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

11TH ANNUAL CONGRESS OF SAAB: The 1985 Congress was held at Potchefstroom University for Christian Higher Education from Tuesday 15th - Thursday 17th January. Delegates were very comfortably accommodated in Klawerhof Hostel while the Congress was held in the J. Chr. Coetzee Building. Delegates to the Congress were welcomed to the University campus by the Vice-Rector, Prof. Nic Swart. The Opening Address was given by Deputy Minister Ben Wilkens who stressed the role Botanists could play in improving the natural pastures of Southern Africa which in many areas, are still severely mismanaged. The invited guest speaker was Prof. Hugh G Gauch Jr., eminent ecologist from Cornell University in the U.S.A. His Keynote Address was entitled "An Overview of Multivariate Analysis in Community Ecology".

Three parallel sessions, namely Physiology, Morphology/Taxonomy and Ecology were held almost throughout the whole Congress. Eighty oral papers were read, while twenty poster papers were exhibited during two poster sessions. A total of about 150 delegates attended the various sessions of the Congress. A number of meetings of various groups were held before and during the Congress. The University lecturers in Botany met on the 14th January. The Plenary session on the afternoon of the opening day was devoted to papers by members of the South African Nurserymen's Association. The Committee for Syntaxonomy met on the 16th, as did the Herbarium Curators. The Wood Anatomists and the botanists involved with the "Flora of Southern Africa" met on the 17th.

The Annual General Meeting of SAAB was held at 14h20 on the last day of the Congress. The new smaller Council consisting of ten members only, was announced. Prof. G K Theron, President, Dr W F Reyneke, Secretary, and Prof. P J F Kok, Treasurer (all from the Botany Department, University of Pretoria), will hold office for 1985/86. The other members are Prof. J H Visser (Past President), Prof. J N Eloff, Dr O T de Villiers, Dr B de Winter, Dr Beth Gibbs Russell, Prof R A Lubke and Dr R Verhoeven. The 1986 Congress will be organized by the Botany Department of the University of Transkei.

As always, delegates to the Congress had ample opportunity to relax and meet socially. The Vice-Rector of Potchefstroom University held a reception at the Hennie Bingle Student's Centre on Tuesday night, while the Civic

Reception of the Mayor of Potchefstroom took place in the Town Hall on Wednesday night. The Annual SAAB Dinner was held in the Restaurant Thaba Jäh at the Students' Centre on Thursday night. The guest speaker on this occasion was Prof. P A J Ryke, well-known zoologist of Potchefstroom University. The following awards were made: The 1984 South African Medal for Botany (Gold) to Prof. Olive M. Hilliard of the University of Natal, Pietermaritzburg. This medal was received on her behalf by Dr Fiona Getliffe Norris. Prof. P J Botha, emeritus Professor of Potchefstroom University, received the 1983 SAAB Senior (Silver) Medal for Botany - he was unable to receive this medal last year because of ill health. Dr F C Botha (University of the OFS, Bloemfontein) received the SAAB Junior (Bronze) Medal for Botany for 1984 for the best botanical doctoral thesis in 1983. Mr D J Erasmus of the University of Natal, Pietermaritzburg received the prize for the best student paper delivered during this Congress.

Three workshops were held after the Congress, namely: Multivariate Analysis, Poaceae and Chromatography. The Microscopy workshop was cancelled because of lack of interest. Reports on these workshops will also appear in Forum Botanicum.

The University of Potchefstroom must be congratulated on hosting this successful, stimulating and enjoyable Congress. Special thanks are due to Prof. D J Botha, Dr G J Bredenkamp and all Staff members of the Botany Department, P.U. of C.H.E.

W.G.W.

