

HERBARIUM NEWS 43

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Welcome to another *Herbarium News*! We have to report that there have been many new activities and changes since our last issue at the end of 2004: 60 more herbarium cabinets installed, the library re-organised, grants received to assist our teaching and research missions, and, as some of you will have heard, the University has merged our School of Plant Sciences with that of Animal and Microbial Sciences, as well as Applied Statistics, effective from the 1st August 2005, see more below.

HERBARIUM CABINETS

We have been fortunate in that the University has purchased 60 metal herbarium cabinets for us from the Natural History Museum. They were originally in the old General Herbarium and moved out to Wandsworth when their new storage system was installed. The Wandsworth store is now required for the Entomology Department while the next big Darwin development phase takes place. Twenty-one of the new cabinets now replace the assorted boxes, wooden cupboards and old Southampton cabinets under our long teak bench. We have also reorganised the library space dramatically, and the herbarium cabinets in this area, with the result that 21 extra cabinets have been installed with minimal effect on the library storage itself. Some periodicals have gone to the MSc laboratory, a few items to the University's main library and some duplicates removed. Some duplicates from the Herbarium Library are now available for purchase, along with other works on our website, please see www.herbarium.reading.ac.uk/booksale Four cabinets have been placed in the MSc lab and the remaining 17 have been installed in our adjoining Preparation Room. Mr Rutherford has already started the major reorganisation of the specimens, the first phase of which is to replace those genera moved out of sequence for lack of space.

CPDS IN THE NEW SCHOOL OF BIOLOGICAL SCIENCES

For some years now, the systematics group, including the Herbarium and MSc course have been operating as The Centre for Plant Diversity and Systematics, CPDS. Our School of Plant Sciences has been merged by the University to form a larger aggregation – the new School of Biological Sciences comprising the former Schools of Plant Sciences, Animal and Microbial Sciences and Applied Statistics. This all means business as usual for the Centre. There are a variety of refurbishments and new buildings in the pipeline: refurbishment of part of the old Tate & Lyle Tower, a new building behind Chemistry and new growth room facilities. This will eventually result in the closure of the old 'Zoology Tower'. The new School came into being on August 1st when Professor Nick Batty (Centre for Horticulture) took over as the new Head, with Professor Mike Dennett as Deputy and Professor Philip John (originally Agricultural Botany) Head of Teaching. Further refurbishment of Plant Sciences by the installation of new windows, rewiring, replumbing and the removal of yet more asbestos is also being talked about!

AHRC GRANT FOR HERBARIUM WORK

Dr Stephen Jury has received a grant from the Arts and Humanities Research Council of £20,000, supplemented by a further £12000 from the University's own funds to create and develop a research and learning resource for the Herbarium over the internet. It is proposed to improve access via the internet and enhance the Herbarium's relevance to teaching and research by building on the already much-used Herbarium website and our recent floristic projects on the Mediterranean Basin. We are grateful to Kate Arnold-Foster and the University's Museum, Archives and Collections Committee for their support.

Identification of Mediterranean Plants The Herbarium is receiving an increasing number of specimens, photographs and images of Mediterranean plants to identify and provide information. The idea is to create a useful identification tool to enable these people to recognise plant species themselves, and at the same time teach them about the plants and their provenance. Two hundred species have been selected from those that we are most frequently asked about and that are of general interest. Almost 45% of the specimens of these species are already represented in our database, and a further 5197 have recently been added representing 181 species by our students, Mr Charles Coyle and Mr Ewan Gage employed over the summer vacation. Mrs Sue Rumsey has assisted, and Mr Hassan Rankou has edited and imported the entries. Scanned specimen images will be supplemented by photographs of habitats and general habit and colour. Short notes with characteristic features (non-technical), uses, if poisonous or a horticultural ornamental are proposed and being compiled at present by Ewan. Distribution in the area will be presented from the specimens in the collections, supplemented by links to other maps where available to assist in projects concerned with mapping climate change, including the recent Biodiversity World NERC-sponsored programme at Reading.

Making of Dried Plant Specimens We are sent and presented with many dried plant specimens which are of limited use because they have been badly prepared and lack documentation. These are all problems we plan to overcome by setting up explanatory web pages, including appropriate video clips. We plan to put some of our teaching schedules and reference lists here as downloadable files. It is hoped that this will also assist with two of our undergraduate and MSc modules. A poster on the project was presented at the last Annual Exhibition Meeting of the Botanical Society of the British Isles

UNIVERSITY CALENDAR

The University A4 wall calendar for 2006 (£1.76 to pick up from the University's Reprographics Services, Whiteknights House, basement, room B03) portrays *Nymphaea lotus* from Andrews Botanical Repository of 1804 for January. This was grown in Whiteknights by the Marquis of Blandford. The page also has "Did you know... The University of Reading's Herbarium is a world resource for botanists and contains over 264500 plant specimens <u>www.herbarium.reading.ac.uk</u>".

