THE BOOK OF ABSTRACTS

V Balkan Symposium on Fruit Growing June 18-21, 2023 Zagreb, Croatia



University of Zagreb Faculty of Agriculture Department of Pomology





V Balkan Symposium on Fruit Growing

The Book of Abstracts



June 18-21, 2023, Zagreb, Croatia

ORGANIZER

University of Zagreb Faculty of Agriculture under the auspices of the International Society for Horticultural Science

SUPPORTERS

University of Zagreb
City of Zagreb
Ministry of Agriculture
Ministry of Science and Education
Croatian National Tourist Board
Zagreb Tourist Board









V BALKAN SYMPOSIUM ON FRUIT GROWING JUNE 18-21, 2023, ZAGREB, CROATIA

Published by University of Zagreb Faculty of Agriculture (Croatia)

Editor in Chief Martina Skendrović Babojelić

Editorial Board Boris Duralija, Marko Vuković

Technical and Graphical Editors Jelena Gadže

> ISBN (USB stick) 978-953-8276-52-1

Web page: https://www.5bsfg.com/

The official language of the Symposium is English

Organized by the University of Zagreb Faculty of Agriculture under the auspices of the International Society for Horticultural Science

©2023 by the University of Zagreb Faculty of Agriculture. All rights reserved. No part of this book of abstracts may be reproduced and/or published in any form or by any means, electronic or mechanical, including photocopying, microfilm and recording, or by any information storage and retrieval system, without written permission from the publishers.









Organizing Committee

Martina Skendrović Babojelić, Croatia (Convener) Boris Duralija, Croatia (Convener) Marko Vuković, Croatia (Secretary) Jelena Gadže, Croatia Ivica Kisić, Croatia Goran Fruk, Croatia Đani Benčić, Croatia Kristina Batelja Lodeta, Croatia Aleš Vokurka, Croatia Aleksandar Mešić, Croatia Mario Njavro, Croatia Luka Cvitan, Croatia Željko Prgomet, Croatia Biserka Milić, Serbia Miljan Cvetković, Bosnia and Herzegovina Gulce Ilhan, Turkey

Honorary Committee

Mihail Coman, Romania Zlatko Čmelik, Croatia Sezai Ercisli, Turkey Karoly Hrotko, Hungary Dragan Milatović, Serbia Ivo Miljković, Croatia Đurđina Ružić, Serbia Militiadis Vasilakakis, Greece Argir Zhivondov, Bulgaria

Technological Committee

Darja Sokolić, Croatia
Tvrtko Jelačić, Croatia
Danijel Čiček, Croatia
Predrag Vujević, Croatia
Giorgio Jurić, Croatia
Leon Prelogović, Croatia
Božidar Hrenković, Croatia
Mario Bekčec, Croatia
Marko Ohnjec, Croatia
Marin Čagalj, Croatia

Scientific Committee

Boris Duralija, Croatia

Martina Skendrović Babojelić, Croatia

Ante Biško, Croatia

Sandro Bogdanović, Croatia

Igor Bogunović, Croatia

Snježana Bolarić, Croatia

Geza Bujdoso, Hungary

Danijela Bursać Kovačević, Croatia

Maria Butac Madalina, Romania

Maurizio Canavari, Italy

Magdalena Cara, Albania

Luca Corelli Grappadelli, Italy

Milena Đorđević. Serbia

Gordana Đurić, Bosnia and Herzegovina

Nesibe Ebru Kafkas, Turkey

Milica Fotirić Akšić, Serbia

Goran Fruk. Croatia

Fuad Gaši, Bosnia and Herzegovina

Muttalip Gundogdu, Turkey

Metka Hudina, Slovenia

Dario Ivić, Croatia

Lidija Jakobek, Croatia

Marjan Kiprijanovski, N. Macedonia

Tomas Kon. USA

Tomislav Kos, Croatia

Marin Krapac, Croatia

Dario Kremer. Croatia

Gunars Lacis. Latvia

Boris Lazarević. Croatia

Darija Lemić, Croatia

Scientific Committee

Ante Lončarić, Croatia

Nenad Magazin, Serbia

George Manganaris, Cyprus

Giulia Marino, USA

Luna Maslov Bandić, Croatia

Bruno Mezzetti, Italy

Michail Michailidis, Greece

Jasminka Milivojević, Serbia

Nebojša Milošević, Serbia

Senad Murtić, Bosnia and Herzegovina

Tomaš Nečas, Czech Republic

Dragan Nikolić, Serbia

Ivana Pajač Živković, Croatia

Jelena Popović-Đorđević, Serbia

Iva Prgomet, Croatia

Predrag Putnik, Croatia

Sanja Radičević, Serbia

Mira Radunić, Croatia

Branka Salopek Sondi, Croatia

Dunja Šamec, Croatia

Zlatko Šatović, Croatia

Jana Šic Žlabur, Croatia

Florin Stanica. Romania

Ivana Tomaz. Croatia

Marina Tomić Maksan, Croatia

Robert Veberić, Slovenia

Marija Vilievac-Vuletić. Croatia

Marko Vinceković. Croatia

Sandra Voća, Croatia

Darko Vončina. Croatia

QUALITY OF DRIED SOUR CHERRIES FROM DIFFERENT SERBIAN CULTIVARS

O. Mitrovic, A. Koricanac, B. Popovic, S. Radicevic, I. S. Glisic*, A. Leposavic, S. Maric

Fruit Research Institute, Cacak, Kralja Petra I 9, 32000 Cacak, Serbia; akoricanac@institut-

*Correspondence: iglisic@institut-cacak.org

Abstract

Dried fruit is classified as a nutritionally highly valued food due to its high content of phenolic compounds and antioxidant capacity. Furthermore, due to a high content of natural sugars giving the body the necessary energy, dried fruit is an essential part of a balanced meal. Therefore, the aim of our paper is to examine the quality of dried sour cherry from newly developed and indigenous cultivars originating from Serbia. Sour cherry cultivars and promising genotypes developed at Fruit Research Institute, Čačak ('Šumadinka', 'Sofija', 'Nevena' and 'GV-10') and autochthonous cultivars 'Oblačinska' and 'Feketićka' were used for testing. Drying of pitted fruit was performed in an experimental drier at an air temperature of 70 °C until reaching 75% of the total dry matter. Contents of total dry matter, sugars, total acids, as well as sugar/acid ratio and pH value were determined in fresh fruit. Large discrepancies manifested in the values of evaluated parameters point to distinct varietal specificities. Besides the aforementioned parameters, total phenols and antioxidant capacity, as well as sensory characteristics (appearance, flavour, aroma, and consistency) were analyzed in dried sour cherry fruits. Based on the results of sensory analyses of dried sour cherry fruits, the cultivar 'Feketićka' had the best, whereas cultivar 'Šumadinka' received the lowest grades, which is consistent with the sugar/acid ratio. On the other side, dried fruits of cultivar 'Feketićka' had the lowest values of contents of total phenolics and antioxidant capacity, whereas the highest values were found in cultivar 'Sofija'. Based on evaluated quality parameters, all tested cultivars have been found suitable for processing by drying. Sensory analysis revealed that the dried fruits of all tested sour cherries had supreme sensory quality.

Keywords: chemical composition, phenolic content, antioxidant capacity, air-drying, sensory analysis