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

DR. M.R. LEVYNS died at her home in Rondebosch on 11th November a few weeks after her 85th birthday. She was an Honorary Member of the Association.

Margaret Rutherford Michell was born in Cape Town in 1890. She was educated at Ellerslie Girls' School in Sea Point and in 1908 proceeded to the South African College.

In 1912 she was awarded the Queen Victoria and 1851 Exhibition Scholarship. After working at the John Innes Horticultural Institute in England she returned to South Africa in 1916. In 1917 she took up an appointment in the Botany Department at the South African College, later the University of Cape Town. In 1923 she married J.P. Levyns, who was later to become the Cape Province Assistant Provincial Secretary.

Mrs. Levyns remained in the Botany Department until her retirement in 1946. She then continued to work in the Department and Bolus Herbarium regularly as an Honorary Reader in Taxonomy.

Mrs. Levyns was an inspired teacher and a dedicated research worker with a long list of publications mainly on the Cape Flora to her credit. In 1963 she was elected the first ever woman President of the Royal Society of South Africa.

DEPARTEMENT PLANTKUNDE, UNIVERSITEIT VAN PRETORIA:

Plantkunde gekonsolideer. Volgens 'n besluit van die Universiteitsraad, is die vroeëre departemente Algemene Plantkunde en Plantfisiologie, wat gesamentlik vir die aanbieding van die voorgraadse kursusse in Plantkunde verantwoordelik was, op 1 Julie 1975 gekonsolideer tot 'n enkele departement, die departement Plantkunde.

Professor N. Grobbelaar, voorheen hoof van die departement Plantfisiologie, is tegelykertyd as hoof van die gekonsolideerde departement aangestel. Hierdie ontwikkeling het gevolg op die aanstelling van professor H.P. van der Schijff, voorheen hoof van die departement Algemene Plantkunde, tot permanent-voltydse dekaan van die fakulteit Wis- en Natuurkunde.

Die oorspronklike departement Plantkunde is in 1953, op aanbeveling van die destydse hoof, professor M.G. Mes, onderverdeel. Met die verdeling het professor

Mes hoof van die departement Plantfisiologie en -biochemie geword en is in 1959 deur professor N. Grobbelaar opgevolg. Professor H.G.W.J. Schweickerdt is tydens die verdeling as hoof van die departement Algemene Plantkunde aangestel en word in 1963 deur professor Van der Schijff opgevolg.

Behalwe vir die tegniese en administratiewe personeel, beslaan die departement Plantkunde huidig die volgende poste:

Professoraat en hoofskap	(1)	Lektorate	(7)
Professoraat	(1)	Junior lektorate	(2)
Mede-Professoraat	(1)	Voltydse Navorsingsbeampste	(1)
Senior lektorate	(4)		

Mej. M.I. Claassen, lektrise, is met studieverlof vanaf 1 Julie tot 31 Desember 1975. Sy beoog om haar navorsingsprojek "Die Transvaalse varswateralge (Diatomales uitgesonder) met spesiale verwysing na die Desmidiaceae van die groot Letaba-rivier en sy sytakke", vir die D.Sc.-graad te voltooi. Mev. C. Ebersohn, B.Sc. U.O.D. (Potch.) neem in haar plek as tydelike lektrise waar. Mev. Ebersohn het onderwyservaring in Bloemfontein opgedoen en het daarna by die Hematologie-afdeling, Onderstepoort, gewerk.

Na 21 jaar diens as tegniese assistent in die departement Plantfisiologie, het mev. M.C. van Beijma aan die einde van Junie 1975 afgetree. Sy het in 1954, in die tydperk toe professor M.G. Mes hoof van die departement was, diens aanvaar. Mej. G. Aschenborn is op 1 Julie 1975 in mev. Van Beijma se pos aangestel en het voorheen by Onderstepoort onder professor A. Littlejohn gewerk.

Mej. S. Besaans is op 1 Julie 1975 as navorsingsassistent in die plek van mej. E. Herbst, wat tot die onderwys toegetree het, aangestel.

