University of South Australia | Ehrenberg-Bass Institute for Marketing Science

Australian Government
Australian Grape and Wine Authority

Understanding Chinese sensory preferences for varied wine styles and the language used to describe them

FINAL REPORT to
GRAPE AND WINE RESEARCH & DEVELOPMENT CORPORATION

Project Number: **USA-1201**

Investigators: **Dr. Armando Maria Corsi, Dr. Justin Cohen, Prof. Larry Lockshin**

Research Organisation: **Ehrenberg-Bass Institute for Marketing Science – UniSA**

Date: **26/10/2014**

Table of contents

Executive summary	3-4
Research overview	5-7
Stages of research	8-77
Qualitative stage	8-21
Wine selection for quantitative stage	22-28
Quantitative stage	29-77
Recommendations	78-79
Acknowledgments	80

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Executive summary (1/2)

1. First study to scientifically validate the lexical equivalence of Chinese and Western taste descriptors refuting commonly accepted notions regarding the breadth of the Chinese lexicon
2. Generic descriptors are used more often than specific descriptors
   - Generic descriptors most commonly selected are smooth (平滑), fruity (果香), sweet (甜), mellow (醇), lengthy aftertaste (回味)
3. The most prevalent specific descriptors perceived in a wine are related to commonly eaten fruits in China. The various vegetables, meats and spices proposed by wine experts are not yet utilised by Chinese wine drinkers
4. When using specific Chinese descriptors, the most prevalent terms are:
   - Citrus fruits such as pomelo and lime for white and sparkling wines
   - Red fruits such as yangmei and dried Chinese hawthorns for red wines
   - Jackfruit and longan for dessert wines

Executive summary (2/2)

5. The majority of the hypothesised equivalences for specific Chinese and Western descriptors are confirmed across all wine styles:
   - 8 out of 14 specific descriptors for red wine & tawny
   - 11 out of 20 specific descriptors for white, sparkling and moscato
6. There is scant evidence that using Chinese or Western descriptors will impact likeability, willingness to buy or perceived price point and due to the fact that Chinese wine drinkers tend to favour certain lexical terms, it is advised that a case by case decision be made on how to orient an Australian wine
7. The wines that Chinese consumers like and are willing to buy are different from those they perceive as more expensive
8. This study validates the research protocol making it possible for further research to be conducted on other Australian wine styles and in other emerging wine markets that possess different cultural and linguistic backgrounds

Research overview

Australian Government
Australian Grape and Wine Authority

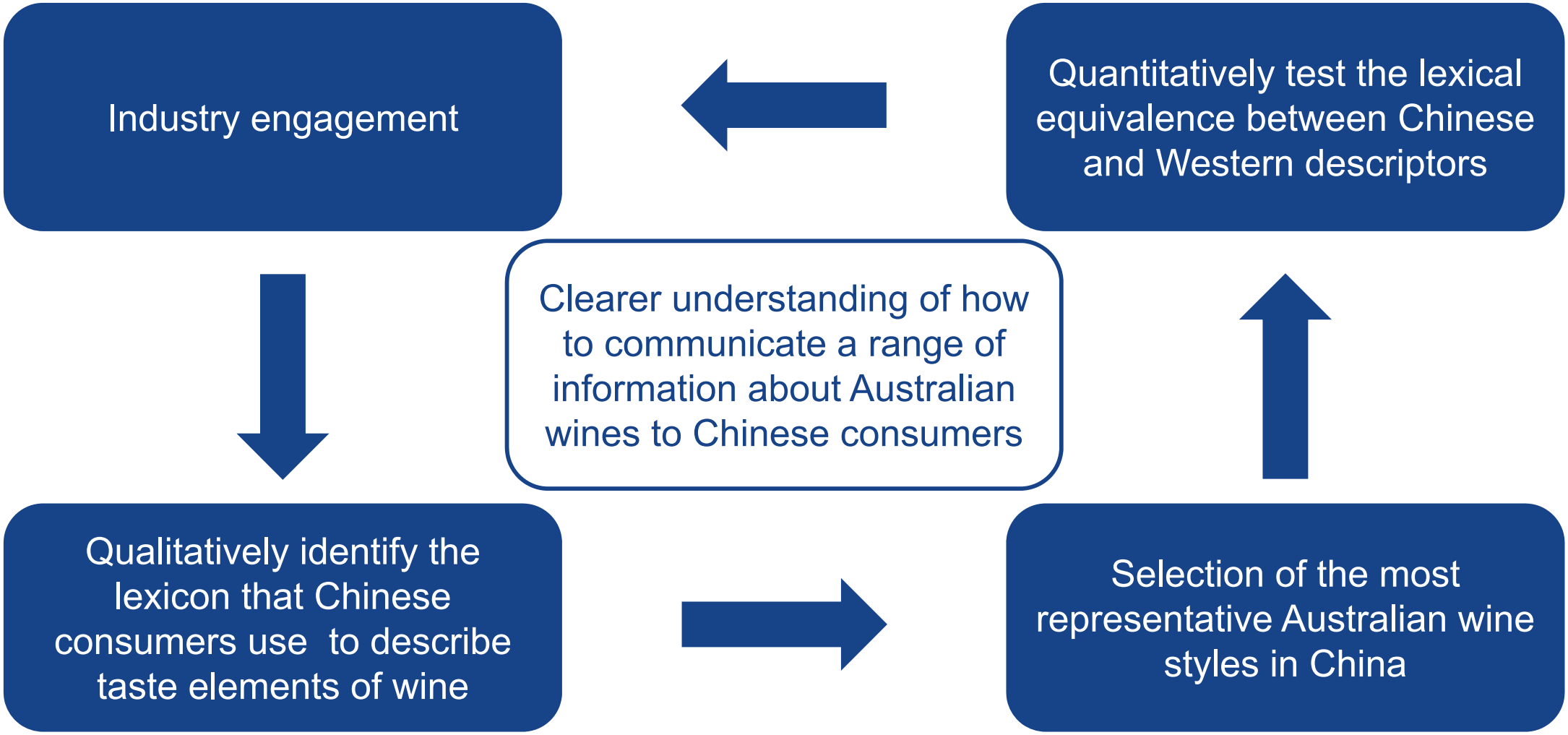
UniSA | Ehrenberg-Bass Institute for Marketing Science

Background

Due to China being a relatively new market with cultural and language issues for all imported wine producers, there is limited managerial information available and scant academic exploration of Chinese consumer behaviour to wine. **One key issue that needs investigating is the usage and impact of tasting terminology.** Currently, wine is most often described using the standard Western tasting terminology and the corresponding Western fruits, vegetables, spices and flavours that are used to describe the sensory profile of a wine.

The current available commentary rests in the domain of journalists, wine writers and, at the pinnacle of knowledge, a few Masters of Wine with an expertise in the Chinese market. **Jennie Cho Lee (2011) created a list of comparable Asian taste descriptors, but no scientific work has been conducted to investigate these proposed equivalences or their usage prevalence by Chinese wine drinkers.**

Structure of the research program



Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Qualitative stage

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research objectives:

Qualitative study of Chinese lexicon

Main objective

Identify the lexicon that Chinese consumers use to describe taste elements of wines

Secondary objectives

Assess the wines for:

- Acceptance and likeability
- Food matching suitability
- Consumption occasions
- Perceived price points

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

12 focus groups across 3 cities



12 focus groups across 3 cities

- Shanghai (16 March 2013)
- Chengdu (20 March 2013)
- Guangzhou (22 March 2013)

4 x 1hr groups in each of the 3 cities

- 1 x younger (25-30) female group
- 1 x older (31-50) female group
- 1 x younger (25-30) male group
- 1 x older (31-50) male group

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

Respondents profile

All respondents were required to:

- Purchase and consume imported wine off-premise at least once a month for the past 6 months
- Consume imported wine on-premise at least 3 times in the past 6 months
- Typically spend RMB 150-400 (~ AUD 15-50) on wine (off-premise)
- Do not buy wine predominately for gifting
- Be interested to taste Australian wines
- Be interested to try new and different styles of wine

Total sample size		48
Gender	Male	24
	Female	24
Age	30 and below	24
	30+	24
City	Shanghai	16
	Guangzhou	16
	Chengdu	16

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

16 wines divided into 4 sets, with 4 wine styles in each set tested across 4 groups in each of 3 cities

Wine	Set 1	Set 2	Set 3	Set 4
1. Sparkling	Coonawarra Sparkling Shiraz (nv)	Victoria Sparkling Rosè (nv)	South Australia Moscato (nv)	South Australia Chardonnay Pinot Noir (nv)
2. White	Margaret River Chardonnay 2011	King Valley Pinot Gris 2011	Claire Valley Riesling 2012	Adelaide Hills Sauvignon Blanc 2012
3. Red	Mornington Peninsula Pinot Noir 2011	Barossa Valley Grenache 2010	Barossa Valley Shiraz 2010	Margaret River Cabernet/Merlot 2010
4. Sweet	King Valley Moscato 2012	Riverina Botrytis Semillon 2008	South Australia Tawny (nv)	Rutherglen Brown Muscat (nv)

Wines served blind, in order of 1 to 4

Wine brands omitted due to confidentiality

Order of sets in each city			
	Shanghai	Chengdu	Guangzhou
Group 1	Set 1	Set 4	Set 3
Group 2	Set 2	Set 1	Set 4
Group 3	Set 3	Set 2	Set 1
Group 4	Set 4	Set 3	Set 2

Methodological note:

Focus groups

Focus groups are group discussions between a small group of people and are usually 1 – 1.5 hours long. In this research, product testing was included as a component of the exploration. **Wine Intelligence**, a recognised leader in market research, was commissioned to manage data collection. A Chinese moderator with wine experience ran the focus groups. The groups were kept to a small size of 4 people in order to make the moderation and maintenance of the wine evaluation feasible.

The key advantage of this method is that it allows respondents to not only provide concrete measurements of preferences, but also their interpretation of their wine experiences. The groups were split by gender and age to account for the cultural nuances of China, thus guaranteeing that the participants were comfortable sharing their opinions. The findings from focus groups are commonly used to frame the design of further quantitative investigation, as is the case for this research.

Research structure:

Focus group outline

Imported wine awareness

- Elicit top of mind awareness for wine attributes

Wine consumption behaviour

- Explore the relationship Chinese consumers have with wine

Blind wine tasting

*See following slide for protocol

- Understand wine style preferences and the generic and specific words used to describe them

Label influence

- Assess the impact of the wine labels on country of origin perceptions and taste preferences

This report is going to summarise only the results relative to the blind wine tasting. For more detailed information about the focus group results, please consult the full report on the qualitative stage of the project

Methodology:

Protocol for descriptor elicitation

Jeannie Cho Lee's 2011 book "Mastering Wine for the Asian Palate" was used to derive the Chinese wine descriptors for this research. Focus group participants were shown two types of flavour lists depending on the wine style tasted: one for white, sparkling and dessert wines, and one for red wines.

Participants were asked to:

- Complete a preliminarily questionnaire which captured their initial impressions of each wine
- Select from the lists of flavours, those that they felt were appropriate to describe each wine
- Select from the lists of flavours, those that they felt were inappropriate to describe each wine

Results:

The most common terminology applied was words such as “smooth”(平滑), “fruity”(果香) , “sweet”(甜), “mellow” (醇), and “lengthy aftertaste”(回味)

Sparkling wines	White wines
	
Red wines	**Dessert wines**
	

Australian Government
Australian Grape and Wine Authority

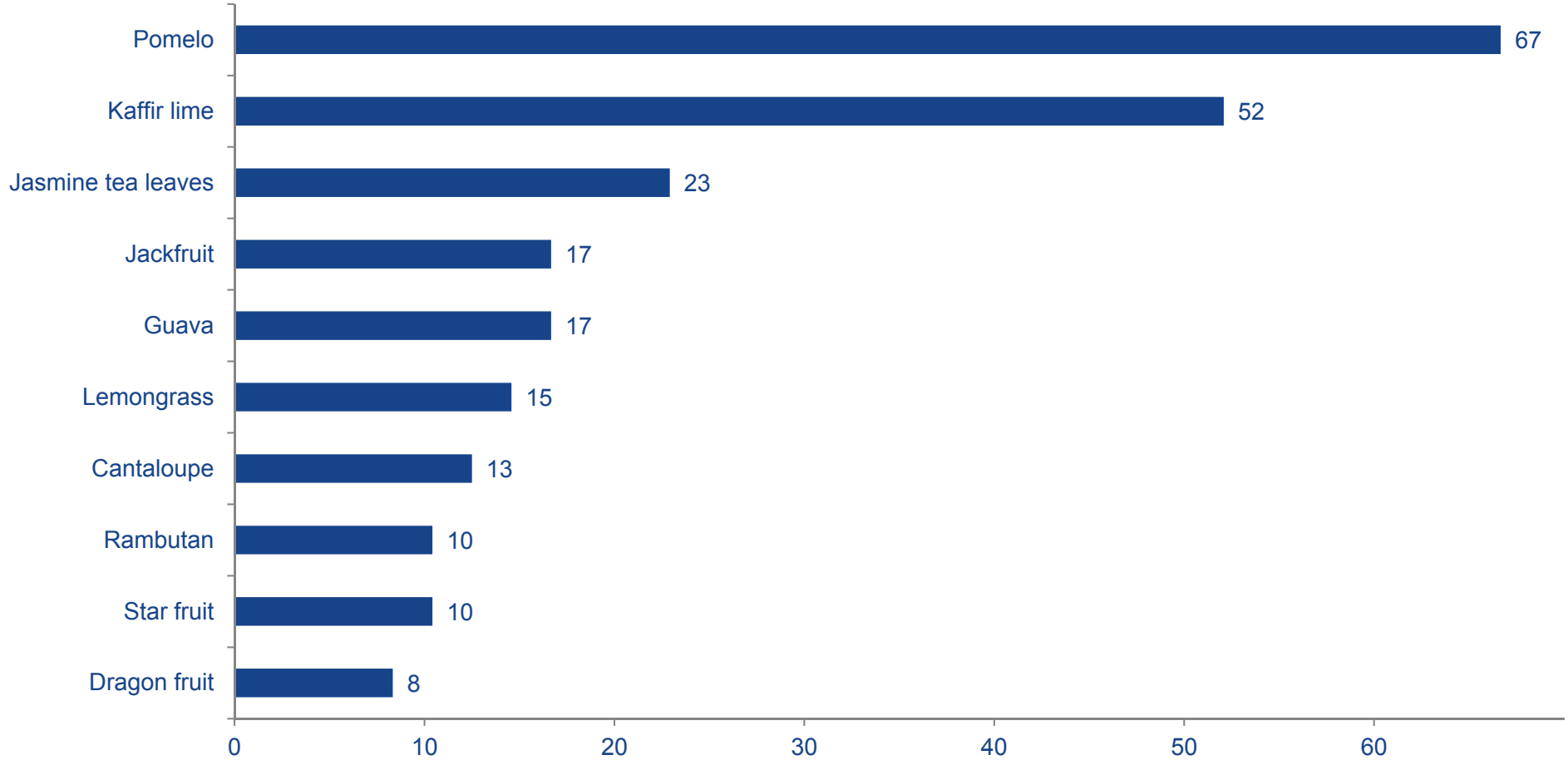
Data visualisation courtesy of Wine Intelligence

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results:

When consumers describe sparkling wine the most common descriptors are ...





Top 10 sparkling wine descriptors out of 32 specific descriptors tested

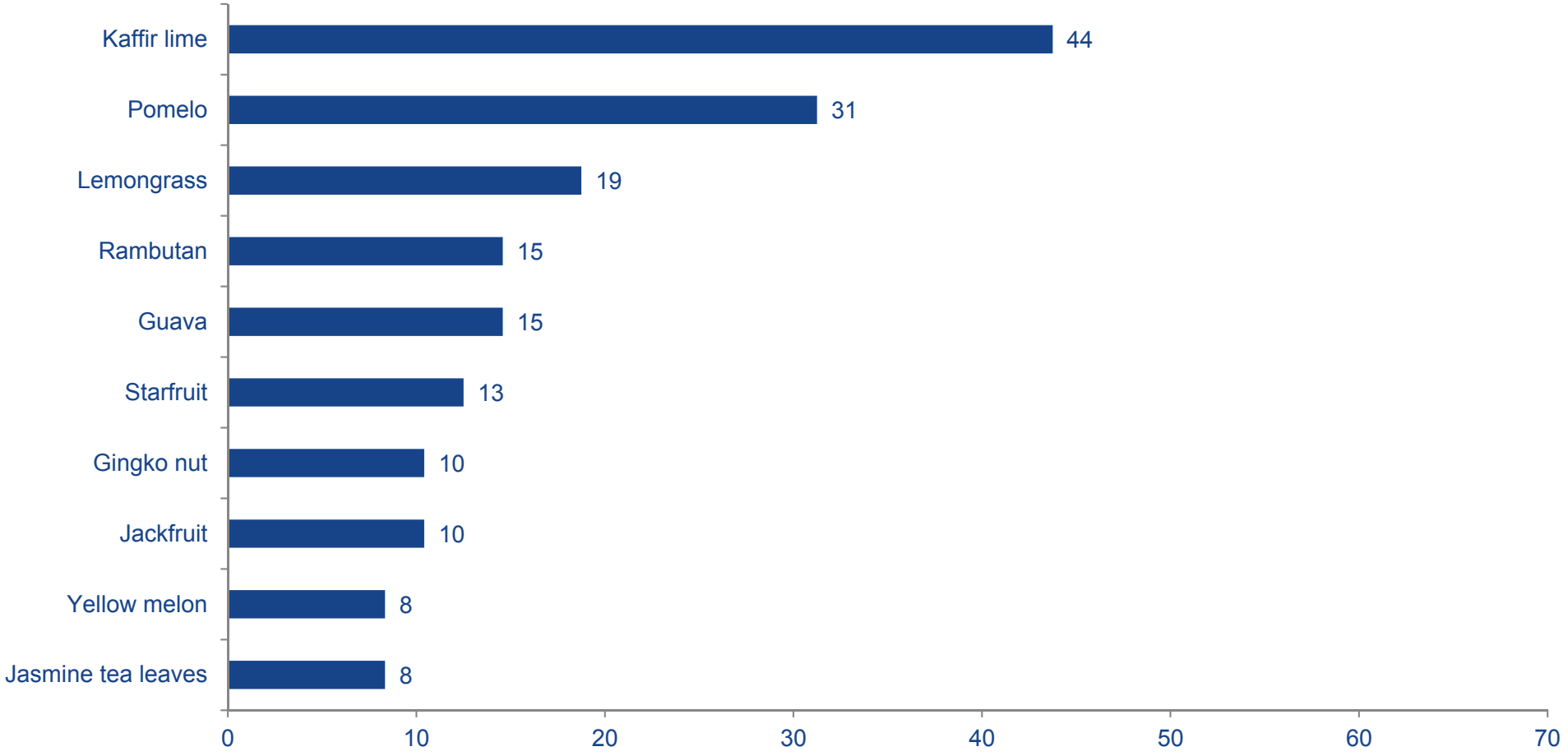
Australian Government
Australian Grape and Wine Authority

UniSA Ehrenberg-Bass Institute for Marketing Science

Results:

When consumers describe white wine the most common descriptors are ...





Top 10 white wine descriptors out of 32 specific descriptors tested

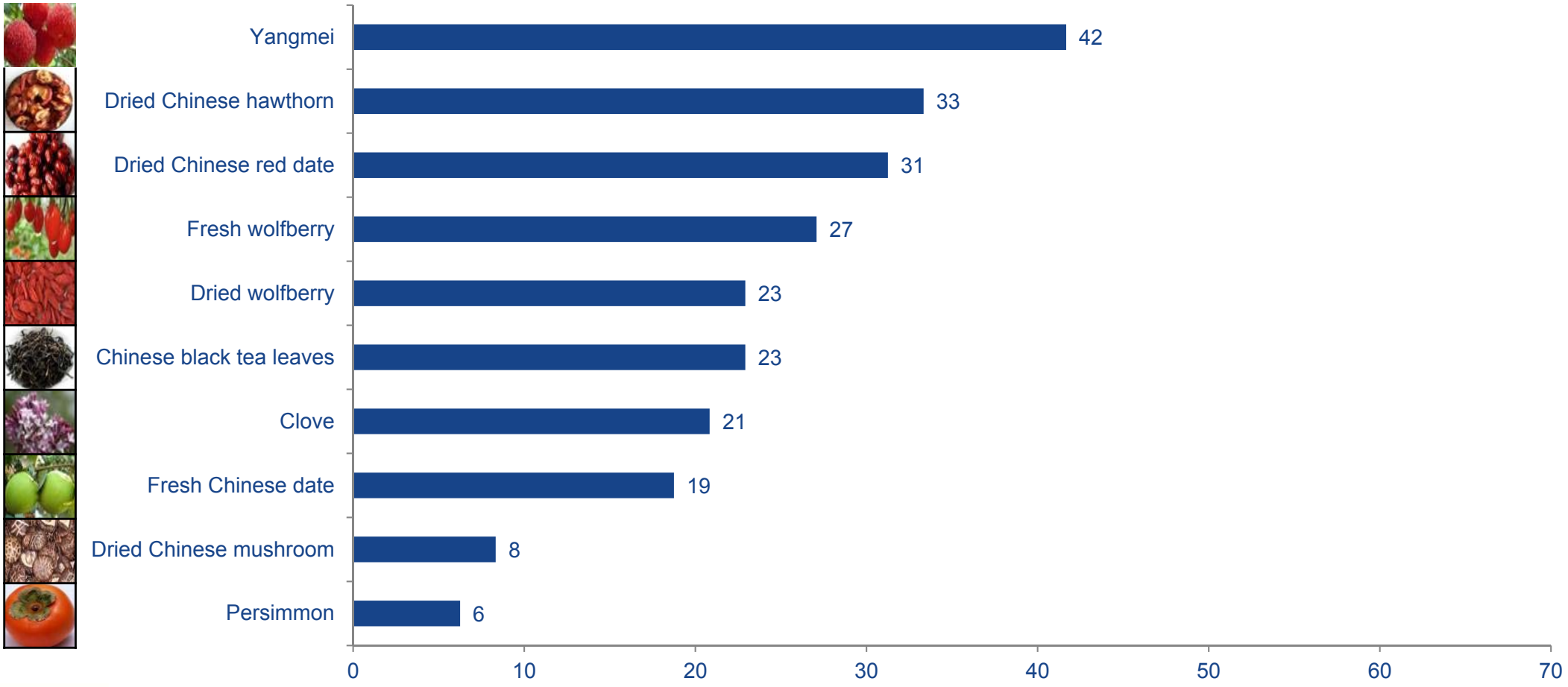
Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results:

When consumers describe red wine the most common descriptors are ...

Count - % - Red wine descriptors



Top 10 red wine descriptors out of 28 specific descriptors tested

Australian Government
Australian Grape and Wine Authority

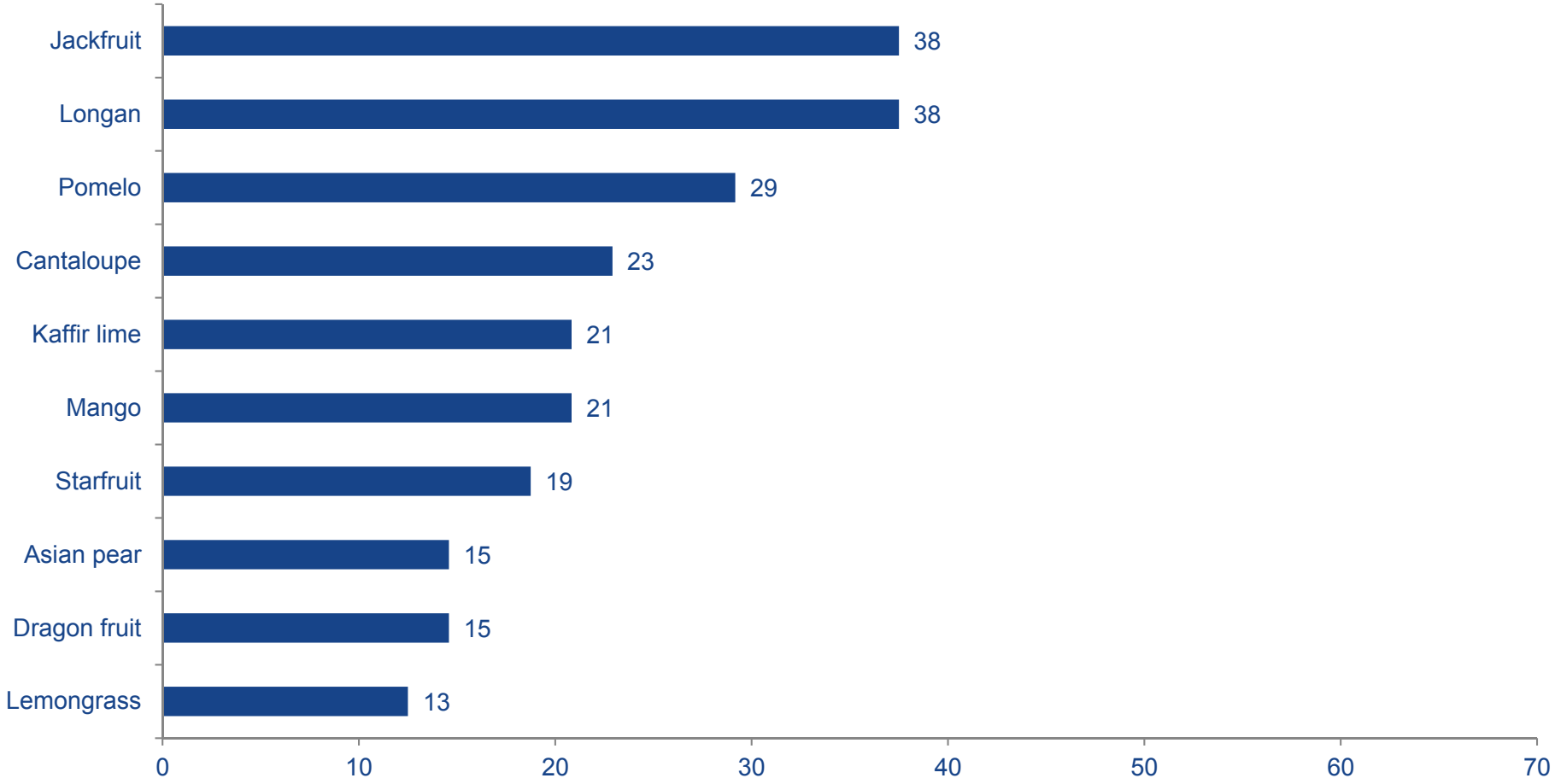
UniSA | Ehrenberg-Bass Institute for Marketing Science

Results:

When consumers describe dessert wine the most common descriptors are ...



