



Food and Agriculture Organization
of the United Nations



European Bank
for Reconstruction and Development



EXTRA VIRGIN OLIVE OILS

Sensory evaluation

London, 5 February 2019

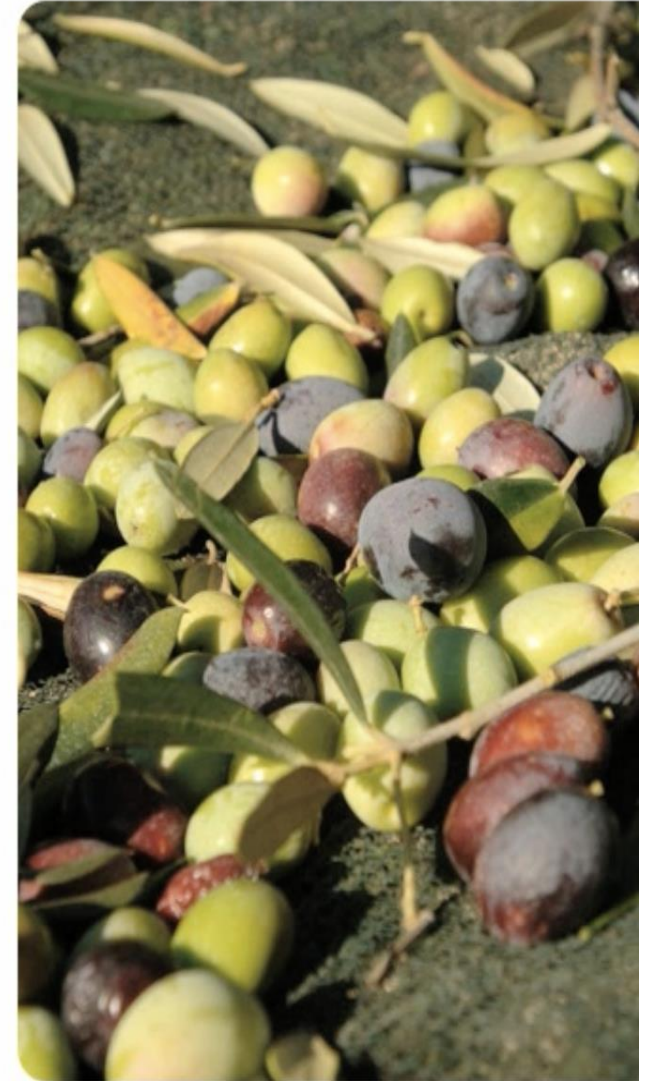
FAO-EBRD Project

Tunisia olive oil: Unlocking the potential through value chain development



The Extra Virgin Olive Oil:

- is a fruit juice
- is obtained by solely using mechanical means
- is not subject to chemical processes
- gives off a unique aroma
- is highly rich in antioxidants (polyphenols)





Until 1991 there were no common methods to identify olive oils and classify the product category.

For the official classification, both a chemical and an organoleptic assessment of virgin olive oil (COI/T.20/Doc. No 15/Rev. 7), is required





Why should we taste
olive oil?

CHEMICAL EXTRACTION



NO FLAVOUR





MECHANICAL
EXTRACTION



MULTIPLE
FLAVOURS



Through an olive oil degustation you may appreciate herby notes, olfactory sensations recalling green or ripened olives, and a palatable bitter and spicy flavor, with a light pungent perception, typical of its antioxidants



Antioxidants are responsible for the Extra Virgin Olive Oils extraordinary properties

Thanks to these compounds, the oil:

- is protected by oxidation process
- has a longer shelf-life
- has salutary effects on the health
- has a bitter and spicy flavor



If we cannot taste green notes, it means that we are probably tasting:

- 1) old oil or not well stored oil
- 2) oil from bad olives, damaged by fruit flies (bractocera) or bad agronomic practices
- 3) oil from over ripened black olives
- 4) defective oil, because of bad processing practices
- 5) oil mixed with other seed oils or chemically processed



Tasting Panel



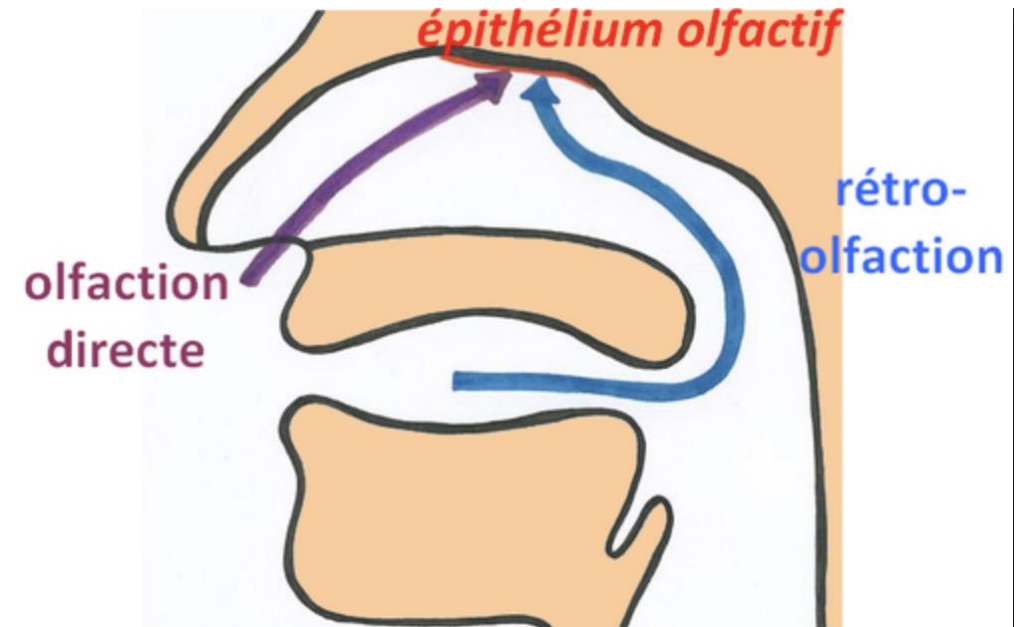
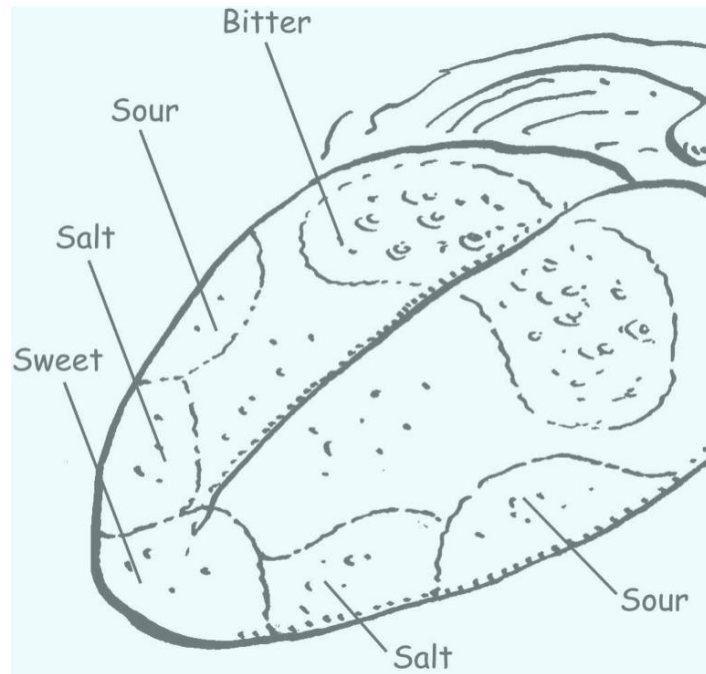
Group of assessors who have been specially selected and trained and who assemble to perform the sensory analysis of a product under controlled conditions.



Professional Tasting Accessories

- glasses (standardized) containing the samples, code numbered, covered with a watch-glass and kept at $28\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$
- profile sheet on hard copy, or on soft copy provided that the conditions of the profile sheet are met, together with the instructions for its use if necessary
- pen or indelible ink
- trays with slices of apple and/or water, carbonated water and/or rusks
- glass of water at ambient temperature
- sheet recalling the general rules listed in sections 9.4 and 10.1.1
- spittoons

How do we feel the organoleptic sensations?



