State slipped deeper into severe drought. Not only did these dry conditions impact on overall crop growth but they also resulted in increased insect and virus disease problems. A widespread outbreak of diamondback moth in central and southern NSW added to the problems faced by growers. Although limited rainfall across most of Victoria assisted crops during the early part of winter, the benefits were quickly lost as conditions in the Wimmera and Mallee regions deteriorated. Fortunately winter rainfall in most of the main canola growing areas in South Australia and Western Australia was more favourable improving crop prospects in these states.

The drought conditions in New South Wales and Victoria continued throughout the spring resulting in a dramatic decline in crop prospects and yield potential with many crops being either grazed off or cut for hay. Although the lack of rainfall had some effect on crops in both South Australia and Western Australia, the fact that plantings were predominantly in districts with normally higher rainfall and more favourable growing conditions assisted them to progress through to harvest.

Fortunately, seed oil contents were higher than expected, particularly in Western Australia, given the difficult growing conditions experienced in many canola growing districts. Ultimately however, the 2002 season was a disappointing one with the harvested area being only an estimated 750,000ha compared to the pre-sowing expectations of around 1.2million ha. Although canola prices were high the drought conditions prevented most growers from being able to share in the benefits.

## *Area and Production*



The 2002 Australian canola crop was a five year low at 790,000 tonnes. This was harvested from approximately 750,000 hectares across New South Wales, Victoria, South Australia and Western Australia.

**Table 2. Canola Production by State in 2002**

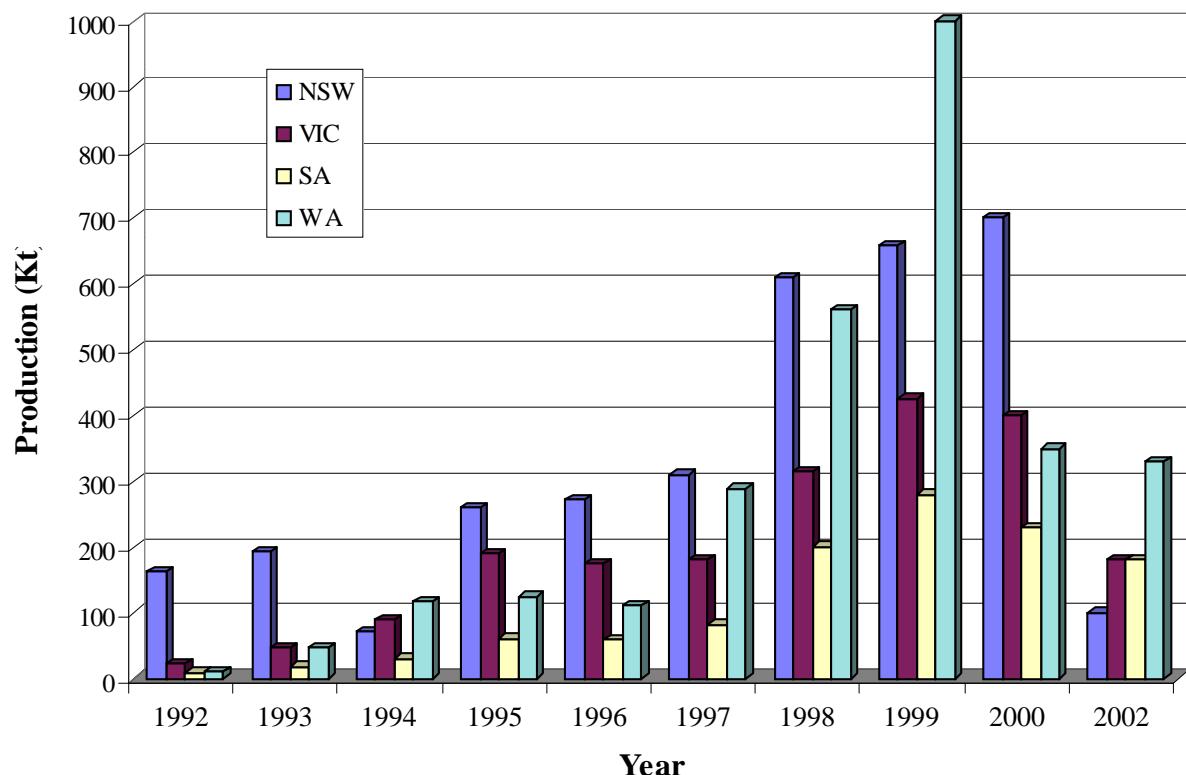
State	Production (Kt)
NSW	100
Victoria	180
SA	180
WA	330
<b>Australia</b>	<b>790</b>

Source: AOF newsletter

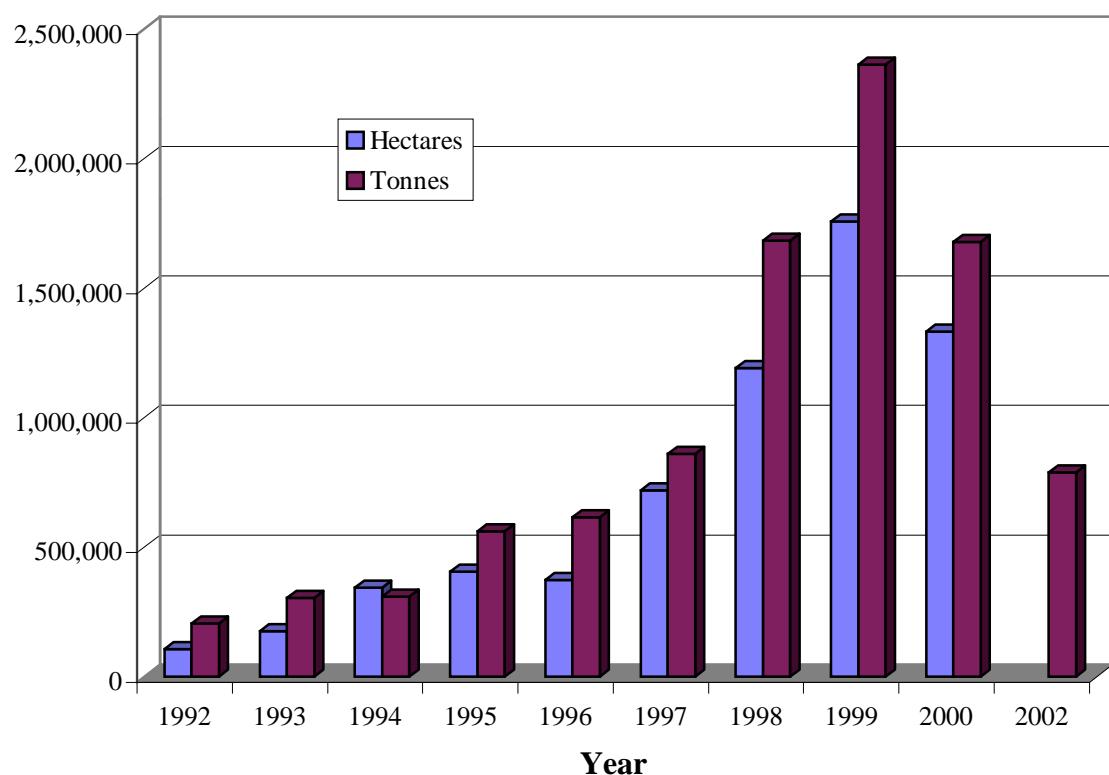
Kt: Kilotonnes

N.B. No data is available Fig. 1 – Fig. 8 for 2001.

**Fig. 1 Australian Canola Production by State 1992-2002**



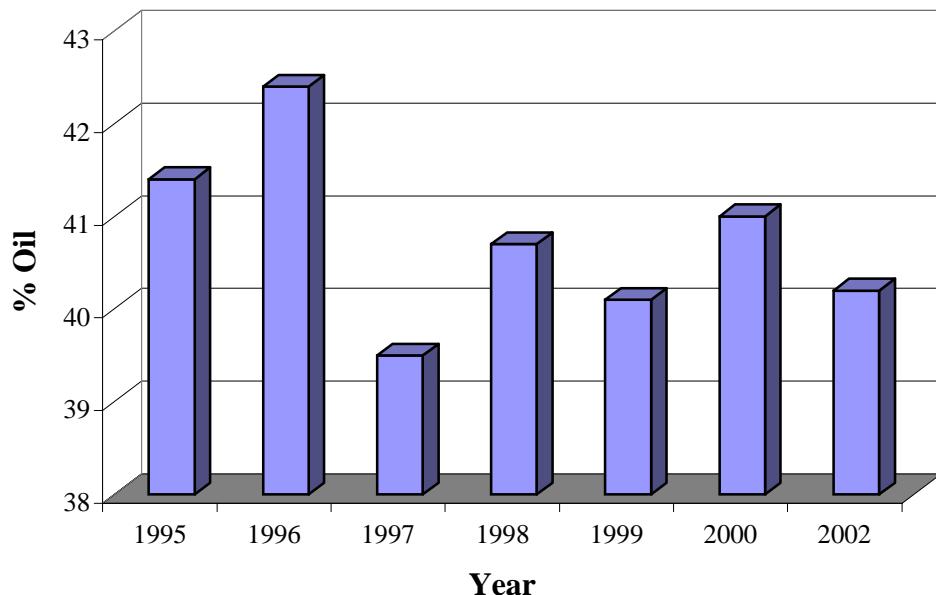
**Fig. 2 Canola Production in Australia 1992-2002**



## ***Oil Content***

Average oil contents of Australian canola was lower in 2002 at 40.2 compared to 2000. This can be largely attributed to stressed growing conditions caused by the drought that affected much of Australia's oilseed growing area. The lowest oil content was recorded at Milbrulong NSW and Quairading CC1 WA with 34.2% and the highest at Kojaneerup WA with 44.1%.

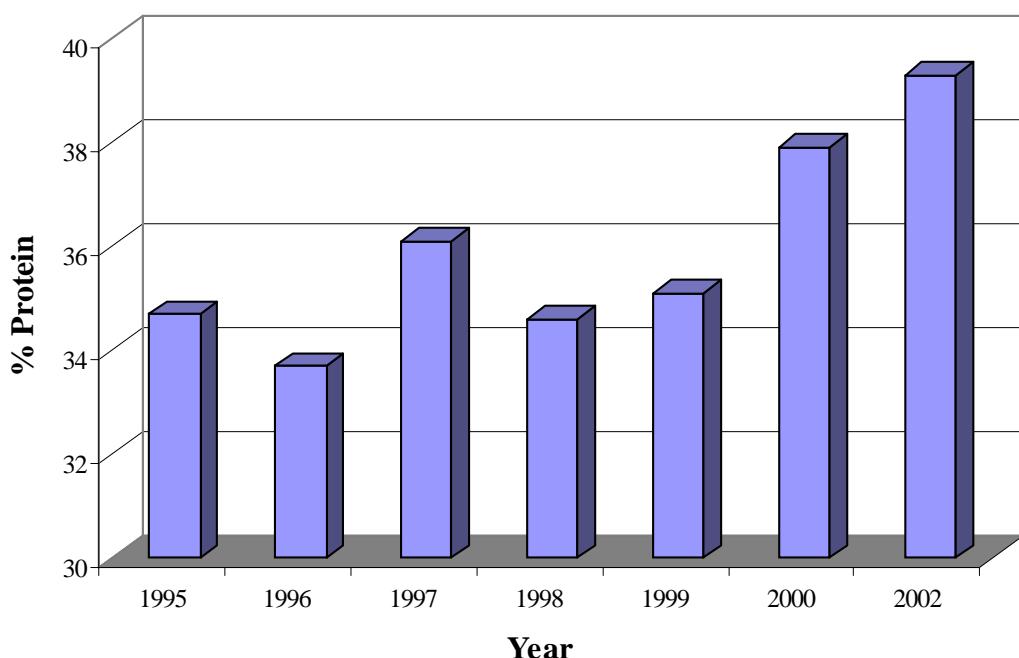
**Fig. 3 Average Oil Content 1995-2002**



## ***Protein Content***

The average protein content of 39.9% is the highest level for the last seven years which was to be expected under the stressed growing conditions. The maximum of 44.6% was received from Neilrex NSW and the minimum at Cranbrook CC1 WA with 36.0%

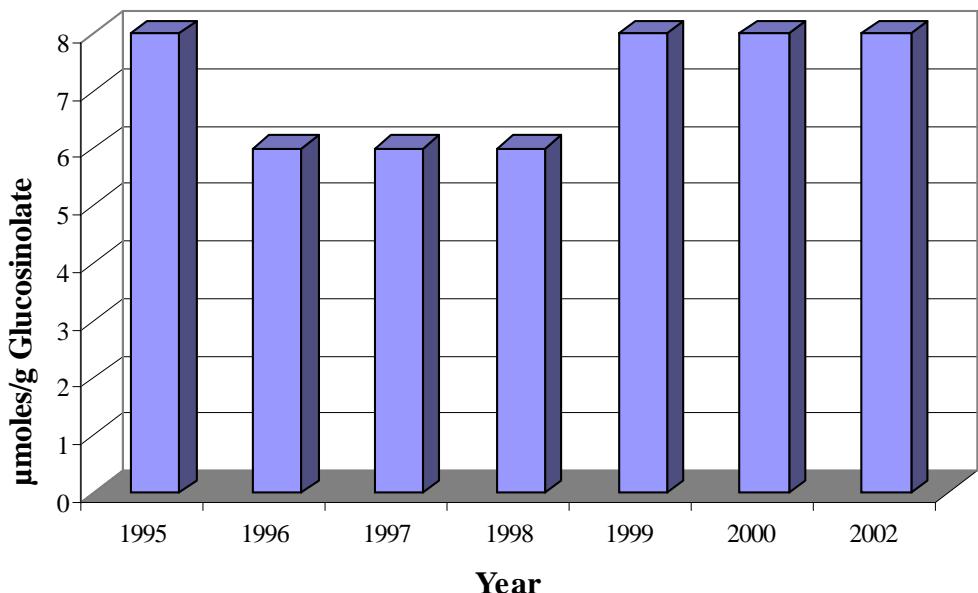
**Fig. 4 Average Protein Content 1995-2002**



## **Glucosinolate Content**

The average glucosinolate levels have remained constant for the last 4 years. It is surprising that they did not increase in 2000 due to the drought. The lowest reading was 1 $\mu$ mole/g at Gladstone in SA with the highest of 15 $\mu$ moles/g at Cranbrook in WA.

**Fig. 5 Average Glucosinolate Concentration 1995-2002**

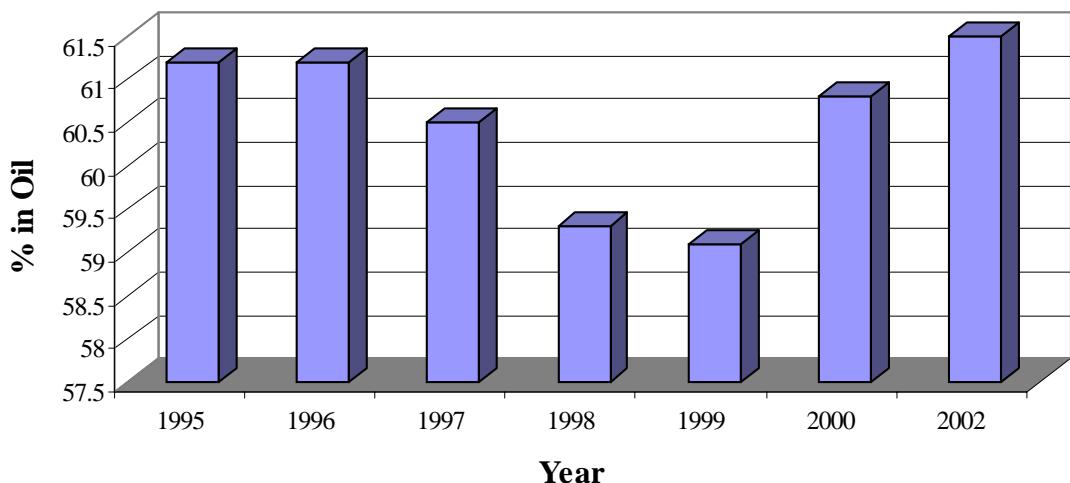


## **Fatty Acid Composition**

Euric (C22:1) acid values for 2002 harvest are well below the canola limit of 2% with the highest concentration of 1.0% found at Merredin CC2 in Western Australia. All other sites reported concentrations of 0.2% or less.

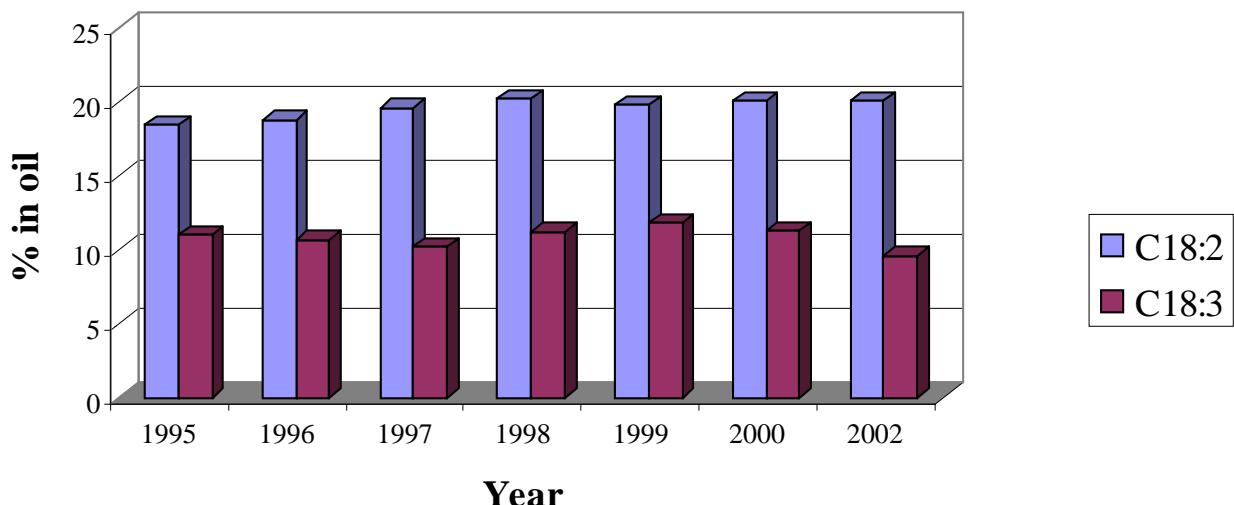
The Australian average oleic acid concentration of 61.5 is the highest in the last seven years. Values ranged from a low of 55.8 at Narembeen in Western Australia to a high of 63.9 at Lubeck in Victoria.

