

University of Georgia Herbarium [GA]
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UNIVERSITY OF GEORGIA HERBARIUM (GA)

Loan & Voucher Guidelines and Agreement

The handling of loans from other institutions impacts the reputation of the University of Georgia Herbarium. Neglectful treatment of loans may affect inter-institutional cooperation, result in loss of loan services, and damage future research at the University of Georgia. Both the lending and borrowing institutions incur expense in the preparation and shipping of loans: administrative staff time is necessary to maintain loan records, and herbarium specimens require suitable storage space. Receiving a loan is a privilege with associated responsibilities. Borrowers at GA follow all rules and regulations provided by the lending herbaria. These guidelines and agreement are designed to help our loan operations run smoothly and to help prevent the embarrassment of returning unannotated or improperly annotated loans.

LOAN REQUESTS

Loan requests from the University of Georgia Herbarium are submitted by the Curator of the Herbarium or the Curatorial Assistant as proxy for the Curator. Herbaria generally do not honor requests made by individuals due to legal ramifications. Consult the Curator about the preparation of loan request letters and prepare the following information:

- title and nature of the project
- predicted time-frame
- complete list of the species and synonyms
- list of the standard acronyms of the loaning herbaria
- list of type specimens with locality, collector, and herbaria where they are deposited. (Many institutions file type specimens in special sets and do not respond to general requests for type material).
- destructive sampling requests, i.e., special permission to remove material from specimens for purposes such as SEM, DNA, palynological and anatomical studies. (Most institutions prefer to review their material before sending it to determine if it will support the procedure.)

LOAN RECEIPT AND ACKNOWLEDGMENT

- **Unpacking and counting specimens.** All incoming loan specimens must be fumigated or frozen (for five days) before entering GA cabinets. Under supervision of the Curator or Curatorial Assistant, carefully unpack and count the sheets received on loan. Specimens should remain in special containers or folders (such as boxes and type folders). Double-check the count and sign the loan acknowledgment form and give it to the Curator. All packing material should be saved. Note any special packing details and shipping methods. Damaged shipping boxes may be discarded and noted on our copy of the loan paperwork.
- **Examining and marking specimens.** Note damaged specimens (loose fragments, holes in sheets, etc.) on the loan acknowledgment form. Scrutinize the material for any insect infestation and damage. Examine each sheet carefully for an identifying mark (accession seal) that clearly indicates the institution. Specimens with no accession seals do occur! Mark all the sheets lightly in pencil with a number and the institution's acronym to prevent confusion when sorting specimens later for return. Multiple loans from an institution must be distinguished so that the specimens may be returned under their specific loan number.

STORAGE AND HANDLING OF SPECIMENS

- **Storage.** Specimens will be stored properly, i.e., in an airtight steel herbarium case with proper fumigation. Keep herbarium doors closed as much as possible, especially when taking folders away to a table for examination. Return all material to a cabinet the same day.
- **Handling.** Do not bend, break, or tear the specimens. Do not turn sheets face down. Specimens may not be Xeroxed (e.g., for label data).
- **Repair.** All sheets with loose pieces should be repaired *immediately*. Notify herbarium staff about sheets requiring repair.
- **Insect damage control.** Please report immediately any evidence of insect damage. The specimens should be regularly monitored for infestations
- **Destructive analyses.** *Material will not be removed from sheets without prior permission of the lending institution.*
- **Annotations.** Do not write directly on a specimen or its label. All comments should be made on an annotation slip (see below).

LOAN EXTENSIONS

Note the loan period of each loan. Most institutions will grant extensions for only one year at a time (six months for types). Approximately two months before the material is due the Curator should be informed of the following details:

- institution
- loan number or date
- description of specimens
- project title and progress made in the project
- length of extension requested.

ANNOTATION



Students must annotate all specimens before graduating. In exchange for sending their specimens, the Curator of the lending institution expects them to be annotated. Therefore, the reputation of GA suffers if we return unannotated loans, and our ability to obtain future loans may be hindered.

- **Definition.** Annotation slips are small labels that update the determinations and/or cite the project for which specimens were examined. All borrowed material should be annotated as fully as possible by the investigator. Do not write on the specimen sheet, specimen label, or someone else's annotation slip.
- **Composition.** A proper annotation slip is composed of acid-free paper scripted with *permanent ink* (hand- or typewritten). *Do not* use ballpoint pen, felt-tip pen, or pencil (all impermanent). The approximate dimensions are approximately 1" X 4 ¼" but may vary depending on the amount of information.
- **Information.** The annotation slip should include at least the accepted name of the taxon (including the authority), the investigator name, and the date (at least the year) of the identification. Other types of information include: our herbarium acronym (GA), study title, location of duplicates, and special comments/additional information about the specimen.
- **Annotations for type specimens.** Type annotations require more information than other annotations. Some institutions require special annotation slips or forms for their types. See <http://www.flmnh.ufl.edu/natsci/herbarium/types/typeannotation.htm> for details. The type annotation should designate the kind of type (HOLOTYPE! ISOTYPE! etc) and the place of publication [journal, vol., page(s), year at minimum]. The author and title of the article may also be included. If the current name differs from the type name, type sheets should have a special annotation in addition to the annotation bearing the current name.