HERBARIUM STAFF

Mrs Sue Rumsey has now been transferred to work in the laboratories of the Animal and Microbial Sciences building as part of the new School re-organisation. We formally thank Sue for all the work she did for us.

In her place we have gained the assistance of Ms Viv Rimmer who has just completed entering the data into BRAHMS (Botanical Research and Herbarium Management System, our Herbarium database system) of the specimens Stephen Jury collected in the Serbian Tara Mountains on the September 2004 OPTIMA excursion following the meeting in Belgrade. Now the labels are available, Mr Ronald Rutherford can complete their mounting, identification and incorporation. Viv is now rapidly entering the data for a collection made by the late Humphry Bowen in Slovenia.

BOTANICAL JOURNAL OF THE LINNEAN SOCIETY

Dr Stephen Jury has taken over from Professor Dianne Edwards as Editor of *The Botanical Journal of the Linnean Society*. Stephen edited this for seven years before handing over to Dianne twelve years ago. Manuscripts are now arriving daily and Stephen's pile of post is now even more enormous. The *Journal* is now published by Blackwell Publishing who are presently setting up an on-line submission system. An assistant is provided to help Stephen and Mr Hassan Rankou has been appointed to this post. He is responsible for the registering and tracking of manuscripts. He can be found in the Herbarium by the 'lower dicotyledons'.

MOROCCAN EXPEDITION, JUNE 2005

The Curator joined Dr Mark Carine and Dr Fred Rumsey (both Reading graduates and now working for the Natural History Museum, London) for a short collaborative expedition with the Institut Agronomique et Vétérinaire Hassan II, Rabat, to the Western Rif Mountains. The trio flew to Casablanca 31^{st} May to be met by their friend Mr Mohamed Ait Lafkih (of the IAV Herbarium, but well-known to RNG as he spent 10 months in Reading for herbarium training after a language course in Banbury, back in the 1980s), and an IAV Mitsubishi 4×4 with driver Bashir. The following morning, after further discussions on some collaborative floristic projects with Professor Mohamed Fennane at the Institut Scientifique, Rabat, the team set off for Chefchaouèn and their base, Hotel Madrid. The team managed to get up several bad tracks before hiking on to collect in the *Abies marocana*, Moroccan Fir forests. Stephen collected material for Sabina Knees of Edinburgh, undertaking a part-time Reading PhD on this genus in the Mediterranean. Mark concentrated on *Convolvulus* and was able to locate two very rare pin-point endemics (*C. dryadum* and *C. vidalii*), both in flower, besides numerous common species, including the very beautiful, dark



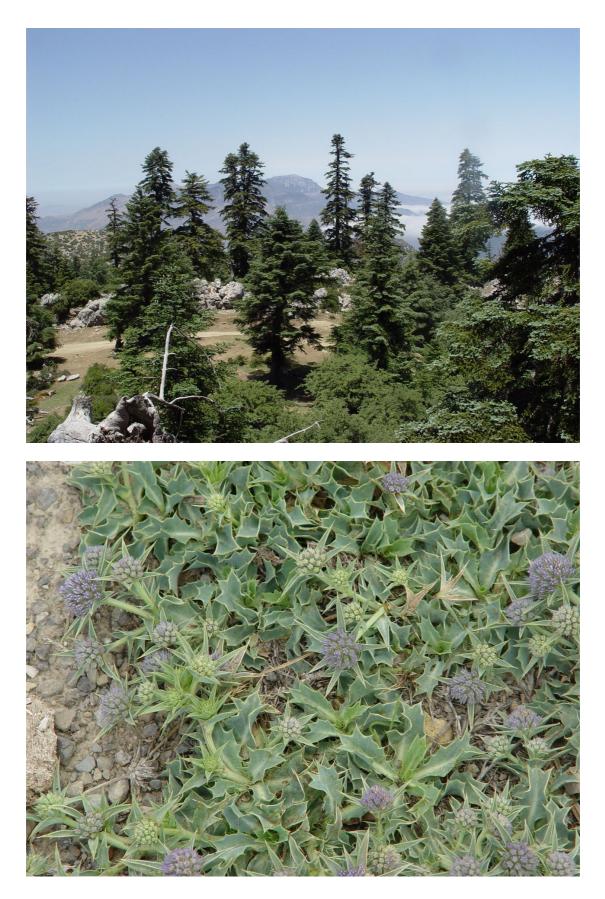
The town of Chefchaouèn from track to Jbel Kalaa.

blue-mauve C. sabatius subsp. mauritanicus.