**Figure 6. Oleic Acid (C18:1) Concentrations 1995-2002**



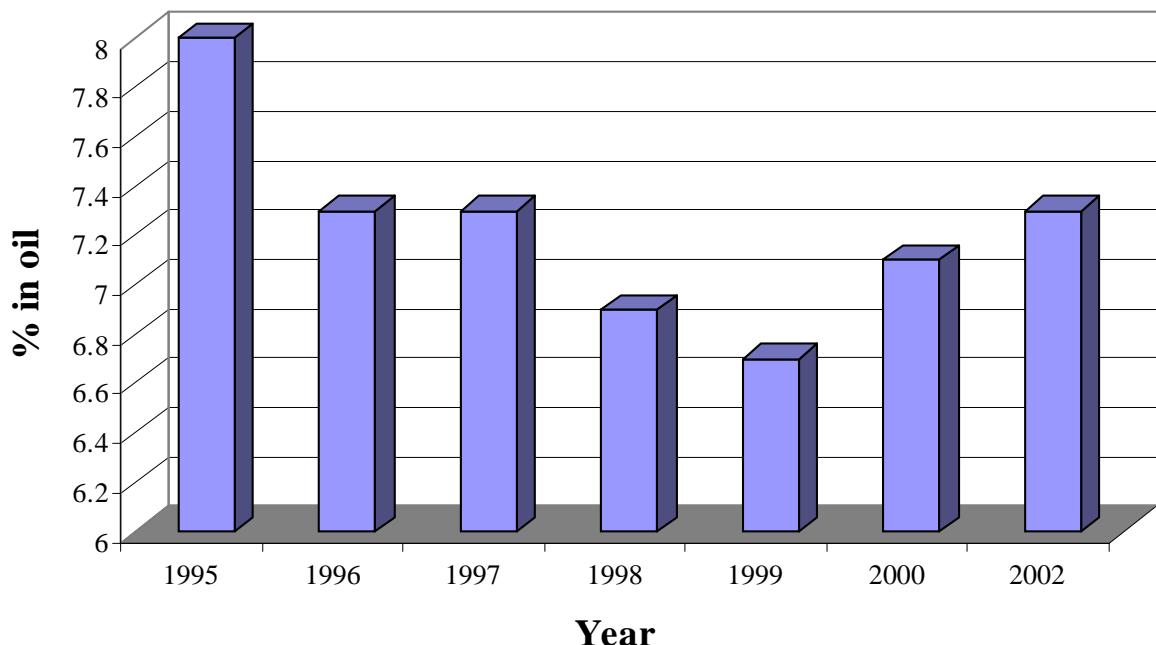
Linoleic levels have remained constant since 2000 at 20.1% while Linolenic acid levels have fallen 1.7% to 9.6% the lowest value seen in seven years. Linoleic values range from 18.4% at Dale in central Western Australia to 24.6% at Narembeen also in central Western Australia. Linolenic acid levels varied from 8.1% in Jacup Western Australia to 11.6% in Milbrulong in New South Wales.

**Figure 7 Linoleic (C18:2) and Linolenic (C18:3) Acid Concentrations 1995-2002**



Saturated fatty acid levels are at the highest seen for 4 years at 7.3% with values range from 6.8% in Pt Lincoln in South Australia and Munglinup, Minegenew, Avon C2, Kojoneerup and York in Western Australia to 8.0% at Grong Grong in New South Wales.

**Figure 8. Saturated Fatty Acid Concentrations 1995-2002**



**Table 3a.*****Quality Data - New South Wales***

		Tonnes		<sup>4</sup> Grain Weight		
Receipt Site	Represented	<sup>1</sup> Oil	<sup>2</sup> Protein	<sup>3</sup> Glucosinolates	lbs/b	kg/hL
<b><u>Central</u></b>						
Ardlethan	351	36.2	42.4	10	54.50	67.93
Barellan	2766	40.7	40.3	7	54.00	67.31
Boorowa	2580	37.8	40.0	13	55.25	68.87
Boree Creek	2039	37.5	41.6	10	55.50	69.18
Coolamon	3289	35.3	42.4	12	56.00	69.80
Cootamundra	4646	37.2	40.7	10	56.00	69.80
Cowra	1527	39.1	38.7	13	54.50	67.93
Greenethorpe	2535	35.5	41.2	11	55.50	69.18
Grong Grong	1905	35.2	41.6	11	55.75	69.49
Harden	11451	37.1	39.7	9	56.00	69.80
Henty West	5487	36.9	40.1	9	55.75	69.49
Junee	2897	36.8	41.6	10	55.75	69.49
Maimuru	3164	36.8	39.9	11	55.50	69.18
Milbrulong	757	34.2	41.4	10	56.00	69.80
Milvale	3908	35.6	40.7	10	56.00	69.80
Pucawan	169	35.2	44.0	9	55.75	69.49
Quandialla	2937	36.2	40.8	9	55.50	69.18
Stockinbingal	624	36.3	42.5	9	55.75	69.49
Temora ST	633	36.6	41.7	10	56.00	69.80
Tocumwal	2899	40.4	39.9	7	55.25	68.87
Wyalong	1238	34.9	41.4	13	55.25	68.87
<b>Central Tonnage</b>	<b>57802</b>					
<b>Central Mean</b>		<b>37.0</b>	<b>40.6</b>	<b>10</b>	<b>55.63</b>	<b>69.34</b>
<b><u>Northern</u></b>						
Neilrex	873	38.5	44.6	8	55.00	68.55
Premer	671	40.8	41.7	7	54.75	68.24
Ulamambri	134	36.8	41.4	8	54.50	67.93
Willow Tree	851	37.7	43.4	8	55.00	68.55
<b>Northern Tonnage</b>	<b>2529</b>					
<b>Northern Mean</b>		<b>38.7</b>	<b>43.3</b>	<b>8</b>	<b>54.91</b>	<b>68.44</b>
<b><u>Western</u></b>						
Alectown West	1870	36.6	40.6	12	55.00	68.55
Back Creek	1088	36.6	42.4	14	55.00	68.55
Condobolin	451	38.6	39.3	11	55.00	68.55
Elong Elong	1680	36.0	41.7	12	55.00	68.55
Forbes	709	35.0	42.4	10	55.75	69.49
Manildra	929	37.4	42.0	8	54.25	67.62
Mungeribrar	3030	39.3	40.5	9	54.75	68.24
Nyrang Creek	59	34.7	43.4	9	54.50	67.93
Parkes ST	4156	36.1	42.5	12	55.25	68.87
Red Bend	3718	36.5	41.9	6	55.25	68.87
Wongarbon	856	35.3	42.5	10	54.75	68.24
<b>Western Tonnage</b>	<b>18546</b>					
<b>Western Mean</b>		<b>36.8</b>	<b>41.7</b>	<b>10</b>	<b>55.04</b>	<b>68.61</b>
<b>NSW Tonnage</b>	<b>78877</b>					
<b>NSW Mean</b>		<b>37.0</b>	<b>40.9</b>	<b>10</b>	<b>55.47</b>	<b>69.14</b>

<sup>1</sup> % in whole seed at 8.5% moisture, <sup>2</sup> % in oil free meal @13% moisture, <sup>3</sup> µmoles/g in whole seed @8.5% moisture<sup>4</sup> Volumetric Grain Weights- lbs/b: Pounds per bushel, kg/hL: Kilograms per hectolitre

**Table 3b.*****Quality Data - South Australia***

Receipt Site	Represented	Tonnes			<sup>4</sup> Grain Weight	
		<sup>1</sup> Oil	<sup>2</sup> Protein	<sup>3</sup> Glucosinolates	lbs/b	kg/hL
<b><u>Central</u></b>						
Andrews	536	36.5	39.4	12	68.24	54.75
Caltowie	1534	36.9	40.3	7	68.87	55.25
Gladstone	915	40.2	38.4	1	69.18	55.50
<b>Central Tonnage</b>	<b>2985</b>					
<b>Central Mean</b>		<b>37.8</b>	<b>39.5</b>	<b>6</b>	<b>68.85</b>	<b>55.24</b>
<b><u>Eastern</u></b>						
Bowmans	15951	38.6	40.1	8	66.06	53.00
Frances	1577	40.1	40.7	7	70.11	56.25
Keith	9504	38.9	38.3	6	68.55	55.00
Pt Adelaide	25945	39.4	40.5	8	67.62	54.25
Roseworthy	9768	38.9	40.2	6	68.24	54.75
Tailem Bend	4480	40.4	38.1	6	67.00	53.75
Woseley	4044	38.1	40.7	8	68.55	55.00
<b>Eastern Tonnage</b>	<b>71269</b>					
<b>Eastern Mean</b>		<b>39.1</b>	<b>39.9</b>	<b>7</b>	<b>67.55</b>	<b>54.19</b>
<b><u>Western</u></b>						
Pt Lincoln	16072	44.0	40.0	4	67.93	54.50
<b>Western Tonnage</b>	<b>16072</b>					
<b>Western Mean</b>		<b>44.0</b>	<b>40.0</b>	<b>4</b>	<b>67.93</b>	<b>54.50</b>
<b>SA Tonnage</b>	<b>90326</b>					
<b>SA Mean</b>		<b>39.9</b>	<b>39.9</b>	<b>6</b>	<b>67.66</b>	<b>54.28</b>

<sup>1</sup> % in whole seed at 8.5% moisture, <sup>2</sup> % in oil free meal @13% moisture, <sup>3</sup> µmoles/g in whole seed @8.5% moisture<sup>4</sup> Volumetric Grain Weights- lbs/b: Pounds per bushel, kg/hL: Kilograms per hectolitre

**Table 3c.*****Quality Data- Victoria***

Receipt Site	Represented	Tonnes		<sup>3</sup> Glucosinolates μmoles/g	<sup>4</sup> Grain Weight	
		<sup>1</sup> Oil	<sup>2</sup> Protein		lbs/b	kg/hL
<b>Southern</b>						
Beulah		37.0	42.7	10.3	56.13	69.96
Carpolac		40.3	40.9	9.9	55.59	69.29
Deniliquin		41.4	37.9	6.6	55.31	68.94
Devenish		37.9	41.6	10.6	55.92	69.70
Dookie		37.9	41.9	9.9	55.84	69.61
Dunolly		37.7	41.7	9.8	55.80	69.55
Echuca		40.1	39.0	6.7	55.71	69.44
Elmore		39.7	41.2	10	55.50	69.18
Gymbowen		39.8	41.0	10.0	55.50	69.18
Hamilton		42.4	38.6	6.8	55.63	69.34
Laharum		40.9	40.9	9.2	55.88	69.64
Lillimur		38.4	41.8	9.5	54.85	68.37
Lubeck		39.9	41.4	7.3	56.06	69.87
Marmalake		39.2	42.3	7.1	56.19	70.03
Marnoo		38.6	42.6	8.2	56.17	70.01
Moolort		36.5	42.1	8	56.75	70.73
Murchison East		38.5	41.3	8.5	55.75	69.49
Narracoorte		40.2	39.5	7.4	55.71	69.44
Natimuk		38.5	42.1	11.1	56.00	69.80
Oaklands		39.2	41.0	10.8	55.55	69.24
Portland		40.1	41.0	8.5	56.42	70.32
Raywood		42.1	39.6	7.6	55.11	68.69
Sanger		37.5	41.1	11.1	55.54	69.23
Serviceton		39.3	41.4	9.9	54.89	68.42
Skipton		39.7	38.5	8.2	56.33	70.22
Swan Hill		43.2	38.3	5.5	55.43	69.08
Yarrawonga		38.6	40.3	11.5	55.50	69.18
Warracknabel		38.1	41.6	9	55.50	69.18
Westmere		39.0	37.5	9.0	56.23	70.08
Willarua		39.6	37.9	8.7	56.03	70.08
<b>Vic Tonnage</b>		<b>125724</b>				
<b>Vic Mean</b>		<b>39.8</b>	<b>39.8</b>	<b>9</b>	<b>55.85</b>	<b>69.65</b>

<sup>1</sup> % in whole seed at 8.5% moisture, <sup>2</sup> % in oil free meal @13% moisture, <sup>3</sup> μmoles/g in whole seed @8.5% moisture<sup>4</sup> Volumetric Grain Weights- lbs/b: Pounds per bushel, kg/hL: Kilograms per hectolitre

Individual site tonnages are confidential and can not be reported

<b>Table 3d.</b>						
<b><i>Quality Data- Western Australia</i></b>						
<b>Receival</b>	<b>Tonnes</b>		<b><sup>4</sup> Grain Weight</b>			
Site	Represented	<sup>1</sup> Oil	<sup>2</sup> Protein	<sup>3</sup> Glucosinolates	lbs/b	kg/hL
<b><u>Central</u></b>						
Avon C1	3922	41.9	40.1	10	54.16	67.51
Avon C2	930	41.9	39.2	6	51.72	64.46
Brookton	2310	39.5	40.4	10	54.14	67.48
Calingiri	2259	40.3	40.3	6	53.77	67.03
Dale	1436	41.2	38.1	10	54.03	67.35
Kellerberrin	568	38.2	40.0	8	55.17	68.76
Kulin	480	38.6	40.9	8	54.65	68.11
Merredin C1	191	41.8	38.5	8	55.65	69.37
Merredin C2	499	40.3	38.9	6	55.25	68.86
MGC C1	30816	37.3	38.4	7	53.81	67.08
MGC C2	2072	37.1	39.2	7	53.31	66.44
Moora	1842	39.5	37.2	8	53.22	66.33
Narembeen	77	38.7	38.6	7	54.78	68.28
Piawanning	3736	40.4	39.4	4	53.54	66.74
Quairading	757	36.7	40.6	7	54.10	67.44
Wickepin	2588	38.8	40.1	5	54.78	68.28
Williams	8960	41.4	37.3	7	54.44	67.85
York	1568	39.6	39.9	14	54.23	67.60
Yornaning	2387	38.0	39.0	8	54.27	67.64
<b>Central Tonnage</b>	<b>67398</b>					
<b>Central Mean</b>		<b>38.8</b>	<b>38.7</b>	<b>7</b>	<b>53.96</b>	<b>67.25</b>
<b><u>Northern</u></b>						
Arrino	1575	40.0	41.9	10	54.79	68.29
Coorow	469	37.4	41.5	10	55.71	69.44
Geraldton C1	18138	41.8	38.7	5	53.05	66.13
Geraldton C2	1143	38.9	40.5	9	54.46	67.89
Mingenew	2026	41.1	39.9	7	53.27	66.40
Northampton	2016	42.4	40.3	6	54.65	68.12
<b>Northern Tonnage</b>	<b>25367</b>					
<b>Northern Mean</b>		<b>41.4</b>	<b>39.2</b>	<b>6</b>	<b>53.42</b>	<b>66.58</b>
<b><u>Southern</u></b>						
Albany C1	54051	42.8	37.7	8	54.59	68.05
Albany C2	2059	42.0	38.6	9	54.29	67.67
Beaumont	6753	40.5	40.1	15	54.56	68.00
Bokal	8099	41.2	37.8	8	54.57	68.02
Borden	9647	40.0	39.8	10	54.68	68.16
Boyup Brook	2982	41.5	37.2	10	54.53	67.96
Broomehill C1	9130	41.1	37.5	8	54.86	68.38
Cranbrook C1	29809	42.6	36.0	7	54.17	67.51
Cranbrook C2	1362	42.1	37.7	10	54.11	67.45
Dumbleyoung	4165	42.1	37.6	8	54.21	67.57
Esperance	44607	40.8	39.9	11	54.88	68.40
Gairdner	6830	40.9	39.6	9	54.39	67.79
Jacup	423	43.1	38.6	7	53.59	66.80
Katanning	12306	38.6	38.5	9	54.99	68.54

**Table 3d.cont.*****Quality Data- Western Australia***

<b>Receival</b>	<b>Tonnes</b>						<b><sup>4</sup> Grain Weight</b>
<b>Site</b>	<b>Represented</b>	<b><sup>1</sup> Oil</b>	<b><sup>2</sup> Protein</b>	<b><sup>3</sup> Glucosinolates</b>	<b>lbs/b</b>	<b>kg/hL</b>	
Kojoneerup	14245	44.1	38.3	7	54.01	67.32	
Kojonup	11206	42.6	38.1	6	53.92	67.21	
Munglinup	7622	42.6	39.7	8	54.28	67.65	
Newdegate	310	39.8	43.0	6	54.91	68.44	
Nyabing	725	39.4	40.8	6	54.97	68.51	
Qualeup	2863	43.7	37.1	7	53.90	67.19	
Ravensthorpe	1739	38.2	38.2	5	54.16	67.50	
Wellstead	6176	42.9	40.7	8	53.60	66.81	
<b>Southern Tonnage</b>	<b>237109</b>	<b>41.8</b>	<b>38.4</b>	<b>9</b>	<b>54.49</b>	<b>67.92</b>	
<b>Southern Mean</b>							
<b>WA Tonnage</b>	<b>329874</b>						
<b>WA Mean</b>		<b>41.2</b>	<b>38.5</b>	<b>8</b>	<b>54.30</b>	<b>67.68</b>	

<sup>1</sup> % in whole seed at 8.5% moisture, <sup>2</sup> % in oil free meal @13% moisture, <sup>3</sup> µmoles/g in whole seed @8.5% moisture<sup>4</sup> Volumetric Grain Weights- lbs/b: Pounds per bushel, kg/hL: Kilograms per hectolitre

