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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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### Change in Library Hours at the BRI

It was announced that the Mary Gunn Library of the Botanical Research Institute, Pretoria, will open at 09h00, instead of 07h45, as from 1 October 1986.

early stage to the fact that all indigenous aloes including natural hybrids, a number of Euphorbia species, all indigenous cycads and orchids, a number of stapeliads and various other succulents including Adenia, Adenium, Pachypodium, Anacampseros, etc. are specially protected by legislation in Zimbabwe and it is a criminal offence to remove any such plants from habitat. The penalties for contravening the law are severe and include imprisonment.

It is emphasised that habitat visits during Aloe 88 are essentially for viewing and for photography. Ample opportunity will exist for acquiring propagated plants at controlled plant sales in conjunction with the Aloe 88 National Aloe, Cactus and Succulent Show or from registered nurseries. Arrangements will be made, as was the case during Aloe 75, for the issue of phytosanitary certificates and export permits to cover the purchase of plants at the Show. The Society's well managed seed bank will operate during the Show and at the Congress venue. It should be borne in mind that Zimbabwe is a party to the CITES treaty.

#### **EXPECTED CLIMATE DURING ALOE 88**

Harare, where the main action will be, has an altitude of nearly 5000 feet (or 1 500 metres) and probably the most comfortable and healthy climate in the world. The climate is a temperate one with summer rain from November to April and dry cool winters from May to August. July is the coldest month with average day temperatures of 68 to 73°F or 20 to 23°C, though the evenings would be cool at this time. Mean relative humidity in Harare in July ranges from 50 to 55° and each day will have about 8 hours of sunshine. In the Victoria Falls and Hwange areas, the climate will be warmer during the day (77 - 88°F or 25 - 28°C) with bigger extremes of temperature between day and night. Mean relative humidity will be 45 to 50° with about 10 hours of sunshine each day.

#### **SAGP-NATUURBEWARINGSKOMITEE**

Die Natuurbewaringskomitee verteenwoordig een van die SAGP-Raad se werkkomitees. Aandag word hoofsaaklik aan natuurbewaringsaspekte wat die belange van plantkundiges raak, geskenk. Die sukses van die komitee hang grootliks af van die samewerking wat van SAGP-lede verkry word.

Lede word versoek om die komitee te kontak as hul bewus is van:

a. enige seldsame plantspesies of infraspesifieke taksons wat deur

uitsterwing bedreig word en/of nie in die register van bedreigde plante opgeneem is nie,

- b. bedreigde plantgemeenskappe of veldtipes waarvan die bewaring daarvan nie reeds aandag geniet nie en
- c. enige ontwikkeling of beplande ontwikkeling wat tot nadeel van die natuurlike omgewing geskied en wat 'n bedreiging vir bepaalde plantegroeitipes of planttaksons inhou.

Lede word verder versoek om waar moontlik, toepaslike natuurbewaringsake van 'n plaaslike aard aanvanklik onder die aandag van hul streeksverteenwoordiger op die natuurbewaringskomitee te bring. Vir die doel kan die volgende persone gekontak word:

**Noord-Transvaal:** Mnr R.H. Westfall  
Navorsingsinstituut vir Plantkunde  
Privaatsak X101  
PRETORIA  
0001

**Oos-Kaap:** Mnr A.R. Palmer  
Privaatsak 1006  
GRAHAMSTAD  
6140

**Suidwes-Kaap:** Prof. A.V. Hall  
Bulus-Herbarium  
Universiteit van Kaapstad  
RONDEBOSCH  
7700

**Oranje-Vrystaat:** Prof. H.J.T. Venter  
Departement Plantkunde  
Universiteit van die OVS  
Posbus 339  
BLOEMFONTEIN  
9300

Lede kan ook direk aan die Sekretaris van die SAGP (dr W.F. Reyneke) skryf, of aan die sameroeper van die SAGP-natuurbewaringskomitee (dr A.E. van Wyk), Departement Plantkunde, Universiteit van Pretoria, Pretoria 0002.

Daar word voorgestel dat waar plantkundiges in die verskillende streke vergader, natuurbewaring as 'n staande punt op die sakelys geplaas word en die tersaaklike inligting periodiek aan die sameroeper van die natuurbewaringskomitee deurgestuur word.