A journey along the Mediterranean coast to collect on serpentines also resulted in a number of interesting finds. However, despite a recent siting, they unsuccessfully scoured Jbel Bou Hachem for *Trichomanes speciosa*, an especial interest of Fred Rumsey who was concentrating on pteridophytes. On Jbel Kalaa, the party met with the Caïd (mayor) of Talembote whom they invited to share a picnic lunch, and who in turn invited them into the shade of a fig tree on his farm, surrounded by his fields of 'mountain tobacco'.

The Restaurant Assaada (مطعم السعادة) in the lower part of the medina, near Bab El Ain, was found to be the best of those listed in *The Rough Guide* and cheap. The group ate there most evenings and recommend it to those visiting the town.

An interesting find was *Hammatolobium kremerianum* (syn. *Tripodion kremerianum* and *Ludovicia kremerianum*), known previously only from the Kert Ganc, Nador and Beni Snassen floristic regions of our published *Checklist*. These sites are over 200 km further west as the crow flies. In fact a further 12 new records seem to have resulted from the Expedition. The rare Moroccan endemic, *Eryngium caespitiferum* was also found, see figure following. A similar species, E. huteri, from Cerro La Sagra, Granada, Spain, has been shown by Professor Gonzalo Nieto to be specifically distinct. In total, 264 gathering were made which Mr Ronald Rutherford has now completed identifying (excepting the Pteridophytes and *Convolvuli*). They are all mounted and laid away with data viewable over our website.



Above: *Abies marocana* forest, looking N from Jbel El Kelaa towards Jbel Kelti. Below: *Eryngium caespitiferum* (Ait Lafkih *et al.* 30), a rare endemic of a few sites in northern Morocco.

CONGRATULATIONS

New graduates. The University recently held its autumn graduation on Saturday 10th December. We congratulate **Dr Ross Bayton** who collected his PhD for his thesis on the palm genus *Borassus*, **Dr Dylan de Silva** for his PhD on *Echium* and **Dr Juliet Rose** of the Eden Project for her PhD on plant conservation in the Seychelles. We also congratulate the nine other Plant Sciences PhDs. The three (out of the five) MScs graduating in person all got distinctions. Especial congratulations to Nicola Beharrell (distinction), Sarah Childs, Matthew Davies (distinction), Clare O'Reilly (née Coleman, distinction) and Diane Taylor. We also congratulate Dr Laura Kelly, Dr Nicola Toomey and Dr Nada Sinnu-Saoud, amongst other PhDs, and the outstanding Botany BScs who graduated earlier in the year.

Births. Congratulations to Judith Stephen (née Heald) and Tim on the birth of their son, Henry, and to Dylan de Silva and Ruth on the birth of their daughter Maria.

RETIREMENTS

Dr Barbara Pickersgill, Professor John Barnett and Mavis Ford have recently retired, even though we have still been seeing them regularly around PSL.

Barbara has been a pillar of Plant Sciences for many years, she was here when I came to Reading in the early 1970s. During this time, she has been awarded many honours, including the Linnean Gold Medal for Botany and the Presidency of the Society of Economic Botany, based in the U.S. She has not only given some of the very best of lectures and practicals to undergraduates and postgraduates in PSL, but has also found time to whiz around the world giving plenary lecture after plenary lecture at international meetings. She has had a distinguished series of remarkably international PhD graduates whom she can be proud of, and a list of publications to make any academic turn green with envy. We wish Barbara a long and happy retirement and hope to see her very regularly in the future.

A meeting to celebrate the wide-ranging interests of Barbara, 'Plants, People and Evolution' is being held by the Linnean Society on the 4th August, organised by Julie Hawkins, Sarah-Jane Senior and Mark Nesbitt. The speakers include Greg Anderson, Spencer Barrett, Alejandro Casas, Colin Hughes, Mark Nesbitt, Bruce Smith, Duncan Vaughan.Jonathan Wendel and Daniel Zohary. Please see <u>www.linnean.org</u> where a circular and registration form is available.

