

New Zealand Sauvignon blanc: What makes it unique and do Oregon USA consumers like it?

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Report to New Zealand Wine Growers

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The objective of this research was to determine what the consumer market in Oregon, USA, preferred in terms of Sauvignon blanc flavours. The research was conducted in two phases. Firstly, using the sensory evaluation skills of a trained and experienced taste panel, we sought to determine scientifically and map the flavour profile of 2005 vintage New Zealand, French, American, Chilean and Australian Sauvignon blanc. In the second phase, eight of the twenty seven wines considered were selected to assess the taste preferences of Oregon wine consumers.

MATERIALS & METHODS

Twenty seven commercially released Sauvignon blanc wines from France, USA, Australia, Chile, and New Zealand were selected for the flavour profile evaluation. New Zealand Sauvignon blanc was represented with wine selections from the three leading Sauvignon blanc growing regions: Marlborough, Wairarapa, and Hawke's Bay. With the exception of two of the French wines, where only the 2004 vintage was available, all the wines in this study were 2005 vintage.

Twelve trained panellists, each with over 250 hours of instruction and practice in Sauvignon blanc flavour assessment, evaluated the flavour profiles of the wines in this study. The twelve panellists evaluated each of the twenty seven wines in triplicate.

Reference standards used to identify and quantify seventeen varietal flavour attributes were: sweet-sweaty, passionfruit, capsicum, boxwood/cat's pee, passionfruit skin/stalk, grassy, flinty/mineral, citrus, bourbon, apple lolly/candy, tropical, mint, fresh asparagus, canned asparagus, stonefruit, apple, herbal floral, and honey mead.

After the sensory evaluation, eight wines representing the full product space were evaluated. One wine from each of France, USA, Chile, Hawke's Bay, Wairarapa and the three wines from Marlborough were selected for consumer assessment. Consumers, who simply rated their preferences amongst the wines, were recruited in Oregon on the basis of their being "wine consumers."

RESULTS AND DISCUSSION

In Figure 1, we see that Marlborough Sauvignon blanc wines are noticeably distinctive in their predominance of capsicum, sweet-sweaty passionfruit, passionfruit skin, tropical, apple and stone fruit characteristics. The other wines have predominantly flinty/mineral, and bourbon flavour characteristics.

Figure 2 confirms that the character of Marlborough Sauvignon blanc wines (South Island) was significantly different from both the international and North Island wines in the 2005 vintage. The Chilean wines were the closest in character to Marlborough wines, but they lacked the fruitier notes.

Figure 3 reveals the overall liking mean scores recorded by the Oregon consumers in the study. Using Analysis of Variance (ANOVA), there are few significant differences in wine preferences. However, the Wairarapa and French Sauvignon blanc wines were greatly preferred over the Chilean and Hawke's Bay wines, which had the least amounts of green characteristics. The lower levels of green characteristics in Chilean and Hawke's Bay wine relative to Wairarapa and French wine was found during trained panel evaluations of sensory attributes: grassy, capsicum, passionfruit skin/stalk, mint, floral herb and fresh asparagus. The data suggest that Oregon consumers prefer green characteristics in Sauvignon blanc. Over half of these consumers normally drink wine once a week.

Table 1 and 2 shows the demographic information for the consumers in the study.

Figure 4 is a preference map, created by correlating trained panel data with consumer data. A cluster analysis identifying consumer clusters, and their desired product characteristics, is shown. There were three distinct consumer clusters 1(38%), 2(36%) 3(26%) from an external preference map analysis (Figure 4).

- a. Cluster 1 were predominately females (69%), who liked a sweet sweaty passionfruit, tropical, passionfruit skin/stalk, apple style Sauvignon blanc and spent less on wine and were older than the other clusters.
- b. Cluster 2 liked a flinty bourbon Sauvignon blanc style, were predominately women (61%), and had more people in higher income brackets, but were more infrequent drinkers and least likely to purchase Sauvignon blanc.
- c. Cluster 3 had more Sauvignon blanc consumers did not like the apple lolly/candy, citrus, stonefruit, apple, mint style wine. They tended to be younger, predominately male (68%) and spent more money on wine and made more money than Cluster 1.

To date, Californian-style Sauvignon blanc has been the main varietal influence for Oregon consumers. The 2004 and 2005 vintages of American Sauvignon blancs were assessed as high in grassy, apple lolly, citrus, and mint characteristics. The American wines contained green notes but not the tropical fruity notes found in the Marlborough wines.