How to taste



1

Get a very small cup (glass or plastic), fill it with some oil (1/4 of the cup capacity), place a lid over it and warm it between your hands

How to taste



2

Remove the lid and smell the oil, trying to identify the different fragrances through slow and deep breathings

How to taste



3

Sip a small quantity of oil and hold it between your lower lip clenching your teeth. Afterwards, breathe some air by vaporizing the oil through the oral cavity, trying to evaluate the bitter and spicy notes



How to taste



4

Once tasting is completed, oil can be expelled. Now, focus your attention and memorize your sensory sensations

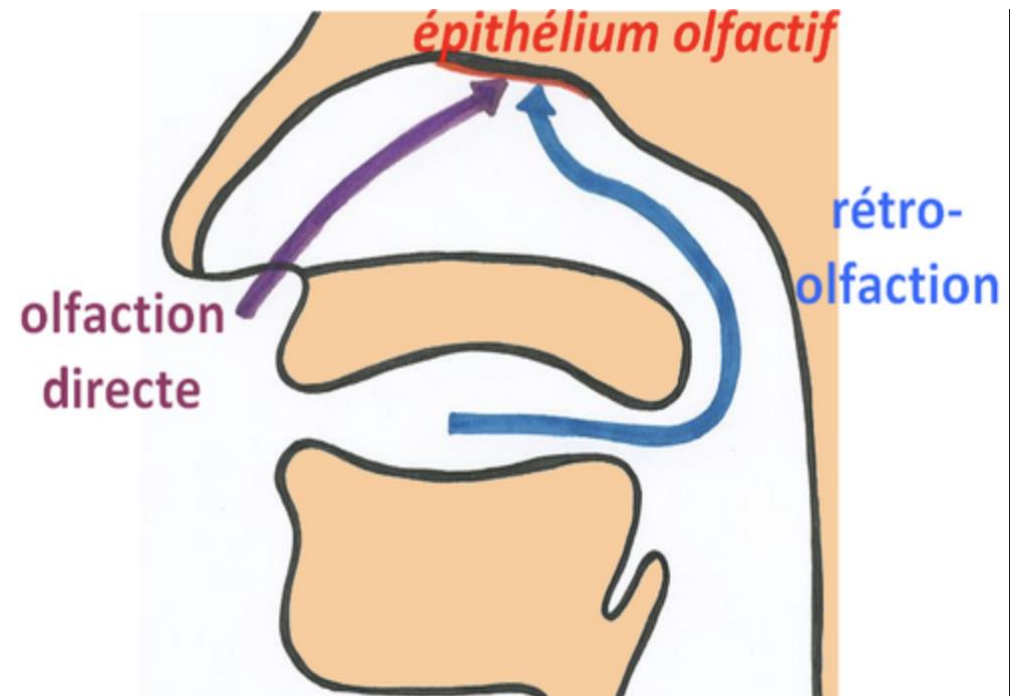
Fruity

Set of olfactory sensations characteristic of the oil which depends on the variety and comes from sound, fresh olives, either ripe or unripe.

It is perceived directly and/or through the back of the nose.

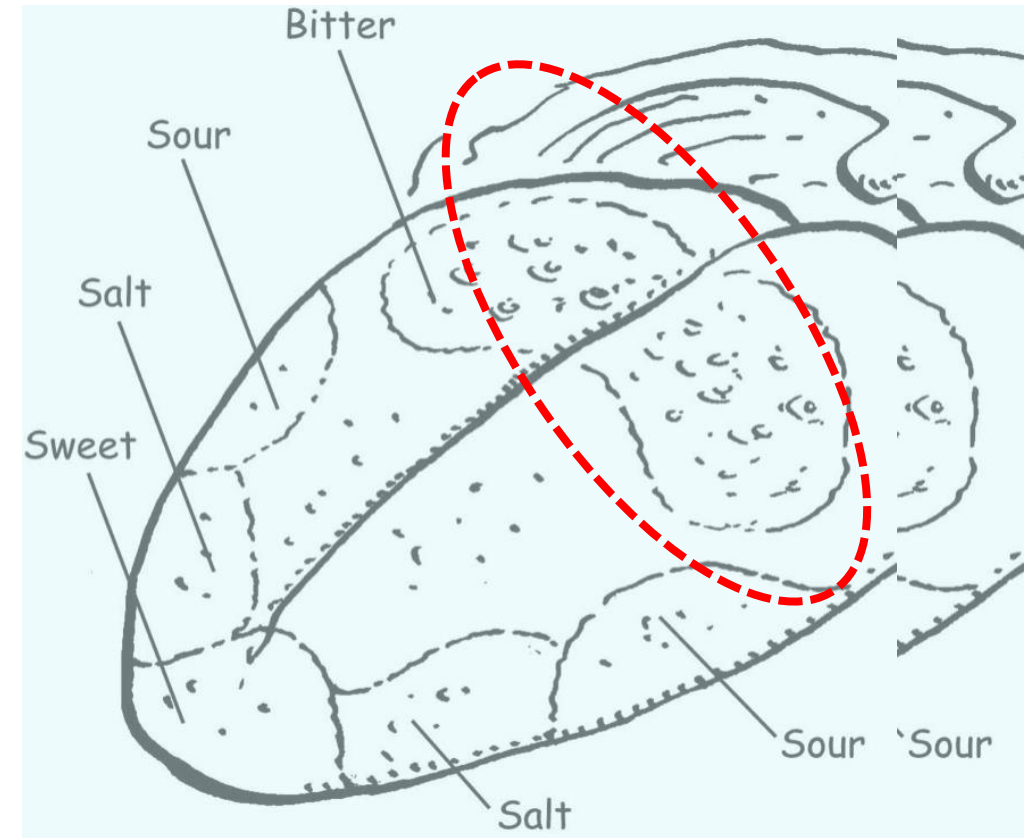
Smells (odours) are perceived by direct aspiration.

