# CORE organic Plus



## Europe needs profitable value chains for organic berry products





#### Aim of the project:

To develop innovative, sustainable processing and packaging solutions to boost the manufacturing of safe and nutritious organic berry products



#### Introduction

The expected outcome of the project is improved sustainable and profitable value chains for organic berry production meeting the growing demand for increased availability of safe and healthy berry products, and produced with respect to quality and environmental impact.

- What Development of innovative and sustainable processing and packaging solutions to boost the manufacturing of organic berry products with high nutritional quality and low environmental impact
- Why The number of fresh and processed organic berry products is still limited and the industry cannot meet the increasing demand from consumers
- **Where** The main regions will be Norway, Finland, Sweden, Romania, Turkey, Italy and France

#### Main activities

- Identify processing solutions to enhance the safety and overall quality and nutritional value of organic berries and products
- Adaption of traditional processing methods to organic requirements
- Use of innovative packaging technologies
- Development of new sustainable processing schemes
- Dissemination and knowledge transfer to relevant stakeholders

#### Background

The future challenges facing agriculture and food production are considerable. The increased public concerns about the negative environmental and health impacts of conventional crop production have been important drivers for the increase in consumer demand for organic foods over the last 20 years.

Organic agriculture and organic food has an important role in pushing agriculture and food production towards sustainability, safety and quality. Since organic production in EU competes with both conventional food and global organic production it depends greatly on innovation, novel appropriate techniques and scientific evidence to support the quality.



Preparation of press cake for extrusion experiments



#### Expected societal benefits

The outputs will have impact on improved sustainable production, enhanced quality of life, international development, exploitation of knowledge addressing environmental and economic challenges and the growing demand for sustainable production and agriculture and safe, high quality food products. Well-adapted packaging solution for fresh food contributes to reduce food wastes and losses through shelf life gain, increased sale of organic berry products and more jobs. The focus of the project will be on development and adaption of processing technologies using berries as raw materials but the findings can be extrapolated to other crops.

A growing organic food sector can be a driving force for social and economic development in rural communities as new business opportunities are created.

#### Expected results and impacts

Knowledge about the potential effects of production methods based on nutritional quality and safety aspects. Identification of packaging solutions based on bio-sourced/biodegradable packaging material to extend the shelf-life of fresh berries and minimize waste of produce.

The knowledge will have positive influence on the end product quality and stimulate producers to improve quality which will contribute to maintained/increased consumer confidence in organic products. The results will underpin creation of new profitable value chains for organic berry products. Better cooperation between researchers, farmers, processing industries, commerce and consumer organizations.

### Expexcted long-term impacts

- Enhanced industrial business activities and export potential.
- Increased biodiversity and decreased use of chemical plant protection products with reduced risks to the environment and health.
- Benefits for animal welfare and rural development.

Berry powder





#### How to reach the target groups

Dissemination of results through leaflets, popular papers, workshops and media contact. Main target groups will be farmers, the food industry, both large and SMEs, retailers, distributors and consumers, inhabitants in regions where there are few economic possibilities and even subsistence farming is marginal. Collaboration with European Food and Drink Federation/organizations and consumer organizations.

#### Coordinator

Marie Alminger, Chalmers University of Technology, Sweden

#### **Partners**

Anders Leufvén, NOFIMA, Norway Marco Dalla Rosa, UNIBO, University of Bologna, Italy Mona Elena Popa, USAMVB, University of Agronomic Science and Veterinary Medicine, Romania Maria Saarela, VTT Ltd. Technical Research Centre of Finland, Finland Nathalie Gontard, UMR-IATE, National Institute for Agricultural Research, France Lilia Ahrné, SP, Technical Research Institute of Sweden, Sweden Fahrettin Gogus, GU/Gaziantep University, Turkey Ohran Eren, CRIFFC, Central Research Institute of Food and feed Control, Turkey



Dried berries, photo from SP - the Technical Research Institute of Sweden



#### Further information

This project is funded via the ERA-net CORE Organic Plus, which is a network of 20 countries on initiating transnational research projects in the area of organic food and farming systems. In 2014, CORE Organic Plus selected EcoBerries and 10 other projects.

Read more at the CORE Organic website: http://www.coreorganic.org/ and find publications from the project at

http://coreorganicplus.org/research-projects/ecoberries/ and at: http://orgprints.org/view/projects/ECOBERRIES.html