Count - % - Dessert wine descriptors



Top 10 dessert wine descriptors out of 32 specific descriptors tested

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Summary of findings

The generic descriptors most commonly applied in the blind wine tasting are:

- Smooth (平滑), fruity (果香), sweet (甜), mellow (醇), lengthy aftertaste (回味)

Specific descriptor usage can be characterised as follows:

- In general limited to commonly eaten fruits
- Only a small subset of Cho Lee's terminology (2011) is utilised by respondents
- For white and sparkling wines, citrus fruits such as pomelo and lime are most prevalent
- For red wines, red fruits such as yangmei and dried Chinese hawthorns are most prevalent
- For dessert wines, jackfruit and longan are most prevalent

The results of this stage of research have identified a battery of generic and specific descriptors that will be applied in the quantitative stage of this research

Wine selection for the quantitative stage

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research objectives:

Wine selection for the quant stage

Main objective

Select 5 red wines, 4 white wines, 3 sparkling wines and 2 dessert wines

Secondary objectives

Utilise the sensory characterisation conducted by the Australian Wine Research Institute (AWRI) to:

- Ensure representativeness of the main styles of wine exported to China
- Guarantee distinctive differences in taste profile of wines selected for this study

The protocol and method of analysis applied for the selection of wines for the quantitative phase presented only in this report. For further information on exact characterisation and chemical analysis of wines please refer to the AWRI report

Australian Government
Australian Grape and Wine Authority

UniSA Ehrenberg-Bass Institute for Marketing Science

Research structure:

Wine sourcing and logistics

In order to achieve appropriate selection of wines and delivery to test centre locations the following protocol was implemented:

1. Lists of the Australian wines available for purchase in China were obtained from the major wine distributors in China
2. The AWRI selected an array of wines (25 in total) that represented the main Australian wine styles available in China. The selection criteria had a price cap in order to respect budget, yet quality wines were chosen over entry level wines to secure the existence of discernable stylistic wine properties
3. Six bottles of each wine were purchased and shipped to Adelaide for profiling. Distributors agreed to hold a further 18 bottles (six per city) of each wine for usage in the quantitative stage of the research in order to guarantee the wines were of uniform vintage, shipping and storage conditions
4. The wines were characterised and analysed by the AWRI and a final selection of 14 wines was made
5. Orders were finalised with the distributors and delivery to test centre locations arranged
6. All wines were photographed at each location and emailed to the team in Adelaide for verification
7. The wines were stored in a climate controlled area until experimentation

Methodology:

Panel training

Twelve AWRI assessors were convened for training for the sensory characterisation of the wines for this study. The panellists did the following:

- Attended four two-hour training sessions to determine appropriate descriptors for rating in the formal sessions using a consensus approach
- Tasted most of wines from the study
- Assessed the wines by appearance, aroma and palate
- Agreed on a final list of three appearance attributes, 12 aroma attributes and 13 palate terms to rate the 25 wines in three repetitions over three formal sessions
- Prior to the formal sessions, panellists assessed the wines over two practice sessions in the sensory booths
- Standards for aroma attributes were presented and discussed

Methodology:

Sensory assessment

The trained assessors conducted the sensory characterisation of the 18 wines according to the following protocol:

- 30 ml samples presented in six trays of three wines in 3-digit-coded, covered, ISO standard wine glasses at 22 – 24°C, in isolated booths under daylight lighting, with randomised presentation order within each tray of samples across judges
- Forced one minute rests implemented between samples with a 10 minutes break between trays
- Assessors required to change booth for each tray
- Samples assessed over three days, with one replicate assessed each day
- Intensity of each attribute rated using an unstructured 15 cm line scale from 0 to 10, with indented anchor points of ‘low’ and ‘high’ placed at 10% and 90% respectively

Methodology:

Sensory assessment (cont.)

- Data acquired using Fizz sensory software
- Panel performance assessed using Fizz, Senstools, and PanelCheck software
- Analysis of variance conducted for the effect of sample, judge and presentation replicate and their interactions, degree of agreement with the panel mean and degree of discrimination across samples. All judges were found to be performing to an acceptable standard
- Analysis of variance (ANOVA) was carried out using JMP 5.0.1a (SAS Institute, USA). Following ANOVA, Fisher's least significant difference (LSD) value was calculated (P = 0.05). Principal component analysis was conducted on the mean values of significant attributes averaged over panellists and replicates, using the correlation matrix

Results:

Wines selected for the quant stage

Style	Wine
Red wines	2010 Adelaide Hills Shiraz 2011 Mornington Peninsula Pinot Noir 2011 McLaren Vale Grenache 2011 Margaret River Cabernet Merlot 2010 Barossa Valley Shiraz
White wines	2011 Margaret River Chardonnay 2012 South Australia Viognier 2011 Margaret River Sauv. Blanc/Semillon 2012 Clare Valley Riesling
Sparkling wines	2005 Yarra Valley Chardonnay/Pinot Noir Sparkling North East Victoria Zibibbo Rosè Sparkling (nv) Australia Moscato Sparkling (nv)
Dessert wines	2012 King Valley Moscato South Australia Tawny (nv)

Australian Government
Australian Grape and Wine Authority

The Australian Wine Research Institute

Wine brands omitted due to confidentiality

UniSA Ehrenberg-Bass Institute for Marketing Science

Quantitative stage

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research objectives:

Quantitative study of Chinese lexicon

Main objective

Test the lexical equivalence between Chinese and Western descriptors

Secondary objectives

- Identify the descriptors Chinese consumers use to describe wines
- Understand what wines Chinese consumers like the most, are most likely to purchase, and perceived price points
- Understand what wines are more likely to be consumed for different consumption occasions
- Measure the impact of visual vs. verbal taste cues on wine choice

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

263 participants collected in 3 cities



Two-Day tasting sessions for each version of the questionnaire:

- Shanghai – Chinese (20-21 August 2013)
- Shanghai – Western (22-23 August 2013)
- Guangzhou – Chinese (25-26 August 2013)
- Guangzhou – Chinese (27-28 August 2013)
- Chengdu – Chinese (30-31 August 2013)
- Chengdu – Western (1-2 September 2013)

7 wines tried each day:

- 3 sparkling wines & 4 white wines (Day 1)
- 5 red wines & 2 sweet wines (Day 2)

Annovax, a leader in food & wine marketing research in China, was commissioned to run data collection for this stage of the project. A member of the project team from the Ehrenberg-Bass Institute supervised data collection *in loco*, guaranteeing that all experimental design and protocol was strictly adhered to.

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

Structure of wine evaluation (by wine)

Hedonic liking
(1 = "Dislike extremely" - 9 = "Like extremely")

Willingness to buy
(1 = "Definitely would not buy" - 5 = "Definitely would buy")

Check-All-That-Apply – Chinese Version
List of items provided to 50% of the sample

Check-All-That-Apply – Western Version
List of items provided to 50% of the sample

Consumption occasion

Perceived price point
(1 = "≤ 150 RMB" – 3 = "250-500 RMB" – 5 = "≥1000 RMB")

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Methodological note:

Check-All-That-Apply (CATA)

The check-all-that-apply (CATA) method was used to test the equivalence between Chinese and Western descriptors and to understand what terms Chinese consumers use to describe wines. The following protocol was applied for each wine:

- Respondents were randomly assigned to one of two experimental conditions – **Chinese** or **Western**
- A list of **generic** and **specific** descriptors was shown to each respondent
- The list of generic terms was identical for all the wines and experimental conditions
- The list of specific terms varied in relation to the style of the wine – **red & tawny**, or **white, sparkling & moscato** – and experimental condition – **Chinese** or **Western**
- Respondents were asked to consider the suitable lexicon from the list of descriptors for each wine they tasted and **check-all-that-apply (CATA)**
- Respondents could select as many descriptors as they wanted and link the same descriptor to more than one wine.
- Every respondent evaluated **all the wines** selected for the quantitative stage, meaning that every respondent saw the list of terms prepared for both wine styles.

This protocol allowed for the testing of the lexical equivalence of Chinese and Western descriptors

Instrument description:

List of generic descriptors tested

GENERIC DESCRIPTORS
Astringent
Sour
Mellow
Lingering
Fruity
Smooth
Intense
Refreshing
Sweet

GENERIC DESCRIPTORS
Pure
Full bodied
Bitter
High Alcohol
Light
Balanced
Oaky
Pungent
Spicy – for red wines and tawny only

Instrument description: Hypothesised equivalences

Red & Tawny

CHINESE	WESTERN
Yangmei	Strawberry
Dried Chinese hawthorn	Blackberry preserves
Dried wolfberry	Strawberry preserves
Dried Chinese red dates	Plum
Fresh Chinese red dates	Blackcurrant
Fresh wolfberry	Raspberry
Clove	Clove

CHINESE	WESTERN
Star anise	Star anise
Chinese black tea leaves	Dark cherries
Persimmons	Red plum
Chinese sausage	Cooked game
Pine nut	Vanilla
Chinese salted pork	Bacon
Chinese green peppers	Green bell peppers

Instrument description: Hypothesised equivalences

White, Sparkling & Moscato

CHINESE	WESTERN
Kaffir lime	Lemon
Jackfruit	Pineapple
Guava	Passion fruit
Pomelo	Grapefruit
Asian Pear	Apricots
Star fruit	Citrus fruit
Ginkgo Nut	Toast

CHINESE	WESTERN
Young Asian coconut	Vanilla
Saturn peach	Peach
Pandan Leaf	Asparagus
Dried chrysanthemum	Dried apricots
Rambutan	Butter
Mangosteen	Lychee
Longan	Gooseberry

CHINESE	WESTERN
Cantaloupe	Melon
Lemongrass	Grass
Jasmine	Flowers
Dragon fruit	Apple
Mango	Mango
Yellow lotus seed paste	Figs

Instrument description:

CATA – Red & Tawny

CHINESE VERSION	
八角/ Star anise	酸/ Sour
纯/Pure	柿子/ Persimmons
醇/Mellow	顺滑/ Smooth
淡/ Light	松子/ Pine nut
丁香/ Clove	山楂干/ Dried Chinese hawthorn
丰润/ Full bodied	甜/ Sweet
果香/ Fruity	香料/ Spicy
干红枣/ Dried Chinese red dates	鲜枸杞/ Fresh wolfberry
干枸杞/ Dried wolfberry	橡木味/ Oaky
高酒精度/ High alcohol	鲜红枣/ Fresh Chinese red dates
回味悠长/ Lingering	辛辣刺鼻/ Pungent
苦/ Bitter	杨梅/ Yangmei
浓烈/ Intense	中式红茶/ Chinese black tea leaves
平衡/ Balanced	中式腊肠/ Chinese sausage
清爽/ Refreshing	中式青椒/ Chinese green peppers
涩/ Astringent	中式咸猪肉/ Chinese salted pork

WESTERN VERSION	
八角/ Star anise	苦/ Bitter
纯 / Pure	李子/ Plum
醇/ Mellow	浓烈/ Intense
草莓/ Strawberry	培根/ Bacon
草莓酱/ Strawberry preserves	平衡/ Balanced
淡/ Light	清爽/ Refreshing
丁香/ Clove	青甜椒/ Green bell peppers
丰润/ Full bodied	涩/ Astringent
覆盆子/ Raspberry	酸/ Sour
果香/ Fruity	顺滑/ Smooth
高酒精度/ High Alcohol	甜/ Sweet
黑樱桃/ Dark cherries	香料/ Spicy
黑莓酱/ Blackberry preserves	香草/ Vanilla
黑醋栗/ Blackcurrant	橡木味/ Oaky
红李子/ Red plum	辛辣刺鼻/ Pungent
回味悠长/ Lingering	野味/ Cooked game

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Instrument description:

CATA – White, Sparkling & Moscato

CHINESE VERSION

菠萝蜜/ Jackfruit
白果/银杏/ Gingko nut
班兰叶/香兰叶/ Pandan leaf
纯/Pure
醇/ Mellow
淡/ Light
丰润/ Full bodied
番石榴/ Guava
果香/ Fruity
干菊花/ Dried chrysanthemum
高酒精度/ High alcohol
哈密瓜/ Cantaloupe – Hami melon
火龙果/ Dragon fruit
红毛丹/ Rambutan
回味悠长/ Lingering
苦/ Bitter
莲蓉/ Yellow lotus seed paste
龙眼/ Longan
芒果/ Mango
茉莉花/ Jasmine
浓烈/ Intense
蟠桃/ Saturn peach
平衡/ Balanced
清爽/ Refreshing
青椰子/ Young Asian coconut
涩/ Astringent
酸/ Sour
山竹/ Mangosteen
顺滑/ Smooth
甜/ Sweet
泰国青柠檬/ Kaffir lime
文旦/柚子/Pomelo
香茅/ Lemongrass
雪梨/ Asian pear
橡木味/ Oaky
辛辣刺鼻/ Pungent
洋桃/ Star fruit

WESTERN VERSION

菠萝/ Pineapple
纯/Pure
醇/ Mellow
草香/ Grass
淡/ Light
灯笼果/醋栗/ Gooseberry
丰润/ Full bodied
果香/ Fruity
高酒精度/ High alcohol
柑橘类水果/ Citrus fruit
黄油/ Butter
花香/ Flowers
回味悠长/ Lingering
苦/ Bitter
烤面包/ Toast
荔枝/ Lychee
芦笋/ Asparagus
蜜瓜/ Melon
芒果/ Mango
柠檬/ Lemon
浓烈/ Intense
平衡/ Balanced
苹果/ Apple
清爽/ Refreshing
涩/ Astringent
酸/ Sour
顺滑/ Smooth
甜/ Sweet
桃子/ Peach
无花果/ Figs
西柚/ Grapefruit
杏子/ Apricots
香草/ Vanilla
杏脯干/ Dried apricots
橡木味/ Oaky
辛辣刺鼻/ Pungent
西番莲/百香果/ Passionfruit

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

Session structure (by city)

Time periods	Day 1	Day 2	Day 3	Day 4
10:00 – 12:00	Preparation and set up (Staff)			
12:00 – 12:30	Lunch break (Staff)			
1:00 – 2:15	Sparkling + White CATA Chinese	Red + Dessert CATA Chinese	Sparkling + White CATA Western	Red + Dessert CATA Western
2:45 – 4:00	Sparkling + White CATA Chinese	Red + Dessert CATA Chinese	Sparkling + White CATA Western	Red + Dessert CATA Western
4:30 – 5:45	Sparkling + White CATA Chinese	Red + Dessert CATA Chinese	Sparkling + White CATA Western	Red + Dessert CATA Western

Research structure:

Session structure (by respondent)

DAY 1		DAY 2	
Time	**Activity**	**Time**	**Activity**
6 min	Sparkling wine 1	6 min	Red wine 1
2 min	Break	2 min	Break
6 min	Sparkling wine 2	6 min	Red wine 2
2 min	Break	2min	Break
6 min	Sparkling wine 3	6 min	Red wine 3
2 min	Break	2 min	Break
5 min	Socio-demo & psychographic questions	6 min	Red wine 4
6 min	White wine 1	2 min	Break
2 min	Break	6 min	Red wine 5
6 min	White wine 2	2 min	Break
2 min	Break	5 min	Socio-demo & psychographic questions
6 min	White wine 3	6 min	Sweet wine 1
2 min	Break	2 min	Break
6 min	White wine 4	6 min	Sweet wine 2
2 min	Break	2 min	Break
5 min	Socio-demo & psychographic questions	5 min	Socio-demo & psychographic questions

The allocation of the wines within each style was controlled by a randomised block design. The wines were presented monadically in three-digits coded wine glasses, each containing 30ml of liquid.

