

Association for the Medicinal and Aromatic Plants
of Southeast European Countries (AMAPSEEC)

Slovak University of Agriculture in Nitra
Faculty of Agrobiolgy and Food Resources

Department of Sustainable Agriculture and Herbology



3rd CONFERENCE ON MEDICINAL AND AROMATIC PLANTS OF SOUTHEAST EUROPEAN COUNTRIES

BOOK OF ABSTRACTS



5 - 8 September 2004

Nitra, Slovak Republic

components were germacreneD (16.0%) and (*E*)-caryophyllene (7.4%). All oils were characterized by a high content of sesquiterpene hydrocarbons (35.2%, 43.6% and 47.9%, respectively).

Key words: *Hypericum perforatum*; *Hypericum tetrapterum*; *Hypericum olympicum*; essential oil composition

References:

- [1] Robson NKB. *Hypericum* L. In: *Flora Europaea*, vol. 2, Heywood VH, (ed.). Cambridge University Press: Cambridge, 1968.
[2] Adams RP. *Identification of Essential Oil Components by Gas Chromatography/Mass Spectrometry*. Allured: Carol Stream IL, 1995.

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**ESSENTIAL OIL OF *ACINOS MAJORANIFOLIUS* (MILL.) SILIC (LAMIACEAE)
FROM MONTENEGRO**

Slavkovska, V.¹, Couladis, M.², Tzakou, O.², Jancic, R.¹, Lakusic, B.¹

¹ Department of Botany, Faculty of Pharmacy, University of Belgrade, Vojvode Stepe 450, 11000 Belgrade, Serbia and Montenegro

² Department of Pharmacognosy and Chemistry of Natural Products, School of Pharmacy, University of Athens, Panepistimiopolis Zografou, 157 71 Athens, Greece, E-mail: kouladi@pharm.uoa.gr

Acinos mayoranifolius (Mill.) Silic is endemic, spread across the western border area of Croatia and Herzegovina and the western part of Montenegro. It is a distinctly Mediterranean mountainous species. It inhabits open limestone rocky terrains, rims of karst forests, on heights between 20 and 1400m (Silic, 1979, 1984). *A. majoranifolius* is distinguished from the rest of the *Acinos* species by its aroma, and therefore the composition of its essential oil is presented in this work.

We have studied the essential oils of three populations of *A. majoranifolius* collected from different localities in Western Montenegro: mountain Orjen, Njegusi and Lijevo Rijeka. The samples were gathered in the flowering period. The essential oil was obtained by hydrodistillation from the dried aerial parts of the plants. The analyses of the oils were carried out using GC/MS. The identification of the compounds was based on comparison of their Kovats indices (KI), their retention times (RT) and mass spectra with those obtained from authentic samples and/or the MS library (Adams, 1995).

The yield of the essential oils was between 0.5% and 0.6%. Pulegone was the main component of all the oils (65.4%-81.3%). The Mt. Orjen and Njegusi populations had a high content of isomenthone (11.4% and 15.4%), while this compound was detected only in traces in the Lijevo Rijeka population. Isopulegone and caryophyllene oxide were found in similar concentrations in all populations.

Key words: *Acinos mayoranifolius* (Mill.) Silic, pulegone, isomenthone, isopulegone, caryophyllene oxide

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- [1] Adams, R. P., *Identification of Essential Oil Components by Gas Chromatography/Mass Spectroscopy*. Allured Publishing Co, Illinois, USA (1995)
[2] Silic, C., Monographie der Gattungen *Satureja* L., *Calamintha* Miller, *Micromeria* Benth., *Acinos* Miller und *Clinopodium* L. in der Flora Jugoslawiens. Zemaljski Muzej BiH, Sarajevo, Bosnia and Herzegovina (1979)
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