



### **DNA sampling policy**

Our basic policy on selecting material for destructive sampling for DNA extraction from herbarium specimens is the following:

1. The investigator must have made a diligent and good faith effort to obtain appropriate material for extraction from other sources.
2. The investigator must have enough experience with the laboratory techniques and the characteristics of their group to insure that there is a reasonable probability of successfully extracting useable DNA from the sampled material.
3. Only material in the fragment packets may be used.
4. Only the minimum amount of material needed may be taken.
5. Only one or two specimens per taxon may be sampled.
6. A specimen may not be sampled a second time.
7. Sampling is restricted to non-type specimens.
8. Sampling must be only from the most recent collections, i.e. those collected since the 1960's.
9. Any sampled specimen must be clearly annotated with what material was removed, by whom, for what purpose, etc.
10. Register GenBank/EMBL accession numbers.
11. Acknowledge both the Missouri Botanical Garden and each collector of material provided in each publication in which data is used.
12. Provide the Garden with reprints from all resulting publications.

Exceptions may be made to this policy, but are only granted after consultation with the Curator of the Herbarium at the Missouri Botanical Garden.

With this in mind, you have permission to sample from specimens that meet the above criteria. If you have any questions, please contact Dr. James Solomon, Curator of the Herbarium.

### **Sampling for Pollen/spores**

Our basic policy on sampling from herbarium specimens for pollen/spores is the following:

- Pollen/spores should be removed from no more than one flower/structure per sheet (i.e. only the minimum amount of material needed should be taken.). If possible the entire flower/structure should not be damaged.
- Only one or two specimens per taxon may be sampled.
- Sampling is restricted to non-type specimens.

- Samples may not be taken from designated historical specimen, (i.e. from collections made before 1900), nor from species represented in the herbarium by less than five collections.
- Any sampled specimen must be clearly annotated with what material was removed, by whom, for what purpose, including the place of deposit of prepared slide(s).
- For scanning electron microscope studies, a photograph (ca. 7 x 10 cm) of the pollen or spore should be returned to the Missouri Botanical Garden. Each photograph should provide the collector's name and number, name of taxon, MO accession number, and magnification, so that they can be easily associated with the mounted specimen.
- Acknowledge both the Missouri Botanical Garden and each collector of material provided in each publication in which data is used.
- Provide the Garden with reprints from all resulting publications.

Exceptions may be made to this policy in specific instances, but are only granted after consultation with the Curator of the Herbarium at the Missouri Botanical Garden.