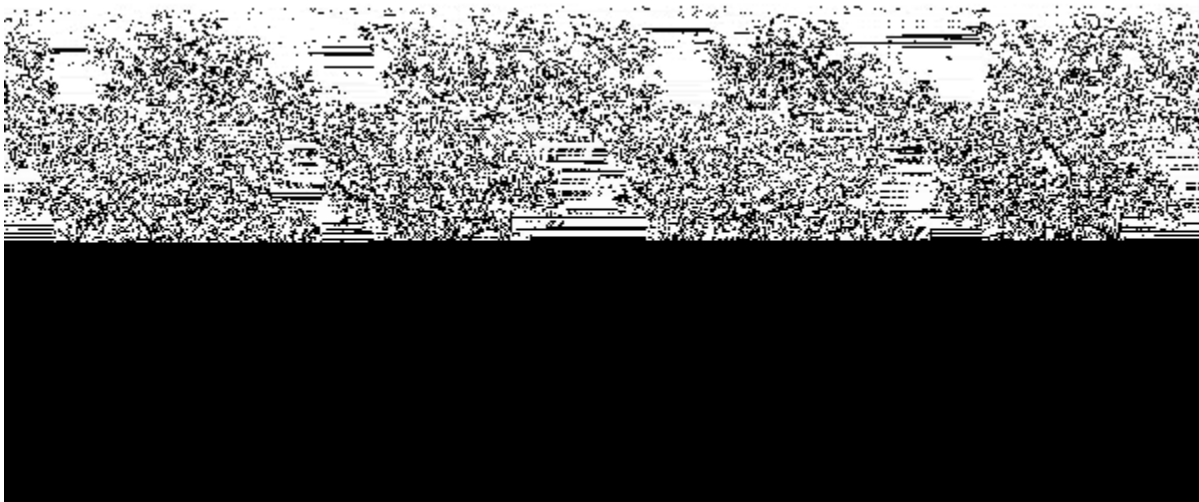




The University of Reading

School of Plant Sciences

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I would be pleased to receive your news and promise not to wait two years before producing the next *Herbarium News*. We send our best wishes for the Christmas Season, the New Year and New Millennium.

Dr Stephen L. Jury

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STAFF: CHANGES AND NEWS | [\[TOP\]](#)

Dr Julie Hawkins

Dr Julie A. Hawkins joined the Reading Botany staff in October 1998. Julie's first degree was awarded from Kings College London in 1990. She went on to study for a MSc in Plant Genetic Resource Conservation and Utilisation at the University of Birmingham and a doctorate at the University of Oxford. Her doctoral studies on the systematics of *Parkinsonia* L. and *Cercidium* Tul. (Leguminosae: Caesalpinioideae) were supervised by Dr Stephen Harris, Dr Colin Hughes and Dr Robert Scotland. Julie remained in Oxford for a short post-doc. before relocating in September 1997 to the University of Cape Town, South Africa, where she worked with Professor Peter Linder. Her post-doctoral project comprised morphological and molecular phylogenetic studies of the largest genus endemic to the Cape Flora, *Aspalathus* L. (Leguminosae; Papilionoideae); Julie plans to continue with this work in Reading.

Professor John Barnett

Readers may not be aware that Dr John Barnett has been given a personal professorship from last October. We are delighted to offer our belated congratulations.

Professor Jeffrey Harborne

Professor Harborne retired from the editorship of the journal *Phytochemistry* at the end of June after 28 years in the job. Dr Christine Williams and the other Associate Editors also retired after distinguished service. A one-day symposium was sponsored by Elsevier and organised by Christine at the Royal Botanic Gardens, Kew to mark and celebrate Jeffrey's distinguished editorial career. Thankfully, he continues to be seen working as usual in the School, though now only a four-day week!

Professor Michael Dick

Michael is now working part-time and expects to retire at the end of September 2000. He has plans to live in Devon. He has recently had a letter published in *The Times*, supporting Professor David Hawksworth's views on the need for mycology in Universities.

Dr Barbara Pickersgill

Barbara is now President-Elect of the Society for Economic Botany (Congratulations!) and will become President at the annual meeting 2000 in Hawaii when she will have to preside. (If her travelling has been reduced these last years when her PhD students were all writing-up, she may well have the opportunity to do some catching up!)

