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### Comparative study on the Essential Oil Composition of *Achillea eriophora* DC. in Field and Wild Growing

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#### Abstract

*Achillea eriophora* is a rare species of *Achillea* that is native (Endemic) to Iran and grows exclusively in southern provinces of Iran. In this research, in order to Comparison between Oil Composition of *Achillea eriophora* DC. in Field and Wild Growing, top flowering part of the plants collected from “Jahrom” (South of “Fars” province) June 2006 then seeds of this plant cultured in September 2006 in Mashhad climate condition. On July 2007 at full flowering stage, top flowering parts harvested. After drying, essential oils of the samples were extracted by “Clevenger”. Essential oils constituents determined by GC and GC-MS. The results showed that essential oils yield in field and wild condition were 2 % and 1.8% v/w respectively. In wild condition Thirty compounds identified that the major component were: Camphor (30.4%), 1,8-Cienol (25.24%), Camphene (6.21%) and  $\alpha$ -Pinen(4.49%). Twenty-six components determined in cultivated condition and the main components were: Camphor (28.98%), 1,8-Cienol (26.98%), Camphene (5.98%) and  $\alpha$ -Pinen(4.23%) .

#### References:

- 1-Mirjalili, M. H., Sonboli, A.,Salehi, P., Sarkhosh, A .2005. Essential oil analysis wild and cultivated of *Cymbopogon oliveri* (Boiss.)Bor in Iran.
- 2- Weyertahl P., H.Marshall, I.Seelman and A. Rustaiyan.1997.Consituents of the Essential oil of *Achillea eriophora* DC.*Flav. Frag. J.* 12:71-78.