C28

Waste by-products from *Olea europaea* as a potential application in Inflammatory Bowel Syndrome

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The use of agri-food by-products represents an important resource in the nutraceutical field in a circular economy perspective oriented to the valorization of our territory products: among these, the olive tree (*Olea europaea*, Coratina cultivar in particular), is an excellent nutraceutical even though it derives from food waste. In this study we present a polyphenolic complex - derived from the mechanical filtration process of wastewater resulting from olive oil production - called MOMAST®. Based on the results obtained from the chemical composition analysis, we hypothesized a possible application of the phytocomplex as a food supplement in Irritable Bowel Syndrome (IBS) [1] [2]. After testing three different types of extracts (MOMAST Plus30, PW25, and HY100) on some IBS-related targets, we verified their antioxidant action and effects on spontaneous and induced intestinal contractility of ileum and colon [3, 4]. From the scientific evidence found, MOMAST® compounds have proved to be excellent candidates to become food supplements in the treatment of IBS [5]: in particular, Plus30 also showed an interesting action against some microorganisms due to its high concentration of polyphenols and oleuropein.

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