

Comparative Analysis of Chemical Composition of Two Ecotypes of *Achillea wilhelmsii* in Iran

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Abstract : The genus *Achillea* belongs to Asteraceae family. This plant is widely found in different regions of Iran and used for treatment of different diseases. The aim of this study was to evaluate the chemical composition of *Achillea wilhelmsii* in Iran. The aerial parts of *A. wilhelmsii* collected from Shahrekord and Mazandaran Province, Iran and they were analyzed by using GC/MS. The 23, 13 compounds were identified in dried aerial parts of *A. wilhelmsii* from Shahrekord and Mazandaran, respectively. The major components in Shahrekord were: 1,8-Cineole (35.532%), α -pinene (22.885%), Camphor (12.238%), Camphene (8.691%), Piperitol (3.748%), Ethanone (2.274%) and The major components in Mazandaran were: 1,8-Cineole (52.951%), α -pinene (13.985%), Camphor (11.824%), Camphene (8.531%), Terpineol (2.533%), α -Thujone (2.330%). According to the results, difference in essential oil components of *Achillea* species in different regions may be due to the several factors that leads to change in compositions of plant.

Keywords : *achillea wilhelmsii*, essential oils, GC/MS

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