

SAMPLE POLICY OF NATURALIS BIODIVERSITY CENTER

(December 2021)

INTRODUCTION

Naturalis Biodiversity Center has the mission to use its botanical, zoological and geological collections in as many ways as possible for the furtherance of scientific study. We also have the duty to ensure that the needs of both contemporary and future users are properly safeguarded. For destructive use of our museum specimens we have therefore formulated the following terms and conditions.

Any study involving irreversible changes to the specimens is considered destructive. The decision whether any type of research is considered destructive will be taken in accordance with guidelines of Naturalis Biodiversity Center and international standards and agreements (in particular EDIT).

For any request Naturalis Biodiversity Center will assess the scientific, historical and cultural importance of the specimen(s) involved and take in consideration the needs of both present and future users, and legal and ethical issues as they relate to that material. Decisions on the use of specimens for dissection or destructive sampling will be taken in accordance with our guidelines and Naturalis Biodiversity Center reserves the right to refuse permission.

APPLICATION

All proposals for research involving the destructive sampling of Naturalis Biodiversity Center specimens should be addressed to *frontofficeCollectie@naturalis.nl* or the appropriate Collection Manager and submitted on the *Destructive Sampling Request Form* below. Naturalis Biodiversity Center aims to acknowledge receipt of the application within a week and give a timeframe of the assessment.

Requirements. A proposal should include:

- the names of the researcher(s) involved and a brief CV for each on request;
- a brief outline of the project including protocols, timeframe and expected outcomes, including plans for publication of the results;
- details of the laboratory where the samples are to be processed;
- a brief justification of the material required to do the research;
- evidence that the proposed techniques produce reliable results and of the researcher competence with the protocol;
- possible dates and duration of visit if applicable;
- requests by postgraduate students or other non-permanent staff must be signed by their supervisor or Head of Department;

- any researchers not directly affiliated with a university or research facility must provide on request a letter of support from the host laboratory.

Any additional information might be requested.

Assessment. The proposal will be evaluated with regard to scientific importance and technical feasibility by the Collection Manager and/or Head of Department. If approved, Naturalis Biodiversity Center will nominate a Collection Manager or Head of Department as the key contact for the project. The Collection Manager will decide, in consultation, which specimens, if any, may be used. Naturalis Biodiversity Center reserves at any time the right to refuse permission including after a general acceptance of the request. In most instances, specimens will only be sampled for scientists or projects which are likely to publish the results of their research.

Investigations, which result in the complete destruction of an object, constitute a disposal and are thus governed by stricter policy. Permission to sample type specimens, historically important specimens or specimens of extinct or endangered species or taxon that are poorly represented in the collections will only be granted in exceptional circumstances and may carry additional costs or conditions (see Fees). The use of these specimens should be approved by the head of Department.

Taxa that fall under CITES regulations will only be considered if the receiving institute is included in the CITES Register of scientific institutions. Requests for genetic material sent outside the EU need to comply with the Convention on Biological Diversity (CBD) and particularly with the regulations set in the Nagoya Protocol.

SAMPLE PROCEDURE

Loan. Samples are considered loans and fall under our loan policy. Loans are made to institutions not individuals. If the laboratory is not part of the applicant's institution the loan will be made out to the institution of the laboratory.

Techniques. Destructive techniques must be agreed with the Head of Department before the project proceeds. Naturalis Biodiversity Center retains the right to insist that any sampling is done in an appropriate laboratory within Naturalis Biodiversity Center and/or by its own staff for which a fee may be charged.

Sampling. The sampling will be performed by Naturalis staff. In some cases, with explicit approval of the Collection Manager, sampling may be performed by the applicant during a visit or on specimens sent on loan. Specific protocols exist for the different techniques and collections and will be provided beforehand.

The choice of specimens and their use will be under the guidance of the appropriate Collection Manager or Head of Department. The smallest possible sample will be taken, from the least intrusive site and causing the least damage to the specimen. Removal of samples should not prevent standard measurements from being taken in the future or make any morphological research impossible. If essential morphological features are lost during sampling, stricter policies will apply.

Naturalis Biodiversity Center only allows sampling of the same specimen once. Applicants will be referred to previous research if the same specimens are requested. In exceptional cases, for instance where there are no remaining products of the original samples, if the research is deemed important, and if the specimens can be sampled without compromising morphological features, the Collection Manager can allow re-sampling.

Fee. Fees might be charged to help Naturalis Biodiversity Center provide the necessary resources, e.g. staff time or training. The fee will cover the sampling by Naturalis staff, the necessary materials or the supervision of or assistance to the visiting researcher to obtain the required samples. A waiver of, or adjustment to, the fee is at the discretion of the Collection Manager or Head of Department. A decision on waiving fees is based on an assessment of the delivery of a direct benefit to Naturalis Biodiversity Center.

Transfer or Move. Material can only be passed to third parties or be moved to another location with the written approval of Naturalis Biodiversity Center. This will also constitute a change in the loan conditions and is subject to permission by the Collection Manager and Registrar.

