

# FORUM BOTANICUM

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

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UNIVERSITY OF FORT HARE, DEPARTMENT OF BOTANY: University level courses in Botany at Fort Hare were first offered in 1938 when Professor Malcolm Giffen was appointed to the staff. We are glad he has remained in the Department as Senior Research Fellow since retirement in 1967, and is still actively capturing diatoms of the Indian Ocean by means of a 10 x 15 cm silk net.

Having joined in 1959, Oswald Makunga is a Senior Lecturer and the first D.Sc. candidate to be registered in the Botany Department. His dissertation involves the morphological and physiological determinants of grain yield in maize. He is now being supported by the British Council at Rothamsted where he is researching the translocation of photosynthates in cereals under the direction of Dr Gillian Thorne. The remainder of his sabbatical during 1977 will be spent by favour of the U.S. Government, as an affiliate to Professor Gracen at Cornell where he will further his studies on maize.

The only other member of the old guard is Bryce Bala, stalwart laboratory manager and provider of materials for an ever growing number of students. Bryce joined the Department in 1963 and is working through Professor P. Robbertse towards his M.Sc. on the embryology of Acacia caffra and A.karoo.

Brian Downing from the Natal Parks Board joined as Head of the Department in 1974, and from 1975 onwards five new staff arrived to fill one vacancy as well as four newly created posts. The first of these Anatolians to take root was "Robbie" Robinson who is registered for an M.Sc. under Dr Charles Breen at Natal, and has almost completed a Braun-Blanquet based study of the Namib Desert Park, where he was previously employed by the CSIR. Techniques for this study, as well as for his current research on the autecology of Pteronia incana, were revised during a sabbatical at Nijmegen and Göttingen during 1974, Robbie has helped in revising our Ecology courses, and is a most useful teacher of Systematics.

Ted Botha spent the preceding ten years in various capacities at the University of Natal, and is congratulated on obtaining a Ph.D. last year. He investigated relationships between aphid feeding habit and phloem translocation under the

supervision of Professor Chris Bornman. This work continues at Fort Hare with the participation of an M.Sc. student, Earnest Mabindisa, who leaves shortly for 18 months study at Göttingen as guest of the Federal Republic of Germany. Ted himself has been invited by Professor Evert to further his studies at Wisconsin during 1977/78. Apart from teaching, Ted has done a good job of re-designing and re-equipping our laboratories, especially a Microtechnique laboratory where a large number of sorely needed micro-slides are being churned out.

Shaun Russell and Lin, his bride of a few days standing, arrived at deserted Alice station at 03 h 00 one chilly winter's morning. The Karroo landscape had proved almost too much for them, but they are now happily adapted to our surroundings and may eventually even see a lion or two. Shaun came from Reading University where he obtained an M.Sc. in Taxonomy under Professor Heywood; and is now registered at Rhodes under Dr Lubke so as to make an ecological/taxonomic study of forest vegetation in the Eastern Cape, with special reference to the Cryptogams. Shaun is mostly responsible for teaching Biology I and Cryptogam courses. Both he and Robbie helped equip the Herbarium during the initial stages.

Beth Gibbs-Russell arrived in 1976 to help teach Taxonomy and has enthusiastically tackled the task of re-organising and increasing the decades-long neglected Herbarium, but which nevertheless has some beautifully prepared specimens, including the Giffen algal collection, and some specimens collected in the W. Cape at the turn of the century. A Herbarium should be an essential facility of a Botany Department and a considerable sum has thus been spent on acquiring some manuals, such as monographs and Index Kewensis, but many more reference books on South African flora are still required. Our Herbarium is small (1 500 sheets) and the intention is to start de novo by using the computer-based information system designed by the BRL. The collection will concentrate on the flora of the E. Cape, Ciskei and Transkei.

Beth hails from Louisiana, obtained her Ph.D. at the University of Georgia under W H Duncan through a taxonomic study of Rhodesian aquatic plants. She spent a period at the Salisbury Herbarium (SRGH) before coming here, where her aquatic interests continue particularly in sedges and rushes.

Two new posts for Laboratory Assistants were recently taken up by Michael Magwa and Jama Mhaga who are being trained in laboratory and herbarium preparation. Student numbers have been limited to 43 in Biology I, 65 in Botany I, 16 in Botany II and 18 in Botany III because of space shortage. Contingency plans for next year will allow a considerable increase in first year students, and an additional Lectureship may be granted on these grounds. A proposed new Biological Sciences building is expected within 5 years.

