

The University of Reading

School of Plant Sciences Department of Botany

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It is now well past the time that an issue of *Herbarium News* should have been produced. In fact, there has been so much activity and news to report that even the thought of `putting pen to paper' became rather daunting! *Herbarium News* started in <u>October 1983</u> (although the first issue was undated) when there was a gap in PSL's own news-sheet (Interflora). The fact that it has gone from strength to strength is the result of the combined efforts of a number of staff and *you* for helping provide the information! Please continue to send in to me items for the next *Herbarium News*: Dr Stephen L. Jury, Department of Botany, Plant Science Laboratories, The University of Reading, Whiteknights, Reading, Berkshire RG6 2AS, UK, Telephone: +44.(0)734.318169, Fax: +44.(0)734.753676, e-mails.l.jury@reading.ac.uk

NERC INITIATIVE IN TAXONOMY

It is very pleasing to report that Dr Anne Bruneau and Dr Terry Hedderson are now in post, though sadly work permits were somewhat delayed, especially in Terry's case.

I am also pleased to say that the University has also supported this taxonomy initiative by allowing Anne and Terry each to have a postgraduate research student through the University Research Endowment Fund. Mr Cymon Cox of Bangor is now in post to research the phylogenetic relationships in the Bryoideae (Musci) inferred from rDNA sequences with Terry, and our own Bill Baker, who has just completed our MSc course (MSc project: A revision of the *Cyrtorchis arcuata* (Lindl.) Schltr. *complex* (Orchidaceae), will be undertaking a systematic study of the Calamoid Palms. Molecular techniques will be used to examine generic-level relationships in Calamoideae and the

results compared with morphological and palynological data within a cladistic framework.

As yet we have no word on the accompanying NERC postdoctoral Research Fellowships; applications from Reading and Birmingham are still being evaluated by NERC.

The arrival of Joe Mullins from Dublin (see elsewhere under 'Botanical Diversity of the Indo-Pacific Region') to work with Dr Alastair Culham on a new molecular project, further strengthens our Molecular Systematics group. (Most of our systematics research students are joining this group for a period to add a molecular component to their studies).

PROFESSOR M.W. DICK

We wish to congratulate Michael on being given a personal chair and becoming Professor of Mycobiology. Nobody has used this title `Mycobiology' before, but it serves to emphasize the importance of fungi in biology!

This honour has been given in recognition of Michael's outstanding contribution to the taxonomy and ecology of the Straminipiles. He is the world authority on this kingdom of major importance and the distillation of his knowledge will be presented soon in a massive publication which will be the definitive work on the subject.

RETIREMENT OF PROFESSOR DAVID MOORE

September 30th saw the retirement of Professor David Moore. A traditional tea party took place in the PSL foyer. The numerous participants, including several ex-students, heard Professor Michael Dick outlining some of David's incredible range of achievements. Dr Royce Longton presented a volume of letters, tributes, messages and photographs collected together by Mrs Ida Moore from David's friends and students, past and present (spanning 5+ decades and 6 continents). David received a large collection of Do-It-Yourself tools (electric circular saw, power belt sander, Tenon saw, Hand saw, Hand drill), plus Heelas vouchers and a book token. David responded by outlining the important r"le of happenstance in the evolution of at least one botanical career. He is at present busy writing over 150 thank- you letters!

NEW STUDENTS

Besides Cymon Cox and Bill Baker mentioned elsewhere, we welcome:

Research students

Shaida Fariza Sulaiman (ex-USM, Malaysia) has started a research project entitled `Chemotaxonomical and pharmacological studies of the Mimoseae'. Shaida has already converted in excess of 100 herbarium specimens into phytochemical extracts.

Jose Augusto Carvalho (University of Madeira, Funchal) will be studying the phytogeographical relationships of selected Macaronesian taxa. We are pleased to say that Bob Press (**BM**) will be actively involved in this project.

Diploma in Pure and Applied Plant and Fungal Taxonomy

| Stephen CAFFERTY | Royal Botanic Gardens, Kew |
|---------------------|--------------------------------------|
| Murray DAWSON | Landcare Research, New Zealand |
| Alan HULME | Royal Botanic Gardens, Kew |
| David NANGOMA of | National Herbarium & Botanic Gardens |
| 61 | Malawi, Malawi |

MSc in Pure and Applied Plant and Fungal Taxonomy

| Ben ARNOLD | University of St Andrews |
|----------------|---|
| Sarah COURTNEY | University of Liverpool |
| Laura FORREST | University of Edinburgh |
| Joelle HAUZEUR | Ecole Pratique des Hautes Etudes, |
| Paris, | France |
| Wan-Pyo HONG | Chungbuk National University, Korea |
| Yusuf MENEMEN | Kirikkale University, Turkey |
| | |
| Momtaz MIRZA | Bangladesh National Herbarium, Dhaka, Bangladesh |

PROFESSOR VERNON HEYWOOD

After an absence of seven years, during which he worked for IUCN - The World Conservation Union as its Chief Scientist, Plant Conservation and as Director of Botanic Gardens Conservation International, Professor Heywood has returned to the Department of Botany. He will now be working mainly for the United Nations Environment Programme as Executive Editor of its Global Biodiversity Assessment (GBA). The objective of the GBA is to provide an independent, critical, peer-reviewed, scientific analysis of the current issues, theories and views concerning the main global aspects of biological diversity. These aspects include the characterization, origins, dynamics, magnitude, distribution, monitoring, and multiple values of biodiversity; biodiversity and ecosystem function; human influences on biodiversity; conservation and sustainable use of biodiversity; biotechnology; data and information management and communication. The project is financed by the Global Environment Facility (GEF). The Chairman of the GBA is Dr Robert T. Watson, Office of Science and Technology of the White House, and Honorary Advisers are Dr Peter Raven, Dr Emile Salim, Dr M.S. Swaminathan and Professor E.O. Wilson. As Executive Editor, Professor Heywood is co-ordinating the working of the co-ordinators and teams of authors of each of the twelve sections of the GBA. Several hundred scientists from over 40 countries are engaged in the preparation of the Assessment, the publication of which is expected in late 1995.