John came to us from New Zealand to sort out our Electron Microscope Unit in 1977, before going on to sort out the Department of Botany in1996 and the whole School of Plant Sciences in 2001. John has been extremely successful in very difficult conditions and at the same time one of the most popular people in the School. He was awarded a Personal Chair and a DSc in 2000. Among many outside achievements, John was elected as a Fellow of the International Academy of Wood Science and served as President. John has published a great deal, both books and papers. Friends and colleagues gathered in the Blue Room on 22 September when the Dean of Life Sciences, Professor Rob Robson, presented John with gifts, including a GPS, from colleagues and from the University itself.

Mavis Ford has retired after more than 25 years serving Plant Sciences with tea and coffee, though in the earlier part, she was also a member of the Prep Room staff

concerned with getting PSL's practical classes organised on time and in good order. Mavis has always given unstinting service, even coming in at weekends for open days, conferences, etc. We thank Mavis and wish her a thoroughly deserved long and happy retirement.

ROYAL HORTICULTURAL SOCIETY NEWS

We are pleased to congratulate Nicola Beharrell, our first RHS Fellow, on her MSc degree with distinction. Nicola's project was an investigation into the status of *Caryopteris* in cultivation and to establish whether this was all C. × *clandonensis*. Nicola gave an account at the last RHS Science & Horticultural Advice Committee. Amanda Read, our second RHS Fellow has a hard act to follow! She will be investigating the *Mahonia* taxa naturalised in the U.K. to establish if they are hybrids and, if so, exactly what of. Many thanks to the RHS for their continued sponsorship.

Congratulations to Dr Simon Thornton-Wood on his promotion to Director of Science & Learning. This means that Simon can now attend the RHS Directors' Meetings.

Dr Stephen Jury joined a recent interview panel to appoint the new Wisley Herbarium Curator. We congratulate Dr Christopher Whitehouse on his appointment and wish him well in his new job. The Science & Horticultural Advice Committee has set up a team to review the development of the RHS Herbarium, including Dr Tim Walker of the Oxford University Botanic Garden and Dr Stephen Jury. Christopher Whitehouse's appointment has caused a vacancy in the Botany Department at Wisley.

Diana Miller, the Wisley Herbarium Curator, retired last September, having restored the collections and set up 'Standard Portfolios' for cultivated plants. These include, not only plant specimens, but printed descriptions, photographs and even paintings in a green folder (bright blue at Reading!) to distinguish them from botanical type specimens in traditional red covers. We wish Diana a long and happy retirement.

The RHS ran a second **Science Exchange** at Reading which attempted to answer the questions: 'What cost the world in your garden?' and 'How great is the threat to our native and garden flora from the accelerating international plant trade?' The meeting was chaired by Professor David Ingram, Master of St Catherine's College, Cambridge with Professor Clive Brasier of Imperial College, London, presenting his case supported by a professionally-made video of his perspective of the biosecurity risks of international trade. Guy Barter, Chief Advisor of the RHS, Wisley, followed with an overview of the significance of this trade today. A good debate followed, helped by an 'expert panel', after which it was agreed to set up a working group that shares an interest in a thriving horticultural trade in a secure environment and which aims for a secure future for horticulture. Thanks are recorded to Defra for their sponsorship.

NEW MSc CLASS

After last year's smaller intake, this year is back to normal with a class of 16. This year also sees a change in that Dr Alastair Culham is now in charge and is the so-called 'Course Director', having taken over from Dr Keith-Lucas. Dr Stephen Jury takes over MSc admissions in conjunction with Mrs June Randall in the student office. Alastair has already been busy: new web pages are available, see: http://www.plantsci.rdg.ac.uk/MScPlantDiversityHome.htm

