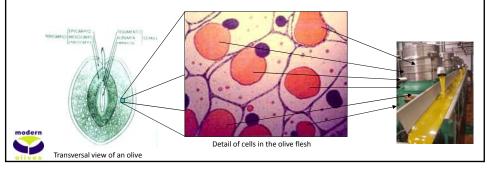
# "The need for an Australian Standard on Olive Oils"

Leandro Ravetti



### The question: What is extra virgin olive oil?

Extra virgin olive oil is obtained **solely** from the fruit of the **olive** tree (Olea europaea L.) by **mechanical** or other phisical means under conditions, particularly thermal, that do not lead to alterations in the oil, and which have not undergone any treatment other than washing, decantation, centrifugation and filtration. It clearly excludes oils obtained using solvents or re-esterification processes and of any mixture with oils of other kinds.



### **Trade Standards for Olive Oil**

- To protect (untrained) consumers against confusing and/or misleading labelling practices.
- To guarantee the quality of the product throughout the chain.
- To allow honest growers and traders to have a level playing field where only pears with pears and apples with apples are compared.
- To provide government and non government agencies with tool to control and enforce fair trade.



#### **Trade Standards for Olive Oil**

- The most widely accepted international standards for olive oils and olive-pomace oils are:
  - Codex Standard for Olive Oils and Olive Pomace Oils Codex Stan 33-1981 (Rev. 2-2003).
  - International Olive Council Trade Standard Applying to Olive Oils and Olive-Pomace Oils COI/T.15/NC Nº 3/Rev. 3 November 2008.
- Other relevant standards due to the olive oil and olive pomace oil volumes traded in those countries are:
  - European Commission Regulation (EEC) № 2568/91 of 11 July 1991 on the characteristics of olive oil and olive-residue oil and on the relevant methods of analysis and subsequent amendments.
  - United States Standards for Grades of Olive Oil Effective date March 22, 1948 together with their current Proposed United States Standards for Grades of Olive Oil and Olive-Pomace Oil – Release date March 28, 2008.
- There is no mandatory standard in Australia for olive oil.



### **Problems with International Standards**

- Based on average European oils' characteristics and do not contemplate new world's olive oils.
- Do not make any reference to the shelf life of the oils and the necessity for a best before date.
- Do not detect refined olive oils utilising new technologies (e.g. Soft Column®).
- Confusing denomination of the different categories.



### **Authentic Australian oils being left outside**







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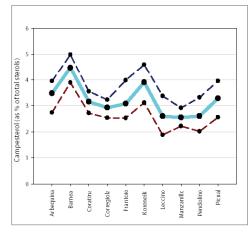
**Table 1.** Average, minimum and maximum levels of fatty acids measured on 153 samples including 10 cultivars grown in environmentally different regions within Australia in 2005 & 2006.

Fatty Acid	Palmitic C16:0	Palmitoleic C16:1	Hepta- decanoic C17:0	Hepta- decenoic C17:1	Stearic C18:0	Oleic C18:1	Linoleic C18:2	Linolenic C18:3	Arachidic C20:0	Gadoleic C20:1	Behenic C22:0
Minimum	6.8	0.3	0.02	0.04	1.1	52.2	2.2	0.3	0.2	0.05	0.04
Average	12.7	1.1	0.05	0.1	1.9	73.6	9.2	0.7	0.3	0.3	0.09
Maximum	20.3	4.1	0.2	0.3	3.8	84.2	23.8	1.7	0.5	0.5	0.2

Source: Mailer, R. 2007. The Natural Chemistry of Australian Extra Virgin Olive Oil. RIRDC & NSW DPI.



### **Authentic Australian oils being left outside**

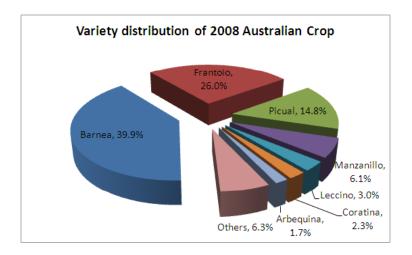


Maximum, average and minimum levels of campesterol found in 10 of the most common varieties in the Australian olive industry.

Source: Mailer, R. 2007. The Natural Chemistry of Australian Extra Virgin Olive Oil. RIRDC & NSW DPI.



### **Authentic Australian oils being left outside**



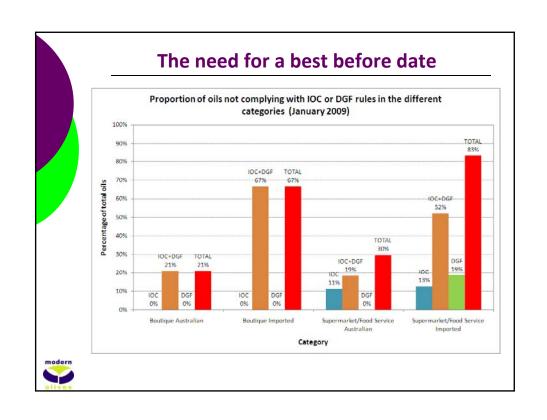


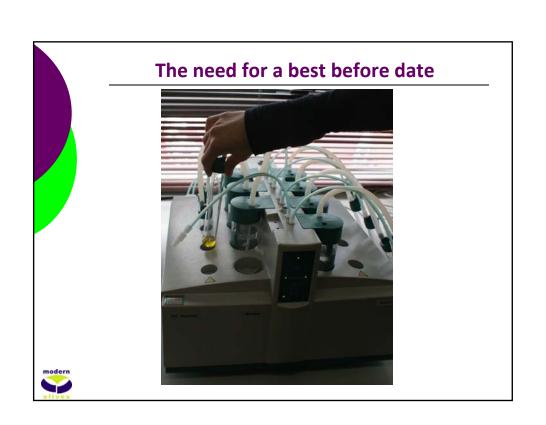
### **Authentic Australian oils being left outside**

Fatty acid profile and sterols profile with minor modification to suit all olive oils (e.g. Linolenic acid ≤ 1.3% or Campesterol ≤ 4.8%) plus triacylglycerol distribution

Comment: As olive oil is a **natural product**, it is recognised that some authentic olive oils or pomace oils may not meet some of the values presented in this standard fatty acid and/or sterol profile. **If a value falls out of** the above **ranges**, all **other results** of the different tests listed in this standard **will be considered** together with information on **country of origin**, **growing environmental conditions**, **traceability** documentation and the **variety** in order to determine its authenticity.







