



Department of  
Primary Industries



## A Descriptive Language for Table Olive Flavours

Dr Soumi Paul Mukhopadhyay  
Sensory & Consumer Researcher- Horticulture

Having a consumer oriented research and product development is important in today's market.....



## Changing shift in today's consumer trend.....

The latest census found that only slightly more than half of Australia's residents today have two Australian-born parents and **more than one in four Australian residents were born overseas.**

This shift in the population make-up also means a shift in shopping habits, preference, behaviours and expectations, as well as a influence and purchasing power towards ethnic-Australian consumers.



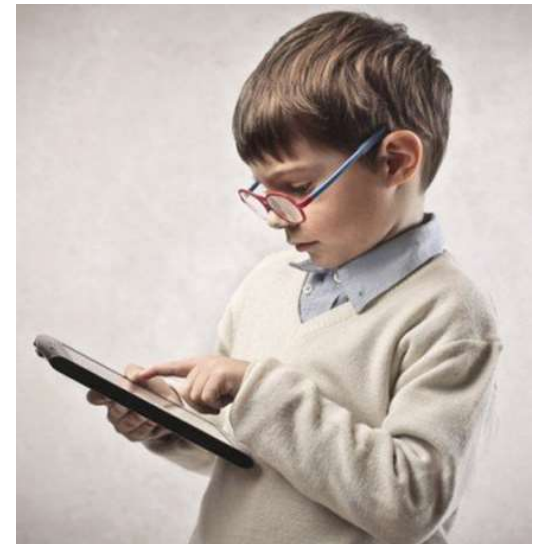
# Consumers consistently seeking value and variety- change in consumer shopping behaviour



