



Berry collections in Norway

Dag Røen, Njøs Fruit and Berry Centre AS / Graminor AS



ECPGR Berries Working Group,
Dresden 14-15 January 2020

- Established by the Ministry of Food and Agriculture as a part of Norwegian Institute of Bioeconomy Research (NIBIO).
- Commissioned to contribute to the effective management of genetic resources in farm animals, crops and forest trees.
- Coordinates expertise and activities regarding the conservation and utilisation of national genetic resources.
- Prepares and follows up action plans for the conservation and sustainable use of genetic resources native to Norway.
- Coordinates activities and priorities linked to genetic resource management and communicates knowledge about the genetic resources and how they can be safeguarded through use and specific conservation measures.
- Follows up these efforts in Nordic and international bodies (NordGen, ECPGR/ERFP/EUFORGEN), and coordinates national and Nordic work on genetic resource management.

Norwegian Genetic Resource Centre

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Norwegian Genetic Resource Centre

Anchoring the national work with plant genetic resources

The Norwegian activities within the field of plant genetic resources are based on national regulations and priorities as well as in international collaborations and agreements.

Norway participates in the collaboration of the United Nations' organization for food and agriculture, FAO, and has endorsed its global plan of action for plant genetic resources (2nd global plan of action for plant genetic resources for food and agriculture, GPA2), from the FAO Commission on genetic resources for food and agriculture (CGRFA) in 2011. The action plan provides themes and advises actions to further global food safety and food security.

Acceding the Convention on Biological Diversity (CBD) from 1992, Norway is committed to the protection of its biological and genetic diversity, and to ensure the sustainable management of national genetic resources.

Norway has ratified the International Treaty on Plant Genetic Resources for Food and Agriculture, ITPGRFA (The Plant Treaty). The Plant Treaty agrees on the special features of the crop plants of the world, and secures the possibilities for continuous exchange of genetic diversity for food and agriculture, to support maintenance and development of agricultural productivity in all countries.

Furthermore, Norway has adopted the Nagoya Protocol, which contributes to the regulation of access and benefit sharing when using genetic resources.

The national action plan for plant genetic resources reflects the themes and recommendations of the global plan of action, GPA2, and contributes to the implementation of the provisions and guidelines of the Plant Treaty and the Nagoya Protocol.

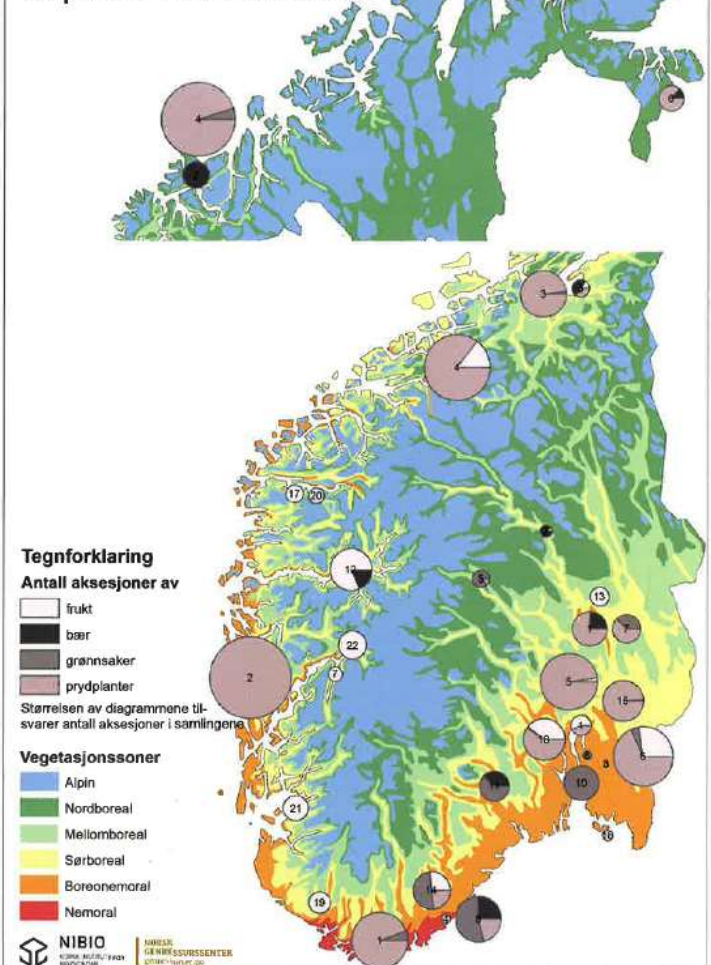
Screenshot from web-page of
Norwegian Genetic Resources Centre

Anchoring national work

- There are 7 working groups (WGs) at NordGen; Cereals, Clonal Archive Network, Forages, Grain Legumes, Industrial Crops, Ornamental & Aromatic Plants, Vegetables & Potatoes.
- Except for potatoes, NordGen do not hold collections of clonally propagated plants, with clonal collections being maintained at national level.
- «Clonal Archive Network» WG of NordGen is a meeting place to facilitate cooperation among the national field gene banks.
- Delegates from Norway in «Clonal Archive Network» WG are Morten Rasmussen and Stein Harald Hjeltnes.

NordGen Working Groups

Fordeling av artsgruppene
av planter i arkivene 2018



Figur 51. Fordeling av antall arter og antall aksjesjoner i de norske klonarkivene.

Clonal archives and backup collections

- Graminor / Njøs Fruit and Berry Centre
- Norwegian University of Life Sciences
- NIBIO units
- Sagaplant (Elite Plant Station)
- Museum gardens
- University botanical gardens

Berry collections

Figure from NIBIO Report 5(86) – 2019.

- Red and white currant (*Ribes rubrum*) - 55 acc.
 - Blackcurrant (*Ribes nigrum*) – 75 acc.
 - Gooseberry (*Ribes uva-crispa*) – 55 acc.
 - Raspberry (*Rubus idaeus*) – 35 acc.
 - Blackberry (*Rubus* spp.) – 35 acc.
 - Cloudberry (*Rubus chamaemorus*) – 5 acc.
 - Cultivated strawberry (*Fragaria x ananassa*) – 50 acc.
 - Sea buckthorn (*Hippophae rhamnoides*) – 25 acc.
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- Other strawberries (*F. vesca*, *F. virginiana* x *F. chiloensis*)
 - Arctic bramble (*Rubus arcticus*, *R. x stellarcticus*)
 - Blue honeysuckle (*Lonicera caerulea*)

Number of accesions are approximate figures

Content of berry collections

Lists of mandate cultivars for Norway have been established and recently updated.

Crop	Mandate cultivars
Strawberry	16
Raspberry	13
Red currant	5
Blackcurrant	8
Cloudberry	4

Mandate cultivar lists

- A lot of work remains on proper cultivar identification in berry collections.
- A large part of the accessions in berry collections are poorly characterised.
- Further funding is needed for identification and characterisation.

Documentation level

- New national strategy (2019) from Ministry of Agriculture and Food on maintenance and sustainable use of genetic resources for food and agriculture.
- Recommends that some clonal collections will be given a role as national gene banks for clonally propagated crops.

New national strategy

- Funding
- Structure
- Diseases and pests
 - Risk of losing accessions
 - Restriction on delivery of material

Constraints

- Network on berry genetic resources
- Starting point for project cooperation

Expectations Berries WG



Thank you!