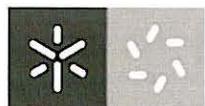
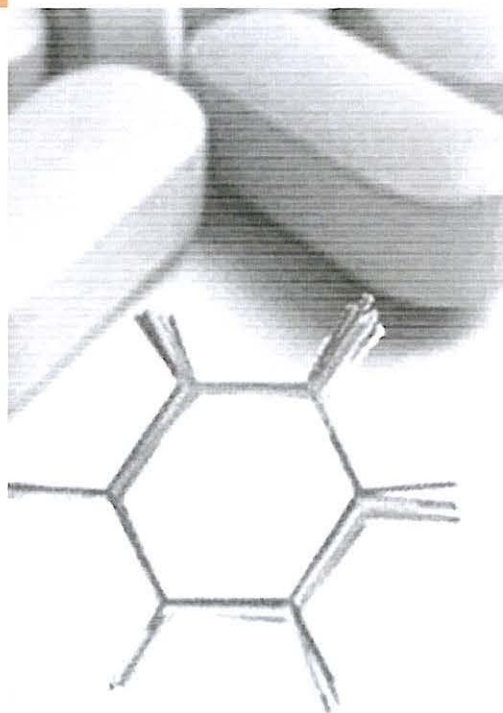


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## Phenolic profile of *Helichrysum stoechas* L. Moench

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Natural matrices represent a rich source of biologically active compounds and are an example of molecular diversity, with recognized potential in drug discovery and development. Many plants frequently used in folk medicine have antioxidant and pharmacological properties connected with the presence of phenolic compounds, especially flavonoids [1]. The biological, pharmacological and medicinal properties of this group of compounds have been extensively reviewed [2]. Ethnobotanical surveys conducted in the Northeast of Portugal highlighted the decoction of *Helichrysum stoechas* (L.) Moench (shrubby everlasting; port. douradinha) for cold, bronchitis and fever [3].

In the present study, the phenolic composition of *H. stoechas* (inflorescences and leafy flowering stems) was analyzed by reversed-phase high performance liquid chromatography coupled to diode array detection and mass spectrometry with electron spray ionization (HPLC-DAD-ESI/MS), after extraction with methanol:water (80:20 v/v).

Seventeen different phenolic compounds were identified, in which eight were characterized as phenolic acids, being 5-*O*-caffeoylquinic and 3,5-*O*-dicaffeoylquinic acids the most abundant compounds. Furthermore, nine flavonols were also identified, mostly derivatives of quercetin and myricetin, being myricetin *O*-acylhexoside the most abundant flavonoid. Overall, the analytical screening by HPLC-MS represents a valid and rapid approach in the search of new bioactive phenolic compounds.

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