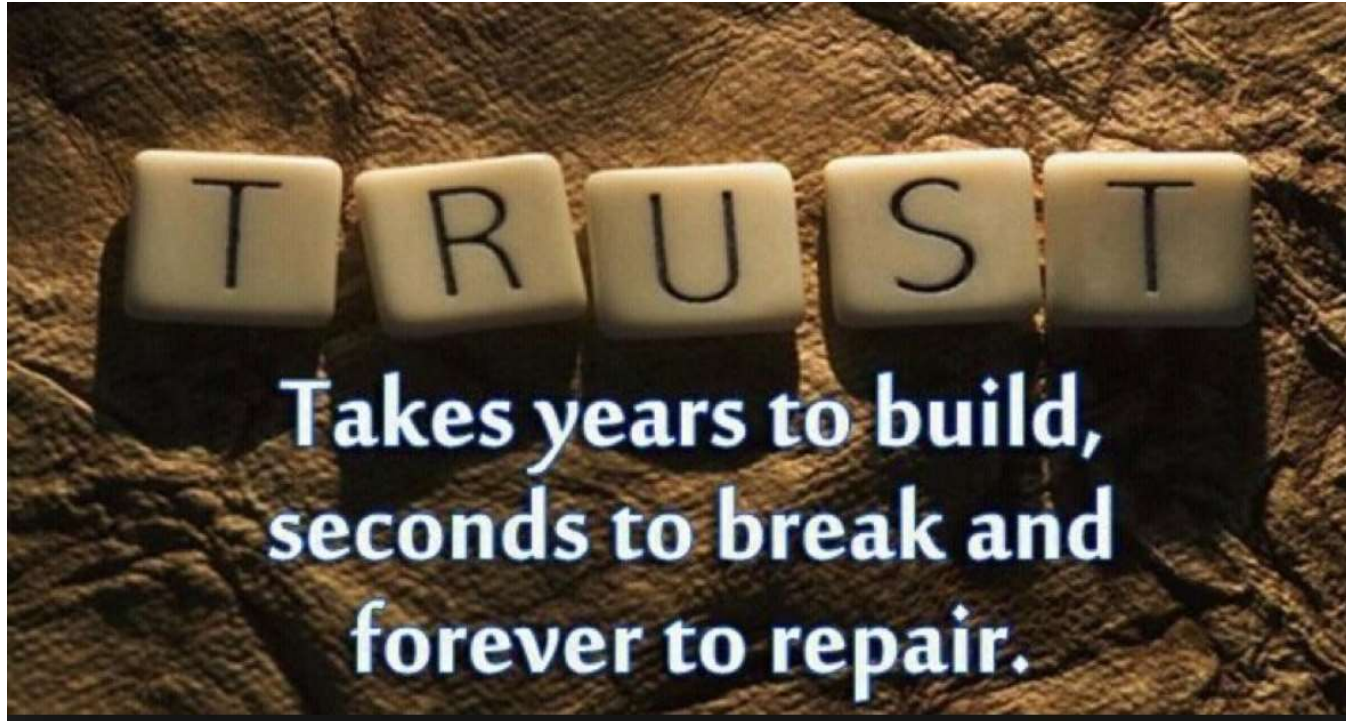
Traditional



Online







# Harnessing Provenance- telling the story of where the food came from



Images used here are for representation purposes only

# Today's consumer is.....

**Provenance**

**Follow food  
trends**

**More  
educated**

**Clear about  
food sensory  
attributes**

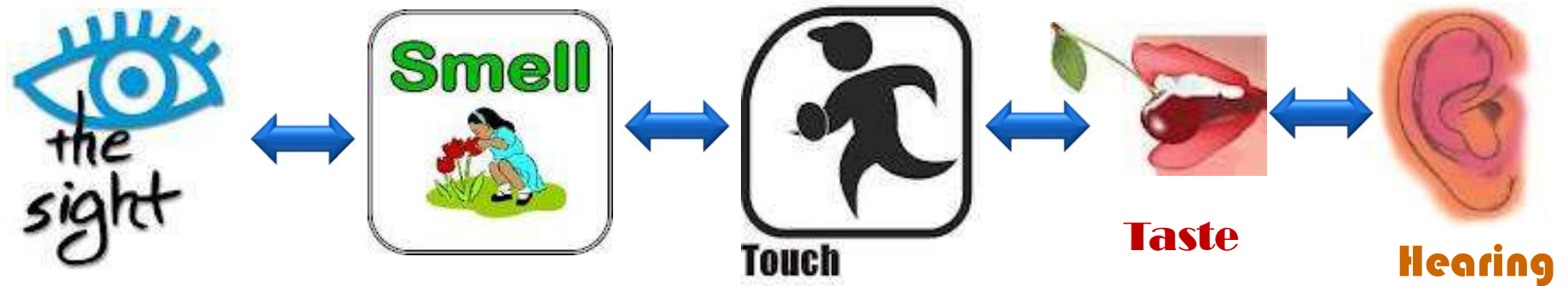
**Aware about  
safe food**

**Technologically  
savvy**

**Health and  
brand  
conscious**

**Environmental  
conscious**