### **ORCHID TAXONOMY : RESEARCH POST AT THE UNIVERSITY OF CAPE TOWN**

A research assistant with experience in taxonomy is needed to help complete the Flora of Southern Africa volume on Orchidaceae. This is part of a team effort: about 65 species are to be done at the Bolus Herbarium and 164 at the Royal Botanic Gardens at Kew and elsewhere. The work will involve assisting with revisions and keys of some taxa and preparing formatted descriptions; describing distribution and main systematic features; and citing literature and specimens. The Bolus Herbarium has outstanding specimen collections and literature on orchids and is a centre for orchid taxonomic research. The study is being run concurrently with an investigation of Orchid flower structure by a CSIR Overseas Research Fellow.

Applicants should apply as soon as possible to the Assistant Director of the Bolus Herbarium, University of Cape Town, Rondebosch, 7700, enclosing a Curriculum Vitae giving qualifications and experience. The post is tenable from the present date until April 1987 with a possible extension for a further year. The salary will be at the normal rates based on qualifications and experience.

Assoc. Prof. A.V. Hall  
Assistant Director  
Bolus Herbarium  
University of Cape Town  
7700 RONDEBOSCH

### **NEWS FROM THE RIJKSHERBARIUM, LEIDEN, THE NETHERLANDS**

The Director, Prof. Dr. C. Kalkman, reports as follows:

For more than 20 years the Rijksherbarium has been housed in a so-called 'provisional' building, originally a textile factory. We have continued growing and the building has progressively deteriorated. Consequently, new and better housing has been negotiated several times and now at last something is going to happen.

This year the general departments of the institute (director's office, secretariat, financial administration, etc.), the main part of the library, the Phanerogam collections, and the research groups 'Tropical Phanerogams' (Flora Malesiana) and 'Dutch and European Flora' will move to the former University Library which has been rebuilt internally.

The other part of the institute (the research groups 'Cryptogams' and 'Comparative Morphology', their collections, their library and

and their laboratories) will remain at Schelpenkade 6 for the time being. They will eventually be moved, to a different building, but not before 1989.

You will understand that the moving operation will have a disruptive effect on our service to others. Preparing loans will be retarded very much, visitors are advised to announce their plans long before, the library will not always be fully accessible. We start moving late May and the process will continue at least all summer. Please continue to use our P.O. Box number for your communications. In due course I will inform you when the move has been completed. I hope that deleterious effects can be kept at a minimum.

Rijksherbarium  
Schelpenkade 6 - P.O. Box 9514  
2300 R A Leiden  
The Netherlands

#### **NEW PUBLICATIONS**

FLOWERS OF SOUTHERN AFRICA. This book comprising 100 plates and accompanying text, the work of the well-known artist Auriol Batten of East London, was launched at a ceremony at the Pretoria Art Museum on 1986.07.30 at 20h00. Dr B. de Winter, Director of the Botanical Research Institute, gave the address. The plates have been kindly donated to the nation by Auriol Batten and will be housed at the BRI, Pretoria. The book, costing R125 plus GST, and published by R. Frandsen, is available at most bookstores in the RSA.

**A PLANT ECOLOGICAL BIBLIOGRAPHY AND THESAURUS FOR SOUTHERN AFRICA UP TO 1975.** (Memoir No. 52). As a service to the botanical community, the BRI is offering on short loan to botanical institutions computer print-outs of the above memoir of the following (1 reference per page):

1. References for each province: Cape, 463 pages; OFS, 72 pages; Transvaal, 291 pages and Natal, 400 pages.
2. Biomes as per thesaurus: afro-alpine, aquatic, desert, forest, fynbos, grassland, karoo and woodlands/savanna/scrub. Total 330 pages.
3. Formations as per thesaurus: desert, dwarf shrubland, forest, grassland, savanna, woodland and herbland. Total 252 pages.

Institutions are at liberty to copy the printouts, which are available from the Director, Botanical Research Institute, Vegetation Resources Data Bank, Private Bag X101, Pretoria, 0001, but if used for publication purposes permission must be obtained from the BRI.