**Table 4a****%Fatty Acid Composition- New South Wales**

Receival Site	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
<b>Central</b>															
Ardlethan	0.1	4.4	0.3	2.1	60.7	19.8	10.7	0.4	1.0	0.2	0.1	0.1	0.1	7.3	115.6
Barellan	0.1	4.5	0.3	1.9	61.2	19.8	10.4	0.4	1.0	0.2	0.0	0.1	0.1	7.2	115.2
Boorowa	0.1	4.7	0.4	2.1	62.2	20.1	8.7	0.5	1.0	0.2	0.0	0.1	0.1	7.7	112.2
Boree Creek	0.1	4.4	0.3	2.1	60.0	20.1	11.0	0.5	1.0	0.2	0.1	0.1	0.1	7.4	116.3
Coolamon	0.1	4.7	0.4	2.0	58.9	21.0	11.0	0.5	1.1	0.2	0.1	0.1	0.1	7.6	117.1
Cootamundra	0.1	4.8	0.4	2.1	61.1	20.3	9.1	0.5	1.0	0.2	0.1	0.1	0.1	7.8	112.7
Cowra	0.1	4.3	0.3	1.9	61.6	19.7	9.8	0.5	1.1	0.2	0.1	0.1	0.1	7.1	114.0
Greenethorpe	0.1	4.8	0.4	2.0	59.9	20.9	10.3	0.4	0.9	0.1	0.1	0.0	0.1	7.4	115.8
Grong Grong	0.1	5.1	0.4	2.2	59.5	20.2	10.9	0.4	0.8	0.1	0.1	0.1	0.1	8.0	115.8
Harden	0.1	4.9	0.4	2.1	60.3	20.6	9.7	0.5	0.9	0.2	0.1	0.1	0.1	7.9	114.1
Henty West	0.1	4.6	0.3	1.9	59.3	20.7	11.4	0.4	0.9	0.2	0.1	0.1	0.1	7.3	117.7
Junee	0.1	4.8	0.4	2.0	59.9	20.4	10.7	0.5	0.8	0.2	0.1	0.1	0.1	7.7	115.9
Maimuru	0.1	4.6	0.3	2.0	60.6	20.3	10.1	0.4	1.0	0.2	0.1	0.1	0.1	7.4	114.8
Milbrulong	0.1	4.5	0.3	1.9	59.4	20.2	11.6	0.4	1.0	0.2	0.1	0.1	0.1	7.2	117.6
Milvale	0.1	5.0	0.4	2.0	59.1	21.1	10.4	0.5	1.0	0.1	0.2	0.0	0.0	7.7	115.9
Pucawan	0.1	4.8	0.3	2.1	59.7	21.1	10.0	0.5	1.0	0.2	0.1	0.1	0.0	7.8	115.2
Quandialla	0.1	4.6	0.3	2.1	60.5	20.2	10.5	0.4	0.9	0.1	0.1	0.1	0.0	7.4	115.5
Stockinbingal	0.1	4.6	0.3	1.9	60.1	20.9	10.0	0.5	1.0	0.2	0.2	0.1	0.1	7.4	115.3
Temora ST	0.1	4.8	0.3	2.1	59.2	21.1	10.4	0.5	1.0	0.2	0.1	0.1	0.1	7.8	115.8
Tocumwal	0.1	4.4	0.3	2.0	61.0	19.7	10.5	0.5	1.0	0.2	0.1	0.1	0.1	7.3	115.2
Wyalong	0.1	4.6	0.3	2.1	60.6	19.7	10.7	0.4	1.0	0.2	0.1	0.1	0.1	7.5	115.4
<b>Central Mean</b>	<b>0.1</b>	<b>4.7</b>	<b>0.4</b>	<b>2.0</b>	<b>60.2</b>	<b>20.4</b>	<b>10.3</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>7.6</b>	<b>115.2</b>
<b>Northern</b>															
Neilrex	0.1	4.8	0.3	1.9	61.4	20.4	9.4	0.5	1.0	0.2	0.0	0.1	0.1	7.6	113.8
Premer	0.1	4.1	0.3	2.1	62.3	19.1	9.8	0.6	1.1	0.3	0.1	0.1	0.1	7.3	113.5
Ulamambri	0.1	5.0	0.3	2.0	60.7	21.3	8.5	0.5	1.0	0.2	0.0	0.1	0.1	7.9	112.4
Willow Tree	0.1	4.9	0.3	1.8	61.9	20.5	8.7	0.5	0.9	0.2	0.0	0.1	0.1	7.6	112.5
<b>Northern Mean</b>	<b>0.1</b>	<b>4.7</b>	<b>0.3</b>	<b>1.9</b>	<b>61.8</b>	<b>20.1</b>	<b>9.2</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>7.5</b>	<b>113.2</b>
<b>Western</b>															
Alectown West	0.1	4.6	0.3	2.2	60.6	20.2	10.2	0.4	0.9	0.1	0.1	0.1	0.1	7.5	114.8
Back Creek	0.1	4.6	0.4	2.1	60.9	19.8	10.4	0.4	1.0	0.1	0.1	0.0	0.1	7.3	115.1
Condobolin	0.1	4.5	0.3	2.0	61.6	19.4	10.2	0.4	1.1	0.1	0.1	0.1	0.0	7.2	114.5
Elong Elong	0.1	4.6	0.2	2.1	62.0	19.5	9.5	0.5	1.1	0.2	0.2	0.1	0.0	7.6	113.1
Forbes	0.1	4.5	0.4	2.0	60.7	20.5	9.5	0.5	1.2	0.2	0.2	0.1	0.1	7.4	114.0
Manildra	0.1	4.6	0.3	1.9	61.0	20.1	10.0	0.5	1.1	0.2	0.1	0.1	0.1	7.4	114.7
Mungeribrar	0.1	4.6	0.3	2.0	61.7	19.5	9.9	0.5	1.0	0.2	0.0	0.1	0.1	7.5	113.8
Nyrang Creek	0.1	4.8	0.4	1.8	60.2	20.6	10.5	0.4	1.0	0.1	0.1	0.0	0.0	7.2	116.2
Parkes ST	0.1	4.7	0.4	2.1	60.0	20.5	10.4	0.4	0.9	0.2	0.2	0.1	0.0	7.6	115.5
Red Bend	0.1	4.5	0.3	2.0	61.6	20.1	9.4	0.5	0.9	0.2	0.2	0.1	0.1	7.4	113.5
Wongarbon	0.1	4.4	0.3	2.0	61.7	19.8	9.7	0.5	1.1	0.2	0.1	0.1	0.1	7.3	114.0
<b>Western Mean</b>	<b>0.1</b>	<b>4.6</b>	<b>0.3</b>	<b>2.1</b>	<b>61.1</b>	<b>20.0</b>	<b>9.9</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>7.5</b>	<b>114.3</b>
<b>NSW Mean</b>	<b>0.1</b>	<b>4.7</b>	<b>0.3</b>	<b>2.0</b>	<b>60.5</b>	<b>20.3</b>	<b>10.1</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>7.6</b>	<b>114.9</b>

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 4b****%Fatty Acid Composition- South Australia**

<b>Receival Site</b>	<b>14:0</b>	<b>16:0</b>	<b>16:1</b>	<b>18:0</b>	<b>18:1</b>	<b>18:2</b>	<b>18:3</b>	<b>20:0</b>	<b>20:1</b>	<b>22:0</b>	<b>22:1</b>	<b>24:0</b>	<b>24:1</b>	<b>Sat</b>	<b>Iodine Value</b>
<b><u>Central</u></b>															
Andrews	0.1	4.7	0.3	2.0	62.2	19.4	9.5	0.5	0.9	0.2	0.1	0.1	0.1	7.6	113.0
Caltowie	0.1	5.0	0.3	2.0	61.7	19.7	9.4	0.5	0.8	0.2	0.1	0.1	0.1	7.9	112.8
Gladstone	0.1	4.9	0.3	1.8	60.3	22.2	9.2	0.3	0.7	0.1	0.0	0.0	0.1	7.2	115.2
<b>Central Mean</b>	<b>0.1</b>	<b>4.9</b>	<b>0.3</b>	<b>1.9</b>	<b>61.4</b>	<b>20.4</b>	<b>9.4</b>	<b>0.4</b>	<b>0.8</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>7.6</b>	<b>113.6</b>
<b><u>Eastern</u></b>															
Bowmans	0.1	4.9	0.3	1.9	61.1	20.1	9.9	0.5	0.8	0.2	0.0	0.1	0.1	7.7	114.2
Frances	0.1	4.7	0.3	1.8	61.3	20.4	9.4	0.4	1.0	0.2	0.0	0.1	0.1	7.3	113.7
Keith	0.1	5.0	0.4	1.9	60.8	20.3	9.8	0.5	0.9	0.2	0.1	0.1	0.1	7.8	114.2
Pt Adelaide	0.1	4.5	0.3	1.9	61.0	20.6	9.9	0.5	0.9	0.2	0.0	0.1	0.1	7.3	115.0
Roseworthy	0.1	4.9	0.3	1.9	61.1	20.2	9.7	0.5	0.9	0.2	0.1	0.1	0.1	7.7	114.0
Tailem Bend	0.1	4.6	0.3	1.9	61.4	19.8	10.5	0.4	0.8	0.1	0.0	0.1	0.1	7.2	115.5
Woseley	0.1	4.7	0.3	1.9	61.7	19.9	9.4	0.5	1.0	0.2	0.0	0.1	0.1	7.5	113.2
<b>Eastern Mean</b>	<b>0.1</b>	<b>4.7</b>	<b>0.3</b>	<b>1.9</b>	<b>61.1</b>	<b>20.3</b>	<b>9.9</b>	<b>0.5</b>	<b>0.9</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>7.5</b>	<b>114.5</b>
<b><u>Western</u></b>															
Pt Lincoln	0.1	4.6	0.3	1.7	62.1	20.5	9.3	0.3	0.7	0.1	0.1	0.0	0.1	6.8	114.1
<b>Western Mean</b>	<b>0.1</b>	<b>4.6</b>	<b>0.3</b>	<b>1.7</b>	<b>62.1</b>	<b>20.5</b>	<b>9.3</b>	<b>0.3</b>	<b>0.7</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>	<b>6.8</b>	<b>114.1</b>
<b>SA Mean</b>	<b>0.1</b>	<b>4.7</b>	<b>0.3</b>	<b>1.9</b>	<b>61.3</b>	<b>20.3</b>	<b>9.7</b>	<b>0.5</b>	<b>0.8</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>7.4</b>	<b>114.4</b>

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 4c****%Fatty Acid Composition-Victoria**

<b>Receival Site</b>	<b>14:0</b>	<b>16:0</b>	<b>16:1</b>	<b>18:0</b>	<b>18:1</b>	<b>18:2</b>	<b>18:3</b>	<b>20:0</b>	<b>20:1</b>	<b>22:0</b>	<b>22:1</b>	<b>24:0</b>	<b>24:1</b>	<b>Sat</b>	<b>Iodine Value</b>
<b>Southern</b>															
Beulah	0.1	4.6	0.3	1.9	59.8	20.5	11.2	0.4	0.9	0.1	0.1	0.0	0.0	7.1	117.3
Carpolac	0.1	4.6	0.3	2.0	63.2	18.8	9.3	0.4	0.9	0.2	0.0	0.1	0.1	7.4	112.2
Deniliquin	0.1	4.9	0.3	2.0	61.2	19.8	10.1	0.4	0.9	0.2	0.1	0.1	0.1	7.7	114.4
Devenish	0.1	4.5	0.3	1.8	59.5	20.9	11.4	0.4	0.9	0.1	0.1	0.1	0.1	7.0	118.3
Dookie	0.1	4.7	0.4	1.8	59.4	21.0	10.9	0.4	1.0	0.2	0.1	0.1	0.1	7.3	117.2
Dunolly	0.1	4.7	0.4	1.9	60.3	20.1	10.6	0.5	1.0	0.2	0.1	0.1	0.1	7.5	115.6
Echuca	0.1	4.8	0.3	1.9	61.1	19.8	10.2	0.5	0.9	0.2	0.1	0.1	0.1	7.6	114.6
Elmore	0.1	4.5	0.3	1.8	62.0	19.5	9.8	0.5	1.1	0.2	0.1	0.1	0.1	7.2	114.0
Gymbowen	0.1	4.9	0.3	1.9	63.4	19.2	8.5	0.5	1.0	0.2	0.1	0.1	0.1	7.7	111.2
Hamilton	0.1	4.7	0.3	1.9	62.4	19.8	8.9	0.5	1.0	0.2	0.1	0.1	0.1	7.5	112.4
Laharum	0.1	4.8	0.3	1.9	63.0	19.4	8.8	0.5	0.9	0.2	0.1	0.1	0.1	7.6	111.9
Lillimur	0.1	4.6	0.3	1.9	62.4	19.8	9.0	0.5	1.0	0.2	0.0	0.1	0.1	7.4	112.6
Lubeck	0.1	4.6	0.3	1.8	63.9	19.1	8.2	0.5	1.1	0.2	0.1	0.1	0.1	7.3	110.7
Marmalake	0.1	4.7	0.3	1.9	61.1	20.4	9.9	0.4	0.9	0.2	0.0	0.1	0.1	7.4	114.8
Marnoo	0.1	4.5	0.3	1.9	62.7	19.8	8.9	0.5	1.0	0.2	0	0.1	0.1	7.3	112.6
Moolort	0.1	4.8	0.3	1.8	60	20.4	10.6	0.5	1.0	0.2	0.1	0.1	0.1	7.5	115.8
Murchison East	0.1	4.6	0.3	1.8	61.7	19.7	10	0.4	1.0	0.2	0.1	0.1	0.1	7.2	114.5
Narracoorte	0.1	4.9	0.4	1.9	61	19.5	10.3	0.5	1.0	0.2	0.1	0.1	0.1	7.7	114.4
Natimuk	0.1	4.7	0.3	1.8	61.4	19.3	10.4	0.5	1.0	0.2	0.1	0.1	0.1	7.4	114.6
Oaklands	0.1	4.5	0.3	2	60.6	20	10.8	0.4	1.0	0.2	0.1	0.1	0.1	7.3	116.2
Portland	0.1	4.6	0.3	1.9	61.9	19.5	9.7	0.5	1.1	0.2	0.1	0.1	0.1	7.4	113.6
Raywood	0.1	4.4	0.3	2	63.2	18.7	9.5	0.5	1.0	0.2	0.1	0.1	0.1	7.3	112.7
Sanger	0.1	4.5	0.3	1.9	59.8	20.3	11.4	0.4	0.9	0.2	0.1	0.1	0.1	7.2	117.5
Serviceton	0.1	4.4	0.3	1.9	62	20.6	8.6	0.6	1.1	0.3	0.1	0.1	0.1	7.4	112.7
Skipton	0.1	4.6	0.4	1.9	60.7	19.4	11	0.5	0.9	0.2	0.1	0.1	0.1	7.4	115.7
Swan Hill	0.1	4.5	0.3	2.1	62.8	18.9	9.9	0.5	0.8	0.1	0	0.1	0.1	7.4	113.6
Yarrawonga	0.1	4.4	0.3	1.7	60.6	20.3	10.8	0.4	0.9	0.2	0.1	0.1	0.1	6.9	116.6
Warracknabel	0.1	4.7	0.3	1.9	60.9	20.4	9.6	0.5	1.1	0.3	0.0	0.1	0.1	7.6	113.9
Westmere	0.1	4.6	0.3	1.9	60.5	19.5	11.1	0.5	0.9	0.2	0.1	0.1	0.1	7.4	115.9
Willarua	0.1	4.8	0.3	1.9	61	19.5	10.8	0.4	0.9	0.2	0.1	0.1	0.1	7.5	115.6
<b>Vic Mean</b>	<b>0.1</b>	<b>4.7</b>	<b>0.3</b>	<b>1.9</b>	<b>61.4</b>	<b>19.7</b>	<b>10.1</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>7.4</b>	<b>114.5</b>

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 4d****%Fatty Acid Composition- Western Australia**

Receival Site	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	Iodine Sat	Value
<b>Central</b>															
Avon C1	0.1	4.5	0.3	1.8	60.9	21.3	9.4	0.4	0.9	0.2	0.0	0.1	0.2	7.0	114.8
Avon C2	0.1	4.1	0.3	1.8	61.0	21.2	9.5	0.5	1.1	0.2	0.0	0.1	0.2	6.8	115.1
Brookton	0.1	4.5	0.3	1.9	61.6	21.0	8.9	0.4	1.0	0.2	0.0	0.1	0.1	7.1	113.7
Calingiri	0.1	4.7	0.3	1.8	60.2	21.7	9.5	0.4	1.0	0.2	0.0	0.1	0.1	7.2	115.4
Dale	0.1	4.1	0.3	1.9	63.5	18.4	9.4	0.5	1.3	0.3	0.0	0.2	0.2	7.0	112.4
Kellerberrin	0.1	4.6	0.3	1.7	58.9	22.3	10.2	0.4	1.1	0.2	0.0	0.1	0.1	7.1	117.0
Kulin	0.1	4.6	0.3	1.7	59.3	22.9	9.4	0.4	0.9	0.2	0.0	0.1	0.1	7.0	116.3
Merredin C1	0.1	5.0	0.3	1.7	56.8	24.1	10.2	0.4	1.1	0.2	0.0	0.1	0.1	7.5	118.3
Merredin C2	0.1	4.8	0.3	1.7	56.9	21.6	10.9	0.5	1.7	0.2	1.0	0.1	0.2	7.4	117.2
MGC C1	0.1	4.3	0.3	1.8	62.3	20.1	9.2	0.4	1.0	0.2	0.0	0.1	0.1	6.9	113.6
MGC C2	0.1	4.5	0.3	1.8	60.7	21.0	9.8	0.4	0.9	0.2	0.0	0.1	0.1	7.1	115.3
Moora	0.1	4.2	0.3	1.8	60.6	21.1	9.9	0.4	1.1	0.2	0.0	0.1	0.1	6.9	115.7
Narembeen	0.1	4.8	0.3	1.8	55.8	24.6	10.9	0.4	0.9	0.2	0.0	0.1	0.1	7.3	120.2
Piawanning	0.1	4.9	0.3	1.8	59.8	21.5	10.0	0.4	0.9	0.2	0.0	0.1	0.1	7.4	115.8
Quairading	0.1	4.6	0.3	1.7	58.3	22.9	10.0	0.4	1.2	0.2	0.0	0.1	0.1	7.2	117.2
Wickepin	0.1	4.7	0.3	1.8	60.1	21.8	9.3	0.4	1.0	0.2	0.0	0.1	0.1	7.3	115.0
Williams	0.1	4.4	0.3	1.9	62.4	19.3	9.5	0.5	1.1	0.2	0.0	0.2	0.2	7.3	113.0
York	0.1	4.2	0.3	1.8	60.6	20.7	10.2	0.5	1.2	0.2	0.0	0.1	0.2	6.8	115.9
Yornaning	0.1	4.5	0.3	1.9	62.1	20.1	9.0	0.5	1.0	0.2	0.0	0.1	0.1	7.3	113.0
<b>Central Mean</b>	<b>0.1</b>	<b>4.4</b>	<b>0.3</b>	<b>1.8</b>	<b>61.6</b>	<b>20.5</b>	<b>9.4</b>	<b>0.4</b>	<b>1</b>	<b>0.2</b>	<b>0</b>	<b>0.1</b>	<b>0.1</b>	<b>7.1</b>	<b>114.1</b>
<b>Northern</b>															
Arrino	0.1	4.5	0.3	1.8	59.2	22.6	9.7	0.4	0.9	0.2	0.0	0.1	0.2	7.1	116.5
Coorow	0.1	4.4	0.3	1.8	59.1	20.7	11.4	0.5	1.1	0.2	0.0	0.2	0.2	7.2	117.8
Geraldton C1	0.1	4.5	0.3	1.7	60.9	21.4	9.5	0.4	0.9	0.2	0.0	0.1	0.1	6.9	115.3
Geraldton C2	0.1	4.8	0.3	1.7	59.9	21.3	9.9	0.4	1.0	0.2	0.2	0.1	0.1	7.3	115.5
Mingenew	0.1	4.3	0.3	1.8	60.9	21.5	9.5	0.4	0.9	0.2	0.0	0.1	0.1	6.8	115.5
Northampton	0.1	4.5	0.3	1.7	59.5	22.5	9.8	0.4	0.9	0.2	0.0	0.1	0.1	6.9	116.7
<b>Northern Mean</b>	<b>0.1</b>	<b>4.5</b>	<b>0.3</b>	<b>1.7</b>	<b>60.6</b>	<b>21.6</b>	<b>9.6</b>	<b>0.4</b>	<b>0.9</b>	<b>0.2</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>6.9</b>	<b>115.6</b>
<b>Southern</b>															
Albany C1	0.1	4.3	0.3	1.7	62.7	19.8	9.0	0.5	1.1	0.2	0.0	0.1	0.2	7.0	112.9
Albany C2	0.1	4.6	0.3	1.8	61.5	20.0	9.6	0.4	1.1	0.2	0.1	0.1	0.2	7.2	113.9
Beaumont	0.1	4.4	0.3	1.8	61.4	19.8	10.2	0.5	1.1	0.2	0.0	0.2	0.1	7.1	115.0
Bokal	0.1	4.3	0.3	1.9	62.2	19.8	9.4	0.5	1.1	0.2	0.0	0.1	0.2	7.1	113.5
Borden	0.1	4.7	0.3	1.8	60.6	21.3	9.5	0.4	0.9	0.2	0.0	0.1	0.1	7.2	114.9
Boyup Brook	0.1	4.1	0.3	1.8	63.0	18.9	9.4	0.6	1.2	0.3	0.0	0.2	0.2	7.0	112.8
Broomehill	0.1	4.5	0.3	1.9	61.6	20.6	9.1	0.5	1.0	0.2	0.0	0.1	0.1	7.2	113.7
Cranbrook C1	0.1	4.3	0.3	1.8	62.3	19.9	9.2	0.5	1.0	0.2	0.0	0.1	0.2	7.0	113.4
Cranbrook C2	0.1	4.3	0.3	1.8	62.6	19.7	9.3	0.5	1.1	0.2	0.0	0.1	0.1	7.0	113.2
Dumbleyung	0.1	4.6	0.3	1.8	59.4	21.7	10.0	0.4	1.2	0.2	0.0	0.1	0.2	7.2	116.1
Esperance	0.1	5.1	0.4	1.8	61.8	19.9	9.2	0.4	1.0	0.2	0.0	0.1	0.1	7.7	112.8
Gairdner	0.1	4.3	0.3	1.7	61.2	20.5	10.0	0.5	1.0	0.2	0.0	0.1	0.1	6.9	115.4
Jacup	0.1	4.4	0.3	1.8	63.6	20.0	8.1	0.4	1.0	0.2	0.0	0.1	0.1	7.0	111.4
Katanning	0.1	4.4	0.3	1.9	61.9	20.1	9.3	0.5	1.0	0.2	0.0	0.1	0.2	7.2	113.5
Kojoneerup	0.1	4.2	0.3	1.8	63.7	19.6	8.4	0.5	1.1	0.2	0.0	0.1	0.1	6.8	111.9
Kojonup	0.1	4.5	0.3	1.9	62.9	20.0	8.5	0.5	1.0	0.2	0.0	0.1	0.1	7.2	112.0
Munglinup	0.1	4.4	0.3	1.7	61.1	21.4	9.5	0.4	0.9	0.2	0.0	0.1	0.1	6.8	115.3
Newdegate	0.1	4.4	0.3	1.8	61.3	21.4	9.1	0.4	0.9	0.2	0.0	0.1	0.1	6.9	114.5
Nyabing	0.1	5.4	0.4	1.8	60.6	21.1	9.1	0.4	0.8	0.1	0.0	0.1	0.1	7.9	113.6
Qualeup	0.1	4.8	0.3	1.8	63.8	19.0	8.4	0.4	1.0	0.2	0.0	0.1	0.1	7.4	110.8
Ravensthorpe	0.1	4.4	0.3	1.7	59.7	21.0	10.3	0.5	1.4	0.2	0.0	0.2	0.2	7.1	116.1
Wellstead	0.1	5.0	0.4	1.7	62.1	20.0	9.1	0.4	0.9	0.2	0.0	0.1	0.1	7.5	112.8
<b>Southern Mean</b>	<b>0.1</b>	<b>4.5</b>	<b>0.3</b>	<b>1.8</b>	<b>62.1</b>	<b>20</b>	<b>9.2</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0</b>	<b>0.1</b>	<b>0.1</b>	<b>7.2</b>	<b>113.3</b>
<b>WA Mean</b>	<b>0.1</b>	<b>4.5</b>	<b>0.3</b>	<b>1.8</b>	<b>61.9</b>	<b>20.2</b>	<b>9.3</b>	<b>0.5</b>	<b>1.0</b>	<b>0.2</b>	<b>0</b>	<b>0.1</b>	<b>0.1</b>	<b>7.2</b>	<b>113.6</b>

