



14th Baltic Conference on Food Science and Technology

FoodBalt2021

“Sustainable Food for Conscious Consumer”

Book of abstracts



Tallinn 2021



Center of Food and Fermentation Technologies

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Book of abstracts

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Dear colleagues,

FoodBalt2021 was supposed to take place in 2020 and be the 14th conference in a row. TFTAK, Center of Food and Fermentation Technologies in Tallinn was preparing the conference to take an honorable place in the chain of events as a traditional meeting of Baltic food and biotechnologists with their international colleagues. COVID-19 spoiled our plan. The conference was postponed first for a year and now it is clear that we cannot meet face-to-face even in 2021. Considering this the Organizing Committee decided to make the least possible and publish the abstracts sent to us now as a token of goodwill. Let the FoodBaltic2021 abstract book be a firm indication that after getting over the pandemic we shall meet again in person and enjoy scientific and personal discussions as neighbors and colleagues.

Having read the abstracts we can assure you and us all that it would have been an interesting and high-level international conference!



Professor Raivo Vilu
Research Director, TFTAK
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THE APPLICATION OF TRITICALE FLOUR FOR THE PRODUCTION OF COOKIES

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Triticale is a hybrid cereal developed by crossing of wheat and rye. It is characterized by higher environmental tolerance than wheat and increased content of lysine, amino acid which is deficient in most cereals. The application of triticale flour in bakery and confectionary industry is limited by high stickiness of dough and low gluten strength. Refined and wholegrain flour prepared from hexaploid triticale cultivar 'Odisej' were used for the production of cookies in this study. The cookies were prepared according to the standard method of American Association of Cereal Chemists for the evaluation of baking quality of cookie flour – micro wire-cut formulation. Dimensions, colour, hardness and sensory properties of triticale cookies were compared to the cookies prepared from refined and wholegrain wheat and rye flours.

Spread ratio of cookies manufactured from refined triticale flour did not differ significantly from refined wheat flour cookies, while instrumentally determined hardness and sensory scores for structure and chewiness were in the range obtained for wheat flour cookies. Total sensory score of cookies manufactured from refined triticale flour was the highest among all samples, indicating that refined triticale flour is suitable for the production of cookies. However, cookies prepared from wholegrain triticale flour were characterized by the lowest spread ratio and the lowest score for appearance, while its texture was assessed as too crumbly. It is supposed that different milling technique is needed to obtain wholegrain triticale flour which is more suitable for cookie production.

Keywords: *triticale, cookies, colour, texture properties, sensory properties*

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