**RUTHERFORD, M.C. and WESTFALL, R.H. 1986. The biomes of southern Africa - an objective categorization. *Memoirs of the Botanical Survey of South Africa No. 54*, pp. 98. Price (GST excluded) local R4,35 other countries R5,40 (post free).**

The biome concept is clarified according to established definitions to permit objective categorization of the major natural systems of southern Africa south of 22°S. Seven biomes were diagnosed according to explicit criteria of dominant and codominant plant life forms at the appropriate scale of 1: 10 000 000. These are the Savanna, Nama-Karoo, Grassland, Succulent Karoo, Fynbos, Desert and Forest Biomes. The biomes correlate well with a combination of an index of summer aridity (SAI) and rainfall seasonality. This climatic combination also differentiates the biomes except for the Grassland Biome, the Forest Biome and areas of anthropogenically induced invasion of Grassland and Savanna Biomes by elements of the Nama-Karoo Biome. The Grassland Biome is differentiated climatically from Savanna in terms of minimum winter temperature in conjunction with moisture levels.

The role of zoological components in biome differentiation appears to be very limited. Absolute annual moisture levels, sometimes associated with edaphic factors, appear to form an appropriate basis for major subdivision of biomes. Ecological implications of the relationship between climate and life form dominance and codominance are discussed. Each biome is systematically described in terms of geographic, biotic, abiotic and resource relations. Various informal approaches to biome categorization in the region illustrate a general lack of appreciation of scale-dependant hierarchical levels. Problems of the relation between mapping scale, vegetation structure and floristic community are elucidated.

This work is available from the Directorate of Agricultural Information, Department of Agriculture and Water Supply, Private Bag X144, Pretoria, 0001, Republic of South Africa.

NEWS from SACNAS/NUUS van SARN:

**Registrasiestatistiek**

Registrasiestatistiek tot en met 31 Maart 1986 sien soos volg daaruit:

A. Aansoeke ontvang	3 398	
Natuurwetenskaplikes geregistreer	2 493	
Natuurwetenskaplikes-in- opleiding geregistreer	325	
	<hr/>	
<b>Totaal</b>	<b>2 818</b>	
Aansoeke afgekeur	96	
Aansoeke teruggetrek	113	
B. Statistiese Analise		%
Getal persone geregistreer	2 818	
Manlik	2 596	92
Vroulik	222	8
Afrikaanssprekend	1 617	57
Engelssprekend	1 201	43
<b>Ouderdomsverspreiding</b>		
<b>60 plus</b>	132	5
<b>50 - 59</b>	457	17
<b>40 - 49</b>	857	30
<b>30 - 39</b>	887	31
<b>20 - 29</b>	485	17
<b>Geografiese verspreiding</b>		
Kaap	529	19
Natal	221	8
Oranje-Vrystaat	185	7
Transvaal	1 813	64
Elders	70	2

**Kwalifikasieverspreiding**

B Sc	299	11
4 jr. B Sc/B Sc (Hons)	691	24
M Sc	769	27
Ph D/D Sc	1 039	37
Ander	20	1

**Dissiplineverspreiding**

Chemiese Wetenskappe	637	23
Fisiese Wetenskappe	287	10
Aardwetenskappe	549	19
Plantkundige Wetenskappe	220	8
Dierkundige Wetenskappe	251	9
Wiskundige Wetenskappe	162	6
Planteproduksie	396	14
Veekunde	233	8
Mikrobiologiese Wetenskappe	83	3

**Beroepsektor**

Universiteit	672	24
Technikon	40	1
Staat	711	26
Statutêre Rade	539	19
Privaatsektor	789	28
Afgetree	25	1
Studeer Voltyds	42	1

**REVIEW OF THE WORK OF THE BOTANICAL RESEARCH INSTITUTE PRETORIA  
FOR 1985/86** (1st April 1985 - 31st March 1986)

**INTRODUCTION**

Good progress has been made with research and the publications of the Institute reflect this very clearly. Nevertheless, there is a steady erosion of available research funds due to minimal growth and continuing inflation. The unfilled research posts now constitute nearly 11% of the total, a situation which may be partially responsible for a drop in the total number of individual



research papers published this year. The production of journals has, however, remained very stable and the publication of two Memoirs, one volume of Palaeoflora, one volume and two parts of volumes of the Flora of southern Africa is remarkable progress under present circumstances.

