Antimicrobial Activity of Essential Oil and Major Constituents of Salvia chloroleuca

Morteza Yousefzadi^{a,*}, Ali Sonboli^b, Samad Nejad Ebrahimi^c, and Seid Hasan Hashemi^d

- ^a Department of Marine Biology, Faculty of Sciences, Hormozgan University, Bandar Abbas, Iran. E-mail: morteza110110@gmail.com
- b Department of Biology, Medicinal Plants and Drugs Research Institute,
- Shahid Beheshti University, Evin, 1983963113, Tehran, Iran
 ^c Department of Phytochemistry, Medicinal Plants and Drugs Research Institute,
- Shahid Beheshti University, Evin, Tehran, Iran

 ^d Department of Biology, Faculty of Science, Zabol University, Zabol, Iran
- * Author for correspondence and reprint requests

Z. Naturforsch. **63 c**, 337–340 (2008); received August 27/October 16, 2007

The aerial parts of *Salvia chloroleuca* were collected at full flowering stage at Shahrestanak (Tehran province of Iran). The essential oil was isolated by hydrodistillation and analyzed by combination of capillary GC and GC-MS. Thirty-four components were identified, representing 98.5% of the total oil. β-Pinene (10.6%), α-pinene (9.0%), β-caryophyllene (9.0%), 1,8-cineole (9.0%) and carvacrol (7.9%) were the main components. The *in vitro* antimicrobial activity of the essential oil of *S. chloroleuca* was studied against seven Gram-positive and Gram-negative bacteria (*Bacillus subtilis, Enterococcus faecalis, Staphylococcus aureus, S. epidermidis, Escherichia coli, Pseudomonas aeruginosa and Klebsiella pneumoniae*) and three fungi (*Candida albicans, Saccharomyces cerevisiae* and *Aspergillus niger*); the disc diffusion method and MIC values indicated that the oil exhibited moderate to high antimicrobial activity.

Key words: Salvia chloroleuca, Antimicrobial Activity, Essential Oil