

Defects and their causes

NY, May 2025



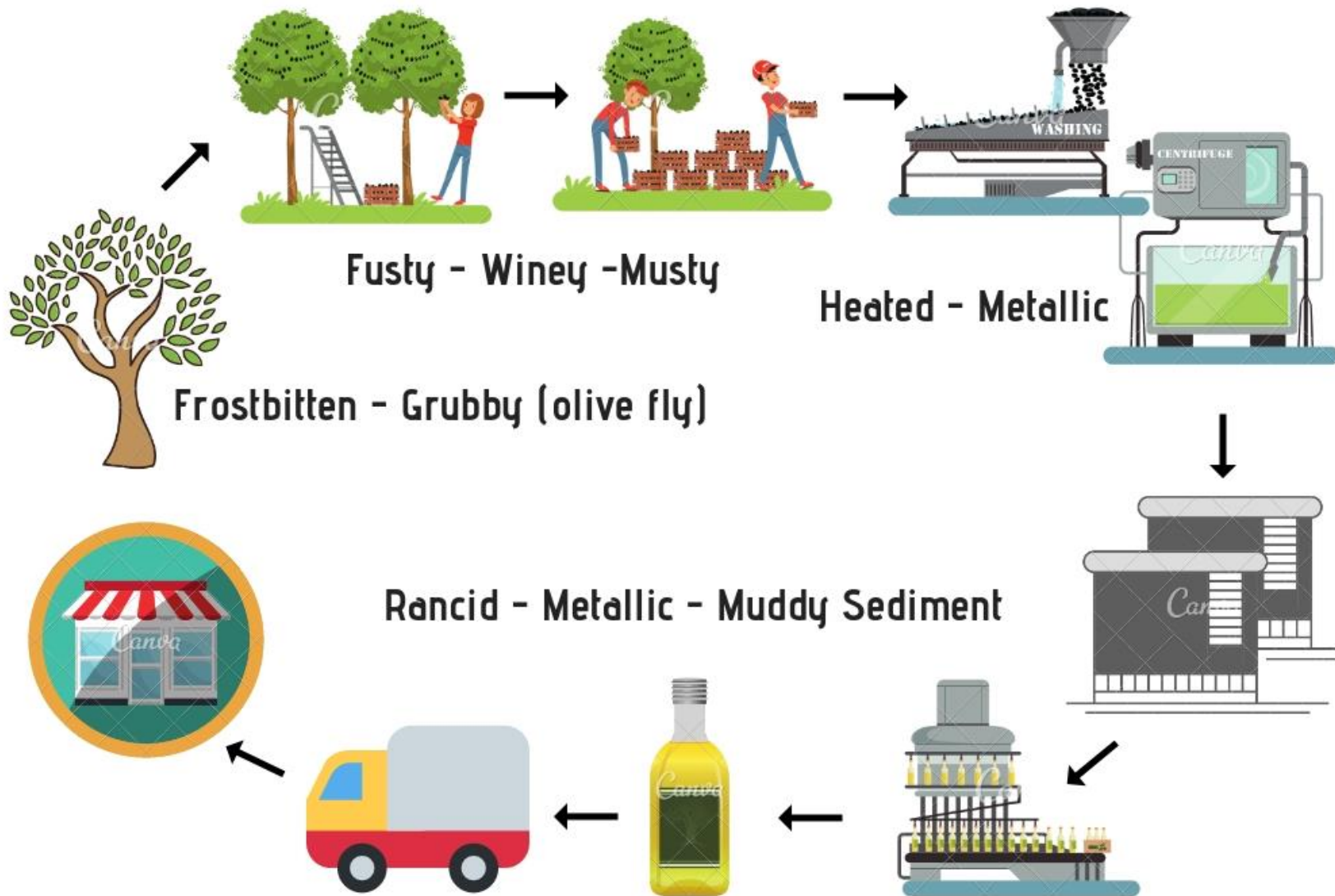
Negative attributes (COI/T.20/Doc. No 15/Rev. 10 2018)

Fusty / muddy sediment	Characteristic flavour of oil obtained from olives piled or stored in such conditions as to have undergone an advanced stage of anaerobic fermentation, or of oil which has been left in contact with the sediment that settles in underground tanks and vats and which has also undergone a process of anaerobic fermentation.
Musty - humid - earthy	Characteristic flavour of oils obtained from fruit in which large numbers of fungi and yeasts have developed as a result of its being stored in humid conditions for several days or of oil obtained from olives that have been collected with earth or mud on them and which have not been washed.
Winey – vinegary – acid sour	Characteristic flavour of certain oils reminiscent of wine or vinegar. 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.

Frostbitten olives (wet wood)	Characteristic flavour of oils extracted from olives which have been injured by frost while on the tree.
Heated or burnt	Characteristic flavour of oils caused by excessive and/or prolonged burnt heating during processing, particularly when the paste is thermally mixed, if this is done under unsuitable thermal conditions.
Hay-wood	Characteristic flavour of certain oils produced from olives that have dried out.
Rough	Thick, pasty mouthfeel sensation produced by certain old oils.
Greasy	Flavour of oil reminiscent of that of diesel oil, grease or mineral oil.
Vegetable water	Flavour acquired by the oil as a result of prolonged contact with vegetable water which has undergone fermentation processes.
Brine	Flavour of oil extracted from olives which have been preserved in brine.
Metallic	Flavour that is reminiscent of metals. It is characteristic of oil which has been in prolonged contact with metallic surfaces during crushing, mixing, pressing or storage.
Esparto	Characteristic flavour of oil obtained from olives pressed in new esparto mats. The flavour may differ depending on whether the mats are made of green esparto or dried esparto.
Grubby	Flavour of oil obtained from olives which have been heavily attacked by the grubs of the olive fly (<i>Bactrocera oleae</i>).
Cucumber	Flavour produced when an oil is hermetically packed for too long, particularly in tin containers, and which is attributed to the formation of 2,6-nonadienal.