Professor Heywood is also chairing a steering group, under the IUBS/UNESCO DIVERSITAS programme, which is developing a new theme on the "Conservation of the genetic variability of wild species". On a related theme he is a member of the Council of Europe Group of Specialists on Biodiversity and Biosubsistence and has been an organizer of three workshops held in Faro (1992), Neuchatel (1993) and Palermo (1994) on the "Conservation of the Wild Relatives of European Crop Plants" under the auspices of the Group. He was also recently elected the first President of the IUBS International Council of Medicinal and Aromatic Plants.

Professor Heywood is also currently finishing the editing of the IUCN/WWF project on "Centres of Plant Diversity", the first volume of which is due to be published in November 1994.

BOTANICAL DIVERSITY OF THE INDO-PACIFIC REGION

There was a meeting of this European Union Network on the 5th and 6th October 1994 in the Rijksherbarium, Leiden, attended by Drs Culham and Jury. The meeting included talks from the postgraduates and post-doctoral fellows on their research projects. The following eight staff have been appointed to the nine nodes in the network:

- 1. Dr Stefan Dressler (from Germany, now in Leiden): Euphorbiaceae Bridelia.
- 2. Mr Josef Mullins (from Ireland, now in Reading): Nepenthaceae Nepenthes.
- 3. Dr David Middleton (from Scotland, now in Dublin): Apocynaceae.
- 4. Dr Petra Hoffman (from Germany, now at Kew): Euphorbiaceae Antidesma.
- 5. Dr Helen Fortune-Hopkins (from England, now in Paris): Cunoniaceae

- 6. Mr Rogier de Kok (from Leiden, now at Oxford): Labiatae/Verbenaceae.
- 7. Ms Josefine Schneidt (from Germany, now at Aberdeen): Asclepiadaceae.
- 8. Ms Nicoletta Cellinese (from Italy but working at BM, [a Reading graduate], going to Mainz): Melastomataceae *Sonerila*.

At the time of writing, the postgraduate position in Aarhus is still not filled. I am informed by Dr Marco Roos in Leiden that an EC postgraduate student is needed urgently (certainly by 1 December 1994). Please contact him directly by fax: +31.71.273511 in Leiden. The post is for two years. The next meeting will be held at Kew in conjunction with the Flora Malesiana symposium next July.

At Reading, Joe's study will involve production of a sectional- level classification within a phylogenetic framework for the genus *Nepenthes*. The work will employ morphological and molecular data in a cladistic analysis.

COLLECTING IN NORTHERN MOROCCO ...

Collecting for our collaborative project 'Floristic Biodiversity of Northern Morocco' commenced again in February with Dr Stephen Jury, Mr Tim Upson (of Reading) and Mr Graham Walters (of the Alpine and Herbaceous Department, Royal Botanic Gardens, Kew) flying out to join Moroccan colleagues in Rabat. A tour took place along the north coast, east to Al Hodeima before returning to Rabat. We were joined by Taleb Abdelbakir and Yacoub from the Institut Agronomique et Veterinaire, Hassan II, Rabat. The English trio then set out again for Taza, Oujda, the Beni Snassen Mountains and the Nador area, but this time with Mohamed Ait Lafkih and Mouks Hassan. (Mohamed spent three months in Banbury learning English at the ELT school in Banbury before coming to work and train at Reading for nine further months, sponsored by the British Council. Hassan is a graduate of Marrakech who is at present in Rabat learning English and hopes to come to Reading to read for our MSc in plant taxonomy. Hassan became known to all as `Hassan offendi'. Both he and Mohamed are excellent workers with a very great knowledge of plants). Unfortunately, Dr Jury had to return to Reading for several other commitments and flew back early from Oujda, on the Algerian border. The team continued the splendid work and made a collection of around 500 numbers, to add to the 500 made earlier, further west. All were collected in sets of four, (as far as possible - for Rabat, Reading, Sevilla & Barcelona; though specimens have been divided according to which centre is responsible for the family concerned).

Another expedition took place in June when Dr Jury joined Mohamed Ait Lafkih and Bushra Tahiri for a week collecting around Jbel Zerhoun and Moulay-Idriss, Region 9 of the project. An interesting collection was made around the ruins of the Roman city of Volubilis, thanks to the co-operation of the custodian and guardians, who were, understandably, at first a little wary of our activities! The limestone slopes and cliffs above the cultivated areas along the Moulay-Idriss to Nzala-des-Beni-Ammar road proved especially interesting. However, throughout the expeditions, careful attention was also paid to the weed and ruderal floras. This iter also yielded another 500 numbers, again pressed into two sets of plant presses, and although there was extra work in the field, not needing to take the specimens destined for Rabat back to Reading, the excess baggage charges were considerably reduced.

Further expeditions are planned this autumn, continuing the successful ones last year, and again concentrating on the abundant autumn bulbous species. It is also planned that Dr Stephen Jury will attend the National Seminar on Biodiversity: "Resources Phytogenetiques et Developpement Durable" to be held at the IAV, Hassan II, 24-26 October. (Professor Heywood will be speaking on "Aspects economiques de la conservation de la biodiversite". Other delegates will be coming from Geneva, Rome, Aleppo, Alger, Tunis, Izmir and Tambacounda).