OBITUARY

Max Walters

Max Walters, the doyen of Cambridge botany died Sunday 11th December 2005. Max taught the undergraduate Michael Keith-Lucas and took him on University field courses to the former Yugoslavia and Czechoslovakia. He was a great and much respected taxonomy teacher to generations of Cambridge students. A dominant figure in British and European floristic botany for many years, Max was a leading light in the *Flora Europaea* organisation – which is where I got to know him. As a new boy on the Editorial Committee towards the end of the project, I greatly appreciated his scholarship and knowledge of European botany and botanists. He was the prime mover of The European Garden Flora project, the National Council for the Conservation of Plants and Gardens, the BSBI (where with Frank Perring he was responsible for the production of the original Atlas of the British Flora) and one of the editors and an enthusiast for the Collins New Naturalist series. His magnum opus is undoubtedly Plant Variation and Evolution (1969) co-authored with his colleague, David Briggs. After he retired as Director of the Cambridge Botanic Garden in 1983, his own private garden became his botanic garden with its collections of Alchemillas and other favourites. Max was at the forefront of the botanic garden conservation movement with his championing of regional plant conservation with the rare wild plants of the Breckland project and his numerous lectures and publications. His Granchester garden was opened regularly under the 'Yellow Book' charity scheme, and I remember visiting some 15 years ago on one of those Sunday afternoons. I was 'spotted' from inside and the sitting room window was suddenly thrown open and Max was there: "Stephen! The church clock stands not at ten-to-three, but there still is honey left for tea - come on in!". This was my introduction to Lorna and Max's legendary home where over the years numerous botanical visitors have been made so welcome and encouraged by his lively interest and friendly persuasion - the most notable being the up-and-coming generation. Max was the Curator of the Cambridge herbarium (1949-1973) and thus, it is especially fitting to publish this note in our Herbarium News. We extend our sympathies to Lorna and the family. I understand a memorial service is likely next year but, as yet, details are not available.

Stephen L. Jury

ILDIS

The ILDIS (International Legume Database Information Service) remains active here in Reading, led by Professor Frank Bisby and Dr Yuri Roskov, with recent grants from GBIF and the Royal Society. The 5th ILDIS workshop was held in Reading 17— 18 November, when the Trustees gathered with some 25 others in the Black Horse House Conference facilities to celebrate 20 years of the ILDIS project. The workshop included a historical review of the project and its publications, as well as a series of legume research presentations. The latest database release was announced and will be published shortly on a mini CD containing a draft world checklist of 19,936 species. The second day was used to discuss further taxonomic editing of the ILDIS World Database of Legumes, and plans for its use in conservation related assessments. Professor Bisby's BBSRC *Biodiversity* World project uses the checklist electronically and there was discussion of using legumes as a model for the first IUCN Global Assessment of a plant family. For further details, email: Y.Roskov@reading.ac.uk

TARIK EL ATECHI

The Curator is pleased to report that Tarik, who worked so extensively on the Euro+Med project and developed our Herbarium website, is now working for Business Objects, a software company in Ealing. Besides his computer skills, he has to use his languages: English, Arabic, French and Spanish. He still lives locally. We wish him every success in his new job. Stephen Jury and Tarik still try and meet up to go to the gym together, but now evenings instead of early mornings.

NEW DARWIN PROJECT

Dr Julie Hawkins has been awarded £240,000 to match the DNA fingerprints of wild Mexican cacti against those of cultivated plants to certify genuine nursery stock. Julie is working with Dr Rolando Barcenas Luna, her former PhD student, now at the University of Queretaro, Mexico. The project requires genetic data collection and analysis on a massive scale over the next four years: 600 species will need to be located and identified. Already, Dr Britta Denise Hardesty has been appointed to the staff in Reading, and we can expect Mexican students to come to our labs for training in the appropriate molecular methods. Already Sr Victor Rodriguez has arrived and working in Room 134. Suitable laboratory facilities will be set up in Mexico to carry on the work and UK scientists will share expertise with their Mexican counterparts in a series of workshops. They all attended a Stakeholders' Dialogue as part of the project's work programme, in Mexico City, on 3-4 November, co-chaired by Professor Vernon Heywood. The Darwin team hope that the scheme will become selffunding by the use of a green tax added to the cost of the plants, but with the aim that sustainable plant nurseries can be more profitable than those employing illegal plant trafficking. A fuller account by Clare O'Reilly is available in the latest *Plant Talk*, 42: 11-12 (October 2005). It includes a picture of Julie and Rolando standing in front of a rather large and common looking Opuntia!



THE SOUTH AFRICA BIG GENERA GROUP

The South Africa Big Genera Group (SABiGG) is a network of collaborating scientists from South Africa and Europe actively working on the phylogenetic reconstructions of large plant genera from the Cape Floristic Region (CFR) (<u>http://www.rdg.ac.uk/AcaDepts/ap/SABGG/publish/index.htm</u>). The project is led by Julie Hawkins (SBS-PSL), and analyses are coordinated by her post-doc Ben Warren. A key element of this project is the linking of species-level molecular phylogenies of many Cape radiations into a single super tree of the Cape. The project aims to locate significant shifts in diversification rate and evaluate the likely importance of potential factors driving rapid diversification in the CFR. The assemblage of available data has been underway throughout this year, and the project will be completed during the coming year.

