

GC-MS characterization of the volatile oil from *Lapsana communis L*Gabriela STANCIU<sup>a</sup>\*, Simona LUPSOR <sup>a</sup> and Mariana ARCUȘ<sup>b</sup><sup>a</sup> Department of Chemistry, "Ovidius" University, 124, Mamaia Blvd., 900527, Constantza, Romania,<sup>b</sup>Department of Pharmacy, 7 Ilarie Voronca Street, Constanta, Romania

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**Abstract.** The paper aims to present the analytical characterisation of the volatile oil from *Lapsana communis L* species in order to identify new regional natural sources as raw materials for pharmaceutical products. The plant was harvested during its blossoming period, in the first half of July 2006, in the Mamaia Sat area, Constantza County and the essential oil, which represents 0.15 % has been extracted and measured. The separation and determination of some components has been achieved using the GC-MS technique. One of the major components of the volatile oil has been found to be limonene in concentration of 22.53g/L. Other eight important components have been identified in the extracted volatile oil using the spectra library: acetophenone, nonanal, ethyl-3-hydroximandelic acid ester, decanal, heptadecane, octadecane, dibutyl phthalate and squalen. The anti-inflammatory and antiseptic properties of these compounds, known from specific studies, could justify the exploitation of the studied essential oil in dermatological diseases treatments. The existence of limonene assures protection against the other potential harmful constituents in the volatile oil.

*Keywords:* *Lapsana communis L.*, volatile oil, GC-MS, limonene, therapeutic properties.

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