Phytochemical Analysis of Essential oil of *Tanacetum parthenium* L. with Hydro-distillation and Steam Distillation

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Abstract

*Tanacetum parthenium* L. known as feverfew is a medicinal herb which is found in many old gardens. It has been used in folk medicine for reducing fever. Feverfew is a member of the daisy family; it is used primarily to prevent migraine headaches and to treat rheumatoid arthritis. It has a colorless essential oil that contains one or more of the sesquiterpene lactones as active principle. *Tanacetum parthenium* cultivated in Iran, were extracted with hydro-distillation and steam distillation and their chemical essential oils composition were investigated by GC/MS. Major components obtained in hydro-distilled method were camphor (36.2%), isoborneol (20.3%), bornyl acetate (14.3%), champhene (8.1%), p-cymene (5.1%) and in steam distilled method were camphor (20.9%), bornyl acetate (14.24%), isobornyl isovalerate (7.1%), bornyl 2-methylbutyrate (5.9%), p-allylanisole (6.3%). The yield of essential oil with hydro-distillation was 0.05% and for steam distillation were 0.12%.

Key words: Essential oils, *Tanacetum parthenium* L, Hydro-distillation, Steam distillation