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

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## Publication from Botanical Research Institute

'A plant ecological bibliography and thesaurus for southern Africa up to 1975' by Antoinette P. Backer, D.J.B. Killick and D. Edwards has been published as Mem. bot. Surv. S. Afr. No. 52, 216 pp. (1986). It is available from the Directorate of Agricultural Information, Private Bag X144, Pretoria, 0001, at R15,50 plus GST, post free. The overseas price is R19,40, post free.

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University, Houghton, MI 49931, USA). Housing registration must be sent to Dr Elmar Hartmann (Institut für Allgemeine Botanik der Universität, Saarstrasse 21, D-6500 Mainz, FRG). Dr Hans Rudolph, Universität Kiel, and Dr Zenoske Iwatsuki, Hiroshima University, are also serving on the workshop organizing committee.

### **IABG Meeting**

A general meeting of the International Association of Botanic Gardens will be held immediately after the Congress at the "Palmen-garten" in Frankfurt. An organizing committee consisting of Hartmut Ern (Berlin), Kai Larsen (Copenhagen), Brian Morley (Adelaide) and Gustav Schoser (Frankfurt) has now been appointed to work out the detailed programme. Those interested can obtain further information on the programme and the exact dates by writing to: Dr Gustav Schoser, Palmengarten, Siesmayerstr. 81, D-6000 Frankfurt a.M.

### **Yeast-Like Fungi**

From 3 to 6 August 1987 the Centraalbureau voor Schimmelcultures will host a post-Congress Symposium on the taxonomy and ecology of yeast-like fungi, entitled: **The Expanding Realm of Yeast-Like Fungi**. There is still a wide gap between the methods employed for the study of yeasts and of moulds, while it is increasingly realized that, on both sides of this "borderline", different parts of the life cycle of one and the same organism may be found. The confrontation of these dissimilar areas of research opens new horizons, both with respect to fundamental research and to (industrial) applications. The Scientific Programme will comprise invited plenary lectures only. Main topics will be (1) a taxonomic review of hitherto known yeast-like fungi and related organisms, (2) the frontiers of development of a selection of taxonomic methods, and (3) ecology and the species problem. Poster contributions are accepted. Abstracts of invited papers and of poster contributions will appear in advance in the journal "Antonie van Leeuwenhoek Reports", while full invited papers will later be published by Elsevier Science Publishers. The symposium will be held in Amersfoort, The Netherlands. The **Organizing Committee** consists of G.S. de Hoog (Netherlands), M.T. Smith (Netherlands), A.C.M. Weijman (Netherlands), L.R. Batra (USA), B.Kendrick (Canada).

T. Nakase (Japan), F. Oberwinkler (FRG), P. Blanz (FRG), and J.P. van der Walt (South Africa).

For information please write to: G.S. de Hoog and A.C.M. Weijman, Centraalbureau voor Schimmelcultures, P.O. Box 273, NL-3740 AG Baarn, Netherlands (phone: 2154-11841).

**Publications on the Palaeoflora of southern Africa.**

The following two publications can be obtained from A.A. Balkema, P.O. Box 317, Claremont, 7735.

**Palaeoflora of southern Africa:** Prodrumus of South African megafloras, Devonian to Lower Cretaceous

**by**

JOHN M. ANDERSON & HEIDI M. ANDERSON

Botanical Research Institute, Pretoria, South Africa

This study is ultimately concerned with floristics and evolution-ary trends witnessed in the preserved South African megaplants over the 300 million year span from the Devonian to Lower Cretaceous; from the appearance of vascular land plants to dramatic rise of the flowering plants. Most gaps in previous sampling are filled and a comprehensive standardized taxonomic revision is given of all the available material from South Africa.

91 genera and around 263 species of megaplants are recognised. A full revision of the taxa, bar those confined to the Molteno Formation and Drakensberg Group is given. Around 70% of the species recognised and described in this volume are either new or substantially different in concept from earlier works.

The catalogue includes 226 plates, illustrates 266 of the best preserved palaeodemes, and totals 1888 individual figures.