Research plan:

Sample distribution across cities

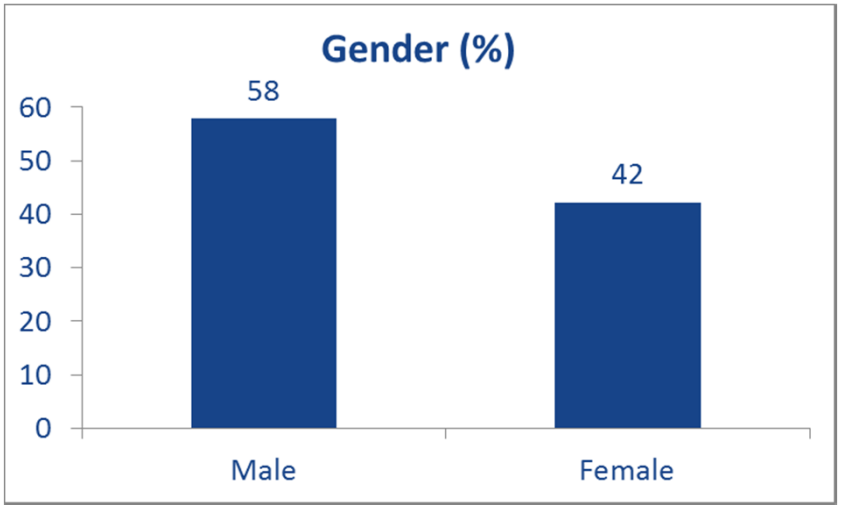
	Panel	Respondents
Shanghai	CATA (CHINESE)	51
	CATA (WESTERN)	52
Guangzhou	CATA (CHINESE)	40
	CATA (WESTERN)	40
Chengdu	CATA (CHINESE)	41
	CATA (WESTERN)	39
Total		**263**

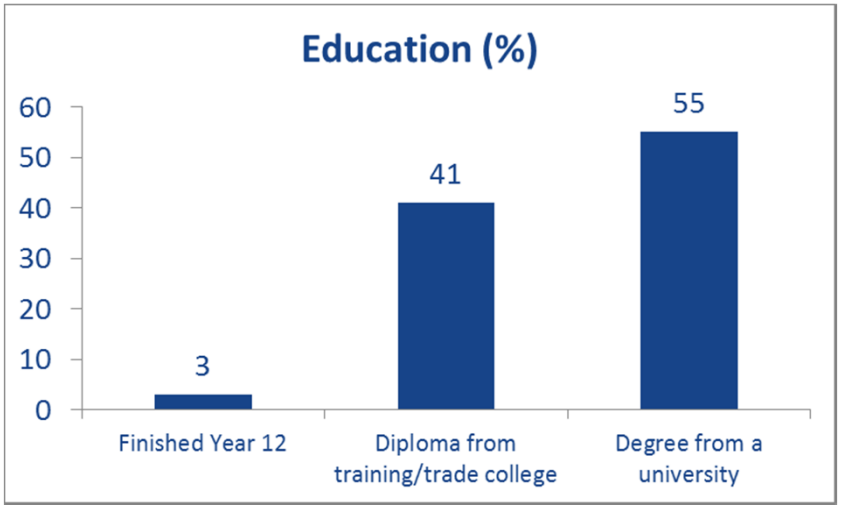
Australian Government
Australian Grape and Wine Authority

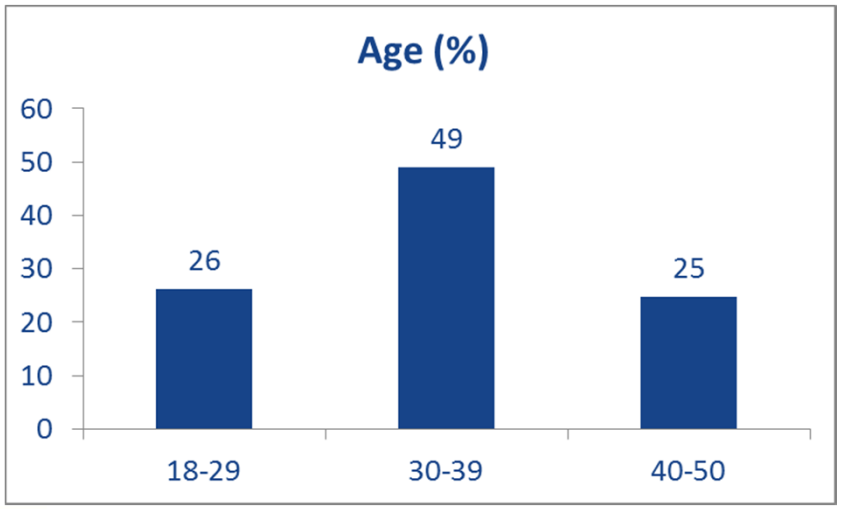
UniSA | Ehrenberg-Bass Institute for Marketing Science

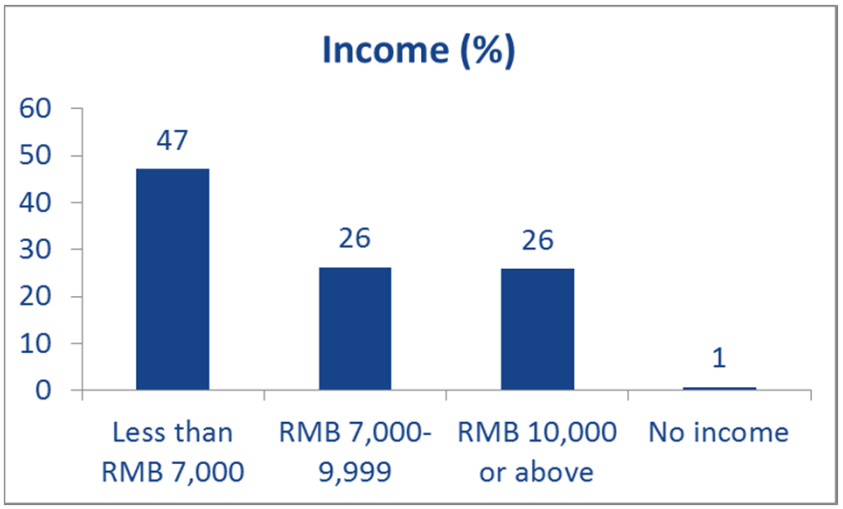
Research structure:

Respondents profile









Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research structure:

Wines used in the quantitative stage

Style	Avg. serving temperature	Wine ID No	Wine
Red wines	21.2	170	2010 Adelaide Hills Shiraz
	21.0	283	2011 Mornington Peninsula Pinot Noir
	21.3	396	2011 McLaren Vale Grenache
	21.4	509	2011 Margaret River Cabernet Merlot
	21.4	912	2010 Barossa Valley Shiraz
White wines	12.8	291	2011 Margaret River Chardonnay
	12.7	390	2012 South Australia Viognier
	12.8	448	2011 Margaret River Sauv. Blanc/Semillon
	12.9	919	2012 Clare Valley Riesling
Sparkling wines	9.7	405	2005 Yarra Valley Chardonnay/Pinot Noir Sparkling
	10.0	756	North East Victoria Zibibbo Rosè Sparkling (nv)
	9.8	937	Australia Moscato Sparkling (nv)
Dessert wines	12.9	713	2012 King Valley Moscato
	18.0	946	South Australia Tawny (nv)

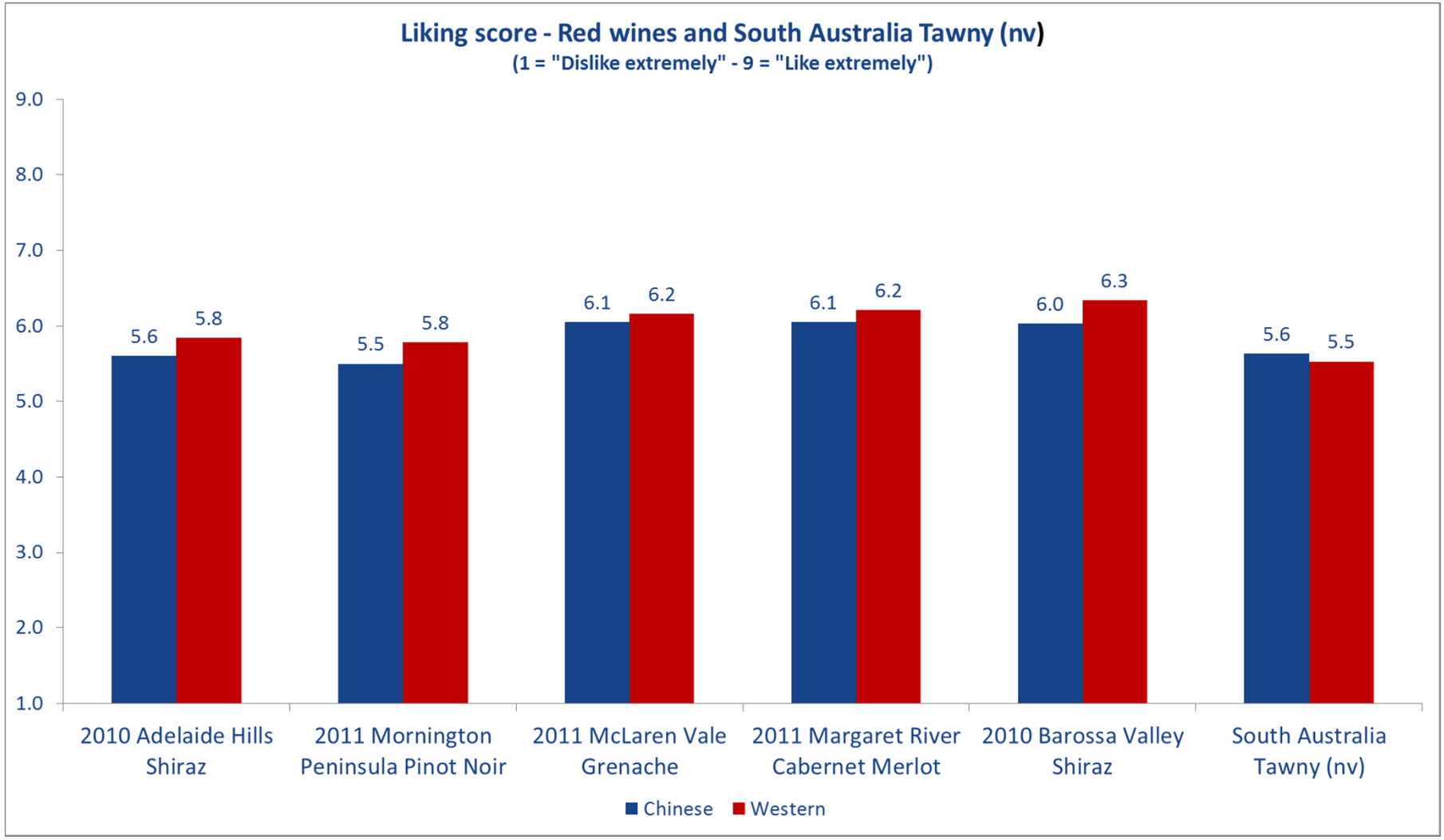
Australian Government
Australian Grape and Wine Authority

