

# FORUM BOTANICUM

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NEWS-LETTER OF THE SOUTH AFRICAN ASSOCIATION OF BOTANISTS  
NUUSBRIEF VAN DIE SUID-AFRIKAANSE GENOOTSKAP VAN PLANTKUNDIGES

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## ALTERED FORMAT FOR THE FLORA OF SOUTHERN AFRICA

During the past S.A.A.B. Congress an outline was given of proposed modifications to the format of the F.S.A. Dr Otto Leistner of the B.R.I. mentioned that the changes were being proposed in order to speed up the production of this work and to enhance its value.

The main modifications are as follows:-

- (1) Publication will in future be in the form of fascicles rather than in volumes. Fascicles may consist of fairly large families, groups of related small families or large tribes.
- (2) Species descriptions will be diagnostic and image-creating and will, as a rule, be no longer than 110 words.
- (3) Bibliographic citations will be limited to the most important works. General references will be quoted under genera only and not be repeated under species.
- (4) The citation of specimens will be limited to no more than 5 representative specimens, giving only the collector and the collecting number. A detailed description of the distribution will be given, however, and the use of distribution maps is encouraged.
- (5) Botswana will be included in the F.S.A.
- (6) Family and genus will be primarily tailored to the representatives in the F.S.A. area.
- (7) Synonyms will be arranged chronologically into groups of nomenclatural synonyms, i.e. synonyms based on the same type.

Details of the format were made available in the form of a guide for contributors to the F.S.A. compiled by J. H. Ross, O.A. Leistner and B. de Winter.

THE DEPARTMENT OF FORESTRY AND NATURE CONSERVATION; POLICIES :

The Department of Forestry is probably best known to the general public for the plantation of exotics, mainly pines, that it has established for the production of essential timber supplies. It is not as well known, however, that the Department is also the oldest and largest flora conservation body in the country.

The first steps to conserve the indigenous forests of the Southern Cape and put a stop to the wanton destruction that was taking place, were taken by forestry officers of the old Cape Colonial administration in 1846. In the years that followed legislation was enacted to tighten up control over the forests until finally, in 1939, the remaining woodcutters were deprived of their prescriptive rights to work timber in the forests and given State pensions. Since this date all State indigenous forests have been managed on a strict conservation basis. Active research is also being undertaken to rehabilitate and consolidate the forests by planting up open areas and enrichment plantings. The purchase by the State of the more important indigenous forests which are still in private ownership has also been approved in principle. Had it not been for the prolonged fight by dedicated forest officers to conserve the indigenous forests, and the establishment of alternative timber resources in the form of plantations, there is no doubt that very little of these forests would have remained today.

The Department of Forestry has also been instrumental in having a list of protected trees drawn up which may not be cut without prior Ministerial authority. This list of trees is being currently revised and expanded. Provision is also made in the Forest Act for the protection of any tree species or forest by proclamation. No proclaimed trees or forest may be cut without authority.

The Department of Forestry also has numerous proclaimed nature reserves which cover thousands of hectare, and are managed for the conservation of specific rare plants species or ecosystems. The main conservation work of the Department, however, takes place on the more than a million hectare of mountain catchment reserves which are managed primarily for water yield, but also for nature conservation and outdoor recreation, uses which are compatible with the main objects of management. This area of mountain catchment is being steadily increased by new acquisitions. All indigenous flora and fauna on these mountain catchments is strictly conserved and they are, therefore, ipso-facto, also nature reserves. An expanding staff of conservation officers, which include plant and animal ecologists, is employed on research to find out how best to manage these catchments, not only for maximum yield of clean, silt-free water, but also for the conservation of the flora and fauna. Rare and endangered species of plants and animals receive special attention and management. Research is also being done on the re-introduction of

animals, such as Eland and other antelope, onto State Forests where they formerly occurred but have long since disappeared. Special conservation research projects are also farmed out to universities and provincial nature conservation departments.

A recent development has been the enactment of legislation, in 1971, to allow for the establishment of wilderness areas. Wilderness areas are large areas, generally of mountainous country, with special scenic or other attributes, which are proclaimed and managed to keep them in a completely natural and unspoilt state and free from the impact of man in all its forms. Three such wilderness areas have already been proclaimed and more are due for proclamation in the near future. Wilderness areas have the highest conservation status and are therefore automatically also nature reserves.

The Department of forestry, with its mountain catchment reserves, makes a major contribution to the conservation of a large number of South Africa's veld types. The Western Cape Mountain Fynbos which has one of the richest and most diverse floras in the world, is dependant on the Department for its permanent conservation. With the rapid agricultural and industrial development of the country during the past few decades, millions of hectare of natural veld have had to be sacrificed and a unique flora has disappeared in the process. Were it not for the Department of Forestry's mountain catchments the flora conservation position in these areas would indeed be in a sorry state. These mountain catchments also provide a last refuge for many of South Africa's most beautiful flowering plants and numerous rare and endangered species. Through dedicated research and far-sighted conservation planning, excellent progress has been made in rehabilitating numbers of endangered species.

Fauna conservation also receives the highest priority on all State Forests and much progress has been made in this direction. It is also not generally realized that plantations of exotic trees provide excellent cover for game animals which have increased many fold on most State Forests. The periodic burning of firebreaks also provides regular grazing for game animals that shelter in the plantations.

Large sums of money are also spent annually by the Department of Forestry on the control of undesirable aliens on State Forests. The problem of the control of undesirable alien vegetation is, however, a tremendous one which can only be mastered by a well financed and co-ordinated national effort. This matter is receiving top level attention. The Department of Forestry is also

responsible for the control and stabilization of all coastal drift sand and large areas are stabilized each year.

Although excellent progress has been made by the Department in all respects of nature conservation much still remains to be done and the work is being expanded as rapidly as conservation staff can be recruited. (H.A. Luckhoff : in Environment RSA)

SAAB CONGRESS: As a result of discussion at the AGM in Cape Town in connection with SAAB Congresses, the secretary was asked to re-examine the replies to a circular on congresses distributed amongst members in 1974.

The results are summarised here for your interest and comments.

1. In reply to a question asking for opinions on the optimum length of a congress:
  - 30 voted for a 5 day congress
  - 27 voted for a 3 day congress
  - 23 voted for a 4 day congress
2. 61 votes were received in favour of annual congresses  
26 in favour of biennial congresses.
3. A majority (58 : 24) favoured a Presidential Address and selected the topic "New Aspects in the field (32) as opposed to "Survey of the Field" (22). 22 left the type of address to the discretion of the President.
4. Members suggested that 60% of a congress be devoted to research papers and the rest of the time be evenly divided between General Symposia, Excursions and SAAB symposia (General Symposia now fall away as these were S<sub>2</sub>A<sub>3</sub> Symposia.)
5. Most members voted for 20 minute papers as opposed to 30 minute papers (45 : 36) but most qualified their vote for 30 minutes to include discussion.
6. A majority voted for the AGM to be held on the last day and not during the Congress (47 : 37).
7. There was an overwhelming vote in favour of Post Congress Tours (62 : 22) and optimum length of such tours was judged to be 4 days.
8. The final question asked members to indicate which other congresses they attended regularly. Here the replies were sporadic.

Akademie vir Wetenskap en Kuns	15
Grassland Society	6
Limnological Society	4
Pathology Society	3

If you have further comments, and in particular wish to augment the information in item 8, please write to the Secretary (F M Getliffe), Department of Botany, University of the Witwatersrand, 1 Jan Smuts Avenue, Johannesburg.

FIFTH INTERNATIONAL SYMPOSIUM ON YEASTS will be held in Hungary/Keszthely at Lake Balaton in late August or early September 1977.

Scope of the Symposium: Systematics and related subjects (taxonomy, ecology, serology, immunology).

The proposed topics are the following:

Taxonomy :

1. The position of yeasts and yeast-like microorganisms in the system of fungi;
2. Natural groups of yeasts and yeast-like microorganisms;
3. The connection of yeast-taxonomy with the Botanical Code of Nomenclature;
4. The relation of the species concept to the taxonomical properties of yeasts and yeast-like microorganisms;
5. Certainty of identification, uncertainty of taxonomical properties;
6. Serological methods in taxonomy and identification;
7. Current taxonomic trends.

Ecology:

1. Yeasts in soil, water and air;
2. Yeast flora of plants and plant pathogenic yeasts;
3. Yeast flora of animals and animal pathogenic yeasts;
4. Yeast flora of the human body and human pathogenic yeasts;
5. Immunological connections of colonized high organisms to their yeast flora;

6. Flora of industrial fermentors, contaminations by yeasts (wild yeast also);
7. Flora of yeast-industrial products (wine, beer etc.);
8. Yeast flora in food-industry and food products.