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 5a. National Brassica Improvement Project Trials 2002 - <sup>1</sup>Oil**

S2 Early Trials					S2 Mid Trials					S2 Early Triazine Trials					S2 Mid Triazine Trials					S2 Early Clearfield Trials					S2 Mid Clearfield Trials						
Variety	W	T	N	Mean	Variety	W	T	K	Mean	Variety	W	T	N	Mean	Variety	W	T	K	Mean	Variety	W	T	N	Mean	Variety	W	T	K	Mean		
01N704	37.9	38.6	36.4	<b>37.6</b>	01N706	37.1	39.0	39.1	<b>38.4</b>	AGT201	39.5	39.4	35.9	<b>38.3</b>	AGT205	38.0	39.2	40.5	<b>39.3</b>	44C73	38.2	38.0	37.2	<b>37.8</b>	45C75	35.4	37.5	40.8	<b>37.9</b>		
AG-OUTBACK	35.7	36.4	35.2	<b>35.8</b>	AG-CASTLE	38.8	41.0	*	<b>39.9</b>	AGT202	37.9	37.2	34.9	<b>36.7</b>	AGT206	36.9	39.2	40.5	<b>38.9</b>	BLN2691CL	39.2	40.1	39.8	<b>39.7</b>	46C74	37.3	38.7	42.3	<b>39.4</b>		
AGC201	37.2	38.3	35.7	<b>37.1</b>	AGC210	37.0	38.3	39.4	<b>38.2</b>	AGT203	37.8	39.0	35.6	<b>37.5</b>	AGT207	37.1	39.4	39.8	<b>38.8</b>	BLN2692CL	40.6	40.6	40.1	<b>40.4</b>	BLN2695CL	38.0	39.3	42.6	<b>40.0</b>		
AGC202	36.8	38.3	36.0	<b>37.1</b>	AGC211	39.7	41.4	43.3	<b>41.5</b>	AGT204	35.4	35.9	34.5	<b>35.3</b>	AGT208	38.4	39.1	40.2	<b>39.2</b>	BLN2693CL	38.6	38.5	39.6	<b>38.9</b>	BLN2696CL	37.9	38.4	42.2	<b>39.5</b>		
AGC203	36.3	37.7	35.4	<b>36.5</b>	AGC212	39.0	40.8	41.7	<b>40.5</b>	ATR-BEACON	36.7	37.0	34.7	<b>36.1</b>	ATR-BEACON	35.8	37.7	39.0	<b>37.5</b>	BLN2694CL	39.6	39.7	38.3	<b>39.2</b>	BLN2697CL	38.0	38.1	41.8	<b>39.3</b>		
AGC204	35.7	37.1	34.7	<b>35.8</b>	AGC213	38.3	39.9	40.1	<b>39.5</b>	ATR-HYDEN	35.6	35.6	33.5	<b>34.9</b>	ATR-HYDEN	35.6	37.6	40.6	<b>37.9</b>	NS04403	36.6	37.3	36.8	<b>36.9</b>	J1311	40.9	40.2	*	<b>40.5</b>		
AGC205	41.5	43.0	39.4	<b>41.3</b>	AGC214	38.2	40.4	42.7	<b>40.4</b>	BLN2626TT	37.3	*	*	<b>34.9</b>	ATR-HYDEN	34.2	36.7	38.3	<b>36.4</b>	SURPASS402CL	39.2	38.8	39.4	<b>39.1</b>	J1316	40.4	41.0	*	<b>40.7</b>		
AGC206	37.5	38.8	36.7	<b>37.7</b>	AGC215	37.7	39.8	42.1	<b>39.9</b>	BLN2669TT	38.9	39.2	37.0	<b>37.3</b>	BLN2673TT	36.8	38.6	39.8	<b>38.4</b>	J1327	37.6	38.6	*	<b>38.1</b>	NS04399	36.8	37.8	41.4	<b>38.7</b>		
AGC207	39.1	40.6	38.0	<b>39.2</b>	AGC216	36.5	41.0	41.6	<b>39.7</b>	BLN2670TT	38.1	40.1	36.3	<b>38.4</b>	BLN2675TT	35.8	38.2	39.2	<b>37.7</b>	SURPASS603CL	39.3	39.5	43.6	<b>40.8</b>							
AGC208	38.5	41.9	37.9	<b>39.4</b>	AGC217	39.1	41.1	42.7	<b>40.9</b>	BLN2671TT	36.9	38.1	36.3	<b>38.2</b>	BLN2676TT	38.2	39.2	40.3	<b>39.2</b>												
BLN2017*SL008	36.8	39.4	36.9	<b>37.7</b>	BLN2440	37.0	41.2	40.9	<b>39.7</b>	BLN2672TT	37.3	38.4	36.0	<b>37.1</b>	RGAS02T14	37.9	38.8	*	<b>38.4</b>												
BLN2026*SL902	39.3	40.6	*	<b>40.0</b>	BLN2677	38.2	40.1	42.6	<b>40.3</b>	BLN2674TT	35.6	36.8	34.1	<b>37.2</b>	SURPASS501TT	39.3	40.7	41.4	<b>40.5</b>												
BLN2483	38.2	40.3	37.5	<b>38.7</b>	BLN2685	38.0	41.1	41.5	<b>40.2</b>	KAROO	36.7	35.5	*	<b>35.5</b>	T2015	37.6	39.3	39.8	<b>38.9</b>												
BLN2678	38.3	39.7	37.6	<b>38.5</b>	BLN2686	38.7	41.3	43.2	<b>41.0</b>	SURPASS501TT	40.3	39.8	38.0	<b>36.1</b>	T2023	38.0	39.5	40.3	<b>39.3</b>												
BLN2679	39.4	40.5	38.1	<b>39.3</b>	BLN2687	38.4	39.8	40.2	<b>39.5</b>	T2028	*	39.2	35.6	<b>39.4</b>	T2027	38.3	39.8	40.1	<b>39.4</b>												
BLN2680	38.5	41.1	38.2	<b>39.3</b>	BLN2688	38.3	41.1	43.3	<b>40.9</b>	T2030	40.8	39.8	38.2	<b>37.4</b>	T11PINNACLE	*	37.2	38.4	<b>37.8</b>												
BLN2681	38.0	39.1	36.5	<b>37.9</b>	BLN2689	37.6	39.2	42.0	<b>39.6</b>	TN4*SL909	37.0	37.5	35.4	<b>39.6</b>	TQ005	39.4	38.8	41.5	<b>39.9</b>												
BLN2682	38.4	39.3	36.3	<b>38.0</b>	BLN2690	38.5	39.7	41.5	<b>39.9</b>	TN4*SL910	*	37.3	38.3	<b>36.6</b>	TQ006	38.2	39.9	40.7	<b>39.6</b>												
BLN2683	37.2	38.9	36.1	<b>37.4</b>	H9001	38.1	38.7	*	<b>38.4</b>	TQ001	37.4	38.6	36.3	<b>37.8</b>	TQ007	35.9	37.5	39.2	<b>37.5</b>												
BLN2684	37.6	40.2	36.6	<b>38.1</b>	H9028	39.2	40.1	*	<b>39.7</b>	TQ002	37.1	37.7	36.2	<b>37.4</b>	TQ008	36.5	37.4	39.3	<b>37.7</b>												
H1068	38.3	39.3	36.3	<b>38.0</b>	HYOLA60	39.8	40.5	42.3	<b>40.9</b>	TQ003	37.0	38.0	34.9	<b>37.0</b>																	
H1432	39.5	40.9	38.1	<b>39.5</b>	LANTERN	38.4	40.7	41.8	<b>40.3</b>	TQ004	37.9	38.6	36.9	<b>36.6</b>																	
H1433	39.4	41.3	37.9	<b>39.5</b>	NS04361	36.3	38.0	40.2	<b>38.1</b>																						
H9010	39.2	39.7	*	<b>39.5</b>	NS04383	37.0	40.0	39.9	<b>39.0</b>																						
H9014	39.3	40.5	*	<b>39.9</b>	OSCAR	*	37.0	37.0	<b>37.0</b>																						
H9019	36.5	38.7	*	<b>37.6</b>	RAINBOW	35.9	38.1	39.2	<b>37.7</b>																						
H9023	37.6	39.2	*	<b>38.4</b>	RGAS0205	35.6	38.9	40.1	<b>38.2</b>																						
H9032	39.0	40.3	*	<b>39.6</b>	RGAS0206	35.3	37.3	39.9	<b>37.5</b>																						
MYSTIC	*	39.1	36.6	<b>37.8</b>	RGAS0207	37.5	39.2	40.1	<b>38.9</b>																						
RAINBOW	36.3	37.0	34.5	<b>35.9</b>	RGAS0209	34.4	36.8	38.0	<b>36.4</b>																						
RIVETTE	38.5	40.5	*	<b>39.5</b>	RGAS0210	37.4	38.3	38.8	<b>38.2</b>																						
RQ001	40.1	39.8	38.4	<b>39.4</b>	RGAS0211	37.5	39.1	40.3	<b>38.9</b>																						
RQ002	38.1	38.7	36.5	<b>37.8</b>	RQ009	38.6	40.5	42.4	<b>40.5</b>																						
RQ003	36.7	36.8	34.7	<b>36.1</b>	RQ010	38.7	40.0	42.0	<b>40.2</b>																						
RQ004	38.5	39.6	37.1	<b>38.4</b>	RQ011	38.1	40.0	40.8	<b>39.6</b>																						
01N705	39.1	41.0	38.4	<b>39.5</b>	RQ012	37.8	40.9	41.6	<b>40.1</b>																						
AG-OUTBACK	38.0	39.2	35.7	<b>37.6</b>	RQ013	37.8	39.7	41.0	<b>39.5</b>																						
AGC209	37.1	40.0	37.1	<b>38.1</b>	RQ014	39.7	41.5	41.4	<b>40.9</b>																						
AGC210	36.7	39.9	37.0	<b>37.9</b>	RQ015	37.1	40.1	40.0	<b>39.1</b>																						
AGC211	40.0	41.5	38.7	<b>40.1</b>	RQ016	37.7	40.8	41.9	<b>40.1</b>																						

W=Wagga- NSW      T=Turretfield- SA      N=Newdegate- WA      K=Katanning- WA

<sup>1</sup>% in whole seed @ 8.5% moisture

**Table 5b. National Brassica Improvement Project Trials 2002- <sup>1</sup>Protein**

<b>S2 Early Trials</b>					<b>S2 Mid Trials</b>					<b>S2 Early Triazine Trials</b>					<b>S2 Mid Triazine Trials</b>					<b>S2 Early Clearfield Trials</b>					<b>S2 Mid Clearfield Trials</b>						
Variety	W	T	N	Mean	Variety	W	T	K	Mean	Variety	W	T	N	Mean	Variety	W	T	K	Mean	Variety	W	T	N	Mean	Variety	W	T	K	Mean		
01N704	44.9	42.7	42.7	<b>43.4</b>	01N706	43.1	42.3	39.6	<b>41.6</b>	AGT201	45.9	42.9	43.1	<b>44.0</b>	AGT205	44.2	41.5	40.7	<b>42.1</b>	44C73	41.2	40.1	40.0	<b>40.4</b>	45C75	44.7	43.0	37.4	<b>41.7</b>		
AG-OUTBACK	43.8	40.5	42.0	<b>42.1</b>	AG-CASTLE	43.5	42.0	*	<b>42.8</b>	AGT202	41.6	41.1	41.5	<b>41.4</b>	AGT206	45.2	42.0	39.9	<b>42.4</b>	BLN2691CL	45.1	43.0	44.6	<b>44.2</b>	46C74	44.9	42.0	36.6	<b>41.2</b>		
AGC201	42.4	39.2	41.6	<b>41.1</b>	AGC210	41.5	40.7	36.5	<b>39.6</b>	AGT203	43.0	42.0	41.9	<b>42.3</b>	AGT207	44.2	41.6	39.0	<b>41.6</b>	BLN2692CL	44.3	42.8	43.2	<b>43.4</b>	BLN2695CL	44.5	42.1	37.8	<b>41.5</b>		
AGC202	42.7	40.1	41.1	<b>41.3</b>	AGC211	43.3	42.4	39.5	<b>41.7</b>	AGT204	44.8	41.4	42.2	<b>42.8</b>	AGT208	45.0	43.7	40.8	<b>43.2</b>	BLN2693CL	45.7	43.1	43.5	<b>44.1</b>	BLN2696CL	45.3	43.4	39.2	<b>42.6</b>		
AGC203	41.2	39.1	41.5	<b>40.6</b>	AGC212	43.8	42.3	39.7	<b>42.0</b>	ATR-BEACON	44.2	42.0	42.2	<b>42.8</b>	ATR-BEACON	44.0	41.9	39.8	<b>41.9</b>	BLN2694CL	44.6	43.4	43.9	<b>44.0</b>	BLN2697CL	45.0	42.9	39.0	<b>42.3</b>		
AGC204	43.2	40.0	41.3	<b>41.5</b>	AGC213	44.1	41.9	40.9	<b>42.3</b>	ATR-HYDEN	44.6	41.3	44.0	<b>43.3</b>	ATR-HYDEN	44.3	41.8	38.0	<b>41.4</b>	NS04403	42.8	41.7	41.7	<b>42.0</b>	J1311	43.9	40.6	*	<b>42.3</b>		
AGC205	42.9	40.9	42.3	<b>42.0</b>	AGC214	43.6	42.4	38.5	<b>41.5</b>	BLN2626TT	45.9	*	*	<b>45.9</b>	ATR-HYDEN	44.7	42.3	39.1	<b>42.0</b>	SURPASS402CL	44.3	40.6	42.3	<b>42.4</b>	J1316	45.2	42.4	*	<b>43.8</b>		
AGC206	45.2	42.3	43.4	<b>43.6</b>	AGC215	44.6	44.0	40.7	<b>43.1</b>	BLN2669TT	43.9	44.0	44.7	<b>44.2</b>	BLN2673TT	45.4	42.4	39.8	<b>42.5</b>	J1327	44.0	41.4	*	<b>42.7</b>	NS04399	43.1	41.0	34.9	<b>39.7</b>		
AGC207	44.0	42.6	42.7	<b>43.1</b>	AGC216	45.1	43.4	40.8	<b>43.1</b>	BLN2670TT	45.2	43.1	43.7	<b>44.0</b>	BLN2675TT	46.2	43.5	41.8	<b>43.9</b>	SURPASS603CL	44.7	43.2	38.7	<b>42.2</b>							
AGC208	44.8	43.5	43.2	<b>43.8</b>	AGC217	44.9	43.4	39.6	<b>42.6</b>	BLN2671TT	44.5	42.5	42.2	<b>43.1</b>	BLN2676TT	45.0	42.4	41.9	<b>43.1</b>												
BLN2017*SL008	44.8	43.1	43.4	<b>43.8</b>	BLN2440	45.1	42.5	40.4	<b>42.7</b>	BLN2672TT	46.1	44.1	44.0	<b>44.7</b>	RGAS02T14	44.8	41.8	*	<b>43.3</b>												
BLN2026*SL902	45.5	43.0	*	<b>44.2</b>	BLN2677	45.9	44.2	40.5	<b>43.5</b>	BLN2674TT	44.7	42.1	43.2	<b>43.3</b>	SURPASS501TT	43.8	41.1	39.6	<b>41.5</b>												
BLN2483	46.1	43.0	44.4	<b>44.5</b>	BLN2685	45.3	43.8	40.6	<b>43.2</b>	KAROO	41.6	39.3	*	<b>40.5</b>	T2015	44.4	42.7	42.1	<b>43.1</b>												
BLN2678	44.2	41.6	43.0	<b>42.9</b>	BLN2686	45.6	43.5	41.1	<b>43.4</b>	SURPASS501TT	43.0	40.4	42.4	<b>42.0</b>	T2023	45.2	42.2	41.5	<b>43.0</b>												
BLN2679	44.9	42.2	43.6	<b>43.6</b>	BLN2687	46.3	44.6	41.3	<b>44.1</b>	T2028	*	41.9	43.7	<b>42.8</b>	T2027	42.4	40.4	41.4	<b>41.4</b>												
BLN2680	44.1	42.0	42.4	<b>42.9</b>	BLN2688	45.4	42.0	38.5	<b>42.0</b>	T2030	44.7	40.8	42.8	<b>42.8</b>	TI1PINNACLE	*	41.9	39.8	<b>40.9</b>												
BLN2681	43.8	43.2	43.7	<b>43.6</b>	BLN2689	45.6	43.8	40.0	<b>43.1</b>	TN4*SL909	44.0	41.4	42.3	<b>42.6</b>	TQ005	44.7	42.0	41.5	<b>42.7</b>												
BLN2682	42.8	39.6	42.0	<b>41.4</b>	BLN2690	44.9	43.8	41.2	<b>43.3</b>	TN4*SL910	*	40.9	43.6	<b>42.3</b>	TQ006	43.4	42.3	40.4	<b>42.0</b>												
BLN2683	45.3	41.4	42.9	<b>43.2</b>	H9001	44.8	41.9	*	<b>43.4</b>	TQ001	42.2	40.9	42.9	<b>42.0</b>	TQ007	44.1	41.5	41.0	<b>42.2</b>												
BLN2684	45.9	43.4	44.1	<b>44.4</b>	H9028	45.4	42.1	*	<b>43.8</b>	TQ002	44.9	42.3	43.5	<b>43.6</b>	TQ008	45.6	42.1	40.1	<b>42.6</b>												
H1068	44.5	42.3	44.0	<b>43.6</b>	HYOLA60	47.0	44.3	41.7	<b>44.3</b>	TQ003	44.3	41.4	41.3	<b>42.3</b>	TQ004	43.1	40.9	42.5	<b>42.1</b>												
H1432	44.9	41.6	43.2	<b>43.2</b>	LANTERN	45.7	44.0	41.9	<b>43.9</b>																						
H1433	44.7	41.0	43.3	<b>43.0</b>	NS04361	42.0	42.7	39.7	<b>41.5</b>																						
H9010	44.0	41.8	*	<b>42.9</b>	NS04383	41.1	39.9	37.2	<b>39.4</b>																						
H9014	42.9	39.6	*	<b>41.2</b>	OSCAR	*	40.4	37.3	<b>38.9</b>																						
H9019	44.5	41.5	*	<b>43.0</b>	RAINBOW	41.6	40.8	36.9	<b>39.8</b>																						
H9023	43.6	40.7	*	<b>42.1</b>	RGAS0205	43.4	42.4	39.6	<b>41.8</b>																						
H9032	44.2	41.1	*	<b>42.7</b>	RGAS0206	43.7	41.0	40.5	<b>41.7</b>																						
MYSTIC	*	39.9	41.8	<b>40.8</b>	RGAS0207	45.3	42.3	38.5	<b>42.0</b>																						
RAINBOW	42.1	39.8	41.6	<b>41.1</b>	RGAS0209	41.3	40.4	37.1	<b>39.6</b>																						
RIVETTE	45.9	43.4	*	<b>44.7</b>	RGAS0210	42.1	41.9	38.1	<b>40.7</b>																						
RQ001	44.6	41.2	43.1	<b>43.0</b>	RGAS0211	43.5	42.8	40.4	<b>42.2</b>																						
RQ002	44.0	40.7	43.4	<b>42.7</b>	RQ009	45.4	44.0	41.4	<b>43.6</b>																						
RQ003	43.6	40.2	42.2	<b>42.0</b>	RQ010	44.5	42.5	38.8	<b>41.9</b>																						
RQ004	43.4	41.3	43.5	<b>42.7</b>	RQ011	45.2	42.9	41.3	<b>43.1</b>																						
RQ005	45.4	42.5	44.3	<b>44.1</b>	RQ012	43.3	42.7	39.6	<b>41.9</b>																						
RQ006	44.2	41.3	42.5	<b>42.6</b>	RQ013	43.2	42.1	40.4	<b>41.9</b>																						
RQ007	43.4	40.1	41.5	<b>41.7</b>	RQ014	44.7	43.6	41.3	<b>43.2</b>																						
RQ008	43.0	40.2	41.7	<b>41.6</b>	RQ015	43.1	41.3	37.8	<b>40.7</b>																						
SURPASS400	43.9	42.1	43.9	<b>43.3</b>	RQ016	44.9	42.8	40.2	<b>42.7</b>																						

