

Kew

PLANTS PEOPLE  
POSSIBILITIES

# Annual Report and Accounts

for the year ended 31 March 2008







PLANTS PEOPLE  
POSSIBILITIES

## Annual Report and Accounts for the year ended 31 March 2008

Presented to Parliament  
pursuant to the National Heritage Act 1983,  
chapter 47, schedule 1, part IV,  
paragraphs 39(7) and 40(4).

Ordered by the House of Commons  
to be printed 10 July 2008

HC680

London: The Stationery Office

£13.50



## The Royal Botanic Gardens, Kew is:

**devoted to building and sharing knowledge** so that people can benefit from plants and fungi – now and for generations to come.

**700 people (including 200 in science and 200 in horticulture)**

supported by 500 affiliated researchers, students and volunteers.

Our impact is strengthened by partnership and collaboration in the UK and overseas.

**a world-leader in plant science** – and a major visitor attraction.

Governed by Trustees and sponsored by the UK's Department for Environment, Food and Rural Affairs (Defra) which champions sustainability. Funding also comes from visitor income and fundraising.

**two stunning gardens** – Kew Gardens (a World Heritage Site) and Wakehurst Place in West Sussex – these house Kew's collections, laboratories and the Millennium Seed Bank – and show the importance of plants in all our lives.

## Kew's mission is:

**to inspire and deliver science-based plant conservation worldwide, enhancing the quality of life.**

## Kew achieves results through:

surveys of plant diversity both overseas and in the UK, high quality scientific research and horticulture, publications – both scientific and popular, direct and digital access to the collections and information, education, capacity building and hands-on conservation activity; crucially the gardens also enable Kew to build public understanding and support for sustainability and plant conservation.

### © Crown Copyright 2008

The text in this document (excluding the Royal Arms and other departmental or agency logos) may be reproduced free of charge in any format or medium providing it is reproduced accurately and not used in a misleading context. The material must be acknowledged as Crown copyright and the title of the document specified.

Where we have identified any third party copyright material you will need to obtain permission from the copyright holders concerned.

For any other use of this material please write to Office of Public Sector Information, Information Policy Team, Kew, Richmond, Surrey TW9 4DU or e-mail: [licensing@opsi.gov.uk](mailto:licensing@opsi.gov.uk)  
ISBN:9780102957280

# Contents

4	Chairman's letter
5	Director's review
	Management Commentary
6	Business aims and outcomes
6	The Breathing Planet Programme
7	Performance targets and results
9	Commentary on performance against targets
10	Review of activities
11	Statutory information
15	Statement of Trustees' and Accounting Officer's responsibilities
16	Statement on internal control
18	Remuneration Report
	Accounts
20	Auditor's Certificate and Report
22	Consolidated Statement of Financial Activities
23	Balance Sheets
24	Consolidated Cash Flow Statement
25	Notes to the accounts
32	Five year financial summary
	Corporate Information
33	Health and safety statement
33	Customer Charter statement
34	Diversity statement
35	Publications
	Contact details

## Chairman's letter

This has been a year of great progress, in terms of both results achieved and, most importantly, in producing a coherent and visionary plan for the future. In his first full year as Kew's Director, Steve Hopper has led the organisation through a systematic process to set strategic priorities and ensure that Kew is well prepared to fulfil its obligations in plant conservation and as a World Heritage Site.

Kew has a unique global capability in plant science and conservation, a world-leading range and depth of resources, and a global network of partners. The new plan will enable Kew to deliver its full potential in meeting the major environmental changes which threaten humanity's wellbeing, stability and security. People everywhere are striving to improve the quality of life. But, in doing so, we are all living on borrowed time because we are putting far too much pressure on the increasingly fragile natural resources on which we depend.

In particular, the world's forests and vegetation are now much diminished, and the consequences are already with us. Deforestation is putting more CO<sub>2</sub> into the atmosphere than all the world's transport systems put together, the ice-caps are shrinking and the deserts expanding. Governments around the world recognise the issues and have begun to take action. The Stern Review made the basic economic point that the cost of doing nothing is vastly greater than the 1% of GDP needed for effective action – and the UK Government, with Defra in the fore, has taken a lead in creating initiatives for sustainability, pressing for international action and funding projects around the world.

Here, I need to sound a warning note because it is clear that the world's economies have entered a difficult period. In such times people, businesses and governments tend to focus on the short term and the bottom line. It is vitally important that we keep sight of the environmental priorities and make the significant investments needed for a sustainable future: in the end these will bring financial as well as environmental benefits.