Dr David Cutler

We send our best wishes to Dr David Cutler, one of our visiting lecturers, who retired recently from the Royal Botanic Gardens, Kew. This event was marked by a symposium, *Under the Microscope*, held at the Linnean Society's rooms, 9th—10th September. The event proved to be a gathering of the world's plant anatomists! It was also a good opportunity to catch up with some news from Reading graduates with Emma Crowe, Peter Gasson, Simon Owens, Himansu Baijnath and Louis-Philippe Ronse Decraene all reading papers. David was back in Reading recently to deliver his plant anatomy course to our Masters students.

Dr Terry Hedderson

Sadly for us, Terry's contract has now run its course and he is leaving for South Africa where he will be lecturing and researching in the Department of Botany of the University of Cape Town. Terry will be continuing his work on molecular systematics of the *Bryaceae*, as well as beginning a programme on the floristics and taxonomy of the Cape Bryoflora. Terry's last days in Reading will be before Christmas. We wish him all the very best for his future and hope to be able to collaborate with him in his new post. (We have already initiated a bryophyte exchange with Cape Town!)

Dr James Compton

James has joined us as an Honorary Research Fellow, but has actually been employed recently on a series of short-term contracts. Since his work on *Actaea* and *Cimicifuga* (which caused a stir in horticultural circles since it sunk the latter genus containing popular garden plants), James has been re-assessing the taxonomy of other *Ranunculaceae* using molecular tools. *Beesia* with two Chinese species and *Eranthis* (the winter aconites) with eight Eurasian species have been shown to belong to the same tribe as *Actaea*.

Professor Peter Crane

We welcome and congratulate Peter on his recent appointment as Director of the Royal Botanic Gardens, Kew. Peter originally graduated at Reading with a first class honours degree in botany and stayed on to undertake research for a PhD in palaeobotany supervised by the late Dr Peter Barnard. Fortuitously, at the end of this Professor Vernon Heywood was appointed Dean of the Faculty of Science and was able to appoint an extra member of staff. After a very open competition, Peter was the successful candidate who

made to the cedars near Bcharré. A second visit was made 16—25th October when a series of field excursions were made to start a collecting programme and study the autumn flora. This was especially successful with a significant number of bulbous species found: *Muscari parviflora*, *Scilla autumnalis*, *Colchicum* spp., *Cyclamen persicum*, *Pancratium maritimum*, the related Amaryllid *Vagaria parviflora* and *Uginea/Drimia maritima*. *Lactuca triquetra* in both white and blue variants was an interesting find on calcareous rocks, though not now considered endemic, as well as *Ludwigia stolonifera* in the river forming the border with Syria, a naturalized alien.

It is planned to add the new specimens to the existing 'Post Herbarium' collections and revive this important Middle Eastern herbarium. Although based on the specimens of George E. Post (author of *Flora of Syria, Palestine and Sinai...*, Beirut, 1896), it contains many specimens amassed much later by Mrs Edgecombe, including a significant number from Europe and America.

ILDIS | [\[TOP\]](#)

The ILDIS *World Database of Legumes* has gone ahead strongly during 1999 with Judith Heald, Sue Brandt, Grace Barter and Frank Bisby both operating the ILDIS co-ordinating many s of

appearing in both lists under the relevant accepted/valid names. Errors and remaining inconsistencies are resolved by the user who is guided by a series of relevant questions requiring a require yes/no answer, or minimal editing of the data

The detection of conflicts within a single checklist is also of use. Litchi checks every name in a checklist against every other name to find taxonomic errors and inconsistencies. Without automation, such a process could take several weeks for some of the larger taxonomic databases.

At present, Litchi is based on rules that reflect the International Code of Botanical Nomenclature, and observed practice in taxonomic databases. It could be easily adapted to reflect the rules of zoological nomenclature. Further research could widen the scope of Litchi to handle additional data attached to taxa (such as distribution, ecological notes), or to provide real-time interrelation of species names in information sources on the Internet. This would allow direct links between information on the same species, not only when information was located in different web sites, but also even when different taxonomic treatments were used to create the different information sources.

NEW PhD STUDENTS | [TOP](#)

Peter Boyce

Peter is now a registered part-time student, ‘working away’ at the Royal Botanic Gardens, Kew and supervised by Dr Barbara Pickersgill and Dr David Simpson at Kew. His title is: ‘Systematics of the *Araceae* tribe *Pothoeae*’.

