

Horizon Europe Brokerage Event Cluster 6 Calls 2025

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Sustainable innovation focused on intelligent transformation of agri-food by-products into high quality inputs for a greener future and increased quality of life

Arabela Elena Untea

secretariat@ibna.ro arabela.untea@ibna.ro



The National Research - Development Institute for Biology and Animal Nutrition (INCDBNA-IBNA Balotești, Romania)



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Topic(s) addressed:

- HORIZON-CL6-2025-01-ZEROPOLLUTION-07: Reducing pollution from the food and drink industries
- HORIZON-CL6-2025-02-FARM2FORK-03-two-stage. Making food systems more resilient to food safety risks through the deployment of technological solutions

Other topics of interest:

- HORIZON-CL6-2025-01-CIRCBIO-05: Consumption patterns and environmental awareness as enablers of transition to circular economy
- HORIZON-CL6-2025-02-FARM2FORK-04-two-stage: Research and innovation for food waste prevention and reduction at household level through measurement, monitoring and new technologies





Project idea - Concept

- Aligning feed innovation with **Zero Pollution and Farm-to-Fork strategies** by supporting **cost-efficient**, and **sustainable animal production systems**.
 - Developing integrated feed-to-fork interventions that mitigate food safety risks in animal-based value chains.
 - **Functional feed solutions** with natural antimicrobials and bioactives.
 - Safer animal-derived food with **less need for preservatives**.
 - Greater **resilience of food systems** under stress (e.g. climate, supply chain disruptions).
 - **Designing a scalable supply chain model** linking food processors with feed producers, closing the loop in the food chain.

Objectives:

- •Identify, collect and characterize high-potential byproducts from the food and drink sector
- •Develop innovative feed formulations using revalorized side streams enriched with natural antioxidants, enzymes, and nutraceuticals, reducing the need for synthetic inputs and improving animal products quality.
- •Nutritional tests on farm animals (poultry, pigs, ruminants), measuring impact on: animal health and productivity, nutrient digestibility, nutritional quality assessment of animal products









Main expertise offered / sought

The National Research and Development Institute for Animal Biology and Nutrition (IBNA - Balotesti) is the most important research unit and the only National Institute in the field of animal science in Romania. The institute is equipped with experimental facilities for monogastric animal and ruminants physiology trials. In terms of development, the institute features an industrial feed mill that caters to all species and categories of farm animals.

Our expertise involve:

- -Valorizing agri-food by-products/co-products/wastes rich in bioactive compounds to formulate next-generation compound feeds; nutritional quality assessment (hydrosoluble compounds (polyphenols profile), liposoluble compounds (vitamins and carotenoids), fatty acids profile, minerals).
- -Designing **nutritionally balanced and environmentally responsible feed recipes** that improve animal health, productivity, and end products quality;
- **-Feed and Food chemistry**: analytical assessment of macro -and micronutrients (proteins/lipids/PUFA/vitamins/pigments/minerals/polyphenols etc)
- -In vivo validation studies at micro- and macroscale (poultry, pigs, goats) under controlled conditions to demonstrate the efficacy, safety, and sustainability of novel feed products.
- -Functional foods (meat, eggs, milk) and feeds obtained through nutritional approaches, intended for the prevention of certain diseases.
- -transdisciplinary studies (technological transfer), integrating stakeholder input across the value chain communication, dissemination and exploitation. Our team collaborates with livestock producers, feed manufacturers, and agri-food companies, supporting cocreation of market-ready innovations and knowledge transfer into practice.

Ongoing and passed EU projects

Role in project: partner or work package leader





Contact details

Name: Untea Arabela Elena, arabela.untea@ibna.ro

General Manager: PhD. Eng. Cătălin DRAGOMIR, catalin.dragomir@ibna.ro

- Organisation: National Research and Development Institute for Biology and Animal Nutrition,
- Romania, R&D Institution; www.ibna.ro















