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# 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**

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

Date: **26/10/2014**

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# 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

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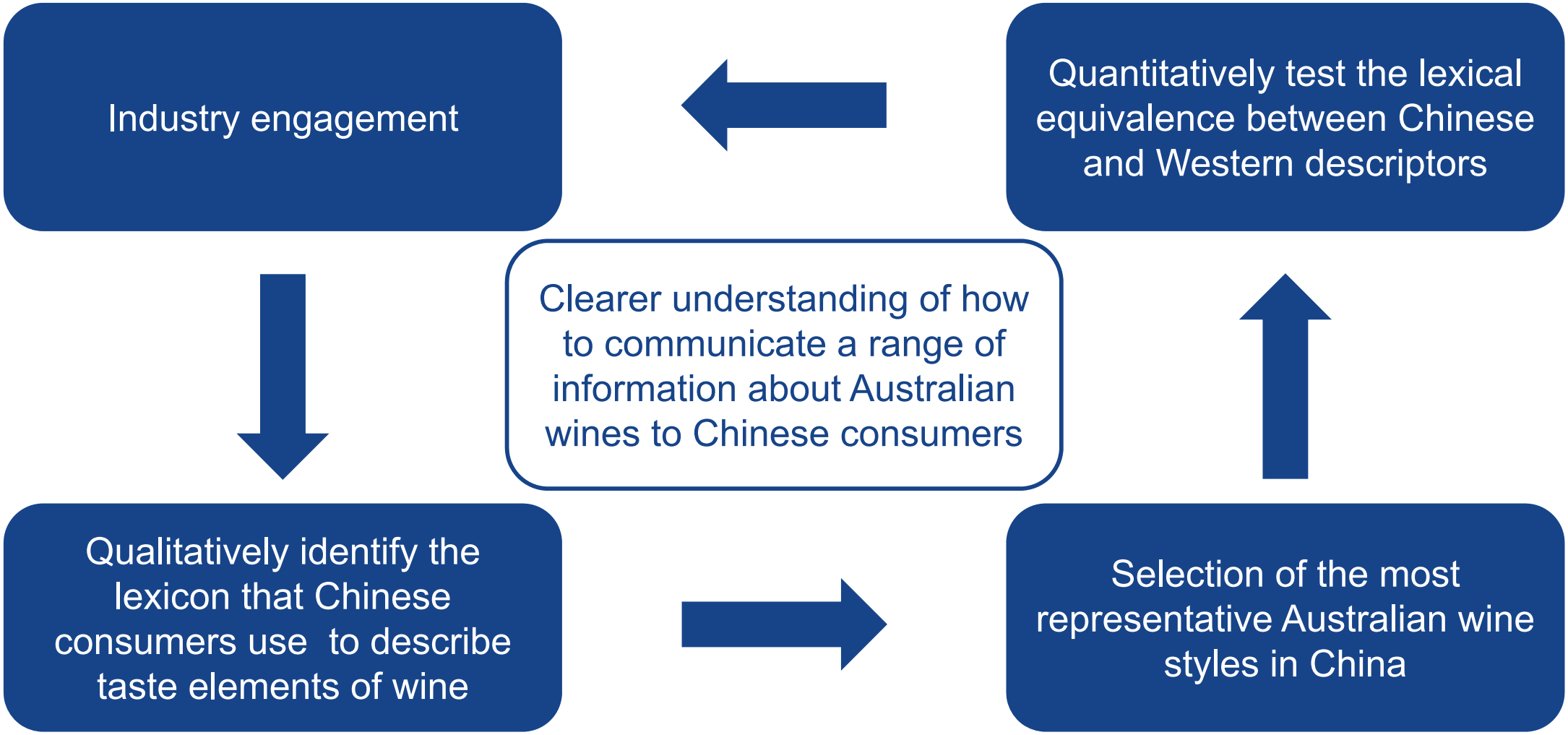
# Background

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

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# Qualitative stage

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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

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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

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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 |

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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** |
|  |  |









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Data visualisation courtesy of Wine Intelligence

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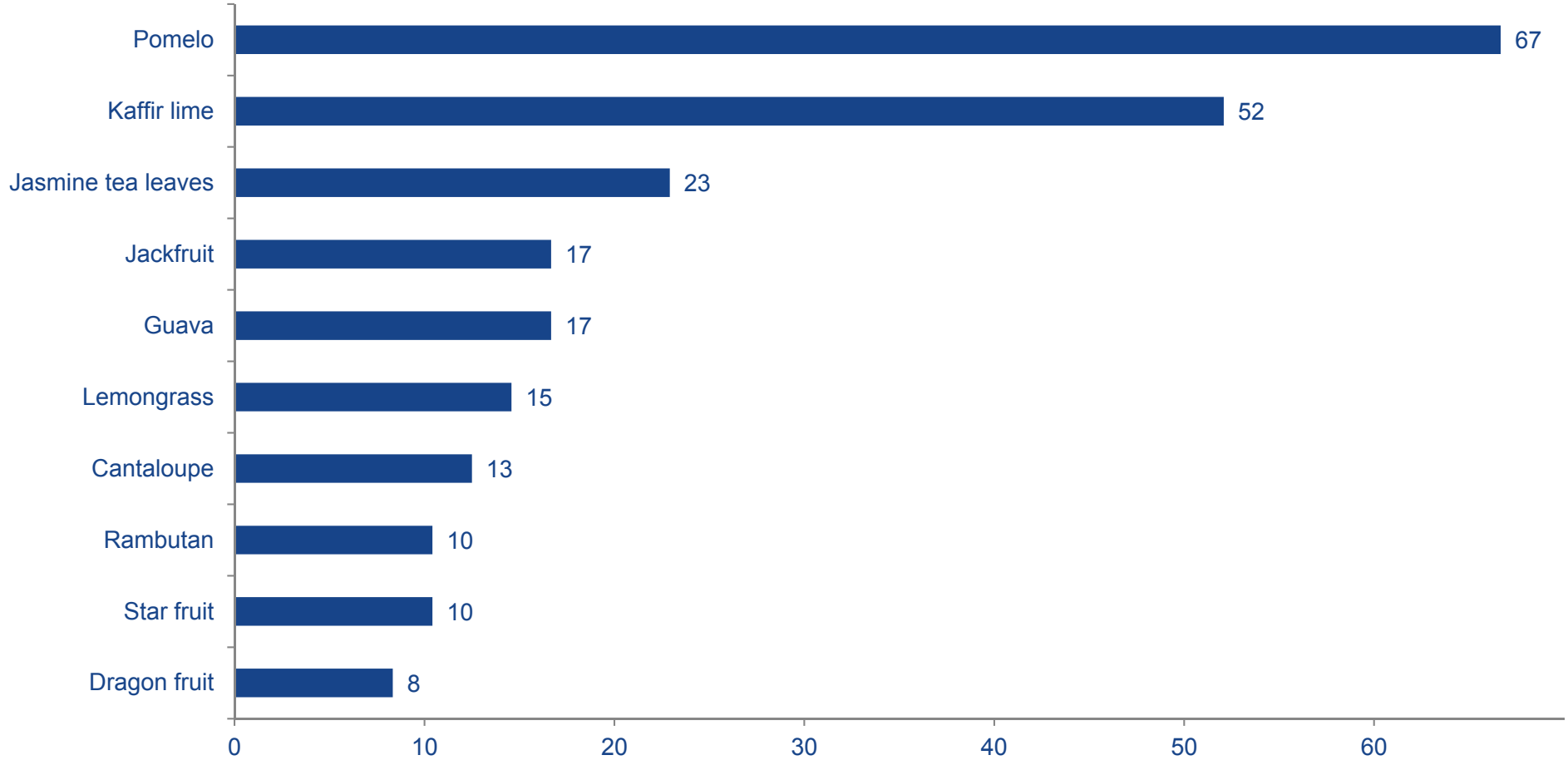
Results:

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




Top 10 sparkling wine descriptors out of 32 specific descriptors tested

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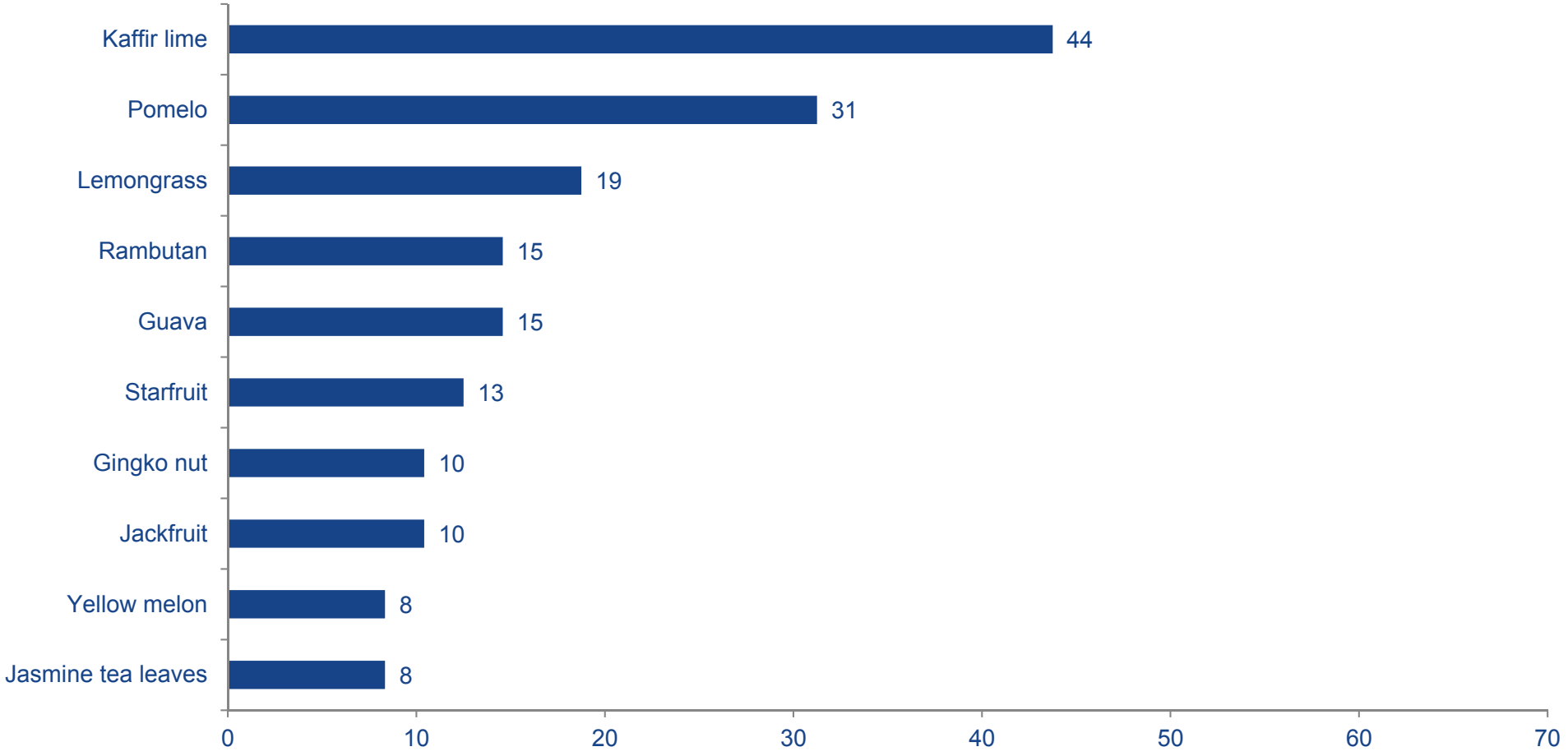
Results:

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




Top 10 white wine descriptors out of 32 specific descriptors tested

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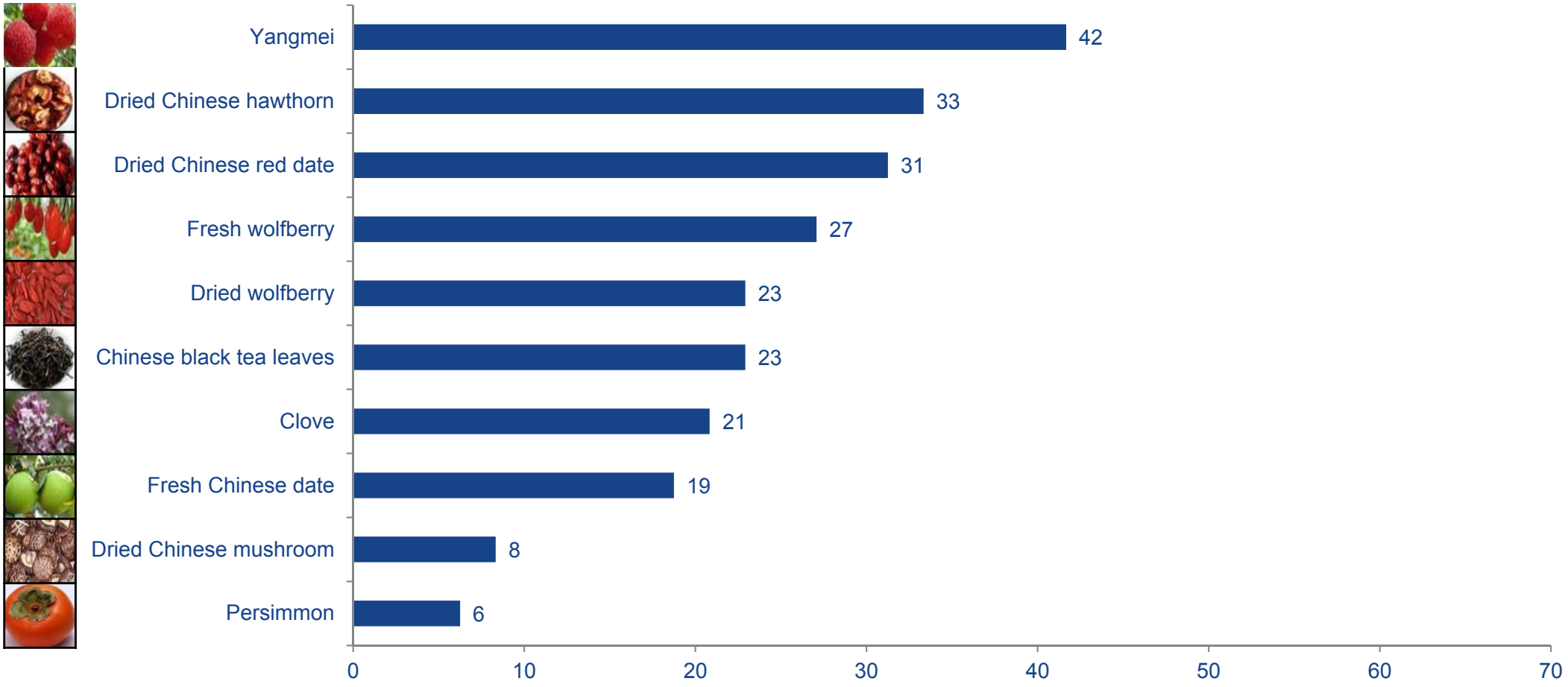
Results:

# 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

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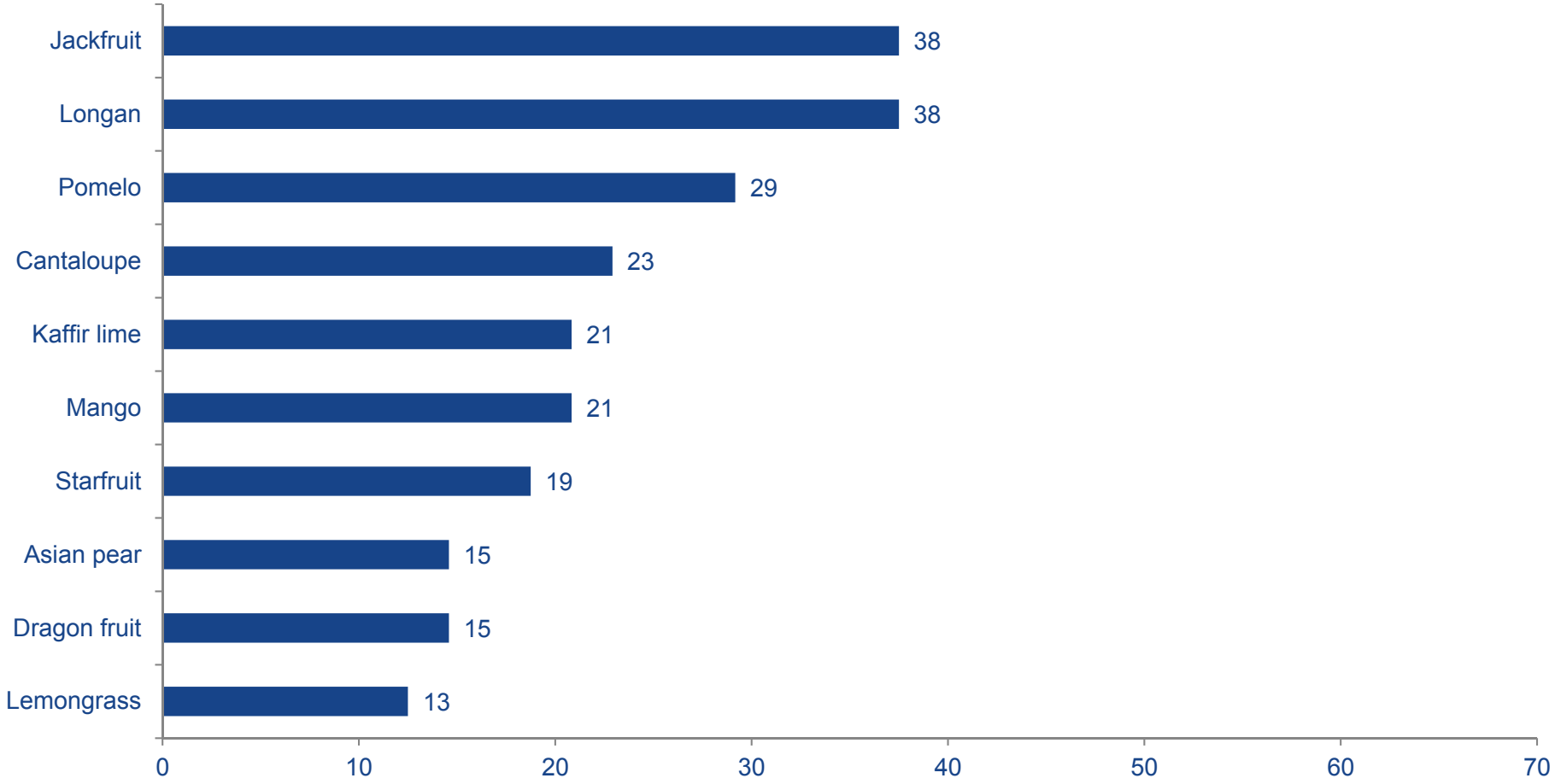
Results:

# 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

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# 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

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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

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

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Wine brands omitted due to confidentiality

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# Quantitative stage

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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

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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.

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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")

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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 |

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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

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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** |

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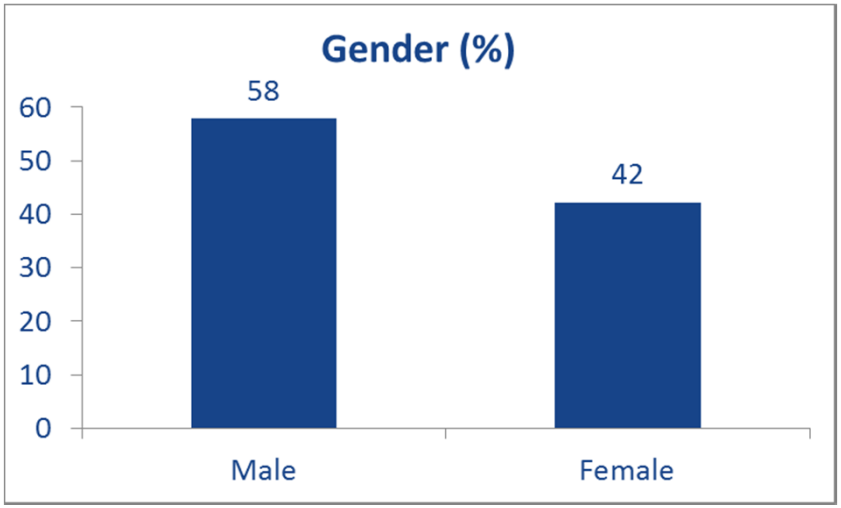
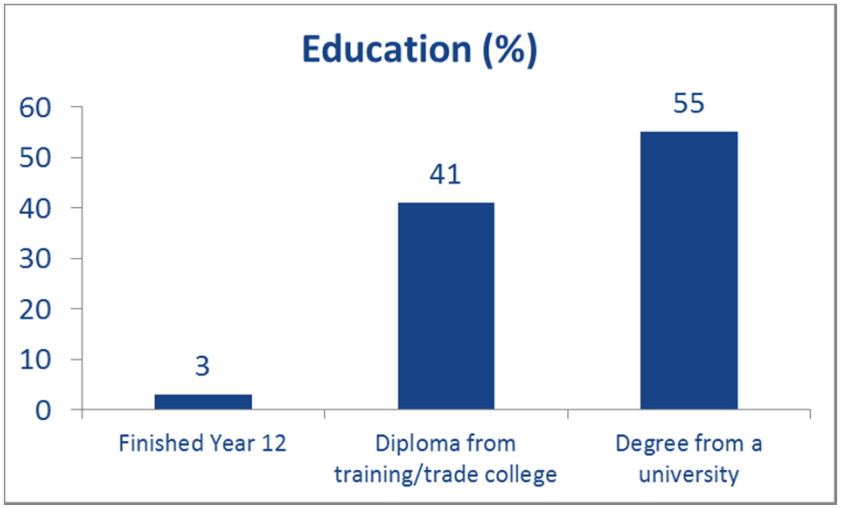
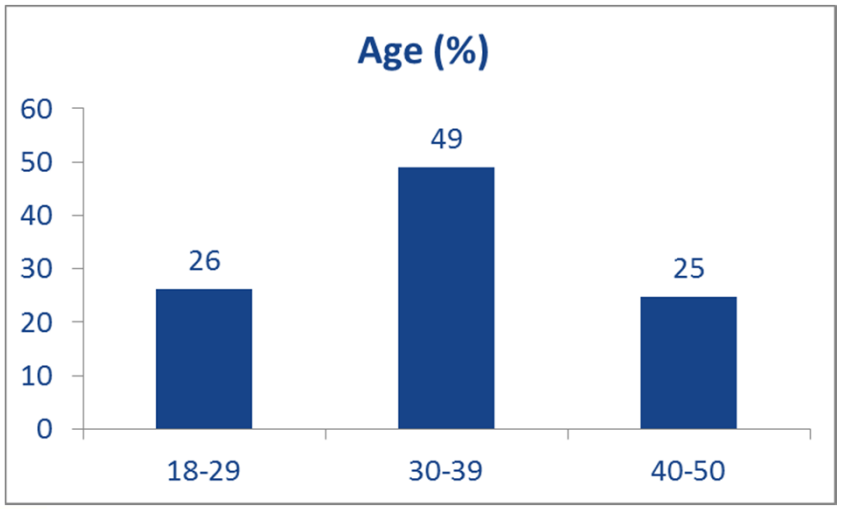
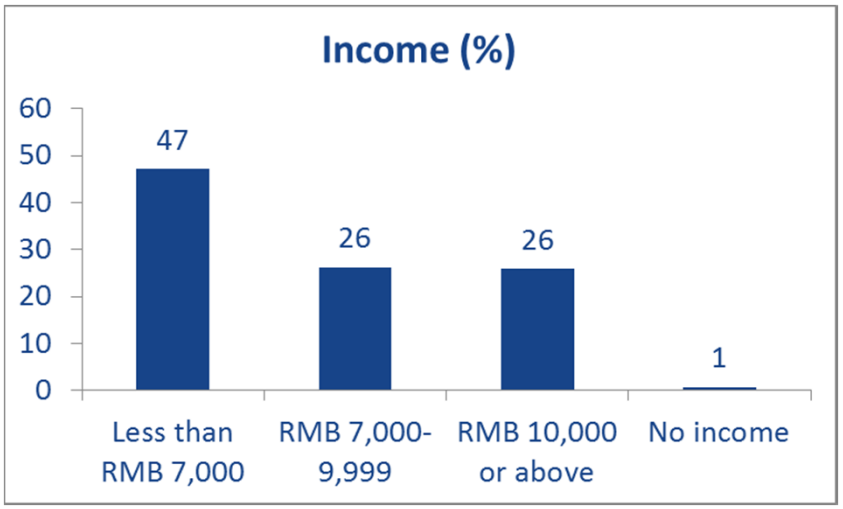
Research structure:

# Respondents profile

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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) |

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Wine brands omitted due to confidentiality

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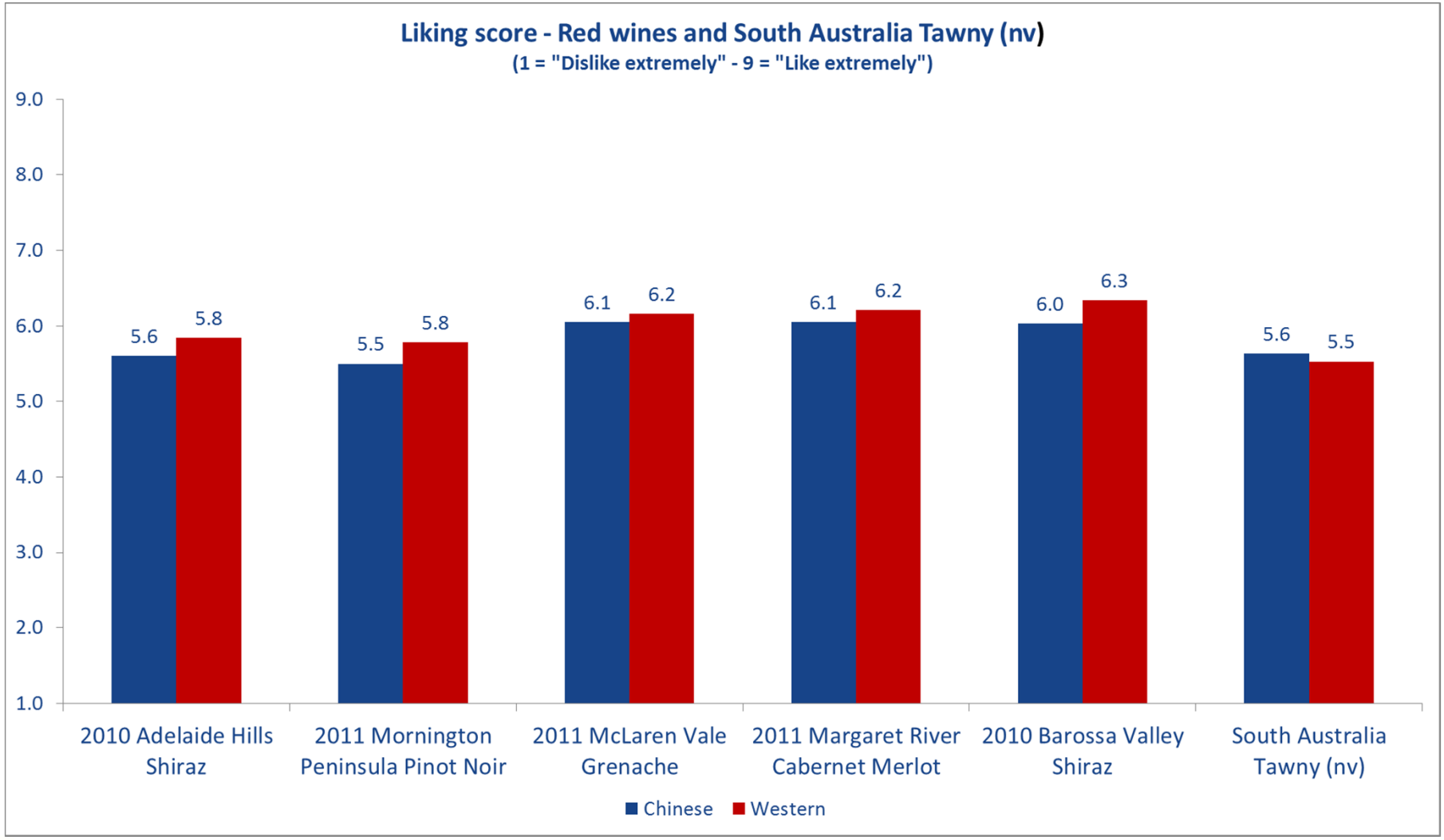
Results: Likeability