The increasing demand for botanical information and plant identifications is reflected in the 28 000 plant identifications done last year. This has, however, meant that most of the professional staff in the herbaria have not had any time for research, a situation which is severely affecting their careers. The initiatives being taken in connection with pasture research have opened new perspectives also in botanical research. These are now being actively pursued.

#### **HERBARIUM DIVISION**

Due to serious understaffing problems, the four herbaria of the Institute are finding it increasingly difficult to cope with the existing workload. This is affecting all three of the major areas of performance, namely, curation, research and information services. This has resulted largely because the staff complement has remained static for more than 20 years while, in the last seven years alone, the workload has increased by over 220%. Figures for the National Herbarium show that during this period the number of revisions incorporated each year has increased by 348%, exchanges with other herbaria by 330%, accessions by 57%, identifications by 40%, registered projects by 400% and the maintenance and updating of PRECIS by over 300%. Every effort is being made to try and deal with the problems being experienced.

#### **National Herbarium, Pretoria (PRE)**

##### Curation

Approximately 140 scientific journals were scanned for taxonomic and nomenclatural changes covering the FSA-region. Statistics available for the monocotyledon families show that 530 new names were adopted, extracted from 41 publications. Of these, 111 were new species. The updating of the PRECIS databank continued with ± 7 400 specimens having undergone name changes and 18 400 specimens

having had their grid references added or corrected. Other miscellaneous changes affected 3 620 specimens. Distribution records were significantly extended for 63 taxa, mostly at the provincial level. These included a number of new records for southern Africa largely involving the mosses and lichens.

#### Computerization

A multi-user Burroughs computer was purchased. This will be used in the herbarium as a management, curatorial and research tool and should significantly boost efficiency and productivity. Mr T.H. Arnold is currently designing various applications to improve the handling of plant identifications, loans and exchanges as well as the printing of specimen labels. It is also planned to use the computer to selectively regulate specimen accessions into the herbarium. This new computer will be directly linked by modem to the B7900 mainframe housing the PRECIS databank.

#### Accommodation

Electrification of the north side of the herbarium wings is complete. No progress has been made with the installation of three additional working bays on the south side of each wing. Plans have been submitted for a new SEM room and for a two-room prefab building in the eastern courtyard to house the four new plant driers and the deep-freezers used to decontaminate specimens. No new herbarium cabinets were purchased. Fire protection and insect proofing of the herbarium is due to start towards the end of 1986. Alterations costing ± R1 000 000 will take place over a 8-10 month period and will seriously affect all activities in the herbarium.

#### Collecting expeditions

These include trips to Zululand (general collecting and Poaceae), south-east OFS and northern Cape (Poaceae, general collecting and Bryophyta), Natal (Vigna), eastern Transvaal (Transvaal wild flowers facet), Natal Drakensberg and southern Cape (lichens).

#### Research and related activities

The family Polygonaceae (G. Germishuizen). The genera Polygonum, Bilderdykia and Reynoutria have been written up in FSA

format and submitted to the editor. Revisions of Oxygonum and Rumex are progressing well with two new Oxygonum taxa having been prepared for publication.

Revision of Riccia (Hepaticae) (S. Perold). This facet is nearing completion. Seven papers were prepared and submitted for publication. These include six new species as well as a new section and subgenus.

Revision of Vigna (Fabaceae) (B. Pienaar). SEM studies of leaf surfaces produced no significant characters of taxonomic value. Two distinct groups were recognized based on keel orientation. The structure and location of glands was also useful in the grouping of taxa.

Revision of Carex (Cyperaceae) (C. Reid). Work on this genus was recently started and to date has been confined to a study of PRE material. A number of problem taxa have been identified as well as four possibly new species.

Contributions to the moss flora (J. van Rooy). Work on the family Bryaceae for the 2nd fascicle was completed. As soon as all the illustrations have been prepared, this fascicle will be submitted for publication. A revision of the family Orthotrichaceae (6 genera, 27 species) was started for the 3rd fascicle.

Transvaal wild flowers. Vol. 2 (G. Germishuizen). Eighty species (13% of total) have been illustrated by the artist Mrs A. Fabian. The text for half of these has been prepared.

Plant species and synonym list (various contributors). Work on Part 2 of the second edition was completed. This covers all dicotyledon families. The manuscript is awaiting checking before being submitted for publication.