Do Oregon consumers appreciate the flavour profile of Marlborough Sauvignon blanc? This seems unlikely. While those surveyed were aware of Marlborough Sauvignon blanc, using the descriptors 'clean, herbaceous, mineral, flinty, green, stinky,' very few of them stated that Marlborough Sauvignon blanc exhibited both fruity and green characteristics.

Do Oregon consumers like New Zealand Sauvignon blanc?

The 2004 study presented at the ICCS in Christchurch found that New Zealand wine consumers clearly preferred New Zealand Sauvignon blanc to similar French, Australia and South African wines. Oregon consumers do not share the same high preference (Lund 2006). While Oregon consumers like Sauvignon blanc, they do not appear to have a distinct preference. In fact, a third of consumers in this study only drink Sauvignon blanc in the summer, whereas only 17% New Zealand wine consumers drank Sauvignon blanc in the summer.

RECOMMENDATION

The Oregon consumers polled in this study regard New Zealand Sauvignon blanc as a high quality wine, but in the blind tasting this was not necessarily reflected in their scores. An educational marketing campaign may need to address this discrepancy between expectations and perceptions. An educational marketing campaign could give American consumers an understanding of New Zealand Sauvignon blanc. Studies have linked consumer sensory perception expectation with consumer product image as important for the success of the product purchase (Backstrom & Johansson 2006).

