

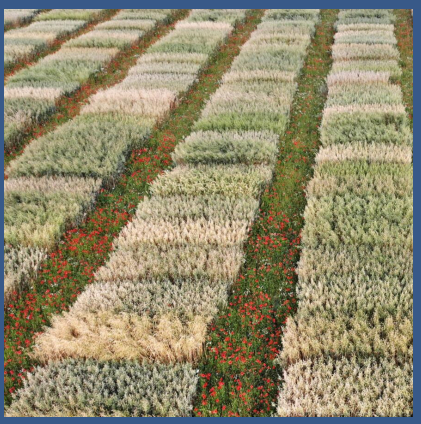
PROJECTS

To participate in and lead different projects is an important part of NordGen's operations. In close collaboration with public institutions, private companies and other organizations, the overall purpose of all projects is to conserve and promote the sustainable use of genetic resources for Nordic food and agriculture. The funding for the projects is granted by the European Union, the Nordic Council of Ministers, directly from the Nordic countries through its government bodies or from public and private foundations and other organizations. Below is a summary of some of our more high-profile projects that were active in 2025.

Top photo: The Danish native breed Klitfår.

Avenue

The collaborative project ***Breeding organic Avena sativa L. (Oat) with high nutritional value*** **(AVENUE)** aims to develop data and a prediciton model that can be used to develop quality oat varieties with high nutritional value that are suitable for organic farming. The project will address the need for oat varieties with high nutritional value specifically tailored to sustainable organic production.



Part of NordGen's field cultivation in the Avenue project, July 2025.

The project will advance our knowledge of genotype and environment interactions, by bridging disciplines of plant genetics, agronomy and statistics. The overall objective is to develop prediction models that integrate quality, diversity, environment and cultivation management. To achieve this, the project will evaluate 200 oat varieties and landraces (of which 180 are from NordGen) that have been collected from across the Nordic Region and grown for a century surviving changes in climate and agricultural practices. As part of the project, field trials will be

carried out in Scotland, Denmark and Sweden over a two-year period.

Among other things, the project will deliver the following:

- Quantitative phenotypic data.
- A prediction model to determine the nutritional value of oats.
- New breeding material tailored to different climate scenarios to future proof health-promoting and sustainable oat production.

The project Avenue will run during 2025-2027 with fundings from the **Novo Nordisk Foundation.**

Nordic crop wild relatives

Crop wild relatives (CWR) are wild plant species that are closely related to crops. They are of great importance since traits in these wild species can be transferred to crops by traditional plant breeding approaches. In many cases, wild species have traits that are not present in modern crops, for example pest and disease resistance, tolerance to drought, waterlogging or heat stress. Such traits are very important when adapting crops to future climate conditions and diseases and are therefore central for climate change adaptation and future food security.



Wild carrot and cultivated carrot in NordGens genebank collection.

The Nordic network on CWR was initiated in 2015 with the long-term aim to promote a well-functioning, climate- and environmentally friendly Nordic agriculture by strengthening CWR conservation and facilitating use of CWR. The fourth phase of the project was approved in 2025 and has the title *Wild plant diversity for resilient Nordic food systems - a nature-based solution*. The project will include project activites such as:

- Identification of climate change refugia.
- Species-specific Nordic CWR conservation strategies.
- Diversity analysis for conservation optimisation and use.
- Nordic CWR population management guidelines.
- Seed collection and conservation.
- Communication.

The fourth phase of Nordic CWR project will be active during 2026 to 2027 with funding from the Nordic Council of Ministers, as well as self-funding from the participating organisations. The project is coordinated by NordGen.