Flavours are perceived by the back of the nose



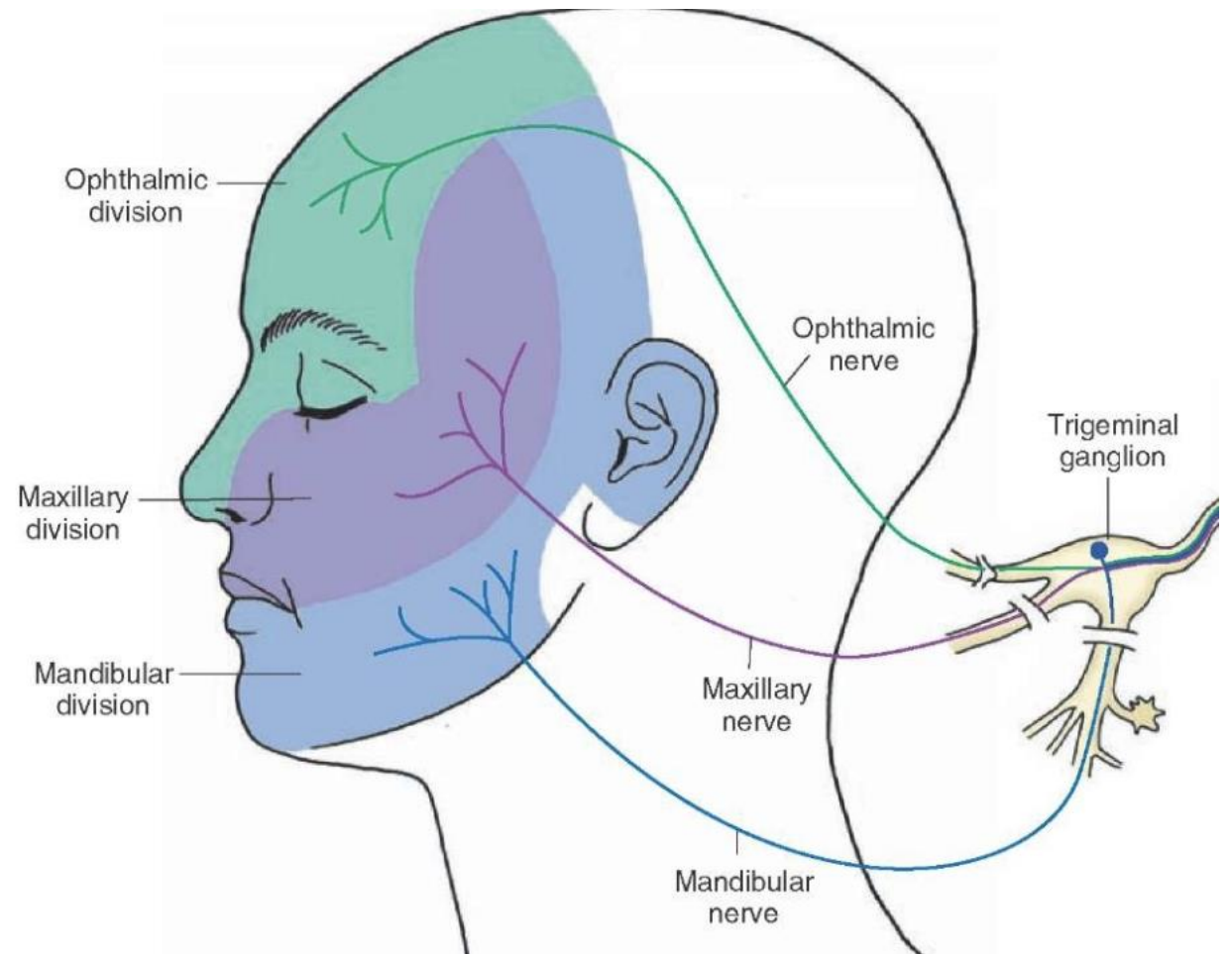
Bitter

Primary oil taste characteristic stemming from green olives or when olives change colour. It is perceived in the area of the tongue sensitive to bitterness which is located at the bottom of the tongue, below the soft palate.



