

# 3<sup>rd</sup> Symposium of Young Researchers on Pharmacognosy



Szeged, 3–4 February 2022

## BOOK OF ABSTRACTS



**3rd Symposium of Young Researchers on Pharmacognosy**

# **BOOK OF ABSTRACTS**

**(ed. Tivadar Kiss, Judit Hohmann)**

**Department of Pharmacognosy, University of Szeged, Szeged,  
Hungary**

**3–4 February 2022**

**doi: [10.14232/syrpharmacognosy.2022.af](https://doi.org/10.14232/syrpharmacognosy.2022.af)**

**A9**

doi: 10.14232/syrpharmacognosy.2022.a9

### Phytochemical analysis of three food plants

Klára Horváth-Boros

Email: horvath-boros.klara@szte.hu

Although the nutritive value of food plants depends on primary metabolites such as carbohydrates, lipids and proteins, their physiological effects and enjoyment values largely depend on secondary metabolites. The aim of our work was to analyze the secondary metabolites of three food plants.

*Capsicum annuum* is currently being studied because it is a characteristic spice of Hungarian gastronomy. The rationale of the *Capsicum* experiments was to find correlation with the organoleptic characteristics to contribute to the development of quality standards based on objective data. The analysis of *Capsicum annuum* samples focused on the carotenoids content. In case of *C. annuum*, we first developed a MPLC method to separation of carotenoids in paprika.

Subsequently, a reversed-phase HPLC method was developed to examine the carotenoid fingerprint of paprika powders. In this case, we examined the proportion of carotenoids described in the literature [1] in the extracts of good quality as well as a poor-quality peppers. This method allows the determination of carotenoid composition in the analysis of samples of different qualities.

**Supervisor:** Dezső Csupor

**Acknowledgements:**

„Supported by the ÚNKP-20-3 - New National Excellence Program of the Ministry for Innovation and Technology from the source of the National Research, Development and Innovation Fund.”

**References**

[1] József Deli et al. J. Agric. Food Chem. 2001. 49:1517–1523.