Eighteen successive megafloras from the Devonian to the L. Cretaceous in South Africa are recognised. Two-way matrix floristic tables display the characteristics (localities, species, abundance) of each megaflorea. Concise data on lithostratigraphy, palaeo-environment, collections, preservation, associations, accompanying fauna, and age are recorded. A balloon diagram illustrates the broad picture of the evolution of plants as witnessed in South Africa. At this level of resolution (classes, and orders) the pattern roughly parallels the global picture. In South Africa

the Permian and Triassic deposits are clearly the most productive, the Devonian and L. Cretaceous intermediate, and the Carboniferous and Jurassic barren or nearly so. Diversity trends are plotted which reveal maximum species numbers in the U. Triassic (115 species in the Molteno Fm.). The Euramerican curve shows fundamental differences from that for South Africa and Gondwana. The Carboniferous and Jurassic hiatuses in Gondwana were contemporaneous with periods of flourishing tropical and warm temperature growth and increasing diversity in Euramerica. The book also contains bibliographies of the 35 most important collectors of fossil megaplants in South Africa from 1845 to the present. A comprehensive annotated bibliography of publications on pre-angiosperm megaplants of South Africa is included in the book.

**Palaeoflora of Southern Africa: Molteno Formation (Triassic)**

Volume I: Part 1. Introduction/Part 2. *Dicroidium*

by

JOHN M. ANDERSON & HEIDI M. ANDERSON

Botanical Research Institute, Pretoria, South Africa

This is the first volume of a series of six on the Molteno Formation palaeoflora which will appear at intervals over the next few years. The series will include coverage of the microflora as well as the diverse insect fauna. The final volume will consist of a systematic account of each locality (lithology, depositional environment, fossil communities) and a phytosociological analysis of the flora as a whole. Throughout, taxonomic and phytogeographic considerations involve the full Gondwana Triassic Realm, which makes the publication of interest to palaeontologists from all parts of the world.

This first volume consists of two parts: The first being a survey of Gondwana Triassic megafloral formations, localities and literature; and a synopsis of the Molteno Formation palaeoflora in which some 112 foliage and 45 fruit and seed taxa are provisionally recognised. The second consists of a detailed taxonomic revision of the seed fern *Dicroidium*, the most abundant diverse genus in the Molteno flora and indeed throughout the Gondwana Triassic Realm. This revision of the genus, supported by cuticular studies, recognises 9 species including a total of 31 infra-specific taxa.

The Molteno ranks as the most productive (localities, diversity, preservation) megaplant bearing formation of any age in S. Africa, and probably also of the Gondwana Triassic. The collection on which the study is based as begun by the authors in 1967 and consists to date of 14 000 catalogued slabs from 44 localities (67 assemblages). It provides an excellent opportunity for reassessing traditional approaches followed in sampling and describing fossil floras.

Forthcoming volumes:

Vol. 2 Part 3 Gymnosperms (excl. Dicr.)

Publication: August 1986

About 400 pages, R100.00

Vol. 3 Part 4 Non-gymnosperms (1987)

Vol. 4 Part 5 Fruit and seeds

Part 6 Spores and pollen grains

Vol. 5 Part 7 Wood

Part 8 Fauna

Vol. 6 Part 9 Localities and communities

Part 10 General synthesis

13th Annual Congress of SAAB

The next Annual Congress of SAAB will be presented by the Department of Biology, University of Natal, Durban, from 12 - 17 January, 1987. The Phycological Society of Southern Africa will join SAAB in holding this Congress. Plenary sessions and a number of workshops and parallel sessions are being planned. SAAB's theme for the plenary sessions is: "Contemporary Aspects of Seed Biology". The venue will be the Science Lecture Complex at the University of Natal. Accommodation will be available at a University residence.

Four post-Congress tours are being planned, among them two 3-day excursions from 17 - 19th January. On the field trip to the Mtunzini Coastal Forest - Ngoye Forest - Hluhluwe Game Reserve, attention will be focussed on species diversity and vegetation dynamics in different seral stages of coastal and inland forest patches.