Wine brands omitted due to confidentiality

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Likeability

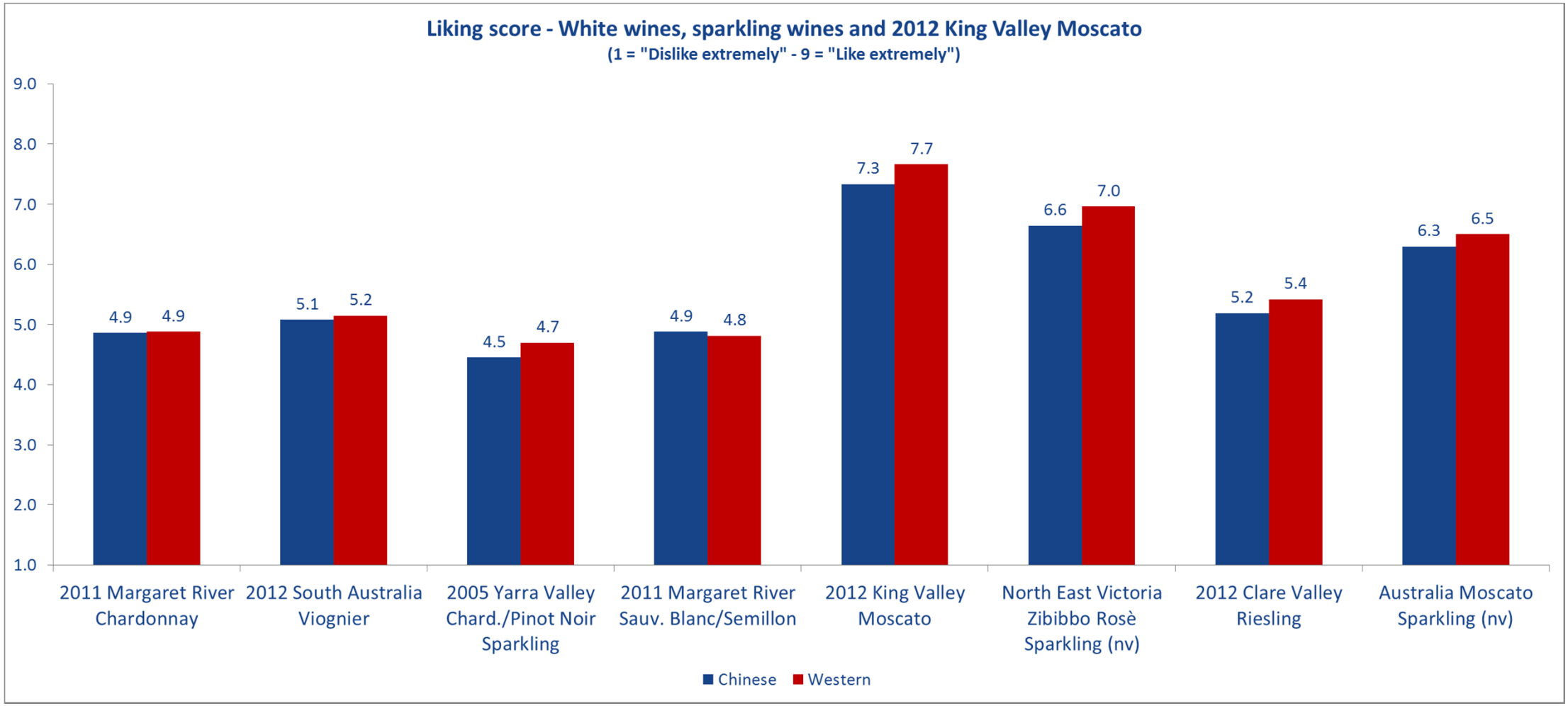
Red & Tawny



No statistical significant difference in terms of likeability between the Chinese and Western conditions

Results: Likeability

White, Sparkling & Moscato



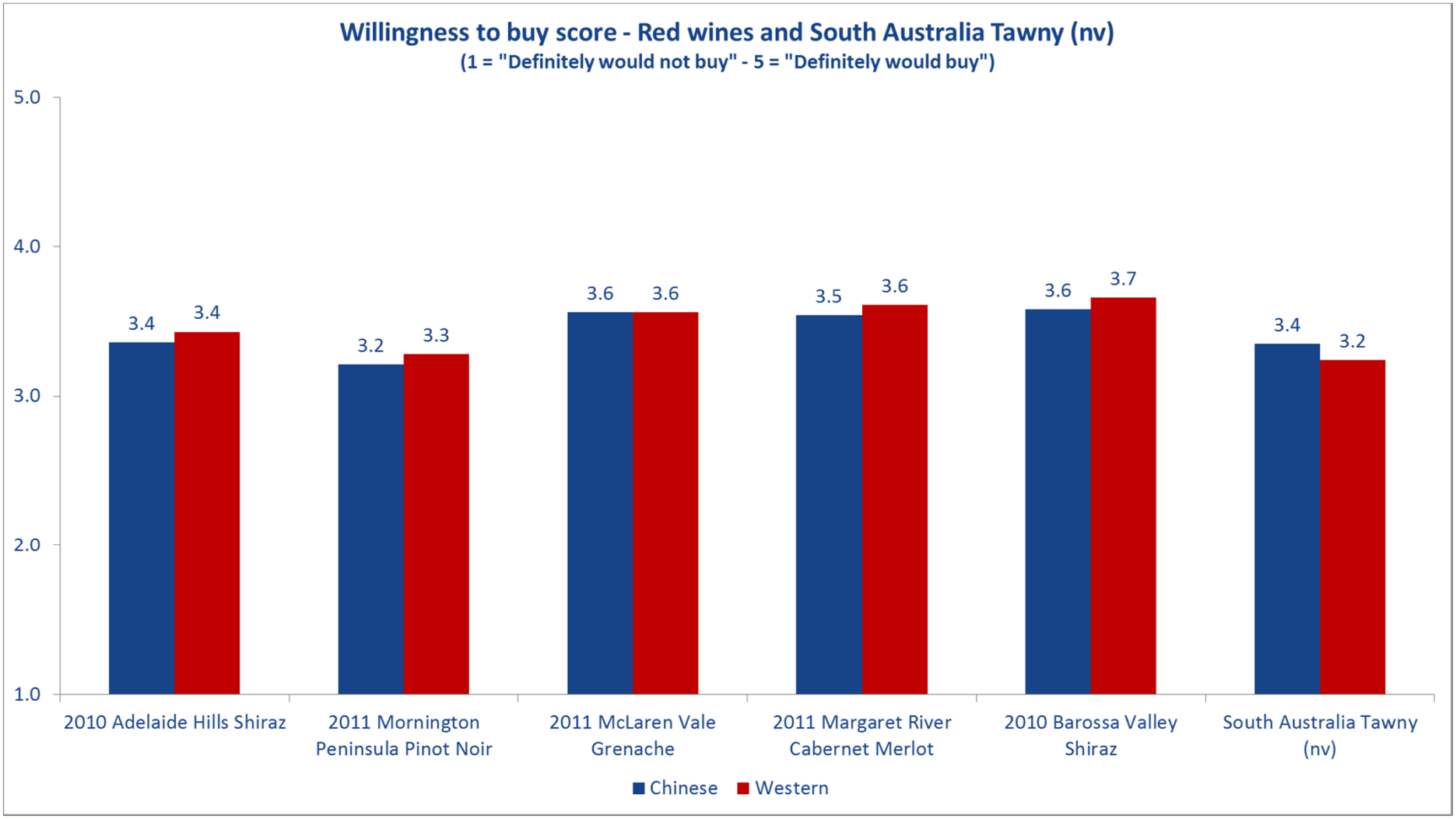
Australian Government
Australian Grape and Wine Authority

Statistical significant difference in terms of likeability between the Chinese and Western conditions recorded only for the 2012 King Valley Moscato and the North East Victoria Zibibbo Rosè (nv)

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Willingness to buy

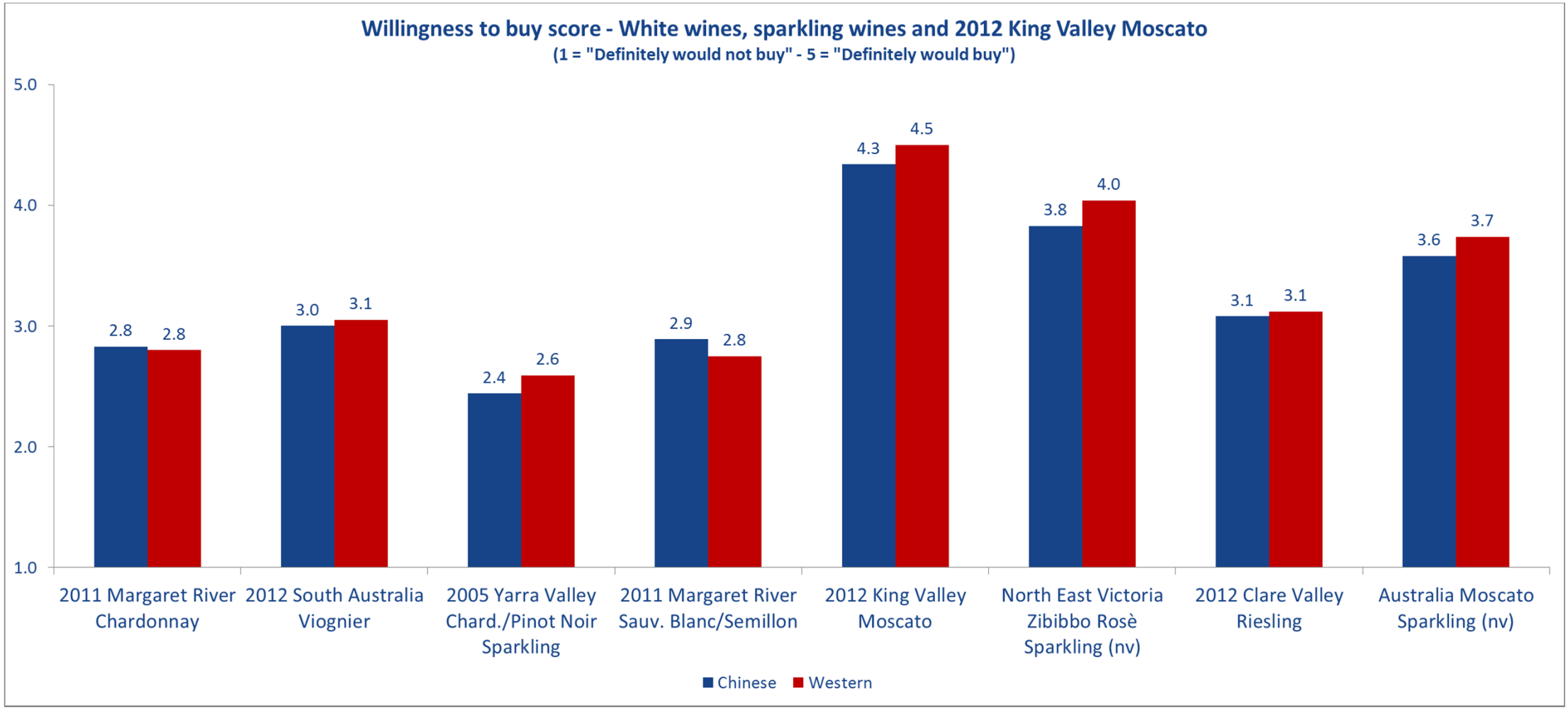
Red & Tawny



No statistical significant difference in terms of willingness to buy between the Chinese and Western conditions

Results: Willingness to buy

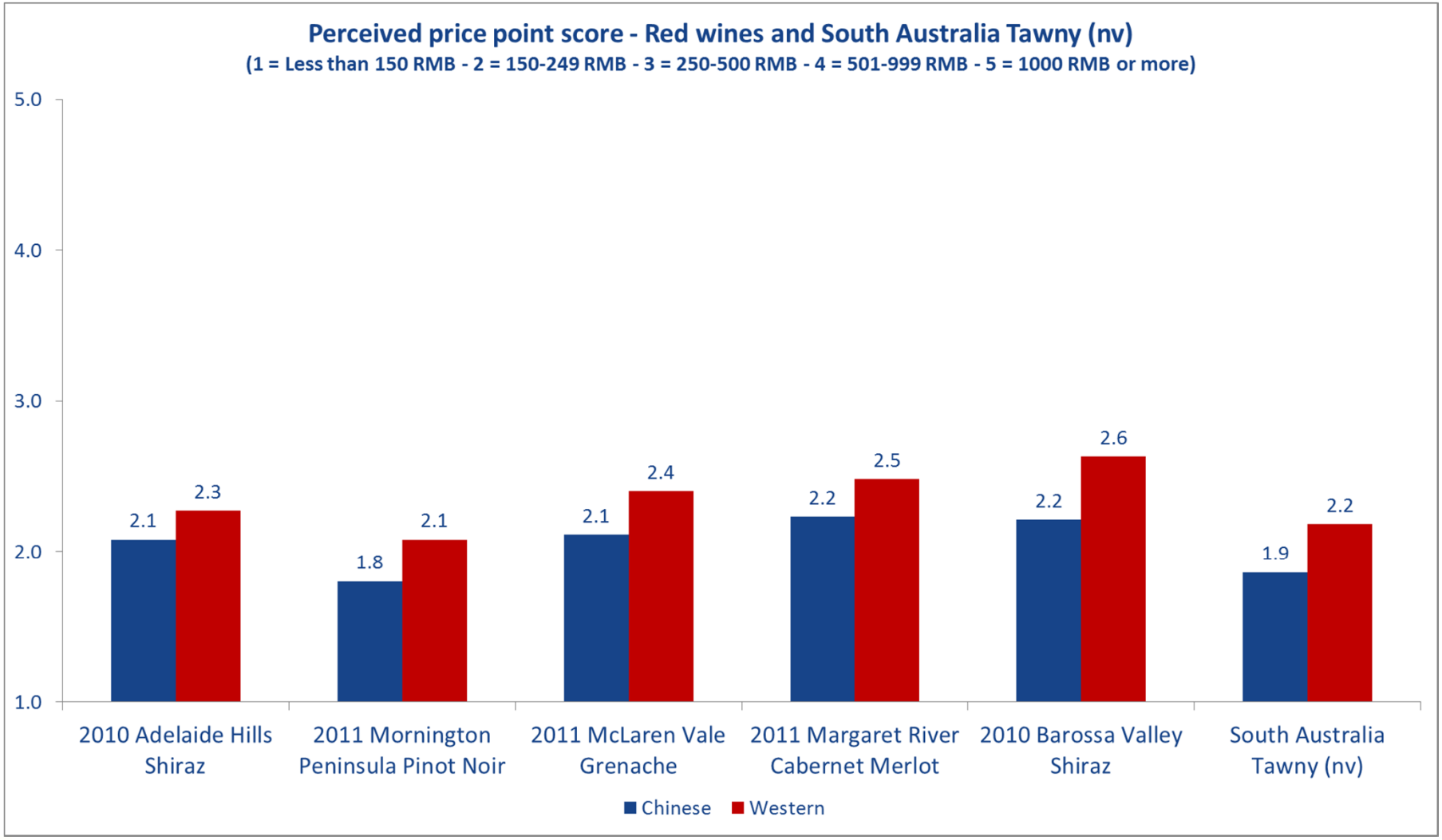
White, Sparkling & Moscato



Statistical significant difference in terms of willingness to buy between the Chinese and Western conditions recorded only for the North East Victoria Zibibbo Rosè (nv)

