

Destructive/Invasive Sampling Policy & Authorization Form

The policy detailed below is intended to help the Rocky Mountain Herbarium (RM) balance the preservation and integrity of herbarium specimens with their utilization for scientific research. Decisions concerning destructive sampling of collections will be made on a case-by-case basis. The investigator requesting destructive sampling should have experience with laboratory techniques to ensure a reasonable probability of research success. We expect the investigator to have made diligent efforts to sample material from non-herbarium resources prior to making this request. Requests for removal of samples from herbarium specimens should be addressed to the Curator via email or mail. Please read this policy statement, complete the agreement form outlined below, and attach it to your specimen request.

As a rule, no material may be removed from specimens without prior consent of the Curator of the Herbarium. Permission for removal of material, when given, is contingent upon adherence to the following guidelines:

1. It is intended that all destructive sampling is conducted for purposes of eventual preparation of a scientific manuscript. Please notify staff if this is not the case.
2. Leaf material, pollen, spores, fungal tissue, bryophyte fragments, etc. may be removed from specimens only when there is adequate material available. Care must be taken not to damage the scientific value of the specimen. Whenever possible, material from fragment packets on the herbarium sheet should be sampled. Specimens should be properly stored during such study.
3. Pollen should be removed from no more than one flower per sheet, and the sheet must have more than three flowers except where permission is otherwise granted. The whole flower should not be damaged or removed.
4. Material may not be removed from type collections, from historical specimens, or from taxa represented in the herbarium by fewer than five collections, except in rare instances, and then only following approval by a designated staff member.
5. Material may not be removed from a herbarium sheet for a second time, if the nature of the study is the same (e.g., pollen material for SEM, leaf material for DNA analysis).
6. For anatomical and morphological studies, the researcher must return to the RM either a duplicate high-resolution micrograph or an SEM photograph as well as the magnification. The photo should be labeled with the name of the taxon, the collector's name and number, and the country of origin of the voucher sheet from which the sample was obtained.
7. For molecular studies, sampling requests should indicate the amount of material needed, and in general should never exceed 1 cm². Specimens must be annotated with the identification for the specimen accepted by the researcher. DNA sequence(s) derived from the specimen must be deposited into GenBank or EMBL within three years of the date of sampling. DNA obtained from RM specimens should be properly stored and curated in a permanent storage facility.

8. For large or complicated requests of material for DNA extractions or other studies, researchers will be encouraged to visit RM to select specimens for sampling. Removal of material from specimens selected by the researcher will be made with supervision and approval by appropriate staff. Not only does a personal visit reduce the work required of the Herbarium staff, it allows the investigator to make more precise selections based on specimen age, material in packets, etc.

9. Each specimen sampled must be annotated, indicating the nature of the study, type of material removed, the researcher's name and institutional affiliation, and date of removal. Labels should not exceed ~ 6 x 2 cm in size.

10. All policies related to RM specimens, as stated in the Rocky Mountain Herbarium Use Policies, apply to specimens used for destructive sampling.

If you need to conduct destructive sampling of RM specimens, and agree to sample materials under the above conditions, please complete and sign the form below, and include it with your sampling request to the Curator, Rocky Mountain Herbarium University of Wyoming, Department of Botany 3165, 1000 E. University Ave., Laramie, WY 82071, U.S.A. or email to bnelsonn@uwyo.edu.

Rocky Mountain Herbarium - Destructive Sampling Request

I have read the Destructive/Invasive Sampling Policy of the Rocky Mountain Herbarium and promise to abide by the policy.

Research Investigator:

Printed Name: _____

Signature: _____

Date: _____

Printed Name and address of the Institution:

Major Professor (if the Research Investigator is a graduate student):

Major Professor Printed Name: _____

Signature of major Professor: _____

Date: _____

Person institutionally responsible for the loan if different from above: _____

Upon receipt and review of your request, we will contact you concerning the RM's decision with regards to the request for destructive sampling.