

Cereal cultivation in the Faroe Islands, challenges and experiences using the Icelandic barley variety Kría compared to the old Faroese landraces Sigur and Tampar

Work Package T2 – Technical Developments
Barley cultivation in the Faroe Islands

Jens Ívan í Gerðinum

When the Agricultural Agency agreed to participate in the NPA cereal program, it was with great anticipation, as the Agency already had participated in a field trial program regarding barley with NORA.

As the NPA program started to take shape, the time had come to try to sow considerable amounts of barley, compared to the small trial plots which had been sown previously. It was decided in January 2016 that the Agency should try to sow at least 1 ha of barley, and if any farmers were interested they too were asked to grow barley at their farms.

Two farmers, Sigert Patursson at the farm Hoyvíksgarður on the island of Streymoy, and Jóannes Johannesen at the farm Miðstovan in Sandoy agreed to sow 0,5 ha at their farms as a test. While the Agency made a barley field consisting of 1,2 ha. In 2017 farmer Jóhan Jógvansson in the village of Saksun also prepared a barley field.

All in all, our experiences were good, regarding the biological needs for barley to grow in the Faroes. Yields were, by estimates and weight of what we actually managed to harvest, no worse than what is expected in some of the other partner countries. Also, the barley managed to slightly ripen on the fields, which actually indicates that barley cultivation on the Faroe Islands is possible.

Then problems occurred. We needed threshers (machines that cut the barley from the field and threshes the grain of the straw) to harvest the grain, and they had to be light and have a broad field contact in order to reduce the pressure on the soil. In 2016 we made great efforts in getting a hold on

a thresher, being in contact with several research institutes abroad for hiring small belted threshers, we always ended with the same results. Hiring machines to a remote island community was always way too expensive.



Figure 1. Reaper binder

In the end we took a decision based on the price of combines (the same as a thresher, but mobile, i.e. it cuts, threshes and drives simultaneously), and the uncertainties whether the fields would be able to carry them. We bought a brand new reaper binder (a reaper binder cuts the straw from the fields and binds them in bundles) and a new stationary thresher from Alvan Blanch from the United Kingdom.

When trying the reaper binder, we were quite disappointed, since the binder did not function at all. Later on that problem was solved, by returning the reaper binder, as the Alvan Blanch technical manager, came to the Faroe Islands in autumn 2017, and he could state that, in order for the reaper binder to function, we needed a considerable larger stem on our grain. This then became an option that we had to dismiss, as one of the reason for barley to grow on the islands is the need for varieties consisting of short stems.

We did however, both in 2016 and 2017 manage to thresh some barley with the stationary thresher.



Figure 2. A stationary thresher.

But this was quite hard work, which meant that we had to cut the barley by hand or with two wheeled mowers, and then we had to pick them up by hand and store them for drying in a large garage. For the drying process the bundles of barley straw were simply stacked on the garage floor with a temperature at 20°C, for a few days. The windows in the garage were let open to assure natural ventilation.

Just the workload in cutting and storing was so expensive that it made the barley very unviable in terms of cost of production.

Once the barley was dry enough (DM 14%) we started threshing. The end result approximately 300 kg grain, which had taken more than one week for three men to thresh, this was the maximum available time we had. We came to an easy conclusion, the process was not viable! The barley threshed was used for brewing (no product is out yet) and as feed for the bulls at the Agricultural Agency.

We have to our success managed to get in contact with a Norwegian farmer, who is willing to sell us his old Volvo combine from the 70s, which is in mint condition. The seller is travelling himself with the machine to the Faroe Islands for harvesting in 2018, after the project has ended, and teaching us about the combine before we buy it. This is our last hope for succeeding with the barley, as our challenge and problem throughout this project has been harvesting the barley, due to lack of knowledge on machinery. Barley grows well enough on the islands, but knowhow and the right machinery for harvesting is what we are lacking, and we are crossing our fingers and hoping for success in 2018. If we succeed in harvesting in 2018, there should be no doubt, that barley will be a stable crop among many Faroese farmers.