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

POST AETFAT CONGRESS TOUR TO THE NORTHERN AND EASTERN TRANSVAAL:

The tour to the northern and eastern Transvaal was led by Chris Scheepers of the Botanical Research Institute, assisted by Braam van Wyk of the University of Pretoria and Bobby Westfall of the Botanical Research Institute. Antionette Backer and Lyn Smith of the BRI were primarily responsible for catering refreshments to the 44 delegates.

The group left Pretoria in two buses and a Kombi, the latter serving as a mobile refreshment station, on Monday 25 January at 9 am. Plant presses and refreshments were issued on the foothills of the Waterberg, north of Warmbaths which was the first opportunity for delegates to collect plants. A picnic lunch was served near Pietersburg on the campus of the University of the North and a tour of the Botany Department was conducted by Prof. Daan van Vuuren. The picturesque "inselberg", next to the Botany Department proved irresistible to many delegates and a climb-and-collect party set out. It is doubtful whether the party could have been recovered without Chris Scheepers and his referee's whistle. Afternoon tea was served next to an "inselberg" which afforded another climb-and-collect opportunity. Here Prof. Müller-Doblies was lost. Several search sorties were made in vain. Dr. de Winter was in the process of sending forth a group of little black boys who were more familiar with the terrain when Prof. Müller-Doblies strolled up to the buses. He had ventured out of earshot of Chris Scheepers's whistle. A very weary group booked into the Mountain Inn Hotel at Louis Trichardt that evening only to find confusion as to who was sharing with whom. This could have proved interesting but for the propriety of the organizers.

On Tuesday the tour headed for lunch at Punda Milia, through Venda with two stops, one for collecting and one for a roadblock, apparently on the lookout for terrorists. This could be indicative of the garb worn by delegates. Willem Gertenbach and Johan Verhoef joined the tour at Punda Milia gate as guides through the Kruger National Park. One bus (with Chris Scheepers and whistle) blew a gasket five kilometres from Punda Milia camp to which it limped and then

remained immobile. After lunch the delegates squeezed into the remaining bus and two Kombi's, the second Kombi by courtesy of the National Parks Board. A leisurely trip to Shingwidzi camp was undertaken where a magnificent braai hosted by the Parks Board was awaiting. Buffalo steak and hippo sausage were reminiscent of a recent banquet.

Wednesday was spent viewing the Park with lunch at Letaba camp and afternoon tea at Masorini, a reconstructed archaeological site. En route to Olifants camp for the night the Kombi with Prof. Eshbaugh, Braam van Wyk, Bobby Westfall and Pablo Weisser who was asleep in the back, was apparently charged by a bull elephant. The story is not quite clear as the people concerned are still incoherent.

Mrs Davidson of the University of the Witwatersrand spoke on aspects of the Blyde River Canyon after supper. Her talk was illustrated with magnificent slides showing what the delegates could expect to see the following days.

On Thursday the relief bus arrived and delegates were able to stretch once more. Farewells were said to Willem Gertenbach and Johan Verhoef at Orpen gate where the group left the Park, en route to Blydepoort for the night. Johan Kluge and Ian Oliver, both from the Lowveld Botanic Gardens, joined the tour on Friday morning as guides. After an early morning hike down one of the nature trails, the group left Blydepoort, aided by Chris Scheeper's whistle for Bourke's Luck and morning tea. It was here that confusions arose over the group's right or lack thereof to denude Bourke's Luck of plant specimens. Lunch was had at the Lone Creek falls and the group arrived at the Drum Rock Hotel near Nelspruit where an early start was made to toasting the success of the tour as this was our last evening together. The toasts continued until late that night.

The group spent Saturday morning visiting the Lowveld Botanic Gardens and were hosted to a splendid tea by the Lowveld Branch of the Botanical Society of South Africa, after which the return journey to Pretoria was made. The delegates had thoroughly enjoyed the tour which had shown them the great variation in vegetation found in the Transvaal and had viewed spectacular scenery. Having deposited the delegates at various hotels, Chris Scheepers found on his return to the Botanical Research Institute that his suitcase was missing. It had joined those of the delegates at an hotel!

