The hydro-distilled essential oil from dried aerial parts of one of widespread Iranian skullcaps, *Scutellaria pinnatifida* A. Hamilt. ssp. *alpina* (Bornm.) Rech., grown in Khorassan province was analyzed by GC and GC/MS. Thirty components were characterized representing 93.8% of the total components detected. The major components of the oil were germacrene-D (39.7%) and beta-caryophyllene (15.0%).

**Key words:** *Scutellaria pinnatifida* ssp. *alpina*, Essential Oil, Germacrene-D