#### Research support

Scanning electron microscope (S. Perold). 1968 micrographs were prepared for various BRI and outside workers. These include — Ehrharta leaf surfaces, lemmas of Panicaceae and Digitaria, Cucurbitaceae fruit and seed surfaces. lichen thallii, Vigna inflorescence and leaf surfaces, fossil leaf cuticles, Riccia spores

and thalli, fern spores and Euphorbia leaf and seed surfaces. Dr H. Glen also continued his investigation of Aloe leaf surfaces.

Determination of priority collecting areas (various contributors). The number of species and specimens per 1/4 degree square was extracted from the PRECIS databank and used to plot species and specimen frequency distribution maps for southern Africa. Identified from the maps were a number of fairly well defined areas which are poorly represented by collections in the National Herbarium.

Based on this information, expeditions were undertaken to fifteen 1/4 degree squares in three of the areas (Natal, south-east OFS and central Cape) to test the extent to which intensive collecting could improve the representation of taxa in the PRE Herbarium. In fourteen of the fifteen squares the holdings were increased significantly (320% over 1 000%).

Special collecting vehicle (M. Panagos). A Nissan Ekonovan is being fitted as a special collecting vehicle. A two-way radio has been purchased and a special roofrack designed and fitted to carry 12 plant presses. The roofrack will facilitate rapid drying of plant material while the vehicle is moving. A roll-up awning has been fitted to shelter workers during unfavourable weather. Fitting of the interior of the vehicle is still at the design stage.

Collecting Poaceae for the National Herbarium (L. Fish). A single collecting trip was undertaken to poorly represented areas of the OFS and north-eastern Cape. 169 specimens representing 156 species were collected. For both species and specimens, representation in the PRE herbarium was increased significantly (more than 1 500%) for four of the five 1/4 degree squares sampled. Over 800 duplicates were collected for distribution to herbaria worldwide.

Expansion of the fruit and seed collection (E. Retief). This has been contributed to largely by material collected during fieldwork for other facets. The fruit collection was extended by 392 to 4 335 collections. The seed collection was extended by 591 to 4 003 collections.

Publications. Fourteen articles appeared in various local as well as overseas publications. A further 32 articles are in press. The plant names in Acocks's Veld types of South Africa

were updated by Mrs E. van Hoepen in preparation for the publication of the next edition of this book.

Contributions to outside publications. Various members of the division contributed to the Ciba Geigy book Weeds of crops and gardens in southern Africa (published 1985) and to the Auriol Batten book Flowers of southern Africa by checking the texts. Assistance was also given by Mr G. Germishuizen towards the books Southern African butterflies by C. Abbott and S. Henning and Children of the hours by Cythna Letty.

Plant identification services. 16 248 specimens were identified for officers of the Institute, various State Departments and Provincial Administrations, universities and neighbouring states. In addition, identifications for visitors numbered 925. Enquiries received by telephone totalled 1 136. New accessions to the herbarium numbered 20 779. Because of a shortage of typists, the typing of specimen labels backlog remains at 12 months.

Loans and exchanges. 67 loans (comprising 7 164 specimens) were sent out and 45 loans (2 910 specimens) returned. The total number of loans out are 288 (35 069 specimens).

#### **Natal Herbarium, Durban (NH)**

With Mr B.D. Schrire transferred to the Royal Botanic Gardens, Kew, London, as the South African Liaison Officer, Mrs M. Jordaan was appointed as curator of the herbarium and officer in charge of the unit. Besides administering the unit, she also continued to be responsible for the bulk of identifications received, assisted by Mr A.M. Ngwenya and Mr C.N. Buthelezi. During this period, it was possible to maintain a good service record despite the serious manpower shortage. This include 4 606 plant identifications, assisting 409 visitors, handling 729 telephone enquiries, dispatching 1 272 specimens out on loan and accessioning 2 765 specimens.

Considerable time was spent sorting and refining taxa in the herbarium and a start was made to remove specimens of western Cape taxa. To date, 370 monocotyledon specimens have been sent to the National Herbarium and 233 to the Stellenbosch Herbarium. When time permitted, studies in the Celastraceae and Cussonia were continued. Plans were submitted to have the poorly utilized room

adjacent to the herbarium insect-proofed and converted into a mounting and parcelling room.

