

**PP50. Composition of the essential oil of the Balkan endemic
Thymus longedentatus (Degen & Urum.) Ronniger**

Ina Aneva^{1*}, Milena Nikolova¹, Antoaneta Trendafilova², Milka Todorova²

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The genus *Thymus* comprises more than 250 species of perennial herbaceous or fruticose plants, classified into 8 sections. A total of 66 species with numerous subspecies and varieties are listed in the Flora Europaea. All species are considered important medicinal and aromatic plants. Twenty species grow spontaneously in Bulgaria. *Thymus longedentatus* is distributed only in the eastern part of the Balkan Peninsula (Bulgaria, Greece and Turkey), inhabiting sunny rocky habitats, mainly on limestone. Samples of this taxon were collected in the region of the Eastern Rhodopes. The essential oils were extracted from dried plant material by hydrodistillation using a Clevenger-type system and analyzed by gas chromatography coupled with mass spectrometry. The essential oils were characterized by a lemon-like odor due to the prevalence of citral isomers: neral (27.5%) and geranial (30.2%). Additionally, eucalyptol (7.8%), *trans*- β -ocimene (7.5%), germacrene D (4.4%) and β -myrcene (3.7%) were among other more abundant constituents of the oil. The remaining compounds were present in smaller percentage. Twenty-eight compounds comprising 98.2% of the total GC-areas detected were identified in the oil.

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¹Institute of Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, 2 Gagarin Str., 1113 Sofia, Bulgaria; ²Institute of Organic Chemistry with Centre of Phytochemistry, Bulgarian Academy of Sciences, Acad. G. Bonchev Str., bl. 9, 1113 Sofia, Bulgaria.

*Corresponding author: ina.aneva@abv.bg