

## Appendix 4

List of potential end-users of botanical information. This list was compiled from Steenkamp & Smith (2002) and Morin, Whetstone, Wilken & Tomlinson (1988). Many of these examples of potential end-users were discussed and determined during a workshop held in Virginia on "Floristics for the 21<sup>st</sup> Century" (Morin *et al.* 1988) and are therefore more relevant to the northern hemisphere.

Ecological/environmental consultants	Seed laboratories
Vegetation surveyors	Seed companies
Rehabilitation specialists	Nurserymen
Forest managers	Poison control centres
Environmental engineers	Plant pathologists
Mining engineers	Landscape architects
Civil engineers	Interior designers
Farmers	Architects
Agricultural consultants	Real estate appraisers
Extension agents	Land use managers
Environmental lawyers	Municipal and regional planners
Custom, border and airport officials	Weed and pest controllers
Postal services	Recreation managers and planners
Health and food industry	Sports field and green keepers
Food quality controllers	Right-of-way engineers
Animal feed companies	Flood control engineers
Forensic scientists	Waterway managers
Medical examiners	Toxicologists
Dermatologists	Outdoor enthusiasts
Traditional plant users	Illustrators
Silviculturists	Users of natural dyes, craftspeople
Rare and endangered species agents	Teachers
Fertilizer manufacturers	Adult Educators
Plant breeders	



Botanical garden management course – inside a nursery.

## Appendix 5

Consolidated list of products required by the end-users of information generated by herbaria participating in the SABONET Project.

Species lists	Up-to-date, correct plant names
Plant identification	Plant biodiversity research
Collection trips to expand collections	Plant taxonomic research
Library facilities and access to relevant and latest literature	Training of taxonomists/technicians
Training of data-capturers	Computerised information/access to databases/web
Efficient curation of the collections	Publication of field guides, brochures, and other general information
Development of Herbarium Management Systems	Help desk on botanical information
Lists of endemics, medicinal plants, alien plants, etc.	Signage in herbaria and botanical gardens
Provide information on plant conservation status	State of environmental report
Red Data List production	Infrastructure and space
Plant distribution data/maps	Policies
Produce scientific publications	Translation of existing literature
Development of a Taxonomic Information System	Botanical Information System
Exchange of information and loans between herbaria	Training of users of botanical information
Outreach programme to create public awareness of herbaria	Consolidation of taxonomic services
Provide information on plant propagation	Enforcement of flora protection laws
Development of new herbaria	
Plant ecological information, life histories, etc.	



Herbarium Management training course – Preparing herbarium specimens.

# Appendix 6

## Appendix 6a

Results from the questionnaire sent out to the participating countries to determine what would deter end-users from using herbaria. ▲—very important, ■—intermediate, ●—not important. No information was supplied for Malawi, Zambia, and Zimbabwe.

	Angola	Botswana	Lesotho	Malawi	Mozambique	Namibia	South Africa	Swaziland	Zambia	Zimbabwe
Charging a fee		▲	●		●	●	▲	■		
The amount charged		▲	●		●	■	▲	●		
No knowledge that the herbaria existed	▲	▲	▲		■	●	●	▲		
No knowledge of the services that the herbaria offered	▲	▲	▲		▲	▲	▲	▲		
Travelling distance to herbaria	●	■	■		▲	●	■	■		
Insufficient collections and relevant information available at herbaria	■	■	●		▲	●	■	▲		
The length of time to get information back from herbaria	▲	▲	●		▲	▲	▲	▲		
Having no access to electronic information	■	●	▲		▲	■	■	■		
No quick guides for easy identification available	■	■	▲		▲	■	●	▲		
The high quality of specimens that herbaria require	●	●	▲		▲	●	▲	▲		

## Appendix 6b

Results from the questionnaire sent out to the participating countries to determine what would encourage end-users to use herbaria. ▲—very important, ■—intermediate, ●—not important. No information was supplied for Malawi, Zambia, and Zimbabwe.