Departmental research is being channelled into two master programmes. The

one embraces floristic and ecological studies in the Transkei and Ciskei, and presently contains five specific projects being done by staff members. The second involves physiological and anatomical studies of plants of potential economic importance to the region. Post-graduate students participate in the four projects of this Master Programme.

Our syllabuses have been revised, new approaches towards teaching are being investigated, and we are experimenting with "open note book" tests.

The Botany Department at Fort Hare takes this opportunity for thanking all who have given us help or suggestions regarding syllabuses - nearly every University in the country has given opinion. Our external examiner, Professor Cresswell, has been most helpful in this regard. The Director of the Botanical Research Institute and his staff have freely given their advice on herbarium matters as has Rhodes University. SAAB has, through its meetings and Forum Botanicum, provided invaluable links with botany in South Africa. The E. Cape branch of SAAB has made it possible for the Fort Hare botanist to participate, together with UPE and Rhodes, in writing the proposed flora of the E. Cape under the direction of Dr Amy Jacot Guillarmod.

DR BRIAN ROBERTS, formerly professor of Pasture Science at UOFS has taken up the post of Head of the Department of Biology at the Darling Downs Institute of Advanced Education in Toowoomba, Queensland. He is responsible for teaching environmental Science and is to lead the School of Applied Science into new curricula in Natural Resource Management when he takes over as Chairman of the School in June 1976. He is compiling a guide to the grasses of South-western Queensland along the lines of his guides for the OFS (1972) and Kalahari (1975). He is in constant contact with Prof. Specht (who was in RSA last year and is writing up world Heath ecosystems) and the Department of Primary Industries. Dr Roberts would be glad to act as liaison between South African and Australian colleagues on matters botanical and agricultural. He would also welcome visitors from the biltong and wine regions!

F R LONG HERBARIUM, BOTANY DEPT., UNIVERSITY OF PORT ELIZABETH: The late Mr Frank Reginald Long A.H.R.H.S., F.I.L.A., F. Inst. P.A. (S.A.) trained as a horticulturist at the Royal Botanic Gardens, Kew and started this collection in 1931 while he was superintendent of Parks and Town Attractions in Port Elizabeth. Inspired as he was by a visit from Dr John Hutchinson of Kew, his original idea was that it should form the nucleus of a herbarium for the Port Elizabeth Parks Department and would be of particular use to the pupil horticulturists there.

However when Mr Long left Port Elizabeth in about 1940 to join the air force,

the herbarium was housed in the old museum in Bird Street and subsequently moved with the museum to Humewood in 1960.

On his death in 1961 the collection was bequeathed to the Museum where it has remained until recently when, on the recommendation of the honorary botanist there, it was transferred to University of Port Elizabeth.

The collection comprises c.1 600 specimens of Eastern Province Spermatophyta, most of which are from the Port Elizabeth and Uitenhage districts.

Triplicate specimens were collected where possible, one set being sent to Kew where they were named, a second set was retained and a third set was sent to the Albany Herbarium and subsequently to the National Herbarium, Pretoria.  
(N.R. Urton)

SECOND INTERNATIONAL MYCOLOGICAL CONGRESS: This Congress will be held at the University of South Florida, Tampa, Florida, U.S.A. from August 27 to September 3, 1977. A main feature of the program will be concurrent 3-hour symposia on each morning of the Congress. These symposia will treat all aspects of mycology and be complemented by contributed papers, poster sessions, mycomotion pictures and invited lectures of general interest.

A member of the Executive Committee of the Congress is responsible for co-ordinating scientific forays. It is intended that several pre- and post-congress forays and/or workshops be organized by individuals in various parts of the country.

The International Mycological Association which has the responsibility for initiating future congresses will meet during the Congress. The IMA Committee on Nomenclature, chaired by Professor Richard Korf of Cornell University, will also meet in Tampa.

Further details from Dr Melvin S Fuller, Dept of Botany, University of Georgia, Athens Georgia 30602, U.S.A.

THE OTTER TRAIL: Friday, 7th May, heralded the start of the "Great Trek" of a small party of U P E botany students, headed by Dr. M C Olivier and Dr B L Robertson of the Botany Department. They had decided to attempt the Otter Trail, one of the most beautiful nature trails in South Africa, stretching from Storms River Mouth to the Groot River, over 65 km in all. Loaded with bulging rucksacks, the unsuspecting hikers set out under the impression that the "uitstappie" would not require much effort. How wrong they were!