Dylan De Silva

Investigation into the potential features which may account for the explosive radiation of the Macaronesian *Echium* by comparison of island with mainland species within a phylogenetic framework.

Elsbeth Haston

Elsbeth Haston, a graduate of our MSc in Pure and Applied Plant and Fungal Taxonomy, returned to the Department to start work on a molecular and morphological study of the *Peltophorum* group (Leguminosae; Caesalpinioideae). Elsbeth is supervised by Dr Julie Hawkins and Dr Gwilym Lewis (Kew).

John Galey

John Galey, also a Reading student (graduating in Botany in 1997), is making a comparative study of the genetics of leaf development across the Leguminosae. John

Galey is supervised by Dr Julie Hawkins and Dr Nick Battey (Department of Horticulture, University of Reading).

Neil Bell

Neil Bell is undertaking a study of higher level relationships in the mosses. His plan is to employ a phylogenetic analysis of taxa critical for the understanding of relationships and the evolution of morphological characters. Neil is supervised by Dr Angela Newton (Natural History Museum), but is registered at Reading, where Dr Julie Hawkins is his second supervisor.

Dei-Wei Chen also took on the genus *Capsicum* with a thesis entitled 'Barriers to gene exchange between *Capsicum chacoense* and the *C. annuum* complex, supervised by Dr Barbara Pickersgill.

The Iter worked from the southern border to the 'steppe' near the Romanian border. The best/worst day was in the Strandja Mountains, right against the Turkish border, when the collections were so numerous that pressing only finished at 3 a.m! This area has a splendid flora including *Rhododendron ponticum*, *Daphne pontica*, *Ilex colchica*, *Prunus laurocerasus* and *Vaccinium arctostaphylos* as an understorey of *Fagus orientalis*. This Euxine element was mentioned by Oleg Polunin in his *Wild Flowers of Greece and the Balkans*

We have also gained nine herbarium cabinets containing the *Vicieae* collections built up by Professor Frank Bisby while at Southampton as part of his *Vicieae* Database Project. So far only some genera have been incorporated with our own material. To accommodate these, we have had the herbarium bench raised a few centimetres and purchased new chairs. (These last from moneys received from some of our commercial identification work.) In fact, the new bench height is proving to be better for the backs of the regular users!

In addition to the work on the Optima Iter VIII material mentioned above, the Herbarium has been presented by Dr John Richards with a valuable collection of c. 380 voucher specimens arising from a seed collecting expedition of the Alpine Garden Society to N. Greece this summer. These have yet to be entered in BRAHMS, although they have now been mounted, had their identities checked and laid away. We are in contact with Professor Arne Strid of Copenhagen and Professor Dimitrios Phitos of Patras concerning this material as they are actively working on the next volume of *Flora Hellenica*.

Dr Terry Hedderson has now worked through many of his bryological collections and the duplicates associated with these (several thousand) have been dispatched to other herbaria through our exchange programmes, or as gifts in recognition of support received.

Several other substantial exchanges have been received, principally from the Université de Liège, the Real Jardín Botánico Madrid, the University of Alicante and Curitiba, Brasil in the form of further Mediterranean (principally Moroccan) and Brazilian specimens. Most have now been incorporated into our collections.

The latest acquisitions are some 180 duplicates made in Lebanon as part of Dr Stephen Jury's involvement in a Darwin Initiative of the Royal Botanic Gardens, Kew, with the American University of Beirut. These specimens have not yet had their labels made (with BRAHMS) and are awaiting mounting and identification.

Specimens have also been dispatched (including five sets of 100 British bryophytes, many provided and identified by Eric Watson) to: ABH, BM, BOL, G, LG, LIV, MA, MARSSJ, MBM, MICH, NICE, PAL and SEV.

Mr Mark Spencer has recently entered 230-odd records into BRAHMS of the genus

Recent visitors have included: David Tattersfield & Charles Aitchison (Moroccan flora and trip planning for a 2-week 'holiday' journey over the High Atlas - which included Mr Ronald Rutherford), John Akeroyd, Eric Clement, Ro FitzGerald, Tim Rich (various British genera), Mark Nesbitt (Turkish grasses), Melissa Spielman (seeds), Ana Maria Planchuelo (Argentinian grasses), Mary Dean, Paul Ashton Nigel Blackstock (*Carex flava* group), Dimitrina Boteva (Bulgarian flor

PRATT, K. & JEFFERSON-BROWN, M., 1997. *The Gardener's Guide to Growing Fritillaries*. Newton Abbott: David & Charles.

