

# **Pumpkin pulp extracts from a Serbian *Cucurbita maxima* Breeding Collection: Phenol profile and in vitro bioactivity**

## **Abstract**

Methanolic pulp extracts from the four selected Serbian accessions of *Cucurbita maxima* were evaluated for phenol profile cytotoxic effects and antimicrobial activity. The results revealed that quinic acid and amentoflavone were the most abundant phenols. The extracts increased the viability of HTR-8 SV/Neo, JEG-3, JAR cells, with the most pronounced increase in the treatment with MAX 113 extract. Furthermore, in HeLa cells, the extracts showed a modest cytotoxic effect. The antimicrobial effects evaluation showed that out of four pumpkin extracts, MAX 117 could moderately suppress the growth of *Staphylococcus aureus* and *Staphylococcus epidermidis* (MIC=1000 µg/mL). The observed biological effects indicate the potential medicinal properties of these pumpkin extracts and contribute to the varietal selection of the most suitable accessions in national breeding programs as candidates for improving human health.