(R. Westfall)

POST AETFAT CONGRESS TOUR TO THE SOUTH-WESTERN CAPE: This tour followed directly on the Transvaal tour. It was attended by 35 overseas delegates, most of whom had been on the other tour, and one local one with Charlie Boucher, Ted Oliver and High Taylor of the Botanical Research Unit, Stellenbosch as guides and David MacDonald also of the BRU as driver of the Kombi and chief supplier of presses, pickle and Liquifruit.

Delegates were met at D.F. Malan Airport at 11.30 on Sunday 1st February and were taken to the National Botanic Gardens, Kirstenbosch where they lunched as guests of the Director, Prof. Brian Rycroft. In the afternoon there was a guided tour around the gardens with Prof. Rycroft, assisted by Compton Herbarium staff, Dee Snijman and Pauline Fairall. This was followed by tea at the guest cottage with some of the local members of SAAB. That night was spent at Stellenbosch.

Monday saw us off to the coast with a brief stop at the Strand flats to give delegates a chance to see a superb show of the monotupic Cybistetes longifolia (Amaryllidaceae) after a recent fire. The first main stop was in unspoilt fynbos on the impressive Kogel Bay marine drive. Next stop was at Davidskraal at Betty's Bay for coastal and dune vegetation with a fine Sideroxylon wood. On the beach delegates were introduced to kelp trumpetting but here Dr. Maley's military service showed up his expertise, and of course, mention must be made of the tour dippers, the Wendeburgers. Lunch was taken under the trees at the Harold Porter Botanic Gardens (NBG) with an after lunch stroll. Much excitement and photographing occurred when someone found a frog being caught by a water snake. We then drove on to Hermanus where a short diversion up the Rotary Mountain Drive on top of the mountains above the town gave everyone a superb view of the whole area. The rest of the afternoon was spent in the Fernkloof Nature Reserve walking along the numerous hiking paths to see excellent stands of fynbos of different ages. On returning to base delegates were welcomed to Hermanus by the Mayor and Councillors with a very pleasant cocktail party in the fine lecture hall. Members of the local Botanical Society were in attendance. The night was spent at an hotel on the sea front.

Tuesday dawned with overcast skies and drizzle. This did not daunt the delegates who had had quite enough sun the previous day judging from the red noses, arms and legs. Fortunately the rain held off for the rest of the day which remained pleasantly cool. First stop was a large remnant patch of coastal forest near Gansbaai where on a good 1½ hour walk we saw fine specimens of Celtis africana and Apodytes dimidiata. The drive on to the next stop

provided delegates with photographic scenes of local ethnic villages as we drove through the picturesque mission station of Elim. There were also fine groups of blue cranes in some of the fields en route. Over the Elim hills we went down to the Rietfontein Nature Reserve where we lunched and walked in the very short fynbos characteristic of the Elim flats. Then on to the southernmost tip of Africa at Cape Agulhas where delegates could choose which ocean they wanted to photograph or dip their toes into, the Atlantic or Indian. Then followed a drive to Bredasdorp for the night where the local correspondent of Die Burger sniffed us out and interviewed Charlie, Ted and the Müller-Doblies plus of course an accompanying photograph.

Wednesday saw us off to the limestone flats and hills near De Hoop to study the fynbos peculiar to this formation and the contact between fynbos and renosterveld. A stop at the De Hoop vleei provided shots of flamingoes and a superb population of flowering Scadoxus puniceus (Amaryllidaceae). A dusty drive over the eastern Rûens to Swellendam ended in lunch at the lovely picnic site on the Breede River in the Bontebok National Park. The bontebok were there to welcome us as well as a tame blue crane that enjoyed lunch leftovers. The heat was oppressive so the short drive to the foot of the Langeberg provided a very pleasant cool walk in the kloof forest in the Marloth Reserve. That evening after dinner we strolled around to the Drostdy Museum where the curator, Mr. Cochrane, gave us a slide lecture on the history of Swellendam. This was followed by a visit to one of the historical houses in the Drostdy complex.

Thursday also dawned overcast with drizzle thus giving an explanation to delegates as to how the forest could survive near Swellendam. This was shortlived as we travelled through the Langeberg via Tradouw Pass into the sunny blue skies and heat of the Little Karoo. We made our way to the north side of the Warmwaterberg for a whole morning studying succulent scrub and succulent quartz patches. The latter produced uninhibited oohs and aahs with the superb stone plants of Gibbaeum and Conophytum spp. and crassulas and Anacampseros. The guide's exclamations "Don't stand on the brown stones they're Crassula columnaris" had the desired effect. It was a case of bottoms up and cameras down. Lunch in cool shade on green lawns at the hot spring was most welcome. A long drive via Montagu and Robertson brought us to Worcester. En route occasional groups of European storks were seen in the fields complementing the one in the bus. At the Karoo Gardens, Worcester, we went for a walk in the natural vegetation with Bruce Bayer and Pauline Perry as guides and then on for a close look at the superb succulent collections.

Friday brought skudding clouds, a strong northwester and every likelihood of rain. Undaunted we made our way to cloud covered Jonaskop. At its base we transferred to two small buses from Stellenbosch for the 11 km tortuous drive to the summit. The higher we drove the more the clouds lifted until eventually they all vanished giving everyone a wonderful view of the mountainous regions of the Overberg. Numerous stops en route down gave delegates a good idea of the altitudinal zonation from high alpine fynbos down to succulent karoo vegetation. We drove back to Stellenbosch via Fransch Hoek where we stopped at the Huguenot Memorial for the French delegates.

Saturday morning began with a visit to the Hortus Botanicus of the University where the famous old welwitschias were seen. We then drove to a farm south of Malmesbury to look at remnant renosterveld where some fine clumps of Stapelia hirsuta were in full flower. A stroll down the hillside to the welcome shade of a grove of eucalypts took us to our lunch spot. Here a most appetising braaivleis with local wines was laid on for the delegates by the farmer and a scheduled one hour stop turned into a very enjoyable and sociable two hours - excusable on the last day of the tour. After this we drove down to the coast to look at coastal fynbos near Pella and strandveld scrub near Bokbaai. The drive to Cape Town along the coast took us past the Koeberg Nuclear Power Station. That evening the wives of the local botanists on the tour joined for dinner at the De Waal Hotel to end off a very pleasant and enjoyable seven days together with no breakdowns or mishaps other than the stigmata of St. Edmund which we are glad to hear have "faded away" in icy London.

Monday saw Hugh Taylor and Ted Oliver, gluttons for punishment, taking 15 of the delegates who had not yet flown off, around the Cape Peninsula to the Cape of Good Hope Nature Reserve to study the vegetation there in an enjoyable and very full day. (E.G.H.O.)

S.A.A.B., EASTERN CAPE BRANCH, ANNUAL REPORT FOR 1981: Probably the most important happening during the past year was the hosting by the E. Cape Branch, of the S.A.A.B. Annual Congress. I believe that the Congress was a great success and I would like to thank all those members who worked so hard to make it all go as well as it did.

Other activities which were conducted under the auspices of the E. Cape branch of the S.A.A.B. in 1981 were a lecture on Reproduction in Seed Plants by Prof. William Jensen from the University of California; a tour to the

Alexandria Forest, organized by Prof. Marker of the Geography Department of Fort Hare, and a lecture by Dr. M.C. Olivier on her trip to Australia and the International Botanical Congress in Sydney.

Our membership has not changed much during the past year, with our current membership standing at 24 members. We were fortunate to have Prof. G.C. Bate join our ranks and we extend a hearty welcome to him and his family.

As the Regional Representative to Council, I attended four Council meetings in Pretoria during 1981 and will report orally on these to the Meeting.

I would like to thank all committee members for their support and hard work during the past year. (B.L. Robertson, Chairman).

There has been a change in the location of Branch headquarters from Port Elizabeth to Grahamstown. The following office bearers have been elected:

Chairman - Mrs. D. Court
Secretary - Mr. A.R. Palmer
Treasurer - Dr. A. Jacot-Guillarmod

The Regional Representative is Dr. R.A. Lubke.

S.A.A.B. TRUST FUND: The January 1982 Council Meeting and the Annual General Meeting of S.A.A.B. held at the University of Pretoria approved the formation of a S.A.A.B. TRUST FUND and the appointment of three Founding Trustees: Professor J. Small (President), Professor C. Cresswell (Past President) and Professor N. Grobbelaar (Past President). The task of the Founding Trustees will be to set up the Trust Fund.

Since a number of S.A.A.B. members were not present at the A.G.M. and others may not have seen the copy of the draft Trust Deed that was on display on the S.A.A.B. notice board during the A.E.T.F.A.T. Congress at the C.S.I.R. Conference Centre, the attention of members is drawn to this draft Trust Deed.

It may be pointed out to members that the draft Trust Deed, appropriately amended, is based on a legally approved document used by other South African and overseas scientific societies for similar trust funds.

Those members who would like to see or make any comments on the Trust Deed may obtain copies from their Regional Representatives: Prof. B. Rycroft (Western Cape), Dr. R. Lubke (Eastern Cape), Dr. P. Keulder (Orange Free State), Dr. G.E. Gibbs Russell (Northern Transvaal), or from the S.A.A.B. Secretary.

UNIVERSITEIT VAN PRETORIA: Gedurende die tydperk Julie tot Desember 1981 het mej. I. von Teichman studieverlof gehad. In London is die Kew Herbarium en Jodrell Laboratorium besoek. Samesprekings oor transmissie-elektronmikroskopie van saadmateriaal is met dr. Margaret Stant gevoer.

Die grootste gedeelte van die verloftydperk is in Reading deurgebring. Onder leiding van dr. J.D. Ross (Departement Plantkunde, Universiteit van Reading) is navorsing in verband met biochemiese aspekte van saadkieming gedoen. Drie Europese boomspesies is vir dié studie gekies nl. Tilia cordata, T. platyphyllos en Sorbus intermedia. Die verandering in aktiwiteit van die twee oksiderings= ensieme (glukose-6-fosfaat dehidrogenase en 6-fosfoglukonsuurdehidrogenase) van die pentosefosfaatweg (PP-weg) gedurende stratifisering by 5°C en 20°C is nagegaan.

Die doel van die ondersoek was om vas te stel of daar enige verband tussen die aktiwiteit van bogenoemde twee ensieme en rusverbreking bestaan. Materiaal is vir elektronmikroskopie voorberei om die ultrastrukturele veranderinge tydens stratifisering na te gaan.

'n Besoek is gebring aan dr. R.A.T. George (Skool van Biologiese Wetenskappe, Universiteit van Bath). Dr. George doen veral navorsing op groente. Aspekte wat hy ondersoek is onder andere die invloed van mineraalvoedingstowwe op die opbrengs en kwaliteit van sade.

Prof. E.H. Roberts (Departement van Landbou en Tuinbou, Universiteit van Reading) is ook besoek. Prof. Roberts is 'n bekende outoriteit op die gebied van saad= kieming. Prof. Roberts stel veral belang in die rol wat die PP-weg tydens saadrus speel asook die landlewendheid van sade tydens opberging.

In Tübingen (Wes Duitsland) is 'n baie leersame kursus in ligmikroskopie gevolg. Hierdie kursus het twee weke geduur. Die A-kursus was baie teoreties van aard, terwyl die B-kursus baie praktikums ingesluit het, waartydens onder andere hoogs gesofistikeerde fotomikroskope gehanteer is.

Een week is by dr. G. Günzel (Afdeling Plantmorfologie en Plantteling, Tegnieese Universiteit van München) deurgebring. Dr. Günzel het in Duitsland bekendheid verwerf met die ontwikkeling van 'n eenvoudige en doeltreffende elektroforese metode vir die variëteitsidentifisering by koring (*Triticum*) en gars (*Hordeum*). Hierdie metode is van ekonomiese belang vir die bak- en vierbroubedrywe aange= sien hierdie identifisering op enkele graankorrels gedoen kan word.

'n Kort besoek is aan dr. B. Schmidt (Afdeling Saadsertifisering en Toegepaste Plantkunde van die Instituut vir Landboukundige Navorsing in Karlsruhe) gebring. Navorsing sluit aspekte soos genetiese variasie van Avena spesies in. Die

kwaliteit van mieliehibriedsaad, die belang van saadgrotte en meganiese beskadiging van dié saad gedurende oes en verdere behandeling word ook bestudeer.

SOUTH AFRICAN INSTITUTE OF ECOLOGISTS: The 1982 Annual General Meeting of this newly formed Institute is being held on 12 March 1982 at the Sandton Field Study Centre near Johannesburg. At the same time a one-day seminar entitled "Ecological assessment of renewable natural resources" will take place under the chairmanship of Prof. Brian Walker of Wits University. Speakers will include Dr. D. Scotney on assessing agricultural potential, Prof. Eugene Moll on assessing natural terrestrial communities, Dr. R.D. Roberts on assessing impacts on inland water and Prof. John Grindley on assessing impacts on marine systems. The summing up will be done by Prof. Richard Fuggle.

SYMPOSIUM ON THE STRUCTURE AND FUNCTIONING OF A SOUTH AFRICAN SAVANNA

ECOSYSTEM : The South African Savanna Ecosystem Project was initiated in 1974 with the immediate objective of developing our knowledge of the structure and functioning of bushveld ecosystems. This knowledge is expected to be applied usefully in planning future agricultural developments in the bushveld. The first and second phases of the Project are in an advanced stage at present and progress should, appropriately, be reviewed. For this reason the National Programme for Environmental Sciences is organizing a symposium on the above subject which will be held on 14, 15 and 16 July 1982 at the C.S.I.R. Conference Centre, Pretoria.

The objectives for the symposium, as endorsed by the Steering Committee for the Savanna Ecosystem Project, are:

- To prepare a synthesis of all past and current research within the Savanna Ecosystem Project.
- To provide a forum in which the achievements of the project can be assessed.
- To initiate the publication of a book comprising key papers, syntheses and original research papers.

PROPOSED SOUTHERN AFRICAN ASSOCIATION FOR ENVIRONMENTAL EDUCATION (SAAEE):

Recently a symposium for Environmental Education was held at Pietermaritzburg under the joint auspices of the Natal Parks Board and UNISA. The symposium was attended by some 50 people from all over southern Africa (e.g. the Natal

Education Department, the Transvaal Nature Conservation Department, the Cape Department of Nature and Environmental Conservation and the Wildlife Society). At the symposium it was decided to form a Southern African Association for Environmental Education (SAAEE). This Association has not yet been formally constituted and there are no official members.

A steering committee consisting of Professor Ron Yle, Johan Degenaar, Geoff Cowan and Lynn Hurry has been formed and is located in Pretoria. The main function of this committee is to keep interested people informed of developments with regard to the SAAEE.

It is hoped to have a meeting in the near future to formally constitute the Association and to elect a committee. One possibility is to have a short meeting during the International Conference on Environmental Education. The steering committee of the SAAEE will contact the organizers of the Conference to explore this possibility.

The Conference will be held at Treverton, Mooi River, South Africa in April 1982.

CALENDAR OF MEETINGS:

MEETINGS 1982

Biological Productivity

BIOLOGICAL PRODUCTIVITY OF CONTINENTAL SHELVES IN TEMPERATE ZONE OF N. ATLANTIC.
2-5 March, Kiel, FRG.

Biometry

XIe CONFERENCE INTERNATIONALE DE BIOMETRIE.
6-11 Sept., Paris, France.

(Dr. L.D. Calvin, Dept. of Statistics, Oregon State Univ., Corvallis, Oregon 97331, USA.)

Botany

5th INTERNATIONAL CONGRESS IN PLANT TISSUE AND CELL CULTURE.

July, Yaman Aski, Japan

(Ass. Prof. A. Komamine, Dept. of Botany, Faculty of Science, Univ. of Tokyo, 7-3-1 Hongo Bunkyo Ku, Tokyo 113, Japan.)

17th CONGRESS OF THE INTERNATIONAL ORGANIZATION FOR SUCCULENT PLANT STUDY.

Aug., Vienna, Austria.

(Mr. Brinson, 127 Brook Street, San Carlos, Calif. 94070, USA).

Cell Biology

BRITISH SOCIETY FOR CELL BIOLOGY "THE EUKARYOTIC GENE IN VITRO AND IN VIVO".

April, Glasgow, Scotland

(Dr. John D. Pitts, Dept. of Biochemistry, Univ. of Glasgow, Glasgow G12 8QQ, Scotland.)

FEBS MEETING ON CELL FUNCTION AND DIFFERENTIATION

10-14 Apr., Athens, Greece

(Dr. A.E. Evangelopoulos, National Hellenic Research Foundation, 48 Vassileos Constantino Avenue, Athens, 501/1 Greece.)

1ST EUROPEAN CONGRESS ON CELL BIOLOGY

Jul., Paris, France.

(Dr. M. Balls, Dept. of Human Morphology, Univ. of Nottingham Medical School, Queen's Medical Centre, Nottingham, BG7 2UH, UK.)

Ecology

3RD INTERNATIONAL CONGRESS OF ECOLOGY

5-11 Sept., Warsaw, Poland

(Org.: Committee, Inst. of Ecology P.A.S., Dziekanow Lesny, 05-150 Lomianki, Poland.)

Electron Microscopy

10TH INTERNATIONAL CONGRESS OF ELECTRON MICROSCOPY

17-24 Aug., Hamburg, F.R.G.

(Dr. Schimmel, Batelle Inst. Postfach 900160, 6 Frankfurt M-90, F.R.G.)

Horticulture Science

5TH INTERNATIONAL CONGRESS OF PLANT TISSUE AND CELL CULTURE

11-16 Jul. Tokyo and Lake Yamana.

(Masatoshi Iwata, Faculty of Agriculture, Univ. of Tokyo, Bunkyo, Tokyo 113, Japan).

79TH ANNUAL MEETING OF THE AMERICAN SOCIETY FOR HORTICULTURAL SCIENCE

8-14 Aug., Ames, Iowa, USA.

(701 North Saint Asaph Street, Alexandria, VA 22314, USA).

21ST INTERNATIONAL HORTICULTURAL CONGRESS

Aug. 29-4 Sept., Hamburg, F.R.G.

(Hamburg Messe und Congress GmbH, Congress Organization, P.O. Box 30 23 60, D-2000 Hamburg 36, Federal Republic of Germany).

I.U.B.S.

1ST IUBS GENERAL ASSEMBLY AND SCIENTIFIC SYMPOSIA

22-27 Aug., Ottawa, Canada.

(IUBS Secretariat, 51, Bd. de Montmorency, 75016 Paris, France).

Microbiology

13TH INTERNATIONAL CONGRESS OF MICROBIOLOGY

8-13 Aug., Boston, USA.

(Mr. R.W. Sarber, 1913 I Street NW, Washington DC 20006, USA).

Morphology

5TH INTERNATIONAL SYMPOSIUM ON THE MORPHOLOGICAL SCIENCES

Rio de Janeiro, Brazil.

(Prof. M. Moscovici, Avenue Atlantica, 720-ap 1002, 22020 Rio de Janeiro, R.J. Brazil).

Mycology

8TH CONGRESS OF THE INTERNATIONAL SOCIETY FOR HUMAN AND ANIMAL MYCOLOGY

8-12 Feb. Palmerston North, New Zealand.

(Secretariat, Dr. M. Baxter, Massey University, P.O. Box 63, Palmerston North, New Zealand).

Nuclear Biology

111e CONGRESS DE LA FEDERATION MONDIALE DE MEDECINE ET BIOLOGIE NUCLEAIRE

29 Aug.-2 Sept., Paris, France.

(Dr. C. Raynaud, BP 28, 91403, Orsay, France).

Oceanography

GROUP OF SPECIALISTS ON SOUTHERN OCEAN ECOSYSTEMS AND THEIR LIVING RESOURCES

May/Jun, Japan

(ICSU, 51, Bd. de Montmorency, 75016 Paris, France).

Paleobotany & Palynology

4TH COLLOQUIUM ON PALEOBOTANY AND PALYNOLOGY

21-26 Jul., Mexico City, Mexico.

(Eloy Salas, Inst. Mexicano de Petroleo, Av. Cien Metros 152, Apartado Postal 14-805, Mexico 14, D.F.).

Phycology

1ST INTERNATIONAL PHYCOLOGICAL CONGRESS

Aug. 8-14, Newfoundland, Canada.

(Prof. G.R. South, Dept. of Biology, Memorial Univ. of Newfoundland, St. John's Newfoundland, Canada A1B 3X9).

Plant Nutrition

9TH INTERNATIONAL COLLOQUIUM ON PLANT NUTRITION

22-27 Aug., Coventry, UK

(Dr. B.J. Greenwood, National Vegetable Research Centre, Wellesbourne, Warwick CV35 9EF, UK).

Plant Protection

INTERNATIONAL CONFERENCE ON PLANT PROTECTION IN THE TROPICS

Mar Kuala Lumpur, Malaysia

(MAPPS, P.O. Box 2351, Kuala Lumpur, 02-02 Malaysia).

Systematics

10TH ANNUAL MEETING OF THE ASSOCIATION OF SYSTEMATICS COLLECTIONS

22-27 May, Hawaii, USA

(Museum of Natural History, University of Kansas, Lawrence, Kansas 66045, USA).

MEETINGS 1983

Cytology

VIIIe CONGRES INTERNATIONAL DE CYTOLOGIE

19-23 Jun. Montreal, Canada.

(Dr. A. Meisels, FIAC, 1050 Chemin Ste-Foy, Quebec PQ, G1S 4L8, Canada).

Genetics

15th INTERNATIONAL CONGRESS OF GENETICS

Dec., New Delhi, India.

(Prof. V.L. Chopra, XV Int. Cong. of Genetics, P.O. Box 2841, New Delhi - 11060, India).

Growth Hormone

INTERNATIONAL SYMPOSIUM ON GROWTH HORMONE AND OTHER BIOLOGICALLY ACTIVE PEPTIDES

Milan, Italy.

(Dr. M.L. Pecile, Dept. of Pharmacology, 3rd Chair, School of Medicine, Via Vanvitelli 32, 20129 Milan, Italy).

Limnology

22e CONGRES DE LA SOCIETE INTERNATIONALE DE LIMNOLOGIE (S.I.L.)

21-28 Aug., Lyon et Villeurbanne, France.

(M. Bournaud, Université Lyon - 1, F-69622 Villeurbanne Cedex).

Mycology

3rd INTERNATIONAL MYCOLOGICAL CONGRESS

Aug. 28-3 Sept., Tokyo, Japan

(Prof. K. Tubaki, Inst. of Biological Sciences, University of Tsukuba, Sakura-Mura, Ibaraki 300-31, Japan).

Nitrogen Cycling

INTERACTION OF ROOTS AND MICROORGANISMS AND THE CYCLING OF NITROGEN

Sept., Loughborough, UK.

Sandy Beaches

AN INTERNATIONAL SYMPOSIUM ON SANDY BEACHES AS ECOSYSTEMS

17-21 Jan., Port Elizabeth, South Africa

(Symposium Secretariat S. 241, CSIR, P.O. Box 395, Pretoria 0001, South Africa).

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