

# Composition and the *in vitro* Antimicrobial Activities of the Essential Oils of some *Thymus* Species

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The genus *Thymus* (Lamiaceae) is represented by 38 species (64 taxa) in Turkey, and 24 of which are endemic to Turkey. Aerial parts of *Thymus longicaulis* subsp. *chaubardii* var. *chaubardii*, *T. zygioides* var. *lycaonicus*, *T. longicaulis* subsp. *longicaulis* var. *subisophyllus* and *T. pulvinatus* collected from three different localities in Balıkesir province were subjected to hydrodistillation to yield essential oils which were subsequently analysed by GC and GC/MS. The main constituents of the oils were identified, and antimicrobial bioassay was applied. Thymol (56.6%, 42.8%, 36.9%) was the main component in the oils of *T. longicaulis* subsp. *chaubardii* var. *chaubardii* (chemotype I), *T. longicaulis* subsp. *chaubardii* var. *chaubardii* (chemotype II) and *T. zygioides* var. *lycaonicus* respectively. The oil of *T. longicaulis* subsp. *longicaulis* var. *subisophyllus* contained carvacrol (60.0%) and the oil of *T. pulvinatus* borneol (27.9%) as main constituents.

**Key words:** *Thymus* sp., Essential Oil, Antimicrobial Activity