Pungent

Biting tactile sensation characteristic of oils produced at early harvest, mainly from unripe olives (green). It can be perceived through the whole of the mouth cavity, particularly in the throat.





Fusty/muddy sediment

This flavour is mainly due to a process of anaerobic fermentation. This is caused by inappropriately piled olives without air ventilation or oil left in contact with the sediment that settles at the bottom of the tanks.



Musty-humid- earthy

This characteristic flavour is mainly due to olives being stored in humid conditions for several days or of oil obtained from olives that have been collected with earth or mud and have not been properly washed.

Winey- vinegary

Characteristic flavour of certain oils reminiscent of wine or vinegar.



Acid-sour

This flavour is mainly due to a process of aerobic fermentation in the olives or in olive paste left on pressing mats which have not been properly cleaned and leads to the formation of acetic acid, ethyl acetate and ethanol.

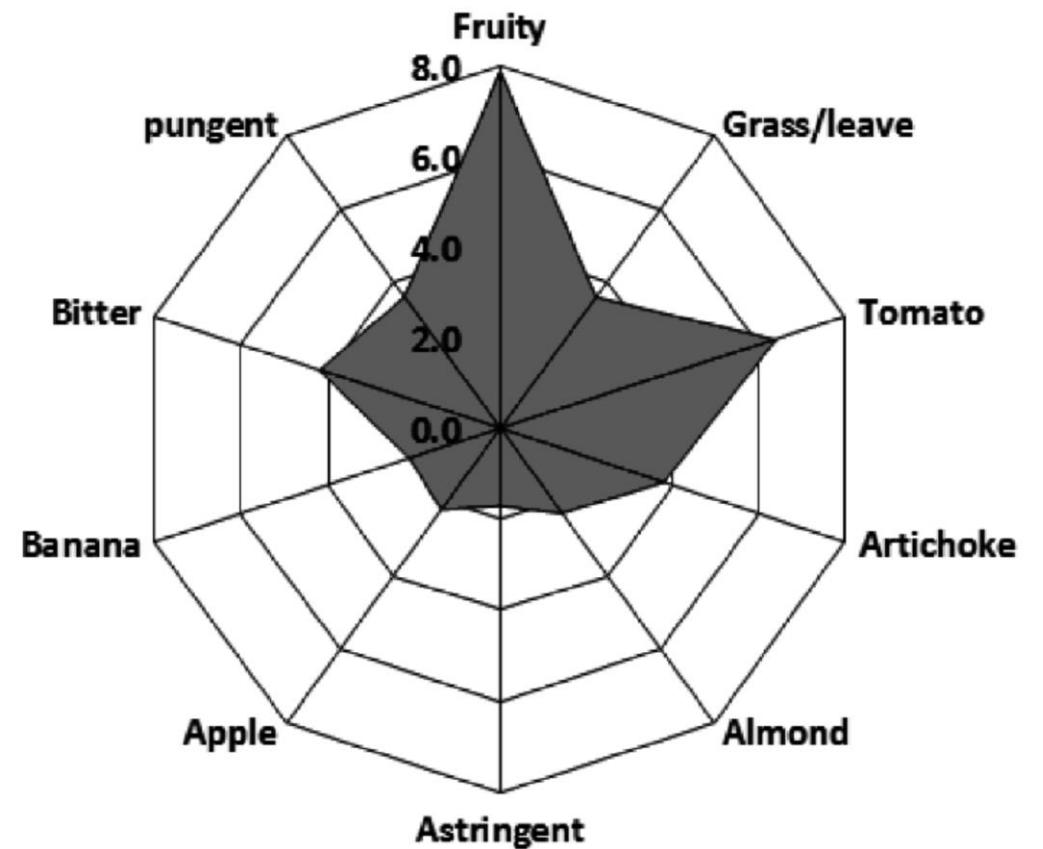
Rancid

Flavour of oils which have undergone an intense process of oxidation. This is mainly due to improperly stored oil through the supply chain (warehouses, shops, restaurants, home).

Frostbitten olives

Characteristic flavour of oils extracted from olives which have been injured by frost while on the tree.

Sensorial profile of Chetoui





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Thank you

For more information, please go to

<http://www.medagri.org/projectcorner/index.php?id=27>