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

PRESIDENT'S ANNUAL REPORT - JULY - DECEMBER 1974

1974 has been a momentous year in the short history of the South African Association of Botanists in that we have decided to mount our own annual congress on a completely independent basis and to hold this in January of each year. This has meant a restructuring of the yearly programme of SAAB to allow for the holding of our A.G.M. in January instead of July and has called for the election of office bearers to take place in December in place of June. This will also mean that for reasons of convenience over the change-over period your present Council will have an unconstitutional lifespan (July 1974 - December 1975), a situation which we trust will be ratified at this A.G.M.!

Many of us will regret the severing of our links with our old parent body the S_2A_3 which has done so much for the furtherance of Science in South Africa, particularly in the promotion of interdisciplinary contact at its prestigious annual conferences. Alas, with the phenomenal increase in scientific knowledge over the past couple of decades, increasing specialisation has become inevitable and the Pan-Scientific approach of bodies such as S_2A_3 appears to be no longer practical. For those of us who may feel our sense of loyalty to S_2A_3 offended by this break in ties it must be some consolation to know that SAAB was the last of the affiliated daughter Societies of S_2A_3 to continue maintaining its links with the parent body.

Although our first independent congress and major symposium will take place in splendid isolation in 1975 it is intended by Council that in future years our congresses will be held in association with those of other cognate societies e.g. the Grasslands Society. There has been the suggestion that our association in January 1976 be with the SAAB - Zoological Society - Royal Society jointly sponsored Saldanha Bay Symposium in Cape Town.

Another departure from precedent has been the transfer of executive control of SAAB from the Transvaal to the Cape for the present year. This has been organised to satisfy the feeling among many of our members that the responsibility for running our Association should be shared between the four provinces. To allow for the satisfactory implementation of this policy while at the same time maintaining

efficient administration it will probably be necessary for us to ammend the constitution to allow for "block elections" of Council Executives to take place in the future.

A precis of the activities of SAAB and its Council for the short period since our last general meeting in July 1974 is presented below. It will be noticed that much of the activities of Council has been concerned with the improvement of the status and image of Botany and its representative body (ourselves) in the country, which is considered to be a necessary prerequisite for furthering the aims and objectives of SAAB.

1.0 MEETINGS. Council met on the following occasions:-

<u>Date</u>	<u>Venue</u>	<u>Members present</u>	<u>Alternates</u>
2.7.74	Grahamstown	9	3
2.7.74	Grahamstown	9	0
17.7.74	Johannesburg	11	0

Four members attended an Executive Committee meeting on 10.11.74 in Grahamstown.

2.0 COUNCIL. The Council for 1974/1975 consists of the following members:-

President	Prof. O.A.M. Lewis
Vice-Presidents	Dr. B. de Winter (re-elected) Dr. A. Jacot-Guillarmod
Immediate Past President . .	Prof. C.F. Cresswell
Hon. Secretary	Dr. B.H. Downing (newly elected)
Treasurer	Prof. J.A. de Bruyn (newly elected)

Regional representatives

S.W. Cape	:	Prof. W.J. Lütjeharms (newly elected)
E. Cape	:	Dr. A. Jacot-Guillarmod
O.F.S.	:	Prof. B.R. Roberts
N. Transvaal	:	Dr. A. Eicker

Members in their second year on Council

- Dr. C. Breen
- Dr. F.M. Getliffe

Newly elected members(for 2 years)

- Dr. D. Edwards
- Prof. N. Grobbelaar
- Prof. M.C. Papendorf
- Prof. H.P. van der Schijff

3.0 MEMBERSHIP. Membership of SAAB is comprised as follows:

Institute members	12	
Ordinary, affiliate and graduate members	209	
Honorary members	9	<u>Total 230</u>

The above total shows an increase of 9 members since July, 1974.

