

FORUM BOTANICUM

Vol. 20. No. 4

July
Julie 1982

ISSN 0015 - 847X

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

GEORGE FREDERIK PAPENFUSS (1903 — 1981): Prof. G.F. Papenfuss, one of the four Honorary Members of SAAB, died in his sleep in his Berkeley, California home on December 8, 1981. This world-renowned marine phycologist was born at Harrismith, South Africa on November 4, 1903 and went to the U.S.A. in the 1920's to study agriculture at North Carolina State University where he earned his bachelor's degree in 1929. He received a doctorate in marine algae at Johns Hopkins University in 1933 and did post-doctoral research at the Swedish Universities of Lund and Uppsala and spent some time at the University of Cape Town (1935 — 39). Prof. Papenfuss was back at Lund in 1940, and to escape German occupation, he crossed Russia by train and made his way to Hawaii where he became Assistant Professor of Botany at the University of Hawaii in Honolulu from 1940 — 42. He then went to the University of California in Berkeley as a research botanist and was appointed Professor of Botany in 1953. He retired with emeritus status in 1971 and continued publishing extensively on the morphology and taxonomy of green, brown and red marine algae.

His collections number about 12 000 worldwide, with about 6 000 from the coast of East and Southern Africa, collected in 1962. Prof. Papenfuss was a Guggenheim Fellow in 1949 and a Miller Research Professor at Berkeley in 1960. He was a member of several scientific societies, including Honorary Fellow of the Royal Society of South Africa and was the current President of the International Phycological Society and of the First International Phycological Congress to be held in Newfoundland this year. Prof. Papenfuss is commemorated in the genera Papenfussia, Papenfussiella and Papenfussiomonas, as well as in over 20 species names. He is survived by his wife and son. (W.G.W.)

MARTHE ODILE SCHMITZ née RUCH (1935 — 1982): Botany in Southern Africa has lost one of its devoted exponents, Marthe Schmitz, in a tragic road accident on the night of April 1, 1982.

Marthe Ruch was born in 1935 in Strasbourg, France. She took her "Brevet Elémentaire" in 1950, followed by Baccalaureat parts 1 and 2 in "Sciences naturelles et

philosophie" in 1954. Thereafter she entered the University of Strasbourg and studied physical and natural sciences, with "Certificat de Botanique" in 1956. For this she wrote a dissertation on 'Etude des stomates dans une chimère'. In the next two years she completed her "Certificat de Geologie" and "Certificat de Zoologie", together with special courses in plant sociology and soil science. She was awarded the "Licence en Sciences" in 1958.

In that year she came out to Basutoland to lecture in Botany at Pius XII University College in Roma. The Department of Botany eventually merged with Zoology to form the Biology Department of the National University of Lesotho. She taught Plant Systematics, Anatomy, Ecology and Genetics, and was in charge of the herbarium. She was Acting Head of Botany in 1960 and 1965. Later in 1965 she stopped lecturing to give more time to her family, but she carried on with her research. She married Dr Gerhard Schmitz in Roma in 1962. Dr Schmitz came from the Netherlands as a lecturer in Geography and is now Professor and Head of the Department of Geography in the National University of Lesotho. The Schmitzes have four sons.

Marthe's knowledge of Lesotho flora was unique, and was the result of 24 years of careful study. She was always ready to help students, scholars, or just interested people, who wanted to know about plants. Her assistance in many projects such as the spiral aloe (Aloe polyphylla) survey of 1976-78 and subsequent dates, the study of the ecology of Sehlabathebe National Park, the arrangement of the grass collection in the Agricultural Research Division of the Lesotho Ministry of Agriculture, the compilation of a handy leaf-key for students - to name a few - has been substantial. For the past 10 years she has been Honorary Curator of the University Herbarium and has built up a collection of an international standard of Lesotho plants. She had recently completed the proof corrections of her illustrated Flora of Lesotho, with special emphasis on the Roma valley, and was working on part 2 and part 3 of Grasses of Lesotho. Part 1 was published in 1974. She rightly placed a great deal of importance on grasses, Lesotho being essentially a grassland country.

The Biology Department has been fortunate to obtain assistance in teaching from Mrs Schmitz in 1972 and 1980 during the all too frequent spells of work overload it has faced. Mrs Schmitz was of invaluable help on field trips where her knowledge and enthusiasm transformed the silent world of plants into a living presence. Often she would point out some aspects which the students from Lesotho were not aware of, which Mrs Schmitz had gleaned from patient questioning of rural people, workers hoeing their fields or tending their animals. The information she obtained was carefully checked from as many sources as she could find.