The first hour's walk, which was not too strenuous, brought them to an eye-catching waterfall, and by lunchtime they had arrived at the first stop - Ngumu's hut.

Now the climbing started - Everest would have seemed nothing compared to the slopes which were now encountered. The descents were just as steep, and by four o'clock the weary group had had enough, and settled down for the night beside the cool refreshing Kleinbos River. A blazing fire and braai soon cheered everyone, and in no time all were snug as bugs in their sleeping bags.

The second day's hike was considerably tougher, but the breath-taking scenery dispelled any thoughts of regret which may have arisen. Scott's Hut, set in picturesque surroundings, was reached at tea-time, and the journey was resumed with a steep climb out of the Geelhoutbos River Valley. The valleys are lush with ferns, while numerous monkey-ropes (lianas) hang down from the trees. The dense forests include Outeniqua yellowwoods (Podocarpus falcatus), stinkwood (Ocotea bullata), saffronwood (Cassine crocea) vlier (Nuxia floribunda) and cape beech (Rapanea melanophloeos). Milkwood (Sideroxylon inerme) and wild sage (Tarchonanthus camphoratus) are also common.

A swim in the Elandsbos River was very refreshing before a vertical ascent out of the valley. Here, and in several other places, the trail was not adequately marked, and some difficulty was encountered in trying to find it again after having crossed the river. Oakhurst, the third rest hut, overlooking the Lottering River Mouth, was reached that evening. A Bully Beef stew was ravenously devoured, thanks to the culinary talents of Dr Olivier.

Sunday dawned and the band started out with feelings of apprehension, as this was the day the dreaded Blaukrans River Estuary had to be forded. No one could swim very well, but despite the brochure's warning, Dr Robertson and a brave student ventured into the waters secured to each other with a rope. However, their fears proved unfounded as the estuary was not more than three feet deep, the dark brown waters of the river having initially given the impression of great depth. The crossing was made on a sand bar which shifts in position. Hence the ideal place for crossing the estuary does not remain constant.

The trail was now considerably easier, and every one could relax and enjoy the pleasures of the natural flora. Fynbos covers the drier crests of the peaks, while dense moist forests occupy the valley floors, riddled with numerous streams trickling down to the sea. Erica spp. were seen all along the trail, as well as impressive examples of Brunia, Indigofera, Polygala, Protea neriifolia and Metalasia muricata. Hypoestes aristata grows in great profusion in the moister areas.

At twilight, after a steep descent, the last stop, Andre's Hut, was reached.

This last night everyone except Dr. Olivier who was equipped with a down sleeping bag, almost froze to death, and all were grateful to Dr. Robertson for bravely surrendering his sleeping bag to relight the fire in the early hours of the morning, with the help of a fellow sufferer.

The final morning's walk was just that, until the final descent into Nature's Valley. Many a heartbeat was missed while climbing down over the crumbling stones of a very steep and narrow cliff path. Eventually the Groot River Mouth and the golden sands of the beach at Nature's Valley were reached. Aching feet were soothed in the icy sea before the final trek was made to the cafe and civilisation, a few kilometers further.

The Otter Trail offers an experience not to be missed - the scenery is truly magnificent, entirely unspoiled by man. However, the trail should not be underestimated in its ruggedness. (C. B-B)

CONSERVATION OF VEGETATION IN AFRICA SOUTH OF THE SAHARA is the title of the proceedings of the special symposium held during the 6th Plenary Meeting of A.E.T.F.A.T. in Uppsala Sweden (September 1966). Copies of these proceedings edited by Prof Olov and Dr Inge Hedberg are still available at \$ 15.50 plus \$ 1 postage and may be placed through the Editors of Forum Botanicum.

ASSISTANT FOR ALLEN VEGETATION RESEARCH: Graduates in Botany, preferably with an Honours Degree, are invited to apply for the post of Research Assistant to help with studies on the problem of invading Pine, Hakea and Acacia in Cape Fynbos vegetation, under the direction of Dr A V Hall and Dr E J Moll in the Department of Botany, University of Cape Town.

Applications, with the names of two referees, should be sent to the Registrar, University of Cape Town, Rondebosch, 7700, as soon as possible.

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