### The need for a best before date

Estimated shelf life of olive oils (in days) for every 1 Rancimat® hour @ 110°C

Storage Temperature (in °C)										
		24	23	22	21	20	19	18	17	16
General	Air	16.1	17.3	18.5	19.9	21.3	22.8	24.5	26.2	28.1
Gen	Nitrogen	24.2	26.0	27.8	29.8	32.0	34.2	36.7	39.3	42.1
Modern Olives Triak	Air	20.2	21.6	23.2	24.8	26.6	28.5	30.6	32.7	35.1
§ g ‡	Nitrogen	30.2	32.4	34.7	37.2	39.9	42.8	45.8	49.1	52.6

General Reference: http://www.metrohm.com.cn/administrator/resource/upfile/Stab%20Introduction.pdf
Nitrogen Factor: http://grasasyaceites.revistas.csic.es/index.php/grasasyaceites/article/view/461/463
Modern Olives Trials: Trials conducted by MOLS in 2008 with BBE Arbequina and Picual oils at varying temperatures
Red: Standard reference for fats and oils stored under air

Green: Estimation proposed by the Australian Code of Practice



### The need for new chemistry Proportion of Olive Oils produced and consumed 80% 72% 70% 56% 60% Percentage of total 50% 35% 40% ■ Consumption USA\* 30% ■ Production Spain\*\* 20% 10% EVOO voo 00 Category of Olive Oil \* Caiani & Co (2006); \*\* Olive Growing Manual (2006)

### The need for new chemistry





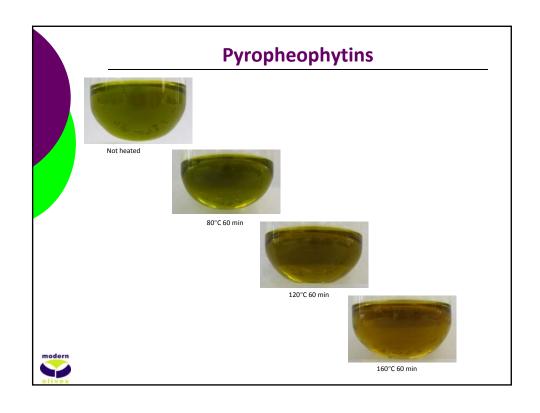


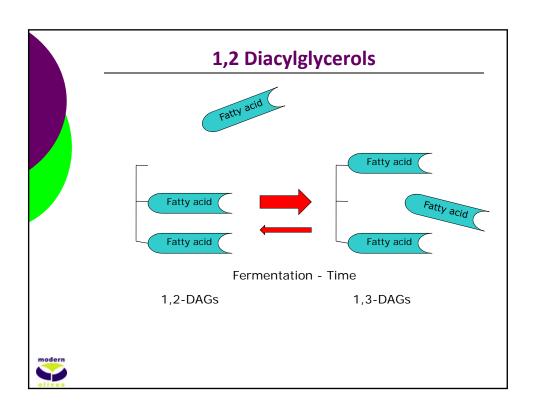
### **Tests**

### Analysis

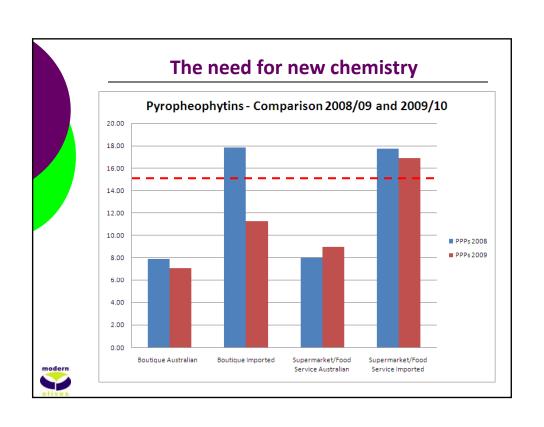
- Pyropheophytins (PPPs). DGF Standard Method C-VI-15(06) ISO 29841:2009.
- 1,2-Diacylglycerol Content (DAGs). DGF Standard Method C-VI 16(06) – ISO 29822:2009.

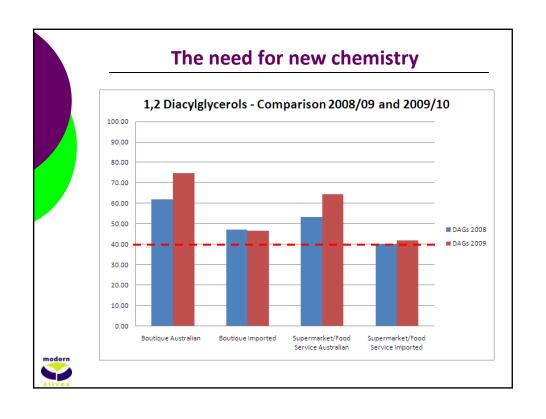


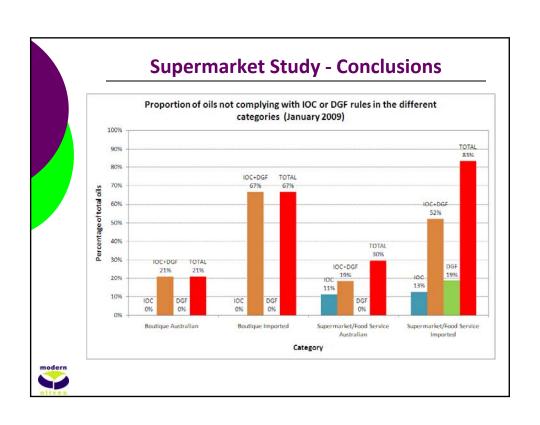


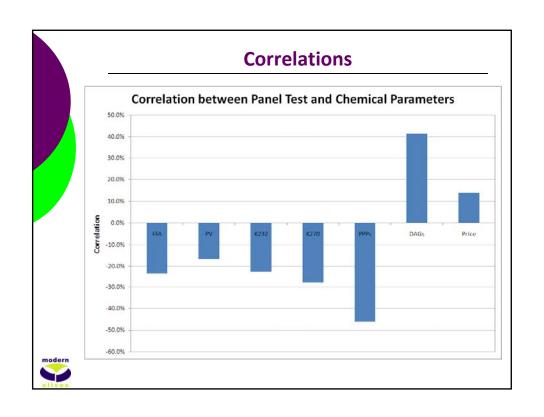


10/018-01 20 °C (Control) 1.779 0.136 0.000 6.54 2.86 82.6 12.300 0.380 0. 10/018-02 40 °C 1.835 0.150 0.000 6.40 3.04 85.6 8.670 0.593 0. 10/018-03 60 °C 1.886 0.168 0.000 6.40 2.99 85.0 8.050 0.588 0. 10/018-04 80 °C 1.861 0.162 0.000 7.88 2.99 85.0 8.050 0.464 0. 10/018-05 100 °C 1.930 0.160 0.000 10.94 2.99 85.0 11.200 0.356 0. 10/018-06 120 °C 1.968 0.163 0.000 18.46 2.92 83.8 17.200 0.497 0. 10/018-07 150 °C 2.508 0.335 0.007 73.28 3.65 69.5 11.400 0.310 0.	НЕ	AT TI	REATMEN	T TRIAL								
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10/018-02 40 °C 1.835 0.150 0.000 6.40 3.04 85.6 8.670 0.593 0. 10/018-03 60 °C 1.886 0.168 0.000 6.40 2.99 85.0 8.050 0.588 0. 10/018-04 80 °C 1.861 0.162 0.000 7.88 2.98 84.8 8.860 0.464 0.10/018-05 100 °C 1.930 0.160 0.000 10.94 2.99 85.0 11.200 0.356 0. 10/018-06 120 °C 1.968 0.163 0.000 18.46 2.92 83.8 17.200 0.497 0. 10/018-07 150 °C 2.508 0.335 0.007 73.28 3.65 69.5 11.400 0.310 0. 10/018-08 200 °C 2.456 0.635 0.021 96.36 8.04 53.4 11.239 0.391 0.	Wo	rk Order	Temp	K232	K270	DK	ppp	PPP pred	DAG	FAAE	Ratio	ST
10/018-03 60 °C 1.886 0.168 0.000 6.40 2.99 85.0 8.050 0.588 0. 10/018-04 80 °C 1.861 0.162 0.000 7.88 2.98 84.8 8.860 0.464 0. 10/018-05 100 °C 1.930 0.160 0.000 10.94 2.99 85.0 11.200 0.356 0. 10/018-06 120 °C 1.968 0.163 0.000 18.46 2.92 83.8 17.200 0.497 0. 10/018-07 150 °C 2.508 0.335 0.007 73.28 3.65 69.5 11.400 0.310 0. 10/018-08 200 °C 2.456 0.635 0.021 96.36 8.04 53.4 11.239 0.391 0.	10,	/018-01	20 ºC (Control)	1.779	0.136	0.000	6.54	2.86	82.6	12.300	0.380	0.0
10/018-04     80 °C     1.861     0.162     0.000     7.88     2.98     84.8     8.860     0.464     0.       10/018-05     100 °C     1.930     0.160     0.000     10.94     2.99     85.0     11.200     0.356     0.       10/018-06     120 °C     1.968     0.163     0.000     18.46     2.92     83.8     17.200     0.497     0.       10/018-07     150 °C     2.508     0.335     0.007     73.28     3.65     69.5     11.400     0.310     0.       10/018-08     200 °C     2.456     0.635     0.021     96.36     8.04     53.4     11.239     0.391     0.	10,	/018-02	40 ºC	1.835	0.150	0.000	6.40	3.04	85.6	8.670	0.593	0.0
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												0.0
PPP%predicted=49,7 - 1,17*%DG + 0,0073*%DG * %DG + 5,0 %	10,	/018-08	200 ºC	2.456	0.635	0.021	96.36	8.04	53.4	11.239	0.391	0.0
	PPP,	Spredicted=4	9,7 - 1,17*%DG + 0	),0073*%DG *	%DG +- 5,0	0 %						