... AND ON TO SOUTHERN MOROCCO

After the March collecting expedition in northern Morocco, Mr Tim Upson remained in Rabat, not only to ascertain that the 'Restaurant Oasis' really was the best Moroccan restaurant in the capital, but to await the end of Ramadan and the return of Dr Jury. They were then splendidly entertained to luncheon by Mr Mohamed Ait Lafkih in his home. It was an honour to join in the traditional feast of Eid Al-Fitir, but it was not to last as they were joined by Bushra Tahiri and a Renault 4 belonging to the Institut Agronomique et Veterinaire to set off on a *Thymus* and *Lavandula* hunt in the south. (Bushra Rahiri was undertaking a PhD in Rabat on the genus *Thymus*; Tim's interest in Lavenders is now infamous.)

It was not long before Hassan Offendi's town of Marrakech was reached and, although we kept our eyes open for him, he had presumably just eaten so much that he was resting indoors Our usual hotel in Asni, the Grand Hotel de Toubkal, was closed for restoration and a night was spent nearby in Ouirgane. (Probably a mistake as apparently there is now good accommodation in Ait Lafkih's well-known village of Moulav Brahim, near Asni. A previous expedition had visited here to shop in the souk, meet his farmerbrother, drink tea, enjoy a tagine, as well as collect.) The following morning got off to a good start with Lavandula maroccana observed frequently along the route, as were several conspicuous thymes. Only brief respects were paid to the Tizi-n-Test Pass and the Argan forests, as the night was to be spent back on the coast at Agadir. The punishing schedule then continued to the Immouzzer Valley and Cascades (now almost completely dried up). Again L. maroccana was frequently observed, along with many Moroccan specialities, including the succulent Euphorbia officinarum infected by Striga gesnerioides. Problems that arose with a puncture (and spare wheel that did not fit) were resolved by the lighthouse keeper at Cap Rhir who happened to be a mechanic with a well-equipped workshop, although the loss of time was regretted. The journey continued to Tiznit and Taroudannt where good tall specimens of a Caralluma were seen. After Taroudannt things really hotted up with Lavandulae coronopifolia, mairei, multifida and pedunculata subsp. atlantica, all growing within a few feet of each other. (Tim used a

complete roll of film here). A visit to Tata yielded good bushes of *L. coronopifolia* and *L. mairei*, besides material of such desert plants as *Calotropis procera*, *Eremophyton chevallieri* and *Reboudia pinnata*. The Gorges du Dades and Gorges du Todra both provided *Lavandula mairei* again and *Othonnopsis maroccana*. For Stephen, the highlight was in the sandy areas around Goulmima where the earlier rains meant that the desert was in full spectacular bloom, (so very different from previous visits). The umbellifer, *Ammodaucus leucotrichus*, was locally abundant with some plants almost 30 cm tall. This enigmatic genus is related to *Cuminum* and was studied extensively at Reading in the 1970s (together with the rest of the tribe Caucalideae). A large collection of desert plants was made here until it got dusk. The return journey was via Midelt and Azrou where further collections were made along the route. *Raffenaldia primuloides*, an acaulescent crucifer with spectacular yellow flowers, was seen near the Col du Zad and S. of Azrou, near Jbel Hebri. Yet more lavenders and thymes were seen, although *L. brevidens* was not seen in a recorded locality "Oued Moulouya pres de Midelt", but further south.

The specimens were collected into pairs of presses, so the Thymes and half the other samples could be left in Rabat. The Reading set has now been poisoned and mounted and identification is proceeding apace, together with a gift of c.80 duplicates from John Edmondson (LIV), also mainly from southern Morocco.

OPTIMA ITER VI

The usual three-week collecting expedition took place during the last week of April and the first two of May, this year going to western Spain and eastern Portugal. It was jointly organized by botanists from Salamanca (Professors Amich and Rico) and Coimbra (Professor Jorge Paiva). Reading was represented at the `senior participant level' by Mr Ronald Rutherford. As usual, the event was a great success, with a large number of specimens (c.1700 gatherings) being collected from some underexplored areas. Ronnie reports on the discovery of *Drosophyllum lusitanicum* in a new area. He has some splendid slides of plants and people. The actual specimens will arrive shortly after they have been processed in Salamanca. Several populations of European bird species were also seen which excited the ornithologists in the party.

Next year's Iter will be in Greece and will be organized by the Flora Hellenica group.

EXPEDITION TO NORTHERN PAKISTAN

Dr Syed Husain led a field expedition to N. Pakistan, July- August, accompanied by L.S. Springate from the Royal Botanic Garden, Edinburgh and R.A.W. Lowe, a second year student of our department and formerly with the NCCPG (National Council for the

Conservation of Plants and Gardens). Dr M. Shah, a taxonomist at the Pakistan Science Foundation also took part.

Over 700 plants were collected, including lichens, mosses and seeds from Gilgit, Yasin, Hunza and Skardu Valleys, Khunjerab Top, and Deosai Plains.

They are grateful to the Royal Geographical Society, London for approval of the expedition plans and for the financial help given by The Alpine Garden Society, The Round Table Trust, The Lindeth Charitable Trust, The Percy Sladen Trust, The Oleg Polunin Memorial Fund and the S.H. Abdeali Ziaudin Trust. They also acknowledge and appreciate the collaboration of the Pakistan Science Foundation, Islamabad, for providing transport and other local help.

AETFAT

The Association pour l'Etude Taxonomique de la Flore d'Afrique Tropicale (A.E.T.F.A.T.) recently held a meeting in the Netherlands. Reading students and graduates were very much in evidence at this meeting! Estrela Figueiredo, Smart Lungu, Paul Mbugua and Francis Gachathi attended from PSL, and all presented posters. Professor Vernon Heywood was chairman for one of the symposia.

It was reported that the hotel was in the middle of the countryside with splendid views, but with an appalling smell of the local cows coming through the air-conditioning!

