

SANBI POLICY DOCUMENT

DIVISION: Biosystematics and Collections	POLICY NUMBER: C1
EFFECTIVE DATE: 1 April 2013	LAST AMENDED: 13 May 2013

PLANT IDENTIFICATION

Background Taxonomists are regularly consulted to provide identifications for plant material. Materials submitted for identification are mainly in the form of dried herbarium specimens, and sometimes as living plants and photographic material. The identification service is provided to a broad clientele that may include researchers at universities, government departments, herbaria, nurseries, nature conservationists, registered collectors, consultants, private individuals, and SANBI staff.

Contact details for the facilities are:

- National Herbarium, Pretoria (National.Herbarium@sanbi.org.za).
- Compton Herbarium, Cape Town, Kirstenbosch (Compton.Herbarium@sanbi.org.za).
- KwaZulu-Natal Herbarium, Durban (KwaZulu-Natal.Herbarium@sanbi.org.za).

Aim The aim of the plant identification service is to provide clients with the necessary up-to-date information required for research and conservation of South Africa's rich botanical diversity.

The aim of this policy is to ensure that SANBI provides an effective and transparent identification service that is standardized across the three herbaria.

Policy

- SANBI's Herbaria are accessible for researchers to do their own plant identifications, free-of-charge, by prior appointment.
- SANBI Herbaria provide a plant identification service to anyone requiring this service.
- Where the expertise for a plant family resides outside of SANBI, the client will be informed accordingly.
- Identification of dried or fresh plant material will be done by Herbarium staff.
- Only well-prepared, good quality and well-documented specimens will be accepted for identification (see Addendum 1).
- Graphic material on its own is discouraged as it cannot be identified to the same level of accuracy as fresh/dried plant material. SANBI herbarium staff cannot assure the integrity of a plant name based on an image. Graphic material, together with a specimen, may be useful and is encouraged.

- Clients will be charged a non-refundable handling fee for all plant specimens submitted, irrespective of the level to which identification can be done. This fee covers documentation, preparing and mailing provisional and final dispatch lists, as well as telephonic and other communication with clients.
 - Higher rates are charged for urgent identifications.
 - Categories and charges for the Plant Identification Service are provided in Addendum 2.
 - Charges are standardized across the three SANBI Herbaria and will be reviewed at appropriate intervals.
 - Where clients want their specimens returned, arrangements should be made with the plant identification services officer. There will be an additional charge for postage and an additional handling fee (see Addendum 2).
 - Only the plant identification services officer will be in direct contact with clients for receiving or returning plant specimens and providing plant names (see Addendum 3).
 - Material will only be identified if a 'Request for Identification Form' has been completed (Addendum 4).
 - In the event that the identification service overruns the time allocated for the identifications, the client will be informed.
 - Specimens for identification will not be accepted between 15 December and 15 January.
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**List of
addenda**

ADDENDUM 1: Guidelines for submitting specimens for identification.

ADDENDUM 2: Categories and charges of the plant identification service.

ADDENDUM 3: Plant identification procedure.

ADDENDUM 4: 'Request for Plant Identification Form'.

ADDENDUM 1

General guidelines for submitting specimens for identification

- Clients submitting material must ensure that it is properly documented, pressed and dried.
 - Procedures for collecting and preparing plant specimens are provided in:
Fish, L. 1999. Preparing herbarium specimens. *Strelitzia* 7. National Botanical Institute. Pretoria.
Victor, J.; Koekemoer, M; Fish, L.; Smithies, S. & Mössmer, M. 2004. Herbarium Essentials: the southern African herbarium user manual. [SABONET Report No. 25](#).
 - A good specimen comprises a fair sample of the plant, displaying its manner of growth, branching, etc. and should include stems, leaves, flowers and/or fruits, and underground parts (essential for grasses, sedges, and bulbous, cormous, tuberous or rhizomatous plants). Preferably the root/stem junction should be included where possible as many plants have important basal organs. If any of the above cannot be collected then a detailed description of the underground part must be provided on the field label.
 - A label must accompany each specimen. The label must state the date and collector. It must describe where the plant was collected, giving the major, minor, and exact locality (e.g. Caledon, farm Groenland, 2 km east of town on road to Riviersonderend). Ideally, GPS co-ordinates in degrees, minutes and seconds should be provided. Useful information about the plant should be included, e.g. flower colour, habitat, plant height/length and fruit colour.
 - Before dried material enters any part of the herbarium building where the collections are housed, it must first be decontaminated. Specimens are decontaminated by placing them in a deep freezer at -18°C for a minimum of 48 hours, to avoid the potential introduction of destructive insects. Decontamination at the herbarium can be arranged with the plant identification services officer.
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ADDENDUM 2

Categories and charges of the Plant Identification Service

Category 1: Urgent Identifications Clients: Life-and-death cases only incl. Onderstepoort and SAPS.

Rate	Delivery time	Conditions
R60 per specimen.	Immediate attention will be given to these identifications. Immediate means up to one hour from receiving of the material.	<ul style="list-style-type: none"> • Specimens of inferior quality will be identified to the nearest name, which may be that of a family only. • In the absence of staff with expertise in particular groups, clients will be referred to experts outside SANBI for possible assistance.

Category 2: Standard Identifications Clients: All non-urgent identifications, incl. researchers, students, institutions universities, commercial ventures, and SANBI programmes and projects.

