

**B061 The essential oil of *Salvia aethiopsis***

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*Salvia aethiopsis* L. belonging to the family Labiatae, is an aromatic shrub, which grows wild in Iran (Mazandaran, Azerbaidjan, Khorasan) (1). *S. aethiopsis* has been used in Iranian herbal medicine as a carminative and tonic agent (2); there is not any report on the volatile constituents of this plant. The medicinal properties attributed to the essential oils of the genus *Salvia* prompted us to investigate the chemical constituents of the oil of *S. aethiopsis*. The aerial parts of *S. aethiopsis* were collected in March 2001 from the suburb of Sari, Mazandaran province, north of Iran. A voucher specimen was deposited in the herbarium of the Department of Pharmacognosy, Mazandaran University of Medical Sciences. The aerial parts were subjected to hydrodistillation using a Clevenger-type apparatus for 5 h to yield 1.6% of yellowish oil. The oil after preparation was submitted to GC and GC/MS analysis. The 28 components of the oil (about 96.9%) were identified by their retention time, retention indices relative to C<sub>9</sub>-C<sub>28</sub> n-alkanes, and by comparison of their mass spectra with those of authentic samples or with data already available in the literature. The relative percentage of compounds was calculated from the total chromatogram by the computer.  $\beta$ -Caryophyllene (17.0%),  $\alpha$ -copaene (16.3%), germacrene-D (13.8%),  $\beta$ -cubebene (9.7%), spathulenol (8.3%),  $\delta$ -cadinene (7.7%) and  $\alpha$ -humulene (6.9%) were identified as major constituents.

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**References:** 1. Rechinger, K.H. (1982) *Flora Iranica*. Akademische Druck- U. Verlagsanstalt. Graz-Austria. 2. Zargari, A. (1990) *Medicinal Plants*. Tehran University Publications. Iran.

**B062 Constituents of the essential oil of *Commiphora myrrha* (Nees) Engl. var. *molmol***

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Myrrh oil has been used since Ancient Greek times to heal wounds. It makes a good expectorant, used in chest rubs for bronchitis and catarrhal colds (1,2). The oleo-gum resin of *Commiphora myrrha* (Nees) Engl. var. *molmol* was prepared from Shiraz, Fars province in Iran, in 2001 and identified by Department of Pharmacognosy, Tehran University of Medical Sciences. A voucher specimen has been deposited at the Herbarium of the Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran. Crushed air-dried oleo-gum resin of this plant (100 g) was subjected to hydrodistillation for 6h using a Clevenger-type apparatus to give oil in 3.1% yield (3.1 g). The chemical composition of the essential oil obtained from the oleo-gum resin was examined by using GC and GC/MS. The 32 components of the oil (about 94.6%) were identified by their retention time, retention indices relative to C<sub>9</sub>-C<sub>28</sub> n-alkanes, and by comparison of their mass spectra with those of authentic samples or with data already available in the literature. Among the 32 components identified in this oil, curzerene (40.1%), furanoeudesma-1,3-diene (15.0%),  $\beta$ -elemene (8.4%) and 2-O-acetyl-8,12-epoxygermacra-1(10),4,7,11-tetraene, isomer I (6.5%) were found to be the major constituents.

**Acknowledgements:** We thank Dr. Gh. Amin (Department of Pharmacognosy, Tehran University of Medical Sciences) for identification of the plant.

**References:** 1. Blumenthal, M. et al. (1998) *The complete German commission E monographs*. The American Botanical Council. USA. 2. Leung, A.Y. et al. (1996) *Encyclopedia of common natural ingredients used in food, drugs and cosmetics*. John Wiley & Sons Inc. New York.