Mnr. J.V. van Greuning, lektor, het vanaf 8 tot 10 Julie 1975 'n winterskool in aftas-elektronmikroskopie, aangebied deur die Elektronmikroskopievereniging van Suid-Afrika, in Durban bygewoon. Die kursus is by wyse van lesings en praktiese klasse aangebied. Die nuutste apparaat vir ondersoek en die nuutste metodes van voorbereiding van biologiese en nie-biologiese materiaal is verduidelik, gedemonstreer en beproef.

Die kursus in grondkunde, "Introduction to the South African Soil Classification", deur dr. C.N. MacVicar van die Grond- en Besproeiingsnavorsingsinstituut, is vanaf 8 tot 10 Julie 1975 deur drr. A. Eicker en G.K. Theron, mej. I. von Teichman und Logischen en mnr. N. van Rooyen bygewoon.

Dr. J.H. Visser, senior lektor, was aan die begin van die jaar vir 'n aantal maande in die buiteland en het tydens sy studietoer die volgende persone en instansies besoek:

- (a) Prof. Reinhold Kickuth van die Afdeling Ekochemie in die Instituut vir Bodemkunde aan die Universiteit van Gottingen. Tydens hierdie besoek van 8 weke gedurende Januarie en Februarie, het dr. Visser die ekochemiese aspekte van die verhouding tussen die blomparasiete *Alectra* en *Striga* en hul gashere ondersoek.
- (b) Prof. R. Kollmann wat die leerstoel in Selbiologie in die Instituut vir Plantkunde aan die Universiteit van Kiel, Duitsland, beklee. Die vernaamste doel van die besoek was om die anatomie van die primêre haustorium van *Alectra vogelii* op die gasheer *Voandzeia subterranea* te ondersoek.
- (c) Dr. Visser het sy studietoer in Maartmaand met 'n weeklange besoek aan die herbarium by Kew afgesluit. Tydens die besoek is die verspreiding van *Alectra*-soorte, *Alectra*-gasheer en potensiële *Alectra*-gasheerplante nagegaan.

Professor P.J. Robbertse het op 19 Julie 1975 van 'n buitelandse besoek teruggekeer, waar hy twee kongresse in London bygewoon en by elk 'n referaat gelewer het. Die kongres van die Internasionale Vereniging van Houtanatome is op 26 en 27 Junie gehou en die tweedaagse simposium oor die Mimosoideae op 1 en 2 Julie. Benewens hierdie twee kongresse, het prof. Robbertse ook die herbarium en Jodrell-laboratorium by Kew en die Botanischen Staatssammlung in München besoek.

Personeel van die departement het die Algemene Jaarvergadering van die Afdeling Biologie van die Suid-Afrikaanse Akademie vir Wetenskap en Kuns aan die einde van Junie in Stellenbosch bygewoon. By hierdie geleentheid het professor H.P. van der Schijff as voorsitter van die Afdeling Biologie uitgetree. Behalwe vir deelname aan die besprekingsaand oor "Evolusie van die mens", het die volgende personeel referate gelewer:

- Prof. N. Grobbelaar - Produseer gifblaar monofluorasetaat?
- Dr. J.H. Visser - Die primêre haustorium van *Alectra vogelii*.
- Dr. A.J.H. Pieterse - Die effek van waterverryking op die algebevolkings van die Washingtonmeer.
- Mnr. P.D.F. Kok - 'n Numeries-taksonomiese ondersoek van twee *Digitaria*-species.
- Mnr. E. Groenewald - Kallusvorming en plantregenerasie uit saadfragmente van *Aloe pretoriensis* Pole Evans.
- Mej. I. von Teichman und Logischen - Knolontwikkeling en algemene anatomie van *Dioscorea cotinifolia* Kunth.
- Mnr. D.C.J. Wessels - Invloed van mikro-organismes op die ontkiemingstimulant van *Alectra* Benth.

Professor H.P. van der Schijff is vanaf 16 Junie 1975 vir 'n tydperk van drie jaar op die raad van die W.N.N.R. aangestel.