Results: Perceived price point

Red & Tawny



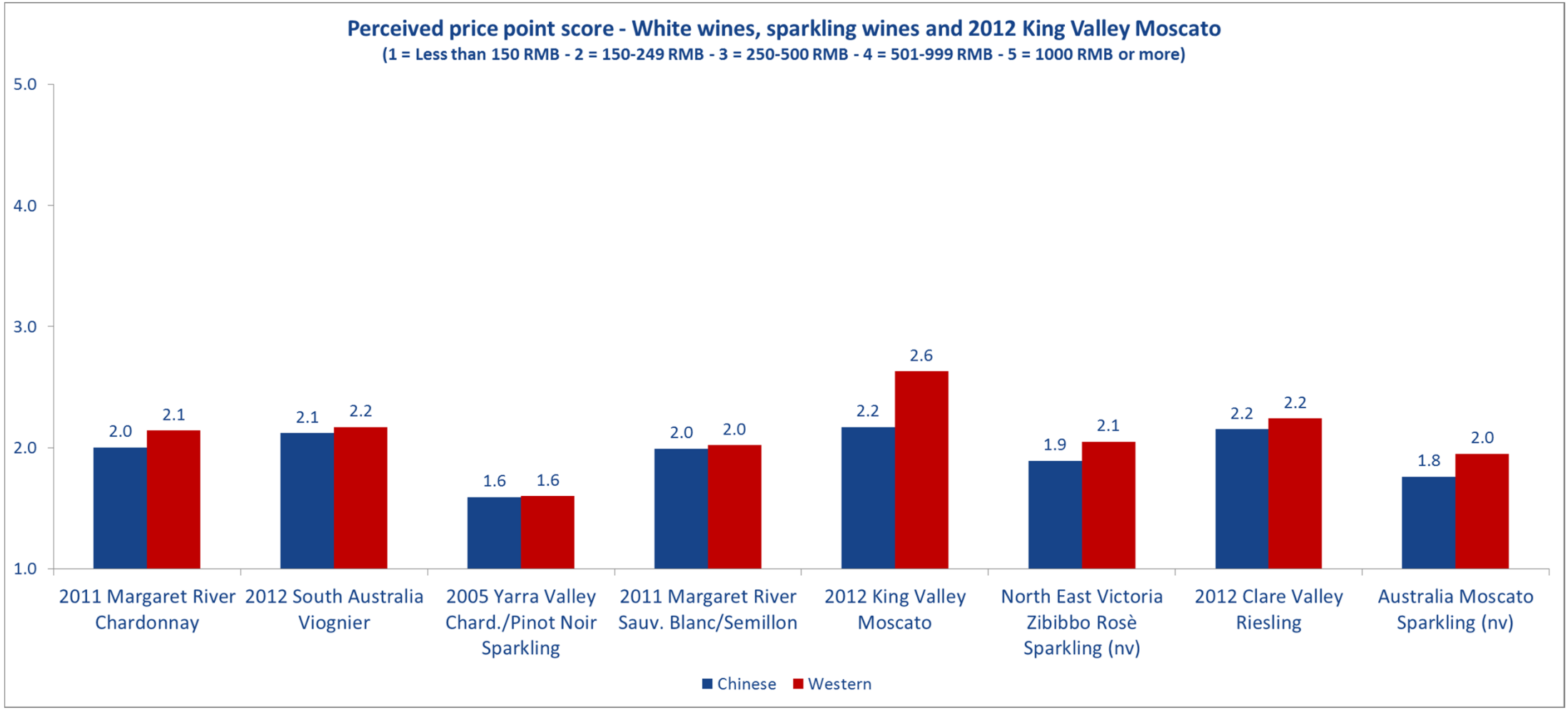
Statistical significant difference in terms of perceived price point between the Chinese and Western conditions recorded for 2011 Mornington Peninsula Pinot Noir, the 2011 McLaren Vale Grenache, the 2010 Barossa Valley Shiraz and the South Australia Tawny (nv)

Australian Government
Australian Grape and Wine Authority

UniSA Ehrenberg-Bass Institute for Marketing Science

Results: Perceived price point

White, Sparkling & Moscato



Statistical significant difference in terms of perceived price point between the Chinese and Western conditions recorded only for the 2012 King Valley Moscato

Most selected occasion (by wine)

Style	Wine	Occasion
Red wines	2010 Adelaide Hills Shiraz	With a more formal or celebration meal in a restaurant
	2011 Mornington Peninsula Pinot Noir	An informal night out at a bar/café/club/karaoke
	2011 McLaren Vale Grenache	With a more formal or celebration meal in a restaurant
	2011 Margaret River Cabernet Merlot	With a more formal or celebration meal in a restaurant
	2010 Barossa Valley Shiraz	With a more formal or celebration meal in a restaurant
White wines	2011 Margaret River Chardonnay	With an informal meal in a restaurant
	2012 South Australia Viognier	With a business lunch or dinner
	2011 Margaret River Sauv. Blanc/Semillon	With an informal meal in a restaurant
	2012 Clare Valley Riesling	With a business lunch or dinner
Sparkling wines	2005 Yarra Valley Chardonnay/Pinot Noir Sparkling	With an informal meal in a restaurant
	North East Victoria Zibibbo Rosè Sparkling (nv)	An informal night out at a bar/café/club/karaoke
	Australia Moscato Sparkling (nv)	An informal night out at a bar/café/club/karaoke
Dessert wines	2012 King Valley Moscato	At a party/celebration/big night out
	South Australia Tawny (nv)	With an informal meal in a restaurant

There appear to be a very close relation between the wine style and the consumption occasion.

Results: Frequency count (%) – Generic descriptors

All wines

TERM	OVERALL SAMPLE	CHINESE	WESTERN
涩/ Astringent	34	31	38
酸/ Sour	34	33	35
醇/ Mellow	31	31	31
回味悠长/ Lingering	30	28	31
果香/ Fruity	29	23	36
顺滑/ Smooth	28	25	30
浓烈/ Intense	25	23	26
清爽/ Refreshing	23	21	25
甜/ Sweet	22	22	21
纯/Pure	20	20	19
丰润/ Full bodied	19	18	19
苦/ Bitter	18	18	18
高酒精度/ High Alcohol	17	17	17
淡/ Light	15	15	16
平衡/ Balanced	15	14	16
橡木味/ Oaky	14	12	17
辛辣刺鼻/ Pungent	12	11	13
香料/ Spicy	9	11	10
AVG.	**22**	**21**	**23**

Results demonstrate:

- Prevalence of generic descriptors should inform Australian wine producers of the general lexicon commonly associated with wines
- Consistent findings with the qualitative stage in relation to the generic terms Chinese consumers identify most often when tasting a wine
- Astringent, fruity, smooth and oaky appear in higher frequency among Western experimental condition

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Frequency count (%) – Specific descriptors

Red & Tawny

IMAGE	CHINESE	%	IMAGE	WESTERN	%	SIG.
	Yangmei	15		Strawberry	4	Y
	Dried Chinese hawthorn	13		Blackberry preserves	8	Y
	Dried wolfberry	12		Strawberry preserves	4	Y
	Dried Chinese red dates	10		Plum	10	N
	Fresh Chinese red dates	10		Blackcurrant	9	N
	Fresh wolfberry	7		Raspberry	4	Y
	Clove	6		Clove	8	N

IMAGE	CHINESE	%	IMAGE	WESTERN	%	SIG.
	Star anise	5		Star anise	5	N
	Chinese black tea leaves	4		Dark cherries	14	Y
	Persimmons	4		Red plum	15	Y
	Chinese sausage	2		Cooked game	12	Y
	Pine nut	2		Vanilla	7	Y
	Chinese salted pork	1		Bacon	3	Y
	Chinese green peppers	1		Green bell peppers	4	Y

Australian Government
Australian Grape and Wine Authority

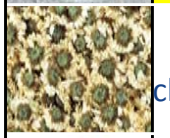
Yellow indicates under which experimental condition the hypothesised paired descriptor is statistically picked more often

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Frequency count (%) – Specific descriptors

White, Sparkling & Moscato

IMAGE	CHINESE	%	IMAGE	WESTERN	%	SIG.
	Kaffir lime	13		Lemon	17	Y
	Jackfruit	9		Pineapple	11	N
	Guava	6		Passion fruit	6	N
	Pomelo	8		Grapefruit	15	Y
	Asian Pear	8		Apricots	4	Y
	Star fruit	6		Citrus fruit	10	Y
	Gingko Nut	5		Toast	2	Y

IMAGE	CHINESE	%	IMAGE	WESTERN	%	SIG.
	Young Asian coconut	5		Vanilla	7	N
	Saturn peach	5		Peach	8	Y
	Pandan Leaf	4		Asparagus	2	Y
	Dried chrysanthemum	4		Dried apricots	5	N
	Rambutan	4		Butter	1	Y
	Mangosteen	3		Lychee	10	Y
	Longan	3		Gooseberry	6	Y

Australian Government
Australian Grape and Wine Authority

Yellow indicates under which experimental condition the hypothesised paired descriptor is statistically picked more often

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Frequency count (%) – Specific descriptors

White, Sparkling & Moscato (cont.)

IMAGE	CHINESE	%	IMAGE	WESTERN	%	SIG.
	Cantaloupe	3		Melon	4	**N**
	Lemongrass	2		Grass	11	**Y**
	Jasmine	2		Flowers	9	**Y**
	Dragon fruit	2		Apple	10	**Y**
	Mango	2		Mango	3	**N**
	Yellow lotus seed paste	1		Figs	3	**Y**

Yellow indicates under which experimental condition the hypothesised paired descriptor is statistically picked more often

Methodological note:

Correspondence analysis (CA)

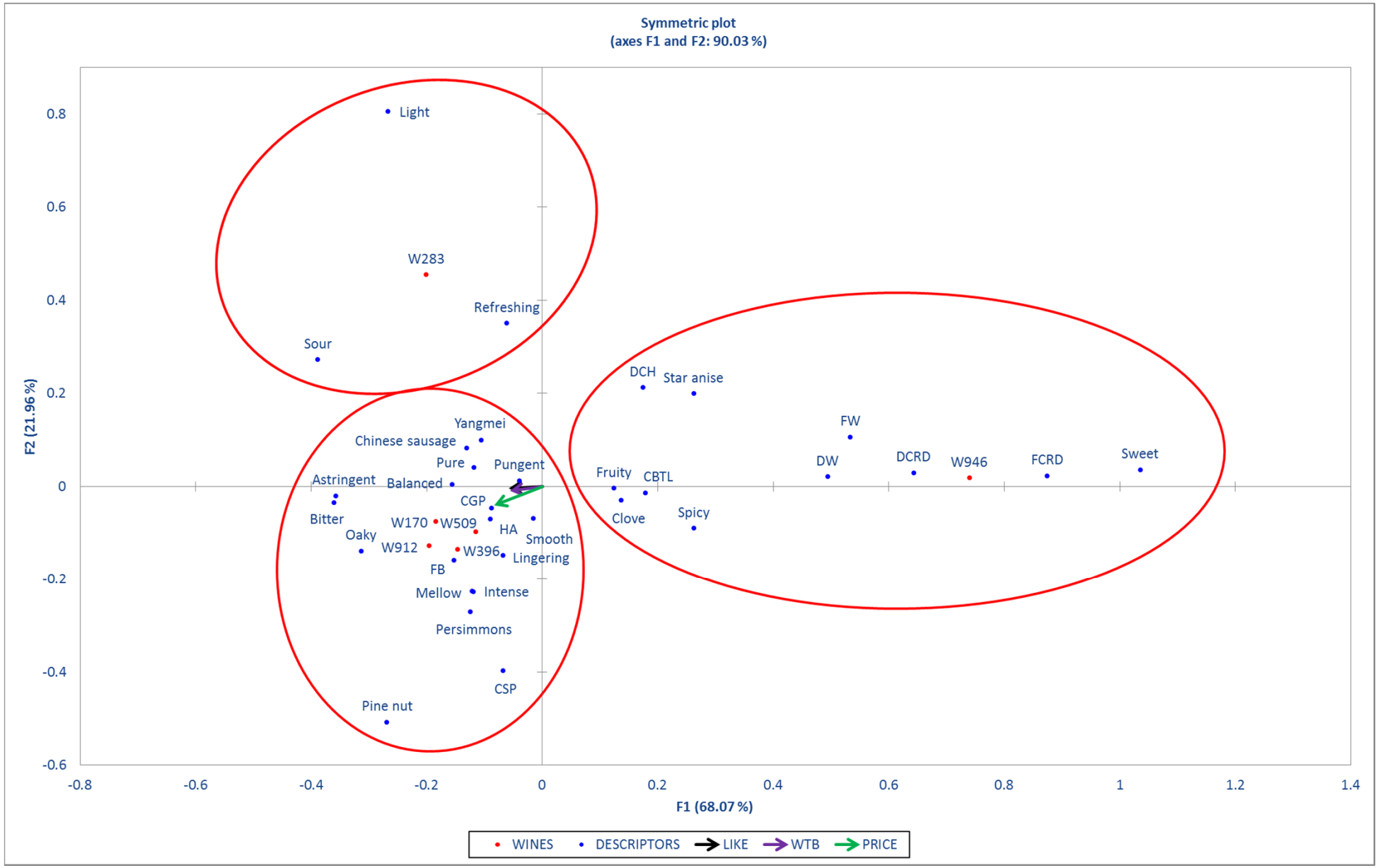
Given that both groups evaluated the same wines, the cross over of generic descriptors allows for validation of the similarity of the sampled groups. If there is no statistical difference between the majority of generic descriptors one can conclude that the data is suitable for comparison of the lexical equivalence of Chinese and Western specific taste descriptors.

