

Булевар цара Лазара 1, Нови Сад Тел: 021/485 3600, 485 3601 имејл: deantf@uns.ac.rs веб: www.tf.uns.ac.rs

### Title of the project:

New concept of food fortification with cereal sprouts from Vojvodina

**Project number:** 142-451-2142/2019-01/01

Funding sources:

Provincial Secretariat for Higher Education and Scientific Research

**Duration of the project:** 2016 – 2020.

Project budget: 5.200.000 RSD

Logo or acronym:

# Research area of the project:

Technical and technological sciences

# **Principal investigator:**

Dr. Gordana Ćetković, full professor, Faculty of Technology Novi Sad, University of Novi Sad

#### **Reseach team:**

Dr. Jasna Čanadanović-Brunet, full professor, Faculty of Technology Novi Sad, University of Novi Sad

Dr. Dragoljub Cvetković, full professor, Faculty of Technology Novi Sad, University of Novi Sad

Dr. Vesna Tumbas Šaponjac, associate professor, Faculty of Technology Novi Sad, University of Novi Sad

Dr. Jelena Vulić, assistant professor, Faculty of Technology Novi Sad, University of Novi Sad Dr. Slađana Stajčić, research associate, Faculty of Technology Novi Sad, University of Novi Sad

Dr. Vanja Šeregelj, research associate, Faculty of Technology Novi Sad, University of Novi Sad

Dr. Boris Popović, full professor, Faculty of Agriculture Novi Sad, University of Novi Sad

Dr. Ružica Ždero Popović, assistant professor, Faculty of Agriculture Novi Sad, University of Novi Sad

Dr. Bojana Blagojević, assistant, Faculty of Agriculture Novi Sad, University of Novi Sad, Dr. Anamarija Mandić, principal research fellow, Institute of Food Technology in Novi Sad, University of Novi Sad Dr. Nebojša Ilić, principal research fellow, Institute of Food Technology in Novi Sad, University of Novi Sad

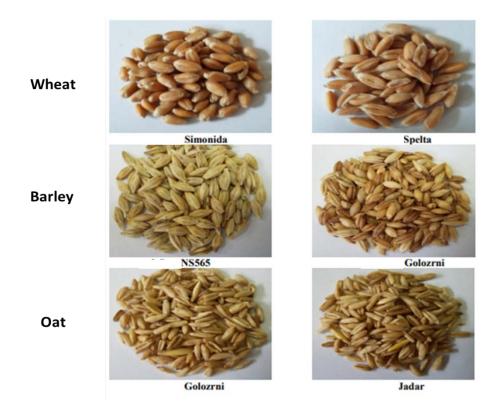
Dr. Alyssa Hidalgo, full professor, Department of Food, Environmental and Nutritional Sciences, University of Milan

# Key words:

sprouts, cereals, polyphenols, antioxidant activity, functional food

### **Project summary:**

The project deals with obtaining and testing sprouts of selected varieties of wheat, barley, and oats in Vojvodina, as well as testing and declaring products enriched with sprouts in powder form. One of the main problems in the production and application of sprouts is their microbiological stability. Our approach, which involves drying and translating sprouts into powder form, greatly improves and prolongs their microbiological stability. Cereals that are brought to the germination phase and then lyophilized, keep in their natural form almost all substances contained in whole germinated grains: dietary fiber, amino acids, vitamins, minerals, proteins, and phytochemicals, therefore they have great nutritional and bioactive value. In addition, the powder form of sprouts allows them to be easily mixed into various matrices as their functional components. Such flexibility of application enables the creation of a wide range of products with the addition of powdered sprouts as a bioactive component in future functional products that have a positive impact on human health. Therefore, the research planned by this project is innovative and contributes to the competence of scientific research, as well as the development of new products and increasing the economic potential in AP Vojvodina.



# Graphical abstract or graphical presentation of project results:



