

FORUM BOTANICUM

Vol. 11, No. 2

Februarv, 1973
Februarie 1973

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

UNIVERSITY OF CALIFORNIA, BERKELEY, U.S.A.: A major climatic disaster struck the University of California's Botanic Garden during early December, last year, when a large number of outdoor plantings were destroyed by a cold Arctic air mass which moved into northern California and caused the normally mild temperatures to drop sharply. Over a week of well below freezing temperatures were recorded during the nights with an all-time low of 10°C. The Garden has what is perhaps the largest collection of living South African succulent plants, many of which are grown in an area of the 25 acre garden known as Africa Hill. As a result of this unprecedented freezing weather, it is estimated that approximately 60% of the non-succulent plants on Africa Hill were killed while about 70% of the succulent plants were destroyed. The latter included two large specimens of *Aloe dichotoma*, a large number of crassula's, aloes and various Aizoaceae. *Pelargonium*, *Melianthus*, *Greyia*, *Halleria*, *Eumyops*, *Osteospermum*, Ericaceae and numerous other shrubby species and an undetermined number of monocot. genera died.

The research material of Prof. R. Ornduff, who visited us during 1970-71, also suffered badly although some material survived in heated glass-houses. The Garden hopes to re-establish its valuable collection and will no doubt rely heavily on its friends in South Africa for seeds and cuttings of various desiderata.

VISITING BOTANISTS:

1. Prof G.F. Papefuss, the recently retired Professor of Botany at the University of California, Berkeley, is on holiday in the Republic. He was recently elected as an Honorary Fellow of the Royal Society of South Africa

and signed the role at a short ceremony in Cape Town. He is at present working on a historical article, in collaboration with Miss Gunn, on algal collectors in South Africa.

2. Prof. J. Pate from the University in Belfast, will be working with Prof. O. Lewis at the University of Cape Town on amino acid and protein metabolism in certain leguminous plants which are important suppliers of high-protein foodstuffs. He is the discoveror of "transfer cells" which are specialised cells responsible for transferring food materials from the conducting tissue of plants to nearby tissues requiring them for nutrition or excretion.

3. Dr. R. Rodin of the Biological Science Department of the Californian Polytechnic State University, San Luis, Obispo, California, will be doing ethnobotanical work in Ovamboland for the next six months under the sponsorship of the National Geographic Society. He is an avid plant collector. His collections made here during 1947 formed the basis of the collection on Africa Hill in the Berkeley Botanic Garden.

4. Miss E. Scholtz, Director of the Brooklyn Botanic Garden, New York, is on a holiday visit to the Republic.

5. Dr. M. Crosby, a bryologist from the Missouri Botanic Garden, ST. Louis, U.S.A., has been on a three week visit to the Republic. He is currently revising the genus *Squamidium* and has visited all Dr. T.R. Sim's collection localities to make new collections. (The Missouri Botanic Garden has now become an institutional member of S.A.A.B.)

THE CLANWILLIAM CEDAR: Dr. H.A. Lückhoff of the Forest Research Institute, Pretoria, has done detailed research into the past and present status of the Clanwilliam Cedar (*Widdringtonia cedarbergensis* Marsh). In the light of his findings he has made proposals for the future management of these well-known cedars to ensure their survival. Further details are available in the J. Bot. Soc. S. Afr. 57: 17-23 of 1971 or in the J. Mountain Club S. Afr. for 1971 pp. 33-39. Illustrations are in black-and-white.

A LIST OF NATAL TREES: Drs. J.H. Ross and E.J. Moll have produced a very useful booklet containing a list of Natal trees. This is an extraction from the National List of Trees produced by B. de Winter and J. Vahrmeijer in 1972. Zulu common names are given in addition to those in English and Afrikaans. This list is published by the Natal Branch of the Wildlife Protection and Conservation Society of South Africa.

THE ALOE, CACTUS AND SUCCULENT SOCIETY OF RHODESIA: The Society has just issued the second number of their excellent journal EXCELSA which has eight full colour plates. Articles are included on the succulent flora of the Malagasy Republic, the aloes in Manicaland (Rhodesia) as well as a lost and found *Lithops* species. The society publishes 100 specially bound and numbered collectors copies of this journal at \$8,50 (Rhodesian) in contrast to the \$2,50 for standard copies. Issues are obtainable from Excelsa, P.O. Box 922, Salisbury, Rhodesia.

CONTRIBUTIONS FROM THE BOLUS HERBARIUM: The fifth volume of this series is now being distributed at a price of R2,00 each, from the Bolus Herbarium, University of Cape Town, Rondebosch, C.P. Subjects treated in this volume include the use of a data-banking system for taxonomic collections by Dr. A.V. Hall and the natural vegetation of the University of Cape Town forty years ago and records of the soil temperatures by Dr. M.R. Levyns.

BOLUS HERBARIUM, UNIVERSITY OF CAPE TOWN: As a result of two expeditions to the Clanwilliam area carried out last spring by Prof. E.A. Schelpe to investigate small terrestrial mosses, three new generic records for South Africa have been made. One is *Bryobartramia robbinsii* Sainsb., previously only recorded from Victoria, Australia. This very small moss resembles a large ephemerum that is peculiar in that the large archegonium does not split off to form a calyptra but continues growth and finally develops both the seta and mature capsule.

The second new record is of the genus *Crossidium* Jar. Here, represented by specimens which appear to be conspecific with the variable Australasian *Crossidium geheebii* (Broth.) Broth.

The third new generic record appears to represent an undescribed cleistocarpous genus of the Dicranaceae.

THE SOUTH AFRICAN JOURNAL OF SCIENCE: The Journal is now published by Macmillan journals (the publishers of Nature). Volume 69(1) for 1973 is the first issue in the new format and is of a very high standard. The annual subscription is R12,00 or free to members of the South African Association for the Advancement of Science. (Subscriptions should be addressed to:- The Subscription Department, South African Journal of Science, P.O. Box 23134, Joubert Park, Johannesburg.)

THE HUMAN SCIENCES RESEARCH COUNCIL conducted a survey of Natural Scientists during 1971 and found that 31% (of the 6 710 graduates participating) pursued occupations in the natural sciences, 30% were teachers, professors or lecturers, 11% occupied managerial and administrative positions, 12% pursued other occupations (such as in the human sciences) and 16% were not members of the labour force (mainly housewives and post-graduate students). The male natural scientists were predominantly Afrikaans-speaking (53%), while the majority of the female natural scientists were English-speaking (60%). Twenty nine percent of the natural scientists were found to be biological scientists. Of the five occupational groups (earth scientists, biological scientists, physicists, mathematicians and chemists) the mathematicians were found to be the youngest (50% under the age of 28 years), the earth scientists (mainly geologists) were the highest paid (50% of the men earn more than R6 470 per annum), the physicists were exceptionally highly qualified (29% in the possession of doctorates) and the chemical, physical and biological scientists spend most of their working hours on research and development.

OPENING OF THE NEW BOTANICAL RESEARCH INSTITUTE BUILDING: The South African Association of Botanists is arranging a programme to coincide with and commemorate the opening of the Botanical Research Institute new building.

On the last day of the annual S₂A₃ Congress (Friday, 29th June) a symposium on the South African flora is being arranged. Speakers will include

Dr. Frans Stafleu, Dr. Merxmüller, Dr. Codd, Dr. De Winter, Professor N. Grobbelaar, an invited overseas ecologist and an economic botanist.

A week-end field trip to the Magaliesberg is being arranged with all botanists accommodated at Utopia holiday resort, our overseas visitors will be our guests.

On Monday, 2nd July, the building will be opened by the Minister of Agriculture.

Actual costs for the week-end are not yet known but will not exceed R30.

Please fill in the enclosed form with a non-returnable deposit of R10.

OUR GREEN HERITAGE: Mr. S.P. Botha announced in Pretoria during December last year that thousands of trees would be presented by his Department to schools during 1973 as part of the "Green Heritage" campaign to make South Africa greener.

"Our Green Heritage" the national campaign for 1973, will promote public appreciation for South Africa's plant life. The organising committee, headed by Mr. Botha, hopes that everyone in South Africa will plant a tree in 1973.

The trees will be available to White, Bantu, Coloured and Indian schools throughout the country and South West Africa. Each school will be allowed ten ornamental trees, plus utility trees as required. These will be planted at special functions to beautify school grounds.

"The Department of Forestry has been preparing for some time to meet the demand for trees from schools, and thousands of trees have been reserved for this purpose," Mr. Botha said.

Information pamphlets on appropriate trees for specific regions, the cultivation and maintenance of trees, etc., will also be made available by the Department free of charge.

As numerous school projects will be centred on cultivating their own trees by pupils, seed will also be made available to schools.

"We have millions of seeds of indigenous trees available. Information material

on the preparation of seed and the cultivation of seedlings is being compiled and will be ready for distribution early next year" Mr. Botha said.

EDITORS/REDAKSIE

E.P. du Plessis, CSIR, Pretoria

E.G.H. Oliver, Botanical Research Unit, Stellenbosch.

CORRESPONDENCE/KORRESPONDENSIE

Mrs. E.P. du Plessis
Division of Information and Research
CSIR, P.O. Box 395,
PRETORIA.