Correspondence analysis (CA) was chosen to test the lexical equivalence of Chinese and Western descriptors and establish their application to different wines. This statistical technique is conceptually similar to principal component analysis (PCA), but instead of using continuous variables, it is applicable to categorical data. As in PCA, the output is a set of coordinates onto the *i* dimensions of a CA plot for each of the items included in the analysis (in our case wines and descriptors).

For ease of interpretation, the plot is often reduced to two dimensions. However, different to PCA, where each axis can be defined by the factor scores each original variable is loaded into, the axes in CA have no other meaning than a bi-dimensional representation of the associations between the items displayed in the plot.

Results: Correspondence analysis – Chinese version

Red & Tawny



Results: Correspondence analysis – Western version

Red & Tawny



Red & Tawny

Comparing the CA for Chinese and Western conditions demonstrates:

- Both conditions associated most of the generic and specific descriptors with the same wines
  - Wine 283, the 2011 Mornington Peninsula Pinot Noir, and wine 946, the South Australian Tawny (nv), are perceived to be distinctively different from the other four wines
- Majority of the generic descriptors (16 out of 18) are identical across the two groups, proving that respondents evaluated the wines in an identical way
  - Most descriptors cluster around the two Shiraz (170 and 912), the Grenache (396) and the Cabernet Merlot (509), which are perceived to be smooth, pure, lingering, balanced, astringent, bitter, oaky, mellow, full bodied, intense, high in alcohol, and pungent
  - The 2011 Mornington Peninsula Pinot Noir is perceived to be light, refreshing and sour
  - The South Australia Tawny (nv) is perceived as sweet by both groups. However, in the Chinese condition this wine is also perceived to be fruity and spicy, while in the Western condition these two terms are associated with the red wines except for the Pinot Noir

Red & Tawny (cont.)

- Hypothesised equivalences are verified for 8 out of 14 specific descriptors:
  - The two Shiraz, the Grenache and the Cabernet Merlot are perceived to taste like yangmei, Chinese sausage, Chinese green peppers, persimmons, Chinese salted pork and pine nut in the Chinese condition and the equivalent strawberry, cooked game, green bell peppers, red plum, bacon, and vanilla
  - The equivalence of dried Chinese red dates and plum is not supported
  - The equivalence between strawberry preserve and dried wolfberry with blackberry preserve and dried Chinese hawthorn is supported for the South Australian Tawny (nv). However, under the Chinese condition respondents associate more elements with this wine, such as fresh and dried Chinese red dates, fresh wolfberries, star anise, Chinese black tea leaves and clove. The Western equivalent descriptors (blackcurrant, plum, raspberries, star anise, dark cherries, clove) are instead clustered around the other four red wines
- In both conditions, more pronounced in the Western, there is a shift in the associations with perceived price point and the associations with likeability and willingness to buy

Red & Tawny

TERM	EQUIVALENCE VERIFIED
涩/ Astringent	√
酸/ Sour	√
醇/ Mellow	√
回味悠长/ Lingering	√
果香/ Fruity	X
顺滑/ Smooth	√
浓烈/ Intense	√
清爽/ Refreshing	√
甜/ Sweet	√

TERM	EQUIVALENCE VERIFIED
纯/Pure	√
丰润/ Full bodied	√
苦/ Bitter	√
高酒精度/ High Alcohol	√
淡/ Light	√
平衡/ Balanced	√
橡木味/ Oaky	√
辛辣刺鼻/ Pungent	√
香料/ Spicy	X

Australian Government
Australian Grape and Wine Authority

The majority of the generic descriptors (16 out of 18) are identical across the two groups, proving that respondents evaluated the wines in an identical way

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Specific descriptors – Equivalence

Red & Tawny

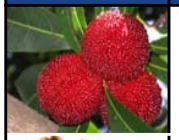
IMAGE	CHINESE	IMAGE	WESTERN	EQUIVALENCE VERIFIED
	Yangmei		Strawberry	√
	Dried Chinese hawthorn		Blackberry preserves	√
	Dried wolfberry		Strawberry preserves	√
	Dried Chinese red dates		Plum	X
	Fresh Chinese red dates		Blackcurrant	X
	Fresh wolfberry		Raspberry	X
	Clove		Clove	X

IMAGE	CHINESE	IMAGE	WESTERN	EQUIVALENCE VERIFIED
	Star anise		Star anise	√
	Chinese black tea leaves		Dark cherries	X
	Persimmons		Red plum	√
	Chinese sausage		Cooked game	√
	Pine nut		Vanilla	√
	Chinese salted pork		Bacon	√
	Chinese green peppers		Green bell peppers	X

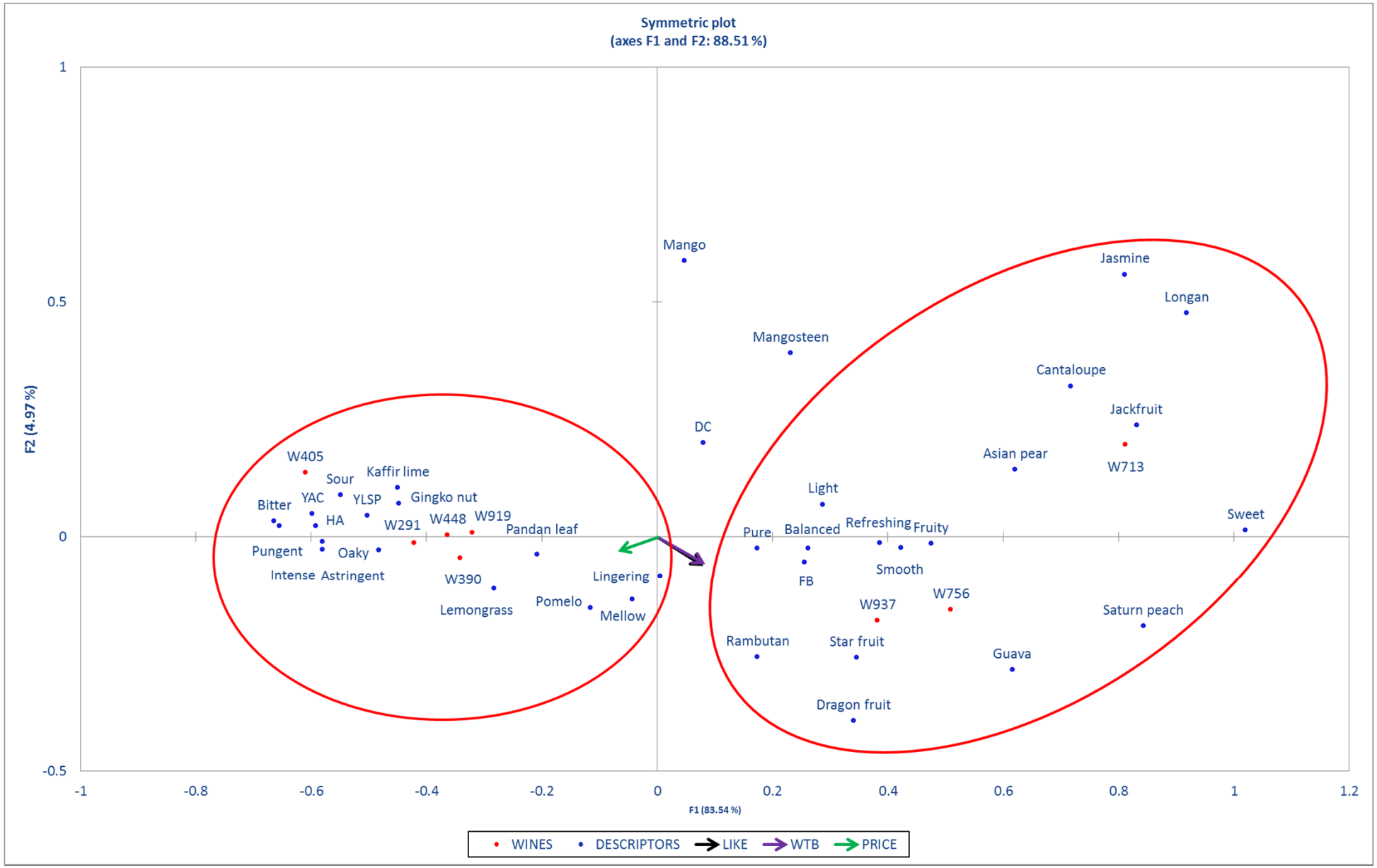
Australian Government
Australian Grape and Wine Authority

Hypothesised equivalences verified for 8 out of 14 specific descriptors

UniSA | Ehrenberg-Bass Institute for Marketing Science

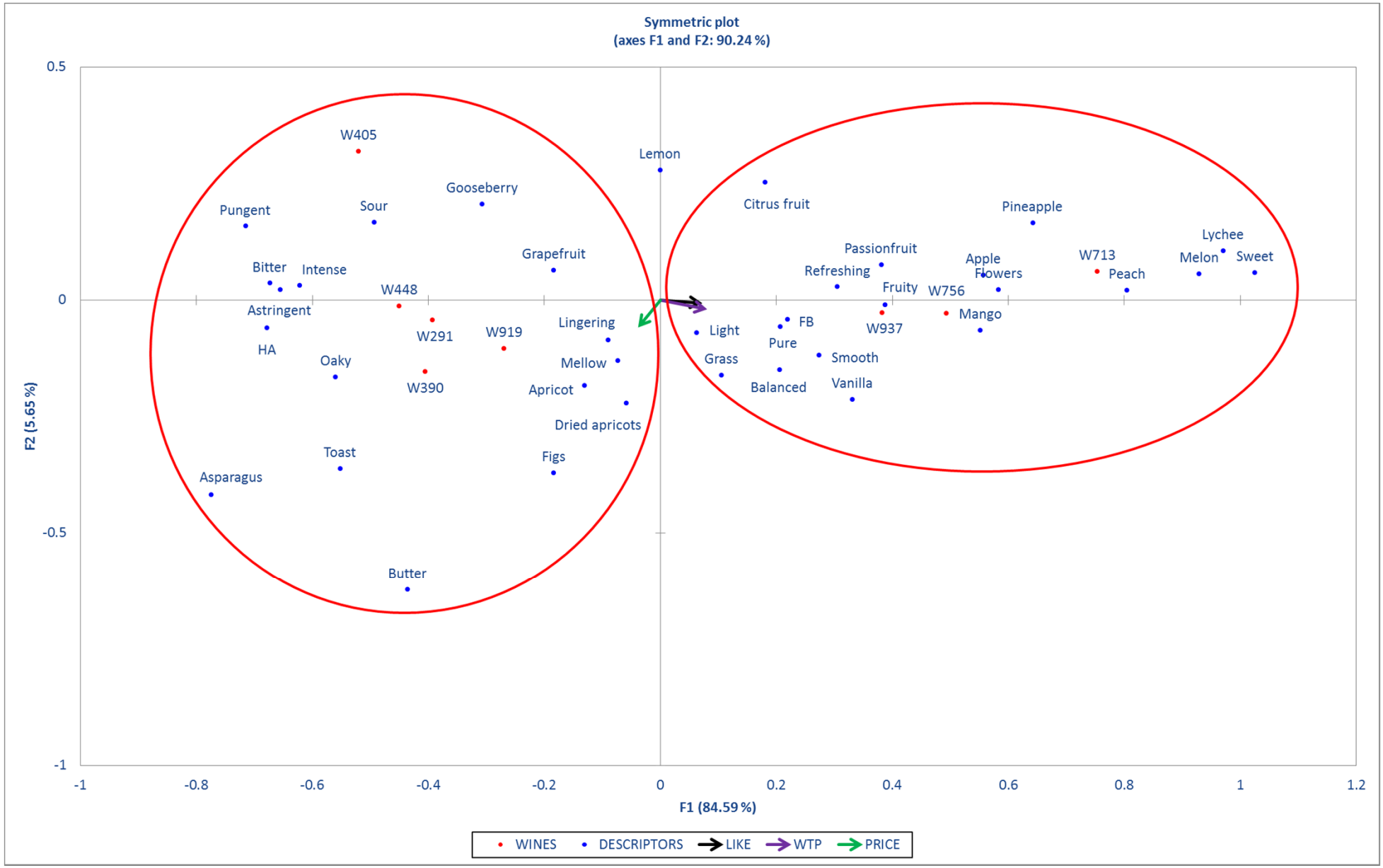
Results: Correspondence analysis – Chinese version

White, Sparkling & Moscato



Results: Correspondence analysis – Western version

White, Sparkling & Moscato



White, Sparkling & Moscato

Comparing the CA for Chinese and Western conditions demonstrates:

- Both groups of respondents differentiate the wines in two groups:
  - **Cluster 1**: the 2012 King Valley Moscato (713), the North East Victoria Zibibbo Rosè Sparkling (756) and the Australia Sparkling Moscato (956)
  - **Cluster 2**: the 2011 Margaret River Chardonnay (291), the 2012 South Australia Viognier (390), the 2011 Margaret River Sauvignon Blanc/Semillon (448), the 2012 Claire Valley Riesling (919), and the 2005 Yarra Valley Chardonnay/Pinot Noir Sparkling (405)
- Hypothesised equivalence verified for all generic descriptors:
  - **Cluster 1** wines perceived to be sweet, fruity, refreshing, balanced, smooth, pure, full bodied and light
  - **Cluster 2** wines perceived to be lingering, mellow, sour, intense, oaky, pungent, butter, astringent, and high in alcohol

White, Sparkling & Moscato

- Hypothesised equivalences are verified for 11 out of 20 specific descriptors:
  - **Cluster 1**: the terms star fruit, peach, passionfruit, apple, pineapple, melon, and flowers are found to be equivalent to citrus fruit, saturn peach, guava, dragon fruit, jackfruit, cantaloupe, and jasmine
  - **Cluster 2**: the terms grapefruit, figs, toast, and asparagus are found to be equivalent to pomelo, yellow lotus seed paste, gingko nut, and pandan leaf
- The non-equivalent descriptors are clustered around the two groups of wine:
  - **Cluster 1**: mango, vanilla, lychee, grass, Asian pear, rambutan and longan
  - **Cluster 2**: kaffir lime, young Asian coconut, lemongrass, apricot, dried apricots gooseberry and butter
- In both conditions, there is a shift in the associations with perceived price point and the associations with likeability and willingness to buy

White, Sparkling & Moscato

TERM	EQUIVALENCE VERIFIED
涩/ Astringent	√
酸/ Sour	√
醇/ Mellow	√
回味悠长/ Lingering	√
果香/ Fruity	√
顺滑/ Smooth	√
浓烈/ Intense	√
清爽/ Refreshing	√
甜/ Sweet	√

TERM	EQUIVALENCE VERIFIED
纯/Pure	√
丰润/ Full bodied	√
苦/ Bitter	√
高酒精度/ High Alcohol	√
淡/ Light	√
平衡/ Balanced	√
橡木味/ Oaky	√
辛辣刺鼻/ Pungent	√

Hypothesised equivalence verified for all generic descriptors

Results: Specific descriptors – Equivalence

White, Sparkling & Moscato

IMAGE	CHINESE	IMAGE	WESTERN	EQUIVALENCE VERIFIED
	Kaffir lime		Lemon	X
	Jackfruit		Pineapple	√
	Guava		Passion fruit	√
	Pomelo		Grapefruit	√
	Asian Pear		Apricots	X
	Star fruit		Citrus fruit	√
	Ginko Nut		Toast	√

IMAGE	CHINESE	IMAGE	WESTERN	EQUIVALENCE VERIFIED
	Young Asian coconut		Vanilla	X
	Saturn Peach		Peach	√
	Pandan Leaf		Asparagus	√
	Dried Chrysantemum		Dried apricots	X
	Rambutan		Butter	X
	Mangosteen		Lychee	X
	Longan		Gooseberry	X

Australian Government
Australian Grape and Wine Authority

Hypothesised equivalence verified for 11 out of 20 specific descriptors

UniSA | Ehrenberg-Bass Institute for Marketing Science

Results: Specific descriptors – Equivalence

White, Sparkling & Moscato (cont.)

IMAGE	CHINESE	IMAGE	WESTERN	EQUIVALENCE VERIFIED
	Cantaloupe		Melon	√
	Lemongrass		Grass	X
	Jasmine		Flower	√
	Dragon fruit		Apple	√
	Mango		Mango	X
	Yellow lotus seed paste		Figs	√

Australian Government
Australian Grape and Wine Authority

Hypothesised equivalence verified for 11 out of 20 specific descriptors

UniSA | Ehrenberg-Bass Institute for Marketing Science

Research beyond the project brief:

Impact of visual vs. verbal cues

The Chinese are known for being a visually leaning culture (De Mooij, 2004; Tavassoli et al., 2002). Their restaurant menus are often pictorial representations of dishes. Observations made by the research team during multiple visits to China identified several wine retailers, supermarkets and on-premise outlets that used stickers of food items to designate flavour profiles of wines. However, these pictorial representations only utilised Western food products to typify taste descriptors. There is no evidence of this being applied yet with Chinese food products. There is currently no known research that scientifically investigates this in the context of wine in China, until this study.

This experiment will identify if Chinese wine drinkers prefer:

a) Visual or verbal representations of specific wine taste descriptors
b) Chinese or Western versions of specific wine taste descriptors
c) The price points associated with the most preferred representation of wine taste descriptors

The following slides explain the experiment in detail.

Instrument description: Best-Worst evaluation

Simulated wine choice

Scenario: Dinner with business colleagues at a restaurant and selected to choose a bottle of red grape-based wine for the table to enjoy with the meal.

Task: Select the wine you would MOST and the LEAST likely choose for this dinner

8 simulated wine choices per respondent: 4 x4 Orthogonal Main Effect Plan (OMEP) design with 16 choice sets with 4 options to choose from in each choice set. Respondents allocated to 8 out of 16 choice sets via a Balanced Incomplete Block Design (BIBD)

4 product attributes manipulated:

1. **Specific descriptors by wine styles:** Selection of 4 mutually exclusive sets of specific descriptors
2. **Specific descriptors appearance:** Visual or Verbal
3. **Specific descriptors language:** Western or Chinese
4. **Price:** RMB 260, RMB 500, RMB 740, RMB 980

Australian Government
Australian Grape and Wine Authority

See following slide for example of simulated wine choice

UniSA | Ehrenberg-Bass Institute for Marketing Science

Instrument description: Best-Worst evaluation

Simulated wine choice - Example

葡萄酒	这款葡萄酒有以下特点:	价格 (RMB)	最可能购买	最不可能购买
1		740	X	
2	草莓, 丁香, 覆盆子 和 红李子	260		
3	鲜红枣, 柿子 和 中式咸猪肉	980		X
4		500		

We have asked the respondents to imagine they were having a dinner with their business colleagues at a restaurant and they had been selected to choose a bottle of red grape-based wine for the table to enjoy with their meal.

Results: Best-Worst evaluation, per cent of times chosen

Western descriptors preferred over Chinese descriptors in a business dinner setting

CHINESE
-12%

Chinese) Star anise, pine nuts, dried wolfberries and Chinese sausage






Chinese) Chinese green peppers, dried Chinese hawthorns and Chinese black tea leaves





Chinese) Yangmei, cloves, fresh wolfberries and dried Chinese red dates






Chinese) Fresh Chinese red dates, persimmons and Chinese salted pork





WESTERN
+12%

Western) Star anise, vanilla, strawberry preserves and cooked game






Western) Green bell peppers, blackberry preserves and earthy flavours





Western) Strawberries, cloves, raspberries and red plums






Western) Blackcurrants, dark plums and bacon





Results: Best-Worst evaluation, per cent of times chosen

Visual descriptors slightly preferred over verbal descriptors

VERBAL
-2%

Chinese) Star anise, pine nuts, dried wolfberries and Chinese sausage

Western) Star anise, vanilla, strawberry preserves and cooked game

Chinese) Chinese green peppers, dried Chinese hawthorns and Chinese black tea leaves

Western) Green bell peppers, blackberry preserves and earthy flavours

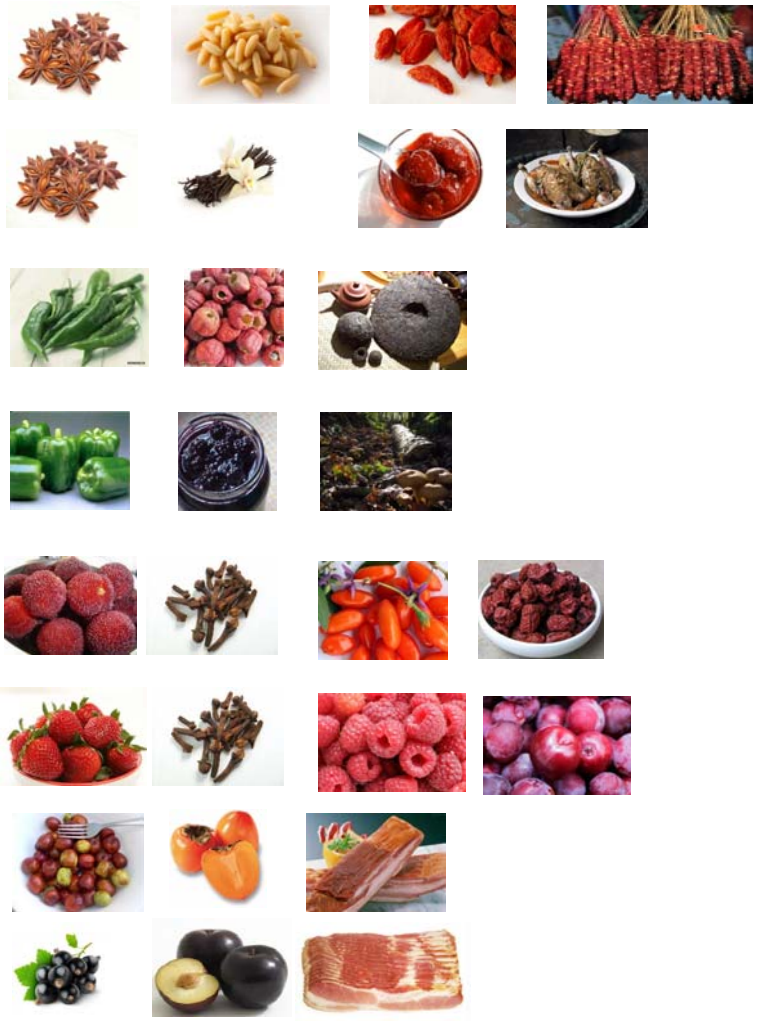
Chinese) Yangmei, cloves, fresh wolfberries and dried Chinese red dates

Western) Strawberries, cloves, raspberries and red plums

Chinese) Fresh Chinese red dates, persimmons and Chinese salted pork

Western) Blackcurrants, dark plums and bacon

VISUAL
+2%



Results: Best-Worst evaluation, per cent of times chosen

Descriptors set no. 2 is the most preferred

DESCR. SET 1 = -15%

Chinese) Star anise, pine nuts, dried wolfberries and Chinese sausage






Western) Star anise, vanilla, strawberry preserves and cooked game






DESCR. SET 2 = +28%

Chinese) Yangmei, cloves, fresh wolfberries and dried Chinese red dates






Western) Strawberries, cloves, raspberries and red plums






DESCR. SET 3 = -10%

Chinese) Chinese green peppers, dried Chinese hawthorns and Chinese black tea leaves





Western) Green bell peppers, blackberry preserves and earthy flavours





DESCR. SET 4 = -3%

Chinese) Fresh Chinese red dates, persimmons and Chinese salted pork





Western) Blackcurrants, dark plums and bacon





Results: Best-Worst evaluation, per cent of times chosen

RMB 500 is the most preferred price point for this occasion

PRICE	PREFERENCE
RMB 260	+ 7
RMB 500	+10
RMB 740	- 2
RMB 980	-15

Results: Best-Worst evaluation

Most preferred wine description






RMB 500

The preferences identified can be explained as follows:

- The preference for Western taste descriptions can be attributed to the fact there is scant evidence of marketing wine using Chinese descriptors.
- The use of pictorial representations of wine taste is in its infancy and exposure limited, thus explaining why there is no clear preference between visual/verbal.
- Price can be explained as the Chinese are value conscious.

Australian Government
Australian Grape and Wine Authority

It is important to note that these findings can not be generalised beyond the context of the experiment – selecting a red wine for a business dinner. Results should rather serve to inform that methods exist to answer such questions in the China wine market.

UniSA | Ehrenberg-Bass Institute for Marketing Science

Summary of findings

The quantitative stage of this research identified the following:

- Generic terms are used by Chinese wine drinkers more often than specific terms
- The equivalence of generic terms is verified for all descriptors for white, sparkling and moscato and for 16 out of 18 descriptors for red and tawny
- The equivalence of specific descriptors is verified for 11 out of 20 descriptors for white, sparkling and moscato and 8 out of 14 descriptors for red and tawny
- Chinese fruits are associated more than their Western equivalent, however savoury tastes are best suited for Western descriptors
- The wines and associated generic and specific descriptors that are associated with WTB and likeability differ to the associations with perceived price point
- The use of Chinese or Western descriptors does not lead to a statically significant difference in likeability, willingness to buy and perceived price point
- There is currently a tendency to choose wines described in a Western context

Recommendations

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science

The opportunity for Australia

The scientific validation of lexical equivalence and prevalence of usage can provide the Australian wine sector a competitive advantage in the Chinese market at two levels:

- Industry level actions:
  - Wine Australia should embrace the validated Chinese lexicon to describe Australian wine styles, in order to further our position as the leading wine country that orientates itself to the China market
  - Australian wine education and experience programs in China should be adapted to include an approachable lexicon for novice drinkers to aid acquisition of wine knowledge and the framework to share with others
  - Training programs in Australia should be developed to orient producers with Chinese taste descriptors to help wineries engage with Chinese consumers
- Producer level actions:
  - Help Australian wine distributors improve wine communication in an omni-channel context in China through the use of a Chinese inspired message with respect to taste profile
  - Improve product footprint in on-premise, off-premise and online channels through adapted marketing collateral focused on engaging the Chinese wine drinkers in a Chinese-centric manner

Acknowledgments



Mrs. Siang Chew



The Australian Wine Research Institute

Dr. Ian Leigh Francis
Mrs. Patricia Williamson



Mrs. Lulie Halstead
Miss. Natasha Rastegar
Miss. Maria Troein

Australian Government
Australian Grape and Wine Authority

UniSA | Ehrenberg-Bass Institute for Marketing Science