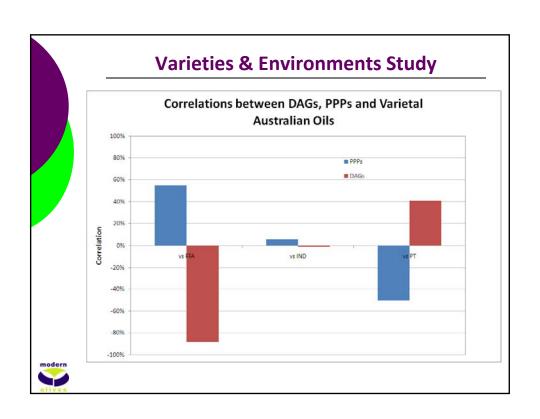


_	Varieties &	Environmer	nts Study
	Arbequina	S VIC	3%
	Picual	S VIC	8%
	Frantoio	S VIC	9%
	Frantoio	TAS	0%
	Frantoio	WA	6%
	Frantoio	NSW	3%
7	Coratina	S VIC	2%
	Koroneiki	S VIC	0%
	Barnea	S VIC	18%
	Picual	N VIC	4%
	Koroneiki	N VIC	1%
	Coratina	N VIC	2%
	Barnea	N VIC	10%
	Coratina	NSW	0%
	Barnea	SA	9%
	Manzanilla	SA	4%
	Picual	WA	5%
	Barnea	WA	10%
rn	Leccino	WA	3%
	TOTAL		97%

### **Varieties & Environments Study**

Parameter	FFA	PV	K232	K270	PPH	PPPs	DAGs
Average	0.22	6.10	1.583	0.097	237	1.94	85.26
Minimum	0.12	3.30	1.243	0.056	77	0.90	74.60
Maximum	0.37	9.50	2.062	0.138	511	4.20	93.90
Limits	< 0.80	< 20.00	< 2.500	< 0.220	-	< 15.00	> 40.00





### The need for clearer denominations



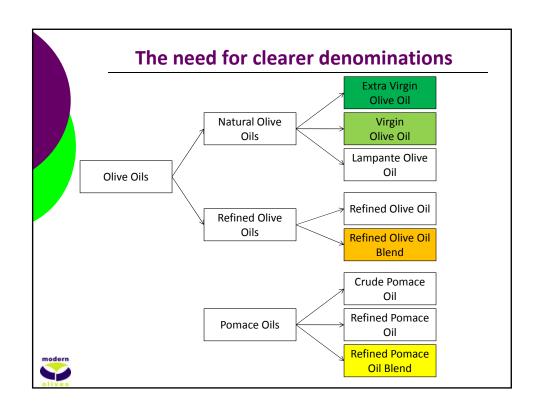




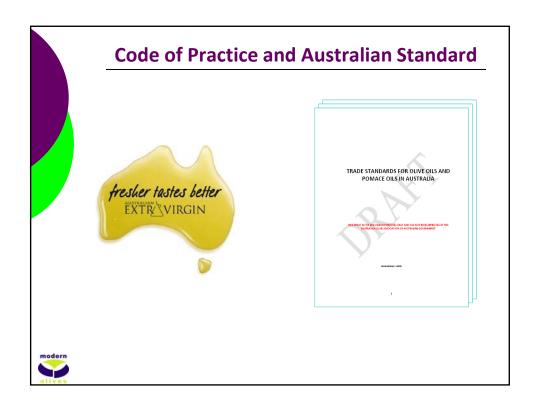
### The need for clearer denominations

- Only 9% of the Australian population knew that different types of olive oil have different health benefits.
- Just 29% of the Australian population knew that EVOO was the highest quality olive oil.
- Refined vs. rectified.
- Blend vs. pure.
- Virgin vs. natural.









### What have we done to date?

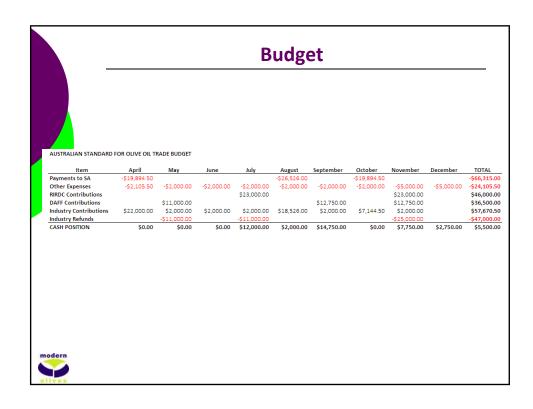
- Development and implementation of Code of Practice.
- Media campaign of awareness.
- First ACCC action on this matter.
- Numerous meetings with ACCC, Customs, DAFF, SA, FSANZ, AOOA, retailers, consumer associations, etc.
- Developed a draft Australian Standard.
- Reached an agreement with Standards Australia after receiving written support of all stakeholders.
- Funding agreement with DAFF and RIRDC.

