

# The Danish National Collections at the Pometum

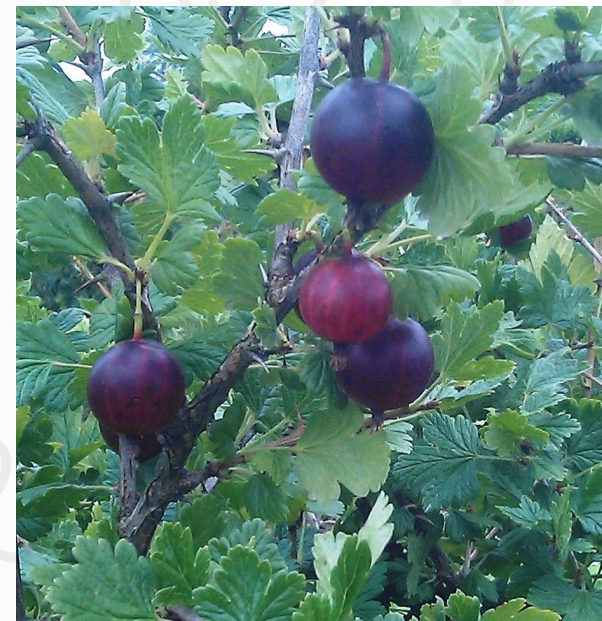
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[www.pometet.dk](http://www.pometet.dk)

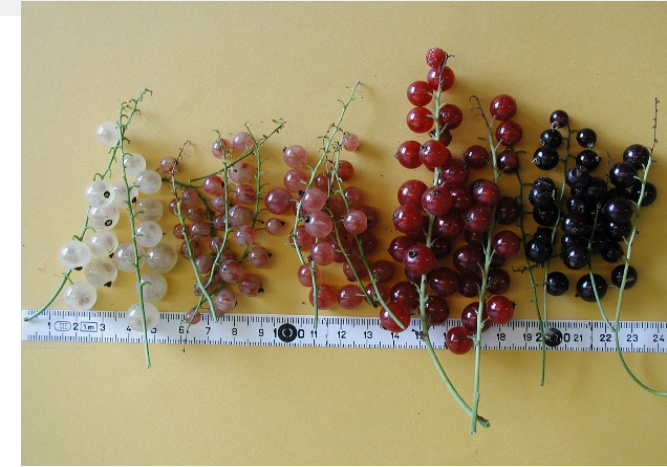
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## Berry collections at the Pometum

- **Strawberries** 200 accessions
- **Gooseberries** 136 accessions
- **Red, white and black currants** 63 accessions
- **Elderberries** 66 accessions
- **(Rubus (Raspberries, Blackberry hybrids) 22+22 accessions)**



- **Additional collections at Pometet of:** Apple (800), Pear (115), Quince (15), Plum (110), Wild Plum (38), Sweet Cherry (49), Sour Cherry (76), Walnut (60), Hazelnut (31), Grape (98), Medlar (8), Ornamental apple (27).
- **In total approx 1950 accessions**

# Strawberries

- **200 accessions** incl. 14 species. (+16 clones of Senga and Senga sengana)
- **85 are unique** to the collection in Europe.
  - Around 35 are old/historical cultivars.
  - 20 are advanced selections (not named) Danish breeding closed in 1980'ies.
  - (Also the species accessions are among the unique)
- **14 exists only at 1 more location** in Europe
- **20** are also to be found in 2 other collections in Europe
- **22** also in 3 other collections.
- 63 are also found in 3 or more (up to 20 locations/Sengana )
- The collection in Aarslev with 98 cv's do not exist any more.
- **In conclusion:** about half the collection is quite unique. The other half not so much.....

## Strawberries, status..

- Kept in the field since the start in 1863. Since 2018 in pots.
- **Virus infected**
- Started cleaning process
- 5 cleaned (certified). (Dir. P. Walbaum, J.A. Dybdahl, Macherauchs Späternte, Årslev 1018/88, Årslev 1591/83)
- 61 heat treated. Of these 38 back from tissue culture. 23 expected delivered in march 2020.
- Another 30-40 planned treated in 2020.
- All then need to be virus tested to verify the virus status.
  
- **Documentation:** Only 29 acc. described with 40 parameters (30 on the fruit)  
+ chemical data (aroma of most accessions in the collection)
- All acc are in a process of **DNA genotyping in the PPP-Nordfruit project.**



# The main collection now in pots



4 plants of each.  
2 renewed/year





# New net protected house





# Plants back after meristem isolation in tissue culture



Tubes back from Iribov after meristem capture and tissue culture establishment.



## Gooseberries

- Field collection with 5 plants of each. 136 accessions.
- Phenotyped in the Ribisco project + chemical data (sugars, acids, aroma)
- 50 cv's genotyped

## Currants

- Field collection, 3 plants of each. 63 accessions
- Phenotyped in the Ribisco project + chemical data (sugars, acids, aroma)
- 32 genotyped

## Elderberries

- 66 accessions. Not phenotyped. Not genotyped. Some chemical data.

**Possibly some virus and disease problems in the collections.**



## Constrains

- After many years with cut backs we do not have sufficient funding:
  - Lack enough staff: 1 Pometmester, 2 Gartners (+2 gartner students)
  - Lack funding of research (1 scientist who also teach 50%, 1 assist. 2days/week project)
  - To little funding of machinery and materials needed
  - No or only very limited backup of the collections
- Infections with virus is a big problem.
  - + diseases, bacteria, fungi.
- Lacking pesticides
- European water vole (Mosegris in Danish) => sudden loss
- No real national program for genetic resources.
  - Not a direct funding link to the relevant ministry
- NordGen have very little focus on vegetative propagated crops = no support at Nordic level.



*Arvicola amphibius*

**European water vole**

# Expectations

- A future basis for the basic/daily work with the collections
- Historically the cooperation in the Nordic region has been our base.
- Today NordGen is only providing a network with no funding
- Hope we at the European level can be able to strengthen the work and create more focus and support for genetic resources
- A future basis also for research projects
- Hopefully not just another network doing more 'in kind work'.. ..
- This is not a hobby! - and should not be volunteers work for free