

The GC-MS characterization of the volatile oil from *Teucrium polium L*

Gabriela STANCIU^{a*}, Magdalena MITITELU^b and Mariana POPESCU^c

^a Department of Chemistry, Ovidius University of Constantza, 124, Blvd. Mamaia, 900527, Constantza, Romania

^b Department of Pharmacy, "Carol Davila" University of Bucharest, Traian Vuia, 6, Bucharest, Romania

^c Rompetrol Quality Control, DJ 226, km 23, Navodari, Romania

Abstract. The essential oil of *Teucrium Polium L.* species, harvested during its blossoming period, in the first half of July 2005, in the Mamaia Sat area, Constantza county is in 1.2 % quantity. Using the GC-MS analysis were identified and quantitatively determined with reference substances, 3 compounds: limonene, β -pinene, α -pinene in 2.29% m/v; 5.83% respective 8.6% m/v. Using data base of apparatus, other two compounds were identified: germacrene D (C₁₅H₂₄) and spathulenol (C₁₅H₂₄O).

The anti-inflammatory and antiseptic properties of these compounds, known from specific studies, could justify the exploitation of this essential oil in dermatological diseases treatments. The existence of limonene ensures protection against the other potential harmful constituents in the volatile oil.

Keywords: *Teucrium Polium L.*, chemical structure, volatile oil, GC-MS, limonene, therapeutic properties.