AN IRISH JAZZ

Dr Jury recently visited Trinity College, Dublin to give a well- attended seminar on his work on the Moroccan flora. This was part of a series held weekly throughout the term.

In the evening he gave another lecture on Morocco to a joint meeting of the Irish Garden Plant Society and the Alpine Garden Society. This concentrated on conifers and autumn-flowering species, with special reference to conservation issues.

Stephen was also fortunate in being able to tour the National Botanic Gardens, Glasnevin and see several splendid developments. The restored Curvilinear Glasshouse range now towers above the surrounding builders' hoardings.. (The restoration has made use of the ironwork of Kew's old Palm House, since this was by the same man, Richard Turner, an Ironfounder who operated from the Hammersmith Iron Works at Ballsbridge, Dublin. Unlike Kew, cream paint has been used (pure white being unknown in the midnineteenth century) and looks aesthetically very pleasing in its garden setting. The recreation of a piece of Burren limestone is also particularly successful. (This was featured in one of the recent TV programmes `Over the Garden Wall' where Charles Nelson mentioned it was re-cycled limestone from County Laoise, but not that it came from a cemetery!) However, Stephen found the most splendid and memorable part of his visit to the Emerald Isle was the Old Schoolhouse at Swords!

SUMMER CIMICIFUGA FIELDWORK

During August and early September, James Compton visited three western States of the USA to search for Cimicifugas, two narrowly distributed species and one of slightly wider range. Oak Creek and a few other deep canyons in N. Arizona possess a specialised mesophytic flora not characteristic of the nearby arid desert. Carved by streams through hundreds of feet of red sandstone from the Coconino plateau (7000 ft), the canyon bottoms (5000-6000 ft) are a haven for the relict species *C. arizonica* S. Wats. The constantly shady, leaf-rich soil beside the Oak creek encourages such plants as *Cornus stolonifera, Rosa arizonica, Lobelia cardinalis* and *Polemonium albiflorum. Cimicifuga arizonica* is a perennial growing to almost 2m and producing upright virgate whiteflowered panicles covered in short glandular hairs.

Cimicifuga laciniata S. Wats. was found growing 900 miles NW of Flagstaff, Arizona, at 4000 ft, beneath Mt. Hood in Oregon State. It grows with the 'Skunk Cabbage', *Lysichitum americanum*, in boggy ground in deciduous streamside groves of Alnus rubra. The plants were observed to possess short stolons, a character not known to occur in other species within the genus. The loose cream-coloured panicles were borne 2-2.5m above the laciniately triternate compound leaves. The third western N. American species, *Cimicifuga elata* Nutt. was found growing in mixed woodland near the Columbia River bordering Washington State; it possesses loose, small-flowered inflorescences and biternate leaves with large palmate leaflets.

EASTER FIELD COURSE TO EASTERN ANDALUCIA

This was the usual success and again a mix of final-year students and `botanicallyminded tourists', but this year with a good contingent of enthusiastic students from the Diploma in Scientific Horticulture course at the Royal Botanic Gardens, Kew. This happy melange of like-minded plant scientists worked well and is something we hope we are able to repeat next year. (The Reading party are still able to remember some of the Crucifers!). **Next year's course** will take place from 23 March until 6 April (subject to flight availability).

PAPYRUS

Reading readers may be interested in this comprehensive and very flexible bibliographic database system. Copies of the program are available from our Computer Services Centre. Version 7.0.1B can be obtained for 25(pounds) and full manuals are available.

CONGRATULATIONS

Antonio Toscano de Brito recently submitted his thesis (Systematic studies in the subtribe Ornithocephalinae (Orchidaceae)) and has been examined by Dr Peter Gibbs; it has been recommended to the University Senate that the degree of Doctor of Philosophy be awarded. Antonio.

Congratulations to **Dr Paul F. Cannon** (BSc 1976, PhD 1981) on his promotion to Principal Scientific Officer at the International Mycological Institute, Egham.

Readers will be delighted to learn that **Dr Riyad Haddad** (PhD 1987) was promoted last January to Director of Scientific Affairs and Postgraduate Studies of the University of Basrah. (Riyad has only Vice-Chancellor and Chancellor to go). I am envious of him having his own private secretary and chauffeur-driven car. He is still giving lectures in taxonomy. We look forward to the day when he can visit us again.

Khadija Biari (UNEP Course, 1993) celebrated her wedding last year and in addition to her work at the Jardins Exotiques is engaged in teaching plant and flower culture in Rabat.

Lawrence Springate (MSc, 1992) has now left Reading and taken up a job at the Royal Botanic Garden, Edinburgh. Lawrence will be working on the Flora of Bhutan project.

Congratulations to **Dr Domingo A Madulid** (PhD 1980) of the Plants Unit, National Museum, P. Burgos St., Manila, P.O. Box 2659, Philippines for securing a 3-year grant from the John D. and Catheryn T. MacArthur Foundation based in Chicago to establish a Biodiversity Information Centre - Plants Unit in the Philippines. The other *Herbarium News* (14 (3 & 4): 12) from **MO** reports:

"This project is set up to serve as an information center [sic] pertaining to plant conservation in the country. A comprehensive database and a mini-library on plant conservation, rare and endangered Philippine plants, biodiversity, taxonomy, systematics and related subjects, will be set up to serve the needs of interested scientists, environmental planners, conservation organizations, government agencies, students, teachers, and the public in general. Training seminars on practical plant conservation techniques will also be undertaken by the Unit.

The Unit will also publish pamphlets and popular articles on rare and endangered plants, plant conservation, etc. for dissemination to the public.

The new unit is headed by Dr. Domingo A. Madulid with a support staff. Any inquiries about this project can be addressed to Dr. Domingo A. Madulid."

