

**The Use of TEX/LL Herbarium Specimens in Studies Requiring
Destructive Sampling (Including DNA-based Studies)
Plant Resources Center (TEX/LL)**

The Plant Resources Center welcomes the use of its collections for all scientific study. This includes studies that might require destructive sampling of small amounts of herbarium material, including SEM studies of pollen, seeds, etc., and molecular sequencing studies. To preserve the collections for present and future researchers, the following guidelines have been drawn up. **Note item 8** – all returned specimens should be annotated.

1. A request to sample, including a brief description of the project involving the use of TEX/LL herbarium material, should be submitted to the Director or Curator. It should contain a brief outline of the study plan, a description of the experience of the individuals involved in the research, and a description of the material required to do the research.
2. Permission to sample is requested and is granted on a specimen-by-specimen basis. In the case of material already on loan to the investigator's institution, descriptions or images of each specimen to be sampled may be required in some cases before permission is granted.
3. Only specimens with ample material should be used. Only the smallest amount of material necessary for the study should be extracted. Using material in packets is preferred to taking material glued to the herbarium sheets. Removal of material from type specimens is not allowed.
4. A small annotation label indicating the person's name and institution, the type of material removed, the date on which the material was removed, and, in the case of molecular studies, the success or lack thereof of isolation and the gene(s) being sequenced, should be glued to the herbarium sheet. This label is separate from an annotation label giving the taxonomic determination.
5. For molecular studies, GenBank accession numbers should be provided for sequence data obtained from any TEX/LL specimen.
6. In any publication in which data derived from sampling of TEX or LL specimens are used (molecular sequences, SEM images, etc.), the specific specimens used and the herbarium to which each pertains (TEX or LL) must be listed.
7. In the case of EM studies, copies of representative photomicrographs from each specimen used should be sent to TEX/LL with the return of the loan. If traditional microscope slides are made of pollen, a second slide should be made in each case and sent to TEX/LL for its pollen slide collection, unless making the additional slide is judged to be too harmful to the specimen.
8. Correct taxonomic identification of the specimens is not guaranteed by the Plant Resources Center. It is the responsibility of the investigator to verify the identification of the material, and taxonomic annotation labels to this effect should be attached to each specimen sampled.
9. The Plant Resources Center of the University of Texas at Austin should be properly acknowledged in any publication containing data derived from TEX/LL specimens.
10. Reprints should be supplied of any published work containing data derived from TEX/LL specimens.

The loan of specimens from the Plant Resources Center is generally made for research on monographs, revisions, and similar work in which careful study, identification, and taxonomic annotation of each specimen will provide both data for the researcher and benefit for TEX/LL and its other users. Loans for DNA studies for the sole purpose of minor destructive sampling for DNA (or similar studies that do not result in careful study and taxonomic annotation of the specimens) can be arranged, but in general only limited material will be sent. For such loans, the TEX/LL policy is to send one specimen per species, and this only when the specimen has abundant material such that its future utility will not be significantly diminished by the destructive sampling.