Op Woensdag 23 Julie het mnr. Frank Hankins van die Universiteit Harvard, VSA, 'n besoek by hierdie departement afgelê en 'n lesing gelewer oor "Identification of fossil and present woods". Mnr. Hankins het die afgelope 15 jaar saam met morfoloë van veral die Universiteit Harvard aan 'n kaartsleutel gewerk vir die identifisering van alle houtsoorte in die wêreld. Wat egter merkwaardig omtrent sy werk is, is dat mnr. Hankins 15 jaar gelede, op 62 jarige ouderdom, as ingenieur afgetree het en hom daarna eers op houtanatomie toegelê het. Ondanks algemene probleme en teenkanting van sommige plantkundiges, het hy tog sy kaart-sleutel voltooi.

BOTANISCHE STAATSSAMMLUNG MÜNCHEN UND INSTITUT FÜR SYSTEMATISCHE BOTANIK DER UNIVERSITÄT MÜNCHEN:

Research concerned with the Flora of Africa:

A) Monographs and Revisions under preparation:

Monograph of the genus *Crassula* by H.C. Friedrich.

Revisions of the following genera - Asteraceae: *Arnellus* and *Chrysocoma* by

A. Rommel; *Athrixia* and *Printzia* by G. Kroner; *Mairia* by J. Grau; -

Papilionaceae-Genisteae: *Lebeckia* by A. Schreiber; - Scrophulariaceae:

Dischisma and *Hebenstretia* by H. Roessler.

B) For FLORA ZAMBESIACA the following groups will be prepared in our institutions:

Asteraceae: Arctotideae-Gorteriinae (H. Roessler) in Press; *Aster*

(W. Lippert); *Felicia* (J. Grau). Papilionaceae-Genisteae: *Lebeckia*

(A. Schreiber).

C) For CONSPECTUS FLORAE ANGOLENSIS the following groups are under preparation:

Asteraceae: Arctotideae-Gorteriinae (by H. Roessler, manuscript completed);

Felicia (by J. Grau).

D) Recent collections from South West Africa (made by Friedrich, Giess, Merx-

Müller & Giess, Rodin and Volk) have been worked up. Corrections and

additions to the "Prodromus einer Flora von Südwestafrika" will be published

from time to time as a result of these studies.

Visitors to the Bot. Staatssammlung und Inst. Syst. Bot. from Southern Africa:

1974: August: Mr. L.C. Leach, National Herbarium Salisbury/Rhodesia

September: Dr. B. de Winter and family, Dr. H. Tölken, Botanical Research Institute, Pretoria/South Africa; Dr. J.J.A. van der Walt, Department of Botany, University of Stellenbosch/South Africa.

1975: since April: Mr. J. Mtombeni, University of Zululand/South Africa - June:

Mr. H. Roth, Windhoek/South Africa - July: Prof. Dr. P.J. Robbertse,

Dept. of General Botany, University of Pretoria/South Africa.

Visits of staff members to Southern Africa

1974: Febr.-April: Prof. Dr. H. Merxmüller, northern parts of South West Africa, accompanied by Mr. and Mrs. W. Giess, Windhoek (phanerogams, all groups (duplicate sets are deposited in M, WIND and PRE)).

Nov. 1974 - Jan. 1975: Dr. H. Friedrich, field- and herbarium studies concerned with his monograph of the genus *Crassula*, in South- and South West Africa in the herbaria of Cape Town, Durban, Grahamstown, Pretoria, Stellenbosch and Windhoek (BOL, NBG, SAM, NH, PRE, STE, Wind).

VIII th Plenary meeting of AETFAT, 16-21 Sept. 1974 in Geneva, Switzerland:

Prof. Merxmüller, Drs. Benl, Friedrich and Schreiber participated in this Meeting, Prof. Merxmüller acting as a Chairman in one of the sessions.

DR. J.C. SCHEEPERS - OVERSEAS STUDY TOUR: This study tour precedes a five-month's sojourn at the Centre d'Etudes Phytosociologiques et Ecologiques at Montpellier, where Dr. Scheepers will prepare a system of codification of environmental data for the Ecological Data Bank of the Botanical Research Institute.

The main purpose of the study tour is to visit centres active in the field of ecological data processing, in order to become acquainted with some of the latest developments in this field. The main centres to be visited will be:

Centre d'Etudes Phytosociologiques et Ecologiques at Montpellier, France
Geobotanisches Institut at Göttingen, West Germany, and the
Botany Department of the University of Nijmegen, in the Netherlands.