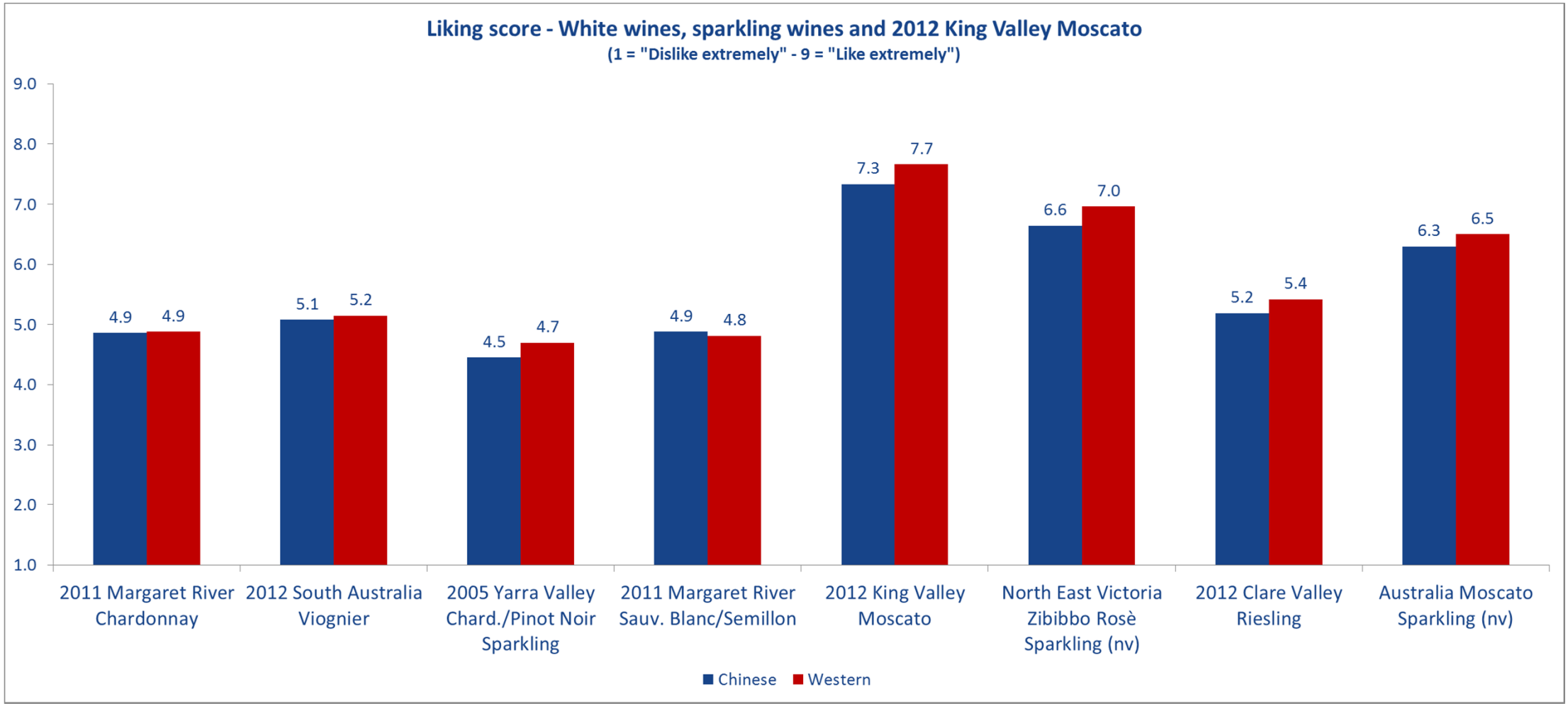
# Red & Tawny




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

Results: Likeability

# White, Sparkling & Moscato

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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)

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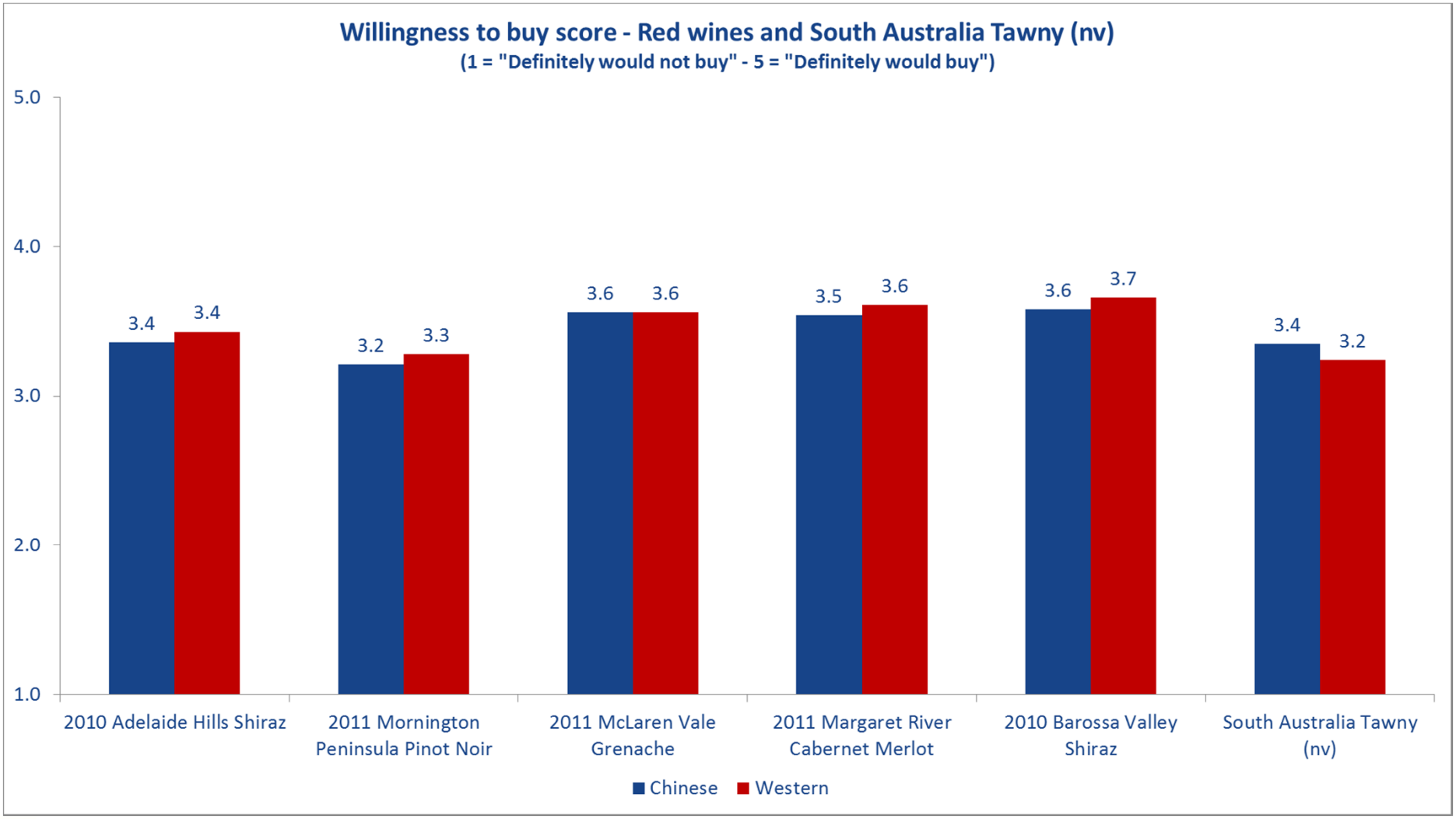
Results: Willingness to buy