Congratulations to **Dr Andre Mauricio de Carvalho** (PhD 1989) on the receipt of The Rupert Barneby Award. Andre, still at Centro de Pesquisas do Cacau, Cepec, Divisao de Botanica, Caixa Postal 7, 45600 - Itabuna, Bahia, Brasil, will use his award to continue his work on a taxonomic treatment of New World *Dalbergia*.

Andre shared the 1993 award with Professor Ricardo Vanni of the Instituto de Bot nica de Nordesta, Corrientes, Argentina.

Carlos Sombrero

Carlos Sombrero (Diploma in Scientific Horticulture, Royal Botanic Gardens, Kew, 1984), BSc Botany (1987) and PhD (1992) has married Andrea Guichard in the Parish Church of Corfe Mullen, Dorset on Saturday, 3 September. We send Dr and Mrs Sombrero every good wish for their future together.

Dr Jim Ross (Carlos's sometime supervisor) was best man. Though the weather was not of the best, it in no way interfered with a warm and joyous occasion. The happy couple spent their honeymoon in the Canary Islands. The Sombreros thank the members of Plant Science Laboratories who contributed to a cheque.

SALLY GLOCKLING

Sally has also recently submitted her PhD `Predacious and parasitoidal fungi in association with herbivore dung in deciduous woodlands' and was examined by Dr R.C. Cooke of Sheffield. Senate has been recommended that the degree be awarded.

We also congratulate Sally following her interview in Brussels last summer. She has been awarded a Science and Technology Agency Fellowship Award, Programme of Japan. We send Sally our very best wishes for her work in the Far East.

DR ALECK T.Y. YANG

It has been recommended to Senate that Aleck be awarded the degree of Doctor of Philosophy for his thesis on Clematis section Viorna sensu Prantl. It seems that the External Examiner, Dr David Sutton, grows quite a number in his garden! Congratulations Aleck.

LOUIS RONSE DE CRAENE

A card has been received from Catherine and Louis Ronse de Craene who are very happy to announce the birth of Alexandre, in Bruges on 23 June, a brother for Camille.

Louis now has a research grant from the National Science Foundation and continues his work on floral ontogeny. (Clearly, yet another box file for "R" reprints will be needed!) Congratulations!

RITA FARRELL

We must also give Rita Farrell our best wishes and congratulations on her recent marriage.

PHIL GARNOCK-JONES

Congratulations to Phil on becoming Professor of Plant Science at the Victoria University of Wellington, PO Box 600, Wellington, New Zealand (Phone: +64 4 4721000; Fax +64 4 4715331; Internet email: Phil.Garnock-Jones@matai.vuw.ac.nz). Phil has now found a house, if still haggling over price and conditions of contract. He reports:

"I have settled into the new job now, and the School of Biological Sciences has been very welcoming. Getting on email has been an ongoing frustration for me and the network staff, but yesterday they tracked it down to a faulty connection at the transceiver. That's now fixed with a piece of cardboard jammed into it until a replacement part can be obtained, and I feel like I've come alive again after being in hibernation! My research here will be much the same, i.e. taxonomy and phylogeny of the Hebe complex, but with an increasing amount of molecular techniques and moving also into similar work with Ourisia. There is quite a strong group of molecular systematists here centred around Geoff Chambers, who works mostly with birds. Currently there are student PhD dissertations on insects, birds, reptiles, and pinnipeds, with one just starting on Scleranthus. My teaching will be varied, but I will have quite a bit of 1st year physiology and cell biology because those are the courses of Ken Heyes who I've replaced. I'll also teach the 4th year course in plant systematics and maybe parts of the 3rd year course".

Best wishes from all your friends in Plant Science Laboratories, Phil. How many years before you can come for another sabbatical here?!

MALAWI MOSSES

The processing of the collections made by the British Bryological Society's Expedition to Mount Mulange in 1991 continues.

This summer, we have been fortunate in having our third-year student, Victoria Bonham, working on the family Meteoriaceae (beautiful pendant `Meteor-like' mosses, epiphytic

on trees) for July and August. Victoria's work confirms the presence of Squamidium brasiliense (Hornsch.) Broth., a new genus for the Malawian flora.

The Society is hoping to stage another expedition, this time to the Ruwenzori Mountains, probably in 1996.

CONSERVATION OF BRYOPHYTES IN EUROPE: MEANS AND MEASURES

Dr Royce Longton has just returned from Zurich where, in his capacity as Vice-President of the International Association of Bryologists, he officially opened the second symposium on endangered bryophytes held 4-8 September.

Royce also gave a paper on the genetics of rare moss species in the first session on the scientific basis of bryophyte conservation.

BRITISH CACTUS AND SUCCULENT SOCIETY INTERNATIONAL CONVENTION

The above Convention was held at the University of Reading from Thursday 21st to Sunday 25th September. The venue for lectures was the Palmer Building. On Friday evening, around 1800 hours, the 200-odd delegates paid a visit to the School of Plant Sciences for an informal reception in the Foyer. The place was full to capacity as Professor Parker gave an informal welcome speech. He touched on many points of interest to the members. He also gave his own story on how he was converted to become an amateur in succulent plant cultivation (after a visit to Mexico where he appreciated the cacti in their natural habitats). He outlined the wide curriculum of the School - from DNA sequencing to landscape designs, back to the farm for basic research and over to phytochemical issues. Several other members of PSL attended including Ronnie Rutherford and Sue Mott (serving the drinks), Professor Caligari and Dr Terry Hedderson (Terry even managed to find a Canadian amidst all that crowd!) Paul Mbugua had displayed two *Sansevieria* posters - the genus he is researching for his PhD.

The scientific programme of lectures went well with the invited guest speakers (Charles Glass, USA; Chuck Hanson, USA; Emst Van Jaarsveld, S. Africa; Woody Minnich, USA; Wemer Rauh, Germany; Graham Williamson, S. Africa) each giving two lectures. Saturday saw the arrival of the other day visitors for the shows and exhibition prepared by Gordon Rowley and Peter Bent. One of the highlights was the auction of plants run by Charlie Glass and Chuck Hanson. This raised over £1300 with most for the conservation fund set up by Gordon Rowley to support projects involving the practical conservation of the rare species. The local branch of the British Cactus and Succulent Society did an admirable job with stewarding, airport taxi services, etc. All in all, a very popular event

(except perhaps the queues for the food!) and a convention we hope to be repeated in Reading in 1998!

Anybody interested in membership of the British Cactus and Succulent Society should contact the Membership Secretary, P. Lewis, "Firgrove", 1 Springwoods, Courtmoor, Fleet, Hampshire, GU13 9SU.

CARNIVOROUS PLANT SOCIETY

Forty members of this Society came to Reading in April for their AGM when they reelected Alastair Culham as editor of the *Carnivorous Plant Society Journal*. They returned on Saturday, 17 September for a general meeting when five of the Society Committee Members demonstrated propagation methods for all the main genera of carnivorous plants. The large class all went home with plastic bags of propagation material!

ERASMUS SYSTEMATIC BIOLOGY NETWORK

This EU Network is co-ordinated by Professor Fred Schram, Professor of Zoology at the University of Amsterdam. There are no less than 17 nodes in the Network in nine countries (Denmark, France, Germany, Ireland, Italy, The Netherlands, Spain, Sweden and the UK).

Recently Dr Jury attended a meeting in Trinity College, Dublin, hosted by Dr John Parnell and Dr Stephen Waldren, co-ordinating this network.

Mr Tim Upson has recently attended a one-month intensive taxonomy training course in Amsterdam, a programme organised by the Network.

The Network also has short three-month taxonomic projects in the nodes of the network - enquiries welcome!

RECENT PUBLICATIONS

BAKER, W., 1994. Three men and an Orchid. Quarterly Bulletin of the Alpine Garden Society, 62(1): 99-114; 62(2): 181-199.
COMPTON, J., 1994. 241. Salvia darcyi. The Kew Magazine, 11(2): 52-55 & pl. 241.
CULHAM, A., 1993. Sarracenia: a need for captive breeding? The Carnivorous Plant Society Journal, 17: 5-6.

- CULHAM, A., 1993. Field notes on Borneo Nepenthes. The Carnivorous Plant Society Journal, **17**: 12-18, 20-22.
- CULHAM, A., 1993. The pygmy sundew controversy: settled at last? The carnivorous Plant Society Journal, **17**: 35-38.
- CULHAM, A. & GORNALL, R.J., 1994. The taxonomic significance of napthoquinones in the Droseraceae. Biochemical Systematics and Evolution, **22(5)**: 507-515.
- DAVIS, A.P. & BRICKELL, C.D., 1994. Galanthus peshmenii: a new snowdrop from the eastern Aegean. The New Plantsman, 1(1): 14-19.
- FIGUEIREDO, E., 1994. New records for the flora of S. Tomé and Principe. Gascia de Orta, Sér. Bot., Lisboa, 12(1-2): 125-126.
- FIGUEIREDO, E., 1994. Little known endemics collected by J. Espírite Santo in S. Tomé. Garcia de Orta, Sér. Bot., Lisboa, 12(1-2): 121-124.

FIGUEIREDO, E., 1994. Contribution towards a botanical literature for the islands of the Gulf of Guinea. Fontqueria, **34**: 1-8.