W=Wagga- NSW

T=Turretfield- SA

N=Newdegate- WA

K=Katanning- WA

<sup>1</sup>% in oil free meal @ 13% moisture

**Table 5c. National Brassica Improvement Project Trials 2002- <sup>1</sup>Glucosinolates**

**S2 Early Trials      S2 Mid Trials      S2 Early Triazine Trials      S2 Mid Triazine Trials      S2 Early Clearfield Trials      S2 Mid Clearfield Trials**

Variety	W	T	N	Mean	Variety	W	T	K	Mean	Variety	W	T	N	Mean	Variety	W	T	K	Mean	Variety	W	T	N	Mean	Variety	W	T	K	Mean		
01N704	18	7	12	12	01N706	14	12	14	13	AGT201	25	15	22	20	AGT205	21	13	7	14	44C73	8	9	9	9	45C75	11	10	9	10		
AG-OUTBACK	13	11	15	13	AG-CASTLE	11	10	*	11	AGT202	21	11	17	16	AGT206	28	16	15	19	BLN2691CL	8	6	11	8	46C74	11	9	8	9		
AGC201	22	10	18	17	AGC210	11	10	8	10	AGT203	24	13	19	19	AGT207	25	12	11	16	BLN2692CL	8	7	8	8	BLN2695CL	10	8	7	8		
AGC202	17	11	14	14	AGC211	9	10	6	8	AGT204	23	12	21	19	AGT208	19	11	11	14	BLN2693CL	8	7	9	8	BLN2696CL	13	11	10	11		
AGC203	11	3	7	7	AGC212	12	8	8	9	ATR-BEACON	13	11	12	12	ATR-BEACON	13	11	8	11	BLN2694CL	8	7	10	9	BLN2697CL	11	8	7	9		
AGC204	15	11	15	14	AGC213	27	13	14	18	ATR-HYDEN	12	11	11	11	ATR-GRACE	14	14	4	11	NS04403	11	9	11	10	J1311	13	12	*	12		
AGC205	12	7	9	9	AGC214	21	11	11	14	BLN2626TT	14	*	*	14	ATR-HYDEN	14	11	11	12	SURPASS402CL	8	10	11	10	J1316	9	9	*	9		
AGC206	12	9	10	10	AGC215	28	14	16	19	BLN2669TT	15	9	15	13	BLN2673TT	14	13	11	13	J1327	9	7	*	8							
AGC207	13	7	10	10	AGC216	20	11	13	14	BLN2670TT	8	8	12	9	BLN2675TT	10	10	8	9	NS04399	10	8	5	8							
AGC208	13	6	9	9	AGC217	11	9	4	8	BLN2671TT	10	8	11	9	BLN2676TT	12	6	8	9	SURPASS603CL	9	9	5	8							
BLN2017*SL008	14	8	11	11	BLN2440	11	10	10	10	BLN2672TT	12	9	13	11	RGAS02T14	10	9	*	9												
BLN2026*SL902	16	7	*	11	BLN2677	18	10	8	12	BLN2674TT	13	11	13	12	SURPASS501TT	12	6	6	8												
BLN2483	13	5	9	9	BLN2685	13	10	7	10	KAROO	13	9	*	11	T2015	9	9	4	7												
BLN2678	12	7	11	10	BLN2686	10	8	8	9	SURPASS501TT	10	7	11	9	T2023	11	7	7	8												
BLN2679	13	10	11	11	BLN2687	15	11	8	11	T2028	*	9	9	9	T2027	10	10	8	9												
BLN2680	13	8	12	11	BLN2688	11	7	9	9	T2030	9	6	8	8	T11PINNACLE	*	13	9	11												
BLN2681	15	11	11	12	BLN2689	9	12	7	9	TN4*SL909	12	10	13	12	TQ005	10	8	9	9												
BLN2682	13	7	11	10	BLN2690	12	8	10	10	TN4*SL910	*	10	9	9	TQ006	17	13	8	13												
BLN2683	12	6	10	9	H9001	13	12	*	13	TQ001	12	9	14	12	TQ007	12	11	9	11												
BLN2684	12	6	12	10	H9028	11	10	*	11	TQ002	23	14	20	19	TQ008	9	9	7	8												
H1068	17	11	13	14	HYOLA60	10	8	9	9	TQ003	10	8	13	10																	
H1432	13	10	11	12	LANTERN	13	10	5	10	TQ004	17	9	14	13																	
H1433	14	9	10	11	NS04361	11	6	11	9																						
H9010	11	9	*	10	NS04383	11	10	9	10																						
H9014	12	9	*	11	OSCAR	*	11	11	11																						
H9019	13	10	*	11	RAINBOW	11	5	10	9																						
H9023	14	9	*	12	RGAS0205	15	10	8	11																						
H9032	12	9	*	10	RGAS0206	23	13	16	17																						
MYSTIC	*	7	12	9	RGAS0207	10	11	7	9																						
RAINBOW	14	9	11	11	RGAS0209	16	12	10	12																						
RIVETTE	14	9	*	12	RGAS0210	12	13	10	12																						
RQ001	11	6	9	9	RGAS0211	12	10	10	11																						
RQ002	19	11	16	15	RQ009	9	9	7	9																						
RQ003	14	9	12	12	RQ010	11	8	8	9																						
RQ004	10	7	9	9	RQ011	11	12	6	10																						
RQ005	13	8	11	10	RQ012	15	8	7	10																						
RQ006	12	6	12	10	RQ013	25	14	12	17																						
RQ007	11	6	11	9	RQ014	9	8	6	8																						
RQ008	9	4	8	7	RQ015	10	11	9	10																						
SURPASS400	13	6	8	9	RQ016	10	9	7	9																						

W=Wagga- NSW

T=Turretfield- SA

N=Newdegate- WA

K=Katanning- WA

<sup>1</sup>μmoles/g in whole seed @ 8.5% moisture

**Table 6a*****National Brassica Improvement 2002- %Fatty Acid Composition******S2 Early Conventional- Wagga Wagga NSW***

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
	01N704	0.1	4.1	0.3	2.0	61.7	19.2	10.3	0.6	1.1	0.3	0.1	0.2	0.1	7.2 114.5
AGC201	0.1	4.4	0.3	2.4	61.7	17.6	11.8	0.5	0.8	0.2	0.0	0.1	0.1	7.7	115.3
AGC202	0.1	4.2	0.3	2.3	62.2	17.2	11.9	0.5	0.9	0.2	0.0	0.1	0.1	7.4	115.5
AGC203	0.1	4.3	0.2	2.3	59.9	20.1	11.1	0.5	1.0	0.2	0.0	0.1	0.1	7.5	116.4
AGC204	0.1	4.0	0.3	2.5	63.7	17.8	9.0	0.7	1.2	0.4	0.0	0.2	0.1	7.9	110.3
AGC205	0.0	4.2	0.2	2.3	61.6	17.4	11.4	0.7	1.4	0.4	0.1	0.2	0.1	7.7	114.4
AGC206	0.1	3.9	0.2	2.1	63.7	17.8	9.0	0.6	1.8	0.4	0.1	0.2	0.1	7.3	110.8
AGC207	0.1	3.9	0.3	2.4	66.8	15.1	8.8	0.7	1.2	0.4	0.2	0.2	0.1	7.5	107.9
AGC208	0.1	4.2	0.3	2.1	65.6	15.4	10.1	0.6	1.1	0.3	0.1	0.1	0.1	7.3	110.8
AG-OUTBACK	0.1	4.1	0.3	2.4	63.6	17.6	9.3	0.7	1.3	0.4	0.0	0.2	0.1	7.8	110.8
BLN2017*SL008	0.1	4.3	0.3	2.0	62.3	18.3	10.0	0.6	1.4	0.3	0.1	0.2	0.1	7.5	113.0
BLN2026*SL902	0.1	4.4	0.2	2.3	63.2	18.3	9.5	0.5	1.0	0.2	0.0	0.1	0.1	7.6	111.9
BLN2483	0.1	4.2	0.3	2.1	61.6	18.7	9.4	0.6	2.4	0.4	0.0	0.1	0.1	7.4	112.1
BLN2678	0.1	4.2	0.3	2.2	62.7	18.4	9.6	0.6	1.3	0.3	0.1	0.2	0.1	7.6	112.1
BLN2679	0.1	4.4	0.2	2.5	62.3	18.0	9.5	0.6	1.8	0.3	0.0	0.1	0.1	8.0	111.3
BLN2680	0.1	4.1	0.2	1.9	60.9	19.5	11.1	0.5	1.1	0.3	0.0	0.1	0.1	7.0	116.3
BLN2681	0.1	4.3	0.2	2.2	63.3	17.5	9.9	0.6	1.1	0.3	0.1	0.2	0.1	7.7	111.9
BLN2682	0.1	4.1	0.0	2.2	61.9	19.3	10.2	0.6	1.1	0.3	0.1	0.1	0.1	7.4	114.2
BLN2683	0.1	4.5	0.2	2.0	59.8	18.8	12.1	0.6	1.2	0.3	0.1	0.1	0.1	7.6	117.0
BLN2683	0.1	4.6	0.3	2.0	59.1	20.8	10.8	0.6	1.1	0.3	0.0	0.2	0.2	7.7	116.2
BLN2684	0.1	4.5	0.2	2.0	62.7	18.0	10.2	0.6	1.1	0.3	0.1	0.1	0.1	7.6	112.9
H1068	0.1	3.9	0.3	2.4	63.7	16.7	10.8	0.6	1.0	0.2	0.0	0.1	0.1	7.4	113.0
H1432	0.1	4.0	0.3	2.3	63.4	19.4	8.4	0.6	1.2	0.3	0.0	0.1	0.1	7.3	111.2
H1433	0.1	4.5	0.3	2.3	61.7	19.5	8.7	0.6	1.7	0.3	0.0	0.1	0.1	8.0	111.1
H9010	0.0	4.7	0.4	2.2	62.3	19.5	8.7	0.5	1.1	0.3	0.0	0.1	0.1	7.9	111.3
H9019	0.1	4.2	0.3	2.3	63.3	17.4	10.1	0.6	1.1	0.3	0.0	0.1	0.1	7.6	112.2
H9023	0.1	4.8	0.3	2.4	62.2	18.1	10.2	0.5	0.9	0.2	0.0	0.1	0.1	8.1	112.8
H9032	0.1	4.5	0.3	2.2	61.6	20.2	8.9	0.5	1.1	0.3	0.1	0.1	0.1	7.7	112.4
RAINBOW	0.1	4.4	0.3	2.3	58.2	19.4	12.7	0.5	1.1	0.3	0.4	0.2	0.1	7.7	118.4
RIVETTE	0.1	4.3	0.2	2.0	62.9	18.4	9.7	0.6	1.2	0.3	0.0	0.1	0.1	7.4	112.7
RQ002	0.1	4.4	0.0	2.2	60.6	18.7	11.9	0.6	1.1	0.2	0.1	0.1	0.1	7.5	116.5
RQ003	0.1	4.5	0.3	2.1	57.9	21.1	11.7	0.5	1.1	0.3	0.0	0.2	0.2	7.7	118.1
RQ004	0.1	5.0	0.3	2.5	59.4	18.6	12.2	0.5	0.9	0.2	0.1	0.1	0.1	8.3	116.3
RQ005	0.1	4.4	0.2	2.1	61.4	19.3	10.4	0.5	1.1	0.2	0.0	0.1	0.1	7.4	114.5
RQ006	0.1	4.2	0.3	2.1	60.9	18.4	11.9	0.6	1.1	0.3	0.0	0.1	0.1	7.4	116.3
RQ007	0.1	4.2	0.2	2.3	59.6	20.9	10.3	0.6	1.1	0.3	0.1	0.2	0.2	7.7	115.4
RQ008	0.1	4.5	0.3	2.2	58.5	21.7	9.5	0.6	1.9	0.3	0.2	0.2	0.2	7.9	114.4
SURPASS400	0.1	4.1	0.2	2.2	62.8	19.7	8.5	0.4	1.4	0.3	0.1	0.1	0.1	7.2	111.9

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6b**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Early Conventional- Turretfield SA***

Variety														<sup>2</sup> Iodine Value	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	
01N704	0.1	4.7	0.3	1.7	60.5	20.4	10.7	0.5	0.8	0.2	0.0	0.1	0.1	7.3	116.3
AGC201	0.1	4.8	0.3	2.0	59.3	20.3	11.5	0.5	0.8	0.2	0.0	0.1	0.1	7.7	117.2
AGC202	0.1	4.4	0.3	2.0	60.4	18.7	12.4	0.5	0.9	0.2	0.0	0.1	0.1	7.3	117.8
AGC203	0.1	4.5	0.3	1.9	56.5	22.9	11.9	0.5	1.0	0.2	0.0	0.1	0.1	7.2	120.4
AGC204	0.1	4.7	0.3	2.1	62.4	18.8	9.7	0.6	0.9	0.2	0.0	0.1	0.1	7.8	112.6
AGC205	0.0	4.2	0.3	1.9	61.4	18.1	11.7	0.6	1.2	0.3	0.0	0.1	0.1	7.1	116.1
AGC206	0.1	4.7	0.4	1.9	60.7	19.8	10.6	0.5	0.9	0.2	0.0	0.1	0.1	7.5	115.3
AGC207	0.1	4.2	0.3	2.0	63.4	16.6	10.5	0.6	1.4	0.2	0.4	0.1	0.1	7.2	112.4
AGC208	0.1	4.2	0.3	1.8	64.0	16.5	11.1	0.5	1.1	0.2	0.1	0.1	0.1	6.9	113.9
AG-OUTBACK	0.1	4.4	0.3	2.2	62.4	18.6	9.6	0.7	1.2	0.3	0.0	0.1	0.1	7.8	112.3
BLN2017*SL008	0.1	4.3	0.3	1.6	59.2	20.6	11.5	0.6	1.2	0.3	0.0	0.1	0.2	6.9	118.0
BLN2026*SL902	0.1	4.5	0.3	2.1	62.2	19.1	9.9	0.5	1.0	0.2	0.0	0.1	0.1	7.4	113.6
BLN2483	0.1	4.6	0.3	1.9	60.0	20.9	10.0	0.6	1.1	0.3	0.0	0.1	0.1	7.4	115.3
BLN2678	0.1	4.7	0.3	1.6	60.2	20.6	10.8	0.5	0.9	0.2	0.0	0.1	0.1	7.2	116.7
BLN2679	0.1	4.4	0.3	1.9	60.9	20.3	10.4	0.5	1.0	0.2	0.0	0.1	0.1	7.2	115.8
BLN2680	0.1	4.8	0.3	1.5	58.7	21.6	11.3	0.4	0.9	0.2	0.0	0.1	0.1	7.1	118.4
BLN2681	0.1	4.5	0.3	1.8	62.5	18.4	10.3	0.5	1.1	0.2	0.1	0.1	0.1	7.2	113.8
BLN2682	0.1	4.9	0.3	1.8	58.9	21.5	10.9	0.4	0.9	0.2	0.0	0.1	0.1	7.5	117.4
BLN2683	0.1	4.6	0.3	1.8	56.8	21.8	12.0	0.6	1.3	0.4	0.0	0.2	0.2	7.6	119.2
BLN2684	0.1	4.5	0.3	1.6	60.5	20.0	10.9	0.5	1.2	0.3	0.0	0.1	0.1	7.1	116.4
H1068	0.1	4.7	0.4	2.2	63.9	17.4	9.5	0.5	0.8	0.2	0.0	0.1	0.1	7.8	111.1
H1432	0.1	4.3	0.3	1.9	61.1	21.2	9.1	0.5	1.0	0.2	0.0	0.1	0.1	7.1	114.1
H1433	0.1	4.5	0.3	1.9	60.8	21.0	9.7	0.5	0.9	0.2	0.0	0.1	0.1	7.3	115.0
H9010	0.1	5.5	0.4	1.9	57.4	23.4	9.6	0.5	0.9	0.2	0.0	0.1	0.1	8.3	116.1
H9014	0.1	5.2	0.4	1.9	59.2	22.3	9.6	0.4	0.8	0.1	0.0	0.1	0.1	7.8	115.7
H9019	0.1	4.9	0.4	2.1	61.7	18.8	10.0	0.5	1.0	0.3	0.0	0.1	0.1	8.0	112.9
H9023	0.1	5.0	0.3	2.0	60.2	20.0	10.9	0.4	0.7	0.1	0.0	0.0	0.1	7.6	115.8
H9032	0.1	4.7	0.3	1.7	59.4	22.2	9.8	0.5	0.9	0.2	0.1	0.1	0.1	7.3	116.2
MYSTIC	0.1	4.6	0.3	1.9	59.8	21.2	9.9	0.6	1.1	0.3	0.0	0.2	0.1	7.6	115.1
RAINBOW	0.1	5.1	0.4	2.0	57.3	21.4	12.0	0.4	0.9	0.1	0.2	0.1	0.1	7.8	119.0
RIVETTE	0.1	5.0	0.4	1.6	60.5	19.9	10.7	0.5	1.1	0.3	0.0	0.1	0.0	7.4	115.7
RQ001	0.1	5.3	0.4	1.7	53.6	25.4	11.7	0.5	0.8	0.2	0.0	0.1	0.1	7.9	121.7
RQ002	0.1	4.7	0.3	2.0	57.7	20.6	12.5	0.6	1.1	0.2	0.0	0.1	0.1	7.7	119.1
RQ003	0.1	4.7	0.4	1.7	53.7	23.7	13.5	0.5	1.1	0.3	0.0	0.1	0.2	7.4	123.8
RQ004	0.1	5.5	0.4	1.9	55.6	21.6	13.4	0.4	0.8	0.1	0.0	0.1	0.1	8.1	121.3
RQ005	0.1	4.0	0.3	1.7	59.8	20.7	10.9	0.6	1.2	0.3	0.0	0.2	0.2	6.8	117.2
RQ006	0.1	4.7	0.3	1.8	60.2	19.5	11.4	0.5	1.0	0.3	0.0	0.1	0.1	7.5	116.4
RQ007	0.1	4.8	0.3	1.9	56.7	23.5	10.9	0.5	0.9	0.2	0.0	0.1	0.1	7.6	119.0
RQ008	0.1	4.9	0.3	1.9	56.6	24.2	10.2	0.5	0.9	0.2	0.0	0.1	0.1	7.7	118.3
SURPASS400	0.1	4.7	0.2	1.7	60.2	22.4	9.2	0.4	0.8	0.1	0.1	0.1	0.1	7.1	115.5

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6c**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Early Conventional- Newdegate WA***

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
01N704	0.1	4.6	0.3	1.9	61.7	20.0	9.6	0.5	0.9	0.2	0.0	0.1	0.1	7.4	113.8
AGC201	0.1	5.2	0.4	2.1	59.7	20.5	10.7	0.5	0.8	0.2	0.0	0.0	0.0	8.1	115.8
AGC202	0.1	5.0	0.4	2.0	60.9	19.2	11.1	0.4	0.7	0.1	0.0	0.1	0.1	7.7	115.6
AGC203	0.1	4.7	0.3	1.9	59.4	22.2	9.9	0.4	0.8	0.1	0.0	0.1	0.1	7.3	116.3
AGC204	0.1	4.9	0.3	2.0	62.0	20.1	9.0	0.5	0.8	0.2	0.1	0.1	0.1	7.8	112.7
AGC205	0.1	4.6	0.3	2.0	62.6	18.4	10.3	0.5	1.0	0.2	0.0	0.1	0.1	7.5	113.7
AGC206	0.1	4.7	0.3	1.9	64.3	18.5	8.6	0.4	0.9	0.1	0.0	0.1	0.1	7.3	110.8
AGC207	0.1	4.3	0.3	2.2	66.4	15.9	8.8	0.6	1.0	0.2	0.1	0.1	0.1	7.5	108.8
AGC208	0.1	4.1	0.3	1.9	67.0	15.7	8.8	0.5	1.1	0.2	0.1	0.1	0.1	6.9	109.1
AG-OUTBACK	0.1	4.7	0.3	2.0	62.4	19.6	9.0	0.5	0.9	0.2	0.1	0.1	0.1	7.6	112.2
BLN2017*SL008	0.1	4.6	0.3	1.7	62.7	19.3	9.5	0.4	0.8	0.2	0.0	0.1	0.1	7.1	113.1
BLN2483	0.1	4.8	0.3	1.9	63.3	19.4	8.7	0.4	0.9	0.1	0.0	0.1	0.1	7.4	111.8
BLN2678	0.1	4.5	0.3	1.9	62.7	19.4	9.2	0.5	1.0	0.2	0.1	0.1	0.1	7.3	112.7
BLN2679	0.1	4.4	0.3	2.0	62.9	19.5	9.1	0.5	1.0	0.1	0.0	0.1	0.1	7.2	112.7
BLN2680	0.1	4.4	0.3	1.6	60.7	21.0	10.0	0.5	1.0	0.2	0.0	0.1	0.1	6.9	115.8
BLN2681	0.1	4.6	0.3	1.9	63.6	18.5	9.1	0.5	0.9	0.2	0.1	0.1	0.1	7.4	111.6
BLN2682	0.1	4.8	0.3	1.9	60.9	20.9	9.5	0.4	0.8	0.1	0.1	0.1	0.1	7.4	114.4
BLN2683	0.1	5.0	0.3	1.7	60.4	20.5	10.4	0.5	0.9	0.2	0.1	0.1	0.1	7.6	115.7
BLN2684	0.1	4.8	0.3	1.7	62.0	19.9	9.5	0.5	1.0	0.2	0.0	0.1	0.1	7.4	113.7
H1068	0.1	4.8	0.5	2.3	65.5	16.8	8.5	0.4	0.7	0.1	0.1	0.1	0.1	7.8	108.8
H1432	0.1	4.5	0.3	2.1	63.8	20.0	7.7	0.5	0.8	0.2	0.0	0.1	0.1	7.5	110.6
H1433	0.1	4.6	0.3	2.0	63.9	19.7	7.8	0.4	0.8	0.1	0.0	0.1	0.1	7.3	110.4
MYSTIC	0.1	4.9	0.3	2.0	61.6	20.4	8.9	0.4	0.9	0.2	0.1	0.2	0.1	7.8	112.7
RAINBOW	0.1	5.1	0.3	2.2	60.4	20.2	10.0	0.4	0.9	0.1	0.2	0.1	0.0	8.0	114.2
RQ001	0.1	5.4	0.4	1.7	57.6	23.0	10.1	0.4	0.8	0.1	0.0	0.1	0.1	7.8	116.8
RQ002	0.1	4.9	0.3	1.9	59.7	20.4	10.8	0.4	0.9	0.1	0.2	0.1	0.1	7.5	116.1
RQ003	0.1	5.2	0.4	1.9	57.4	22.0	11.5	0.4	0.8	0.1	0.1	0.1	0.1	7.8	118.6
RQ004	0.1	5.1	0.4	2.0	59.0	20.2	11.9	0.3	0.7	0.1	0.1	0.1	0.1	7.7	117.9
RQ005	0.1	4.3	0.3	1.8	62.1	20.1	9.6	0.4	0.9	0.2	0.1	0.1	0.1	6.9	114.4
RQ006	0.1	4.7	0.3	1.9	61.5	19.7	10.0	0.5	0.9	0.2	0.0	0.1	0.1	7.5	114.2
RQ007	0.1	4.7	0.3	2.1	59.4	22.2	9.4	0.5	0.9	0.2	0.1	0.2	0.1	7.8	115.2
RQ008	0.1	5.1	0.3	2.0	58.4	23.5	9.0	0.4	0.9	0.1	0.1	0.2	0.1	7.9	115.5
SURPASS400	0.1	4.7	0.3	1.8	62.4	19.2	9.4	0.6	1.0	0.2	0.0	0.2	0.1	7.6	112.6

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6d**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Early Triazine Tolerant-Wagga Wagga NSW**

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
AGT201	0.1	4.6	0.2	1.8	61.4	19.0	10.9	0.5	1.0	0.2	0.0	0.1	0.1	7.3	115.3
AGT202	0.1	5.0	0.3	1.6	59.0	21.4	10.8	0.4	0.9	0.2	0.0	0.1	0.1	7.4	117.1
AGT203	0.1	4.9	0.3	1.5	59.1	21.1	10.7	0.4	1.0	0.2	0.0	0.3	0.3	7.5	116.5
AGT204	0.1	5.1	0.4	1.8	58.3	21.1	11.6	0.4	0.9	0.2	0.0	0.1	0.1	7.7	117.9
ATR-BEACON	0.1	4.0	0.2	2.1	61.2	19.0	11.1	0.5	1.2	0.2	0.2	0.1	0.1	7.0	115.8
ATR-HYDEN	0.1	4.5	0.4	2.0	62.1	18.1	10.6	0.5	1.2	0.2	0.0	0.1	0.1	7.4	113.8
BLN2626TT	0.1	5.3	0.4	1.7	61.5	19.1	10.5	0.4	0.9	0.1	0.0	0.1	0.1	7.7	114.3
BLN2669TT	0.1	4.1	0.2	1.9	61.5	19.3	11.1	0.4	0.9	0.2	0.0	0.1	0.1	6.8	116.4
BLN2670TT	0.1	4.6	0.3	2.0	61.0	20.1	10.5	0.4	0.8	0.1	0.0	0.1	0.1	7.3	115.6
BLN2671TT	0.1	4.8	0.3	1.7	59.9	20.3	11.0	0.5	1.0	0.2	0.0	0.1	0.1	7.4	116.4
BLN2672TT	0.1	4.5	0.3	1.9	63.4	17.1	10.7	0.5	1.1	0.3	0.0	0.1	0.1	7.4	113.1
BLN2674TT	0.1	5.0	0.3	1.8	59.7	19.8	11.0	0.5	1.1	0.3	0.1	0.1	0.1	7.9	115.7
SURPASS501TT	0.1	4.4	0.3	2.0	62.2	20.7	8.6	0.4	0.9	0.2	0.0	0.1	0.1	7.1	112.9
T2030	0.1	3.8	0.2	1.5	63.9	18.2	9.9	0.5	1.4	0.2	0.0	0.2	0.1	6.2	113.7
TN4*SL909	0.1	3.9	0.2	2.1	60.3	18.6	10.9	0.5	2.4	0.2	0.6	0.1	0.1	6.9	115.1
TQ001	0.1	5.3	0.4	1.8	59.8	19.3	11.3	0.4	1.0	0.2	0.1	0.1	0.1	7.9	115.8
TQ002	0.1	4.0	0.3	1.8	61.5	19.7	10.2	0.6	1.3	0.3	0.0	0.2	0.2	6.9	115.0
TQ003	0.1	4.1	0.2	2.0	55.9	21.9	13.8	0.5	1.0	0.2	0.1	0.1	0.1	7.0	123.1
TQ004	0.1	4.4	0.3	1.8	59.5	20.5	10.5	0.6	1.4	0.3	0.3	0.2	0.2	7.5	115.6

**Table 6e**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Early Triazine Tolerant-Turretfield SA**

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
AGT201	0.1	4.7	0.3	1.6	57.6	21.5	12.2	0.5	1.1	0.2	0.0	0.1	0.1	7.2	119.8
AGT202	0.1	4.5	0.3	1.5	55.7	23.6	12.1	0.5	1.2	0.3	0.0	0.1	0.2	6.9	121.6
AGT203	0.1	5.2	0.3	1.3	54.7	24.2	12.2	0.4	1.0	0.2	0.1	0.1	0.1	7.3	122.0
AGT204	0.1	5.2	0.4	1.6	54.0	24.5	12.2	0.5	1.0	0.2	0.0	0.1	0.1	7.7	122.0
ATR-BEACON	0.1	4.6	0.3	1.7	57.7	21.5	12.2	0.4	1.0	0.2	0.1	0.1	0.1	7.1	119.9
ATR-HYDEN	0.1	4.5	0.3	1.8	59.6	19.7	11.7	0.5	1.2	0.2	0.1	0.2	0.1	7.3	117.3
BLN2669TT	0.1	4.2	0.3	1.7	60.2	20.1	11.8	0.4	0.9	0.1	0.0	0.1	0.1	6.6	118.4
BLN2670TT	0.1	4.4	0.3	1.8	59.1	21.3	11.5	0.4	0.8	0.1	0.0	0.1	0.1	6.9	118.7
BLN2671TT	0.1	5.0	0.4	1.5	56.7	22.5	11.9	0.5	1.1	0.3	0.0	0.1	0.1	7.5	120.1
BLN2672TT	0.1	4.4	0.3	1.7	60.4	18.9	11.3	0.6	1.4	0.4	0.2	0.2	0.2	7.3	115.7
BLN2674TT	0.1	5.1	0.3	1.6	56.2	22.4	12.2	0.5	1.1	0.2	0.0	0.1	0.1	7.6	120.2
KAROO	0.1	4.7	0.3	1.6	52.7	23.5	12.2	0.5	2.4	0.3	1.6	0.2	0.2	7.4	121.3
SURPASS501TT	0.1	4.7	0.3	1.7	57.5	24.4	9.7	0.4	0.9	0.2	0.0	0.1	0.1	7.2	118.1
T2028	0.0	4.5	0.3	1.8	58.8	20.7	11.3	0.6	1.3	0.3	0.0	0.2	0.2	7.4	117.3
T2030	0.1	4.5	0.3	1.3	59.2	21.4	11.2	0.4	1.2	0.2	0.1	0.1	0.1	6.6	118.6
TN4*SL909	0.1	4.5	0.3	1.8	58.6	20.9	11.9	0.4	1.0	0.2	0.1	0.1	0.1	7.1	118.9
TN4*SL910	0.1	4.5	0.3	1.8	57.9	21.2	12.1	0.4	1.1	0.2	0.3	0.1	0.1	7.1	119.5
TQ001	0.1	4.7	0.3	1.6	56.4	21.7	12.5	0.6	1.3	0.3	0.1	0.2	0.2	7.5	120.2
TQ002	0.1	4.6	0.3	1.5	56.7	23.1	11.2	0.5	1.2	0.3	0.1	0.2	0.2	7.1	119.6
TQ003	0.1	5.1	0.3	1.7	53.4	24.3	13.6	0.4	0.8	0.1	0.0	0.1	0.1	7.5	124.5
TQ004	0.1	5.1	0.3	1.6	55.0	23.2	11.7	0.5	1.3	0.3	0.5	0.2	0.2	7.8	119.8

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6f**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Early Triazine Tolerant- Newdegate WA**

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
AGT201	0.1	5.4	0.4	1.6	58.1	21.9	10.9	0.4	0.9	0.2	0.0	0.1	0.1	7.8	117.5
AGT202	0.1	5.6	0.4	1.6	64.1	17.4	9.1	0.4	0.9	0.2	0.0	0.1	0.1	8.1	110.0
AGT203	0.1	5.3	0.3	1.4	57.3	23.0	10.9	0.4	0.9	0.2	0.0	0.1	0.1	7.5	118.6
AGT204	0.1	5.4	0.4	1.6	57.2	22.8	10.8	0.4	0.9	0.2	0.0	0.1	0.1	7.8	118.0
ATR-BEACON	0.1	4.7	0.4	1.8	62.2	19.2	9.9	0.4	0.9	0.2	0.0	0.1	0.1	7.3	113.7
ATR-EYRE	0.1	4.7	0.3	1.8	61.5	19.1	10.8	0.4	0.8	0.1	0.0	0.1	0.1	7.2	115.1
ATR-HYDEN	0.1	4.8	0.4	1.8	63.4	18.1	9.6	0.4	1.0	0.2	0.0	0.1	0.1	7.4	112.2
BLN2669TT	0.1	4.5	0.3	1.7	61.9	19.9	10.3	0.3	0.8	0.1	0.0	0.1	0.1	6.8	115.6
BLN2670TT	0.1	5.1	0.3	1.5	58.9	20.7	10.9	0.5	1.2	0.2	0.4	0.1	0.1	7.5	116.5
BLN2671TT	0.1	4.8	0.3	1.5	59.7	21.4	10.3	0.5	1.0	0.2	0.0	0.1	0.1	7.2	116.4
BLN2672TT	0.1	4.6	0.3	1.6	64.6	17.3	9.1	0.5	1.1	0.3	0.0	0.2	0.1	7.4	110.6
BLN2674TT	0.1	5.3	0.3	1.6	59.6	20.7	10.2	0.5	1.0	0.3	0.0	0.2	0.1	7.9	115.0
SURPASS501TT	0.1	4.6	0.3	1.7	61.5	21.7	8.2	0.4	1.1	0.2	0.0	0.1	0.1	7.1	113.1
T2028	0.1	4.9	0.4	1.6	61.9	19.5	9.5	0.5	1.1	0.3	0.0	0.2	0.1	7.5	113.1
T2030	0.1	4.6	0.3	1.3	63.4	18.9	9.5	0.4	1.0	0.2	0.0	0.1	0.1	6.7	113.2
TN4*SL909	0.1	4.4	0.3	1.9	61.9	19.4	10.2	0.4	1.0	0.2	0.1	0.1	0.1	7.1	114.7
TN4*SL910	0.1	4.6	0.3	1.6	64.5	19.8	7.3	0.5	1.1	0.2	0.0	0.1	0.1	7.1	110.0
TQ001	0.1	5.1	0.3	1.5	60.9	19.6	10.4	0.4	1.0	0.2	0.1	0.1	0.1	7.4	114.7
TQ002	0.1	4.8	0.3	1.5	61.7	20.3	9.5	0.4	0.9	0.2	0.1	0.1	0.1	7.1	114.1
TQ003	0.1	4.9	0.3	1.7	57.3	22.5	11.4	0.4	0.9	0.2	0.1	0.1	0.1	7.4	119.1
TQ004	0.1	5.0	0.3	1.7	60.2	20.9	9.7	0.5	1.0	0.2	0.1	0.2	0.1	7.7	114.5

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6g**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Early Clearfield- Wagga Wagga NSW***

Variety														<sup>2</sup> Iodine	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	Value
BLN2692CL	0.1	4.0	0.3	2.0	63.0	18.4	10.1	0.6	1.2	0.3	0.0	0.1	0.1	7.0	113.5
BLN2694CL	0.1	4.1	0.3	1.9	63.6	19.9	8.3	0.4	1.0	0.2	0.0	0.1	0.1	6.8	112.0
BLN2691CL	0.1	3.9	0.3	1.8	62.7	19.7	9.2	0.6	1.2	0.3	0.0	0.1	0.1	6.7	113.4
NS04403	0.1	4.1	0.3	2.0	59.5	19.9	11.6	0.6	1.3	0.3	0.0	0.2	0.1	7.3	117.2
SURPASS402CL	0.1	4.3	0.3	2.0	62.5	20.5	8.6	0.4	1.0	0.2	0.0	0.1	0.1	7.0	112.9
44C73	0.1	4.0	0.3	2.0	61.9	19.1	10.8	0.4	1.0	0.2	0.0	0.1	0.1	6.8	115.6
BLN2693CL	0.1	4.7	0.3	1.8	59.6	21.4	9.9	0.5	1.1	0.2	0.0	0.1	0.1	7.4	115.5