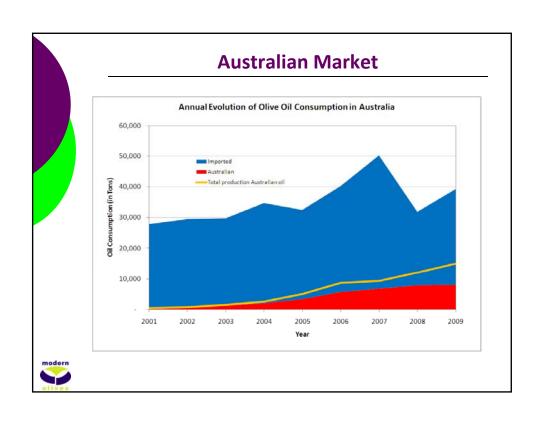


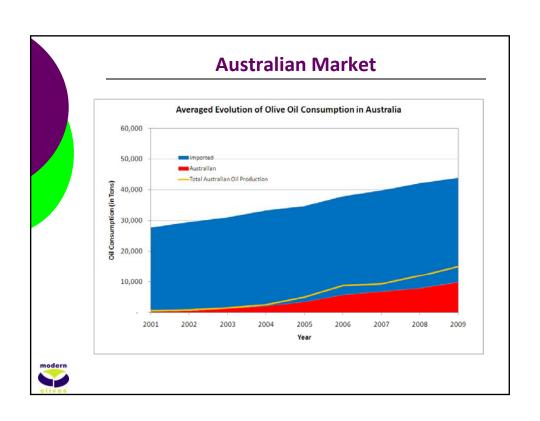
### **Next Steps**

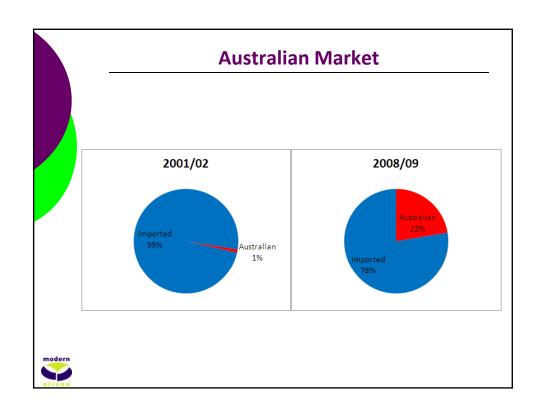
- Signing agreement between AOA and SA March 2010.
- Kick-Off Meeting and designation of committee May 2010.
- Committee Draft Finalised and Public Consultation starts July 2010.
- Public consultation finishes September 2010.
- Final publication and implementation October 2010.
- Promotional activities November onwards.













# Australian Standard for Olive Oil and Olive-Pomace Oil AS 5264-2011®

### **Paul Miller and Leandro Ravetti**

**Australian Olive Association** 

Melbourne, Victoria August 2011



# Australian Standard Code of Practice – The First Step







# Australian Standard The Ultimate Goal

Scientifically based and consumer oriented Standard for all olive oils and olive-pomace oils traded in Australia



# Australian Standard The Process

Phase	Start	Finish
Preliminary Phase	June 2004	May 2010
Initiation	June 2010	August 2010
Design	August 2010	December 2010
Public Comment	December 2010	February 2011
<b>Public Consultation Resolution</b>	March 2011	May 2011
Ballot Period	May 2011	June 2011
Finalisation	June 2011	July 2011
Publication	20 <sup>th</sup> July 2011	



- To protect (untrained) consumers against confusing and/or misleading labelling practices.
- To guarantee the quality of the product throughout the chain.
- To allow honest growers and traders to have a level playing field where only pears with pears and apples with apples are compared.
- To provide government and non government agencies with a tool to control and enforce fair trade.



### Standard Committee

- Standards Australia.
- Department of Agriculture, Fisheries and Forestry.
- Rural Industries Research and Development Corporation.
- Industry and Investment NSW (AORL).
- Private Laboratories.
- Australian Olive Association.
- New Zealand Olive Association.
- Australian Olive Oil Association.
- Australian Customs.
- Australian National Retailers Association.
- Food and Grocery Council New Zealand.
- Consumers Federation of Australia.
- Choice (observer).
- Australian Competition and Consumer Commission (observer).
- Food Standards Australia and New Zealand (observer).



- The most widely accepted international standards for olive oils and olive-pomace oils are:
  - Codex Standard for Olive Oils and Olive Pomace Oils Codex Stan 33-1981 (Rev. 2-2003).
  - International Olive Council Trade Standard Applying to Olive Oils and Olive-Pomace Oils - COI/T.15/NC № 3/Rev. 3 November 2008.
- Other relevant standards due to the olive oil and olive pomace oil volumes traded in those countries are:
  - European Commission Regulation (EEC) № 2568/91 of 11 July 1991 on the characteristics of olive oil and olive-residue oil and on the relevant methods of analysis and subsequent amendments.
  - **United States Standards** for Grades of Olive Oil and Olive-Pomace Oil Effective date October 25, 2010.
- There is no mandatory standard in Australia for olive oil.



# Australian Standard Why Australia needed a new Standard?

- Based on average European oils' characteristics and do not contemplate new world's olive oils.
- Do not make any reference to the shelf life of the oils and the necessity for a best before date.
- Do not detect refined olive oils utilising new technologies (e.g. Soft Column®).
- Confusing denomination of the different categories.



# Australian Standard Recognition of natural variations without compromising detection of adulterations

Summary of AORL and MOLS records for Fatty Acid Composition of Australian oils

	C 14:0	C 16:0	C16:1	C 17:0	C 17:1	C 18:0	C 18:1	C 18:2	C18:3	C 20:0	C 20:1	C22:0	C 24:0
IOC LIMITS	0.0-0.05	7.5-20.0	0.3-3.5	0.0-0.3	0.0-0.3	0.5-5.0	55.0-83.0	3.5-21.0	0.0-1.0	0.0-0.6	0.0-0.4	0.0-0.2	0.0-0.2
AUSTRALIAN STANDARD LIMITS	0.0-0.05	7.0-20.0	0.3-3.5	0.0-0.3	0.0-0.4	0.5-5.0	53.0-85.0	2.5-22.0	0.0-1.5	0.0-0.6	0.0-0.5	0.0-0.2	0.0-0.2
AVERAGE	0.01	11.87	0.98	0.09	0.11	2.31	73.81	9.25	0.73	0.39	0.31	0.10	0.09
MEDIAN	0.01	11.70	0.90	0.10	0.10	2.30	74.30	9.40	0.70	0.40	0.30	0.10	0.10
STANDARD DEVIATION	0.00	1.57	0.33	0.03	0.05	0.44	3.86	2.75	0.10	0.05	0.05	0.02	0.03
MAXIMUM	0.04	20.26	3.56	0.50	0.50	5.40	84.15	23.79	1.71	0.70	0.60	0.20	0.20
MINIMUM	0.00	6.70	0.29	0.00	0.00	0.20	53.87	2.21	0.30	0.16	0.03	0.04	0.00
NUMBER OF SAMPLES	1859	1859	1859	1859	1859	1859	1859	1859	1859	1859	1859	1859	1859
PERCENTAGE OF SAMPLES BELOW PROPOSED AUS STANDARD	0.0%	0.2%	0.1%	0.0%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
PERCENTAGE OF SAMPLES ABOVE PROPOSED AUS STANDARD	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
PERCENTAGE OF SAMPLES BELOW IOC STANDARD	0.0%	0.3%	0.1%	0.0%	0.0%	0.1%	0.1%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
PERCENTAGE OF SAMPLES ABOVE IOC STANDARD	0.0%	0.1%	0.1%	0.1%	0.3%	0.1%	0.4%	0.1%	0.5%	0.1%	2.6%	0.0%	0.0%

