SUSFOOD project idea:

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Institute of Agricultural and Fisheries Research (ILVO) (www.ilvo.vlaanderen.be)

The Institute for Agricultural and Fisheries Research (ILVO) performs multidisciplinary, innovative and independent research aimed at economically, ecologically and socially sustainable agriculture and fisheries. Through this research, ILVO accumulates fundamental and applied knowledge which is vital for the improvement of products and production methods for quality control and the safety of end products, and for the amelioration of policy instruments as a foundation for sector development and agricultural policy for rural areas.

UNIT Technology and Food – **Product quality and innovation**: Optimal processing of primary agricultural products (plant and animal) into quality food, feed and non-food products is our focus, particularly dairy, meat and fish products, ready-made meals, vegetables and fruits. We study quality improvement, authenticity, nutritional and functional properties, taste, nutrition and health, detection of GMOs and allergens, valorisation of secondary flows and new applications from plant biotechnology.

UNIT Plant Sciences – **Growth and development**: Basic research on plant genetics and genomics, image-analysis based phenotyping, plant physiology and modeling. Which molecular and physiological processes lay at the basis of plant growth, development and their interaction with environmental factors such as light, water availability, temperature or crop management? This knowledge is applied in innovative crop husbandry and for the breeding of food, feed and industrial crops.

• Abstract IDEA for SUSFOOD call:

Plant proteins can supply a range of essential amino acids, but can also contribute structural properties to foods through processes such as emulsification, foaming, gelation and dough formation. In the context of human protein nutrition, the most important plant groups are cereal grains and food legumes (peas, lupins). But other plant groups such as grasses can also be of interest. In addition to proteins other components of nutritional importance are present in grass biomass including fibres and minerals. Therefore, a grass biorefinery concept is aimed with high-value valorization of the different fractions.

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