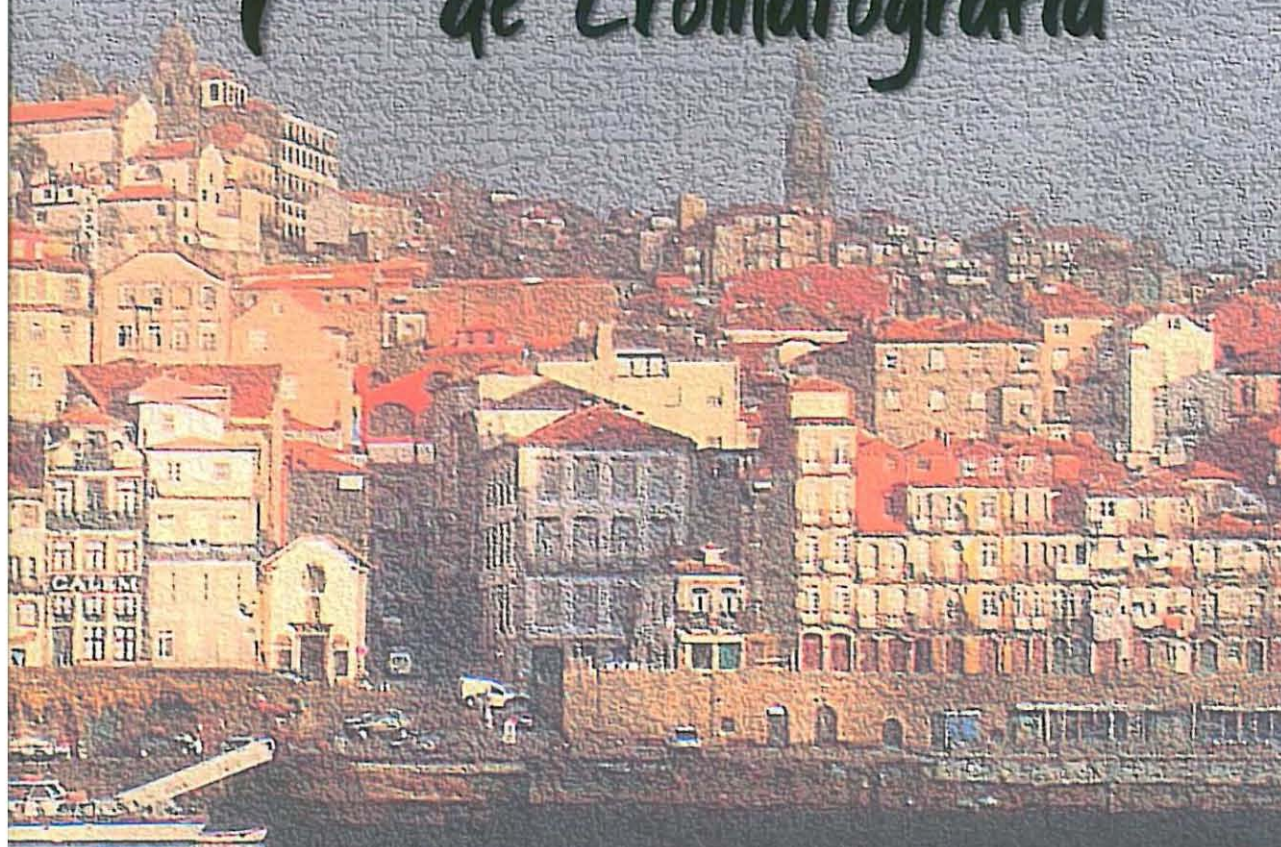


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P62. *Mentha aquatica*: source of flavanone glycosides

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Mentha aquatica L., commonly known as water mint, is a perennial herb that grows in Europe temperate regions. This plant is used in traditional medicine for the treatment of external inflammation, rheumatism, colds, respiratory problems and difficult menstruation [1]. It has been described as a good source of phenolic compounds with high scavenger activity [2]. In this study, a purified ethanolic extract of *M. aquatica* was prepared and its specific phenolic composition was determined. The extract of the aerial parts of *M. aquatica* was prepared according the procedure described by Pereira et al [3] and analyzed by high performance liquid chromatography with diode array detection with quantification of main phenolic compounds, using the external standard method. In order to determine the exact structure of phenolic compounds, the HPLC eluted fractions were manually collected and further analyzed by tandem electrospray mass spectrometry. The purified ethanolic extract of *M. aquatica* was mainly rich in flavanones. In detail, eriodictyol-7-O-rutinoside (MW 594 Da) represented approximately half of the total quantified phenolic compounds, while hesperitin-7-O-rutinoside (MW 610 Da) and naringenin-7-O-rutinoside (MW 580 Da) represented 15% and 8% of the phenolic content, respectively. Other flavonoids in the extract detected in smaller quantities, comprised the glucoside, rutinoside and glucuronide derivatives of luteolin. Moreover, the purified ethanolic extract of *M. aquatica* contained moderate amounts of rosmarinic acid (20%), a phenolic acid very common in *Mentha* species and in Lamiaceae family.

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