

PP74. The essential-oil content and components of *Thymus syriacus* Boiss. at different harvesting periods

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The genus *Thymus* (Lamiaceae) has 39 species and 59 taxa in the flora of Turkey and 53% of them are endemic. *Thymus syriacus* Boiss. is known to give positive results against cough and other respiratory complaints, as well as some gastrointestinal disorders. Despite the presence of such evidence, scientific investigations concerning the therapeutic use of *T. syriacus* or the aspects of its chemical inventory remain inadequate. In this study, *T. syriacus* leaves were collected from the wild-growing flora of Hatay province at two different phenological periods (pre-flowering and full flowering). The essential oils were obtained from the leaves of *T. syriacus* by hydrodistillation. The essential oil content amounted to 2.25% in the pre-flowering period, while during the full flowering period, the essential-oil content was found to be 2.35%. The essential oils were analyzed by GC/MS. In total, 42 components representing 99.5% of the detected GC-peak areas were identified in the pre-flowering period oil, and 47 representing 98.8% of the detected components of the essential oil hydrodistilled from plant samples collected at the full flowering stage. Carvacrol (82.0-85.7%) was the main component of the essential oils in both pre-flowering and full flowering periods. It was followed by thymol (3.1-4.0%), *o*-cymene (3.1%), γ -terpinene (1.0-2.3%), and β -caryophyllene (0.9-1.3%). In our study, the relative amount of carvacrol was higher compared to the previous studies. There were no significant differences in the relative amount of carvacrol between the harvesting periods. Our study suggests that *T. syriacus*, collected at both phenological phases, could be considered a rich source of carvacrol.

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