**Table 6h**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Early Clearfield- Turretfield SA***

Variety														<sup>2</sup> Iodine	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	Value
44C73	0.1	4.2	0.3	1.8	58.3	21.4	12.1	0.4	0.9	0.2	0.0	0.1	0.1	6.8	119.8
BLN2691CL	0.1	4.5	0.3	1.7	59.6	21.3	10.3	0.5	1.1	0.3	0.0	0.1	0.1	7.2	116.2
BLN2692CL	0.1	4.6	0.3	1.8	60.0	19.6	11.6	0.5	1.1	0.2	0.0	0.1	0.1	7.3	117.0
BLN2693CL	0.1	4.9	0.3	1.7	56.3	23.6	11.0	0.5	1.1	0.2	0.0	0.1	0.1	7.5	119.2
BLN2694CL	0.1	4.6	0.3	1.7	57.8	23.3	10.0	0.5	1.2	0.4	0.0	0.1	0.1	7.4	117.5
NS04403	0.1	4.4	0.3	1.9	58.7	20.2	12.3	0.5	1.1	0.2	0.0	0.2	0.1	7.3	118.8
SURPASS402CL	0.1	4.8	0.3	1.9	57.7	23.6	10.2	0.4	0.8	0.1	0.0	0.1	0.1	7.4	118.1

**Table 6i**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Early Clearfield- Newdegate WA***

Variety														<sup>2</sup> Iodine	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	Value
44C73	0.1	4.4	0.4	2.0	62.1	19.6	9.9	0.4	0.9	0.1	0.1	0.1	0.1	7.1	114.4
44C73	0.1	4.2	0.4	2.1	62.6	19.2	9.8	0.5	1.0	0.2	0.0	0.1	0.1	7.1	113.7
BLN2691CL	0.1	4.5	0.3	1.8	64.3	19.0	8.1	0.5	1.0	0.2	0.0	0.1	0.1	7.2	110.5
BLN2692CL	0.1	4.5	0.3	1.8	64.2	19.1	8.0	0.5	1.0	0.2	0.1	0.1	0.1	7.2	110.4
BLN2693CL	0.1	4.6	0.3	1.8	61.8	20.5	9.0	0.5	1.1	0.2	0.0	0.1	0.1	7.3	113.3
BLN2694CL	0.1	4.7	0.3	1.8	62.4	20.6	8.2	0.5	1.0	0.2	0.0	0.1	0.1	7.4	111.9
NS04403	0.1	4.6	0.3	2.0	62.4	18.8	9.7	0.5	1.0	0.2	0.1	0.1	0.1	7.5	112.7
SURPASS402CL	0.1	4.4	0.3	1.9	61.7	20.9	9.0	0.4	1.0	0.2	0.0	0.1	0.1	7.1	113.9
SURPASS603CL	0.1	4.2	0.3	1.7	64.0	20.2	7.2	0.5	1.3	0.2	0.1	0.1	0.1	6.8	110.2

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6j**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Mid Conventional - Wagga Wagga NSW**

Variety														<sup>2</sup> Iodine Value	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	
01N706	0.1	4.0	0.3	2.1	61.9	18.5	10.1	0.6	1.6	0.4	0.1	0.2	0.1	7.4	113.2
AGC210	0.1	4.0	0.2	2.3	60.8	19.9	10.7	0.5	1.0	0.1	0.1	0.2	0.1	7.1	115.9
AGC211	0.1	4.0	0.2	1.9	61.3	19.7	8.9	0.6	2.3	0.6	0.1	0.2	0.1	7.4	112.2
AGC212	0.1	4.5	0.3	1.9	61.3	19.5	9.3	0.6	1.7	0.5	0.1	0.1	0.1	7.7	112.5
AGC213	0.1	3.9	0.2	2.0	66.2	16.0	8.8	0.5	1.7	0.3	0.1	0.1	0.1	6.9	109.1
AGC214	0.1	3.6	0.2	2.0	65.7	16.4	8.7	0.6	1.7	0.5	0.1	0.2	0.1	7.1	109.1
AGC215	0.1	3.8	0.3	2.1	64.0	18.4	8.6	0.6	1.6	0.4	0.0	0.1	0.1	7.1	110.8
AGC216	0.1	4.8	0.2	1.9	62.2	18.0	10.5	0.5	1.1	0.2	0.1	0.1	0.2	7.7	113.4
AGC217	0.1	4.3	0.2	1.9	59.9	20.6	9.2	0.5	2.6	0.3	0.0	0.2	0.1	7.3	113.6
AG-CASTLE	0.1	4.2	0.3	2.0	61.5	19.8	9.3	0.6	1.4	0.4	0.1	0.2	0.1	7.4	113.1
BLN2440	0.1	4.3	0.2	2.0	61.9	19.8	9.3	0.6	1.2	0.3	0.1	0.2	0.1	7.4	113.0
BLN2677	0.1	3.9	0.3	1.9	61.5	19.4	9.7	0.6	1.8	0.3	0.1	0.1	0.1	7.0	113.7
BLN2685	0.1	4.0	0.2	2.1	62.4	17.5	10.4	0.6	1.8	0.4	0.3	0.2	0.1	7.3	112.9
BLN2686	0.1	4.3	0.2	1.9	61.1	19.2	11.0	0.5	1.1	0.3	0.1	0.1	0.1	7.2	115.7
BLN2687	0.1	4.4	0.2	2.0	61.5	18.7	10.7	0.6	1.2	0.3	0.1	0.1	0.1	7.5	114.6
BLN2688	0.1	4.5	0.3	2.0	60.9	19.4	10.6	0.5	1.1	0.3	0.1	0.1	0.1	7.6	114.9
BLN2689	0.1	4.1	0.3	2.1	61.3	19.4	10.0	0.6	1.3	0.4	0.1	0.2	0.2	7.5	113.8
BLN2690	0.1	3.8	0.2	1.9	64.5	17.7	9.0	0.6	1.6	0.4	0.1	0.2	0.1	6.9	111.0
H9001	0.1	4.1	0.3	2.3	64.3	18.5	7.9	0.6	1.3	0.3	0.1	0.2	0.1	7.6	109.4
H9028	0.0	3.8	0.3	2.1	64.0	18.8	8.1	0.6	1.3	0.4	0.1	0.2	0.1	7.3	110.1
HYOLA60	0.1	4.1	0.2	1.9	63.3	18.6	8.7	0.6	1.8	0.3	0.1	0.2	0.1	7.1	111.2
LANTERN	0.1	3.9	0.2	2.1	61.4	18.2	10.3	0.6	2.4	0.4	0.1	0.2	0.2	7.2	113.3
NS04361	0.1	4.4	0.3	2.0	59.7	20.3	10.6	0.6	1.2	0.3	0.1	0.2	0.1	7.7	115.5
NS04383	0.1	4.5	0.3	2.4	60.7	18.8	11.4	0.5	0.9	0.2	0.0	0.1	0.1	7.9	115.4
RAINBOW	0.1	4.3	0.3	2.4	59.8	19.4	11.4	0.5	1.2	0.3	0.2	0.1	0.1	7.6	116.1
RGAS0205	0.1	4.2	0.3	1.9	61.3	19.9	9.9	0.6	1.1	0.3	0.0	0.2	0.1	7.3	114.3
RGAS0206	0.1	4.1	0.0	1.8	63.1	18.3	9.9	0.6	1.4	0.3	0.1	0.2	0.1	7.1	113.0
RGAS0207	0.1	4.3	0.3	2.3	60.7	18.0	12.6	0.4	1.0	0.2	0.0	0.1	0.1	7.4	117.3
RGAS0209	0.1	4.3	0.3	2.3	62.4	18.2	10.1	0.6	1.1	0.3	0.1	0.1	0.1	7.7	112.8
RGAS0210	0.1	4.1	0.2	2.3	61.1	18.6	11.4	0.5	1.1	0.3	0.1	0.1	0.1	7.5	115.7
RGAS0211	0.1	4.3	0.2	2.1	60.0	20.3	10.3	0.6	1.3	0.3	0.1	0.2	0.1	7.6	115.1
RQ009	0.1	4.5	0.2	2.3	59.9	19.8	11.3	0.5	1.0	0.2	0.0	0.1	0.1	7.6	116.4
RQ010	0.1	4.1	0.0	2.3	61.8	18.8	10.9	0.5	1.0	0.2	0.0	0.2	0.2	7.2	115.0
RQ011	0.1	4.3	0.3	2.2	60.7	20.4	10.1	0.5	1.0	0.2	0.1	0.1	0.1	7.3	115.1
RQ012	0.1	4.3	0.3	2.3	61.3	19.0	10.4	0.5	1.3	0.3	0.1	0.1	0.1	7.5	114.2
RQ013	0.1	4.4	0.0	2.2	62.2	18.7	10.4	0.5	1.0	0.2	0.0	0.1	0.1	7.5	114.0
RQ014	0.1	4.1	0.2	2.5	61.1	18.8	11.0	0.5	1.1	0.3	0.2	0.1	0.1	7.6	115.0
RQ015	0.1	4.1	0.3	2.1	60.9	19.3	11.1	0.5	1.0	0.2	0.2	0.1	0.1	7.1	116.0
RQ016	0.1	4.2	0.3	2.1	60.1	19.2	10.6	0.6	2.0	0.3	0.2	0.2	0.1	7.5	114.6

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6k**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Mid Conventional- Turretfield SA***

Variety														<sup>2</sup> Iodine Value	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	
01N706	0.1	4.6	0.3	1.7	60.1	20.1	11.0	0.5	1.1	0.2	0.0	0.1	0.1	7.2	116.4
AGC210	0.1	4.7	0.3	1.8	56.7	22.9	12.0	0.4	0.8	0.1	0.0	0.1	0.1	7.2	120.7
AGC211	0.1	4.8	0.3	1.7	60.0	21.7	9.6	0.5	1.0	0.2	0.0	0.1	0.1	7.4	115.4
AGC212	0.1	5.0	0.4	1.7	59.6	21.4	9.8	0.5	1.0	0.2	0.1	0.1	0.1	7.6	115.2
AGC213	0.1	4.2	0.3	1.6	64.8	17.6	9.6	0.5	1.1	0.2	0.0	0.1	0.1	6.7	112.5
AGC214	0.0	4.1	0.3	1.7	65.2	17.3	9.3	0.5	1.1	0.2	0.0	0.1	0.1	6.6	111.5
AGC215	0.1	4.4	0.3	1.7	63.3	19.4	9.1	0.5	0.9	0.2	0.0	0.1	0.1	7.0	112.8
AGC216	0.1	4.9	0.3	1.6	59.9	19.4	11.9	0.5	1.0	0.2	0.0	0.1	0.1	7.4	117.3
AGC217	0.1	5.0	0.3	1.7	59.4	22.2	9.6	0.4	1.0	0.2	0.0	0.1	0.1	7.5	115.7
AG-CASTLE	0.1	4.5	0.3	1.7	59.9	21.3	10.2	0.5	1.0	0.2	0.0	0.1	0.1	7.1	116.2
BLN2440	0.1	4.8	0.3	1.7	58.6	22.2	10.4	0.5	1.1	0.2	0.0	0.1	0.1	7.4	117.2
BLN2685	0.1	4.5	0.3	1.7	61.5	19.0	10.9	0.5	1.1	0.2	0.0	0.1	0.1	7.1	115.5
BLN2686	0.1	4.4	0.3	1.7	60.0	21.2	10.4	0.5	1.0	0.2	0.0	0.1	0.1	7.0	116.6
BLN2687	0.1	5.0	0.3	1.8	59.7	20.1	10.6	0.5	1.2	0.2	0.4	0.1	0.1	7.7	115.4
BLN2688	0.1	4.3	0.3	1.8	59.7	20.6	11.0	0.5	1.1	0.3	0.0	0.1	0.1	7.1	116.9
BLN2689	0.1	5.1	0.3	1.8	58.8	21.9	10.1	0.5	1.0	0.2	0.0	0.1	0.1	7.8	116.0
BLN2690	0.1	4.4	0.3	1.7	61.7	20.1	9.7	0.5	1.1	0.2	0.0	0.1	0.1	7.0	114.4
H9001	0.1	4.8	0.3	2.0	61.6	20.5	8.9	0.5	0.9	0.2	0.0	0.1	0.1	7.7	112.8
H9028	0.1	4.7	0.4	1.8	60.9	21.1	9.0	0.5	1.0	0.2	0.0	0.1	0.1	7.4	113.6
HYOLA60	0.1	4.7	0.3	1.7	60.0	21.5	9.7	0.5	1.1	0.2	0.0	0.1	0.1	7.3	115.4
LANTERN	0.1	4.5	0.3	1.8	60.4	19.9	11.0	0.5	1.1	0.2	0.0	0.1	0.1	7.2	116.3
NS04361	0.1	5.0	0.3	1.6	57.8	22.1	10.9	0.5	1.0	0.2	0.0	0.2	0.2	7.6	117.6
NS04383	0.1	4.8	0.4	2.2	59.0	20.4	11.5	0.5	0.8	0.1	0.1	0.1	0.1	7.8	117.2
OSCAR	0.1	4.5	0.3	1.7	59.1	21.7	10.6	0.5	1.1	0.2	0.1	0.1	0.1	7.1	117.4
RAINBOW	0.1	4.8	0.3	2.1	58.4	20.9	11.6	0.5	0.9	0.2	0.1	0.1	0.1	7.8	117.8
RGAS0205	0.1	4.7	0.3	1.6	57.4	22.7	11.2	0.5	1.0	0.2	0.0	0.1	0.1	7.2	119.0
RGAS0206	0.1	4.8	0.4	1.6	59.2	20.8	11.3	0.5	1.0	0.2	0.0	0.1	0.1	7.3	117.7
RGAS0207	0.1	4.9	0.4	2.0	58.9	19.4	12.9	0.4	0.8	0.1	0.0	0.1	0.1	7.6	119.0
RGAS0209	0.1	5.4	0.4	2.0	59.4	20.1	10.9	0.4	0.8	0.1	0.0	0.1	0.1	8.1	115.4
RGAS0210	0.1	5.3	0.4	1.9	58.8	20.2	12.0	0.3	0.7	0.1	0.0	0.1	0.1	7.8	117.9
RGAS0211	0.1	4.5	0.3	1.8	60.0	20.7	10.6	0.5	1.1	0.2	0.0	0.1	0.1	7.2	116.3
RQ009	0.1	5.1	0.3	1.9	57.6	22.3	11.3	0.4	0.8	0.1	0.0	0.1	0.1	7.7	118.6
RQ010	0.1	4.8	0.4	1.9	59.9	20.3	11.2	0.4	0.8	0.1	0.0	0.1	0.1	7.4	117.0
RQ011	0.1	4.8	0.4	1.8	57.6	22.9	11.0	0.4	0.8	0.1	0.0	0.1	0.1	7.3	119.0
RQ012	0.1	4.7	0.4	1.9	60.8	19.8	10.5	0.5	0.9	0.2	0.0	0.1	0.1	7.5	115.1
RQ013	0.1	4.9	0.3	1.8	60.6	20.2	10.6	0.4	0.8	0.1	0.0	0.1	0.1	7.4	115.7
RQ014	0.1	4.9	0.3	2.2	59.7	20.0	11.2	0.4	0.8	0.2	0.0	0.1	0.1	7.9	116.2
RQ015	0.1	4.7	0.3	1.8	58.1	21.2	12.0	0.4	0.9	0.2	0.1	0.1	0.1	7.3	119.1
RQ016	0.1	4.8	0.3	1.9	57.8	21.5	11.9	0.5	0.9	0.2	0.0	0.1	0.1	7.6	119.1

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6l**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Mid Conventional- Katanning WA***

Variety														<sup>2</sup> Iodine Value	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	
01N706	0.0	4.6	0.3	2.0	61.8	18.9	10.0	0.6	1.2	0.3	0.1	0.1	0.1	7.6	113.4
AGC210	0.1	4.1	0.3	2.2	59.7	21.0	10.7	0.5	0.9	0.2	0.0	0.1	0.1	7.2	116.7
AGC211	0.0	4.7	0.3	2.0	63.3	19.6	8.4	0.5	1.0	0.2	0.0	0.1	0.0	7.4	111.4
AGC212	0.1	4.7	0.3	2.0	61.7	19.8	9.2	0.6	1.1	0.2	0.2	0.1	0.1	7.7	112.7
AGC213	0.0	3.8	0.3	2.0	66.3	16.4	8.7	0.6	1.3	0.3	0.0	0.1	0.1	6.9	109.5
AGC214	0.0	3.8	0.3	2.0	68.1	15.8	7.8	0.6	1.2	0.3	0.0	0.1	0.1	6.8	107.5
AGC215	0.0	3.7	0.3	2.1	66.1	17.6	7.8	0.6	1.2	0.3	0.0	0.1	0.1	6.9	108.9
AGC216	0.1	4.5	0.3	1.9	63.6	17.4	10.1	0.5	1.1	0.2	0.0	0.1	0.1	7.3	112.6
AGC217	0.1	4.5	0.3	2.0	61.7	20.9	8.5	0.5	1.1	0.2	0.0	0.1	0.1	7.4	112.7
BLN2440	0.1	4.4	0.3	2.1	61.8	19.9	9.3	0.6	1.1	0.3	0.0	0.1	0.1	7.6	113.0
BLN2677	0.1	4.0	0.2	2.0	61.6	20.2	9.7	0.6	1.2	0.3	0.0	0.1	0.1	7.0	114.4
BLN2685	0.1	4.2	0.3	2.1	63.0	17.9	10.3	0.6	1.2	0.3	0.0	0.1	0.1	7.3	113.2
BLN2686	0.1	3.8	0.2	2.1	63.1	19.0	9.3	0.6	1.2	0.3	0.0	0.1	0.1	6.9	112.9
BLN2687	0.1	4.7	0.3	2.0	61.2	19.5	10.2	0.6	1.1	0.2	0.0	0.1	0.1	7.7	114.2
BLN2688	0.1	4.1	0.3	2.1	61.5	19.2	10.3	0.6	1.2	0.3	0.1	0.1	0.1	7.4	114.3
BLN2689	0.1	4.4	0.3	2.1	62.1	19.5	9.2	0.6	1.1	0.3	0.0	0.1	0.1	7.6	112.5
BLN2690	0.1	4.3	0.3	1.8	63.8	18.8	8.9	0.5	1.1	0.2	0.0	0.1	0.1	7.1	111.8
HYOLA60	0.1	4.2	0.3	2.0	61.8	20.3	8.8	0.6	1.2	0.2	0.1	0.2	0.1	7.3	112.7
LANTERN	0.1	4.1	0.3	2.1	63.0	18.1	10.1	0.6	1.2	0.3	0.0	0.1	0.1	7.2	113.2
NS04361	0.1	4.1	0.3	2.1	60.6	20.4	9.9	0.7	1.3	0.3	0.0	0.2	0.1	7.4	114.6
NS04383	0.1	4.2	0.3	2.4	60.8	19.1	11.0	0.6	1.0	0.2	0.0	0.1	0.1	7.6	115.3
OSCAR	0.1	4.2	0.3	2.1	60.9	20.1	9.6	0.6	1.3	0.3	0.2	0.2	0.1	7.5	113.7
RAINBOW	0.1	4.3	0.3	2.4	60.2	19.9	10.7	0.5	1.1	0.2	0.1	0.1	0.1	7.6	115.5
RAINBOW	0.1	4.2	0.3	2.4	60.3	19.7	10.7	0.5	1.1	0.2	0.2	0.1	0.1	7.5	115.3
RGAS0205	0.1	4.3	0.3	1.9	61.5	19.9	10.0	0.6	1.1	0.3	0.0	0.1	0.1	7.2	114.5
RGAS0206	0.1	4.1	0.3	2.0	64.3	17.3	9.8	0.6	1.1	0.3	0.0	0.1	0.1	7.1	112.0
RGAS0207	0.1	4.4	0.3	2.4	62.3	18.0	10.9	0.5	0.9	0.2	0.0	0.1	0.1	7.5	114.2
RGAS0209	0.1	4.1	0.3	2.4	63.3	18.1	9.5	0.6	1.1	0.3	0.0	0.1	0.1	7.6	111.8
RGAS0210	0.1	4.4	0.3	2.3	60.9	18.9	11.1	0.6	1.0	0.2	0.0	0.1	0.1	7.7	115.2
RGAS0211	0.1	4.1	0.3	2.1	61.9	19.7	9.5	0.6	1.1	0.3	0.0	0.2	0.1	7.3	113.4
RQ009	0.1	4.5	0.3	2.2	60.7	20.1	10.3	0.5	0.9	0.2	0.0	0.1	0.1	7.6	115.0
RQ010	0.1	4.4	0.3	2.2	61.6	19.3	10.6	0.4	0.9	0.2	0.0	0.1	0.1	7.3	115.0
RQ011	0.1	4.0	0.3	2.2	61.2	20.7	9.8	0.5	1.0	0.2	0.0	0.1	0.1	7.0	115.0
RQ012	0.1	4.4	0.3	2.2	62.6	18.8	10.0	0.5	0.9	0.2	0.0	0.1	0.1	7.3	113.5
RQ013	0.1	4.5	0.3	2.1	62.0	19.4	9.8	0.5	1.0	0.2	0.0	0.1	0.1	7.4	113.7
RQ014	0.1	4.2	0.3	2.4	61.5	19.2	10.4	0.5	1.0	0.2	0.0	0.1	0.1	7.5	114.5
RQ015	0.1	4.2	0.3	2.1	60.7	19.7	10.7	0.5	1.1	0.2	0.2	0.1	0.1	7.2	115.6
RQ016	0.1	4.6	0.3	2.2	61.5	19.1	10.4	0.5	1.0	0.2	0.0	0.1	0.1	7.7	114.2
SURPASS400	0.1	4.5	0.3	2.0	62.1	21.0	8.5	0.4	0.9	0.1	0.0	0.1	0.1	7.1	113.0

