



e-Flora of South Africa Policy

DIVISION: *Foundational Biodiversity Science, Foundational Research and Services*

EFFECTIVE DATE: *April 2024*

Policy / Procedure Details

Document owner	Dr M. Marianne le Roux, Dr Janine E. Victor
-----------------------	---

Policy / Procedure Review

Version details	2024 – Version 1
Reason for the review	Divisional decision to review all policies in quarter 1 of the 2024-2025 financial year. Revision required based on the online publication of the National Biodiversity Information System (the Biodiversity Advisor).
Potential consolidation of policies	
Other policies / procedures that might be impacted by this policy / procedure	South African National Plant Checklist Policy

Approved / Reviewed by:

Committee / Division	Date	Signature	Review / Approved
<i>Foundational Biodiversity Science, Foundational Research and Services</i>	<i>April 2024</i>		X

e-Flora of South Africa Policy

Table of Contents

1.	Preamble.....	3
2.	Purpose of the policy / procedure	3
3.	Legislation & standards	3
4.	Link to other SANBI policies and procedures	3
5.	Scope of application	3
6.	Definitions	3
7.	Abbreviations	3
8.	Policy / Procedure.....	3
8.1	e-Flora of South Africa guidelines	3
8.2	The SANBI procedures for maintaining and expanding the e-Flora of South Africa	4
8.3	Dissemination of the e-Flora of South Africa	5
8.4	Statistics.....	5
8.5	Branding.....	5
8.6	References.....	5

1. Preamble

The South African National Biodiversity Institute (SANBI) is mandated in the National Environmental Management: Biodiversity Act (2004) to coordinate and promote the taxonomy of South Africa's biodiversity, as well as to collect, generate, process, coordinate and disseminate information about biodiversity. SANBI is thus obligated to collect, generate, process and disseminate information resulting from taxonomic research in the form of an electronic Flora of South African plants. The e-Flora of South Africa (hereafter referred to as 'e-Flora') was first published in 2020 and is being maintained and expanded to ensure that the public have access to the most up-to-date and accurate taxonomic information. The e-Flora is obligated to contribute data towards the first target of the Global Strategy for Plant Conservation (Convention on Biological Diversity). Target 1 is aimed at producing an online Flora for the world and South Africa contributes approximately 8% of which 4% is unique. The e-Flora is maintained according to the South African National Plant Checklist. A procedure for maintaining and expanding the e-Flora ensures transparency with respect to how information is selected for inclusion in the e-Flora.

2. Purpose of the policy / procedure

To provide standard guidelines for the decisions and procedures relating to the updating and management of the e-Flora to ensure consistency, transparency, and credibility for both contributors and end-users.

3. Legislation & standards

National Environmental Management: Biodiversity Act, 10 of 2004

4. Link to other SANBI policies and procedures

South African National Plant Checklist Policy

5. Scope of application

This policy is applicable to SANBI staff of the Foundational Biodiversity Science division, as well as external collaborators contributing to expanding and maintaining the e-Flora. The policy impacts on all contributors and end-users of the e-Flora.

6. Definitions

Autonym: the automatically established name of a subdivision of a genus or of an infraspecific taxon that includes the type of the adopted, legitimate name of the genus or species, respectively. Its final epithet repeats unaltered the generic name or specific epithet and is not followed by an author citation.

Flora: all plant life present in a particular region or time.

7. Abbreviations

BIM – Biodiversity Information Management Directorate
BODATSA – Botanical Database of Southern Africa
BRAHMS – Botanical Research And Herbarium Management System
e-Flora – e-Flora of South Africa
SANBI – South African National Biodiversity Institute
WFO – World Flora Online

8. Policy / Procedure

8.1 e-Flora of South Africa guidelines

The e-Flora is designed based on the approach followed by the WFO project (Target 1 of the Global Strategy for Plant Conservation of the Convention on Biological Diversity) and guides the continuous development and maintenance of the e-Flora^{1,2}.

The e-Flora project is managed by SANBI and is a collator of information³.

The South African National Plant Checklist is used as the e-Flora's taxonomic backbone. The e-Flora is updated on an annual basis, incorporating changes made in the previous year's South African National Plant Checklist. The e-Flora database is also expanded by uploading new information.

Only published information will be incorporated; if no published data are available, a note provided by an expert may be added with attribution.

Permission must be obtained from either the author or publisher of taxonomic information for the sole use in the e-Flora and WFO portals. Attribution must be given in the form of a reference to the source of the information. Where applicable, a creative commons licence and caveat, if requested by the author or publisher, should be recorded and displayed with the associated text.

Taxonomic data is deposited in BODATSA that is managed within the BRAHMS platform. The e-Flora is disseminated online through the SANBI Biodiversity Advisor. The e-Flora dataset is periodically submitted (e.g. when substantial changes are introduced to the information in the e-Flora dataset) to the WFO for publication on the WFO portal.

A feedback function that allows commenting by external users is required on the Biodiversity Advisor website. The e-Flora Coordinators will be responsible for responding to comments.

A single staff member (the e-Flora Coordinator at SANBI), with a sound knowledge and understanding of plant nomenclature and taxonomic literature, will have ultimate responsibility for aligning the e-Flora to international guidelines and data standards, and maintaining the e-Flora accordingly.

A Deputy e-Flora Coordinator with similar competence in nomenclature and taxonomic literature will have equal editing rights to the database, and will be tasked with responsibilities towards maintaining and expanding the e-Flora.

A technician (e-Flora Support Officer) will assist the e-Flora Coordinators to coordinate and collate taxonomic information.

A group of SANBI scientists and technical staff, as well as external taxonomists and citizen scientists will assist in sourcing the most appropriate taxonomic data.

The Policy may be reviewed annually by the e-Flora Coordinator, or upon request from SANBI management, and amended if necessary.

8.2 The SANBI procedures for maintaining and expanding the e-Flora of South Africa

Up-to-date names with authorships for all taxa within South Africa (covering family, genus, species and infraspecific taxa) and related taxonomic information is provided from the South African National Plant Checklist. Data elements harvested for the e-Flora (selected to be in agreement with the WFO¹) include:

- Morphological description
- Habitat information
- Distribution information
- Phenology (flowering time)
- Altitude range
- Literature reference (and Creative Commons licence and caveat where relevant)
- Links to identification keys to families, genera and species, where available
- Images (photographs, scans of herbarium specimens, and/or drawings) of at least one species of each genus (ideally, linked to voucher specimens with barcodes)
- Online links to external data and data sources about the species, e.g. DNA barcodes

The e-Flora dataset may further be enhanced with the following data elements, where available:

- Vernacular names

- Traditional, economic, and medicinal uses
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) statuses
- Red List of South Africa conservation statuses

Descriptions should preferably be compiled from the most recent taxonomic revision or appropriate conspectus. Should there be no recent published description of adequate quality, or if SANBI does not have permission from the author or publisher to re-use the information, older published descriptions may be used. In the absence of a usable description, a reference should be provided to the most recent publication. If no morphological description is available for an autonym, this should be stated in the morphological description field.

Multiple descriptions may be available for a single taxon. The primary description or preferred description (primary source) will be flagged accordingly in BODATSA and will appear first under the relevant heading on the species page on the Biodiversity Advisor. Additionally stored descriptions may also be disseminated, arranged in chronological order following the primary source.

Scientists and technicians employed by SANBI have a responsibility to assist the e-Flora Coordinators in updating and maintaining the e-Flora, by identifying, digitising and marking-up relevant taxonomic literature.

8.3 Dissemination of the e-Flora of South Africa

The e-Flora will be published online in the SANBI Biodiversity Advisor, administered by BIM, as species pages.

An updated version of the e-Flora will be published annually on the Biodiversity Advisor after its first publication.

The Biodiversity Advisor will have a commentary feedback system in place where users can comment on content in order to improve the e-Flora data. Feedback on improvement should be provided to the users.

The e-Flora data will be shared with the WFO, published on the WFO portal.

8.4 Statistics

Contributors (authors of descriptions) will be able to download statistics of how many times information for a particular taxon is viewed/downloaded. This should be implemented by BIM.

8.5 Branding

The e-Flora has its own branding in terms of a logo. All documentation and activities, including the species pages on the Biodiversity Advisor, use this logo and name alongside the SANBI logo. The WFO project's logo may also be used on documentation or publications.

8.6 References

1. CBD (2012) Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA) Global strategy for plant conservation: World flora online by 2020, 16th Meeting, Montreal, Canada. Convention on Biological Diversity, UNEP/CBD/SBSTTA/16/INF/38.
<http://www.cbd.int/doc/meetings/sbstta/sbstta-16/information/sbstta-16-inf-38-en.doc>
2. Borsch, T., Berendsohn, W., Dalcin, E., Delmas, M., Demissew, S., Elliott, A., Fritsch, P., Fuchs, A., Geltman, D., Güner, A., Haevermans, T., Knapp, S., Le Roux, M.M., Loizeau, P.-A., Miller, C., Miller, J., Miller, J.T. Palese, R., Paton, A., Parnell, J., Pendry, C., Qin, H.-N., Sosa, V., Sosef, M., Von Raab-Straube, E., Ranwashe, F., Raz, L. Salimov, R., Smets, E., Thiers, B., Thomas, W., Tulig, M., Ulate, W., Ung, V., Watson, M., Wyse Jackson, P. & Zamora, N. 2020. World Flora Online: Placing taxonomists at the heart of a definitive and comprehensive global resource on the world's plants. *Taxon* 69(6): 1–31. DOI <https://doi.org/10.1002/tax.12373>

3. Le Roux, M.M., Wilkin, P., Balkwill, K., Boatwright, J.S., Bytebier, B., Filer, D., Klak, C., Klopper, R.R., Koekemoer, M., Livermore, L., Lubke, R., Magee, A.R., Manning, J.C., Paton, A., Pearce, T., Slingsby, J., Van Wyk, B.-E., Victor, J.E., Von Staden, L. Producing a plant diversity portal for South Africa. 2017. *Taxon* 66(2): 421–431. DOI <https://doi.org/10.12705/662.9>