Summary of AORL and MOLS records for Sterol Composition of Australian oils

	Cholesterol	Brassicasterol	Campesterol	Stigmasterol	D-7-Stigmastenol	β-Sitosterol	Total sterols	E+U	2-glyceryl monopalmitate
IOC LIMITS	0.0-0.5	0.0-0.1	0.0-4.0	< Camp.	0.0-0.5	93.0-100.0	> 1000	0.0-4.5	C16:0<=14.0 <=0.9%, <=1.1%
AUSTRALIAN STANDARD LIMITS	0.0-0.5	0.0-0.1	0.0-4.8	< Camp.	0.0-0.5	92.5-100.0	> 1000	0.0-4.5	<=1.5%
AVERAGE	0.18	0.02	3.81	0.71	0.26	94.08	1741.11	1.02	0.48
MEDIAN	0.15	0.03	3.80	0.63	0.20	94.07	1764.00	0.90	0.40
STANDARD DEVIATION	0.13	0.01	0.68	0.29	0.11	0.73	327.95	0.55	0.23
MAXIMUM	0.80	0.10	5.00	2.30	1.19	96.70	2862.00	5.53	1.50
MINIMUM	0.00	0.00	1.88	0.00	0.00	92.00	789.23	0.20	0.04
NUMBER OF SAMPLES	651	651	651	651	651	651	651	582	305
PERCENTAGE OF SAMPLES BELOW PROPOSED AUS STANDARD	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	1.2%	0.0%	0.0%
PERCENTAGE OF SAMPLES ABOVE PROPOSED AUS STANDARD	0.8%	0.0%	1.1%	0.0%	0.5%	0.0%	0.0%	0.3%	0.0%
PERCENTAGE OF SAMPLES BELOW IOC STANDARD	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	1.2%	0.0%	0.0%
PERCENTAGE OF SAMPLES ABOVE IOC STANDARD	0.8%	0.0%	39.0%	0.0%	0.5%	0.0%	0.0%	0.3%	3.9%



# Australian Standard Shelf life limited to no more than 2 years from bottling and guided by evidence

Estimated shelf life of olive oils (in days) for every 1 Rancimat® hour @ 110°C

			Storage Temperature (in °C)										
		24	23	22	21	20	19	18	17	16			
General	Air	16.1	17.3	18.5	19.9	21.3	22.8	24.5	26.2	28.1			
Gen	Nitrogen	24.2	26.0	27.8	29.8	32.0	34.2	36.7	39.3	42.1			
Modern Olives Triak	Air	20.2	21.6	23.2	24.8	26.6	28.5	30.6	32.7	35.1			
Moc	Nitrogen	30.2	32.4	34.7	37.2	39.9	42.8	45.8	49.1	52.6			

General Reference: http://www.metrohm.com.cn/administrator/resource/upfile/Stab%20Introduction.pdf
Nitrogen Factor: http://grasasyaceites.revistas.csic.es/index.php/grasasyaceites/article/view/461/463
Modern Olives Trials: Trials conducted by MOLS in 2008 with BBE Arbequina and Picual oils at varying temperatures

Red: Standard reference for fats and oils stored under air

Green: Estimation proposed by the Australian Code of Practice





Principe de Vergara, 154 - 28002 Madrid - España Telef.: +34 915 903 638 Fax: +34 915 631 263 - e-mail: iooc@internationaloliveoil.org - http://www.internationaloliveoil.org/

### DECISION No DEC-18/96-V/2008

### DETECTION OF DEODORISED OLIVE OILS IN EXTRA VIRGIN OLIVE OILS

#### THE COUNCIL OF MEMBERS OF THE INTERNATIONAL OLIVE COUNCIL,

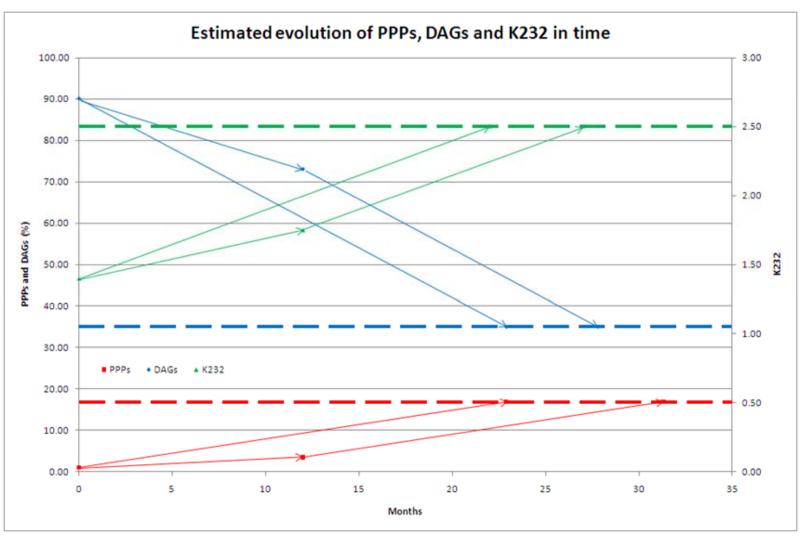
**Having regard** to the recommendation made by the Technical Committee at its fifth meeting on the occasion of the 96th session of the Council of Members,

Whereas means are urgently needed to facilitate the detection of the fraudulent admixture of deodorised olive oil to extra virgin olive oil until the chemists define a position on the most reliable method and acceptable repeatability values;

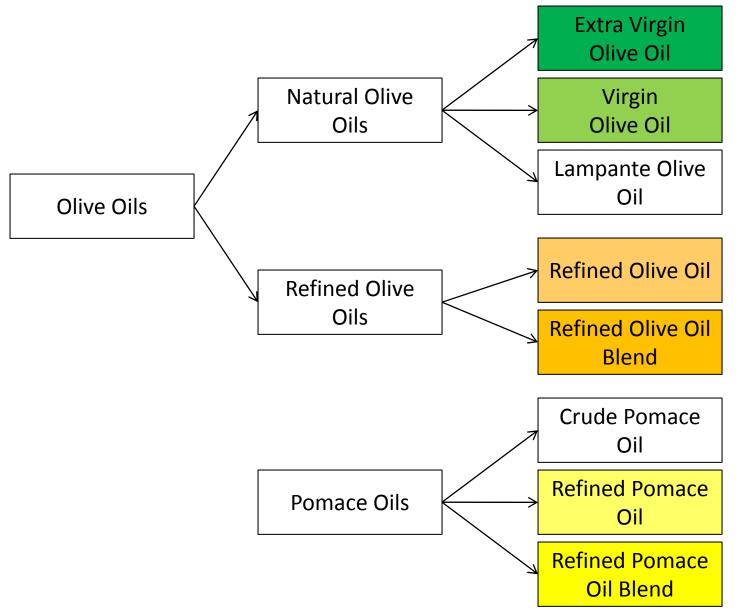


Treatment	Storage time (months)	Initial PPP Ratio (%)	PPP Ratio (%) after temperature
20ºC	6	1.5	1.5
100ºC − 5 min	6	1.5	10.9
150°C – 5 min	6	1.5	73.3
200ºC − 5 min	6	1.5	96.4