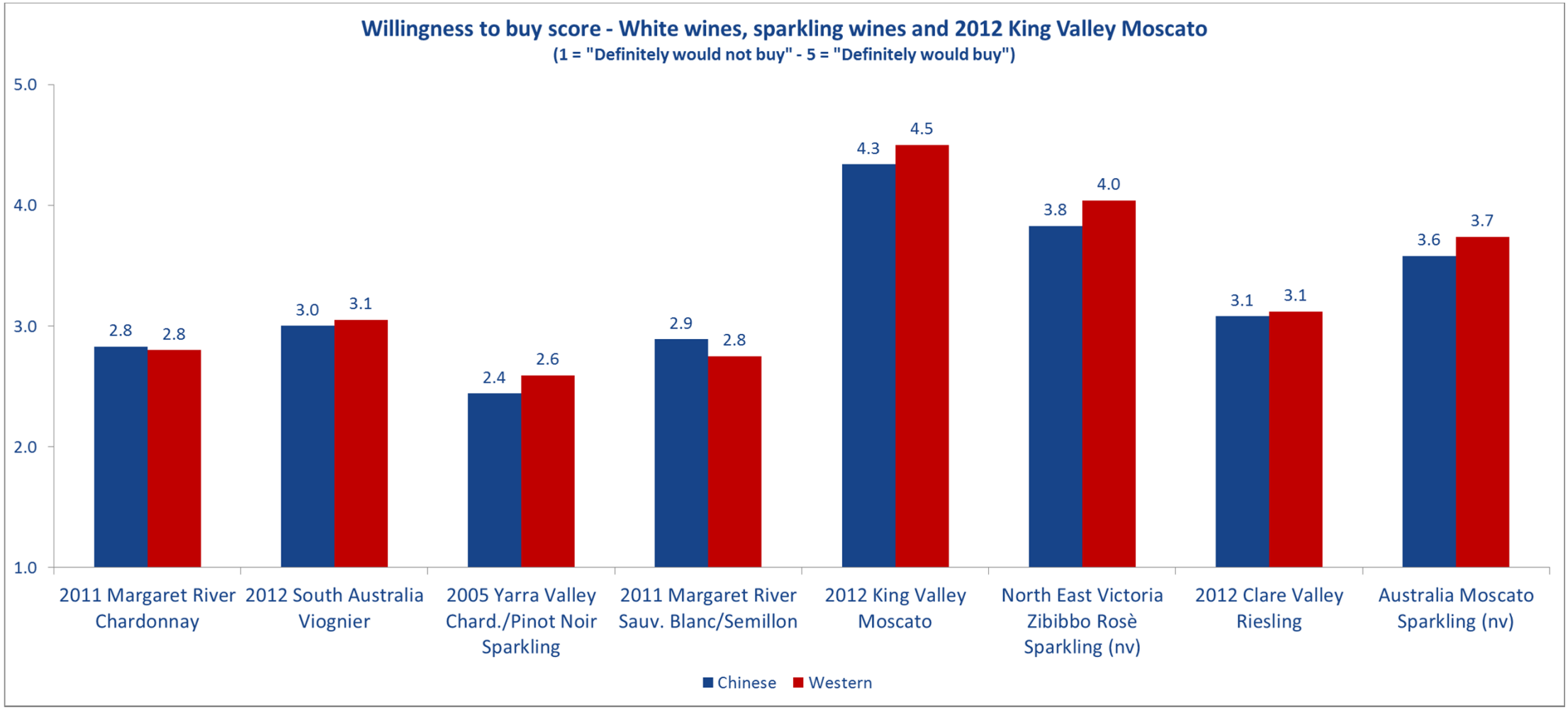
# Red & Tawny




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

Results: Willingness to buy

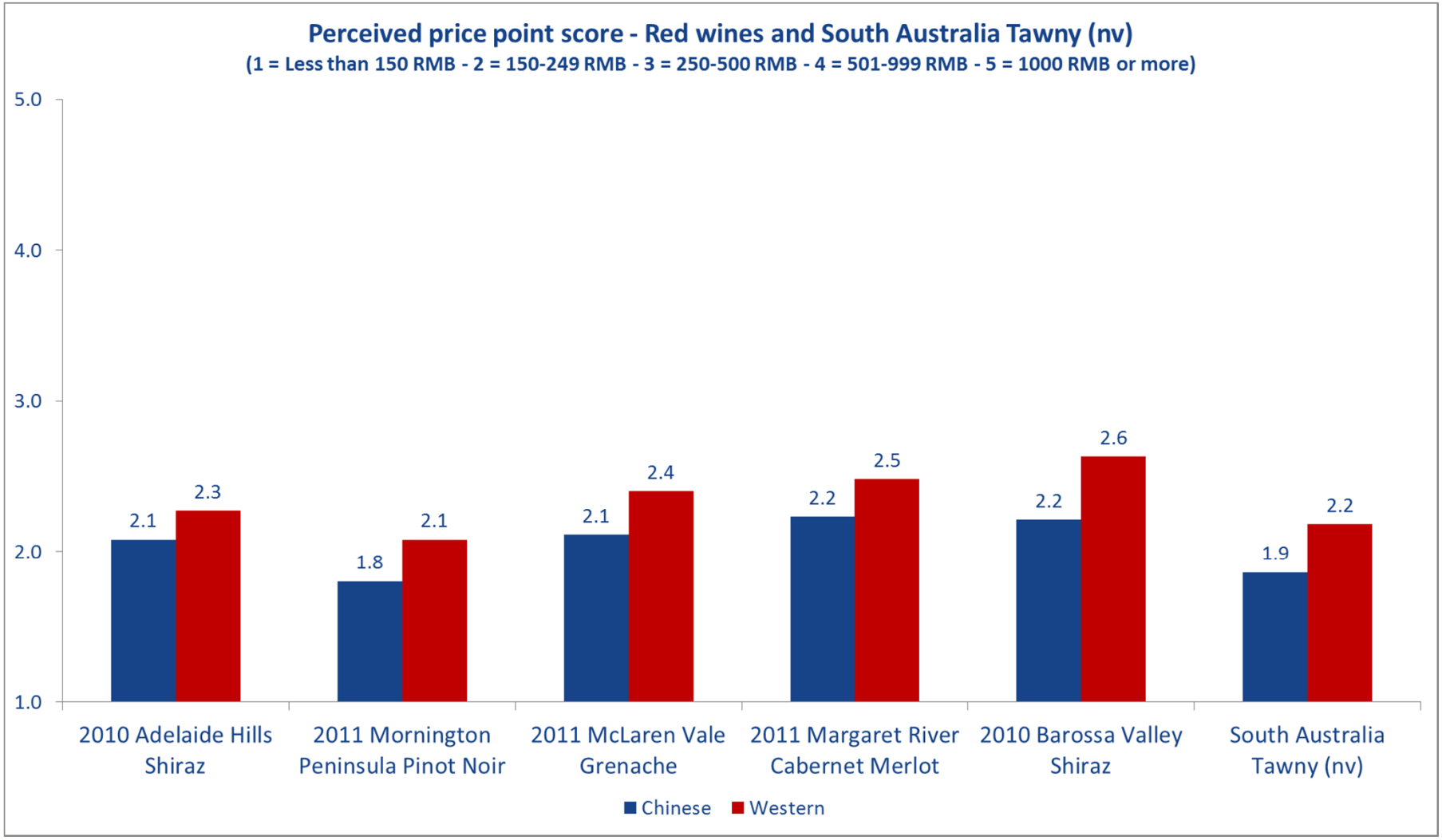
# White, Sparkling & Moscato




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)

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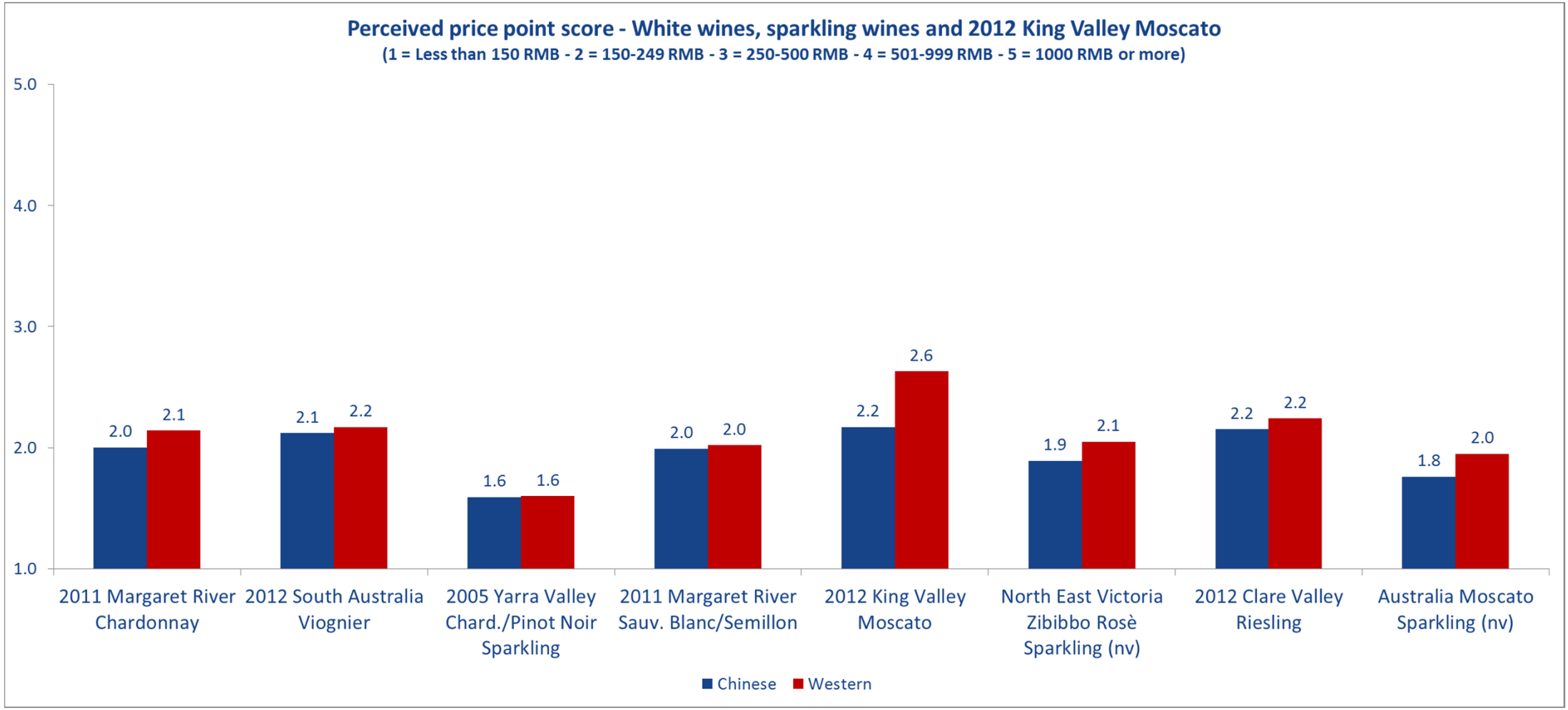
Results: Perceived price point