ENBI WORKSHOPS

Professor Heywood co-organized and participated in a series of training workshops on Biodiversity Information and Informatics as part of the EU-funded ENBI programme, held in Palma de Mallorca, Spain, 9—10 May, Prague, Czech Republic, 21—22 November and Chania, Greece, 14—15 December.

Dr Stephen Jury attended the ENBI Advanced Workshop on Biodiversity Information and the Law: Balancing Freedom of Access and Rights of Providers held at the Royal Botanic Gardens, Kew, 30 November—2 December and organised by Professor Simon Owens and Dr Chris Johnson.

PROFESSOR HEYWOOD'S ACTIVITIES

Besides the ENBI workshops above, Professor Heywood was one of the lecturers in a Master's Course on CITES held at the Universidad Internacional de Andalucía in Baeza, Spain 10—11 October.

Professor Heywood participated in the 5th International Congress of Ethnobotany in Istanbul in August 22—25, where he gave a paper on the Human use of plant resources – the knowledge base and conservation needs and a Plenary Lecture on Biodiversity, Global Change and Human Health. Visiting Professor Sir Ghillean T Prance also gave a plenary lecture at the Congress.

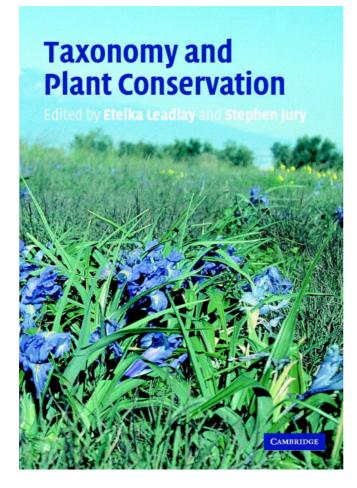
Professor Heywood was one of a series of speakers who gave lectures on The future of Botanic Gardens at The University of Bern Botanic Garden on 19 August. He was a member of the scientific committee and gave a plenary lecture on Conservation of the Mediterranean flora: general perspectives and historical context at the International Workshop on the "Conservation de la flore méditerranéenne dans un environnement changeant" held at Hyères, France, 29 September—2 October 2005, on the occasion of the 25th anniversary of the Conservatoire Botanique National Méditerranéen de Porquerolles.

Professor Heywood visited Antananarivo, Madagascar, as a member of the Technical Advisory Group of a GEF project on UNEP/GEF supported project, "*In situ* conservation of crop wild relatives through enhanced information management and field application," 17—21 October, 2005.

Mediterranean invasive species

Professor Vernon Heywood participated in an International Workshop on "Invasive Plants in the Mediterranean Type Regions of the World", co-organized by the Conservatoire Botanique National Méditerranéen de Porquerolles, the European and Mediterranean Plant Protection Organization, the Council of Europe and the World Conservation Union - Centre for Mediterranean Cooperation, was held in Mèze (France), from 25 to 27 May 2005. It was attended by over 110 experts from 24 countries and from the other Mediterranean-type regions of the world (Northern Chile, California, the Cape Region of South Africa, and Western Australia). Professor Heywood presented a paper on "Changing attitudes to plant introductions and invasives" and edited the Declaration of Mèze which is available, together with a of the meeting. along with the presentations on line report at: http://www.eppo.org/MEETINGS/2005 meetings/workshop invasive/workshop.htm

TAXONOMY AND PLANT CONSERVATION



The cover features *Iris planifolia* just south of Catania, photographed on January 2nd. Sadly, the smoke from Etna is lost under the title!

You may have heard by now that this book edited by Etelka Leadlay and Stephen Jury was launched at the Linnean Society on January 10th. It is published as a tribute to Professor Vernon Heywood who has done so much to highlight the importance of sound scholarship, training and collaboration for plant taxonomy and conservation. The book illustrates the key role played by taxonomy in the conservation and sustainable utilisation of plant diversity. The book is published by Cambridge University Press at £70 (hardback) and £35 (paperback), though a discount flier is available with 20% off, plus £3.50 p. & p. Please contact Etelka

(Etelka.Leadlay@btinternet.com) or myself if you do not receive a copy with this *Herbarium News*.

FAMILIES OF FLOWERING PLANTS

Professor Heywood has devoted much of the year to preparing a completely rewritten edition of this popular book. The other principal authors are Dr R K Brummitt, Dr Alastair Culham and Professor Ole Seberg. I am pleased to report that all the accounts of the families are now complete. Publication is expected later this year.