MULTIVARIATE ANALYSIS WORKSHOP: Approximately 30 botanists participated in the very instructive post-congress workshop held in the Computer Science Department, Potchefstroom University for C.H.E. from Friday 18th to Saturday 19th January. The daily schedule comprised two morning sessions followed by an afternoon session (six sessions in all). Each session began with a lecture on theoretical aspects and was concluded with a period of practical computing. Miss Erna Botes of Potchefstroom University delivered the first lecture on the use of the IBM terminal. Participants were then given the opportunity of acquainting themselves with the terminals allocated to them. Here, the less initiated of us (no names mentioned) were seen to wander around rather vacantly at times. Goodwill prevailed however, and with the help of more experienced colleagues, our introduction to the computer was fairly painless. In the two sessions following the introduction, Hugh Gauch Jr. of Cornell University spoke on Direct Gradient Analysis and Ordination. An interesting feature of the Ordination lecture was the use of Beta diversity in choosing ordination methods. Subsequent computing time

enabled participants to analyse either their own data or that supplied by Hugh Gauch. Various computer programmes were provided by the latter for this purpose. Included were ORDIFLEX (for Reciprocal Averaging, Principal Components Analysis, Polar Ordination, Weighted Averages); DECORANA (for Detrended Correspondence Analysis); TWINSpan (for Hierarchical Classification); COMCLUS (for Non-hierarchical Classification); and MATMODEL (for Mixed Model Ordination).

The highlight of the second day was Hugh Gauch's lecture on mixed models. By integrating three conventional statistical approaches, namely Analysis of Variance (ANOVA), Multivariate Analysis and Linear Regression, the mixed model utilizes both additive (ANOVA) and multiplicative (Multivariate Analysis) terms to fit two way data. Besides requiring no additional computation, mixed models often give results superior to any conventional approach. By this stage of the workshop some participants had abandoned their terminals in favour of discussing the relevance of the different methods to their own data. Others needed clarity on interpretation of programme outputs. In both cases Hugh Gauch's patience and willingness to teach won the admiration of us all. The final two lectures were on Classification and Research Strategy respectively. With regard to the latter topic, Hugh Gauch emphasised the importance of validating the ordination models we construct by testing their ability to predict extrinsic reserve data.

The success of the workshop lay in the fact that regardless of their computing background, most participants learnt something new. For some, it was merely to run ORDIFLEX using simulated data. For others, it was to attempt the more sophisticated MATMODEL. For all, it was to discover new ways of approaching data. Congratulations to the organizer Dr George Bredenkamp, and to the speakers Hugh Gauch Jr. and Miss Er. Zotes on a most successful and stimulating workshop.

G..

SOUTH AFRICAN SYNTAXONOMIC NOMENCLATURE COMMITTEE: The following report was presented at the SAAB AGM.

We held our Annual General Committee Meeting on Wednesday 1985.01.16 during this Congress. The meeting was an open meeting and some interested observers attended. The meeting was a fruitful one with lively discussion and several useful ideas and suggestions came to the fore. I think we are about to move from first into second gear.

The Committee informs the Meeting that the S A Syntaxonomic Nomenclature Committee will request the Organizing Committees of the 1986 and subsequent SAAB Congresses to attempt to set aside a time slot as a general discussion period for all phytosociologists. The discussion period will

occur together with the meeting of the South African Syntaxonomic Nomenclature Committee.

J.C.S.

SAAB NATURE CONSERVATION COMMITTEE: During 1984 several matters had been looked into by this Committee. The more prominent of these included: the De Hoop issue; collecting permits; bush clearing in the operational area, along the Limpopo River and of Valley Bushveld in the Eastern Cape. Concerning the latter issue, the Eastern Cape Region of the Department of Agriculture had reacted to our representations and requested that our Committee indicate the localities, the nature and the extent of the threats posed by bush clearing. We are in the process of preparing a consolidated reply.

Once again, we would like to express appreciation for the contribution to this effort made by SAAB members. As before, we would call on members to be observant as to what is going on in their respective areas, paying particular attention to any threats to the flora and vegetation and, indeed, to nature and the environment in general. Please refer such cases back to Mr Braam van Wyk who can then investigate and, where necessary, state the views and standpoints of SAAB on the matter.

J.C.S.

NATIONAL WORKING GROUP FOR VEGETATION ECOLOGY: The following report was presented at the SAAB AGM.

