

Sensory Trends in the Olive Oil Market - A Swiss View

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Background

The Olive Oil market in Switzerland is traditionally and mainly influenced by Italian Olive Oils but includes as well Oils from other origins as there are Greece, Spain, Turkey and many others more. As soon as we deal with such a broad diversity of "extra virgin" Olive Oils, a lot of interesting questions appear ...

- ❖ How can sensory characteristics of Olive Oils be described ?
- ❖ Why is an Oil especially liked by the consumer ?
- ❖ Which objective attributes are relevant for the consumer preference with regard to a specific olive Oil or specific Olive variety ?
- ❖ What characterizes a group of consumers with same preferences for Olive Oil ?
- ❖ Why is an Olive Oil especially liked by a specific group of consumers but not by another group ? Where are the differences ?

Idea / Aim

To find answers a project was implemented that deals on the one hand with the objective description of sensory characteristics of Olive Oil and on the other hand with the individual and subjective opinion of non-involved light and heavy oil users. Beyond that the aim was to finally analyze and combine both data sets to have deeper insights into consumer relevant objective criteria which would help to better understand consumer behaviour on the whole, preferences of certain target groups and finally the overall-liking for Olive Oil.

Two Tests Events

International Olive Oil Award – Zurich (IOOA)

→ Objective sensory evaluation of extra virgin Olive Oils by trained panelists – namely the Swiss Olive Oil Panel (SOP) Gourmesse Zürich (OLIO)

→ Consumer Acceptance Test of extra virgin Olive Oils on the occasion of the "Gourmesse Zürich" (= gourmet fair)



Test Design IOOA / OLIO

1. Pre-Test → Screening of Olive Oils in order to categorize fruitiness and to eliminate Oils with pronounced defects
2. Paneltest 1 (extended) → Classification of all Olive Oils and description of characteristics
3. Paneltest 2 (extended) → Verification of Paneltest 1 and definition of the Awards, Silver and Golden Olives
4. Consumer Test → Finding consumer favourites and definition of the OLIO's.

Objective Methodology → IOOA

In the course of the IOOA ca. 130-150 Olive Oils are tested by a minimum of 8 tasters each. The evaluation is based on the Paneltest described in the EC Regulation 640/2008, but extended with additional criteria as there are "harmony" and "persistence" (Figure 1), which are crucial in order to discriminate Olive Oils within the category "extra virgin". Moreover a detailed aroma description (Figure 2) is included.

Subjective Methodology → OLIO

In the course of the Gourmesse Zurich or rather the acceptance test OLIO, Olive Oils are evaluated by at least 90 to 120 consumers on a 9-point-hedonic-scale (Figure 3).

Conclusion

For producers the main benefit of the "International Olive oil Award – Zurich" and the "OLIO" lies in the information they receive in the form of a comprehensive report, containing hints concerning quality improvement potential for their individual Olive Oils. For retailers the main benefit lies in the possibility to further differentiate the category "extra virgin" from a qualitative and objective point of view that is able to lead to a specific "sensory marketing" of Olive Oil. And finally for the consumer the main benefit appears as enhanced transparency on the Olive Oil market primarily by publication of results.

defective / totally unharmonious (≤ 3)	unharmonious (3.1 - 4.4)	average (4.5 - 5.4)	harmonious (5.5 - 6.4)	complex / harmonious (> 6.5)
single defects without median, totally inharmonious aspects (e.g. gallic bitterness)	many inharmonious aspects	no negative aspects, few aroma components, often overripe	more complex aroma profile, flavour above average	very complex aroma profile, pronounced harmony / persistency aspects
very short	short	average	long	very long
positive aspects do not last at all	positive aspects do last less long than average	medium persistency	positive aspects last longer than average	positive aspects do last very long

Figure 1: „Harmony“ Scale and „Persistency“ Scale (10 cm each)

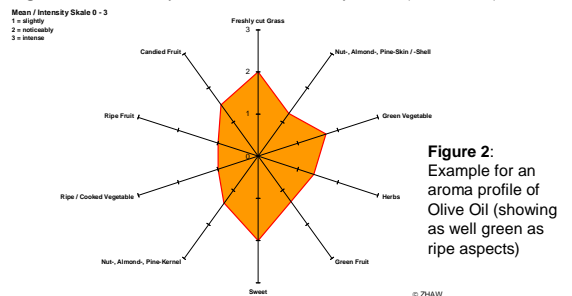


Figure 2: Example for an aroma profile of Olive Oil (showing as well green as ripe aspects)



Figure 3: 9-point Hedonic Scale

Results of IOOA / OLIO

"Harmony" is a relevant quality indicator for Olive Oils (Figure 4). Without that indicator all these Oils could not be differentiated and would be considered "only" as extra virgin.

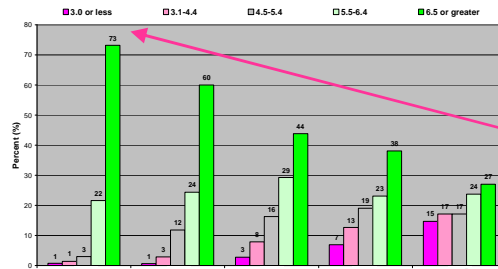


Figure 4: Quality indicator „Harmony“ in the years 2005-2009

Combining the results of objective and subjective evaluation, the Preference Map (Figure 5) gives an insight of consumer preferences. Looking at the 2008 data all consumer clusters are orientated in opposition to vectors that stand for sensory characteristics, meaning that consumers do not like heavily pronounced Olive oils whatsoever.

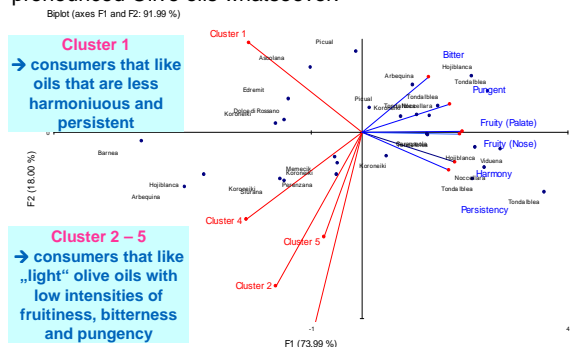


Figure 5: Preference Map - Consumer preferences for monovarieties 2008