



DOCUMENTATION

Review of books

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Olive and Olive Oil Bioactive Constituents.– D. Boskou, editor.–AOCS Press, Urbana, IL, USA. 2015.– XXIII+397 pages.—ISBN 978-16306741-2.

The olive oil can be considered one of the main components of the Mediterranean diet. During the last decades, this diet has been the objective of multiple studies and, at present, it is believed to have beneficial effects in human health. Because of that, the olive oil, and also to some extent table olives, have been the objective of many studies trying to identify the bioactive compounds responsible for the beneficial effects of the Mediterranean diet. This book, edited by Prof. Boskou with a long trajectory in the study of olive oil, tries to summarize the broad research carried out. It is mostly focused on the role of phenolic compounds and, also to a lower extent, to triterpenic compounds present in both olive oil and table olives.

The book has been divided into 11 chapters. It begins with an introductory chapter entitled “Olive fruit, table olives, and olive oil bioactive constituents”, D. Boskou (30 pages, 99 references). In this chapter Prof. Boskou describes the composition, analysis and beneficial effects of the bioactive constituents of olive fruit components. The second chapter, entitled “Minor bioactive olive oil components and health: key data for their role in providing benefits in humans, M.-I. Covas, M. Fitó and R. de la Torre (22 pages, 76 references), describes the beneficial effects of olive oil components found in large studies such as PREDIMED y EUROLIVE. The next chapter, entitled “Cellular and molecular effects of bioactive phenolic compounds in olives and olive oil”, N. B. Ray, N. T. Lam, R. Luc, N. P. Bonvino y T. C. Karagiannis (39 pages, 203 references), describes the role of olive oil in traditional medicine and the effect of phenolic compounds in several diseases. Chapters 4 and 5 are dedicated to describe different factors that affect the phenolic composition of olive oils. Their titles are: “Olive oil phenolic composition as affected by geographic origin, olive cultivar, and cultivation systems”, R. Malheiro, N. Rodrigues and J. A. Pereira (29 pages, 96 references) and “Effect of fruit maturity on olive oil phenolic composition and antioxidant capacity”, N. Kalogeropoulos and A. C. Kaliora (23 pages and 105 references). The sixth chapter, entitled “From drupes to olive oil: An exploration of olive key metabolites”, A. Termentzi, M. Halabalaki and A. L. Skaltsounis (31 pages, 79 references), describes the use of new analytical procedures, especially HRMS LTQ-Orbitrap, to the study of phenolic compounds. Next chapter, entitled “Research and innovative approaches to obtain virgin olive oils with a higher level of bioactive constituents”, M. L. Clodoveo, S. Camposeo, R. Amirante, G. Dugo, N. Cicero and D. Boskou (37 pages, 135 references), is dedicated to the study of new methodologies that allow to obtain olive oils with a higher content of bioactive compounds. The eight chapter is dedicated to the study of table olives, which are usually richer in bioactive compounds than the olive oil. Its title is “Table olives as sources of bioactive compounds”, D. Boskou, S. Camposeo and M. L. Clodoveo (43 page, 100 references). Chapter 9, entitled “Bioactive phenolic compounds from *Olea europea*: a challenge for analytical chemistry”, A. M. Gómez-Caravaca, J. Lozano-Sánchez, M. D. M. Contreras Gómez, A. Segura Carretero and A. Tasmalli (38 pages, 147 references), reviews the different techniques employed to study phenolic compounds, a subject that is also related to the next chapter. This new chapter is dedicated to the study of bioactive compounds by NMR: “Analysis of bioactive microconstituents in olives, olive oil and olive leaves by NMR spectroscopy: an overview of the last decade”, P. Dais and E. Hatzakis (34 pages, 74 references). Finally, the last chapter, entitled “Recovery of high added value compounds from olive tree products and olive processing byproducts”, A.-L. Skaltsounis, A. Argyropoulou, N. Aligiannis and N. Xynos (24 pages, 88 references), describes the uses of the byproducts produced during the elaboration of olive oils and table olives.

In summary, a good updated summary of the broad knowledge existing in this subject. It will be of interest to those working in this or related subjects.

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