The response to the questionnaires sent out to active researchers has been very good. We are now in a position where we have records for most of the active researchers engaged in vegetation ecology in South Africa. These records are currently being loaded onto a computer data-management system, which will also provide South African base maps with the approximate co-ordinates of the study areas of each active researcher. This will facilitate the determination of later priorities. A start has also been made on the encoding and loading of data from vegetation ecology studies already published, onto PHYTOTAB. These data will then be available for synthesis, with the authors' permission, and will furthermore form the basis of the PHYTOTAB database, as well as a community name register.

J.C.S.

NOORD-TRANSVAALSE STREEKTAK, JAARVERSLAG VIR 1984:

Komitee: Voorsitter: mnr P Herman, Ondervoorsitter: dr P Weisser, Sekretaris: mej D van Rensburg, Penningmeester: mnr G Germishuizen, Lede: mej C Reid, mej C Huysen, Verteenwoordigers: Dr G E Gibbs Russell (op die raad), mnr A E van Wyk (Natuurbewaring). Die ledetal staan tans op 159. Die komitee het 4 keer gedurende die jaar vergader om aktiwiteite te bespreek en lesings te reël.

Lesings: Die volgende lesings is gedurende die jaar aangebied: 23 Februarie: prof. S R Ash - Weber State College, Utah, U.S.A. "On the trail of the Wiley Cycad in the Triassic of New Mexico". 15 Maart: mnr W P D Gertenbach - Nasionale Krugerwildtuin. "Landskapklassifikasie as basis vir bestuur in die Nasionale Krugerwildtuin". 14 Junie: dr L A Coetzer - Departement Plantkunde, U.P. "Kan die genus Tylosema 'n bydrae lewer tot die biologie van heterostilie?". 19 Julie: dr C Puff - Botaniese Instituut, Univ. van Wene. "Flora and vegetation of the Ruwenzori mountains (Uganda - Zaire)". 9 Augustus: dr P Ashton - National Institute for Water Research, CSIR. "An autecological study of Azolla filiculoides". 20 September: mnr F Brusse - Navorsingsinstituut vir Plantkunde. "How to know lichens". 18 Oktober: mnr G Deall - Navorsingsinstituut vir Plantkunde. "The Plant ecology of the Sabie area - Eastern Transvaal escarpment". 6 November: Prof O T Solbrig - Harvard University, Massachusetts. "Life and death among the violets". Een lesing is in samewerking met die Biologiese Vereniging en een lesing in samewerking met die S.A. Vereniging van plantpatoloë aangebied.

Ander aktiwiteite: 'n Uitstalling van Botaniese kunswerke deur kunstenaar naresse vroeër en tans verbonde aan die Navorsingsinstituut vir Plantkunde is vir die week 15 - 19 Mei in die museum van die NIP gehou. Die openingsaand op 15 Mei is in samewerking met die Noord-Transvaalse tak van SAGP aangebied. 'n Kaas-en-wynonthaal is deur die firma SA archem en die NIP geborg. Dit was 'n baie geslaagde onderneming wat oor die algemeen groot byval gevind het. Die komitee wou graag 'n T-hempie met die SAGP embleem daarop aanskaf. Nadat toestemming van die Raad verkry is om die embleem te gebruik, is 'n omsendbrief aan lede uitgestuur. Die belangstelling was egter baie swak (slegs 3 lede het gereageer) en gevolglik is dië projek laat vaar. Onder die aansporing van dr I Verdoorn het mnr A E van Wyk, ons tak se verteenwoordiger op die Natuurbewaringskomitee van SAGP, en die voorsitter samesprekings met verskeie instansies o.a. die Stadsraad van Pretoria en die Voortrekkers, gevoer i.v.m. die uitroei van wattels in die Waterkloof- en Wolwekloofspruite. Dit blyk dat die Voortrekkers wat 'n kampterrein in die omgewing het, baie ywerig is om die area om hulle kampterrein skoon te maak. Hoewel die Stadsraad simpatiek gesind is, kon hulle op hierdie stadium nie veel hulp verleen om die gebied skoon te maak nie. Samesprekings en onderhandelinge word voortgesit en met 'n klein bedraggie geld wat aangebied is, kan die Voortrekkers moontlik in die nabye toekoms met die projek begin.