Natal Parks Board research staff will demonstrate management techniques used to control bush encroachment and promote establishment of different vegetation types. The Umtamvuna Forest field trip will be devoted to this unusual forest which occurs on Table Mountain Sandstone at low altitude and latitude. Many endemic species occur scattered through this area, making the trip of interest to the taxonomist who doesn't mind walking! Two one-day excursions will take place on 17th January. A visit to the Beachwood Mangrove Swamp will focus on mangrove ecology, plant taxonomy and the influence of heterotrophs on the ecosystem. A SCUBA diving trip to Park Rynie is also planned. The reef is rich in corals, algae and many forms of invertebrate and vertebrate life. Access is by ski-boat and the depth is down to 30 m. Scientific divers are asked to provide their own equipment.

For more information, contact Dr A.M. Amory, Secretary: Organizing Committee SAAB, Department of Biology, University of Natal, King George V Avenue, Durban, 4001.

**EMPLOYMENT OPPORTUNITY : SENIOR RESEARCHER IN REMOTE SENSING,  
SOUTH AFRICAN FORESTRY RESEARCH INSTITUTE, PRETORIA**

Salary negotiable up to R30918 per annum.

**Requirements:** A recognised four year Bachelors degree or equivalent qualification plus a post graduate qualification in the appropriate field or equivalent experience.

**Duties:** The successful applicant will join a team of forestry research scientists active in the fields of forestry and natural resources and have specific responsibilities for leadership in planning, overseeing and undertaking research on digital image analysis using the most modern processing equipment. The principal objective is to research and develop field applications of remote sensing in the effective management of timber plantations and natural resources in mountain catchment and other forestry conservation areas. Techniques must be developed to detect, map and monitor plantations and forests, areas burnt in veld fires, vegetation recovery, plant communities and saturated zones in mountain catchments and other applications. The relationship between spec-

tral information and soils and vegetation will require specific study. The results of the research on field applications must be effectively conveyed to forestry managers for application in their normal tasks.

**NOTE:** The following will be recommendations

- \* Formal studies in the fields of forestry, botany, hydrology, soil science or agriculture and biometrics.
- \* Experience with application of computers and adequate programming ability, especially in higher-level languages
- \* Practical experience in digital image analysis and interpretation.

Applications must be submitted on form Z83, accompanied by certified copies of qualifications and two recent testimonials to Director, South African Forestry Research Institute, P O Box 727, Pretoria 0001. The closing date for applications is 30 September 1986. Enquiries should be directed to Mr P.A. Kirkam (Tel. (012) 28 7120).

#### **Instelling van die Schweickerdtmedalje by die Universiteit van Pretoria**

Die Hans Schweickerdtmedalje is vanjaar die eerste keer toegeken aan die Honneursstudent wat die beste skripsie oor enige aspek van Plantkunde (met die uitsondering van saad) gelewer het. Die eerste ontvanger van die medalje is mnr Gideon Smith. Die titel van sy skripsie was "Die taksonomiese status van die monotipiese genusse Chortolirion Berger en Pollnizia Uitewaal in die tribus Aloineae". Dr W.F. Reyneke was sy skripsieleier.

Die medalje is vernoem na Prof. H.G.W.J. Schweickerdt, een van die vorige hoofde van die Departement Plantkunde. Die Schweickerdt-familie het besluit om die medalje ter ere van sy nagedagtenis te skenk. Hy was self nooit getroud nie, maar sy broerskinders was teenwoordig by die oorhandiging van die medalje.

In Memoriam, C.E.B. Bremekamp, 1888 - 1984

The death on 21 December 1984 of Prof. C.E.B. Bremekamp, who, in the first half of this century, made an important contribution to the knowledge of the South African flora, probably escaped the notice of most South African botanists.

Cornelis Elisa Bertus Bremekamp was born in Dordrecht, the Netherlands on 7 February 1888 and received a D.Sc. degree from the University of Utrecht in 1912 with a thesis dealing with the geotropy of twining plants. He left for Dutch East India where he was employed at the Java Sugar Experiment Station until 1914, studying the diseases of sugar cane. He taught biology at the Medical School in Soerabaja from 1915 - 1921, when he returned to the Netherlands and worked at the University of Amsterdam for two years.

