

Sustainability Meets Innovation: Unlocking the Potential of Plant-Based Proteins

Project leader: Prof. Dr. techn. Heike Frühwirth

Funding: Ministerium für Ernährung, Ländlichen Raum und Verbraucherschutz Baden-Württemberg

Duration: 2022 – 2023

Project

description:

This project will examine ways to improve efficiency in plant-based protein meat substitute production. The necessary proteins can be obtained from crops like peas, beans, soy, and lupins.

The purified protein or isolate is processed and used as an ingredient in meat substitute products. A biorefinery concept will be developed to utilize all usable components of the agricultural materials.

The study will analyze the solutions for the overall process, identify risks, and estimate the economic prospects. The production chain for proteins will include using the starch fraction and nutrients in the process. The previous residual will be utilized in a new utilization or value creation in line with the bio-based circular economy, bringing advantages for water use, space and time efficiency, and CO₂ balance.



INSTITUTE

RESEARCH AREA

CONTACT PERSON

Institute for Applied Sciences (IAB)

Industrial Biotechnology

Prof. Dr. techn. Heike Frühwirth