- HARBORNE, J.B., WILLIAMS, C.A., GREENHAM, J. & EAGLES, J., 1994. Variations in the lipophilic and vacuolar flavonoids of the genus Vellozia. Phytochemistry, 35(6): 1475-80.
- HEYWOOD, V.H., 1994. Peter Hadland Davis (1918-1992). Watsonia, 20: 167-168.
- JURY, S.L., 1994. Narcissus calcicola. In J. Fernández Casas (Ed.), Asientos para una Flora Occidental, 10. Fontqueria, 39: 475.
- LINNEGAR, S., 1993. The use of *Iris* past and present. *The 1993 Iris Year Book*, London: The British Iris Society.
- LONGTON, R.E., 1993. British Bryological Society Expedition to Mulanje Mountain, Malawi: 1. Background, itinerary and procedures. Journal of Bryology, 17: 633-644.
- MARHOLD, K. & RAYNER, T.G.J., 1994. Typification of the names of two species of the Cardamine pratensis group (Brassicaceae). Taxon, 43: 77-83.
- MBUGUA, P., 1994. Three Sansevieria species of Kenya: 1. Sansevieria robusta N.E. Br. Cactus and Succulent Journal (US), 66: 87-88.
- RAJPUT, M.T.M., TAHIR, S.S. & HUSAIN, S.Z., 1994. Taxonomic notes on *Sibbaldia micropetala* (D. Don) Handel-Mazzetti. Rosaceae. II. Candollea, **49**: 129-132.

```
RAJPUT, M.T.M., TAHIR, S.S. & HUSAIN, S.Z., 1994. The distribution and synonymy of Sibbaldia procumbens L. (type species of the genus Sibbaldia) Rosaceae. III. Candollea,
49: 133-139.
WILLIAMS, C.A., HARBORNE, J.B., GREENHAM, J. & EAGLES, J. 1994. Differences in flavonoid patterns between genera within the Velloziaceae. Phytochemistry, 36: 931-940.
YANG, Aleck Tsung-Yu, 1994. Abutilon. In Huang, Tseng-Chieng Flora of Taiwan, second edition, 3: 739-741. Taipei, Taiwan: National Science Council of the Republic of China.
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BOOK REVIEW

Flora of Madeira. Edited by J.R. Press and M.J. Short. Pp.xvii + 574. The Natural History Museum and HMSO, London, 1994. Price £35 (ISBN 0-11-310017-5).

The archipelagos comprising Macaronesia, from the Azores in the north to the Cape Verde islands in the south, have long been of considerable interest to evolutionists and phytogeographers. Lying along the eastern margin of the Atlantic Ocean but isolated from the adjacent parts of southern Europe and western Africa they still retain fragments of the Tertiary vegetation which originally flanked the Tethys Sea separating Europe from Africa. Elements of this flora are preserved in parts of Macaronesia, notably the Canary Islands and Madeira, their closest relatives now being found in S.E. Asia. The subtropical rainforest (*laurisilva*) where these relicts now occur seems to exist because of the mild, humid conditions in parts of these oceanic, macaronesian islands. Furthermore, the islands' isolation has permitted evolution in plant-groups away from pressures present in the continental areas. This had led apparently old, woody groups, such as *Argyranthemum, Echium and Sonchus*, with herbaceous, often weedy representatives elsewhere, to give rise to many endemic species in Macaronesia. This speciation within groups which would otherwise be considered as palaeo-endemics is known as `active epibionty' and contributes to the great scientific interest of such oceanic island-groups.

Because of their interesting and picturesque topographical diversity, their accessibility from \pm adjacent highly populated areas and their suitability for cultivation, many parts of Macaronesia have been greatly modified by European man since their colonization in the 16th century. Nowhere has this been more profound than in the Canary Islands and Madeira, much visited by tourists - especially from NW Europe.

The scientific, horticultural and conservation importance of such islands has been widely recognized, as has the great value of documenting the plants which are to be found there. This definitive Flora of Madeira fulfils the necessary criteria.

The Introduction, outlining the topography, geology, climate, vegetation and history is accompanied by useful maps indicating features of interest. This is followed by a section

detailing the use of the *Flora* and criteria followed in its preparation. A key to the families involved then leads on to the taxonomic `meat' of the book.

The sequence of families follows that in *Flora Europaea*, while those of lower categories reflect the opinions of the relevant authors. The salient features of families (except in the pteridophytes where families are not recognized) and genera are given, whilst workable dichotomous keys are provided for genera and the species within them. The species descriptions are concise (again apparently owing much to *Flora Europaea*) but informative, their consistency being testament to the editors' skill in dealing with contributions from the 17 authors. In addition to the 1226 native species, of which 10% are endemic, many naturalized taxa are described, while there are notes on species of doubtful occurrence. The use of `like, but' or `said to occur' surely leads the way to future theses. Ecological and geographical data are uniformly summarized, as is information on conservation status. Original line-drawings, mostly of habit, for a significant proportion of the endemics, together with indices to scientific and Portuguese names, complete the book.

This well-produced *Flora* is an excellent contribution to knowledge of the plants of Macaronesia but is especially, of course, important to all drawn to the scientific and horticultural wealth of Madeira and its adjacent islets. **D.M. Moore**

OBITUARY

David Allerdice Webb

The recent tragic death of Professor David Webb, `D.A.', on the road in Oxfordshire on September 26, cannot pass without an appreciation in *Herbarium News*. His numerous visits to Reading (and he was on his way to **RNG** when he died) were all delightfully memorable, if very hard work.

David was born in Dublin on August 12, 1912, educated at Charterhouse and Trinity College, Dublin where he graduated four years later in Natural Sciences. He entered the research world as a zoologist working on the minor elements in marine invertebrates. The award of an 1851 "Exhibition" enabled him to transfer to Trinity College, Cambridge, where he gained his PhD. It was during this time he had the opportunity to study in Naples at the Marine laboratory, and gain his special affection for Italy and a love of the Mediterranean. David returned to Dublin as an assistant to Professor H.H. Dixon, whom he succeeded as Professor in 1950. This promotion clearly recognised his very great abilities and his distinction in research work was further recognised by his admission to the degree of ScD in Trinity College Dublin in 1951 and the award of an honorary doctorate by the University of Stirling in 1979.

David Webb retired from his post as Head of the School of Botany, Trinity College, Dublin then as a member of their teaching staff and finally in 1984 as Curator of the *TCD* Herbarium.

Herbarium News No. 3 of 1 February 1984 reported the visit of Drs John Akeroyd and Stephen Jury to Trinity for a symposium to mark this retirement and that an "Irish source was quoted as saying that Professor Webb gives as many last concerts as the Rolling Stones"! John spoke on "The future of *Flora Europaea*" on which he was actively working to produce the second edition of volume one. It was this revision work which brought David to Reading for arduous working sessions with John. David applied his great knowledge of geography and editorial skills to carefully and accurately construct all the geographical phrases, produce new accounts of *Saxifraga* and *Polygonum* (amongst others), as well as place a restraining hand on John, making sure the concept of the *Flora Europaea* `overview' was maintained!