APPENDIX

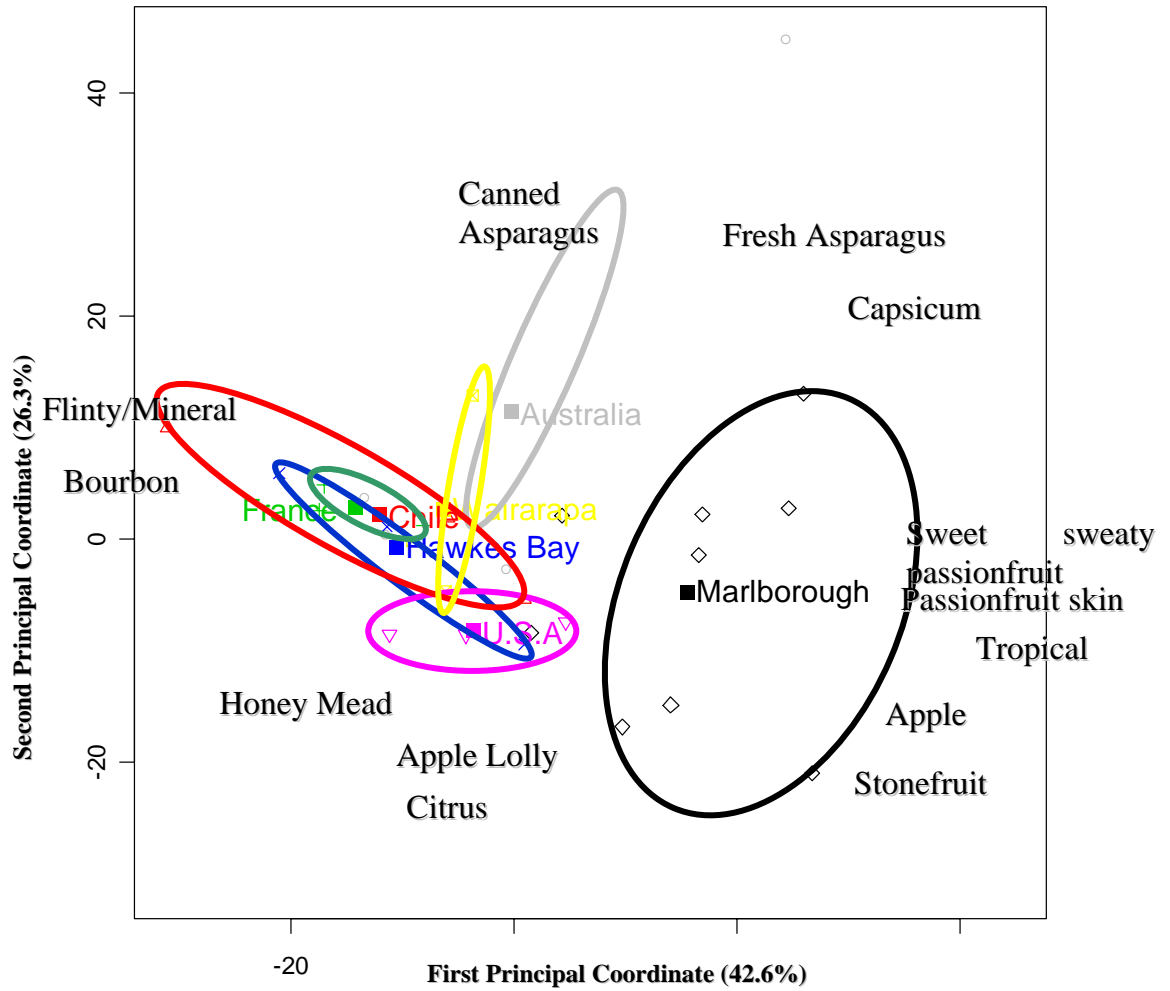


Figure 1. Principal component analysis using the first two principal components to explain 2005 ratings of Sauvignon blanc wines from five countries.

