

The UBC Herbarium Policy for Destructive Sampling

The UBC Herbarium protects and preserves three quarters of a million dried plant specimens from around the world within the Beaty Biodiversity Museum (BBM). For over a century, the UBC Herbarium has been a core resource for botanical research, education and outreach at UBC and, more recently, within the BBM.

Specimens can be destructively sampled adding to the specimens' overall value for scientific studies, but can have negative impacts on the specimen. Each request will be reviewed on a case-by-case bases, to ensure long term preservation of the collection.

Destructive Sampling Policy

A destructive sampling request must be submitted to the Assistant Curator or Collection Manager of the individual collection. The request should state;

1. The person who is requesting the destructive sampling, and if applicable, their Principal Investigator
2. The nature of their research
3. The number of samples required, accession numbers if available on-line
4. Estimated amount of material needed
5. The list of species requested, including all known synonyms, and any geographical restrictions

Once the shipment of specimens/ and or samples is received, please verify by signing the agreement and send back to the UBC Herbarium.

Guiding Principles

1. No material will be removed without written authorization from the Director and collection staff Curators.
2. You will only be allowed to remove material once per authorization and would need to re-request a second removal of material off the same specimen.
3. Where possible sampling should be conducted using species well represented in the herbarium, using specimens that have only ample material on the sheet and if packet material is available it should be used first.
4. Specimens of limited value for other purposes, such as sterile specimens, are particularly suitable for destructive sampling.
5. In certain rare cases herbarium staff may advise withholding of destructive sampling where the perceived scientific benefits does not outweigh potential damage.

Where excessive amounts of material are sampled (relative to the total material on the sheet) that would obliterate diagnostic characters or make the material of limited value to future researchers.

If similar material would be impossible or difficult to recollect, for instance if the taxon is rare (e.g. blue or red listed), or the locality is in a National Park or one that has been subject to habitat destruction.

If the specimen is of exceptional historical or iconic value, such that maintaining it in its entirety has intrinsic value for exhibitions, display, teaching or illustration.

6. Specimens that are inappropriately sampled may lose scientific value, for instance if important diagnostic characters are lost in the sampling process. The best of care must be used when considering removing material.
7. Types, historical, or rare specimens in collection (less than 5) may not be destructively sampled, except in rare cases.
8. Any resulting publications, Genbank or BOLD numbers resulting from the use of our specimens should acknowledge UBC Herbarium and send us referencing the publication.
9. Removal of material cannot be used for commercial profit.

Protocol for sampling – removal of material and after

1. Material should be carefully and neatly removed using appropriate, sterilized tools
2. An annotation label should be affixed to the sheet giving information about the material removed, date and the researcher's name and institution.
3. A pencil mark of your initials and date (matching the annotation) near wear the material was removed.

Publications

All specimens used for publications should be cited;

UBC Herbarium, Beaty Biodiversity Museum, with UBC Herbarium's international acronym "UBC". A copy or notification of publication reprints where a specimen was used should be send to UBC Herbarium.