# What is sensory evaluation?



- ❖ Appearance
- ❖ Shape
- ❖ Colour
- ❖ Consistency

- ❖ Odour
- ❖ Volatile molecules

- ❖ Tactile sensation

- ❖ Sweet
- ❖ Sour
- ❖ Bitter
- ❖ Salty
- ❖ Savoury

- ❖ Crunching
- ❖ Crackling
- ❖ Popping
- ❖ Bubbling



Producer-Priority  
Selection

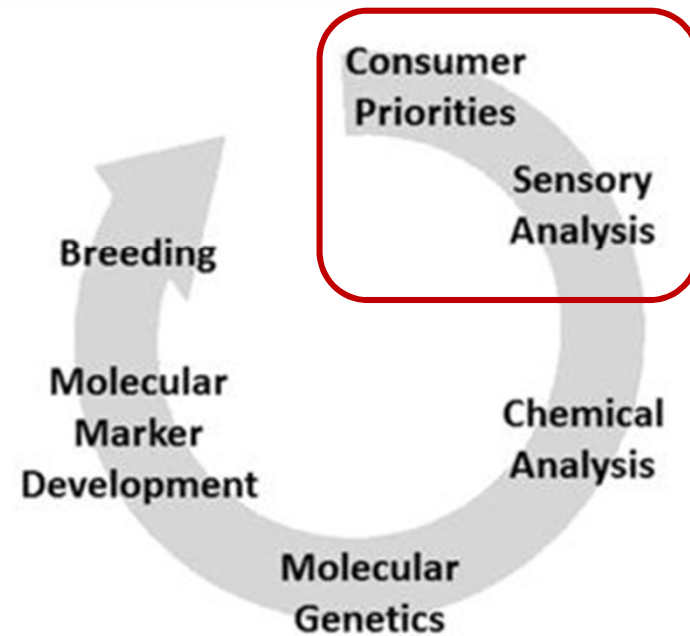
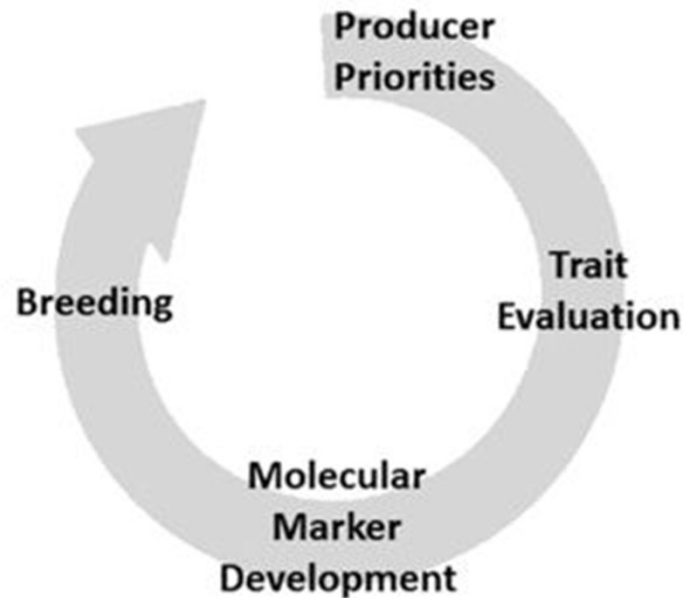
Consumer-Assisted  
Selection

BREEDING  
PRIORITIES

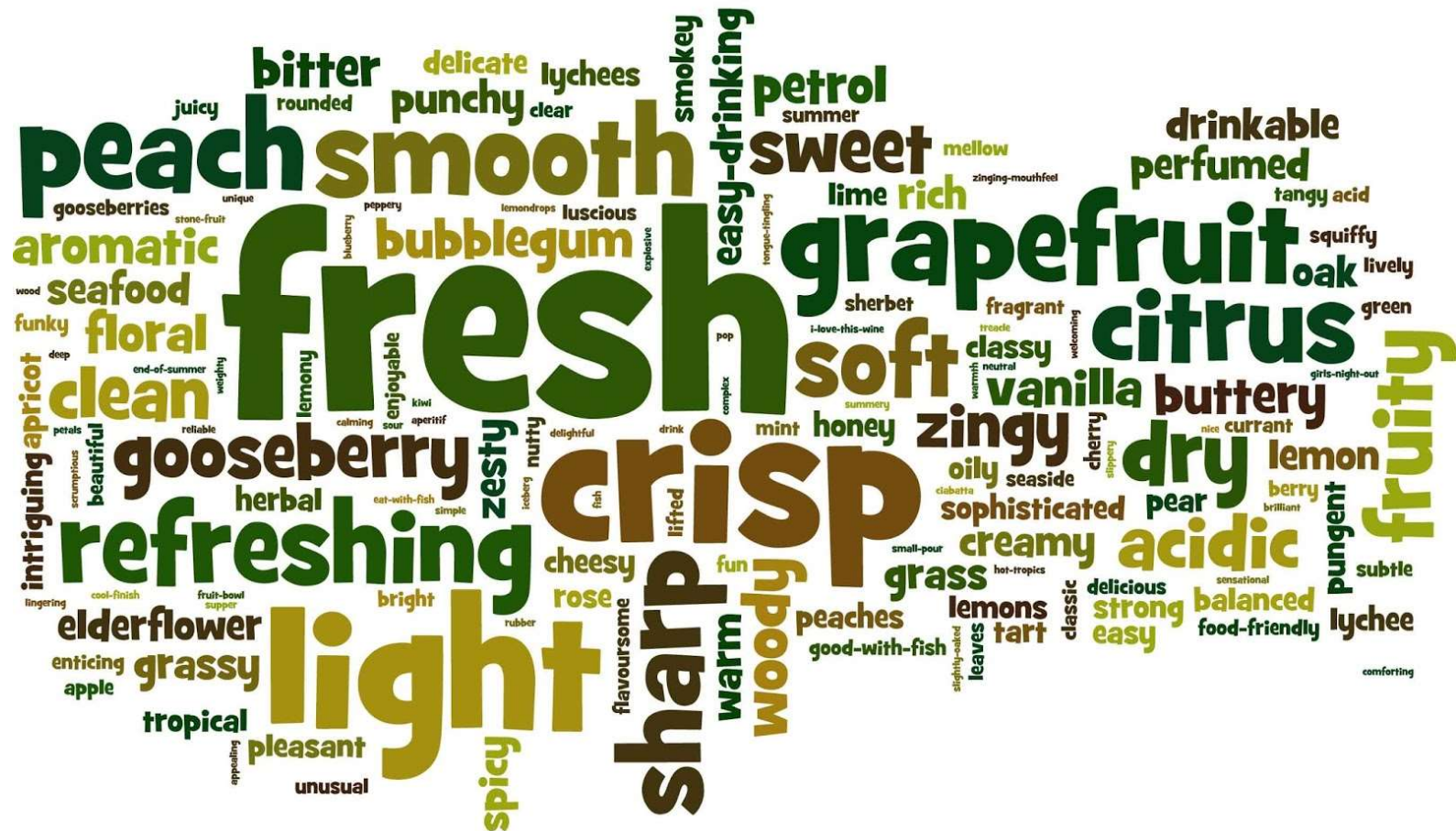
Disease resistance  
Shelf life  
Yield  
Appearance  
Uniformity

Flavor  
Aroma  
Novelty  
Nutrition  
Sustainability

BREEDING  
PROCESS



# Understanding Wine sensory descriptors- Diversity in the sensory attributes



## Present situation



**What is the best way to describe and appreciate Australian table olives?**





Consumer  
Survey

Sensory  
Evaluation

Consumer  
Testing



Now I got  
the perfect  
match!!!

## AN OLIVE FOR EVERY OCCASION

### BLACK RIPE OLIVES

Enjoyable any time of day—either as a quick daytime snack or with an elaborate evening meal. Also try

**SLICED BLACK RIPE OLIVES** for complementary flavor.

### STUFFED OLIVES

Combine almost any food with this Mediterranean favorite for delicious and creative flavor.

### NATURAL AND SEASONED OLIVES

Green, black and colored olives taste delicious with their natural flavors.

### GREEN OLIVES STUFFED WITH PIMIENTO

Commonly used for hors d'oeuvres and work well with sharp cheeses.

### SPANISH GREEN OLIVE

This year-round favorite is flavorful enough to stand alone, yet adaptable to make any dish more memorable.

### QUEEN OLIVES

When pitted, can be used for stuffing, cooking or just plain old snacking.



*Look for  
the logo!*



# Sensory methods

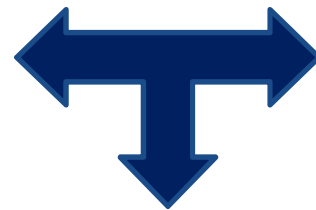
## Effective Testing

- ❖ *Objective* facts
- ❖ Trained Panel: 8-12

## Affective Testing

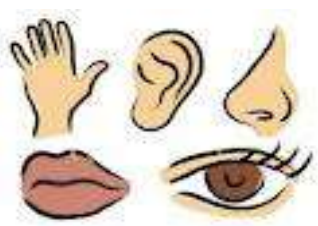
- ❖ *Subjective* preferences
- ❖ Untrained panel: >50

Descriptive Analysis

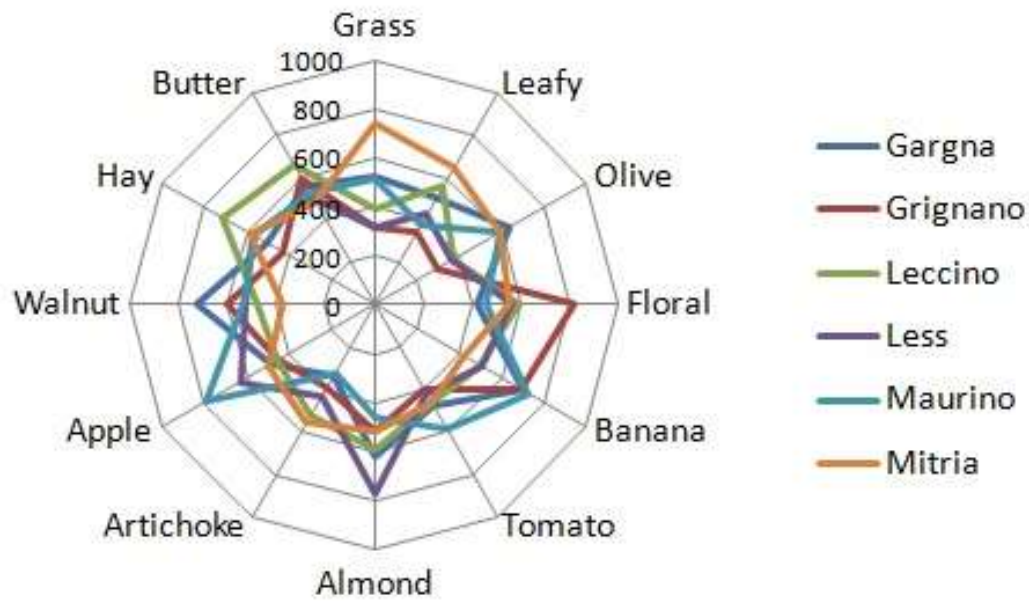
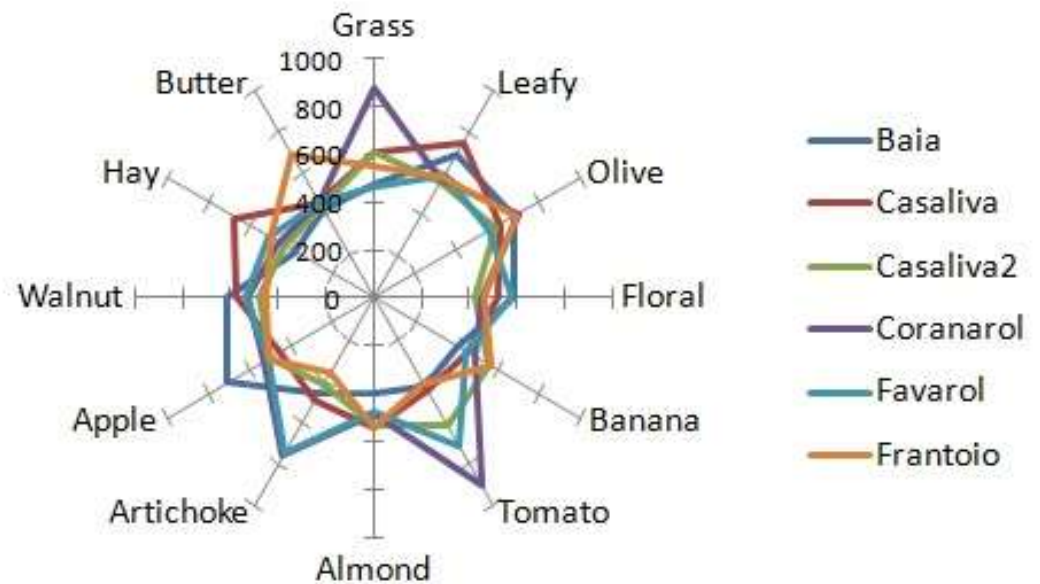


