

# ABSTRACT PROCEEDINGS

## II Conference FoodWaStop



CA22134

**Sustainable Network for agrofood loss and waste prevention, management, quantification and valorisation**

March 4-5<sup>th</sup> 2025

Rectorate of the University of Córdoba, Spain



# FoodWaStop COST OVERVIEW

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The **FoodWaStop COST**, is a scientific cooperation network, “CA22134 – Sustainable Network for agrofood loss and waste prevention (FLW), management, quantification and valorisation » funded by COST ACTION programme that addresses the following challenges and aims to: (i) build an interdisciplinary and multi-actor European Network that will also connect with non-EU Mediterranean countries, to promote knowledge on FLW beyond the state of the art; (ii) determine incidence of FLW in the critical points of the fruit and vegetable value chain; (iii) foster technological innovations and sustainable management strategies to reduce and prevent FLW; and (iv) valorise agrofood waste to promote a circular bio-economy.

The experience of the Coordinators and Participants gained from other related projects (e.g., PRIMA, H2020), the background from diverse EU and extra-EU countries, and the involvement of stakeholders and industry partners will contribute to increase awareness of this problem, to determine its incidence, to seek strategies for its management through exploitation of the potential of innovative technologies, and to define good practices to prevent FLW.

The **FoodWaStop** Network will provide benefits to various stakeholders and end-users, including all actors in the agrofood value chain, from farmers (Farm) to consumers (Fork). Moreover, **FoodWaStop** will create a knowledge platform that will promote innovation, deliver guidelines, and favour dialogue with policymakers, to focus their attention on the social and economic implications of FLW.

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# POSTER PRESENTATIONS

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## P4.17. Sustainable Valorization of Raspberry Pomace Using Biocompatible Ionic Liquids

JOVANOVIĆ, J.<sup>1</sup>, LAZAREVIĆ, D.<sup>1</sup>, ČUJIĆ NIKOLIĆ, N.<sup>2</sup>, TRTIĆ-PETROVIĆ, T.<sup>1</sup>

<sup>1</sup>*Vinča Institute of Nuclear Sciences – National Institute of the Republic of Serbia, University of Belgrade, Belgrade, Serbia.*

<sup>2</sup>*Institute for Medicinal Plant Research Dr. Josif Pančić, Belgrade, Serbia.*

ttrtic@vin.bg.ac.rs

Raspberry belongs to a group of highly valued fruits, known as berries, which possesses unique flavor and significant nutritional and health benefits attributed to its rich content of bioactive compounds. Bioactives (polyphenols, flavonoids, anthocyanins, and ellagitannins) could exhibit anti-inflammatory, antioxidant, and anti-diabetic properties. However, raspberries have a short shelf life and often are processed into juice, wine, jam, or syrup, resulting in substantial amounts of pomace, primarily composed of seeds and pulp, which are commonly discarded as agricultural waste. This study explores the potential of raspberry pomace as a sustainable source of bioactive compounds through the application of green extraction technique. Ionic liquids (hydrophilic: cholinium acetate, cholinium bitartrate, and cholinium ascorbate; and hydrophobic: cholinium decanoate and cholinium dodecanoate) were synthesized and employed as alternative, non-toxic solvents. Direct solid-phase extraction was conducted with the aid of ultrasonic waves. The total phenolic and anthocyanin content was determined spectrophotometrically, while ellagic acid was quantified using HPLC. The results indicate that ionic liquids provide an effective, eco-friendly approach for the valorization of raspberry pomace, highlighting their potential as alternative solvents in bioactive compound extraction. This study underscores the feasibility of utilizing agricultural by-products to obtain valuable bioactive compounds, contributing to sustainability and waste reduction in the berry processing industry.

**Keywords:** Raspberry pomace, ionic liquids, bioactive compounds, green extraction