	Angola	Botswana	Lesotho	Malawi	Mozambique	Namibia	South Africa	Swaziland	Zambia	Zimbabwe
Taxonomic expertise found at herbaria	▲	▲	▲		▲	▲	▲	▲		
Correct identifications by herbarium staff	■	▲	▲		▲	▲	▲	▲		
Current information (names etc.) available	■	▲	▲		▲	▲	▲	■		
Access to relevant literature	■	▲	▲		■	■	▲	▲		
Easily accessible herbaria	▲	▲	▲		▲	●	■	■		
Low costs of identification	▲	▲	▲		▲	▲	▲	■		
Acceptable waiting periods for identification service	▲	▲	▲		▲	▲	▲	▲		
Availability of research facilities	▲	▲	▲		▲	●	▲	▲		
Access to electronic products and information	■	●	▲		●	▲	▲	▲		
Relevant information on Red Data Lists/endemism/medicinal plants	■	▲	▲		▲	▲	▲	▲		
Access to plant locality data and distribution maps	■	▲	▲		●	▲	▲	▲		
The professional attitude of herbarium staff	▲	▲	▲		▲	■	▲	▲		

## Appendix 6c

Results from the questionnaire sent out to the participating countries to determine what the end-users of botanical information require from herbaria. ▲—very important, ■—intermediate, ●—not important. No information was supplied for Malawi, Zambia, and Zimbabwe.

	Angola	Botswana	Lesotho	Malawi	Mozambique	Namibia	South Africa	Swaziland	Zambia	Zimbabwe
Species list	▲	▲	▲		▲	▲	▲	▲		
Plant identification	▲	▲	▲		▲	▲	▲	▲		
Collection trips to expand collections	■	▲	▲		▲	●	▲	▲		
Library facilities and access to relevant and latest literature	■	▲	▲		▲	▲	■	▲		
Up-to-date, correct plant names	■	▲	▲		▲	▲	▲	▲		
Training of taxonomists/technicians	▲	▲	▲		▲	▲	■	■		
Training of data-capturers	▲	■	▲		▲	●	■	■		
Efficient curation of the collection	■	▲	▲		▲	▲	■	▲		
Development of Herbarium Management Systems	■	▲	▲		▲	●	■	■		
Lists of endemics, medicinal plants, alien plants etc.	■	▲	▲		▲	■	▲	▲		
Provide information on plant conservation status	●	▲	▲		▲	●	▲	▲		
Red Data List production	▲	▲	▲		▲	●	▲	▲		
Plant distribution data/maps	■	▲	▲		▲	■	▲	▲		
Produce scientific publications	▲	▲	▲		▲	■	▲	■		
Development of a Taxonomic Information System	▲	▲	▲		▲	▲	▲	■		
Exchange of information and loans between herbaria	●	▲	▲		▲	■	■	■		
Outreach programme to create public awareness of herbaria	■	▲	▲		▲	■	■	▲		
Provide information on plant propagation	●	■	▲		▲	●	●	▲		
Development of new herbaria	▲	■	▲		▲	●	●	▲		
Plant ecological information, life histories etc.	●	▲	▲		▲	■	▲	■		
Plant biodiversity research	■	▲	▲		▲	●	▲	▲		
Plant taxonomic research	■	▲	▲		▲	■	▲	▲		
Computerised information/access to databases/web	▲	▲	▲		▲	▲	▲	▲		
Publication of field guides, brochures and other general information	▲	▲	▲		▲	■	▲	▲		
Other*		▲	▲			▲■		▲		

\* Botswana (help desk on botanical information, signage); Lesotho (state of environmental report); Namibia (infrastructure/space, policies, translation, Botanical Information System, training of users, consolidation of taxonomic services); Swaziland (enforcement of flora protection laws)

# About SABONET

This publication is a product of the Southern African Botanical Diversity Network (SABONET), a programme aimed at strengthening the level of botanical expertise, expanding and improving herbarium and botanic garden collections, and fostering closer collaborative links among botanists in the southern African subcontinent.

The main objective of SABONET is to develop a strong core of professional botanists, taxonomists, horticulturists, and plant diversity specialists within the ten countries of southern Africa (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe). This core group will be competent to inventory, monitor, evaluate, and conserve the botanical diversity of the region in the face of specific development challenges, and to respond to the technical and scientific needs of the Convention on Biological Diversity.

To enhance the human resource capacity and infrastructure available in the region, SABONET offers training courses, workshops, and collaborative expeditions in under-collected areas. The programme produces a series of occasional publications, the Southern African Botanical Diversity Network Report Series, and a newsletter, SABONET News.

SABONET is co-funded by:

- The United States Agency for International Development (USAID/World Conservation Union—Regional Office for southern Africa (IUCN-ROSA))
- The Global Environment Facility (GEF)/United Nations Development Programme (UNDP)

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