Examples of annotations:

<i>Zigadenus glaberrimus</i> Michx. Det. Wendy B. Zomlefer, [GA] Aug. 2000	Sampled for Molecular Study on the Melanthiaceae Leaf material removed for DNA extraction. Wendy B. Zomlefer [GA] Nov. 2000
UNIVERSITY OF GEORGIA HERBARIUM [GA] <i>Lyonia fruticosa</i> (Michaux) G. S. Torrey Det. Wilbur Duncan 1978	A Revision of <i>Zigadenus</i> Leaf material removed for DNA Extraction GenBank Accession No. AF303702 [ITS] Wendy B. Zomlefer [GA] Nov. 2000
ISOTYPE of: <i>Rhododendron quinquefolium</i> Bissett and Moore <i>J. Arn. Arb.</i> 26(3): 113. 1955. Kathleen A. Kron, FLAS 3 Dec. 1988	Flora of North America <i>Zigadenus glaberrimus</i> Michx. Wendy B. Zomlefer, GA Nov. 2000
Isotype of: <i>Rhododendron quinquefolium</i> Bissett and Moore <i>J. Arn. Arb.</i> 26(3): 113. 1955. Kathleen A. Kron, FLAS 3 Dec. 1988	Voucher for Flavonoid Investigation of <i>Dahlia</i> [Extraction successful] D. E. Giannaisi [GA] Nov. 1985

- **Placement.** Show the Curator your annotations before you affix them! Consult the rules of the lending herbaria concerning annotation of their specimens. In some cases, annotations are attached in a specific location. Generally, the annotation slip should be affixed to the herbarium sheet in a blank space as near as possible to the original label or most recent annotation. Standard practice is placement above the label and flush with the right side of the sheet or to the left of the label. If other annotations are present, the new one should be positioned above the most recent, unless it will not fit or the most recent is in a very unusual position. If blank space on the sheet is insufficient, an annotation may be glued only at one end and overlap mounted plant material.
- **Attachment.** A white glue, DucoCement or any other permanent glue should be used to attach the annotation slip. *Do not use rubber cement (impermanent).* Glue should be applied only to each or one end of the annotation. Some institutions do not want annotation slips to be affixed.

PACKING LOANS FOR RETURN

 **Students must prepare loans for return before graduating.**

The investigator is responsible for packaging and return of loans. The Curator will place a hold on graduation with the University Registrar if *all* loans have not been returned prior to graduation. Allot ample time for this time-consuming procedure. The Curator should be informed at least one month before specimens are ready for return. In times of financial crisis, the payment of the return postage may also be negotiated. All specimens should be sorted by institution and counted before any loans are packed for return. The Curator must inspect the material to certify its condition for return. Once all loans correlate with the records, the Curator will explain the preparation of shipping invoices, shipping labels, and customs declarations. Packing must be done in the Herbarium under the supervision of the Curator or Curatorial Assistant.

PARTIAL RETURN OF LOANS

The partial return of a loan should be avoided. If partial return is necessary, both the returned material and the remainder should be carefully counted and checked against the original loan total.

VOUCHERS

 **Students must have their vouchers labeled and sorted before graduating.**

- **Definition.** A voucher -- literally "a piece of evidence" -- is an essential component of the scientific method. *All* published research on organisms should be vouchered. These specimens are physical proof validating the identity of the plant used in a research project.
- **Policy.** Students in the Botany Dept. at the University of Georgia are required to deposit a set of their voucher specimens in the GA herbarium. Although not collecting as extensively as those participating in floristic projects, students undertaking revisionary studies (and who request loans) usually also have their own collections to prepare for deposit in the home herbarium and for exchange to other herbaria. In addition, most journals now require citation of the repository for vouchers in molecular studies before publication is allowed.
- **Labels.** See the Curator, "Floristic Study Agreement," and <http://www.flmnh.ufl.edu/natsci/herbarium/voucher.htm> for details and policies on specimen and label preparation. The label should indicate if the specimen is a voucher for a molecular study.
- **Sorting.** See the Curator and "Floristic Study Agreement" for details on sorting.

CITATION OF SPECIMENS IN PUBLICATIONS

- **Standard herbarium acronyms**, listed in *Index Herbariorum* [<http://www.nybg.org/bsci/ih/>], are used in specimen citation in publications. The University of Georgia Herbarium is cited as GA.
- **Institutions with multiple herbaria.** Some single institutions actually administer specimens for separate herbaria. Examples: Harvard University Herbaria [Oakes Ames Orchid Herbarium (AMES), Arnold Arboretum (A), Gray Herbarium (GH), the Economic Herbarium of Oakes Ames (ECON), New England Botanical Club (NEBC), and the Farlow Herbarium of Cryptogamic Botany (FH)]; Botanical Research Institute of Texas (BRIT, SMU, VDB), University of Texas (TEX, LL), University of Alabama (ALU, UNA), and California Academy of Sciences (CAS, DS).

PUBLICATIONS

- **GA Herbarium library.** A complimentary copy of all theses, dissertations, and published papers relating to the specimens borrowed should be donated to the University of Georgia Herbarium.
- **Lending herbaria.** A copy of published papers (when possible) pertaining to borrowed specimens should be sent to the lending institution (c/o the Curator or official correspondent) in appreciation for the use of their specimens.

Graduate Student Agreement:

- ☒ 1. I have read and agree to comply with the University of Georgia Herbarium guidelines outlined in "Synopsis of GA Herbarium Policies" and "Collections Use Policies."
- ☒ 2. I have read and consent to handle loans to GA for my study in accordance with the attached "Loan and Voucher Guidelines and Agreement."
- ☒ 3. As detailed above, I acknowledge that annotating my study specimens and providing properly labeled vouchers are part of my graduate project. I understand that ***I will not be allowed to graduate until my loans are properly annotated and packaged for return and all voucher specimens from my study are properly labeled and sorted for deposit at GA. Failure to comply will prevent completion of my degree.***

Printed Name

Signature

Date

Thesis/Dissertation Advisor Signature

Date