Consumer Evaluation

**Flavour Preference Map**



## Multidimensional sensory flavour profile



Complex

## AIOA Table Olive Classes 2018

	<p><b>Class 11: GREEN OLIVES</b></p> <p>Plain, whole olives only, no added flavours. In Brine.</p>		<p><b>Class 16: DRIED OLIVES</b></p> <p>Sun, salt and heat dried olives, including spiced and pitted</p>
	<p><b>Class 12: MEDLEY of OLIVES</b></p> <p>Plain, whole olives only, no added flavours. In Brine.</p>		<p><b>Class 18: SPECIALTY OLIVES</b></p> <p>Spiced and specially treated olives with declared country of origin ingredients</p>
	<p><b>Class 13: OLIVES TURNING COLOUR &amp; BLACK OLIVES</b></p> <p>All varieties EXCEPT KALAMATA OR California ripe processed. Plain whole olives only, no added flavours. In Brine.</p>		<p><b>Class 18(a):</b> – flavoured WITHOUT garlic and/or chilli.</p> <p><b>Class 18(b):</b> – flavoured WITH garlic and/or chilli.</p>
	<p><b>Class 14: KALAMATA OLIVES</b></p> <p>Plain whole olives only, no added flavours. In Brine.</p>		<p><b>Class 18(c): PITTED OR STUFFED OLIVES</b></p> <p>Olives pitted or stuffed with declared country of origin ingredients.</p>
	<p><b>Class 15: WILD OLIVES</b></p> <p>Small in size, variations in colour permitted, whole olives only. In Brine.</p>		<p><b>Class 19: TAPENADES</b></p> <p>Olive tapenades – various recipes.</p>



### A description example

	Things to look for	Comments
Appearance	Blemish (does the olive appear blemished?)	Clean unblemished fruit characteristic of the Kalamata olive
	Colour (is the olive colour appealing?)	Appealing purple colour
Aroma	First impression - appealing or unappealing aroma? Aromatic, floral? Intense or subdued?	Appealing intense floral aroma
	Malodourous - abnormal fermentation – putrid, butyric, Zapateria (rotten leather) Winey-vinegary, nail polish solvent	No abnormal aroma
Flavour	Evidence of off flavours – rancid, musty, cooked, soapy, metallic, earthy, acidic	No off flavours
	Does the exhibit have any specific olive flavours? What are the levels of bitterness (minor to overpowering)? Evidence of other flavours including varietal, preservation (vinegar, oil), added flavourings (citrus, garlic, chili, herbs)	Pronounced olive flavour, with well-balanced bitterness.
	Flavour balance, Flavour transference - does the aroma match the flavour? Length of flavour (short to lingering)	Well balanced flavours and aroma with lingering flavours
	Saltiness, slight, just right, too salty Acidity - slight, just right, high	Saltiness and acidity just right
	Hardness - finger squeeze test – soft, firm, hard? Bite test – skin thickness – tough, resistant, fine	Firm texture, good skin thickness
	Chewing test - flesh texture– smooth, mushy, granular, lumpy, fibrous Crunchiness – low, moderate, high?	Smooth even mouthfeel with moderate crunchiness
Texture	Ease of flesh removal? Flesh-to-pip ratio, lean, fleshy?	Generous fleshy olive that easily bites away from the pip
<b>Final tasting comment:</b> Attractive purple coloured fruit with no blemishes. Clean floral aroma flowing onto the palate with intense olive flavour and balanced saltiness. Well balanced flavours and aroma with lingering flavours. A firm texture with good skin thickness, moderately crunchiness and generous flesh. The lingering mouthfeel is smooth with balanced bitterness and acidity.		



## An example of “Green Table Olive”- Sample D



### Appearance

appealing turning unblemished fruit even spots size  
slight blemishes blemishes variation colour light  
green mostly olive good small smallish pale uniform

### Aroma

slightly pleasant fresh Mild olive vinegar aroma  
odour intense unpleasant winey vinegary unappealing

### Texture

fibrous pip low pit skin tough ratio crisp flesh ratio firm  
difficult flesh texture large crunchy crunch good removal lean  
olives hard

### Taste/Flavour

salt taste overpowering lacking olive flavour acidic  
bitterness slightly bitter low flavour salty olive fruit  
saltiness balance



## “Green Table Olive”- Sample E



### Appearance

brown medium small pale good wrinkles green frost damage  
blemishes shrivelled colour variable size variety  
olives white fruit yellow unappealing large

### Aroma

pleasant palate saltiness quite olive flavour earthy salty  
bitterness slightly salty nice balance bitter  
flavour salt good acceptable taste olive

### Texture

olive crunch chewy removal lean ratio pit hard texture mushy firm  
ratio flesh bite good soft skin easy crunchy flesh removal lean  
pit ratio tough skin

### Taste/Flavour

clean fermentation smell brine olives pleasant aroma winery  
appealing unappealing vinegary odour vinegary odour intense vinegar





*Images used here are for representation purposes only*