- 4.0 FINANCES. The financial position appears to be satisfactory at the moment; the Treasurer's report will be circulated separately.
- 5.0 REGIONAL SECTIONS. The number of active regions remains at four because Natal and South Transvaal have not yet organised themselves into regions. The annual reports and Financial Statements of the regions are tabled.
- 6.0 JOINT COUNCIL OF SCIENTIFIC SOCIETIES. The president of Joint Council met with the Scientific Advisor to the Prime Minister, who advised that the following areas were of highest priority for government support:-
Metallurgy/Minerology/Mining
Industrial production, and Social Science aspects touching the race relations problem.
Botanical and environmental aspects are conspicuous by their absence from the priority list. Joint Council has invited the opinion of SAAB on this priority list, which will be discussed at the A.G.M.
- 7.0 OTHER ACTIVITIES OF SAAB. The following matters have been dealt with by your Council during the last six months.
- 7.1 Work opportunities for Botanists. The Committee's report and conclusions have already been circularised via Forum Botanicum Vol. 12, No. 10.
- 7.2 National Journals. In spite of considerable efforts by Council, little headway has been made in the implementation of a national journal. A special sub-committee is still dealing with this matter.
- 7.3 South Coast Freeway. Council was disappointed and dissatisfied at the response from the authorities over this matter, which we are still persuing through Joint Council.
- 7.4 Saldanha Symposium and next Congress. Prof. Lewis has been named by Council as the SAAB representative on the organising committee of the Saldanha Symposium. An attempt will be made to synchronise this symposium with out next Congress in 1976 as Cape Town has been offered as the venue of the SAAB Congress. The Saldanha Symposium is being organised to study the environmental effects the projected development of the area will have on this nature sanctuary.
- 7.5 Procedure for Honorary Membership. Dr. Jacot-Guillarmod has presented Council with recommendations concerning the procedure for election to Honorary Membership.
- 7.6 Conservation Ordinances. A number of undesirable facts have been revealed in the Cape Nature Conservation Ordinances, both from plant collecting aspects. Council has, therefore, decided to set up working groups which will investigate Provincial Ordinances and make recommendations for changes considered desirable.

7.7 The Image of SAAB and Botany in South Africa. Council is concerned that SAAB is still not receiving adequate publicity and recognition of its rôle as representing professional botanical opinion in South Africa. It has been noted that SAAB is not as a rule officially consulted by the authorities on matters which are our concern (e.g. item 7.6). Letters have been sent to the Prime Minister's Scientific Advisor and to the directors of the nature conservation departments in an endeavour to alter this situation.

It is very pleasing to record that the Secretary for Agriculture has invited a six-man representation from SAAB to sit on a 13-man Botanical Advisory Committee to perform the following functions:-

- 1) To advise the Minister of Agriculture on botanical matters.
- 2) To advise on the co-ordination of botanical research programmes.
- 3) To liaise between the Department of Agriculture and outside organisations.

The Council has decided to approach various botanists to contribute talks to the early morning programmes of the SABC in an effort to further publicise botanical affairs and our association. Suggestions for further publicity measures will be welcomed by Council.

7.8 The aims of SAAB. The following statement of the aims of the Association has been placed before Council.

1. To safeguard and protect the interests of professional botanists in South Africa.
2. To represent South African botanical opinion at official and public levels.
3. To promote and stimulate botanical education and research in South Africa through the sponsorship of educational programmes, and by the organisation of national and international congresses.

7.9 "Regionalisation" of Executive Committees. Some problems exist because of the dispersal of Committee members at various centres. This can result in considerable travel expenses and in inefficient lines of communication. Council is investigating ways in which these problems can be overcome probably through regional "block voting" for the central executive committee.

7.10 Black Membership. The Minister of the Interior is prepared to allow black membership in the Association provided (1) there is no other outlet for such members, and (2) that the Minister is informed of such membership. Our first African member from Fort Hare University staff has already been enrolled.

7.11 Workshops. Arrangements are to be made in future for the setting up of workshops to discuss and advise on various botanical problems. The first workshop will be an ecological one dealing with South African Soils.

BOTANICAL RESEARCH INSTITUTE, ECONOMIC BOTANY SECTION: This section of ten in the Institute receives archaeological plant material from archaeologists working in different parts of Southern Africa. The specimens vary from fossilised seeds and stems to fairly "fresh" material. The specimens are identified with the help of the staff of the National Herbarium and the archaeologists are provided with background information. In most cases all or some of the specimens are donated to the Institute so that a good collection can be built up.

Much information can be gained from these archaeological plant specimens. The climate and vegetation of a certain era can be reconstructed and compared with the climate and vegetation of today. The possible uses of plants can be determined as can be the origin of some cultivated crops. Much work in this connection is now being done at Mapungubue in Northern Transvaal and Border Cave in Natal.

DEPARTEMENT ALGEMENE PLANTKUNDE, UNIVERSITEIT VAN PRETORIA: Behalwe vir die klein getalle tweede- en derdejaar studente het hierdie Departement weereens 'n baie vrugbare en suksesvolle jaar agter die rug.

Gedurende 1974 het die volgende studente een of ander kursus in hierdie Departement gevolg, of was vir 'n nagraadse kursus geregistreer.