Bywoning van lesings:

<u>Datum</u>		<u>Spreker</u>	<u>Lede</u>	<u>Besoekers</u>	<u>Totaal</u>
23/2		Prof. Ash	18	9	27
15/3	*1	Mnr W Gertenbach	20	26	46
15/5		Kunsuitstalling	35	45	80
14/6		Dr L A Coetzer	13	1	14
19/7		Dr C Puff	23	7	30
9/8		Dr P Ashton	12		12
20/9	*2	Mnr F Brusse	21	3	24
18/10		Mnr G Deall	16	2	18
6/11		Prof O T Solbrig	24	4	28
		Totaal	182	97	279
		Gemid. 1984	20	10	31
		" 1983	17	8	25
		" 1982	17	8	26

*1 In samewerking met die Biologiese Vereniging

*2 In samewerking met die SA Vereniging van Plantpatoloë

Dit bly steeds 'n hartseer saak dat lesings nie meer aktief ondersteun word nie.

Dankbetuigings: Die volgende persone en instansies word hartlik bedank vir hul bystand en samewerking: Al die bestuurslede van die Noord-Transvaalse tak van SAGP vir hulle hulp en ondersteuning die afgelope jaar, 'n besondere woord van dank aan ons sekretaresse, mej Thea van Rensburg, vir haar harde werk en toewyding. Almal wat as sprekers by vergaderings gedurende die jaar opgetree het asook die borge van die kaas- en wynonthaal gedurende die kunsuitstalling. Baie dankie ook aan die bestuur van die NIP vir samewerking met die kunsuitstalling. Die bestuur van die Biologiese Vereniging en die S A Vereniging van Plantpatoloë vir samewerking tydens gesamentlike lesings. Die hoof van die Departement Plantkunde, U.P., vir toestemming om breekgoed te gebruik. Die Departement Boukunde, U.P., vir die gebruik van die lesingslokale. Die hoof van die NIP vir toestemming om adresetikette m.b.v. die rekenaardrukker te bekom asook vir die gebruik van die museum en kombuis van die gebou vir ons AJV. Die hoof, Navorsing en Inligting van die Nasionale Parkeraad, vir toestemming dat kennisgewings en notules daar getik en gedupliseer kan word. Alle lede van ons tak wat vergaderings getrou bygewoon het. P. H.

SWA-STREEKTAK, JAARVERSLAG VIR 1984: SWA-lede wat eers onder die Oranje-Vrystaat-Streek van die SAGP gesorteer het, het na goedkeuring van die Raad van die SAGP in Januarie 1984, 'n eie tak op 7 Mei 1984 gestig. Redes vir die afstigting was: (i) weens die afgesonderdheid was dit nie moontlik om fisies in te skakel by die OVS-streek nie; (ii) om nouer skakeling tussen plaaslike lede te bewerkstellig. Die volgende lede is op die stigtingsvergadering op 7 Mei 1984 tot die plaaslike bestuur verkies: Voor-sitter: dr W Jankowitz, Ondervoorsitter: mnr M A N Müller, Sekretaris/

Tesourier: mnr K Kellner, Addisionele lede: mev P Craven en mev B Loutit. Die ledetal van die SWA-streek is tans 16. Daar is die afgelope jaar gepoog om met alle plaaslike plantkundiges kontak te maak vir inskakeling by hierdie tak.

Daar is besluit om 4 keer per jaar te vergader waartydens daar ook van gassprekers gebruik gemaak sal word. Na afloop van die verrigtinge word die bestuursvergadering gehou. Vanweë die wydverspreidheid van lede van dië streek verg dit ook groot opofferings om die vergaderings te kan bywoon met die gevolglike lae bywoningsyfer. Die volgende lesings is gehou met vergaderings daarna: 19 Junie - M A N Müller - "Die plantegroei van Suidwes-Afrika". 17 Persone teenwoordig, 25 Sept. - P S Nel van Direkoraat Natuurbewaring - "Weidingsekologie van die Namib-Naukluftpark". 12 Persone teenwoordig, 27 November - dr W J Jankowitz van die Windhoekse Onderwyskollege. "Voedselvoorkeure van die Eland op die Waterbergplatoopark". 6 Persone teenwoordig. Gemiddelde aantal persone per lesing: 12.