PUBLIC LECTURE

Professor Sir Ghillean Prance gave a public lecture in the University last November to an audience of over 300 people. His title 'The Explorer of Flora – an Amazon Adventure' gave a personal account of his plant collecting in the Amazon over the last 40 years. He explained how the adventures of fieldwork linked to the completion of the inventory and the production of Floras and that all needed the back-up of a good herbarium. He then outlined the work of our Herbarium and highlighted some of its collections, including an old specimen of *Davallia* collected by Alfred Russell Wallace and a modern type specimen, that of *Lavandula rejdalii*, named after one of our celebrated graduates, Professor Mohamed Rejdali, now Mayor of Temara, a city to the south of Rabat, Morocco, and collected by Dr Tim Upson.

We are grateful that Sir Iain (as he prefers to be known) takes his visiting professorial duties so seriously and was able to give up his time and deliver this lecture. We shall see him back later this term to lecture to both the MSc undergraduate classes.

THE ROBERT ALLERTON MEDAL

We also wish to congratulate Visiting Professor Sir Ghillean T. Prance on the award of the Robert Allerton Medal by the National Tropical Botanical Garden, whose headquarters are in Hawaii. This award is bestowed biennially for excellence in tropical botany or horticulture. Sir Iain has published 19 books, edited a further 14 and written over 450 papers.

CHARLES BUTTERWORTH

Dr Stephen Jury was pleased to hear news from Charlie recently. He reports that after five years at *Reader's Digest* in London, he headed off to Iowa where he got his PhD in cactus molecular systematics with Rob Wallace. He married a fellow botanist, and did a post-doc at Rancho Santa Ana Botanic Garden in Claremont, CA, where he worked on molecular systematics of the Hawaiian Silverswords - *Dubautia* (Asteraceae), before getting his current position at the Desert Botanical Garden, Phoenix, Arizona. His current job is also as an adjunct professor at Arizona State University, where he has teaching commitments.

His ongoing research is investigating phylogenetic relationships in the tribe Cacteae, collaborating with other U.S., Canadian, and Mexican researchers. He is hoping to gather molecular and morphological data for all species in the tribe (over 200), as one of the issues in the tribe has been the delineation of genera. Once a sound phylogeny is obtained, he plans to continue to address issues of evolutionary development as it may pertain to various aspects of convergent evolution, paedomorphosis, etc.

HERBARIUM SPECIMEN ACTIVITIES

Exchanges

The Herbarium was delighted to receive 500 valuable Iranian herbarium specimens from the Department of Natural Resources at Isfahan University of Technology, where Dr Jamal Khajeddin is now head. Readers may remember Jamal, one of Dr Keith-Lucas's past PhD students. We have already sent some of our duplicates in exchange, but still await to know that they have arrived safely.

Other accessions this year, besides Moroccan, include: 10 interesting Umbelliferae sent from Edinburgh, but collected by Sabina and Martin Gardener and Turkish students on their Darwin Initiative tour in Turkey; 87 from the University of Liège; 50 from Mr Gordon Hanson of Ware, Hertfordshire, 259 Taiwanese from the Herbarium of the Taiwan Forestry Research Institute, Taipei and 144 duplicates from the Natural History Museum, London, on incorporation of an old European collection. The Taiwan exchange is new and is to help provide useful specimens for the new Chinese work undertaken by the School of Pharmacy.

Loans

Twenty loans were sent out in 2005 and a further 30 received for use by staff and students in our Herbarium from as far away as China and as near as Kew! However, already this year eight have been sent out.

Phytochemistry voucher specimens

Mr Ronald Rutherford has now finished mounting our backlog of phytochemistry voucher specimens, arising from the work of Dr Christine Williams and the late Professor Jeffrey Harborne. These include a valuable collection of 208 Australian Restionaceae, many collected by Barbara Briggs. These specimens allow their phytochemical work to be verified and thus to maintain its value, even if specimens are reidentified.

SELECTED PUBLICATIONS

Chacon, M.I., Pickersgill, B. and Debouck, D.G. Domestication patterns in common bean (*Phaseolus vulgaris* L.) and the origin of the Mesoamerican and Andean cultivated races. *Theor Appl Genet*, **110**, 2005, 432-444.

Cryer, N.C., Butler, D.R. and Wilkinson, M.J. *High throughput, high resolution selection of polymorphic microsatellite loci for multiplex analysis.* 2005 http://www.plantmethods.com/content/1/1/3.

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Hawkins, J.A. Using phylogeny to investigate the origins of the Cape flora: the importance of taxonomic, gene and genome sampling strategies. *Diversity and Distributions*, **12**, 2006, 27–33.

Heywood, V. Legumes for all. *Plant Talk*, 2005, 42, 41–42.