Her many students, colleagues and friends mourn her untimely death together with her bereaved family. (Dr S Talukdar)

AETFAT Congress 1982: It was certainly not a case of "all work and no play" for the delegates to the 1982 AETFAT Congress in Pretoria ! The organizers took care in providing a full and varied social programme for all delegates and their companions. There was a short orientation tour of Pretoria on Sunday, 17th January, followed by a visit to the Botanical Research Institute which included guided tours to the Botanic Garden and nursery and a chance to wander through the main building, viewing the library as well as various exhibits and projects by staff members. Unfortunately many overseas visitors suffered from jet lag. Delicious snacks and good Cape wine managed to revive most of them so that they could enjoy the company of old and new friends. This reception was sponsored by SAAB.

On Monday, after the opening day of the Congress, everyone was invited to attend a cocktail party sponsored by and held at the University of Pretoria. Afterwards a tour of the Botany Department and Margaretha Mes Institute for Seed Research took place. A great number of projects by staff members and post-graduate students of the Department were on show.

The SAAB Annual General Meeting took place on Tuesday night, and theatre entertainment was arranged for those delegates who were not SAAB members. It was said that "Marico, Moonshine and Mampoer", a musical based on the stories of Herman Charles Bosman, which was performed at the Market Theatre in Johannesburg, was most enjoyable.

Sentrachem Ltd. sponsored the typically South African hospitality on Wednesday night. After the delicious "braaivleis" at the C.S.I.R. recreation site, delegates from every country represented at the Congress were requested to "sing for their supper". This resulted in a jolly musical feast !

The proceedings on Thursday night were in a more serious vein when a public Nature Conservation evening was held at the University of Pretoria. Dr A V Hall of the Bolus Herbarium at Cape Town University spoke on "Endangered Species", while Mr D Garstang of the National Parks Board discussed "Conservation and the National Parks". Two excellent Nature films were then shown, namely "On the Third Day" and "The Namib".

The Congress Banquet, hosted by the Minister of Agriculture and Fisheries, the Honourable P T C du Plessis and Mrs du Plessis, was held at the C.S.I.R. Con=

ference Centre on Friday night, 22nd January. The menu for this banquet was remarkable in having almost exclusively indigenous Southern African items like Marula juice, Rooibostee punch, Guinea Fowl paté, Namibian truffles, Ostrich egg, Waterblommetjie soup, Smoked Snoek, Yuga beans, Fried Porcupine, Sourfig fruits, Springbok pie, Sorghum rice, Wild Spinach, Maraca squash, Wild Celery, Watercress, Wild Garlic, Seaweed jelly, Aloe preserve, Heuningbos tea and of course, Cape wines. A souvenir booklet with information about each dish was available together with Protea ink for those who wished to collect some autographs. This banquet was also the occasion for presenting the SAAB Awards, namely the SAAB Senior (Silver) Medal to Dr Inez Verdoorn for her contributions to South African Botany, particularly taxonomy; the SAAB Certificate of Merit to Miss Cythna Letty, the doyenne of South African Botanical Artists and the SAAB Junior (Bronze) Medal to Dr A.J. Twinch for his Ph.D. thesis "Some aspects of phosphorous cycling in Lake Midmar". Special bronze gilt medals to commemorate the occasion of the AETFAT Congress in South Africa were presented by SAAB to three eminent overseas botanists who have made valuable contributions to African botany, namely Proff. J. Léonard (first General Secretary of AETFAT), J.P.M. Brenan (former Director of the Royal Botanic Gardens, Kew) and H. Merxmüller (Director of the Botanische Staatssammlung, Munich) who, because of ill health was unable to attend the congress.

The AETFAT Business Meeting was held on Saturday morning, when, amongst other things, it was announced that the next Secretary General will be Dr Peter Goldblatt of the Missouri Botanical Garden. After the farewell luncheon on Saturday, every delegate received a memento of the Congress, namely a small block of Stinkwood, together with an illustrated pamphlet giving background information on Ocotea bullata.

An interesting sightseeing programme was arranged for persons accompanying delegates and for those delegates who slipped away from the Congress to see something more of Johannesburg and Pretoria.

