

ZERO
WASTE

THINK
GREEN

NO
PLASTIC

ECO
FRIENDLY



FULL
RECO4US

**International Sustainable Resource Recovery Strategies
Towards Zero Waste (FULLRECO4US) Conference**

13 – 15 September 2023

Istanbul, Turkey



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Funded by
the European Union

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Preface

On behalf of the organizing committee, I would like to welcome all participants and speakers to the International Sustainable Resource Recovery Strategies Towards Zero Waste (FULLRECO4US) Conference in Istanbul/Turkiye. This conference is the first international conference under Cost Action 20133: Cross Border Transfer and Development of Sustainable Resource Recovery Strategies Towards Zero Waste (FULLRECO4US) and I hope it will be the starting point for a series of FULLRECO4US conferences. It is my pleasure to thank COST Action 20133 (funded by the European Union) for their financial support.

FULLRECO4US Istanbul 2023 conference provides a unique opportunity for professionals from around the world to learn, share and present the latest knowledge and insights on circular economy, zero waste, resource recovery strategies, energy resources and sustainable food systems. The conference is a networking platform with the world's leading experts in resource recovery strategies and related fields. It is an important event for assessing the key challenges in promoting a sustainable zero waste bringing together an international community of leading academics, researchers, engineers and industry professionals to exchange and share their ideas and experiences.

This conference was organized in Istanbul by Innobrane Research Group led by Derya Y. Koseoglu-Imer and Bilig Upcycling Academy. The local organizing team, which are members of Innobrane Research Group, consists of Derya Y. Koseoglu-Imer (conference chair), Sama Al-Mutwalli (conference secretariat), Tugba Sapmaz-Wikstrom (conference secretariat), Mustafa Taher (conference secretariat), Elifnur Gezmis Yavuz, Esra Buyukada Kesici, Feyza Nur Buyuknalçaci, Sezer Gençturk, Yasin Sahin, Duygu Tozaraydin, Cagri Kaan Kilic. There was also an international organizing committee composed of 10 members from 9 different countries: Mohammad Taherzadeh (SE), Philippe Corvini (CH), Pieter Billen (BE), Olga Nunes (PT), Jorge Marchetti (NO), Patrik Lennartsson (SE), Timo Kikas (EE), Belen Garcia (ES), Gjore Nakov (BG), Derya Y. Koseoglu-Imer (TR). The scientific committee of the conference included 120 reviewers from 36 countries. We had 2 plenary speakers, 7 keynote speakers, 7 stakeholders, 57 oral presentations, and 51 poster presentations and more than 200 participants from 35 countries. The conference showed a good balance in terms of gender equality: 57% of the participants were women and 43% were men.

It is my pleasure to thank Prof. Mohammad J. Taherzadeh (COST Action Chair) and all members of the core group and management committee of COST Action-20133, members of local organizing team, all participants, stakeholders, Kolektif House, Bilig Academy and Crowlink who contributed to success of this conference.

Istanbul is truly a crossroads of ideas and cultures between Europe and Asia. I hope that all participants had good memories of the FULLRECO4US Istanbul Conference.

See you again in Istanbul, Sincerely

Assoc. Prof. Dr. Derya Y. Koseoglu-Imer (Conference Chair)



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Monitoring quality changes in set yoghurt produced with bioprotective cultures

Biljana Trajkovska ^{a*}, Ljubica Trajkoska ^a

^a University st.Kliment Ohridski, Faculty of Biotechnical Sciences, Bitola, North Macedonia,
biljana.trajkovska@uklo.edu.mk; ljubicaatrajkoska@gmail.com.

* Corresponding Author

Abstract

One of the natural ways of product protection is using a bioprotective culture in order to delay spoilage from yeast and mold contamination. This study examines the effect of using bioprotective cultures during the industrial production of set yogurts. Samples were stored at three different temperatures 5, 10, and 25 °C, and quality changes were monitored. pH decreased and titratable acidity increased during the storage temperatures. The yeasty taste of samples was noticed as aging progressed at storage temperatures with different time intervals. Changes in sensory characteristics, during storage, correlated best with yeast and mold counts. At samples stored at 25 °C the first sensory and microbiological changes were noticed on the 9th day after production at samples without bioprotective cultures. Samples stored at 10 °C and 5 °C were monitored up to 49 days after production and the first changes in sensory properties were noticed at 30 and 38 days, respectively at samples without bioprotective cultures. Using bioprotective cultures in set yogurt production prolongs the shelf life of the product and improves the sensory properties of the final product and reduces waste.