# 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

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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 |

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

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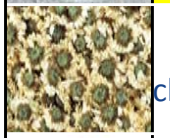
Results: Frequency count (%) – Specific descriptors

# 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 |

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

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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)

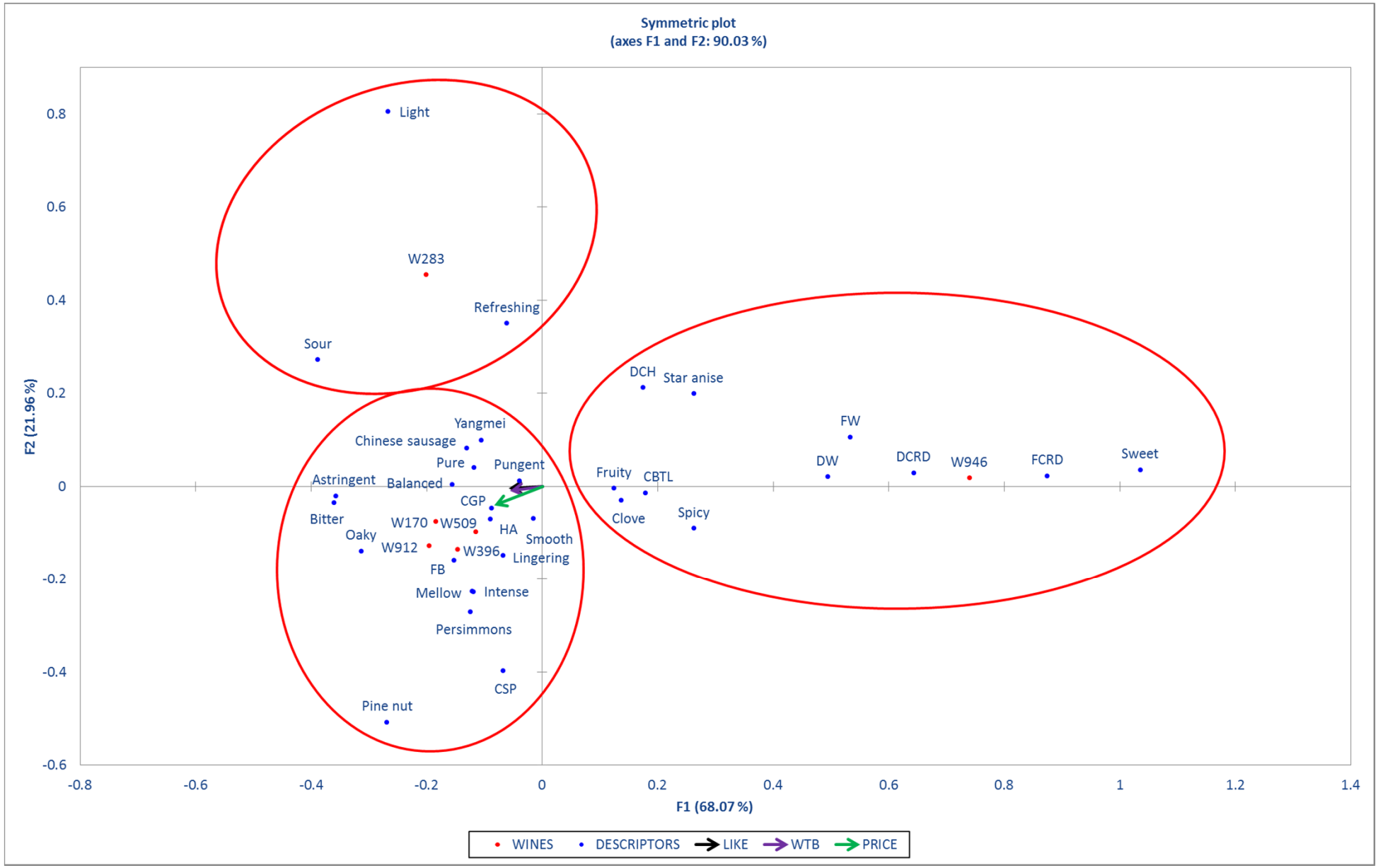
Given that both groups evaluated the same wines, the cross over of generic descriptors allows for validation of the similarity of the sampled groups. If there is no statistical difference between the majority of generic descriptors one can conclude that the data is suitable for comparison of the lexical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

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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

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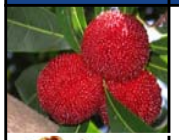
Results: Specific descriptors – Equivalence

# 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 |

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Hypothesised equivalences verified for 8 out of 14 specific descriptors