It was generally agreed that this was a most successful, enjoyable and well organized Congress. Many thanks are due to the organizers, namely the C.S.I.R., the AETFAT Secretariat, the Department of Agriculture and Fisheries and SAAB. All AETFAT members are now looking forward to the next Congress in St. Louis, Missouri in 1985. (W.G.W.)

NATIONAL BOTANIC GARDENS OF SOUTH AFRICA - APPLICATIONS FOR THE KIRSTENBOSCH JUBILEE PRIZE TO THE VALUE OF R1 500 ACCEPTED UP TO 30 SEPTEMBER 1982:

The prize is financed out of the Kirstenbosch Jubilee Fund of the National Botanic Gardens of South Africa and came into being in 1963 through contributions from the public of South Africa and is still being expanded, with the object of promoting the aims of the National Botanic Gardens, particularly research.

The object of the prize, in the first instance, is to grant botanical and horticultural contributions towards the study of the country's indigenous flora and, secondly, to promote further study/research/publication in this field.

Applications must be directed to: The Director, National Botanic Gardens of South Africa, Kirstenbosch, Private Bag X7, Claremont, 7735 and must mention the age, nationality and other personal particulars and give two references; and must be accompanied by a short curriculum vitae, certified copies of academic and professional qualifications, a list of publications and a short exposition of concluded and planned research.

Applicants must please request those people who supply references to send confidential reports direct to the Director, to reach him not later than 16 October 1982.

1982 SAAB ANNUAL CONGRESS: The 8th Congress was held in the Education Building of the University of Pretoria on the 15th and 16th of January, and was organized by the Northern Transvaal Branch of SAAB under the leadership of Mr Trevor Arnold.

Eighty-one persons registered as delegates to the Congress out of the ⁺ 130 replies to the First Circular. About 15 additional persons attended the Fynbos Symposium on the morning of Saturday January 16th, but did not register for the Congress. Accommodation was made available for Congress delegates by the University of Pretoria in Huis Tankotie. Nineteen delegates stayed in the residence.

A total of 46 papers were presented at the Congress, in the following categories:

	<u>Oral papers</u>	<u>Poster papers</u>
Taxonomy	4	3
Physiology	24	3
Ecology	3	-
Symposium	6	-
Other	1	2

Awards for best student papers were initiated for the first time this year.

Two awards were made, one for the best oral paper and one for the best poster paper. The three judges appointed by Council were Prof. N. Grobbelaar, Prof.

J. van Staden and Dr G.E. Gibbs Russell. Papers were judged on the basis of content and presentation, with a maximum of 25 points awarded in each category. The award winners were:

Oral paper - Mej. C. Huyser: Die invloed van fenoliese verbindings op sommige ensieme en selektiewe metaboliese prosesse in die loofblare van Protea neriifolia.

Poster paper - Mev. E. du Plessis: Eugenia L. (Myrtaceae) in Suidelike Afrika - numeriese taksonomie van loofblare organografie. (T.A.)

M.H. GIFFEN COLLECTION OF DIATOM SLIDES: Professor Malcolm H. Giffen, former Professor of Botany at Fort Hare University, celebrated his 80th birthday on July 6 this year. Owing to his "final retirement" from Fort Hare University and his move to his permanent home at Kidd's Beach, he has donated the "M.H. GIFFEN Collection of Marine Littoral Diatom Type Slides and Type Material" to the National Institute for Water Research, where, according to Dr R.E.M. Archibald who is now in charge of it, it will be available to research workers who wish to examine the slides.

The N.I.W R. has already obtained very valuable sets of slides from the British Museum, such as the type collections of Van Heurck, Cleve, Möller, Tempere, Peragallo and also the Eulenstein sets. They are not all complete, but the Institute does not miss many of them. These, with the Cholnoky Collection, now make the N.I.W.R. one of the six biggest collections in the world.

The donation of Prof. Giffen's Collection does not mean his retirement from Diatom studies ! He is completing his papers on NAMAQUALAND and MAURITIUS and a gigantic card index of all marine littoral diatoms recorded from the RSA shores. He has some 2 300 cards, mostly his own records and he is seeking lists from other authors. (M.H.G.)