Defects and clasification

Bad cultivation, harvest, olives storage	Bad extraction process	Bad oil storage
Fusty	Heated / burnt	Rancid
Winey	Metallic	Muddy sediment
Musty / humid / earthy		Metallic
Frozen / Frostbitten		



Fusty

Anaerobic fermentation (without oxygen) when the olives are piled up. Increases with humidity and higher temperatures.





Winey

Aerobic fermentation (with oxygen), in the piled olives, promotes the formation of ethanol, ethyl acetate and acetic acid. All of these compounds pass into the oil in the crushing /malaxing phase.



Musty / humid / earthy

Proliferation of fungi and yeasts, which occurs due to damage during the harvest; because olives that have fallen to the ground have been used; or lack of cleaning of the fruit.



Frozen / Frostbitten

It occurs when the olives freeze on the tree, before being harvested. The damage will depend on the duration of exposure to the cold, but it is irreversible and will show up at some point.



Heated

It occurs when the olive or pasta is exposed to high temperatures (over 30 degrees) during processing. It is necessary to take care of every step, not just the malaxing.

Muddy Sediment

Anaerobic fermentation also occurs, but in the remains of sediments that remain in the oil. This is the main reason to include filtering as a priority in the process.



Rancid

It is due to oxidation processes that are natural to the fruit, but is increased by contact of the oil with air or by the action of light. It cannot be avoided, but it can be delayed if the necessary measures are taken.

WINEY

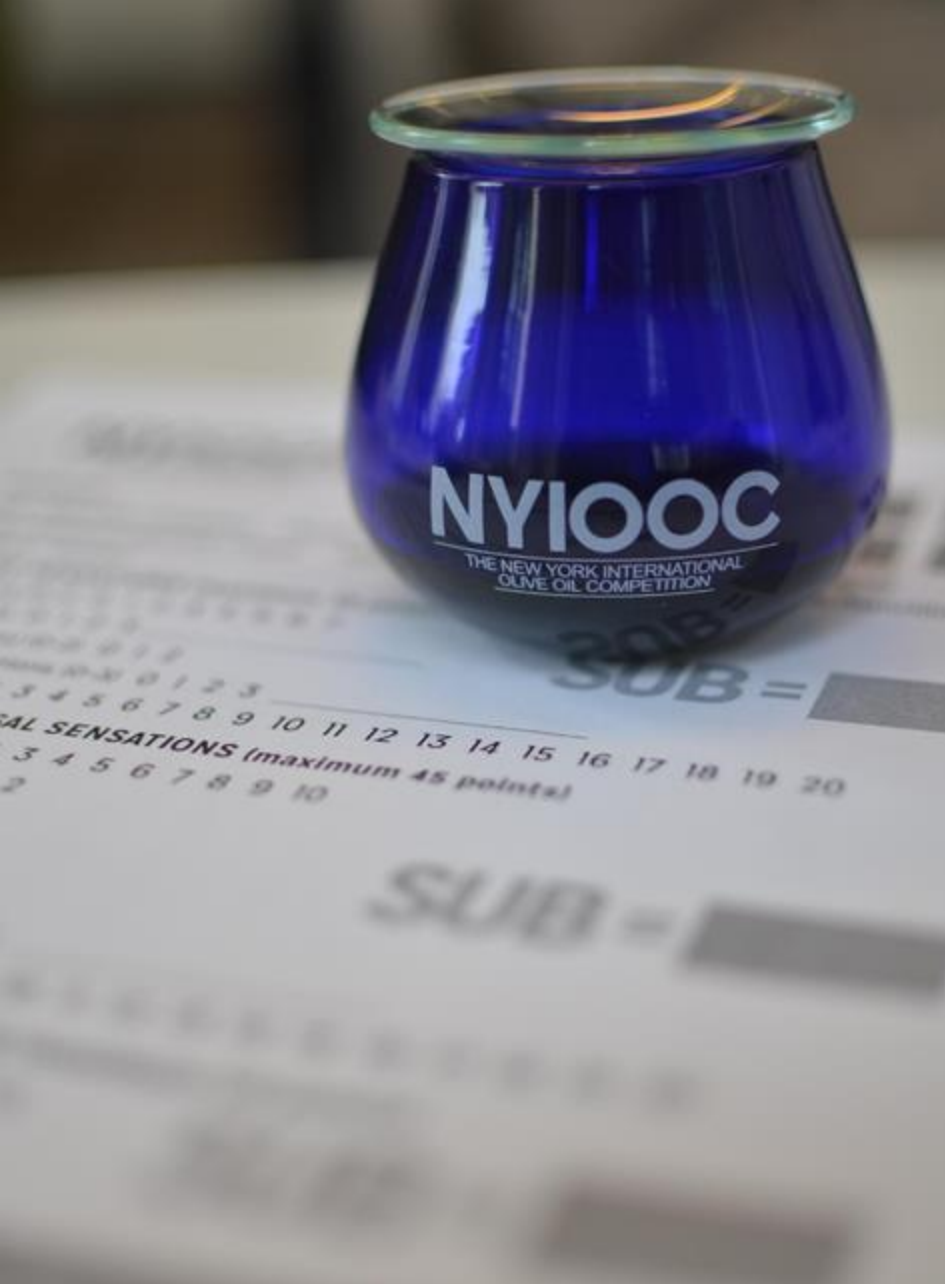
MUSTY

RANCID

**FUSTY –
MUDDY SEDIMENT**

FROSTBITTEN





A little secret...

**It's all
in that very
first smell.**