Antimicrobial Activity of Six Constituents of Essential Oil from *Salvia*

Ali Sonboli[a,*], Babak Babakhani[b,*], and Ahmad Reza Mehrabian[c]

[a] Department of Biology, Medicinal Plants and Drugs Research Institute, Shahid Beheshti University, Evin, P.O. Box 19835-389, Tehran, Iran.
Fax: (+9821) 2418679. E-mail: a-sonboli@cc.sbu.ac.ir

[b] Department of Biology, Tonekabon Islamic Azad University, Tonekabon, Iran

[c] Department of Biodiversity, Research Institute of Environmental Sciences, Shahid Beheshti University, Tehran, Iran

* Authors for correspondence and reprint requests

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The antimicrobial activity of three *Salvia* species, *i.e. S. santolinifolia, S. hydrangea* and *S. mirzayanii,* essential oils were investigated. The essential oils were obtained from the aerial parts of plants and analyzed by GC-MS. The main constituents of aforementioned species were α-pinene (72.4%), β-pinene (6.6%) and limonene (5.3%); β-caryophyllene (25.1%), 1,8-cineol (15.2%) and caryophyllene oxide (11.5%); α-terpinenyl acetate (22.6%), 1,8-cineol (21.2%) and linalool (8.9%), respectively. Bioassays exhibited that the property of the oil of *S. myrzayanii* was superior to others. The antimicrobial activity of essential oil from *Salvia* species may well be due to the presence of synergy between six tested compounds (linalool, 1,8-cineol, α-pinene, β-pinene, β-caryophyllene and limonene) and other constituents of the oils with various degrees of antimicrobial activity. Among these, linalool and 1,8-cineol had the highest antimicrobial activity.

Key words: Antimicrobial Activity, *Salvia*, Essential Oil