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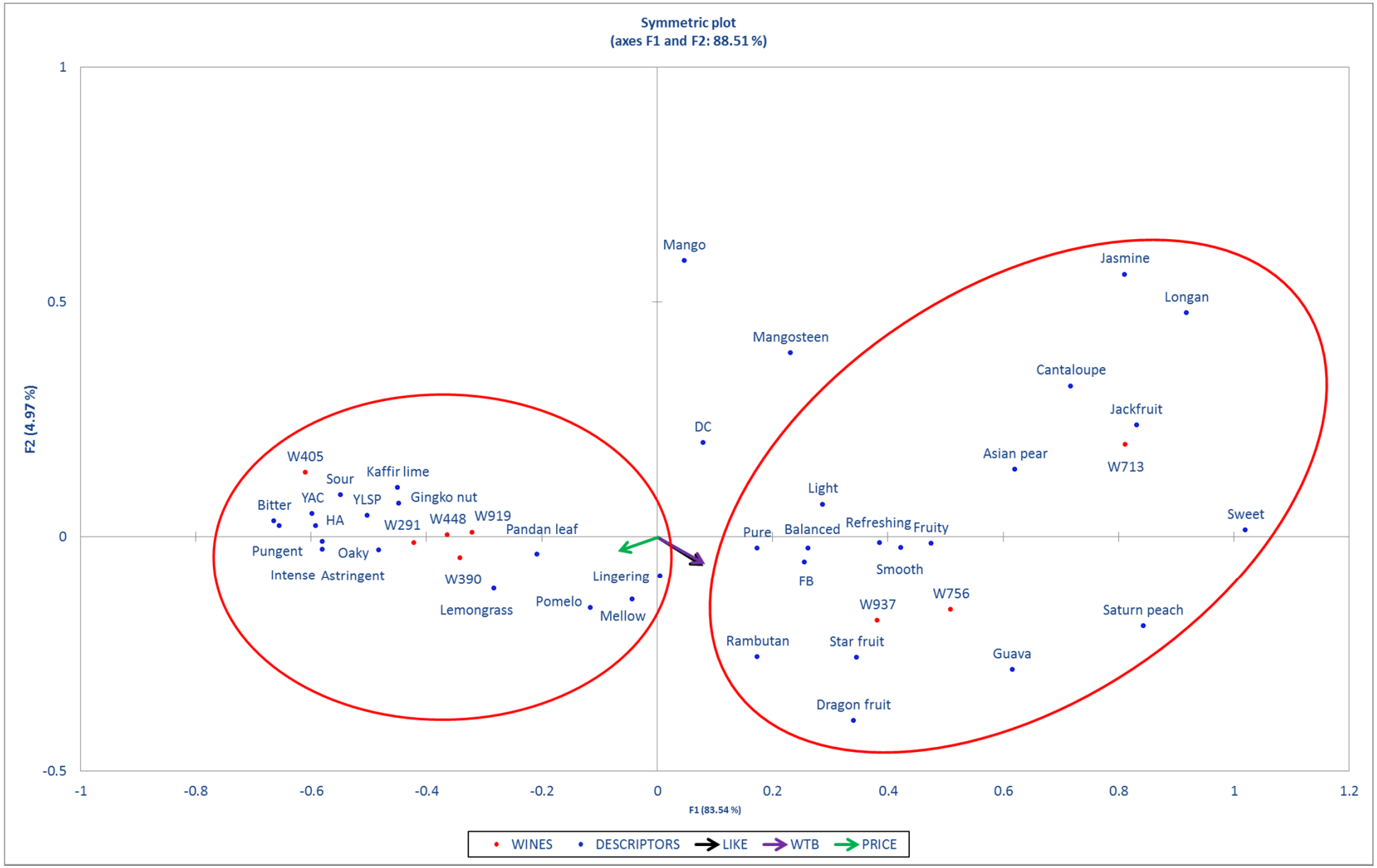
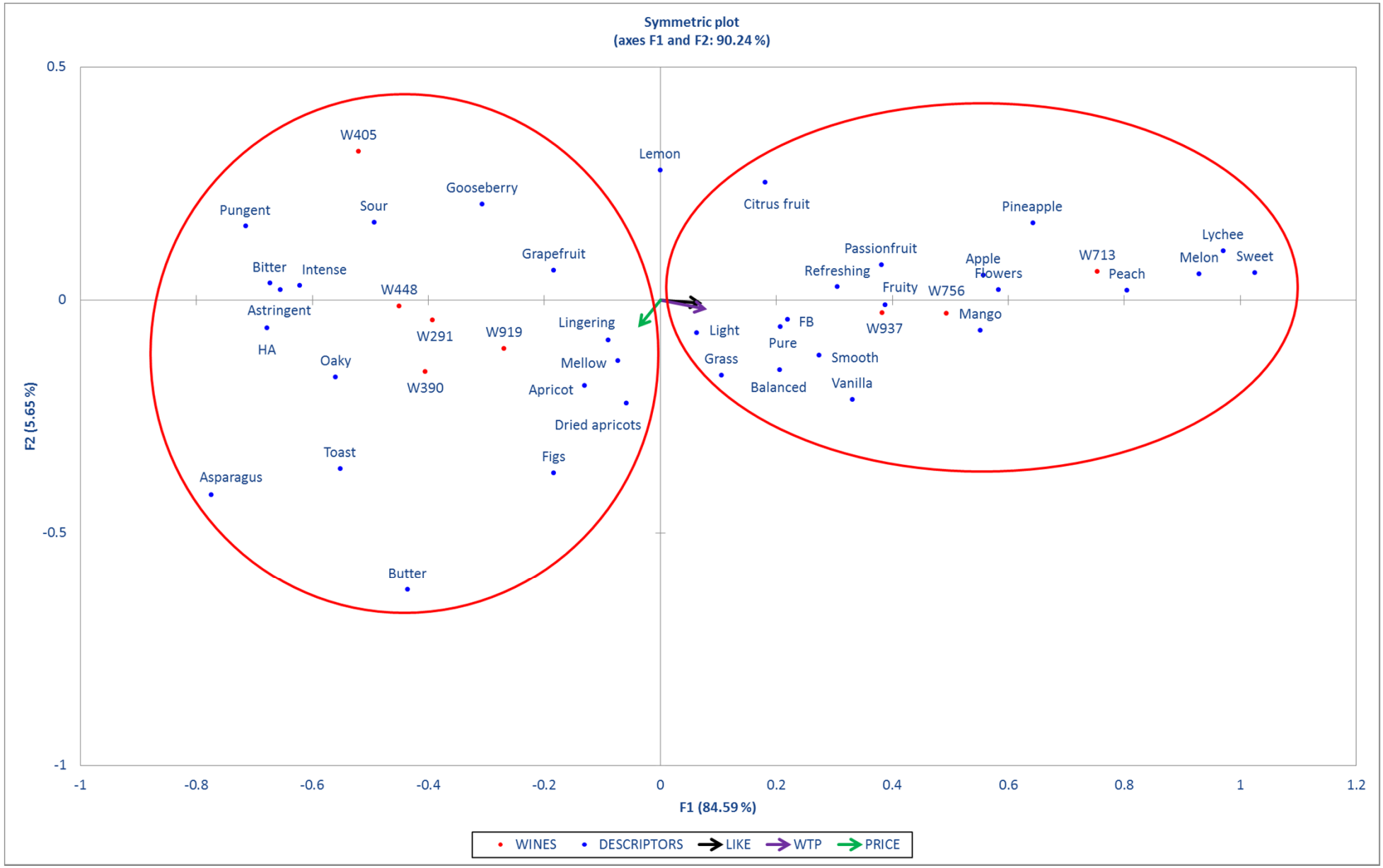
Results: Correspondence analysis – Chinese version

# 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 |

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Hypothesised equivalence verified for 11 out of 20 specific descriptors

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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 | √ |

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Hypothesised equivalence verified for 11 out of 20 specific descriptors

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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

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See following slide for example of simulated wine choice

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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

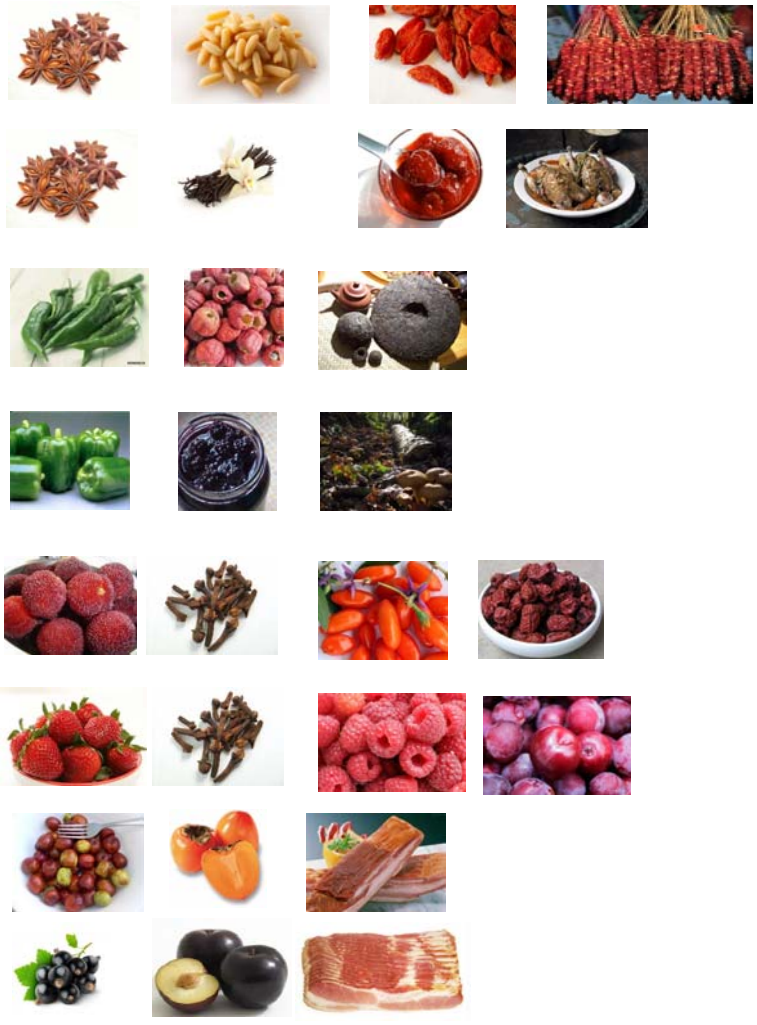
**Chinese)** Yangmei, cloves, fresh wolfberries and dried Chinese red dates

**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.

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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.

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# 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

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# 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

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