Plantkunde I	318
Plantkunde II	50
Plantkunde III	31
Biologiese Wetenskap	403
Landskapsargitektuur	18
Biologie	121
Natuurstudie vir Kleuterskoolonderrig	18
B.Sc. Hons. Plantkunde	2
B.Sc. Hons. Natuurbeheer	3
M.Sc.	11
D.Sc.	17

Die volgende projekte nader voltooiing en sal binnekort afgehandel word:

- (a) Du Toit, P.C.V. - 'n Morfologiese studie van die familie Ochnaceae DC. in Suidelike Afrika.
- (b) Müller, M.A.N. - 'n Morfologiese-taksonomiese studie van die genus *Eriocephalus* L. in Suidwes-Afrika.
- (c) Hodgson, L.M. - Some aspects of reproductive behaviour in *Eucalyptus grandis* (Hill) Maiden.
- (d) Scheepers, J.C. - A plant ecological survey of the Highveld Region.

Uit navorsing wat in die Departement gedoen is het gedurende 1974 6 publikasies verskyn en is 'n verdere 14 publikasies reeds in die pers. Ses populêre artikels deur die personeel en nagraadse studente het ook gedurende 1974 verskyn.

Referate is tydens die volgende kongresse deur personeel en studente gelewer:

S.A. Akademie vir Wetenskap en Kuns - Pretoria.

S.A.G.P. - Grahamstad

AETFATT - Geneve, en

Verskeie plaaslike Verenigings, Skoolgroepe, Boeredae en ander geleenthede.

Gedurende die jaar is die volgende studente-uitstappies onderneem:

1. Gedurende Januarie is, onder die leiding van dr. G.K. Theron en mev. J.E. Lombard, 'n besoek met die Honneurs-studente aan Greefswald op die walle van die Limpoporivier gebring, waartydens ekologiese opnames gemaak is. Op 'n latere stadium het prof. P.J. Robbertse en mnr. L.A. Coetzer, W.F. Reyneke en J.V. van Greuning by die groep aangesluit om met die opnames te help.
2. Gedurende die Aprilvakansie het die Plantkunde III-studente onder leiding van dr. G.K. Theron en mev. J.E. Lombard 'n besoek aan die Vrolijkheid Natuurbewaringstasie naby McGregor gebring. Die studente was mnr. G.V. van der Merwe behulpsaam met die versameling van herbariumeksemplare op die reservaat. 'n Besoek is ook aan Kaapstad en die Bettiesbaai omgewing gebring, sowel as die Riviersonderendberge.
3. Gedurende September het mnr. P.D.F. Kok die Honneurs Natuurbeheer studente vergesel op 'n ekskursie na die Natalse Parke en die Nasionale Kruger Wildtuin.

Verskeie kleiner ekskursies is in die omgewing van Pretoria met die Plantkunde II en III studente onderneem waartydens veral aandag aan ekologiese werk gegee is.

Nagraadse-studente in die Departement sowel as in die Departement Dierkunde is deur dr. G.K. Theron by Ofcolaco, Klaserie, Witrivier, Springbok, Buffelsbaai en die Okavango-moerasse besoek. In die versameling van navorsingsmateriaal het personeel en studente (vergesel van personeel) feitlik deur die hele land gereis. Gedurende November het dr. A. Eicker en mnr. J.V. van Greuning 'n besoek aan die Caprivi gebring om onder andere *Ficus*- en *Dioscorea*-materiaal te versamel.

Gedurende Oktober het dr. G.K. Theron, proff. F.C. Eloff en J. du P. Bothma (Departement Dierkunde) vergesel na die Kaokoveld en Damaraland. Die geselskap het gegaan op versoek van die Departement Bantoe-administrasie en Ontwikkeling met die oog op voorstelle vir die afbakening van Natuurbewaringsgebiede. Dié besoek was hoofsaaklik beperk tot die dele met 'n reënval van 100 mm en minder per jaar en die volgende plekke is onder andere aangedoen: Rua Cana-watervalle, Epupa-watervalle, Otjijandjosema, Marienfluss, Hartmannvallei, Orupembe, Sanitatas, Okonjombo, Khumibarivier, Nadasrivier, Purros-Hoarusibrivier, Sesfontein, Hoanibrivier, Moduribrivier, Skedelkuspark, Kovarib Schlucht, Beesvlakte, Palmfontein, Orumborumbonga en Wêreldsend.

'n Verdere besoek of twee aan die gebied word vir 1975 en 1976 beplan. Voortspruitend uit hierdie besoek is 'n navorsingspos aan mnr. P.J. Viljoen (B.Sc. Hons. Natuurbewaring) aangebied om die status van wild in die gebied te bepaal asook om 'n voorlopige fisionomiese plantegroeikaart van die dele waar wild konsentreer saam te stel.