Rights. Naturalis Biodiversity Center retains all rights to any samples or products derived from specimens in its collections. Specimens in the collections of Naturalis Biodiversity Center are property of the State of the Netherlands and are subject to Dutch law.

Commercial use. The research and the results of the research may not be commercially exploited in any way without the prior written agreement of Naturalis Biodiversity Center. Such agreements may be refused by Naturalis Biodiversity Center or granted subject to such conditions as Naturalis Biodiversity Center may decide and may require prior agreement as to the sharing of the financial benefits arising from such exploitation. Such decisions will be guided by Naturalis Biodiversity Center policies and the principles of the United Nations Convention on Biological Diversity (Nagoya Protocol).

Disclaimer. Naturalis Biodiversity Center warrants that it has made all reasonable inquiries as to the provenance of the items provided for sampling and that to the best of its knowledge Naturalis Biodiversity Center is the legal custodian of the items in its collections. Naturalis Biodiversity Center does its utmost to provide correct information about the specimens in its collections but takes no responsibility for errors due to mislabelling or misidentification of the specimens.

Terms of agreement

The applicant agrees to:

- notify Naturalis Biodiversity Center of publications arising from the use of its items and provide digital copies of text and figures;
- acknowledge use of collection of Naturalis Biodiversity Center in any publications or unpublished reports involving use of its specimens. The researcher should acknowledge Naturalis Biodiversity Center, Leiden, by name and cite the registration numbers of the specimens concerned;
- include details of vouchers, their nature and location, in published studies so that future workers can relocate them;

- provide GenBank/EMBL accession numbers or computer readable copies of sequence data derived from specimens as soon as possible but no later than the date of submission for publication. Naturalis Biodiversity Center agrees not to disseminate these data until they are accepted for publication;
- provide copies of experimental protocols that differ from published methods. Naturalis Biodiversity Center will not publicise such innovations until they have been published;
- publish jointly with Naturalis Biodiversity Center staff if they have contributed significantly to the work;
- provide brief annual reports on the status of the research until it is either published or abandoned;
- provide Naturalis with at least half of the yield of the extracted DNA (a DNA-duplicate) of any extractions from Naturalis specimens;
- return to Naturalis Biodiversity Center all remaining material including the original mount, dissected parts and any preparations or products such as unused tissue samples, geological thin sections or aliquots of extracted DNA;
- make permanent preparations of all remaining parts using materials and protocols specified by the Collection Manager;
- provide each permanent preparation with a direct copy of the specimen data including identification, in permanent ink on an archival quality label;
- fully cross-reference all preparations with the original specimen following the format specified by the Collection Manager;
- label prospective voucher specimens so that they may be recognised as such and linked with the published study they support;
- label and mark all voucher specimens and materials, if the research has resulted in a type designation, to ensure material and specimens can be recognised as such;
- conform to normal outgoing research loan regulations where material is taken out of Naturalis Biodiversity Center;
- identify specimens as far as possible before dissection or preparation;
- provide remains of samples or raw material (extracts) to a third party upon request by Naturalis Biodiversity Center;
- notify Naturalis Biodiversity Center and return all samples if the project is abandoned before completion;
- return all unused samples or products once the project is completed.

Naturalis Biodiversity Center agrees to:

- respond in writing to the applicant, agreeing to or declining the proposal;
- arrange the sampling through the Collection Manager in charge who will prioritise requests and allocate sampling or visits in accordance with an agreed timetable appropriate for both parties;
- provide details of any relevant Naturalis Biodiversity Center specimens for the study in question. However, the choice of specimens to be sampled, is solely the responsibility of the relevant Collection Manager or Head of Department, who has to consider the condition and rarity of the specimen;
- withhold from disseminating any details of sequence data, or novel protocols and procedures until they have been published.

Destructive Sampling Request Form

I have read the Naturalis Biodiversity Center Sample Policy and agree to its terms and regulations*.

E-mail:

Telephone-number:

Name:

Institution:

Address:

Date and Signature:

***Requests by postgraduate students or other non-permanent staff must be signed by their supervisor or Head of Department. Any researchers not directly affiliated with a university or research facility must provide a letter of support on request from the host laboratory.**

I will send with this request:

- a brief outline of the project including protocols, timeframe and expected outcomes, including plans for publication of the results;
- a brief justification of the material required to do the research;
- evidence that the proposed techniques produce reliable results and of the researcher competence with the protocol;
- possible dates and duration of visit if applicable.

I request the following taxa and/or specimens to be sampled (or see attached list):

The samples will be processed by:

Institution/laboratory:

Name:

Email:

Telephone-number:

Address:

Date and Signature:

and they accept our loan policy (samples will be sent as a loan to this address)

to be filled in by Naturalis Biodiversity Center

Collection Manager/ Head of Department/ Director of Collections: neg. / pos.

Name:

Date and Signature: