Abstract

Methods of Obtaining Extracts from *Hedera helix* L. Leaves and Evaluation of the Total Saponins Content †

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Abstract: *Hedera helix* L. is known for its therapeutic properties, such as analgesic, anti-inflammatory, expectorant activity. It is currently known that the characteristic therapeutic effects of ivy extracts are induced by phytocompounds, such as: saponins (hederagenin, α and β-hederin, hederacoside B and C), phytosterols (sitosterol, stigmasterol, campesterol), flavonoids, falcarinol, falcarinone, scopoline, chlorogenic acid, caffeic acid, phytoestrogens [1]. The purpose of our study was to evaluate the total saponin content of *Hedera helix* L. leaves extracts obtained by both conventional, and unconventional methods. The commercial fresh leaves of *Hedera helix* L. were purchased from Hofigal SA, Romania. The following reagents used for testing were α-hederin, hederagenin, and hederacoside C at purity ≥98% (HPLC), DMSO were purchased from Sigma Aldrich. The chemical composition of the obtained extracts was analyzed by HPLC-MS/MS, and the total saponin content was evaluated [2,3]. Our study indicated an optimal method for obtaining *Hedera helix* L. leaves extract with an enriched saponin content.

Keywords: *Hedera helix* L. leaves extract; HPLC-MS/MS; total saponin content

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References