In the course of this tour, the symposium at Montpellier of the European Working Group for Data Processing in Phytosociology will be attended. Here there will be the opportunity of meeting Prof. Pignatti and Dr. Feoli of Italy, as well as Drs. Van der Maarel and Werger of the Netherlands.

It is also the intention to attend the Annual Congress of the West German Ecological Society at Göttingen. This will provide an occasion to meet several workers in the field, especially Prof. Ellenberg and colleagues.

En route to France, there will be an opportunity to meet workers active in this field in the Netherlands, notably Dr. van der Maarel and colleagues at Nijmegen.

Other visits to workers at Malmaison and to Dr. Ernst at Amsterdam are intended to obtain other insights into site classification from geological, geomorphological and geobotanical points of view.

The discussions with Prof. Lamotte are to be conducted on behalf of Dr. Bosch of the Savanna Ecosystem Project.

COMPOSITAE: Since Compositae occupy such a pre-eminent place in the South African flora, readers of *Forum Botanicum* may like to have a few words about the International Symposium on Compositae sponsored by the Linnean Society of London and the Phytochemical Society and held at the University of Reading July 14-19 this year.

The programme was an ambitious one. Not only was there a series of general lectures, but every one of Bentham's thirteen tribes was covered by both a systematic and a biochemical review. That was quite a meal and if at the end a non-chemist like myself was a bit foxed about the relative distribution, and importance, of the polyacetylenes, sesquiterpene lactones and pyrrolizide alkaloids - that didn't matter because it will all be in the published book which will appear in 1976. What was important was to learn of the very large amount of work that is being done in the field of phytochemistry and to appreciate something of its coverage. Professor Bohlmann from Berlin will be known to some South African botanists, for he has twice visited the Cape to collect Compositae for study. He did not, however, get up to the summer rainfall area but I hope to be able to send him some selected material so that we can see if the chemistry throws any light on the relations between the plants in these two climatic areas - e.g. in the *Athanasia-Pentzia* group. Four of the botanists who contributed tribal reports are certainly well known over here: Prof. H. Merxmüller (Inuleae), Prof. J. Grau (Astereae), Dr. B. Nordenstam (Senecioneae) and Dr. T. Norlindh (Calenduleae and Arctoteae). Thus South African plants were by no means neglected.

General lectures included an introductory one by Dr. Cronquist, one on habit and floral anatomy in relation to phylogeny by Prof. G.L. Stebbins, cytology (Dr. O. Solbrig), the diversification of the capitulum in flower and fruit (B.L. Burtt), pollen (J. Skvarla). But as at any good symposium the opportunity of getting to know so many people studying the group from different angles was in itself well-worth attendance. It was clear that a lot of useful arrangements for future co-operation were being made.

Planning was in the hands of Prof. V.H. Heywood (Reading) and his staff and all participants were grateful to them for a very smooth-running meeting, with a splendid dinner as a highlight. (O.M. Hilliard).

S.A.G.P. EKOLOGIESE KURSUS OOR SUID-AFRIKAANSE GRONDE: Op Dinsdag 8 Julie 1975 het drie-en-dertig plantkundiges by die Navorsingsinstituut vir Plantkunde, Pretoria, vergader om aan 'n driedaagse kursus oor Suid-Afrikaanse gronde, deel te hê. Die kursusgangers was afkomstig van die volgende instansies: Navorsingsinstituut vir Plantkunde, Nasionale Parkeraad, Afdeling Natuurbewaring - O.V.S., Nasionale Botaniese Tuin - Nelspruit, Natalse Parkeraad, Wetenskaplike en

Nywerheidsnavorsingsraad, asook die Universiteite van Pretoria, Rhodes, Witwatersrand, Durban-Westville, Oranje-Vrystaat en Potchefstroom. Die nodige reëlings vir die kursus is deur dr. D. Edwards, namens die Raad van die S.A.G.P., getref.