HABITAT COUNCIL: SAAB is a member society of this Council and is represented by Dr D. Edwards. The Habitat Council comprises one representative, and one alternate, of each of its member societies which number over 50. The organisations represented range from learned societies, including member societies of the Associated Scientific and Technical Societies, to Horticultural Societies, Mountain and Hiking Clubs, Voortrekkers and Boy Scouts. It also includes such bodies as the Family Planning Association, the Chamber of Mines and specific interest organisations such as the Save the Garden Route and the Parktown Associations.

The interests of these organisations vary widely from the general to the specific. They are concerned with all aspects of the environment, natural and built, and the Council involves itself in a responsible manner in controversial projects. It also concerns itself with broader issues and has made representations on the proposed legislation shortly to be tabled in Parliament.

It conducts an annual general meeting in one of the centres of the Republic at which time it usually conducts a symposium such as that held last year on "Roads and the Environment". General conduct of business is by an Executive Committee which comprises a President (Prof. P R Botha) and ten members elected annually at the annual general meeting. This body meets four times a year.

It has become the practice for the Executive Committee to meet the Minister of Environmental Affairs each year to draw his attention to matters of concern to the Council.

In the past year, subjects which have been raised include:

The Palmiet River Project

The Management of the Mont-Aux-Sources Plateau

Prospecting and Mining Activities in natural areas (including coking - al in the Kruger Park)

The use of sewage sludge

The Richards Bay Pipeline

The use of off road vehicles on beaches

Township development in Plettenberg Bay Area

Kaolin exploitation in the Cape Peninsula

The preservation of Estuaries

It also has made representations to the Commission of Enquiry into the Fishing industry, and is endeavouring to initiate a study into the effects of Fiscal Policy on the Environment.

Over the ten years or so of its existence, the Council has matured and is no longer widely regarded as a collection of "Econuts". It has been responsible in its representations and accepts that modification of the environment is inevitable if progress is to be made.

It enjoys close collaboration with the Department of Environment Affairs and receives an annual state grant to support its activities. It also complements the work of EPPIIC, which consists of representatives of the planning professions, and has greatly assisted that body by arranging joint conferences

and in the preparation of a handbook to serve as a guide for engineers, architects, town planners and others.

NATUURRESERVAAT IN KNYSNA-WOUDE: 'n Nuwe natuurreservaat, die Sinclair-natuurreservaat is op 19 Februarie 1982 deur sy Edele die Minister van Omgewingsake by wyse van publikasie van 'n goewermentskennisgewing in die Staatskoerant afgesonder. Hierdie is die eerste in 'n reeks van voorgestelde natuurreservate wat in die inheemse woude van Knysna en die Tsitsikamma beoog word. Die Sinclair-natuurreservaat is ongeveer 1 350 ha groot en is in die woude suid-oos van Knysna geleë. 'n Klein gedeelte van die reservaat al langs die kus word in beslag geneem deur tipiese fynbosveld met sy rykdom van suikerbos, heide en ander blomme.

Die verklaring van hierdie en ander stukke inheemse bos as natuurreservate het in die praktyk die uitwerking dat geen ontginning van edelhoutsoorte uit die reservaat sal plaasvind nie. Slegs klein gedeeltes van die inheemse bosse in die Suid-Kaap en Tsitsikamma word aktief ontgin, en dan word bome ook alleen op 'n baie selektiewe basis vir ontginning uitgesoek.

Die Sinclair-natuurreservaat sluit die pragtig kuslyn oos van Moetzie in en die woude bevat die gebruikelike ryk verskeidenheid van varings, rankplante, bome, pragtige voëls en kleiner soogdiere.

Die Direktooraat het tans 32 afgesonderde natuurreservate regdeur die land met 'n totale oppervlakte van 68 152 ha. Wildernisgebiede beslaan tans 244 598 hakteer (agt gebiede). (Habitatraad Nuusbrief, Mei 1982).

REMINDER: Have you replied to the First Circular about the 1983 SAAB Conference ??? Replies should have reached the organisers at the Botany Department, Witwatersrand University by JUNE 30th 1982.

EDITORS/REDAKSIE

Mr E.G.H. Oliver (Stellenbosch)

Miss W.G. Welman and Dr G.E. Gibbs Russell (Pretoria)

ADDRESSES/ADRESSE

Botanical Research Unit
P.O. Box 471
7600 STELLENBOSCH

(For News and Correspondence)

Botanical Research Institute
Private Bag X101
0001 PRETORIA

(For Change of Address)