'n Spesiale woord van gelykwensing aan prof. H.P. van der Schijff met die toekenning van die Senior Kaptein Scott medalje wat op 21 November 1974 aan hom oorhandig is.

Sedert Februarie 1974 is mev. M.E. Buys, 'n oudstudent in hierdie Departement, as Herbariumassistente alhier werksaam. Mev. E. Vorster is sedert 1 Mei 1974 as voltydse Navorsingsassistent vir prof. P.J. Robbertse in die Departement aangestel. Haar werk staan in verband met 'n projek oor die uitheemse *Acacia*-soorte wat as indringerplante in Suid-Afrika voorkom.

Mev. Elzabé Schoonraad was tot die einde Mei as voltydse navorsingsassistente vir prof. H.P. van der Schijff by ons werksaam. Sy gaan egter voort met haar besondere uitstaande navorsing op die inheemse *Podocarpus* spp. Haar pos is sedert Augustus deur mej. Erika Herbst, ook 'n oudstudent, gevul.

Mej. Suzelle Ferreira, wat die afgelope twee jaar in die plek van mnr. A.J.H. Pieterse as tydelike voltydse lektrise in die Departement aangestel was, het aan die einde van die jaar na R.A.U. vertrek, waar sy 'n soortgelyke pos aanvaar het.

Mnr. Pieterse het gedurende Desember 1974 vanaf Seattle, V.S.A. teruggekeer na drie jaar van nagraadse studie op die gebied van die Hidrobiologie.

Mev. J.E. Lombard wat oorspronklik op die Loranthaceae gewerk het, is tans besig met die projek: "Bacterial symbiosis in South African members of the genus *Pavetta*".

Gedurende 1974 is die verskeie Etenuurlesings deur personeel, studente en gaste in die Departement aangebied.

Dr. Bryan A. Barlow van Flinders University, Adelaide, South Australia, het gedurende November 'n kort besoek aan die Departement gebring waartydens hy vir die S.A.G.P. 'n lesing oor "Sex-linked translocation heterozygosity in African *Viscum*s" aangebied het.

Dr. D.F. Cutler van die Jodrell Laboratory, Royal Botanic Garden, Kew, 'n bekende plantanatom en outeur van onder andere "Anatomy of the Monocotyledons IV Juncales" kom aan die begin van 1975 na Suid-Afrika vir 'n verblyf van ongeveer drie maande. Hy sal in die Departement Algemene Plantkunde navorsing doen asook 'n kursus in taksonomiese anatomie vir personeel en nagraadse studente aanbied.

Prof. H.P. van der Schijff het gedurende September en Oktober 1974 'n besoek aan Europa beging. Tydens hierdie besoek het hy die AETFAT-kongres bygewoon. Daarna het hy ook onder andere 'n kort besoek gebring aan proff. R. Dahlgren en A. Strid (Universiteit van Copenhagen) en prof. C. Kalkman (Rijksherbarium, Leiden). Tydens sy verblyf in Holland het hy ook 'n besoek gebring aan die Phillips Fabriek te Eindhoven in verband met die Aftas-Elektronmikroskoop wat deur die Universiteit van Pretoria aangekoop is en aan die begin van 1975 geïnstalleer word.

Dr. G.K. Theron het ook gedurende September 1974 Europa besoek waartydens hy die Intecol-kongres te Den Haag en die AETFAT-kongres bygewoon het. Terselfdertyd het hy van die geleentheid gebruik gemaak om verskillende Botaniese tuine in Madrid, Parys, Den Haag en Wenen te besoek.

Daar word vordering gemaak met die aanlê van die Arboretum op die Universiteitsproefplaas, waar ongeveer 300 bome reeds geplant is.

Die Personeel van die Departement Algemene Plantkunde voel baie sterk daarvoor dat die AETFAT-kongres na dié een in Las Palmas gedurende 1978, in Suid-Afrika aangebied moet word.

Nuwe pos

Vanaf 1975 is daar voorsiening gemaak vir 'n voltydse Navorsingsbeampte (Morfologie en Taksonomie) teen 'n salaris van R7 380 x 360 : 9 900 x 450 : 10 350, in hierdie Departement. Die pos was reeds geadverteer met die sluitingsdatum vir aansoeke op 22 November 1974. Indien u besonderhede in verband met hierdie pos sou verlang kan u skryf aan Die Hoof, Departement Algemene Plantkunde, Universiteit van Pretoria, Pretoria.

