RESEARCH

In pursuit of premium

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Australian winemakers know. So does Wine Australia, the marketing arm of the Australian Wine & Brandy Corporation. As researchers, we know it too. It is time to go premium.

To continue Australia's winning streak in producing and selling a decent drop, it's not enough to sit back and trade off the sector's good reputation. We're known internationally for reliable wines that deliver on price and quality. But we're capable of even more.

Premium is the way to go. In its strategy document *Directions to 2025*, released last year, Wine Australia said what the sector was thinking:

"Australia's success as a maker of multi-regional brands of high quality and affordable price has over-shadowed Australia's place as a producer of top-end wines.

"Until it is broadly recognised around the world that the imperatives of terroir, typicité, site and vintage are today as much a foundation of Australia's regionally distinct and fine wine dimension as they are in traditional Europe, there is no room for complacency."

The message is clear. We want consumers to trade up when they buy Australian wine. We want to deliver higher quality and generate higher returns. We don't want to be hamstrung by our success in producing multi-regional wines. But how do we put the theory into practice?

At The Australian Wine Research Institute, our job is to use science and research to help the wine sector to meet its objectives. And once again we have delivered.

The key to unlocking the door to premium wines could be tannin. Tannin is the invisible ingredient in wine that locks in the colour and adds the spectacular dimension of texture. The beauty of tannin texture is its many dimensions, from the feeling of silk to suede or sandpaper.

A wine's texture comes to life when tannin teams up with proteins in the mouth, at a molecular level. This texture is known as 'astringency' and is perceived on the palate.

Wine without tannin is like a wet weekend. The colour drains out, leaving the ripest red dull, faded and brown. But our research has found that tannin is more than just a chemical. It can mean an upgrade to premium class.

A new tannin test developed at the AWRI is just one way that we can help grapegrowers, winemakers and marketing teams make better decisions about how to produce and sell the best Australian wines.

The test uses simple equipment, is easy to perform and delivers quick, reliable results. Winemakers can build their own test-kit or use the AWRI's analysis service. Regular testing throughout production means that processing methods can be changed to create the desired quality or style of wine, in line with tannin targets.

We have tested Shiraz and Cabernet Sauvignon wines from all around Australia and found that higher quality wines consistently contain optimal concentrations of tannin. With the help of major Australian wine companies, a range of wines were assessed and graded for quality, before we tested them for tannin.

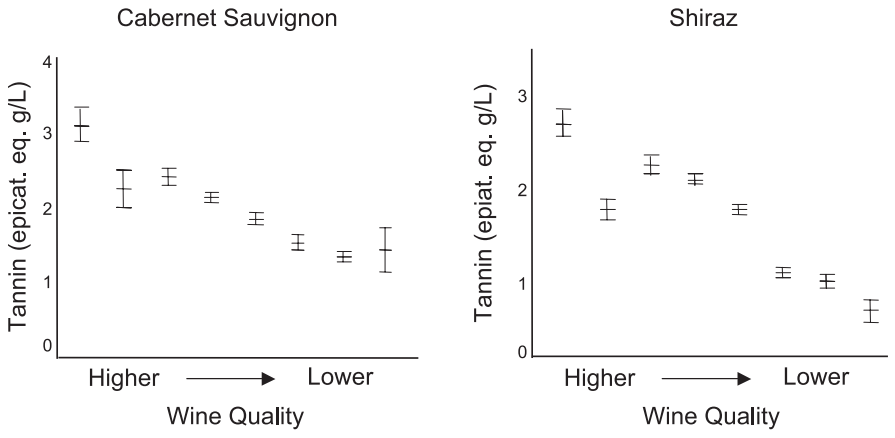
Not only did we find that the higher quality wines contained more tannin, we also discovered—in a separate study—that there are serious benefits to knowing the amount of tannin that different wine consumers prefer.

In a consumer preference study published last year, the AWRI's team of sensory experts selected six Shiraz and six Cabernet Sauvignon wines representing a wide range of styles and tannin concentration.

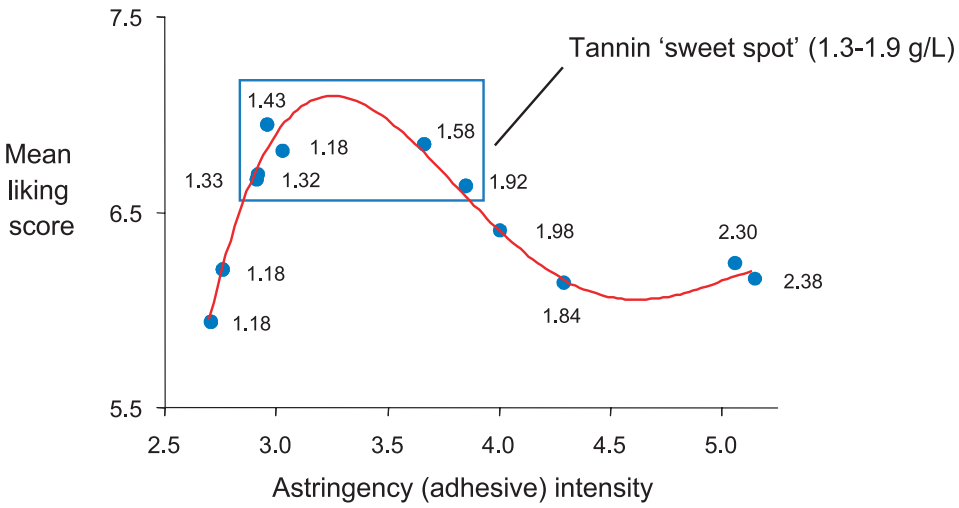
More than 200 consumers tasted the wines, scored how well they liked them and the results were clear: the most popular wines were midway on the tannin concentration scale. For these consumers there is a tannin 'sweet spot' that is not too little and not too much—and you can measure it.

