

ESSENTIAL OIL COMPOSITION AND ETHNOBOTANICAL PROFILE OF SOME SELECTED SPECIES OF *EUCALYPTUS* GROWING IN CYPRUS

Samuel Adediran¹, Azmi Hanoğlu², Duygu Yiğit Hanoğlu^{1,*}, K. Hüsnü Can Başer² and Dudu Özkum Yavuz^{1,*}



¹ Department of Pharmaceutical Botany, Faculty of Pharmacy, Near East University, Lefkoşa (Nicosia), Turkish Republic of Northern Cyprus

² Department of Pharmacognosy, Faculty of Pharmacy, Near East University, Lefkoşa (Nicosia), Turkish Republic of Northern Cyprus

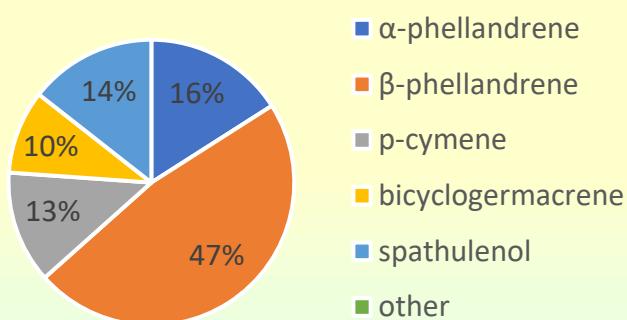
*Corresponding author. Email: duygu.yigithanoglu@neu.edu.tr; dudu.ozkumyavuz@neu.edu.tr

The aim of this study is to review the existing ethnobotanical research literature of eucalyptus trees growing in Cyprus and to analyse the leaf essential oils of two *Eucalyptus* species (*E. camaldulensis* and *E. torquata*) growing in Cyprus. The essential oil composition of *E. torquata* was reported for the first time.

Table. The traditional usage of *Eucalyptus sp.* in Cyprus

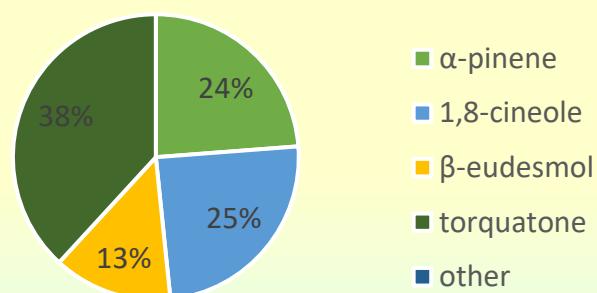
Species	Part	Usage	Indication	Reference
<i>E. camaldulensis</i> Dehnh.	Leaves	Oral, Topical	abortion, after-labor tonic, cold / flu symptoms, decongestant, urinary tract antiseptic and syphilis	1
		Topical	antirheumatic	2,3
		Inhalation	treat flu, cold, and other upper respiratory tract infections	2,3
-	-	-	respiratory tract disorders, musco-skeletal disorders and skin disorders	4
<i>E. tereticornis</i> Sm.	Leaves	Inhalation	treat flu, cold, and other upper respiratory tract infections	2
		Topical	antirheumatic	

E. camaldulensis Essential Oil Composition

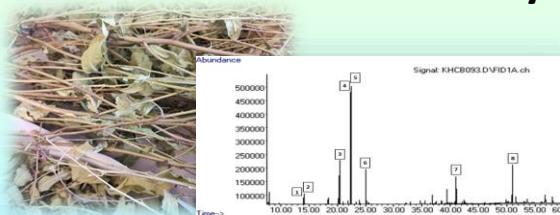


E. camaldulensis oil yield was 2.4%.

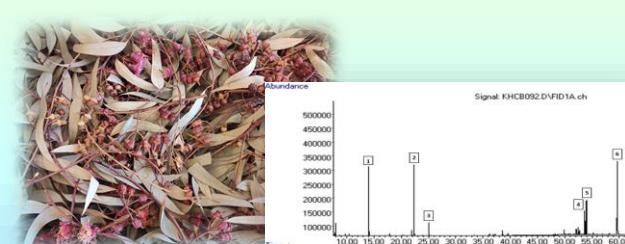
E. torquata Essential Oil Composition



E. torquata oil yield was 1.6%.



There are about 62 species of *Eucalyptus* (Fam. Myrtaceae) found in Cyprus, of which 47 are classified but 15 are not classified or hybrid.



As a result, On the other hand, According to the literature of In conclusion, in addition to the *E. camaldulensis* essential oil composition. The research showed that there are chemical variations in the essential oil composition of *E. camaldulensis* growing in Northern Cyprus.

We assume that the essential oil of *E. camaldulensis* belongs to the chemotype rich in phellandrene (α- and β-), p-cymene, spathulenol with the absence of 1,8-cineole. On the other hand, the essential oil composition of *E. torquata* growing in Cyprus showed variations with the literature data. Further research is in progress in order to reveal chemical variations including the biological activities of the essential oils of other *Eucalyptus sp.* growing in Cyprus.

References

- Yöney, Ahmet, et al. "Ethnopharmacy of turkish-speaking cypriots in greater London." *Phytotherapy Research: An International Journal Devoted to Pharmacological and Toxicological Evaluation of Natural Product Derivatives* 24.5 (2010): 731-740.
- Ozan, 2011. Master thesis,
- Kaya Yıldırım, 2010.
- González-Tejero, M. R., et al. "Medicinal plants in the Mediterranean area: synthesis of the results of the project Rubia." *Journal of Ethnopharmacology* 116.2 (2008): 341-357.