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## Latvia University of Life Sciences and Technologies Faculty of Food Technology

# FOODBALT 2019 13th Baltic Conference on Food Science and Technology “FOOD. NUTRITION. WELL-BEING.” and NEEFOOD 2019 5th North and East European Congress on Food

## Abstract Book

Jelgava  
May 2-3, 2019

# FOODBALT 2019 and NEEFOD 2019

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# FOODBALT 2019 and NEEFOOD 2019

**EP14** – I. Joudu, P. Paaso, R. Bhat ERA chair for food by-products valorisation technologies of the Estonian University of Life Sciences (VALORTECH)

**EP15** – S. Muizniece-Brasava, A. Kirse-Ozolina, I. Gramatina, A. Gorbatovskiy, S. Sazonova, E. Straumite, Z. Kruma, I. Ciprovica, M. Sabovics, D. Kunkulberga, J. Kivite, T. Kince, J. Zagorska *Innovative structured fish mass products from Baltic sprat (*Sprattus sprattus balticus* Schneider)*

## 19<sup>00</sup> CONFERENCE DINNER

**May 3, 2019**

### **Session V** **Room 278, LLU main building**

**Moderators:** Ivi Joudu, Estonia University of Life Sciences, Estonia

Martins Sabovics, Latvia University of Life Sciences and Technologies, Latvia

8<sup>30</sup>-9<sup>10</sup> **KEY LECTURE** Jorg-Thomas Morsel, GmbH UBF, Germany, Seabuckthorn – a unique of value added natural products

9<sup>10</sup>-9<sup>25</sup> **O23** – H. Danilcenko, D. Televiciute, N. Vaitkeviciene, M. Lasinskas *The effect of plant extracts on the synthesis of biologically active compounds in germinated leguminous*

9<sup>25</sup>-9<sup>40</sup> **O24** – J. Dorozko, D. Kunkulberga, I. Sivicka, Z. Kruma *The influence of various drying methods on the properties and quality of edible flowers` petals*

9<sup>40</sup>-9<sup>55</sup> **O25** – A. Kirse-Ozolina *Comparison of free-range, barn and caged hens` eggs commercially available in Latvia*

#### 9<sup>55</sup>-10<sup>15</sup> E-POSTERS

**EP16** – I. Misina, A. Valdovska, J. Zagorska, E. Urvaka, K. Juhnevica-Radenkova, P. Gornas *Physicochemical characteristic of two cold-pressed seed oils: Japanese quince vs. sunflower*

**EP17** – B. Cindik, E. Yalcin *Effect of fermentation on phytic acid and fructan contents of cornelian cherry tarhana*

**EP18** – E. Sosyura, E. Romanenko, M. Selivanova, T. Aysanov, N. Esaulko, M. German *The technology of obtaining extracts of fruit and berry raw materials for functional beverage production*

## 10<sup>15</sup>-10<sup>45</sup> COFFEE BREAK

### **Session VI** **Room 278, LLU main building**

**Moderators:** Ene Viiard, Center of Food and Fermentation Technologies, Estonia

Asnate Kirse-Ozolina, Latvia University of Life Sciences and Technologies, Latvia

10<sup>45</sup>-11<sup>00</sup> **O26** – R. P. F. Guine, L. Fontes, M. J. Lima *Evaluation of colour in Serra da Estrela cheese produced in different dairies along maturation time*

11<sup>00</sup>-11<sup>15</sup> **O27** – M. J. R. Lima, L. Fontes, A. M. Peres, R. P. F. Guine, E. T. Lemos *Fatty acid profile in Serra da Estrela cheese: An overview*

## FATTY ACID PROFILE IN SERRA DA ESTRELA CHEESE: AN OVERVIEW

Maria Joao Reis Lima<sup>1,2</sup>, Luisa Fontes<sup>2</sup>, Antonio M. Peres<sup>3</sup>, Raquel P.F. Guine<sup>1,2</sup>, E. Teixeira Lemos<sup>1,2</sup>

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Milk and dairy products are of major importance in the human diet, since they are an excellent source of well-balanced nutrients which are consumed in large amounts and are easy to manufacture. Most cheeses present in the market are made from cow's milk, with ewe's and goat's cheeses being considered delicacies derived from the unavailability of goat's and ewe's milk in certain periods of the year, proleading to a final product with high prices that consumers tend to value given the quality of the final products. Serra Estrela (SE) cheese, a traditional variety manufactured in the center region of Portugal, is part of the national ancient cultural heritage. Made from raw sheep milk it is assumed as an iconic gourmet cheese, when compared with other Portuguese cheeses. In the present work, the evolution of the lipid fraction, namely unsaturated fatty acids such as monounsaturated and polyunsaturated (omega 3 fatty acids and omega 6 fatty acids), was evaluated for a period of 9 months. Chemically it was possible to verify differences in terms of the fatty acid profile between the analysed cheese samples. SE cheese was characterized by a relatively high content of monounsaturated fatty acids (MUFA) and the evaluation of the lipid profile of SE cheese allowed possible future work in determining bioactive lipid compounds with possible health promoting functions.

**Keywords:** Serra da Estrela cheese, fatty acids, flavour, health

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