These sojourns (usually over a weekend) often involved a lunch in the herbarium (Safety Office, please proceed to the next paragraph). These `herbarium lunches', as they became known, were no ordinary affairs, with such delights as Coquille Saint-Jacques en croute, just for an entrée. David always arrived with a contribution to his food, sometimes a large piece of smoked salmon, once a fresh pineapple and a pint of cream and on another occasion, a brace of pheasants.

John always cooked an evening meal in his rooms (chez Françoise and Ian Richardson in Whiteknights Road). John often succeeded in finding a new bird or animal previously uneaten by DAW, the most successful being a brace of teal purchased in `Smelly Alley'.

His great generosity to enthusiastic students was boundless. Often, wined, dined and taken on tours of Irish botanical sites, they were also treated to his wit and wisdom, something that many Reading graduates will remember for the rest of their lives.

CHERYL LANGRIDGE, R.I.P.

We are sad to report that Cheryl Langridge (BSc, Botany 1993) died recently and to remember her University life, her family joined us to plant a tree (*Betula pendula* `Tristis', a rare weeping birch) in the Harris Garden.

F. WHITE

Oxford University Herbaria regret to announce the death of F. White, M.A., Sc.D (Cantab.), Curator (1964-1992) and distinguished Research Curator (1992-1994).

EDITORIAL MATTERS

Terry Hedderson has been appointed an editor of *Lindbergia*, the journal of the Nordic Bryological Society.

Royce Longton is now the editor of *Advances in Bryology* and an associate editor of the *Journal of Bryology*, the journal of the British Brylogical Society. (Royce is actually President of the British Bryological Society until December 1995).

Prof Michael W. Dick and **Dr Stephen L. Jury** continue to serve as Associate Editors of *The Botanical Journal of the Linnean Society*, **Professor Jeffrey Harborne** continues as Editor in Chief of *Phytochemistry* and **Dr Christine Williams** as an associate editor. Dr Stephen Jury also serves on the Editorial Board of OPTIMA, responsible for publishing the journal Flora Mediterranea. **Professor Moore** continues on the editorial boards of *Webbia* and *Parodiana*.

DR ERIC WATSON

The staff of the Department of Botany joined together for luncheon in the Orange Room on Thursday, 12 May with Dr and Mrs E.V. Watson to celebrate Eric's 80th birthday the following weekend. Dr Watson was presented with a copy of the recent *Flora of the Mediterranean* by Christopher Grey-Wilson and was in fine form, reminiscing about the Department in the earlier days.

COMINGS AND GOINGS

Dr Renée Grayer has sadly left us for a senior post in the Jodrell Laboratories at the Royal Botanic Gardens, Kew. She has been associated with the Department since 1976 when she came to work on her doctoral thesis on chemosystematics of *Veronica* L. and related genera (partly supervised by Professor Harborne). More recently, Renée has been working as a post-doctoral fellow on the phytoalexins of rice.

Last June we held a tea party to say goodbye, present a leaving present and wish her all the best in her new job. We are pleased to say her new post brings her back occasionally to Reading to develop and liaise on research projects.

We are pleased to announce that Renée's old post has been taken by Dr Vivian Dillon who has crossed the road from the Department of Food Science to join us. Vivian obtained her PhD in food microbiology from the University of Bath, after having already graduated at Reading. We hope she will be very happy working with us.

HEDYSARUM WORK

Dr Byoung-Hee Choi, a Royal Society Developing Country Fellow, has now returned home to the Department of Biology, College of Science, Inha University, Incheon 401-751, South Korea after spending 12 months working at the Royal Botanic Gardens, Kew and the University of Reading.

At Reading Dr Choi learnt DNA extraction and amplification, restriction site analysis and DNA sequencing methods. Dr Choi will be reconstructing the phylogeny of the genus on the basis of the morphological, biochemical and molecular data using cladistic analysis.

FLORA MESOAMERICANA LAUNCHED AT THE NATURAL HISTORY MUSEUM

A splendid event recently took place at the Natural History Museum: the launch of the first published volume (six) of *Flora Mesoamericana*. The event started with an introduction by The Museum's Director, Dr Neil Chalmers and an explanation of the project by Dr Sandy Knapp. Peter Raven, who flew over especially for the event from the Missouri Botanical Garden, then addressed the distinguished audience. It was perhaps unfortunate that his clarion call for biodiversity was preached to the converted. This talk was followed by wine and canapés.

The volume, written in Spanish, contains 28 families of monocotyledons (Alismataceae - Cyperaceae), including a total of 1891 species. It can be purchased for \$75 plus \$3 p & p from the Missouri Botanical Garden.

VISITORS

Dr Matthew Jebb of Trinity College, Dublin visited Reading to discuss research on with Alastair Culham.

Matthew Jebb's work on *Nepenthes* started with his long term stay at the Christensen Research Institute in Papua New guinea. This work resulted in publication of "An account of *Nepenthes* in New Guinea" (Science in New Guinea, 17(1): 7-54 [1991]) and will be followed by an account of *Nepenthes* for Flora Malesiana written jointly with Martin Cheek at Kew.

As a result of Matthew's visit, collaborative work on Nepenthes has started.

Dr Simon Charlesworth of Downderry Nursery, Aylesford, Kent visited to consult our *Rosmarinus* and *Lavandula* collections and to discuss their taxonomy. Tim Upson was able to exchange several interesting taxa, which are valuable additions to our collection.

This exchange was followed by a visit from Mrs Joan Head who is holder of one of the NCCPG *Lavandula* Collections near Nottingham. Mrs Head also publishes the newsletter The Lavendar Bag. *Lavandula* of all types are of especial interest to Mrs Head who was pleased to obtain several rare Moroccan plants from us. In exchange she generously donated many samples of wild collected seed from her own collection from the Iberian Peninsula and the Canary Islands.

Madame Debbagh (Institut Agronomique et Vétérinaire Hassan II) visited us for two weeks in September to study pollen in Moroccan Honey with Dr Michael Keith-Lucas.

Other visitors to the herbarium included: John Akeroyd (Kingston- upon-Thames), Yuri Murinson (Jerusalem), Chris Chadwell (Slough), Pietro Mazzola (Palermo), Mark Watson (Edinburgh), Peter Bailey (Adelaide), Laurie Springate (Edinburgh), Paul Wilkin (Kew), Elizabeth Young (Milford-on-Sea), John Letts (Oxford), Dominique de Moulins (London), Paul Hughes (Southampton), M.K. Sidhu (Punjab), Simon Charlesworth (Aylesford), Chris Sanders (Nantwich), David Minnion (Pinner), Vahideh Nazeru (Liverpool), Hugh McAllister (Liverpool) and Carol Palmer (Sheffield).