Original Article

Essential Oil Composition of Eight *Hypericum* species (Hypericaceae) from Iran: Part II

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Abstract

The *genus Hypericum* is one of the most important medicinal plants that contain 17 species in Iran, three of them are endemics. This paper reports the essential oil composition of eight *Hypericum* species from Iran. The essential oil analysis of a number of the studied plants has already been reported but their report from Iran may be valuable for scientists. Samples collected from different places between June and August 2010. The composition of the essential oils from *Hypericum* was investigated on the flower head. Essential oils were obtained by hydrodistillation method and analyzed by GC and GC/MS. The essential oil yield and composition in *H. androsaemum* L.: oil yields (0.17%) and major components were longifolene 19.2%, β-gurjunene 16%, and γ-gurjunene 8.4%, in *H. apricum* kar. & kir. oil yields (0.50%), and major components were cis-piperitol acetate 24.3%, p-cymene 21% α-pinene 8.3%; in *H. armenum* Jaub. & Spach oil yields (0.20%) and major components were γ-cadinene 30.6%, longifolene 10.4%, and E-nerolidol 7.4%; in *H. asperulum* Jaub. & Spach oil yields (0.05%), and major components were α-muurolole 17.6%, cis-sesquisabienen hydrate 12.5%, and germacrene B 9.8%; in *H. hirsutum* L. oil yields (0.05%), and major components were germacrene B 29.2%, citronellyl propanoate 7.9%, and γ-gurjunene 7.5%; in *H. linarioides* Bosse oil yields (0.15%), and major components were (E, E)-farnesyl acetate 16.5%, cis-cadinene ether 12.7%, and 1-tridecene 5.7%; and in *H. tetrapterum* Fries oil yields (0.08%), and major components were trans-linalool oxide 22.3%, p-cymenene 6.2% and (E, E)-farnesyl acetate 6% and in *H. vermiculare* Boiss. & Hausskn. oil yields (1.74%), and major components were α-pinene 61%, myrcyne 6% and E-β-farnesene 5.3%.

Key words : Essential oils, Distillation, *Hypericum androsaemum; H. apricum; H. armenum; H. asperulum; H. hirsutum; H. linarioides; H. tetrapterum; H. vermiculare*