Die SWA-tak finaliseer sy eie grondwet wat aan lede bekend gestel word en aan die Raad voorgelê word. Die Algemene Jaarvergadering is op 27 November 1984 gehou. Geen nuwe bestuur is verkies nie. Die bestuur van 1984 funksioneer tot einde 1985. Die streek beskik oor 'n saldo van R30. Daar is besluit om in die loop van 1985 ekstra fondse te bekom om die streek se finansies te verbeter. Die SWA-streek is nuutgestig en betreklik onbekend en benodig wyer bekendstelling. Dit is dan ook die oogmerk vir 1985.

W.J.J.

PUBLICATIONS:

Memoirs of the Botanical Survey of South Africa No 49. Pattern analysis in savanna woodlands at Nylsvley, South Africa by R H Whittaker, J W Morris and D Goodman 51 pp. (1984). Price: R3,20 excl. GST, post free; overseas R4,00. Available from the Director, Botanical Research Institute, Private Bag X101, Pretoria, 0001, RSA.

A review of the southern African species of Cyrtanthus by C Reid and R Allen Dyer published by the American Plant Life Society (1984). Comprising 68 pages, 21 distribution maps, 16 colour photographs and 30 black and white figures. Obtainable at R15 post free GST incl. from the Director, Botanical Research Institute, Private Bag X101, Pretoria 0001, RSA.

ARTICLES FOR HERBERTIA

Mr R Mitchell Beauchamp, editor of Herbertia, has written to Dr Killick of the Botanical Research Institute as follows: 'I am constantly searching for articles on bulbous plants. We have expanded the scope of our journal, Herbertia, to include bulbous members of the Iridaceae, Liliaceae,

Hypoxidaceae and even Oxalidaceae. If you know of any persons seeking a medium to publish treatments of bulbous plants, either taxonomic or cultural in nature, please refer them to me'.

Mr Mitchel Beauchamp's address is:

The American Plant Life Society
1843 East 16th Street
NATIONAL City, Ca 92050
U S A

S A INSTITUTE OF ECOLOGY: The 1985 Symposium and AGM of the Institute will take place on 12 April 1985 at the University of Port Elizabeth. The theme of the symposium will be 'Management of Coastal Resources' and will start at 08h30. The symposium will include a series of presentations on planning needs for development, the ecology and status of our coastal resources and a final session on research priorities.

The Annual General Meeting will start at 15h30 and will be followed at 18h00 by a fish braai at the Van Staden's River mouth.

VAKATURE VERLANG: P J R M DIRIX van Grote Markt 52, 8500 Kotryk, België (Tel. 056-220125) wil na Suid-Afrika emigreer en soek werk as navorser in plantfisiologie. Hy is vanaf middel April 1985 beskikbaar. Hy is 26 jaar oud en ongetroud. Hy beskik oor 'n lisensiaat in die wetenskap (plantfisiologie - plantbiochemie) wat hy in 1981 verwerf het. Sy lisensiaatthesis het gehandel oor: "Studie van het energiemetabolisme van Kalanchoe blossfeldiana-saden, by imbibitie en induktie van het memory-effekt." Hy beskik ook oor 'n onderwysdiploma wat hy in 1982 verwerf het.

As referente noem by o.a. die volgende: Prof dr Fredericq, dr Rethy en dr Dedonder, Labo voor Plantenfysiologie, Ledeganckstraat 35, 900 Gent, België (Tel. 091-227821 uitbreiding 473).

RESEARCH NEEDS: Robert S Wallace BS, MS, is requiring seeds of as many taxa within the Molluginaceae as possible (i.e. Adenogramma, Coelanthum, Hypertelis, Pharnaceum, Polpoda, Psammotropha, Gisekia, Limeum including Semonvillea, and Mollugo), for biosystematic studies.

His address is: Department of Biological Sciences, Nelson Biological Laboratory, Rutgers, P O Box 1059, Piscataway, New Jersey 08854, United States of America.

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