

Original article

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doi:10.5633/amm.2017.0319**ROSMARINIC AND CAFFEIC ACID CONTENT AND ANTIOXIDANT POTENTIAL OF THE *SALVIA AETHIOPIS* L. EXTRACTS**

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Aromatic plants are the source of pharmacologically active compounds with high antioxidant effects. Among them, *Salvia* L. species, sages, have been known world-wide as spices, aromas, medicines, natural preservatives and antioxidant agents since ancient times. Literature data have shown that *Salvia aethiopis* L. expresses various biological effects. The aim of this research was to determine the quantity of rosmarinic and caffeic acid, usually present in sages, in *S. aethiopis* extracts prepared with different solvents and to estimate their antioxidant effects. The above-ground parts of *S. aethiopis* were collected in the period of full blossom in the surrounding area of Niš, Ploče, Serbia. The plant material was air-dried, pulverized and extracted with absolute and 80% methanol, 96%, 80% and 60% ethanol and ethyl acetate (M, M80, E, E80, E60 and EA, respectively) in an ultrasonic bath. The phenolic acids were quantified by High Performance Liquid Chromatography and antioxidant effect was estimated by two complementary in vitro methods: 2,2-diphenyl-1-picrylhydrazyl (DPPH) and  $\beta$ -carotene/linoleic acid (BC) models. Extract E80 contained the highest amount of rosmarinic acid ( $231.09 \pm 4.11$   $\mu\text{g}/\text{mg}$ ) and E60 was the richest in caffeic acid ( $4.39 \pm 0.80$   $\mu\text{g}/\text{mg}$ ). M80 was the most efficient in DPPH antioxidant assay, while E60 expressed the best antilipoperoxidant activity in BC method. The presence of significant amount of rosmarinic acid along with caffeic acid and excellent antioxidant activity of the extracts may be contributable to their potential usage in different pathological conditions, especially in the modulation of oxidative stress. *Acta Medica Medianae* 2017;56(3):121-128.

**Key words:** *Salvia aethiopis* L., extracts, rosmarinic acid, caffeic acid, antioxidant activity