ROWLEY, G.D., 1999. *Pachypodium and Adenium*. [*The Cactus File Handbook* no. 5.] Southampton: Cirio Publishing Services Ltd.

TURNER, R., 1999. *Euphorbias: A Gardeners' Guide*. London: Batsford.

WIGGINGTON, M.J., 1999. *British Red Data Books. 1: Vascular Plants*. Peterborough: JNCC.

Recently, we organised a successful sale of duplicate books over the www. A few are still available, but the majority have been sold. This raises some extra useful finances for our book-purchasing budget. We shall continue to put surplus items on this sale page, so please keep looking: www.herbarium.rdg.ac.uk/booksale/

SOME RECENT STAFF PUBLICATIONS | [\[TOP\]](#)

BAKER, W. J., DRANSFIELD, J., HARLEY, M. M. & BRUNEAU, A., 1999.

Morphology and cladistic analysis of subfamily *Calamoideae* (*Palmae*).

Memoirs of the New York Botanical Garden, 83: 307--323.

BAKKER, F.T., CULHAM, A. & GIBBY, M., 1999. Phylogenetics and biogeography of

Pelargonium (*Geraniaceae*). In Gornall, R. & Hollingsworth, P. (eds), *Advances*

In Plant Molecular Systematics, Systematics Association special VOLUME: 353-

374.

BAKKER, F.T., CULHAM, A., DAUGHERTY, L. & GIBBY, M., 1999. A trnL-F based

phylogeny for species of *Pelargonium* (*Geraniaceae*) with small chromosomes.

Plant Systematics and Evolution, 216: 309-324.

BAKKER, F.T., HELLBRUGGE, D., CULHAM, A. & GIBBY, M., 1998. Phylogenetic

Relationships within *Pelargonium* sect. *Peristera* (*Geraniaceae*) inferred from

stable!]

- MAUNDER, M., CULHAM, A. & HANKAMER, C., 1998. Picking up the pieces: Botanical conservation on degraded oceanic islands. In P. L. Fiedler & P. M. Kareiva (eds), *Conservation Biology for the coming decade*. New York: Chapman & Hall.
- PICKERSGILL, B., 1997. Genetic resources and breeding of *Capsicum* spp. *Euphytica*, 96: 129-133.
- NUR SUPARDI, M. N., DRANSFIELD, J. & PICKERSGILL, B., 1998. Preliminary observations on the species diversity of palms in Pasoh Forest Reserve, Negri Sembilan. In Lee Su See, Dan Yit May, I. D. Gauld & J. Bishop (eds), *Conservation, Management and Development of Forest Resources. Proceedings of the Malaysia-United Kingdom Programme Workshop, 21-24 October 1996*: 105-114. Kuala Lumpur: Forest Research Institute.
- PICKERSGILL, B., 1998. Crop introductions and the development of secondary areas of diversity. In H.D.V. Prendergast, N.L. Etkin, D.R. Harris & P. J. Houghton (eds), *Plants for Food and Medicine*: 93-105. Kew, Royal Botanic Gardens.
- VARGAS, P., MORTON, C. & JURY, S. L., 1999. Biogeographic patterns in Mediterranean and Macaronesian species of *Saxifraga* (*Saxifragaceae*) inferred from phylogenetic analysis of ITS sequences. *American Journal of Botany*, 86: 724-734.
- WILLIAMS, C.A., HARBORNE, J.B., GEIGER, H. & HOLT, J.R.S., 1999. The flavonoids of *Tanacetum parthenium* and *T. vulgaris* and their anti-inflammatory properties. *Phytochemistry*, 51: 417--423.
- WILLIAMS, C.A., NEWMAN, M. & GIBBY, M., 2000 [1999]. The application of leaf phenolic evidence for systematic studies within the genus *Pelargonium* (*Geraniaceae*). *Biochemical Systematics and Ecology*, 28: 119--132.