DEPARTMENT PLANTKUNDE, UNIVERSITEIT VAN PRETORIA: Tydens 'n aanvullende promosieplegtigheid in September 1975 is die DSc-graad aan vier nagraadse studente van hierdie departement toegeken terwyl een student die MSc-graad ontvang het. Die student, met die titel van hul onderskeie projekte, is die volgende:

DSc-studente:-

- |                 |   |  |
|-----------------|---|--|
| D J Botha       | : | 'n Taksonomiese studie van die Suid-Afrikaanse verteenwoordigers van die Menispermaceae. |
| J. Coetzee      | : | The pollen morphology of the South African Malvales and some taxonomical implications.   |
| L M Hodgson     | : | Some aspects of reproductive behaviour in <u>Eucalyptus grandis</u> (hill) Maiden.       |
| N O van Gylswyk | : | Aspects of the intermediary metabolism of <u>Butyrivibrio fibrisolvens</u> .             |

MSc-student:-

- |              |   |   |
|--------------|---|---|
| M A N Muller | : | 'n Morfologies-taksonomiese studie van die genus <u>Erioccephalus</u> L. in Suidwes-Afrika. |
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SYMPOSIUM ON RESEARCH IN THE NATURAL SCIENCES AT SALDANHA, 3-5 FEBRUARY, 1976  
arranged by The Royal Society of South Africa, in association with the Geological Society of South Africa, the Zoological Society of Southern Africa and the South African Association of Botanists.

RESOLUTIONS

1. Research Institute: The Symposium, recognising the need for continued study and monitoring of changes and pollution levels in the important ecosystems of Saldanha Bay, Langebaan Lagoon and surrounding areas, recommends that a permanently manned research station be established in the area as a facility for all interested agencies.
2. Pollution: The Symposium, recognising the major scientific, aesthetic and recreational importance of maintaining the Saldanha-Langebaan ecosystems in as far as possible an unspoiled state, and noting the high pollution-potential and environmental impact of planned port activity, primary and secondary industry, and residential development, recommends that,

- (a) base-line studies and continued monitoring to develop and maintain pollution standards, be established in the Saldanha-Langebaan area; and,
  - (b) that the necessary enforcement of legislation be undertaken with regard to pollution in the region.
3. Oil and Chemical Spillage: The Symposium, recognising the serious threat of accidental oil and chemical spillage from port and industrial activity, recommends that:
  - (a) high priorities be given to measures to prevent the pollution of Saldanha Bay, its islands, and Langebaan Lagoon, these to be given maximum assistance with regard to staff and financial support; and,
  - (b) that anti-pollution measures be fully established before major port and industrial activity begins at Saldanha.
4. Botanical Research: The Symposium, recognising that land plants, seaweeds and other marine plant forms are the base of the food chain, and that plants are the main stabilizers of easily disturbed and eroded areas such as the Sandveld in the Saldanha-Langebaan region, notes the present lack of botanical research in the region, and recommends the expansion of staffing and financing of required research in marine and terrestrial plant ecology.
5. Nature Reserve: The Symposium, recognising the national and international scientific importance of the unique, inter-linked ecosystem of the Langebaan Lagoon, the Langebaan Peninsula, the adjacent islands and the lands surrounding the Lagoon; also noting that the almost undamaged state of these areas for study and controlled recreation may not last in the face of present pressures; recommends that these areas be proclaimed together as a Nature Reserve as a matter of urgency.
6. Removal of Invasive Alien Species: The Symposium, recognising the environmental threats posed by the growths of invasive alien shrubs and trees, recommends that they be removed and destroyed in the proposed reserve areas while the invasion is still minor enough for this to be practical; and that care be taken not to introduce seed, plants or soil containing seed, into uninfested areas.

7. Special Protection of Salt-Marshes: The Symposium, noting the major ecological importance of tidal marshes and sand-flats in the Langebaan Lagoon, and recognising the susceptibility of these areas to disturbance, urges the authorities to incorporate such areas as places of restricted access within a proposed Nature Reserve, and further urges that no vehicle be allowed on such areas.

BOTANICAL SOCIETY OF SOUTH AFRICA: At the recent Annual General Meeting of the Society in Cape Town the following members of SAAB were elected to offices in the Society:-

Prof H B Rycroft	(Vice-President)
Prof E A Schelpe	(Chairman of the Council)
Mr D Heesom	(Council Member)
Prof O A M Lewis	(Council Member)

FERN WORKSHOP: A proposed intensive course or workshop on Pteridophyta is to be conducted by Prof E A Schelpe at the Bolus Herbarium in Jan:Feb 1977. The suggested programme is a series of 10 lectures (2 per morning) with 4 afternoon practicals, one afternoon excursion and a full-day excursion on the Saturday. The main emphasis will be on the identification, phytogeography and biology of ferns plus the ecology of water ferns. Details will be given later in the year.

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EDITORS/REDAKSIE

Mr E G H Oliver & Miss M Welman

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