Die kursus, as sulks, is deur dr. C.N. MacVicar, assistent-direkteur van die Navorsingsinstituut vir Grond en Besproeiing, Landbou-tegniese Dienste, aangebied. Die eerste dag is aan teoretiese aspekte omtrent grond gewy wat die volgende onderwerpe gedek het: die definisie van grond, grondvormingsvergelyking, faktore wat grondvorming teweeg bring, verwering en grondvorming, belangrike bestanddele van grond, grondvormingsprosesse, vlakke en lae, beskrywing van 'n grondprofiel, identifisering van diagnostiese vlakke, die identifisering van grondvorms en grondseries. Hierdie aspekte is op uitstekende wyse deur dr. MacVicar oorgedra en met kleurskuifies toegelig. Na 'n lewendige bespreking aangaande die probleme wat plantkundiges met die eienskappe en klassifikasie van grond ondervind, is die dag se verrigtinge met 'n gesellige kaas-en-wyn funksie afgesluit in die ontspanningslokaal van die Navorsingsinstituut vir Plantkunde.

Op 9 en 10 Julie 1975, kon die kursusgangers die teoretiese aspekte waarmee op die eerste dag kennis gemaak is, prakties in die veld nagaan. 'n Aantal grondprofiel in die omgewing van Pretoria, Johannesburg en Rustenburg, verteenwoordigend van vyftien grondvorms en sewentien grondseries, is aan die plantkundiges getoon. Kursusgangers is dit eens dat die kursus oor die Suid-Afrikaanse gronde leersaam en beslis die moeite werd was! (E. Retief en I. von Teichman)

U.P.E. BOTANY TRIP TO PONDOLAND: A group of sixteen U.P.E. staff members, honours students and third year Botany students made a highly eventful trip to Pondoland over the last weekend in September. Our intention was to visit the *Jubaeopsis caffra* stands on the banks of the Msikaba and Mtentu rivers, the mangroves at Entafufu and the forest around Hluleka. Little did we know what was in store for us!

Soon after leaving Port Elizabeth early on Friday morning it began to rain and continued to pour until late Saturday night. Nothing daunted we pressed on to Umtata and then along the slippery road to Hluleka until our progress came to an abrupt halt at the completely flooded Hluleka river just 300 metres from the rondavels where we were to spend the night. After much deliberation we proceeded to cross the swollen river in the Land Rover carrying as much luggage as possible and with everyone clinging to the vehicle to give it weight. The Kombi and Granada were left on the Port Elizabeth side of the river and it was to the sound of rain and the incessant croaking of thousands of frogs that we fell asleep.

Saturday dawned to yield more rain. Despite this everyone ventured out to examine the prolific vegetation of the region including beautiful *Clivia miniata* specimens,

dense stands of *Strelitzia nicolii* and trees such as *Mimusops caffra*, *Ficus natalensis*, *Cordia caffra* and *Allophylus natalensis*. In the afternoon a group under the guidance of two local Africans went for a walk through the dense forest and returned soaked to the skin but with plenty of specimens for the herbarium. Everyone was still in high spirits and after delicious camp stew and an evening of much singing and joking everyone climbed into their sleeping bags wondering if it would every stop raining!

We woke on Sunday morning to find that the rain had stopped and it was decided to cross the river and travel on to Port St. Johns immediately. After much effort we got the vehicles started and set off along the road which was full of potholes and dongas. Yet again our progress came to an abrupt halt with a landslide completely blocking the road. With help from a few Africans we cleared a path through the mud in just over an hour and continued on our way to Port St. Johns and then on to Entafufu to see the mangroves. *Avicennia marina*, *Bruguiera gymnorhiza* and *Hibiscus tiliaceus* were abundant there. We returned to Port St. Johns to pitch our tents in the caravan park where an entertaining evening was spent.

After filling up with petrol at seven o'clock on Monday morning we set off for Port Elizabeth stopping to look at some specimens of *Erythrina latissima* on the Port St. Johns road. We arrived back in Port Elizabeth late in the afternoon, thoroughly exhausted after a very eventful excursion. (L.B.)

BOTANICAL PHYSICIST: Dr. Dana Bailey, an ionosphere physicist from Colorado, U.S.A., recently visited the Republic partly on holiday and partly on business after visiting South America. Some members of S.A.A.B. were fortunate to hear Dr. Bailey talk during his last visit a few years ago on his pet subject, the bristle-cone pines of the Rockies, those remarkable high altitude species which he has shown are up to 7 000 years old.

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