

The Lantmännen Research Foundation grants food system-related research SEK 13 million

The Lantmännen Research Foundation recently presented the allocation of SEK 28 million to innovative projects in the 2023 call, of which SEK 13 million goes to projects related to Lantmännen's processing industry in food and bioenergy.

Since 1986, the Foundation has invested in research along the entire value chain. Among other things, a network of researchers has been created who work together to increase agricultural productivity and reduce climate impact in order to secure the food supply and create a more robust food system.

To ensure broad support and ensure the benefit for Swedish agriculture, all applications are assessed by review panels consisting of representatives from academia, Lantmännen's officials and Lantmännen's members – active Swedish farmers.

In the food sector, one of the new projects is about meeting the demand for improved bread quality. Here, flour of different quality will be fractionated into starch, gluten and fiber. The starch will, among other things, be studied thermomechanically and with X-rays to better understand how its composition affects the water absorption capacity. Gluten has a major impact on the functionality of the dough and its rheological properties (the stress-strain ratio of the material) will therefore be investigated in detail. Starch, protein and fiber will then be put together in new proportions to study the impact this has on baking properties and bread quality.

"Our hopes for the practical benefits of the project are that we will be able to ensure, with precision, that the right flour with the right properties is used in the right way for the right food," says Louise Selga, Project Manager Food, Lantmännen R&D.

"In this way, we will enable both better sensory experiences, such as taste and texture, and a longer shelf life of the products," concludes Louise Selga.

For more information about the inherent chemistry of baking, please read Cerealier's interview with Thony Hedin, Product Developer at Lantmännen Cerealia here (only in Swedish).

In two other projects, legumes are in focus. One will use precision fermentation to achieve better flavours and thus more attractive ingredients in plant-based foods. A project whose results could be used in Lantmännen's production of vegetable proteins in Lidköping and GoGreen's frozen product range.

The second legume project explores the possibility of separating and mapping the different proteins in yellow peas. The goal is to improve the functionality of pea protein isolate by combining protein fractions in different ways.

In summary, the Lantmännen Research Foundation intends that the results of the research will contribute to strengthening our food industry.

"Lantmännen and the Research Foundation are in a unique position to use this knowledge in various businesses and create value throughout the value chain. This can be achieved through product innovations, process improvements and new business models that contribute to a more sustainable food system and, in the long run, improved profitability for Swedish farmers," concludes Annelie Moldin, R&D Manager Food and Energy, Lantmännen R&D.

For more information, please contact:

Annelie Moldin, R&D Manager Food and Energy, Lantmännen R&D

E-mail: annelie.moldin@lantmannen.com

Lantmännen's Press Service **Tel:** +46 10 556 88 00

E-mail: press@lantmannen.com

About Lantmännen

Lantmännen is an agricultural cooperative and Northern Europe's leader in agriculture, machinery, bioenergy and food products. Owned by 18,000 Swedish farmers, we have 12,000 employees, operations in over 20 countries and an annual turnover of approximately SEK 70 billion. With grain at the heart of our operations, we refine arable land resources to make farming thrive. Some of our best-known food brands are AXA, Bonjour, Kungsörnen, GoGreen, FINN CRISP, Schulstad and Vaasan. Our company is founded on the knowledge and values acquired through generations of farmers. With research, development and operations throughout the value chain, together we take responsibility from field to fork. For more

information: www.lantmannen.com