

DOI: 10.16210/j.cnki.1007-7561.2022.01.009.en

GHEDIRA A. Definition, mission and standards of International Olive Council (英文原文) [J]. Science and Technology of Cereals, Oils and Foods, 2022, 30(1): 83-86.

# Definition, Mission and Standards of International Olive Council (英文原文)

Abdellatif GHEDIRA

(The International Olive Council, Madrid 28002, Spain)

**Abstract:** The International Olive Council (IOC) is an international intergovernmental organization dedicated to olive oil and table olives, aiming at modernizing olive production, coordinating olive policies, improving the regulation of international trade, defending the quality of the olive sector and promoting olive oil and table olives to increase their consumption. The IOC grants recognition of laboratories and tasting panels in annual trials when they meet the conditions given in the decisions adopting the IOC certificate for laboratories for the physico-chemical testing of olive oil and laboratories for the sensory analysis of virgin olive oils. The IOC establishes analysis methods applying to olive oils and olive pomace oils for purity, quality and organoleptic assessment. The IOC elaborates guides of storage conditions for olive oils and olive pomace oils, of managing virgin olive oil tasting panels and of sensory testing laboratories. In future works, the IOC includes activities to identify analytical criteria for detecting fraud and guaranteeing the quality of olive oils and olive pomace oils.

**Key words:** the international olive council; standardization; recognition; trade standards; quality management guides; future trends

**Chinese Library Classification Number:** TS210.7

**Documentary Identification Code:** A     **Article ID:** 1007-7561(2022)01-0083-04

**Published time on CNKI:** 2022-01-07 15:41:12

**Published address on CNKI:** <https://kns.cnki.net/kcms/detail/11.3863.TS.20220107.1318.014.html>

## 1. DEFINITION AND MISSION OF THE INTERNATIONAL OLIVE COUNCIL

The International Olive Council (IOC), the international, intergovernmental organization dedicated to olive oil and table olives, was created under the auspices of the United Nations in 1959<sup>[1]</sup>. Headquartered in Madrid, Spain, the IOC is tasked with administering the various international agreements negotiated over the past 60 years, with

the aim of defending and promoting olive growing, olive oil and table olives. The sixth agreement, the International Agreement on Olive Oil and Table Olives 2015, was adopted in Geneva at the United Nations Conference on Trade and Development and came into force on 1 January 2017<sup>[2]</sup>. At present, the IOC has 18 members which are Albania, Algeria, Argentina, Egypt, Georgia, European Union (with its 27 Member States), Iran (Islamic Republic), Israel, Jordan, Lebanon, Libya, Montenegro, Morocco, State of Palestine, Tunisia, Turkey, Uruguay and Uzbekistan.

The IOC is a decisive player in the sustainable and responsible development of the olive sector with various functions. However, they are all aimed at

**Received Date:** 2021-11-15

**Author:** Abdellatif GHEDIRA, male, Born in 1962, Master, The highest rank of agricultural engineer, Executive Director, Research field: the organization, administration and supervision of the IOC Executive Secretariat. E-mail: iooc@internationaloliveoil.org. See more details in PC14-C15

modernizing olive production, coordinating olive policies, improving the regulation of international trade, defending the quality of the olive sector and promoting olive oil and table olives to increase their consumption.

One of the activities assigned to the IOC to expand international trade is to draw up and adopt trade standards for olive oils, olive pomace oils and table olives, and to devise methods for testing their physico-chemical and organoleptic characteristics. Regarding the regulation of international trade, the IOC established the definitions and analytical characteristics of each of the denominations of olive oils and olive pomace oils traded internationally and of table olives, as mentioned in the trade standards adopted by the Members, which are mandatory in international trade.

## 2. STANDARDIZATION AND RESEARCH IN THE IOC

The goal of standardization and research (S&R) activities is to achieve uniformity in national and international legislation relating to the physico-chemical and organoleptic characteristics of olive oils, olive pomace oils and table olives. For this reason, the IOC works with several international standardization organizations to harmonize standards on olive oils and olive pomace oils. Together, they strive to prevent ambiguity, thus protecting the consumer and facilitating international trade.

Besides, the S&R Unit organizes forums for discussing scientific issues based on the work of an international group of experts to tackle both present and future challenges, coordinating therefore studies and research on the chemical, organoleptic and nutritional properties of olive oil and table olives.

Within the framework of the quality of analysis laboratories and to increase trust between laboratories and olive oil professionals, the IOC grants its recognition in annual trials. Laboratories and tasting panels are granted recognition when they meet the conditions given in the decisions adopting the IOC certificate for laboratories for the physico-chemical testing of olive oil and laboratories for the sensory analysis of virgin olive oils. The Unit coordinates two proficiency tests for sensory testing laboratories and one for physico-chemical testing laboratories. For the former, laboratories must prove they are proficient in applying the method developed by the IOC for the organoleptic assessment of virgin olive oil. For the latter, they are required to demonstrate their competence in applying the testing methods

specified in the IOC trade standard.

The IOC also organizes the Mario Solinas Quality Award, the annual competition for extra virgin olive oils, which draws entries from around the world. The Unit coordinates the voluntary monitoring agreement co-brokered by the IOC and importer/exporter associations to ensure the quality of the olive oils and olive pomace oils sold on import markets, which is designed to safeguard the image of olive oil and prevent fraud.

## 3. IOC TRADE STANDARDS

The standards developed by the IOC<sup>[3]</sup> are trade standards, adopted by consensus by the Council of Members, who undertake to introduce them into their respective legislation so that they are implemented. These standards aimed to improve the quality control to achieve transparency in the international market for olive oil, olive pomace oil and table olives and thus promote their consumption. They are always revised in the light of scientific progress, which allows for the adoption of more accurate methods of analysis, and as technological and commercial developments occur.

The results of ongoing studies and ring tests performed by the expert groups and relations with other standardization bodies are used to update limits according to the results.

### 3.1 Trade standard applying to olive oils and olive pomace oils

The last version of this standard was adopted in June 2021 (**COI/T.15/NC No 3/Rev. 16–June 2021**). This standard lays down the definitions, limits, and purity and quality characteristics of the nine designations of olive oil and olive pomace oil currently traded internationally. It also lays down the rules applicable to hygiene, packaging, container filling and labelling, essentially in line with the international requirements determined by the Codex Alimentarius Commission. The standard also indicates the recommended methods of analysis and sampling.

### 3.2 Trade standard applying to table olives

The last version of this standard was adopted in December 2004 (**COI/OT/NC No. 1–December 2004**). This standard established the definitions of each of the commercial designations of table olives (green olives, black olives or olives turning colour) in their various forms of presentation. It also lays down the quality factors for both the fruit and the brine and their commercial classification according to the importance of any defects they may have. It also lays

down the requirements for hygiene, filling, labelling and methods of analysis set by the Codex Alimentarius Commission.

#### 4. IOC METHODS

Methods of analysis must be constantly updated in line with research needs, scientific progress, and analytical technology. To achieve this, officially designated chemical and organoleptic experts from IOC member countries meet several times a year to discuss the methods for the analysis of virgin olive oils and olive pomace oils as well as the elaboration of new methods to determine the quality of the oils and their purity. Once a method is developed, its margins of error checked and its applicability to olive oil confirmed, it will be adopted by the Council of Members and then included in the IOC trade standard. The methods of analysis developed by the IOC are those included in the current trade standard applying to olive oils and olive pomace oils for the following determinations:

##### For purity criteria:

- Determination of fatty acid methyl esters by gas-chromatography: COI/T.20/Doc. No 33/Rev.1
- Determination of the composition and content of sterols, triterpenic dialcohols and aliphatic alcohols by capillary column gas chromatography: COI/T.20/Doc. No 26/Rev. 5,
- Determination of the difference between actual and theoretical content of triacylglycerols with ECN 42: COI/T.20/Doc. No 20/Rev. 4
- Determination of stigmastadienes in vegetable oils: COI/T.20/Doc. No 11/Rev.4
- Determination of sterenes in refined vegetable oils: COI/T.20/Doc. No 16/Rev.2 Determination of the percentage of 2-glyceryl monopalmitate: COI/T. 20/Doc. No 23/Rev.1
- Determination of the content of waxes, fatty acid methyl esters and fatty acid ethyl esters by capillary gas chromatography: COI/T.20/Doc. No 28/Rev.2
- Determination of biophenols in olive oils by HPLC: COI/T.20/Doc. No 29/Rev.1
- Method for the evaluation of the coherence of TAG composition with the fatty acid composition: COI/T.20/Doc. No 25/Rev.2.

##### For quality criteria:

- Organoleptic assessment of virgin olive oil: COI/T.20/Doc. No 15/Rev.10
- Determination of free fatty acids, cold method: COI/T.20/Doc. No 34/Rev.1
- Determination of the peroxide value: COI/T.

20/Doc. No 35/Rev.1

- Spectrophotometric investigation in the ultraviolet: COI/T.20/Doc. No 19/Rev.5
- Determination of tetrachloroethylene in olive oils by gas-liquid chromatography: COI/T.20/Doc. No 8.

#### 5. IOC ORGANOLEPTIC STANDARDS

To perform the organoleptic assessment of virgin olive oils, the IOC adopted standards to assemble the general terms used in sensory analysis and to give their definitions (COI/T.20/Doc. No 4/Rev. 1–September 2007), to describe the characteristics of the glass intended for use in the organoleptic analysis of virgin olive oils (COI/T.20/Doc. No 5/Rev. 2–2020) and to specify the basic conditions to be met when installing a testing room (COI/T.20/Doc. No 6/Rev. 1–September 2007).

#### 6. IOC GUIDELINES

The IOC has drawn up, in collaboration with experts and representatives of the olive sector, quality management guides for olive oil, table olives and olive pomace oil extraction industries. It also elaborated a guide to determine the characteristics of oil- olives. Recently, the IOC adopted guidelines on the best storage conditions for olive oils and olive pomace oils to preserve the original positive characteristics during storage; a guide for verifying the conformity of a previously declared commercial category of olive oil and olive pomace oil; and guidelines for managing virgin olive oil tasting panels in the event of a pandemic, to provide health and safety recommendations for conducting the organoleptic assessment of virgin olive oils during a pandemic.

Besides, the IOC has drawn up guidelines for the accomplishment of requirements of standard ISO 17025. This document is for sensory testing laboratories with particular reference to virgin olive oil, to provide recommendations, guidance and suggestions for panel leaders and laboratories interested in obtaining accreditation. The document is also a source of guidance and uniformity for inspectors responsible for auditing systems for the sensory analysis of virgin olive oil.

#### 7. TRENDS OF IOC FUTURE WORKS

In the olive chemistry and standardization programme, the IOC includes activities to identify analytical criteria for detecting fraud and guaranteeing the quality of olive oils and olive pomace oils. Ring tests will be carried out, as required, to develop analytical methods to improve

the quality and authenticity of olive oils, and several expert groups will work on topics of interest to the sector

Considering that the harmonization of standards is essential for facilitating international trade, promoting and guaranteeing fair trade and protecting the consumer both in terms of health and in terms of the conformity of the product to its label, the IOC works in close cooperation with other international bodies like the Codex Alimentarius Commission and the ISO.

## 8. CONCLUSIONS

The IOC is the forum where its members elaborate and adopt by consensus rules for olive products aimed at quality improvement and control

to achieve transparency in the international market for olive oil, olive pomace oil and table olives and thus promote their consumption.

The standards, methods and guidelines drawn up by the IOC are continually revised in the light of scientific advances which permit the adoption of more precise methods of analysis and as technological and commercial progress is made.

## REFERENCES

See in its Chinese version P82. 完