So what does this mean for winemakers and marketers? It means that with the help of the AWRI, science has met art in the evaluation of wine quality and consumer preference.

Until now, wine quality has been subjective—based on the assessment of



The higher the quality, the higher the tannin concentration. The AWRI tested a range of Shiraz and Cabernet Sauvignon wines with the help of a major Australian wine company in 2006. The wines were assessed and graded for quality, then tested for tannin.



Not too much or too little. The tannin 'sweet spot' for consumers in this study shows they prefer wines with intermediate tannin levels, measured by astringency.

professional tasters with trained noses, the right knowledge and the words to describe what they taste and smell.

Tannin measurement takes wine evaluation into new territory. For the first time, quality can be expressed in a different language—the language of mathematics, where numbers can reveal some of wine's secrets. Suddenly, assessing quality and consumer preference becomes more objective.

Our research has also proved that tannin is a driver of wine style and regional character. Wine Australia's 'Regional Heroes' are wines from particular regions, promoted under the sector's new marketing strategy. They are: "Wines from *somewhere*, rather than wines from *anywhere*," according to *Directions to 2025*.

But how do you define a wine from somewhere, not anywhere? What drives regional character? Again, tannin provides a clue. Our surveys of the past five vintages of Shiraz and Cabernet Sauvignon wines from across Australia reveal that tannin not only varies with vintage—it also varies from region to region.

This means that winemakers who are trying to define a certain character, to characterise a particular region or style, can use tannin as a measure of their success. It can also help grapegrowers, as they try to grow grapes to meet style and quality requirements in times when drought can affect the tannin concentration of grapes and hang-time is also a factor.

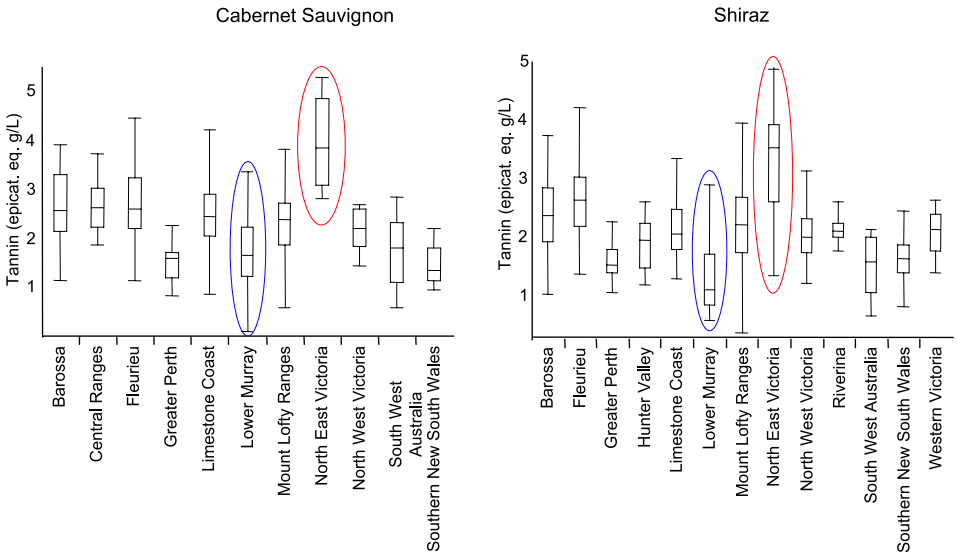
Over the five vintages, we saw a general increase in tannin from year to year. This is probably due to climate change—less water means more concentrated grapes which produce more tannin since tannin resides in the skins and seeds of grapes, rather than the juice and flesh. The connection between high quality wines and optimal tannin concentrations means this could be used to our sector's advantage.

As the Australian wine sector considers new markets and new opportunities, tannin may also lever open new doors to new markets. Its astringent texture on the palate is liked by some consumers and not others.

It might emerge, for example, that new markets for Australian red wine in Asia might have a preference for particular tannin levels. Knowing how much tannin a wine contains offers greater certainty as to which markets to target with which wines and a new spin for marketing teams.

Above all, as AWRI researchers, our aim is to put our knowledge of wine science to good use. Our research shows that tannin is like a weather vane—it can show which way a wine is likely to go in terms of quality, regional character and whether consumers think it is any good.

What's more, our research is always improving. Real-time tannin tests using equipment most wineries have to hand, are also on their way. The results could make the difference between an average bottle, a 'Regional Hero' with character or an 'Icon' premium brand with all the benefits that go along.



Tannin—the key to regionality. AWRI surveys of the last five vintages of Shiraz and Cabernet Sauvignon wines from across Australia show that tannin not only varies with vintage—it also varies from region to region.

Acknowledgements

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