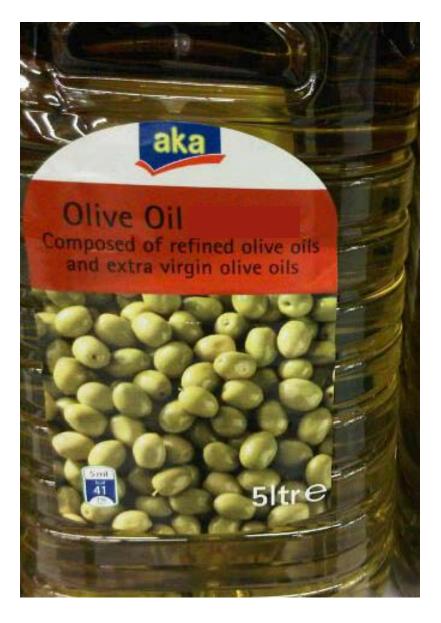




















#### CODEX STANDARD FOR OLIVE OILS AND OLIVE POMACE OILS

CODEX STAN 33-1981 (Rev. 2-2003)1

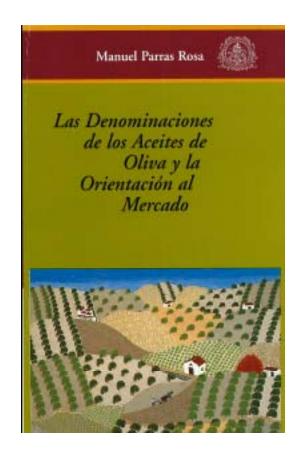
- 3.5 Olive oil: oil consisting of a blend of refined olive oil and virgin olive oils suitable for human consumption. It has a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams and its other characteristics correspond to those laid down for this category <sup>3</sup>.
- 3.6 Refined olive-pomace oil: oil obtained from crude olive-pomace oil by refining methods which do not lead to alterations in the initial glyceridic structure. It has a free acidity, expressed as oleic acid, of not more than 0.3 grams per 100 grams and its other characteristics correspond to those laid down for this category<sup>2</sup>.
- 3.7 Olive-pomace oil: oil consisting of a blend of refined olive-pomace oil and virgin olive oils. It has a



Formerly CAC/RS 33-1970; Revised in 1989

<sup>&</sup>lt;sup>2</sup> This product may only be sold direct to the consumer if permitted in the country of retail sale.

The country of retail sale may require a more specific designation.





"The current confusing denominations do not assist in a better knowledge and differentiation of the different olive oil grades. It is our opinion that current denominations create confusion or, at least, do not assist in differentiating the various olive oil grades having a negative incidence in the knowledge that the consumer has about them" (Page 11). "We must change the current denominations for other names that help consumers to differentiate between the different grades of olive oil" (Page 13).

"It seems clear that the naming policy followed until now tried to avoid a product differentiation up to the point that, it could be argued that, the denominations do not follow labelling regulations related to food products according to which the retail denomination should not have an intention to mislead the consumer. The use of adjectives such as "Extra light", "fine", "pure", etc. are clear examples of that" (Page 33).

"Denomination policies for olive oil have been mostly technical in nature and they have never been oriented towards facilitating the consumers' purchasing process. That is, they have been policies decided from the offer perspective and not oriented towards the consumer" (Page 34).

"It is extremely hard to understand how the term "pure" can be used to refer to a blend of different grades of olive oil. According to the dictionary, "pure" means "free of any mix or blend"" (Page 39).

"Using the term "Olive Oil" for a grade is also a mistake because, if we mention olive oil, it is not clear if we are talking about all olive oils or just one of its grades. Equally misleading is to be able to continue utilising the terms "pure" or "100% pure" after the grade pure olive oil has been removed" (Page 40).

"In terms of denominations, olive oil Standards managed to confuse consumers rather than facilitating information about the characteristics of the different oils. AS a consequence, consumers cannot, on one hand, differentiate the different grades of olive oil, and on the other hand, they cannot recognise virgin and extra virgin olive oils as the only grades that have not undergone chemical or thermal treatments" (Page 41).



#### 52001AE0709

Opinion of the Economic and Social Committee on: the Commission Report to the Council and the European Parliament on the quality strategy for olive oil, and the Proposal for a Council Regulation amending Regulations No 136/66/EEC and (EC) No 1638/98 as regards the extension of the period of validity of the aid scheme and the quality strategy for olive oil

Official Journal C 221, 07/08/2001 P. 0068 - 0073

3.1.2.3.7. Oils sold for consumption (1.3.3)

3.1.2.3.7.1. Aware of the low level of consumer knowledge concerning the quality and types of olive oil, the Commission proposes to clarify and reduce the number of current designations at both the wholesale and retail levels. The ESC welcomes the Commission's stance, and it is to be hoped that its proposals will be sufficiently understood by consumers, for whom the suggested changes are basically intended.

3.1.2.3.7.2. There is a clear lack of analytical procedures for identifying specific lawful blends of olive oil and determining the proportions involved. The most sensitive point of the Commission proposal under this heading is the present use of the term "olive oil", which is at the same time a generic designation and a specific category.

3.1.2.3.7.3. This overlap introduces an element of confusion which should be removed. This could be achieved by selecting a new term for the present "olive oil" category (blend of refined and virgin oils), adding some qualification - with neither a negative or a positive connotation - which clearly distinguishes it from the generic term olive oil. Given the possible economic repercussions for some of the subsectors involved, the ESC proposes a prior survey of consumers and users to sound out their reaction to a possible change in the current designation of olive oil. In any case, efforts must continue to raise the profile of higher-quality oils and allow base prices for the different categories of olive oil to be more clearly differentiated. In so doing, it must be borne in mind that because of their unique production process, higher-quality oils generate more employment, require shorter processing times and are more environment-friendly.



#### 52000PC0855

Proposal for a Council Regulation amending Regulations No 136/66/EEC and (EC) No 1638/98 as regards the extension of the period of validity of the aid scheme and the quality strategy for olive oil /\* COM/2000/0855 final - CNS 2000/0358 \*/

Official Journal 213 E , 31/07/2001 P. 0001 – 0004

The second principal aspect is the current use of generic designations for specific types of olive oil. The biggest problem in this respect is the mandatory use of the designation "olive oil" for blends of refined olive oil and certain virgin olive oils. Consumers are to some extent misled by a mixture which guides them to one sort of olive oil, to the detriment of virgin olive oils. The type of oil concerned should be described accurately, without detracting from its merits, in particular those of a nutritional nature.



COUNCIL REGULATION (EC) No 1513/2001 of 23 July 2001

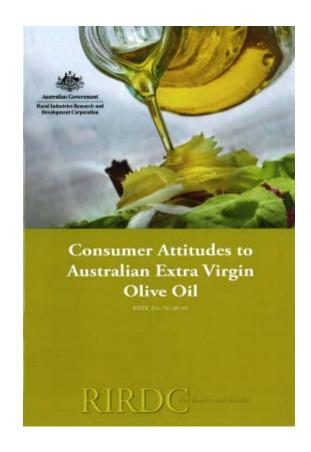
amending Regulations No 136/66/EEC and (EC) No 1638/98 as regards the extension of the period of validity of the aid scheme and the quality strategy for olive oil

(6) The descriptions and definitions of olive oils and olive-pomace oils are in certain cases unsatisfactory and could lead to confusion among both consumers and operators. Such problems cause disruption on the market and, in order to avoid them, new descriptions and definitions should replace those laid down in the Annex to Regulation No 136/66/EEC.

#### 3. OLIVE OIL — COMPOSED OF REFINED OLIVE OILS AND VIRGIN OLIVE OILS

Olive oil obtained by blending refined olive oil and virgin olive oil other than lampante oil, having a free acidity content expressed as oleic acid, of not more than 1 g per 100 g, and the other characteristics of which comply with those laid down for this category.



