Identification and Determination of some Phenolic Compounds in Five Wild Growing Salvia Species of Iran

Salvia L. (Lamiaceae) is a large genus with over 700-1000 species broadly distributed in different regions of the world, of which 58 species are in Iran. Salvia plants are rich sources of di- and trienoloids, phenolic acids, and flavonoids. Among the phenolic acids, caffeic, and salicylic acid-B are also present in Salvia extracts. In regards to widely distribution of Salvia species in Iran and several medicinal applications of them, the major purpose of this study was identification and determination of some phenolic acids in leaves of five wild species (S. officinalis, S. hypoleucanitis, S. santoliloha, S. sylvestris, and S. santonilhoja). The plant materials were collected from different localities in Iran. Methanolic extracts of the plant materials were prepared and the amounts of the phenolic compounds in the extracts were quantitated by HPLC with UV detection (250 nm). Based on our results, among the studied species, leaves of S. officinalis and S. hypoleucanitis with 14.14±1.48 and 16.65±0.98 mg/g DW were the richest sources of rosmarinic acid and salvinolic acid A, respectively. Caffeic acid was not detected in leaves extract of S. santoliloha. The highest content of rosmarinic acid B was found in leaves of S. sylvestris (8.5±1.16 mg/g DW), followed by leaves of S. officinalis and S. hypoleucanitis (7.64±0.79 and 7.64±0.79 mg/g DW), in conclusion, some Iranian Salvia species could be introduced as new potent sources of rosmarinic acid and its derivatives.

Keywords: Salvia L., rosmarinic acid, salvinolic acid A, salvinolic acid B, caffeic acid