EURO+MED | [\[TOP\]](#)

This is the short name of a project submitted to the E.U. by Dr Stephen Jury for an international consortium of botanists which has received positive reviewing. Contracts are at present being negotiated (which includes the monies available) with Brussels. It is expected that Reading, Sevilla, Berlin, Madrid, Palermo, Bern, Helsinki, Edinburgh, Bratislava, Sofia and Patras will each receive staff and funding. I hope that I shall be able to present you with the details in the next *Herbarium News*.

You will be aware that *Flora Europaea* is now severely out of date, having stimulated a great deal of taxonomic research. This has resulted in a loss of taxonomic consensus. After Dr John Akeroyd's efforts at revising volume one, it is clear that a thorough job is needed, but one involving botanists throughout the area (the *F.E.* 'Regional Advisors') to gain complete European approval. The published volumes of *MedChecklist* edited by W. Greuter, H. Burdet and D. Long have shown that it is also very necessary to include extra

series of sections and interpreting the results as a 3-D drawing. All the examples (*Vicia*, *Lamium* and strawberry runners) came from his garden. His teaching abilities were such that most students were inspired to work incredibly hard to do the most difficult example (*Vicia*, the stipules complicate the structure enormously).



Dr Eric Watson on a bryophyte foray on the 6th March, 1983, near his home in Goring.



Dr Watson at the start of a bryophyte foray in his garden with (L to R) Dr Chris Preston (BRC, Monks Wood), Dr David Goyder (R.B.G., Kew), Dr Sarah Webster (DETR,

He will be greatly missed. We send his widow Joyce and family our condolences.

Stephen L. Jury

ADVANCED COURSE IN MOLECULAR SYSTEMATICS | [\[TOP\]](#)

Our Centre for Plant Diversity and Systematics in the School of Plant Sciences, as part of the NERC Taxonomy Initiative at the University of Reading, is running an Advanced Course in Molecular Systematics, 3rd—13th April 2000. This is a repeat of the successful course run in 1998. It is sponsored by NERC and will provide in depth coverage of the latest techniques in molecular systematics and comparative sequence analysis. The treatment of theoretical issues in formal lectures is coupled with practical workshops and seminars in three main areas:

1. Practical issues of DNA extraction, PCR and sequencing.
2. Skills in computer-based sequence assembly, alignment and assembly, etc.
3. Phylogeny reconstruction
4. Interpretation of phylogeny to answer biological questions.

website: www.rdg.ac.uk/AcaDepts/sb/Courses/courses-short/molsys.html

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TAXONOMY TODAY: DIVERSITY & THE TREE OF LIFE | [\[TOP\]](#)

First notice is given of an International Conference, sponsored by NERC as part of the NERC Taxonomy Initiative and hosted by the Centre for Plant Diversity and Systematics at the University of Reading, 3rd--5th July, 2000. There will be three symposium sessions:

1. Key innovations: past and present
2. Rate and time in phylogenetics
3. The Catalogue of Life: discovery, classification and information systems
4. Taxonomy for tomorrow: a policy forum.

Book the date!

website: www.rdg.ac.uk/AcaDepts/sb/cpds/taxonomy_today.html

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STAFF TRAVEL | [\[TOP\]](#)

In addition to travels mentioned elsewhere, **Dr Royce Longton** attended the XVI

Bill graduated at Reading in July 1998 with a thesis on *Palmae*. Sally graduated from our Vegetation Survey and Assessment M.Sc. in 1996.

We were all very saddened by the news that **Ahmad Daman Huri Mohammed** is ill with diabetes. We all wish him well to complete his Ph.D. on *Taxithelium (Bryophyta)*. At present he is in Malaysia.

Humphrey Muiruri sends greetings from Kenya. He has recently undertaken a short course in Israel.

The last *Herbarium News* reported on **Dr Hani Daraghma** (Hani Abu Sbaih). He is now working as a Programme Officer for the United Nations Development Programme in New York.

Congratulations to **Professor Mohamed Rejdali** on his appointment to a new post at the Institut Agronomique et Vétérinaire Hassan II, Rabat where he is now head of the scientific research and development office.

Congratulations to **Dr Cymon Cox** on gaining a post-doctoral research position at Duke University in North Carolina. This is where Dr Angela Newton was, but you will probably know she is now working at the Natural History Museum, London.