#### **Government Herbarium, Grahamstown (GRA)**

The staff are now well settled into their new quarters with all activities functioning normally. There has been an overall increase in services with 3 241 plant specimens identified, assistance given 1 109 visitors, 494 telephone enquiries dealt with and 13 loans (1 185 specimens) sent out. A special effort was made to improve the quality of the collections by scanning through covers, renaming misidentified specimens and generally sorting taxa into more homogeneous groups. 253 genera were examined and the names of 125 specimens updated.

Mrs Rei Hart was appointed to a part-time post, funded by the Pocock bequest to the Albany Museum. She will curate the Pocock Marine algae collection which last received attention in 1969. To date, she has systematically examined the green and brown algae and has mounted, sorted and accessioned all the material in 74 genera. Mr Neil Abrahams continued giving voluntary assistance in the herbarium by helping with the labelling and mounting of specimens. The block clearing of alien plants on the Grahamstown Nature Reserve remains an endless problem. This work continued throughout the year with the reserve curator assisted by the Herbarium Laboratory Assistant for a period of five months. Despite this, the problem is still not under control.

#### **Government Herbarium, Stellenbosch (STE)**

Mr R.O. Moffett took over from Mrs C.M. van Wyk (who was transferred to PRE) as curator of the herbarium. A total of 2 995 specimens was identified, 312 visitors were assisted, telephone enquiries numbered 332, accessions into the herbarium totalled 4810 and 904 specimens were sent out on loan. Because of the staff shortage and the identification backlog that existed, an additional 636 specimens were sent to PRE where they were identified by Mrs van Wyk. The naming backlog has now largely disappeared.

Four collecting trips were undertaken to the following areas

— De Hoop, Sutherland, Barrydale (Langeberge) and to the southern Karoo. A total of 755 collections was made. Mr Moffett continued with his study of the genus Rhus which is now largely completed. A paper titled 'A SEM study of the leaf of Rhus species in southern Africa' was presented at the SAAB Congress in Umtata, Transkei.

## FLORA RESEARCH DIVISION

### Flora of southern Africa (FSA)

The FSA subproject has had impact outside the Institute in several ways. The Department provided extra support through awarding a research contract to the University of Cape Town, for the Orchidaceae volume; following the untimely death of Prof. E.A. Schelpe, the contract was taken up by Prof. A.V. Hall. The fourth meeting of the FSA working group was held during the Congress of the South African Association of Botanists in January 1986. News of interest to FSA contributors was circulated in Forum Botanicum, the newsletter of SAAB.

Three Flora fascicles were published. Vol. 4,2 by Mrs A.A. Obermeyer (Mauve), who has recently retired, for the families Xyridaceae, Eriocaulaceae, Commelinaceae, Pontederiaceae and Juncaceae. The fascicle covers 17 genera and 106 species in the five families. Vol. 14 by H.R. Tölken, formerly of the BRI and now at the herbarium in Adelaide, Australia, covers the family Crassulaceae, with six genera and 215 species (345 species and infraspecific taxa). Vol. 31,1,2 by C. Puff covers the tribes Paederieae, Anthospermeae and Rubieae in the Rubiaceae, comprising eight genera and 74 species. Dr Puff, of the Institute for Botany at the University of Vienna, completed the research on a fellowship from the Department.

The List of species of southern African plants, Edn 2, Part 1, covering cryptogams, gymnosperms and monocots was published, and Part 2, covering dicots, is nearly complete. The List of species is a precursor to the FSA that presents up-to-date coverage of all taxa at increasing levels of approximation, and future editions will contain additional information, such as distribution, conservation status and life form. Institute staff members, and outside contributors on contract made the following progress with research facets for the FSA.

Lichens. Prof. O. Almborn of Lund, Sweden, has increased the potential contributors to the lichen volume to 33, and has made a formal division of the work into fascicles.

Bryophyta. The genus Bryum was completed by Mr J. van Rooy, and Fascicle 2 by Dr R.E. Magill of the Missouri Botanical Garden has gone to press.

Vol. 2. Poaceae — Oryzoideae, Centostecoideae and Bambusoideae. The draft for Ehrharta was completed by Dr G.E. Gibbs Russell, but a number of type specimens must be seen. All types have been examined for Oryza, Leersia, Prosphytochloa and Megastachya.