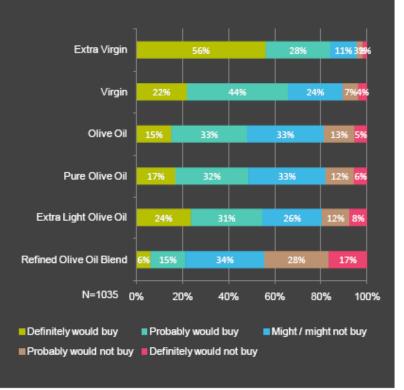


RIRDC funded research study on "Consumer Attitudes to Australian Extra Virgin Olive Oil" states: "Extra light appears most strongly associated with low/good fat credentials when compared with Extra Virgin".



# Extra Virgin is the variety of olive oil that is most likely to be purchased by consumers.

- More than 80% of consumers show a positive purchase intent for Extra Virgin Olive Oil.
- "Olive", "pure olive" and "extra light" oil varieties have a similar purchase intent profile with between 42-45% claiming a positive purchase intent for these varieties.
- Refined Olive Oil Blend has the lowest purchase intent of all varieties and is significantly lower than either of the variety names that it would replace.

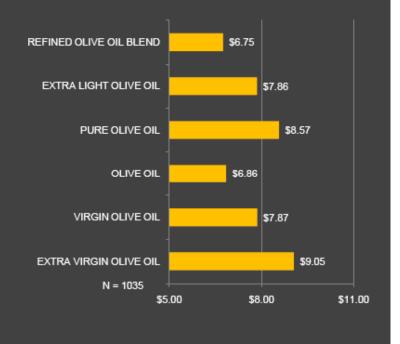






Consumers expect to pay a much lower price for refined olive oil blend than either of the two products it would replace.

- Extra Virgin Olive Oil is seen as the most premium of the olive oils with an average expected price of \$9.05 for a 500mL bottle.
- Consumers expect to pay between \$1.11 and \$1.82 less for the proposed name change of refined olive oil blend compared to the products it would replace.









# Australian Standard Next Steps

- Education and training of consumers and retailers.
- Adoption of Standard by retailers.
- Meeting with key stakeholders.
- On going survey (30 samples/3 months).







Australian Olive Association Ltd (A.B.N. 57 072 977 489) PO Box 134 MURRAY BRIDGE SA 5253 AUSTRALIA

Phone: +61 8 85357170

Email: president@australianolives.com.au

September 16 2011

#### **Catherine Haslock**

Senior Investigator
Enforcement - Melbourne Regional Office
Australian Competition & Consumer Commission

By email to <a href="mailto:Catherine.Haslock@accc.gov.au">Catherine.Haslock@accc.gov.au</a>

Re: Retail Sector Testing post- AS 5264-2011

Dear Catherine,

As discussed in our meeting of the 9<sup>th</sup> of August, the AOA has commissioned screening of retail olive oils. This will be done quarterly and is intended to monitor the state of the quality and authenticity of olive oils along with the labelling being used over time.

Since the publication of AS 5264-2011 there are will be progressive efforts to implement this Standard hopefully with support from the supply chain both for retail and bulk olive oil trades. With regard to bulk imports we have had discussions with Australian Customs and anticipate similar testing of that trade shortly. We will attempt to have a stakeholder meeting to discuss implementation of the Standard on October 19<sup>th</sup> at the offices of Choice in Sydney.

The results of the first survey are attached to this email along with a particular test of an olive oil brand Oz Olio labelled as Australian extra virgin olive oil. I will describe the Oz Olio results after I have described the results of the retail survey.

As background information the AOA asked two qualified laboratories in Australia – Australian Oils Research Laboratory, NSW DPI Wagga Wagga and Modern Olives Laboratory Services at Lara – to quote for this work. Modern Olives was selected to do the work on the basis of timeliness and cost effectiveness.

The instructions to the laboratory are attached at the end of this letter.

#### 1. General Comments About the Analytical Results

We are very disappointed in the results.

It appears that nothing has changed in the Australian olive oil market with regard to the poor quality and authenticity of many olive oils on offer to consumers in the retail sector in Australia.

This is despite the efforts of the AOA, NSWDPI, RIRDC, DAFF and the ACCC since 2008:

- In 2008 AORL Wagga Wagga tested oils and found numerous quality and authentic problems that were reported nationally by the ABC.
- Following that the ACCC did its own investigation, found similar problems and took some action.
- RIRDC funded extensive marketplace research that was presented at the ISF 2009 Fats and Oils Congress
  in Sydney in September 2009 that found about 80% of imported and 20% of Australian extra virgin olive
  oils for sale to consumers did not make the grade.
- During the 12 month process of developing AS 5264-2011, supported by DAFF and RIRDC, stakeholders were engaged and educated about the situation in Australia at a series of meetings. These stakeholders included the two major retailers and the importers association AOOA along with consumer groups.
- Minutes of those meetings reflect agreement with regard to the provisions of AS 5264 after extensive consultation and modification of its content to the satisfaction of all stakeholders.
- For some years Aldi supermarkets has been using the technology contained within AS 5264 doing its own testing and specifying this to its suppliers to ensure it offers the real thing to consumers as it does throughout Europe (along with Lidl). This is well known by all the other retailers.
- There has been and is ongoing media about the problems with olive oil quality here and overseas.
- There is widespread media support and consumer support via Choice and ACF for the revision of the denominations of olive oil to remove misleading terms such as extra lite, light, lite and pure from front of label replacing these with the truth for consumers that these are refined olive oils or blends.

So despite all of this much of the supply chain continues to thumb its nose at Australian government and industry efforts to have that supply chain deliver good quality authentic olive oils to consumers that is properly labelled and is what it says it is on the label.

Please consider this a formal complaint from the AOA seeking action by ACCC to address this poor situation for consumers. We believe that we are supported in this view by both Choice and ACF.

#### 2. Results of First Post AS 5264-2011 Retail Survey

The tabulated results and the certificates of analysis from Modern Olives accompany this letter. The data is divided between olive oils labelled as extra virgin and olive oil labelled with other denominations.

#### 2.1 Extra Virgin - Analysis Report 11/655

#### 2.1.1 Aigeon Oil

This oil failed K232, PPP and DAG tests and was rancid. It was not extra virgin olive oil and may have been adulterated with refined olive oil.

#### 2.1.2 Always Fresh Australian

This oil failed K232, PPP and DAG tests and was rancid. It was not extra virgin olive oil. There was also no lot identification/batch number.

#### 2.1.3 Bertolli-Fruity Taste

This oil had taste defects, was not extra virgin and the claimed best before date was not supported by the oxidative stability test.

#### 2.1.4 Cobram Estate – delicate

OK

#### 2.1.5 Cobram Estate – robust

OK

#### 2.1.6 Coles LO4771

This oil failed the PPP test and was rancid – not extra virgin. Its level of PPP indicated the possibility of adulteration with refined and deodorised olive oil.

#### 2.1.7 Coles 9:41

ОК

#### 2.1.8 Woolworths - Homebrand

This oil failed the PPP test and was rancid — not extra virgin. Its level of PPP indicated the possibility of adulteration with refined and deodorised olive oil. Its best before date was greater than 2 years and there was no lot identification/batch number.

#### 2.1.9 IGA Signature

This oil had a best before date of greater than 2 years – a time not supported by the oxidative stability test.

2.1.10 Jingilli

This oil had a taste defect – it was rancid and not extra virgin.

2.1.11 Lupi -Fruity Taste

This oil failed UV tests, was rancid and not extra virgin. Its best before date was not supported by the oxidative stability test.

