

## WP3.1 Field Day report from NMBU, Ås, Norway

Date: 12.08.2025

Place: NMBU, Ås, Norway

Participants: 109



Norwegian  
University of  
Life Sciences

The OatFrontiers project was presented at the annual “Smart Farming” field day at the Norwegian University of Life Sciences (NMBU) in Ås. The Vollebekk field station of NMBU is located in the heart of the southern cereal cultivation area in south-eastern Norway and is also the main hub for the multiplication and evaluation of the recurrent selection population used in the OatFrontiers project. About 60% of the oat acreage in Norway is found in this part of the country (Oslo, Buskerud, Akershus and Østfold).

A total of 109 registered participants took part in the field day, representing researchers, farmers extension service, farming organizations, agri-tech companies, government organizations and students. The smart farming field day is a main arena for showcasing research at NMBU and interacting with the larger agricultural research and business community.

At the field day, the large field trial with 1000 small yield plots of progenies from the recurrent selection population was showcased, focusing on the value of introducing new genetic variation to improve the nutritional value of oats. Kai Ilves presented her PhD work related to the OatFrontiers project, focusing on the work to study the genetics of protein content of oats. Different oat genotypes with high protein content were presented along with how new high-protein oat cultivars can support the efforts of the food industry to develop new and healthy food products from oats.





The modern oat cultivars grown by farmers in Norway are morphologically uniform with only minor differences in their appearance. The recurrent selection population utilized in OatFrontiers and showcased in the field trial represents large diversity in panicle shape, seed coat colour, plant height and other visible characters. It was an eye-opener for many of the participants, illustrating the wide genetic diversity available for oat breeding, and the potential for developing new cultivars with new characteristics – also for traits not visible to the human eye such as protein, beta-glucan and fat content.