Vol. 4. Restionaceae. Dr H.P. Linder has been on leave travelling and collecting plants in tropical Africa for a year, so little work has been done. However, a conspectus of 318 species, arranged according to his own generic classification, was published in Bothalia 15, 3 & 4 (1985).

Vol. 5. Liliaceae—Aloinae—Aloe. The FSA manuscript for Aloe by Dr H.F. Glen and Mr D.S. Hardy is nearing completion. Dr Glen has carried out an extensive survey of leaf epidermal types using the scanning electron microscope, assisted by Mrs S. Perold.

Vol. 8. Orchidaceae. Prof. A.V. Hall has taken over the contract on the death of Prof. E.A. Schelpe. Thirteen genera were completed by Mrs N.C. Anthony, who resigned in July 1985. Of the remaining work to be done, Mrs J. Stewart, of the Herbarium, Royal Botanic Gardens, Kew, has agreed to contribute 23 genera, and Miss K.L. Immelman will contribute Holothrix. There are therefore 17 genera, comprising about 65 species, that still require attention.

Vol. 9. Salicaceae, Fagaceae, Urticaceae and Piperaceae. FSA manuscripts have been prepared for all genera, and only a few type specimens are needed before the work can be finalized. The work on Urticaceae has been done in collaboration with Dr I. Friis of the Botanical Museum and Herbarium, Copenhagen.

Vol. 11. Mesembryanthemaceae. A treatment of Astridia, Acrodon and Ebracteola is in press in Bothalia.



- Vol. 16. Fabaceae—Desmodieae. Mr B.D. Schrire's account of the tribe is in press in Bothalia. The FSA fascicle of which it forms a part will not appear until other genera have been completed.
- Fabaceae—Millettieae. Mr Schrire has studied generic limits between Mundulea and Tephrosia, and has produced a conspectus of the species and species complexes in Tephrosia subgenus Barbistyla, which will be published in Bothalia to serve as an aid to identification until the FSA treatment is complete.
- Vol. 25. Ericaceae. Mr E.G.H. Oliver has continued studies in the 'minor genera', concentrating on Sympieza, Ericinella, Coilostigma, Blaeria and Anomalanthus. Monographic treatments of Ericinella and Coilostigma are in press in Bothalia, but future work will be written in FSA format.
- Vol. 30. Acanthaceae—Justicia. Miss Immelman's completed FSA manuscript is with the editor, and awaits contributions from researchers from other institutions before the fascicle can be published.

### Pretoria Flora

Work this year has been concentrated in Poaceae, which was completed, translated into Afrikaans, and typeset, and in Asteraceae. Of a total of about 1 780 species to be treated in the Pretoria Flora, only about 100 are still outstanding.

### Palaeoflora of southern Africa

The Prodromus of South African megafloras, Devonian to Lower Cretaceous, by Drs J.M. and H.M. Anderson was published. It covers all plant fossils known for southern Africa during the Pangaea period. Eighteen different 'floras' dominated at different times, and each flora is related to major geological events such as glaciation. The Andersons are now preparing the second in the Molteno Formation series, dealing with all the gymnosperms except Dicroidium, which was published in Volume 1.

### Liaison Officer, Kew

Mr B.D. Schrire assumed duty as the new Liaison Officer. He has continued to provide information about taxonomic and related

subjects to researchers on the southern African flora, and to pursue his research in Fabaceae. He has developed a particular interest in taxon databases, and is co-operating in the International Legume Database as the person responsible for Indigoferaeae.

UNIVERSITY OF CAPE TOWN — SMUTS MEMORIAL FELLOWSHIP

VALUE: R10 000, renewable for second year. Applications for the abovementioned Fellowship are invited from suitably qualified persons wishing to undertake study and research in the systematics and geographical distribution of the South African flora. The Fellowship is open to persons of any nationality, although preference may be given to a graduate of UCT. The incumbent will be required to work under the supervision of the UCT Department of Botany or at the National Botanic Gardens, Kirstenbosch, where research facilities and accommodation may be provided. Further details and application forms are available from The Registrar, Postgraduate Scholarships Office, University of Cape Town, Private Bag, Rondebosch 7700.

The closing date for receipt of applications is 31st October 1986.

REDAKTRISE/EDITOR

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