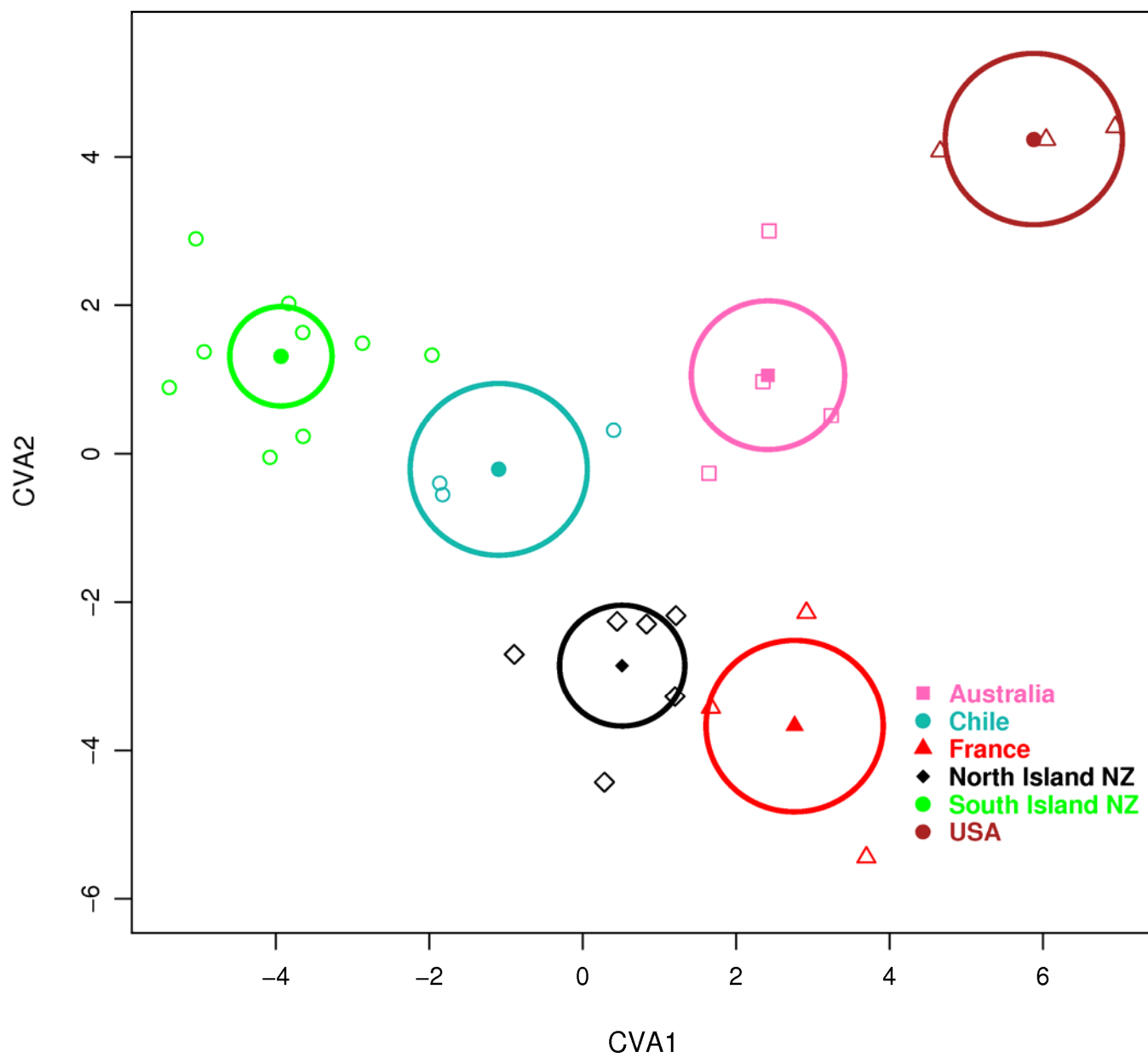


Figure 2. Canonical Variate Analysis of 2005 Sauvignon blanc wines from five countries.

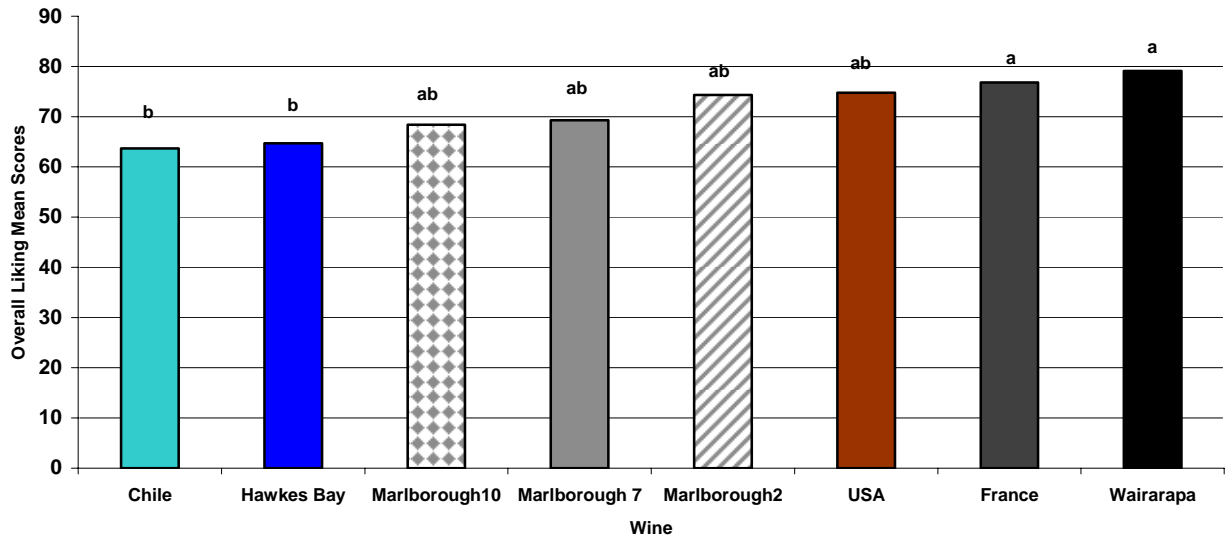


Figure 3. Overall liking mean scores of American consumers comparing eight Sauvignon blanc wines. Bars with different letters are significantly different from one another ($P < 0.05$).

