



## Selected WSRC 11 highlights

**Food, feed, processing, sustainability assessments for so, and European soy**

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Full programme: <https://www.wsrc11vienna.com/program/>

### FOOD, FEED, AND PROCESSING

#### **Soy protein functionality and processing (B4, 20.6., 14:10)**

*Chair: Leonard Sagis, Wageningen University, Wageningen, The Netherlands*

The protein transition from animal-based proteins to more sustainably producible plant-based proteins is currently an important theme in the field of Food Science & Technology. Progress in this area is currently hampered by a lack of general knowledge on the link between plant-protein molecular structure and techno-functionality. Plant proteins tend to perform worse with respect to foaming, emulsifying, and gelling behavior, than the animal-based proteins they are supposed to replace, and during extraction and processing the structure of plant proteins is often significantly affected, leading to a further decrease in nutritional and functional properties. Soy protein extract is still one of the key ingredients used by the food industry for plant-based products. New plant-based products are entering the market continuously, but their development is mostly based on trial-and-error approaches, and a consistent approach to go from starting materials to products, which is robust with respect to source variations, is still missing. In this session we will focus on recent advances in establishing structure-function relations for soy and other plant-based proteins, and finding optimal processing methods to obtain soy-based products with desired functionality.

Expert presentations:

- Connecting Soybean Fractionation to novel Food Applications, Atze Jan van der Goot, Wageningen University
- Promoting the fiber formation for high moisture extrusion cooking on soy proteins, Sui X, Jiang L
- Effects of Molten-globule State and Renaturation Treatment on the Structure and Functional Properties of Soybean 11S Globulin, Na Zhang et al.
- ADM

### **The future of soy is food (B3, 20.6., 11:00)**

*Chair: [Matthias Krön, Donau Soja Association, Vienna, Austria](#)*

International consulting companies forecast a global decline in the consumption of animal-based food products. How will consumers and the food industry respond to the reduced role of livestock in our diets? What requirements must soybean cultivars and products meet to contribute to this change in consumption?

### **Soy processing technologies (W6, 20.6., 11:00)**

*Chair: Prof. Dr-Ing. Werner Sitzmann, Research Institute of Feed Technology, Braunschweig, Germany*

It is known from practice that the quality of soybeans and soybean extraction meal can vary greatly. This applies even more so to the subsequent processing steps and their effect on quality parameters. These variations in quality are a serious challenge not only for feed production and for the resulting animal feed, but also the food industry. In this workshop, representatives from the fields of product analysis, soy treatment and plant configuration will discuss the challenges and possible solutions.

Expert presentations:

- Amandus-Kahl
- Evonik
- Wenger Manufacturing
- Farnet

### **Feed and aquaculture developments (B2, 19.6., 16:15)**

*Chairs: [Mian N. Riaz, Texas A&M University, College Station, Texas, USA](#); [Iani Adrian Chihaia, Independent, Bucharest, Romania](#)*

Feed industry is looking to find alternative protein sources to produce sustainable aqua feed. Soybean ingredients have gained the popularity because its yearlong availability, sustainable supplies, and high protein content. This session will discuss soy ingredients in feed and aqua feed production, nutritional advantages and effect on processing aqua feed.

Expert presentations:

- Fermented Soybean Meal and Soy Quality Control for Aqua Feeds | Dr. Jan Van EYS- USSEC-Euro
- Soy Industry 4.0 is Here ; Is Europe ahead in Rethinking Innovation in Value Added Soy Products | Dr. Iani Chihaiia – Independent Consultant – Romania
- Aqua Feed Extrusion with Soy based Ingredients. Dr. Mian N. Riaz, Texas A&M University, USA
- The use of Ultra High Protein, low oligosaccharides soybean meals varieties in aquaculture | Jorge Gallardo, Benson Hill

## SUSTAINABILITY ASSESSMENTS FOR SOY

### Assessing sustainability of soybean supply chains (B6, 21.6., 14:10)

*Chairs: Thomas Nemecek, Agroscope, Life Cycle Assessment research group, Zurich, Switzerland  
Werner Zollitsch, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria*

The sustainability of soybean supply chains depends on where and how soybean is grown and how it is used. We welcome contributions assessing one or several dimensions of sustainability along the supply chain including crop production, use in animal and human nutrition, and co-products applying different systems approaches.

- Thomas Nemecek & Werner Zollitsch: Sustainability assessment of soybean supply chains: concepts, methods and insights
- Disclosure of certified Donau Soja/Europe Soja soybean cultivation datasets, Davide Lucherini, Blonk Consultants
- Carbon footprint of soybean crops associated with different agronomic management in the province of Tucumán (Argentina) between 2018 and 2021, Daniela Rossana Pérez, Estación Experimental Agroindustrial "obispo Colombres" (eeaoc)
- Supporting sustainability innovation in soybean supply chains: Findings from GFLI's Branded Data Pilot Project, Delanie Kellon, GFLI
- The role of soybean for re-designing European cropping systems, Marjana Vasiljevic (Institute of Field and Vegetable Crops Novi Sad) & Moritz Reckling (ZALF, Germany)

### Soybean in agricultural systems (plenary, 21.6., 08:30)

*Moderator: Helmut Gaugitsch (Head of Scientific Management Biodiversity - Environment Agency Austria)*

As the global climate and biodiversity crisis deepens, there is growing interest in more holistic and sustainable farming approaches such as regenerative agriculture, agroecology, and carbon farming. This plenary session will explore how soybean cultivation can fit into these systemic approaches. The session will also examine the role of markets and policies in incentivizing sustainable farming approaches, exploring regulatory and market-driven initiatives. Speakers and panellists will discuss what is perceived as beneficial by producers and the market, and how to avoid greenwashing. Join us for an engaging and informative discussion on the future of soybean cultivation in the context of sustainable agriculture.

# EUROPEAN SOY

## **European soybean session (plenary, 20.6., 08:30)**

*Chair: Matthias Krön, Donau Soja, Austria*

This plenary session highlights the European footprint in the world of soy. The area of soybean in Europe is growing rapidly. However, imports remain highly relevant for resilient and sustainable supply chains in Europe. What are the special dynamics and requirements of the European soybean market? How can these be addressed? What are the relevant policies for the production and consumption of protein-rich crops? And how does all this affect global supply chains? These are just some of the topics we are going to discuss in the European Soybean Session.

## **Knowledge exchange for European soybean agronomists (W3, 21.6., 11:00)**

*Chair: Leopold Rittler, Donau Soja, Vienna, Austria*

Reflecting the wide range of soil and climate conditions, soybean production methods vary greatly across Europe. In this workshop, representatives from the main soybean producing regions will present and discuss their local approaches, challenges and solutions. Topics addressed: tillage systems, management of weeds, pests, and disease, harvesting, etc.

Regional experts:

- Terres Innovia (France);
- Soia Italia (Italy);
- Agricultural Chamber of Austria (Central Europe);
- Institute of Field and Vegetable Crops Novi Sad (South-Eastern Europe) and
- Institute of Agrobiology (Ukraine)