

DEVELOPMENT OF METROLOGY OF THE ORGANOLEPTIC QUALITY EXTRA VIRGIN OLIVE OIL SYSTEM

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In this work, the authors [1] proposed a system of metrology of extra virgin olive oil organoleptic quality, based on Panel Test with specially designed evaluation sheet for the development of the guide "Flos Olei" [2].

The assessment of quality is defined through a holistic processing system based on Kohonen maps, which also provides for the dissemination of metrology system developed by supervised systems of Back Propagation, trained by gas chromatography of oil samples used for the development of metrology.

The making available by E.V.O. editor of "Flos Olei" guide, the evaluation sheets of extra virgin olive oils of the years since 2005, totaling more than 6000 evaluations, allows you to explore them as completely as that to date has ever been done, the distribution of the organoleptic quality.

It is also possible the evaluation of the extension 55 of the flavors explored, on the map, with the relative intensities.

The analysis of the weight coefficients of the Back Propagation of dissemination system, allows to evaluate the sensitivity of the Panel Test flavors identified in the extra virgin olive oil samples taken into account.

References: [1] *"Flavours Mapping by Kohonen network Classification of Panel Test of Extra Virgin Olive Oil"*, M.Caciotta, S.Giarnetti, M.Oreggia, C.Pucci, S.Rametta; Measurement 78 (2016) 366-72, [2] *"Flos Olei"* ISBN 9788890429088

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