In 1924 he accepted the post of Professor of Botany at the Transvaal University College, where at first, he concentrated on plant physiology. However, stimulated by the indigenous flora, his interests turned to morphology and taxonomy. He undertook several collecting trips, many jointly with Dr H.G. Schweickerdt in the Transvaal, Rhodesia and Mozambique. His specimens are housed mainly at the Botanical Research Institute and the University of Pretoria. Perhaps his most important student is Mrs. A.A. Mauve (née Obermeyer), recipient of the SAAB Senior Medal for Botany.

Prof. Bremekamp returned to the Netherlands in 1931, where he settled at Bilthoven and worked at the Botanical Museum and Herbarium (later Institute for Systematic Botany) until 1976. His main interests were the Rubiaceae and Acanthaceae, where his most important publications, in a South African sense, were on Oldenlandia sens. lat. and Pavetta (both Rubiaceae). He was a member of the Royal Dutch Academy of Sciences and honorary member of the Royal Dutch Botanical Society. He is commemorated in the tropical African Rubiaceae genus Batopedina Verdc. (derived from Batopedon, a Greek rendering of his name) and the Asian Bremekampia Sreemadhavan (Acanthaceae), as well as several species names.

W.G.W.



**News from the South African Council for Natural Scientists/Nuus van die Suid-Afrikaanse Raad vir Natuurwetenskaplikes**

**Use of the title "Sci.Nat."**

All registered natural scientists are again urged to indicate, wherever appropriate, the fact that they are registered by affixing the title "Sci.Nat." immediately after their names, e.g.

Prof J J Doe, Sci.Nat., Ph.D etc. etc.

**Die Wet en die reëls**

Stappe word gedoen om die Wet op Natuurwetenskaplikes, 1982 en die Wysigingswet op Natuurwetenskaplikes, 1985 te konsolideer en, tesame met al die reëls ens, in A-5 formaat te laat druk. Die publikasie (die Engelse en Afrikaanse tekse sal apart verskyn) sal aan belanghebbendes beskikbaar gestel word teen 'n verkoopprijs wat net die Raad se druk- en verspreidingskoste sal dek. Nadere inligting sal in 'n latere nuusbrief bekend gemaak word.

**Natuurwetenskaplikes-in-opleiding**

1. Natuurwetenskaplikes-in-opleiding word daaraan herinner dat die onus op hulle rus, om, nadat hul die nodige ervaring oor die voorgeskrewe tydperke opgedoen het, aansoek te doen om registrasie as natuurwetenskaplikes.
2. Aansoeke moet vergesel gaan van volledige inligting oor die verskeidenheid, aard en standaard van natuurwetenskaplike werk wat verrig is, insluitende besonderhede oor enige publikasies wat verskyn het in vakkundige tydskrifte. Twee referentverslae, op die voorgeskrewe vorm, moet ook ingedien word.

**Waiving of annual fees**

Council has decided to consider, on merit, applications for the waiving of annual fees from natural scientists who have retired on pension or who have temporarily left the labour market. This will enable the persons concerned to retain their registration as natural scientists.

### **Attempted isolation of SA Natural Scientists**

The editors of the eminent international scientific journals "Science" and "Nature" published letters addressed to them by the President of the Council in which the proposed banning of SA natural scientists from attending the International Archeological Congress was opposed. Particular reference was again made to Council's stated support of the universality of science, its stance in favour of the free and unfettered pursuit of science and its constant aim to promote the interests of all natural scientists, irrespective of race, colour, creed or sex.

### **Change of address and status**

Considerable difficulty is experienced in keeping track of natural scientists and natural scientists in training who have changed their addresses. It would, therefore, be appreciated if Council could be advised timeously of any change of address and/or status so that the records may be updated. In correspondence to Council kindly quote your registration number as this also facilitates matters.

### **Computer Scientists**

Contrary to the garbled interpretations which appeared of a press statement released by Council, computer scientists who comply with the requirements set out in Act 55 of 1982, are eligible for registration as natural scientists. Their status remains unimpaired in spite of the fact that the profession of computer scientist has been deleted from the Schedule to Act 55 of 1982.

### **REDAKTRISE/EDITOR**

**Mej. W.G. Welman, Sci.Nat.**  
**P/A Navorsingsinstituut vir Plantkunde**  
**Privaatsak X101**  
**PRETORIA**  
**0001**