

# Turkish Journal of Chemistry

Turkish Journal

Determination of trace element contents of Thymus species from Turkey

of

Chemistry

F. Zehra KÜÇÜKBAY, Ebru KUYUMCU

İnönü University, Faculty of Pharmacy, Department of Basic Pharmaceutical Sciences,

Division of Analytical Chemistry, 44280 Malatya-TURKEY

e-mail: zkucukbay@inonu.edu.tr

 [Keywords](#)  
 [Authors](#)



[chem@tubitak.gov.tr](mailto:chem@tubitak.gov.tr)

[Scientific Journals Home](#)  
[Page](#)

**Abstract:** Eleven mineral and trace elements (Mg, Ca, K, Fe, Mn, Al, Zn, Cu, Cd, Ni, and Pb) were determined in the Thymus species growing in Turkey. The total concentrations were measured in samples mineralized with concentrated nitric acid and hydrogen peroxide in a microwave system. The determination of mineral and trace elements in the leaves of the Thymus species was carried out by flame and graphite furnace atomic absorption spectrometry. The accuracy of the method was ensured by using standard reference material (NIST-SRM 1515 apple leaves). The concentration of elements in the Thymus species and their biological activity on humans is discussed.

**Key Words:** Thymus species, trace elements, minerals, atomic absorption spectrometry, microwave digestion

---

Turk. J. Chem., **34**, (2010), 911-920.

Full text: [pdf](#)

Other articles published in the same issue: [Turk. J. Chem., vol.34, iss.6.](#)