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SPECIES 2000 AND THE CATALOGUE OF LIFE: HALF A MILLION SPECIES!

The Species 2000 project, run by Professor Frank Bisby and Ms Pamela Harling with a team in Reading and around the world, has made significant progress this year. In March there was a meeting in Malta of both the Species 2000 europa projects and the global project team (about 70 people in all), where it was announced that the Annual Checklist had reached its milestone of half a million species. This is the Species 2000 & ITIS Catalogue of Life 2005 Annual Checklist, available both on the web (www.sp2000.org/AnnualChecklist) and on free CD, and intended eventually to cover all 1.75 million known species of plants, animals, fungi and microbes. The present edition is composed of sectors from 30 selected and peer-reviewed global species databases combined with interim regional sectors from ITIS. Dr Yuri Roskov leads the content management, with Dr. Susanah Kimani organising the GBIF-funded global project, Dr Adeline Souter-Perkins (Paris) the global databases in Europe, and Ms Monalisa Cachuela assembling the sectors (Los Bãnos, Philippines). The 2005 Annual Checklist was publicly launched at the GBIF Governing Board meeting in Brussels on April 20th. GBIF uses the Checklist as the index to its main data portal

(<u>www.gbif.net</u>). Interface design and production of the CD were done by Jorrit van Hertum at ETI, Amsterdam.

On October 15th, the Species 2000 europa project held its public presentation meeting jointly with the EC ENBI project at the Stockholm Natural History Museum. Professor Frank Bisby Publicly launched the two other Species 2000 public services, the Species 2000 & ITIS Catalogue of Life Dynamic Checklist and the Web-Services. The Dynamic Checklist (<u>www.sp2000.org/DynamicChecklist</u>) resembles the Annual Checklist, but operates as a dynamic virtual checklist on the Internet, polling and harvesting data from the contributing databases around the world. Frank showed an additional feature to be expanded in future – that the Dynamic Checklist has both the Global Hub (with global species databases) but also an experimental regional Euro-Hub in which Euro+Med, Fauna Europaea and ERMS can be queried. The Dynamic Checklist involves not only the content management (Yuri and Adeline) but also the work of Qinglai Ni (wrapper program support), Peter Hollas at York (hub & server management) and Ed Donavan at Cardiff (SPICE software development). This 'launch' provided a fitting end to the EC's €2.5 million europa project to be followed by the FP6 EDIT project.

Finally, in November Species 2000 & ITIS (N. American partner) demonstrated the system at the SBSTTA meeting of the UN Convention on Biological Diversity (CBD), where it is a key component in the Global Taxonomy Initiative. The Sp2000 & ITIS Catalogue of Life is now being adopted for 5 programmes of the CBD through an MOU with CBD Secretariat.

F.A. BISBY

KEW SANDWICH-YEAR STUDENTS

Mr Ewan Gage (Part II, Botany Hons) is going to spend 12 months from August working at the Royal Botanic Gardens, Kew, in the Herbarium. Ewan will be concerned with providing identification material for CITES inspectors to use.

We will welcome back in the autumn Mr Kwok Cheung who will have spent 12 months working in the Jodrell laboratory on a genetics project.

LINNAEUS IN THE FOYER PLANT SCIENCE LABORATORIES

I am often asked about the Linnean bust in our foyer which I reported on in *Herbarium News* no. 30. Thanks to Professor Per Magnus Jørgensen of Bergen, we know that it was made by a very famous Finnish sculptor, Wilhelm Magnus Rűneberg, son of the poet who wrote the Finnish national anthem. Rűneberg also made busts of Czar Alexander II, Nordenskiøld and Ibsen. According to Professor Ahti in Helsinki, he was commissioned to make busts of several famous scientists by the University of Helsinki just after the turn of the 19th century, but it is still not clear whether this was one of those. It is thought that the original bronze by Rűneberg is in St Petersburg and that this is one of six signed and dated plaster casts. There is another known in Lund (see photo overleaf) with the same inscription as ours and one in Helsinki.



Photo of Linnaeus at Lund courtesy of Professor Per-Magnus Jørgensen

THE HERBARIUM AND PLANT IDENTIFICATION SERVICE CONTACTS

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Access to the collections is available by appointment and specimens can be loaned to other institutions (private individuals only by special arrangement). A seed exchange scheme is operated for research and teaching purposes, accessible from the Herbarium website. There is a reference library of Floras, monographs and systematic botany literature available for consultation in the Herbarium. Use of Macintosh computers for sequence alignment is also available.