P-151 (260) VOLATILE COMPONENTS OF ERYNGIUM BILLARDIERI F. DELAROCHE COLLECTED FROM DIFFERENT REGIONS OF IRAN

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Eryngium billardieri F. Delaroche or sea holly is a perennial herbaceous plant belongs to the Apiaceae family. It is native to Iran, Iraq, Lebanon, Turkey, Caucasus and Pakistan. Eryngiumgenus has about 250 species worldwide which at least 10 species grow in mountain area of Iran. The floral water of this plant has been traditionally used by Iranian as a hypoglycemic remedy. In fact, in this study the chemical composition of essential oils from aerial parts of 8 populations of Eryngium billardieri collected from different provinces has been investigated. The samples were from Tehran province (2 samples, Tehran and Firoozkooh), Qazvin (2 samples), Markazi (2 samples) and Semnan (2 samples). The volatile oils of E.billardieri were isolated by hydrodistillation using Clevenger type apparatus for three hours and their compositions were analyzed by GC and GC-MS. A total of 28 compounds have been identified which the main constituents were Sesquicineole, Spathulenol, Bicyclogermacrene, trans-Caryophyllene, Ledol and α-Bisabolol.

Keywords: Eryngium, GC/MS, Hydrodistillation, essential oil, population