Rate	Delivery time	Conditions
R40 per specimen.	30 days from time of decontamination.	<ul style="list-style-type: none"> • Only good quality, fertile specimens will be considered for identification to species level. • Clients must collect their specimens within one (1) month or make prior arrangements with the plant identification services officer as to the fate of the material submitted.

Category 3: Other herbaria, specimens donated from under-collected areas and own identifications Clients: Countries participating in an exchange programme, gifts, researchers and private individuals where speed of identification is not important.

Rate	Delivery time	Conditions
Free-of-charge.	120 days (4 months).	<ul style="list-style-type: none"> • Well documented and properly prepared material must be donated for inclusion in the herbarium. • Poor specimens will be discarded before being named. • Own identifications requires prior arrangement with the herbarium.

- Return of specimens (by request only): R50 handling, plus postage cost per parcel.

ADDENDUM 3

Plant Identification Procedure

Request form	Collector to submit Request for Identifications Form with each batch of specimens (Addendum 4).									
Decontamination of plant samples	<p>Arrange with plant identification services officer to place the material in:</p> <ol style="list-style-type: none"> 1. A deep freezer for 48 hours <u>OR</u> 2. A microwave with time and heat as listed below (excluding members of Family Rutaceae): <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Number of specimens</th> <th style="text-align: center;">Time in microwave</th> <th style="text-align: center;">Microwave heat option</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1–10</td> <td style="text-align: center;">1 minute</td> <td style="text-align: center;">100%</td> </tr> <tr> <td style="text-align: center;">11–20</td> <td style="text-align: center;">1½ minutes</td> <td style="text-align: center;">100%</td> </tr> </tbody> </table>	Number of specimens	Time in microwave	Microwave heat option	1–10	1 minute	100%	11–20	1½ minutes	100%
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Stamping	Both urgent and standard batches are stamped on Monday by the Plant Identification Services Officer.									
Specimen Sort	<p>Specimens are sorted into family, genera or wing (in the case of PRE) and made into batches for identification by technicians and scientists.</p> <p>In PRE, sorting takes place on Tuesday and Thursday, and is undertaken by the wing sort team.</p> <p>In NH, sorting takes place on Thursdays, and is lead by the Plant Identification Services Officer, and includes technicians and interns.</p> <p>At NBG, sorting takes place within 1 week of decontamination.</p> <p>In NBG and NH, the Wing Convener is also the Plant Identifications Services Officer.</p>									
Data capturing	<p>Plant Identification Services Officer</p> <ol style="list-style-type: none"> 1. Processes a batch of specimens for identification a day after family/wing sort. 2. Creates a list with relevant information on computer. 3. Prints list and checks for errors, and edits list. 4. Distributes specimens to wings/family specialists. 									

<p>Specimen distribution</p>	<p>At PRE, when distributing specimens to wings, the Plant Identification Services Officer must:</p> <ol style="list-style-type: none"> 1. Ensure the recommended basket is used for carrying specimens to wings. 2. Inform the wing convener about plant specimens sent to wing. <p>On receiving the specimens, the Wing Convener must:</p> <ol style="list-style-type: none"> 1. Sort specimens for distribution within the wing and this should be done one (1) day after batches are received. 2. Distribute specimens to technician/scientist for identification. 3. Keep an accurate record of batch list in files: e.g., Urgent IDs, Standard IDs, SANPARKS and Gift specimens. <p>The Plant Identification Services Officer must then: Record the number of specimens per batch received per technician/scientist.</p>
<p>Specimen identifications</p>	<ol style="list-style-type: none"> 1. Technicians/Scientists identify specimens according to the chosen category in Addendum 2. 2. The Wing Convener marks the specimens off from the file after identification. 3. The Wing Convener places identified specimen in basket or cupboard in front. 4. Plant Identification Services Officer collects specimens with completed identifications from wings every day.
<p>Correspondence</p>	<p>On receiving identified specimens, the Plant Identification Services Officer:</p> <ol style="list-style-type: none"> 1. Captures plant names onto computer. 2. Sends provisional lists to collectors once every second week (i.e. twice a month). 3. Files specimens in service room cupboard until all specimens are received and a batch is complete. 4. Sends final list to collector after final identification.



REQUEST FOR PLANT IDENTIFICATION

1. This form must accompany specimens submitted for identification.
2. Please refer to the categories and charge rates the identification service (Addendum 2).

To NBG NH PRE (select herbarium for service)

Date _____

Name _____

Address _____

Tel _____ Fax _____

E-mail _____

Number of specimens in batch _____

General area of collection (e.g. coast, midlands) _____

Type of service Donated Id & Return

Number of specimens paid for _____

Dispatch List to be posted faxed e-mailed

Requirements

1. Submit well-collected, fertile specimens for identification. Sterile specimens can rarely be named below the level of family or genus.
2. Supply a label with each specimen giving at least the 'minimum information': Collector's name and number, date of collection, grid reference, precise locality, habitat, life form and flower colour.
3. If the specimens are pressed and dried, please also:
 - 3.1. Place each specimen inside a protective cover.
 - 3.2. Write or print the collector's name and number in the bottom right-hand corner on the front of each cover.
 - 3.3. Mark specimens you would like returned with a large * after Collector number.

FOR OFFICIAL USE

Batch No. Date received Date sorted