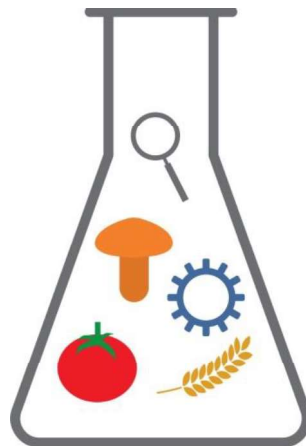




**University of Belgrade  
Faculty of Agriculture**

The 3<sup>rd</sup> International UNIFood Conference  
**UNIFood2024 Conference**

**Book of Abstracts**



**UNIFOOD**

*Belgrade, June 28-29, 2024.*

UNIFood2024 Conference - Book of Abstract

**The 3<sup>rd</sup> International UNIFood Conference – UNIFood2024**

***Publisher***

University of Belgrade - Faculty of Agriculture  
6 Nemanjina street  
11080 Zemun - Belgrade

**For Publisher**

Prof. Dr Dušan Živković, Dean  
University of Belgrade  
Faculty of Agriculture

***Editors***

Prof. Dr Mirjana Pešić  
Prof. Dr Slađana Stanojević

***Cover Design Layout, technical preparation, typesetting***

Ivana Isaković

***Print run***

20 copies

***Printing house***

Faculty of Agriculture, Nemanjina 6, 11080 Belgrade

**ISBN: 978-86-7834-438-1**

Belgrade, 2024.



## **ENHANCING STRAWBERRY TREE FRUIT SPIRIT: EFFECTS OF OAK WOOD AGEING**

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The present study focuses on the impact of wood ageing on strawberry tree fruit spirit, a high-quality beverage in Mediterranean regions, particularly Portugal. It explores the chemical and sensory changes resulting from ageing the spirit for two periods of time with oak wood of varying toasting levels. Analysis included acidity, colour, pH, dry extract, volatile compounds (methanol, acetaldehyde, ethyl acetate and fusel alcohols), identified and quantified through GC-MS and GC-FID, and low molecular weight compounds, quantified by HPLC (gallic acid, ellagic acids, syringic acid, vanillin, syringaldehyde, coniferaldehyde, sinapaldehyde, furfural, 5-hydroxymethylfurfural and 5-methylfurfural). Sensory evaluations were made by a trained panel.

Results showed enhanced colour and enrichment with volatile and low molecular weight compounds due to oak wood contact, with slight differences among toasting levels. Almost all parameters increased with ageing time, as confirmed by principal component analysis, which effectively discriminated between aged spirits and toasting level. These findings contribute to understanding and optimizing the ageing process of strawberry tree fruit spirit for commercialization. Medium toasted oak yielded the best results.

*Keywords: strawberry tree fruit, spirit, volatile compounds, low molecular weight compounds, sensory analysis*

*Acknowledgements: This work was supported by Foundation for Science and Technology (FCT, Portugal) for their financial support through national funds FCT/MCTES (PIDDAC) to CERNAS-IPCB, UIDB/00681/2020 (DOI: 10.54499/UIDP/00681/2020); CEF, UIDB/00239/2020 (DOI: 10.54499/UIDB/00239/2020) and TERRA (DOI: 10.54499/LA/P/0092/2020); MED, UIDB/05183/2020.*



**UNIFood2024 Conference**  
28<sup>th</sup>-29<sup>th</sup> June 2024 University of Belgrade  
**3<sup>rd</sup> International UNIFood Conference**



CIP - Каталогизација у публикацији Народна библиотека Србије, Београд

663/664(048)

**INTERNATIONAL UNIFood Conference (3 ; 2024 ; Beograd)**

Book of Abstracts : The 3rd International UNIFood Conference, UNIFood2024 Conference, Belgrade, June 28-29, 2024. / [editors Mirjana Pešić, Slađana Stanojević].  
- Belgrade : University, Faculty of Agriculture, 2024 (Beograd : Faculty of Agriculture).  
- 165 str. ; 30 cm

Tiraž 20.

ISBN 978-86-7834-438-1

a) Храна -- Апстракти

COBISS.SR-ID 147592713

