

DNA sampling protocol

CONDITIONS FOR SAMPLING DNA FROM NHN COLLECTIONS FOR EXTERNAL USERS

Nationaal Herbarium Nederland



Requests may consider herbarium specimens, spirit or wood collections or (parts of) silica gel dried material.

I agree with the following conditions:

Samples will be made available without additional costs. However, in case a lot of effort and/or time from NHN staff is involved in handling the request, some form of compensation should be arranged.

Requests will be considered on a case by case basis. Permission should always be asked to remove material from herbarium specimens. For type material the type status should be explicitly stated when the permission is requested.

Taxa that fall under CITES regulations will only be considered for shipment to non-EU areas when the

receiving institute has a CITES number, in which case the simple CITES-label forms can be used.

Requests should be addressed to heads of collection management and will be handled in conjunction with scientific staff:

- University of Leiden branch: Gerard Thijssse
- Wageningen University branch: Folkert Aleva

For all requests we will try to supply silica gel-dried material or leaf material of duplicate sheets if available, in order to leave the first set intact.

In the event of silica gel-dried material or duplicates not being available and the material is already on loan to you, please consider the following:

- If several specimens of a taxon are available, select those with the most abundant leaf material.
 - Use mature leaves over buds or flowers.
 - After permission is granted, you are only permitted to remove maximum 50 mg of dried material (this equals c. 4 cm² of medium heavy leaf), where this should never involve more than 5% of the entire specimen (in cases of small herbs etc. an entire medium sized plant may be removed if there are 20 plants on the sheet, or half a plant in case of 10 plants, etc.). Removal of other organs (e.g. flower, fruit, seed) should also be limited to 5% of the organ on the specimen.
 - An annotation label is to be glued on the NHN herbarium sheet that has been sampled. Please do not annotate directly on the sheets.
 - The annotation label should include the collector and number (in case of s.n. add the barcode or herbarium sheet number), the purpose of the sample, the name and affiliation of the sampler, and the date of sampling.
 - Immediately after sampling, but in no case later than two weeks after the permission was granted, you are obliged to send a list of the specimens you sampled. This list will be used to prepare the DNA sample loan documentation (see point 9).
- You are kindly requested to return half of the yield of the extracted DNA (a DNA-

duplicate) of any extractions from NHN collections to the NHN branch where the sample originated. The sample will then be incorporated into the NHN DNA bank (http://www.nationaalherbarium.nl/taskforcemolecular/dna_bank.htm).

Material removed for DNA extraction is regarded as an associated collection on loan to you, and the loan is only regarded as returned on receipt of the DNA-duplicate.

As a condition of release for any samples specified on the attached list, each applicant agrees to abide by the restrictions stated above and also agrees to:

Register GenBank/EMBL accession numbers.

The NHN, and if material has been collected into silica gel each individual collector, should be acknowledged in each publication in which data is used.

Provide the NHN with reprints/pdfs from all publications that cite the specimens used.

Requests to pass either material provided by the NHN or extracted DNA to third parties, must be approved by the curator of the herbarium from where the sample was obtained.

The NHN maintains ownership of all plant material and releases samples only under specific conditions to support appropriate research projects. Samples will be distributed only for the study of relationships of plants or for studies aimed at improving our understanding of evolutionary mechanisms. Under this protocol samples will not be made available and may not be used for any commercial application.

A separate protocol already exists for requests for aliquots of existing DNA extracts and is available at

http://www.nationaalherbarium.nl/taskforcemolecular/dna_bank.htm.