



A New Phytochemical Investigation on Two Iranian Endemic Species of *Salvia* L.

Marzieh Fotovvat,^{1,3}Tayebeh Radjabian,^{1*}Azra Saboora²

¹Faculty of Basic Sciences, Shahed University, Tehran, Iran.

²Faculty of Biological Sciences, Alzahra University, Tehran, Iran.

³Faculty of Biological Sciences, Kharazmi University Tehran, Iran.

E-mail: rajabian@shahed.ac.ir

Genus *Salvia* with over 58 species in Iran, 17 of which are endemic, is one of the largest members of the Labiatae family [1]. *Salvia aristata* Aucher ex Benth. and *S.chorassanica* Bunge are two of the Iranian endemic species of *Salvia* that only grow in Iran [1]. However, recently *S.aristata* has been found in the area of Turkey [2]. Tanshinones are abietane-type norditerpenoidquinone compounds that until now, the roots of *S.miltiorrhiza* and *Perovskia abrotanoides* Kar. have been introduced as the main sources of these valuable medicinal compounds. This study was performed to identify and to determine of tanshinone I, tanshinone IIA and cryptotanshinone in the root extracts of *S.aristata* and *S.chorassanica* by HPLC and LC-MS methods for the first time. Based on our results, the roots of both studied *Salvia* species were rich sources of tanshinones. The highest content of tanshinone I (36 ± 2.24 mg/g DW) and tanshinone IIA (2.02 ± 0.16 mg/g DW) was detected in the roots of *S.aristata* and *S.chorassanica*, respectively. Also the presence of cryptotanshinone was confirmed in the root extracts of both species by LC-MS. As a general result, some Iranian *Salvia* species could be introduced as new potent sources of tanshinone derivatives in order to medicinal, food and industrial purposes.

Keywords: *Salvia aristata*; *Salvia chorassanica*; Tanshinone I, Tanshinone IIA

References

[1] Mozaffarian, V.A. *Farhang Moaser*. **1996**: 477.

[2] Zaker, A.; Sykora, C.; Gössnitzer, F.; Abrishamchi, P.; Asili, J.; Mousavi, S.H.; Wawrosch, C. *Ind. Crops Prod.* **2015**, 67: 97-102.