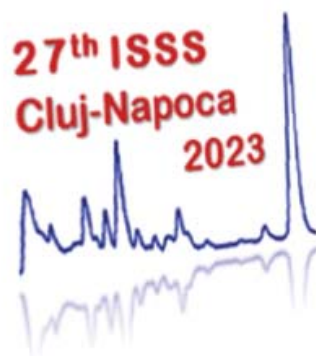




## **SYMPOSIUM PROGRAMME**



## **BOOK OF ABSTRACTS**

27<sup>th</sup> International Symposium on Separation Sciences

September 24<sup>th</sup> - 27<sup>th</sup>, 2023  
Cluj-Napoca, Romania

CASA CĂRȚII DE ȘTIINȚĂ

Editor: Virginia COMAN

Co-Editor: Dan Constantin NIȚĂ, Simion BELDEAN-GALEA

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on  
Separation Sciences**

**PROGRAMME**



**September 24<sup>th</sup> – 27<sup>th</sup>, 2023  
Cluj-Napoca, Romania**

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## KL-06

### Chemical Characterization of Beebread from Serbia. UHPLC-QTOF identification of Phenolic Compounds

Živoslav TEŠIĆ<sup>1</sup>, Nebojša NEDIĆ<sup>2</sup>, Mirjana PEŠIĆ<sup>2</sup>, Danijel MILINČIĆ<sup>2</sup>,  
Milica KALABA<sup>3</sup>, Aleksandar KOSTIĆ<sup>2</sup>

*University of Belgrade - Faculty of Chemistry, Studentski trg 12-16, Belgrade 11158, Serbia*

*<sup>2</sup>University of Belgrade – Faculty of Agriculture, Chair of Chemistry and Biochemistry, Nemanjina 6, Zemun-  
Belgrade 11080, Serbia*

*<sup>3</sup>Institute of General and Physical Chemistry, Studentski trg 12-16, Belgrade 11158, Serbia  
[ztesichec@m.bg.ac.rs](mailto:ztesichec@m.bg.ac.rs)*

**Key Words:** *Beebread, Chemical characterization, Pollen analysis, Phenolic profile*

Beebread is a important bee product made from plant pollen and honey. In order to obtained beebread plant pollen collected by the bees is mixed with digestive enzymes and honey and stored into the honeycomb where it undergoes fermentation process before being used by bee as a food. Unlike honey, which gives them energy, beebread is an important source of protein, minerals, vitamins and biologically active substances. The diversity of plant species is important for its quality. That was also the reason to collect a large number of samples from different locations of Serbia and study them in detail. Pollen analysis showed that the largest number of samples are polyfloral, although a few are monofloral. The UHPLC-QTOF technique was used to identify and quantify phenolic compounds. Over 190 components from the class of phenolic acids, hydroxycinnamic amides, flavonoid glycosides, aglycones and anthocyanidin glycosides were identified. Polyfloral beebread contained a greater number of phenolic compounds. In addition, the presence of a significant number hydroxycinnamic amides was determined. It should be emphasized that a large number of phenylamides, important biologically active substances, have been identified [1]. It has been shown that the studied beebreads are an excellent source of important nutrients and biologically active components not only for bees, but can also be used in human nutrition.

#### References

[1] A. Kostić, D. Milinčić, B. Špirović-Trifunović, N. Nedić, U. Gašić, Ž. Tešić, S. Stanojević and M. Pešić, *Antioksidans*, 2023, 12, 1424.

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