2.1.12 Moro

This oil failed the PPP test, is not extra virgin and this indicated the possibility of adulteration with refined/deodorized olive oil. There was no best before date.

2.1.13 Ollo - Mild and Mellow

The best before date was not supported by the oxidative stability test.

2.1.14 Red Island

OK

2.1.15 The Olive Tree - delicate

OK

2.1.16 The Olive Tree - fresh and fruity flavour

ОК

#### 2.1.17 Viva – late harvest

The best before date was not supported by the oxidative stability test.

#### 2.1.18 Woolworths Select

OK

#### 2.1.19 Zafarelli

This oil failed FFAs, DAGs and was faulty (musty). Not extra virgin. It also had a best before date of greater than 2 years.

#### 2.1.20 Romanelo

This oil failed FFAs, UV tests, PPPs and DAGs and was faulty (musty). Not extra virgin. There was no best before date.

#### 2.1.21 Manzanillo Grove

OK

#### 2.1.22 Lighthouse

OK

#### 2.1.23 General comments

These results are consistent with those of previous work such as that reported at the ISF 2009 conference on fats and oils. In general there appears to be little or no improvement state of extra virgin olive oils in the marketplace since then.

#### 2.2 Other Denominations

#### 2.2.1 Homebrand Extra Light

The oil was defective and rancid. The denomination was wrong. There was no lot/batch number and the best before date is greater than 2 years.

#### 2.2.2 Lupi Extra Light

The oil was defective and rancid. The denomination was wrong. There was no best before date.

#### 2.2.3 Moro Extra Light

The denomination was wrong. There was no best before date.

#### 2.2.4 Moro Puro Olive Oil

The denomination was wrong. There was no best before date.

#### 2.2.5 Bertolli Pure olive oil

The denomination was wrong. There was no best before date

#### 2.2.6 Carbonell Olive Oil

The denomination was wrong. There was no best before date.

#### 2.2.7 Lupi Olive Oil

This oil was rancid and defective. The denomination was wrong. There was no best before date.

#### 2.2.8 Always Fresh Olive Oil

The denomination was wrong. There was no best before date.

#### 2.2.9 General comments

The misleading and deceptive nature of the labelling of refined or blended olive oils such as these was identified during the development of AS 5264-2011. They would be better to comply with the denominations outlined in AS 5264-2011.

In addition there are several rancid oils in these samples – something that is unacceptable in any oil and fat including olive oil. It shows a total disregard for quality by the suppliers and retailers of these oils.

Only one of these oils had a best before date and that one was wrong in fact highly unlikely.

#### 3. Oz Olio Extra Virgin Olive Oils

#### 3.1 Background

Oz Olio is an olive oil brand of:

The Big Olive

1 High St

Kensington SA 5068

Australia

Phone: +61 8 8431 9111 Fax: +61 8 8431 9133

See also http://www.bigolive.com.au/products/olive-oil/oz-olio/

After a report by one of its members the AOA had testing done on 4 bottles of Oz Olio olive oil and the results of these are in the attached analysis report 11/621 from Modern Olives Laboratory Services. These oils were purchased from Ritchies Supa IGA at Yarra Glen Vic on the 11<sup>th</sup> of August 2011.

Copies of the back labels are also attached in this report. Astoundingly two of the labels cite a free fatty acid level of 0.9% - above the AS 5264 and all other Standards limits of 0.8% and confirmed by testing.

#### 3.2 Oz Olio Rich and Flavourful 500 ml

This oil was defective – lampante – and failed the free fatty acid test. Failure of the DAGs test indicates very poor quality olives used to make the oil and it is probably quite old – several years old.

#### 3.3 Oz Olio Fruity and Aromatic 1 l

This oil failed UV and PPP tests. It was also defective with regard to its taste. The high level of PPPs strongly indicates the presence of refined and deodorized olive oil.

#### 3.4 Oz Olio Fruity and Aromatic 500 ml

This oil failed the free fatty acid test as well as the PPP and DAGs tests. It was also defective with regard to its taste. The complete absence of PPPs in the oil along with the high level of DAGs indicates that it is very old.

#### 3.5 Oz Olio Rich and Flavourful 1 l

This oil failed the PPP test and was defective – lampante. It is highly likely to contain refined and deodorized olive oil.

#### 3.6 General Comments

The Oz Olio website claims that these are premium Australian Cold Pressed Extra Virgin Olive Oils. Their chemistry and taste test results indicate that they are anything but these claims. The AOA is extremely concerned to see such poor quality olive oil olive oils claiming to be Australian Extra Virgin olive oils.

#### 4. The Australian Oils with Quality Problems

Both Jinjilli and Viva are signatories to the Australian Olive Industry Code of Practice (COP). The Industry Compliance Committee of the COP Chaired by John Ashe will be informed of the problems with these oils and requested to take urgent remedial action. We are happy to keep you informed of this process and its progress if that is of interest.

With regard to the Oz Olio oils and Always Fresh Australian, neither The Big Olive or Always Fresh have ever been members of the AOA or a signatory to the COP so the AOA s unable to take any action. The AOA requests that the ACCC takes whatever action it can in the matter of these Oz Olio olive oils.

Yours Sincerely,

Paul Miller President

#### **Attachment**

# AUSTRALIAN OLIVE ASSOCIATION LTD OLIVE OIL MARKET SURVEY POST PUBLICATION OF AUSTRALIAN STANDARD AS 5264-2011 BRIEF AUGUST 15 2011

#### Introduction

The Post Implementation Review of the Standard is an important part of the Australian Standard development process. This review will focus on different aspects such as rate of implementation, impact on local and O/S producers, evolution of olive oil quality in the Australian market, etc. The ongoing survey of olive oils sold in Australian supermarkets, boutique shops and food service channels is a critical part of this process.

#### **Proposed Survey**

The survey should cover a minimum of 30 olive oil samples taken and analysed every 3 months. Those samples should be distributed approximately as follows:

•	Boutique EVOO Australian:	10%
•	Boutique EVOO O/S:	5%
•	Supermarket EVOO Australian:	30%
•	Supermarket EVOO O/S:	20%
•	Supermarket VOO & ROO:	20%
•	Food Service Australian:	5%
•	Food Service O/S:	10%

It is expected that after the 4 annual sampling rounds, all brands and most of the oil types should have been sampled and analysed at least once.

The minimum analyses to be conducted in those samples are:

For EVOO: Free fatty acids (FFA); Peroxides Value (PV); UV Coefficients (K270, K232 & DK); Pyropheophytins (PPPs); Diacylglycerols (DAGs); Induction Time (IND) and panel test (PT).

For VOO, ROO: Free fatty acids (FFA); Peroxides Value (PV); UV Coefficients (K270, K232 & DK); Induction Time (IND) and panel test (PT).

Those analyses need to be performed following official methods listed in the AS 5264-2011. Labelling requirements according to AS 5264-2011 will have to be checked and reported.

These surveys will be required to identify the rate of adoption of the new Standard and the number of brands not complying with it (and in time the response of the market to any government intervention).

All those results will be presented in quarterly reports to the AOA technical committee who will then decide if further analysis may be required for certain oils, if some oils need to be retested, etc.

Results of those surveys will be communicated to the relevant stakeholders (ACCC, Customs, Choice, etc.) and will be utilised to analyse the Standard facing its review at the end of the Post Implementation period.