THE 9TH INTERNATIONAL CONFERENCE ON PLANT GROWTH SUBSTANCES, under the auspices of the International Plant Growth Substances Association, will be held at Lausanne, Switzerland, from August 30 to September 4, 1976. Because of the diverse nature of the research in the field of plant growth substances, four topics have been selected for communications at the Congress:

1. Regulative role of hormones in cell metabolism.
2. Significance of hormone balance in growth and senescence processes.
3. Wall extension: ultrastructural problems, enzymology, biochemical and biophysical analyses, relation to the plasmalemma.
4. Photo- and georeaction (kinetics and receptors) associated with growth processes.

In addition to the above, about 40 reports, reviewing recent progress, will be presented by invited speakers.

Preregistration forms must be completed and returned by May 31, 1975. Persons interested in attending the congress, should request forms from Prof. J.A. de Bruyn, Department of Botany, University of Stellenbosch, no later than March 31, 1975. Prof. De Bruyn will thereupon obtain them from the Congress organisers.

MEMBERSHIP FEES: Members who have not yet done so, are requested to forward their fees for the current year (1974/75), to the Treasurer, Prof. J.A. de Bruyn, Department of Botany, University of Stellenbosch, Stellenbosch, 7600, at their earliest convenience. Cheques and postal orders may be made out to S.A.A.B.

SAAB., NORTHERN TRANSVAAL BRANCH: REPORT ON ACTIVITIES FOR THE PERIOD JUNE 1974/DECEMBER 1974:

Committee: Chairman : Dr. N.P. Ferreira
Vice Chairman : Dr. G.K. Theron
Secretary/Treasurer : Miss E. Retief
Members : Prof. J.M.P. Geerthsen, Dr. J.H. Visser,
Mr. R. Ellis, Miss I. von Teichman.

Membership: There are at present 64 ordinary members and 2 honorary members of the association in this branch.

Meetings and lectures: The committee arranged four meetings during the past year:

- 21 August, 1974 : Prof. D.C. Jameson. "Interdisciplinary research - a modern biological concept."
29 October, 1974 : Dr. E.M. van Zinderen Bakker (jns). "Die biologie van Devon Eiland in die Hoë Arkties".
13 November, 1974: Dr. B.A. Barlow. "Sex-linked translocation heterozygosity in African Viscums".
27 November, 1974: A dinner meeting at which Mr. J. Vahrmeijer delivered a lecture entitled "Oorlewing in die veld".

Other activities: The branch is actively involved with the campaign for the preservation of Mcrelettaspruit and is represented on the council of the association which is organising this campaign.

Committee meetings: The committee of this branch held meetings on the following dates: 24 June, 1974; 30 July, 1974; 27 August, 1974; 14 October, 1974 and 11 November, 1974.

General: The branch has also made the necessary arrangements for the 1975 Annual Congress of the SAAB.

MR. J.J. LAVRANOS now working in close association with the Botanical Section of the Goulandris Natural History Museum of Kifissia, Greece and the BRI, is currently engaged upon preparing a thesis for a Ph.D. at the University of the Witwatersrand, the subject being "A study of Mediterranean and related Floral Elements in certain Winter Rainfall Enclaves of the Northern Somali Escarpment Area". Seven botanical

collecting trips were made to this rather inaccessible part of the world since 1968 and about 2 000 herbarium specimens were collected. These are now being finally identified with the co-operation of Mr. B.L. Burtt, at Edinburgh. In addition, a considerable number of live succulent plants were gathered, many of them new to science; several of these have been described; in the main they belong to the *Stapelieae* and to *Aloe*. A very considerable number of *Euphorbieae* await determination and of these the majority are new. Finally, in March-April 1974, a reconnaissance was made into the Yemeni mountainland with satisfactory results. Further work in this area and in the Jabal-al-Akhdhar of Oman are contemplated if the necessary permission from the governments of these lands can be obtained.

JOURNAL OF S.A. BOTANY: P. Vorster, Botanical Research Institute, Private Bag X101, Pretoria, would like to purchase second-hand copies of the following parts of the Journal of South African Botany: Vols. 5.1, 6.4, 7.2, 8.4, 9.1, 9.2, 9.3, 10.2, 11.3, 13.2, 13.3, 13.4, 14.1, 15-19, 20.1, 20.3, 20.4, 21-22, 23.1, 24.2, 24.3, 24.4, 25-33, 34.1, 34.2, 34.4 and from 36 onwards. Complete volumes containing the required parts would also be considered.

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EDITORS/REDAKSIE

Mr. E.G.H. Oliver, Botanical Research Unit, Stellenbosch (Production)
Miss M. Welman, Miss S. Zwanziger, Mr. N. Pienaar, B.R.I., Pretoria (News).

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