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6m**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Mid Triazine Tolerant- Wagga Wagga NSW***

Variety														<sup>2</sup> Iodine	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	Value
AGT205	0.1	4.3	0.3	1.8	61.6	19.3	10.2	0.5	1.2	0.3	0.1	0.1	0.1	7.2	114.4
AGT206	0.1	4.4	0.2	1.6	58.2	20.5	12.7	0.5	1.1	0.3	0.0	0.2	0.2	7.0	119.9
AGT207	0.1	4.8	0.3	1.6	57.5	21.2	12.1	0.5	1.1	0.4	0.0	0.2	0.2	7.6	119.0
AGT208	0.1	4.4	0.4	1.9	62.3	18.6	10.0	0.6	1.1	0.3	0.1	0.2	0.1	7.4	113.2
ATR-BEACON	0.1	4.1	0.3	2.0	60.7	18.8	11.5	0.5	1.3	0.3	0.3	0.1	0.1	7.0	116.3
ATR-GRACE	0.1	4.1	0.3	1.9	61.0	18.9	10.8	0.5	1.4	0.4	0.3	0.2	0.2	7.2	115.0
ATR-HYDEN	0.1	4.4	0.3	2.0	62.4	17.7	10.7	0.5	1.1	0.3	0.2	0.2	0.1	7.5	113.7
BLN2673TT	0.1	4.2	0.3	1.8	61.1	18.8	11.5	0.6	1.1	0.3	0.1	0.2	0.2	7.1	116.2
BLN2675TT	0.1	4.4	0.3	1.7	57.5	20.6	13.3	0.5	1.1	0.3	0.1	0.1	0.1	7.1	121.0
BLN2676TT	0.1	4.7	0.3	1.9	61.8	17.7	11.6	0.5	1.0	0.3	0.1	0.1	0.1	7.5	115.1
RGAS02T14	0.1	4.4	0.3	1.9	60.4	19.0	11.9	0.5	1.0	0.2	0.2	0.1	0.1	7.2	117.1
SURPASS501TT	0.1	4.2	0.3	1.9	61.1	20.8	8.6	0.4	2.2	0.2	0.0	0.2	0.1	7.0	112.9
T2015	0.1	4.5	0.3	2.0	60.5	19.8	10.9	0.4	0.9	0.2	0.1	0.1	0.1	7.4	115.9
T2023	0.1	4.5	0.2	1.8	61.9	19.1	9.7	0.6	1.3	0.4	0.1	0.2	0.1	7.6	112.9
T2027	0.1	4.9	0.3	1.9	59.0	20.9	10.5	0.6	1.1	0.3	0.1	0.2	0.1	8.0	115.6
TQ005	0.1	4.0	0.3	2.0	61.4	18.8	10.8	0.6	1.2	0.2	0.2	0.2	0.2	7.2	114.9
TQ006	0.1	4.4	0.3	2.3	60.9	18.3	11.2	0.4	1.1	0.2	0.4	0.1	0.1	7.6	114.9
TQ007	0.1	4.5	0.3	1.7	58.0	21.2	11.9	0.5	1.0	0.3	0.1	0.2	0.1	7.3	119.0
TQ008	0.1	4.7	0.3	1.7	46.4	17.5	11.1	0.6	8.7	0.3	8.1	0.1	0.3		

**Table 6n**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Mid Triazine Tolerant- Turretfield SA***

Variety														<sup>2</sup> Iodine	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	Value
AGT205	0.1	5.1	0.4	1.6	57.1	22.5	11.4	0.4	1.0	0.2	0.1	0.1	0.1	7.5	119.1
AGT206	0.1	4.9	0.3	1.4	55.1	23.2	13.0	0.4	1.1	0.2	0.1	0.1	0.1	7.1	122.8
AGT207	0.1	5.5	0.4	1.4	54.3	24.3	12.2	0.4	1.0	0.2	0.0	0.1	0.1	7.7	121.9
AGT208	0.1	5.2	0.4	1.6	57.8	21.7	11.2	0.5	1.1	0.2	0.1	0.1	0.1	7.7	117.9
ATR-BEACON	0.1	4.9	0.3	1.7	57.3	21.3	12.3	0.4	1.0	0.2	0.1	0.1	0.1	7.4	119.5
ATR-GRACE	0.1	4.6	0.3	1.7	59.7	20.0	11.2	0.5	1.1	0.2	0.2	0.1	0.1	7.2	116.6
ATR-HYDEN	0.1	4.6	0.4	1.9	60.7	19.0	11.2	0.5	1.1	0.2	0.1	0.1	0.1	7.4	115.7
BLN2673TT	0.1	4.9	0.3	1.6	58.1	21.3	11.7	0.5	1.0	0.2	0.1	0.1	0.1	7.4	118.6
BLN2675TT	0.1	4.8	0.3	1.6	56.3	22.4	12.5	0.5	1.0	0.2	0.0	0.1	0.1	7.3	121.0
BLN2676TT	0.1	5.0	0.3	1.6	59.1	20.1	12.0	0.4	0.9	0.2	0.1	0.1	0.1	7.4	118.1
RGAS02T14	0.1	5.2	0.3	1.8	59.1	21.0	10.8	0.4	0.8	0.1	0.1	0.1	0.1	7.7	116.4
SURPASS501TT	0.1	4.8	0.3	1.7	59.2	23.0	9.3	0.3	0.8	0.1	0.1	0.1	0.1	7.1	116.1
T2015	0.1	4.7	0.3	1.8	58.4	21.8	11.3	0.4	0.9	0.2	0.1	0.1	0.1	7.3	118.6
T2023	0.1	4.6	0.3	1.7	57.9	21.6	11.5	0.5	1.2	0.3	0.1	0.2	0.1	7.4	118.6
T2027	0.1	5.1	0.3	1.7	56.9	23.1	10.9	0.5	1.0	0.2	0.0	0.1	0.1	7.7	118.5
TI1PINNACLE	0.1	4.7	0.4	1.7	58.5	21.0	11.6	0.5	1.0	0.2	0.2	0.1	0.1	7.3	118.3
TQ005	0.1	4.6	0.3	1.8	58.6	21.2	10.7	0.5	1.2	0.2	0.6	0.1	0.2	7.3	116.8
TQ006	0.1	4.8	0.4	2.2	61.1	18.7	10.8	0.4	1.0	0.1	0.3	0.1	0.1	7.7	114.6
TQ007	0.1	5.2	0.4	1.5	55.0	23.8	12.0	0.5	1.0	0.2	0.1	0.1	0.1	7.6	121.2
TQ008	0.1	5.1	0.4	1.6	45.9	19.8	11.9	0.5	7.1	0.2	7.1	0.1	0.3	7.6	116.0

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6o**

***National Brassica Improvement 2002- %Fatty Acid Composition***  
***S2 Mid Triazine Tolerant- Mingene WA***

Variety														<sup>2</sup> Iodine	
	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	Value
AGT205	0.1	4.8	0.3	1.6	57.8	22.1	11.4	0.4	1.0	0.2	0.1	0.1	0.1	7.2	118.9
AGT208	0.1	4.7	0.3	1.6	60.2	20.1	10.9	0.5	1.1	0.2	0.0	0.1	0.1	7.2	116.2
ATR-BEACON	0.1	4.7	0.3	1.7	59.1	20.3	11.9	0.4	0.9	0.2	0.1	0.2	0.2	7.3	118.2
ATR-EYRE	0.1	4.9	0.3	1.9	58.3	20.3	12.5	0.4	0.8	0.1	0.0	0.1	0.1	7.5	118.9
ATR-HYDEN	0.1	4.4	0.3	1.8	61.3	18.9	11.3	0.5	1.0	0.2	0.1	0.2	0.1	7.2	116.2
BLN2673TT	0.1	4.7	0.3	1.7	59.6	20.2	11.5	0.5	1.0	0.2	0.0	0.1	0.1	7.3	117.4
BLN2675TT	0.1	4.7	0.3	1.5	56.3	22.5	12.6	0.5	1.0	0.2	0.0	0.1	0.1	7.1	121.4
BLN2676TT	0.1	4.8	0.3	1.6	59.0	20.3	12.2	0.4	1.0	0.2	0.1	0.1	0.1	7.2	119.0
RGAS02T14	0.1	4.6	0.3	1.9	59.7	19.5	12.2	0.4	0.8	0.1	0.1	0.1	0.1	7.2	118.0
SURPASS300TT	0.1	5.1	0.3	1.7	53.4	26.4	11.3	0.4	0.8	0.1	0.1	0.1	0.1	7.5	122.2
SURPASS501TT	0.1	4.4	0.2	1.7	59.9	22.3	9.8	0.4	0.9	0.1	0.0	0.1	0.1	6.8	116.7
T2015	0.1	4.7	0.3	1.8	59.4	20.9	11.4	0.4	0.8	0.1	0.0	0.1	0.1	7.2	118.0
T2027	0.1	4.7	0.3	1.7	56.9	22.8	11.4	0.5	1.1	0.2	0.0	0.1	0.1	7.3	119.4
TI1PINNACLE	0.1	4.8	0.4	1.6	57.9	21.5	11.5	0.4	1.1	0.2	0.3	0.2	0.1	7.3	118.6
TQ005	0.1	4.5	0.3	1.8	58.7	21.2	11.3	0.5	1.1	0.2	0.1	0.1	0.1	7.2	118.0
TQ006	0.1	4.4	0.3	2.0	60.0	19.5	11.6	0.4	1.0	0.1	0.2	0.1	0.1	7.1	116.9
TQ007	0.1	4.9	0.4	1.5	54.3	24.5	12.1	0.5	1.1	0.2	0.1	0.1	0.1	7.3	122.1
TQ008	0.1	4.6	0.3	1.5	44.2	19.7	11.7	0.5	8.3	0.2	8.6	0.1	0.3	7.0	115.8

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

**Table 6p**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Mid Clearfield- Wagga Wagga NSW**

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
45C75	0.1	4.9	0.4	1.8	60.5	19.5	10.9	0.5	0.9	0.2	0.1	0.1	0.1	7.6	115.5
46C74	0.1	4.9	0.3	1.8	60.6	20.1	10.4	0.5	1.0	0.2	0.0	0.1	0.1	7.6	115.2
BLN2695CL	0.1	4.7	0.3	1.9	62.9	17.7	10.3	0.5	1.1	0.2	0.0	0.1	0.1	7.5	112.8
BLN2696CL	0.1	4.5	0.3	1.7	62.8	19.7	9.1	0.4	1.1	0.2	0.1	0.1	0.1	7.0	113.2
BLN2697CL	0.1	4.7	0.3	1.8	61.7	19.2	10.1	0.5	1.2	0.2	0.2	0.1	0.1	7.4	114.1
J1311	0.1	4.1	0.3	1.7	62.6	19.9	9.3	0.5	1.1	0.2	0.0	0.1	0.1	6.7	113.8
J1316	0.1	4.6	0.3	1.8	64.4	20.4	6.3	0.5	1.2	0.2	0.0	0.1	0.1	7.3	108.4
J1327	0.1	4.5	0.3	1.8	60.6	22.2	8.7	0.4	1.0	0.1	0.0	0.1	0.1	7.0	114.4
NS04399	0.1	4.4	0.3	2.1	62.8	18.1	10.6	0.4	0.9	0.1	0.0	0.1	0.1	7.2	114.1
SURPASS603CL	0.1	4.4	0.3	1.8	63.9	20.5	7.1	0.5	1.1	0.2	0.1	0.1	0.1	7.1	110.3

**Table 6q**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Mid Clearfield- Turretfield SA**

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
45C75	0.1	4.4	0.3	1.8	58.7	20.7	11.4	0.6	1.2	0.3	0.1	0.2	0.2	7.4	117.6
46C74	0.1	5.3	0.3	1.7	58.7	21.6	10.5	0.5	1.0	0.2	0.0	0.1	0.1	7.9	116.4
BLN2695CL	0.1	5.2	0.3	1.8	61.9	18.6	10.3	0.5	1.0	0.2	0.0	0.1	0.1	7.9	113.5
BLN2696CL	0.1	4.9	0.3	1.7	61.6	20.0	9.4	0.5	1.0	0.2	0.0	0.1	0.1	7.5	113.3
BLN2697CL	0.1	4.9	0.3	1.7	60.8	19.9	10.3	0.5	1.1	0.2	0.0	0.1	0.1	7.5	114.8
J1311	0.1	4.4	0.3	1.6	59.6	21.7	10.2	0.5	1.2	0.3	0.0	0.1	0.1	7.0	116.8
J1316	0.1	4.7	0.3	1.7	62.5	21.4	7.1	0.5	1.2	0.2	0.0	0.1	0.1	7.3	110.6
J1327	0.1	4.9	0.3	1.7	57.2	23.8	10.3	0.4	0.9	0.2	0.0	0.1	0.1	7.4	118.3
NS04399	0.1	4.5	0.4	1.9	61.0	19.4	11.1	0.4	0.9	0.2	0.0	0.1	0.1	7.2	116.2
SURPASS603CL	0.1	4.5	0.3	1.6	61.2	22.0	8.2	0.4	1.2	0.2	0.0	0.1	0.1	6.9	113.4

**Table 6r**

**National Brassica Improvement 2002- %Fatty Acid Composition**  
**S2 Mid Clearfield- Katanning WA**

Variety	14:0	16:0	16:1	18:0	18:1	18:2	18:3	20:0	20:1	22:0	22:1	24:0	24:1	<sup>1</sup> Sat	<sup>2</sup> Iodine Value
45C75	0.1	4.9	0.3	1.9	60.4	20.0	10.7	0.5	0.8	0.2	0.0	0.1	0.1	7.7	115.5
46C74	0.1	4.8	0.3	2.0	62.2	19.3	9.6	0.5	0.9	0.2	0.0	0.1	0.1	7.7	113.0
BLN2695CL	0.1	4.7	0.3	1.9	62.8	18.1	10.1	0.6	1.1	0.2	0.0	0.1	0.1	7.6	112.9
BLN2696CL	0.1	4.2	0.3	1.9	62.8	19.1	9.4	0.6	1.2	0.3	0.0	0.1	0.1	7.1	112.8
BLN2697CL	0.1	5.1	0.3	1.9	62.7	18.7	9.5	0.5	0.9	0.2	0.1	0.1	0.1	7.9	112.2
NS04399	0.1	4.5	0.4	2.2	62.0	18.8	10.6	0.4	0.7	0.1	0.1	0.1	0.1	7.4	114.6
SURPASS603CL	0.1	4.5	0.3	2.0	63.3	20.0	7.8	0.5	1.0	0.2	0.0	0.1	0.1	7.4	110.6

<sup>1</sup> Sat- Sum of the saturated fatty acids including 14:0, 16:0, 18:0, 20:0 22:0, 24:0

<sup>2</sup> Iodine Value- Calculated from the fatty acid composition

## **Definition**

Canola is a term used to describe seed of the species Brassica napus or Brassica campestris, the oil component of which seed contains less than 2% erucic acid (C22:1) and the solid component of which seed contains less than 30 micromoles of any one, or any mixture, of 3-butetyl glucosinolate, 4-pentenyl glucosinolate, 2-hydroxy-3-butetyl glucosinolate and 2-hydroxy-4-pentenyl glucosinolate per gram of air dry, oil free solid as measured by the gas chromatographic method of the Canadian Grain Commission (Canola Council, Winnipeg, Manitoba, Canada).

## **Methods**

### **Moisture Content:**

Moisture is determined on whole seed using a 6500 near infrared (NIR) spectrometer calibrated using AOF 4-1.6, Moisture content of oilseeds oven method. The moisture contents are used to convert the oil and protein raw data to the appropriate moisture content for reporting.

### **Oil Content:**

Oil content is determined by NIR calibrated using results obtained by supercritical fluid extraction (SCFE) AOF 4-1.27, Oil content of oilseeds-supercritical fluid extractor. The SCFE uses low temperature and high pressure carbon dioxide to extract the oil from ground up canola seed. Settings of extraction chamber temperature 120<sup>0</sup>C, extraction chamber pressure 7500 psi , restrictor temperature 150<sup>0</sup>C and extraction time of 1hr give good correlation with the previous reference method (petroleum ether (40-60<sup>0</sup>C) extraction using a goldfische apparatus). The results are reported as a percentage of the seed at 8.5% moisture.

### **Protein Content:**

Protein content is determined on whole seed by NIR, calibrated from samples analysed by the LECO elemental determinator AOF 4-3.3, Protein, crude, of meals (generic combustion). Results are reported as percent protein (nitrogen x 6.25) and calculated to 13% moisture on oil-free meal.

### **Glucosinolate Content:**

Total glucosinolate concentration is determined by NIR, calibrated using the reference method AOF 4-1.22 Glucosinolate content, Glucose method, Canola and Rapeseed. The method involves an enzymatic hydrolysis to release glucose followed by a colorimetric reaction and quantitation by a UV-Vis spectrophotometer. The method has compared favourably with the HPLC methodology of the AOCS with the added advantage of speed and economy. Results are reported as µmoles glucosinolates/ gram whole seed at 8.5% moisture.

### **Fatty Acid Composition:**

Fatty acid composition involves methylation of fatty acids with sodium methoxide, AOF 4-2.18, Preparation of fatty acid methyl esters. The methyl esters are then separated on a gas chromatograph using a BPX70 capillary column. Fatty acids are reported as a percentage of the total fatty acids.

### **Iodine Values:**

Iodine values are calculated from the fatty acid profile using AOF 4-2.14, Iodine value by fatty acid composition.

### **Volumetric Grain Weights:**

Volumetric grain weights are measured using a Franklin chondrometer and reported as both lbs/bushel and kg/hectolitre.