CHEMICAL COMPOSITIONS OF HEXANE EXTRACT OF LEAVES OF *ARTEMISIA KOPETDAGHENSIS* FROM IRAN

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The genus *Artemisia* (Asteraceae) is the largest and most widely distributed one of the approximately 60 genera belonging to the tribe Anthemideae. This genus comprises a variable number of species, ranging from 200 to 800, which are predominantly distributed in the northern temperature region of the world in the 0-50 cm precipitation area [1]. Thirty four genera of them are reported in Iran of which two are endemic [2, 3]. *Artemisia kopetdaghensis* is a common perennial herb growing wild in Iran. In this study *Artemisia kopetdaghensis* were collected from Neyshabur area in Khorasan-e-Razavi province, Iran. Chemical constituents of essential oil of flower of *Artemisia kopetdaghensis* were determined. Dried flowers of plant were subjected to hydrodistillation in a Clevenger–type apparatus until there was no significant increase in the volume of the oil collected. The yield of the oil was 0.80% (w/w). The essential oil was analyzed by GC and GC/MS. Identification of the components was based on GC retention indices computer matching with Wiley GC-MS library, and by comparison of the fragmentation patterns of the mass spectra with those reported in the literature [4]. Fifty-four compounds were identified constituting more than 99.2% of the oil. β-Myrcene (3.5%), linalyl alcohol (2.1%), terpinolene (2.5%), camphor (8.7%), (Z)-citral (3.5%), β-citral (12.9%), geranyl acetate (24.1%), and camphene (2.1%)were major components in essential oil of flower of *Artemisia kopetdaghensis*. Amongst them oxygenated monoterpenes and monoterpene hydrocarbons were predominant components.

References

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