

Tuesday, August 16, 2011



AWRI
COMMERCIALSERVICES
OUR KNOWLEDGE, YOUR RESOURCE

AWRI Red Wine Closure Trial - Expression of interest

We have just initiated a new red wine closure benchmarking trial, examining how 10 common closures, including 5 screw caps, influence the development of a premium red wine. The key deliverables from this new AWRI closure trial are:

- Sensory and chemical profiling of the development of a Barossa Shiraz subjected to the different closures technologies;
- Quantifying the impact that closure properties, specifically oxygen transmission rate (OTR), have on the evolution of red wine; and
- Identify consumer preferences for the varying wine styles resulting from different closures.

This information will empower you with the knowledge and confidence required to select the closure(s) that your wines deserve. The trial will be run over 24 months, with the likelihood of extending to 48 months. The full range of closure technologies are covered, examining the 10 closures as shown in Table 1.

Table 1: List of closures

Supplier	Closure	Closure type
Amcor	Stelvin® (tin saran)	Screw cap
Amcor	Stelvin® (saranex)	Screw cap
Amcor	Stelvin® Lux (tin saran)	Screw cap
ASA	Screwcap (tin saran)	Screw cap
Guala	Wak (tin saran)	Screw cap
Amorim	Twin Top®	Technical cork
CSA	Natural Cork ref 2	Natural cork
Nomacorc	Classic +	Synthetic
Oeneo Bouchage	Diam 5	Technical cork
Vino-lok	Vino-lok	Alternative (glass)

Closure suppliers have also submitted an additional 6 closures and these results may be shared at the entrant's discretion for all the trial participants to see. The analytical regime and reporting time points are detailed in Table 2. This trial was bottled in November 2010, and the total package oxygen (TPO) levels were managed to ensure comparable bottling conditions for all closure technologies. The results from the first 6 months of analysis are available now, and differences in the wines are already evident!

You can choose to access all or just some of the trial results by choosing one of the following options:

- The **complete package**, providing access to the results of all closure technologies, for a total of **\$18,000**. This package also includes a customised presentation and interpretation of the results through a Webinar presentation at both the 12 and 24 month time points.
- The cost effective **3-pack** option, designed to satisfy the needs of smaller wineries. Any 3 closure technologies can be selected as part of this package for a total of **\$7,000**. Customised packages are available upon request.

All payments are split across 2 financial years, and results are available now!

If you wish to be involved in this project, please contact me on (08) 8313 1152, 0418 681 533, or alternatively at warren.roget@awri.com.au. Please do not hesitate to contact me if you wish to discuss the content of this document. I hope it provides you with sufficient information to make an informed choice and I look forward to the opportunity to collaborate with you.

Kind Regards,

Warren Roget
Technical Manager
AWRI Commercial Services

ABN 83 007 558 296
T +61 8 8303 6600
F +61 8 8303 6621
E commercial@awri.com.au
www.awri.com.au

The Australian Wine Research Institute Ltd
Hartley Grove Urrbrae (Adelaide) SA 5064
PO Box 197 | Glen Osmond
SA 5064 | Australia



AWRI

Table 2: Analytical testing

Analytical parameter	Purpose	Method	24 hours	3 months	6 months	12 months	18 months	24 months	Optional extra timepoint(s)
Free & Total SO ₂	Used to assess wine shelf life under various closure technologies	Lachat Quik Chem FIA 8000 series	✓	✓	✓	✓	✓	✓	
Red wine colour including OD420/520	Used to assess wine shelf life under various closure technologies	Modified Somers method	✓	✓	✓	✓	✓	✓	
Spectral fingerprinting	This non destructive technology can be used to screen for variability of closure performance across a large sample set.	NIR Spectroscopy	✓	✓	✓	✓	✓	✓	
Oxygen transmission rate	Quantify the key closure property linked to driving wine style evolution	AWRI <i>in-situ</i> method			✓	✓		✓	
Low molecular weight sulfur compounds	Presence of these compounds has been linked with undesirable reductive wine attributes	GC-MS with sulfur compound detector			✓	✓	✓	✓	
Sensory descriptive analysis	To quantify wine flavour and aroma attributes	AWRI sensory panel				✓	✓	✓	
Consumer preference*	To quantify wine stylistic changes preferred by consumers	External consumer panel						✓	
Closure and bottle dimensions	General information	AWRI Laboratory Method		✓					
Extraction force / Removal Torque	Used to assess closure performance	Mecmesin Versatest / Testequip 2000 torque meter		✓					
Reporting	Formally document trial results	AWRI Technical Report	✓		✓	✓	✓	✓	

* To be conducted on a subset of wines, covering the range of wine styles resulting from the different closure technologies.