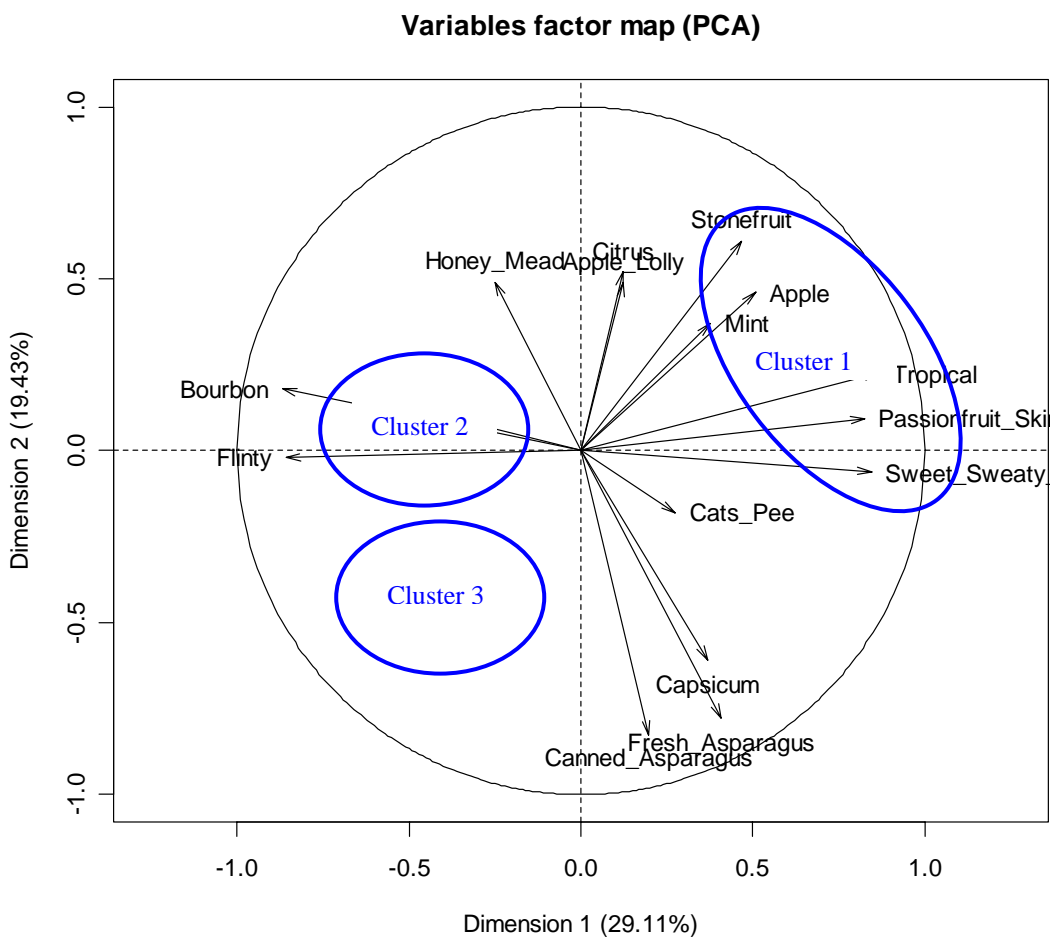


Figure 4. Cluster analysis of American consumer preferences for seventeen Sauvignon blanc attributes.

Table 1. Demographic information from the Oregon USA consumer panel (n=85).

Demographic	Percentage
Gender	
Female	44%
Male	56%
Age	
18-24 years	6%
25-34 years	27%
35-44 years	15%
45-54 years	26%
> 55 years	26%
Status	
Single	13%
In a relationship	2%
Couple living together	15%
Married	61%
Divorced	5%
Separated	2%
Widowed	2%
Frequency of wine consumption	
Once a day	5%
3-4 times a week	29%
Once a week	53%
Once a month	12%
Once a year	1%
Never	0%
Income	
<US\$25,000	13%
US\$25,001 to US\$50,000	32%
US\$50,001 to US\$75,000	25%
US\$75,001 to US\$100,000	8%
US\$100,001 to US\$150,000	12%
>US\$150,000	4%
Do not wish to answer	7%
Ethnicity	
USA	92%
African	2%
Canadian	1%
South American	1%
European, Asian, Australian, New Zealander	0%
Other	3%
Do not wish to answer	0%

Table 2. Demographic information from the Oregon USA consumer panel (n=85).

Wine	Percentage
Wine preference for red or white wine	
White	25%
Red	29%
Both	46%
Neither	0%
White wine varietal preferences	
Sauvignon blanc	6%
Pinot gris	29%
Riesling	25%
Chardonnay	25%
Sparkling	6%
White wine blend	4%
Gewurztraminer	0%
Other	5%
Time of day for Sauvignon blanc wine consumption	
Brunch	0%
Lunch	0%
After work/school	6%
Dinner	40%
Evening	53%
Other	1%
Place for Sauvignon blanc wine consumption	
Home	95%
Restaurant	86%
Friend's	84%
While participating in recreational activities	13%
A bar/pub	9%
Beach	8%
Work	1%
Average price spent on a bottle of wine	
< US\$7	13%
US\$7 to US\$11	53%
US\$11 to US\$15	24%
US\$15 to US\$20	8%
US\$20 to US\$25	2%

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- Backstrom K, Johansson U 2006. Creating and consuming experiences in retail store environments: Comparing retailer and consumer perspectives. *Journal of Retailing and Consumer Services* 13: 417-430.
- Lund CM 2006. What makes New Zealand Sauvignon blanc unique? A sensory perspective. *International Cool Climate Symposium*. Christchurch New Zealand.

