

## LEVELS OF ESSENTIAL HEAVY METALS IN HERBAL TEA COLLECTED FROM SABAC

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**Abstract:** *The chemical components in tea have received great interest because they are related to health. In this study, the content of four essential heavy metals including Cu, Fe, Mn and Zn were determined by atomic absorption spectrometry on samples of herbal teas (Matricariae flos, Thymy herba, Menthae piperitae folium and Betulae folium) collected from Sabac market, Serbia. The sample preparation has been performed using dry digestion procedure and dissolving the ash the first in 6M HCl and then in 0.1 M HNO<sub>3</sub>. Herbal teas showed the concentration of the heavy metals Cu, Fe, Mn and Zn in the range: 11.0-13.4 mg/kg, 166.5-755.5 mg/kg, 43.5-561.0 mg/kg and 16.5-242.5 mg/kg, respectively. The level of copper in all samples was uniform. The highest content of Fe was in Thymy herba, while Mn and Zn were in Betulae folium. The herbal tea samples analysed contain essential heavy metals (Cu, Fe, Mn and Zn) and could contribute to the daily dietary requirements.*

**Keywords:** *heavy metals, essential elements, herbal tea, AAS.*