This does mean, of course, that we must continue to help Government to build public support for environmental policies. The gardens at Kew and Wakehurst Place attracted a record 1.9 million visitors in 2007/08. Combined with Kew's strong media presence, the organisation makes a substantial impact in the public consciousness. This is one of Kew's great strengths and, therefore, in planning for future development at the Kew and Wakehurst sites, Steve Hopper has taken pains to consult local people and other interested groups at an early stage.

Income from visitors is very important and, in order to meet the major challenges in conservation, we must also look to raise additional money from national and international sources, from public funds and through fundraising. As Steve Hopper points out in his Review, Kew's current financial position will not meet the need and, during 2007/08, considerable effort has gone into the development of a new strategy designed to raise the substantial amounts required.

Taking the long view, another significant development during the year has been the discussion, now at an advanced stage, of a merger of CABI's mycology function with that of Kew. There are great potential benefits in merging the expertise and collections of fungi, and if it comes to fruition, the result will be a world-leading scientific facility in an area of great future promise.

I also commend the key appointments that have been made this year. Steve has greatly strengthened his team and brought in people who can challenge existing ideas and create the robust operations needed to support the vision. There have also been changes to the Board of Trustees and I would like to take this opportunity to thank Marion Regan and David Norman, who retired from the Board during the year, for their wisdom, energy and time. Their places have been taken by George Loudon and Timothy Hornsby who, with the other Trustees, play a vital governance role for Kew. I would like to thank them all for their contribution. The Trustees are unpaid volunteers, and Kew is supported by many others who give freely of their time. They include honorary researchers, guides, and hundreds of selfless people who carry out all sorts of jobs in the organisation, allowing staff more time for their core activities. All deserve more than the recognition I can express here and the organisation is very grateful.

There are also many individuals and organisations who have made donations to Kew during the year and, on behalf of the Board, I would like to thank them. In particular, I would like to recognise the support and encouragement provided by Ministers and officials at Defra as well as the all important grant-in-aid. It is also appropriate to mention the very generous support given by Xstrata for the Treetop Walkway, the Hanson Environmental Trust for the Rhizotron, and by Dr Shirley Sherwood and members of her family for the construction of an important new gallery for botanical art.

Above all, it is important to acknowledge the people who work at Kew Gardens and Wakehurst Place. Change is always in the air and they work in a demanding arena, often in the public eye, aiming for high standards and usually with limited resources.

We have a strong programme in place, with strong leadership and a committed team. Much will depend on the financial position and that will govern the rate at which we can progress. What is certain is that we are going in the right direction.



**John Selborne**  
Chairman  
Trustees of the Royal Botanic Gardens, Kew

## Director's review

We began 2007/08 with the collection of the billionth seed by the Millennium Seed Bank Project. This landmark was celebrated at a well-publicised event involving the Chancellor of the Exchequer in Downing Street, and we now hold 23,000 species in the Bank – a vital asset for the regeneration of damaged habitats.

In October Hilary Benn, Defra's Secretary of State, made an important speech on climate change at Kew. Noting the Stern Review, he highlighted the Climate Change Bill and called for stronger action on carbon emissions. Mr Benn used Kew's records to illustrate the effect of a warming climate in bringing forward the flowering times of plants in the UK and remarked on the impact that Kew has already achieved in conservation worldwide.

The Millennium Seed Bank demonstrates this point and symbolises the way forward for Kew. The Project involves 53 countries, has trained 1,200 people, and carries out functions ranging from basic research on seed germination to habitat restoration. This is important to the world because plants provide people with virtually all we need for a sustainable future by soaking up sunlight and CO<sub>2</sub>. In return, we need to make sure that they have a future too, and botanic gardens hold the resources and expertise needed to make that happen.

During the year, we made good progress in this direction by developing sound plans for the future. In particular, Kew's Breathing Planet Programme, a ten-year collaborative agenda, will support Defra's aims and involve many partners in the UK and overseas. The impact of the Programme, to be launched in 2009, will come from a much higher level of activity and a strong focus on practical outcomes that will help people mitigate and adapt to the effects of climate change.

The Breathing Planet Programme is set out in full on the following page; it includes seven key themes that link together to combat climate change and the environmental challenges facing us all. These themes involve discovering and providing information, identifying areas and species at most risk, implementing conservation programmes, seed-banking, restoration ecology, locally based sustainable use, and harnessing the public profile of gardens to win crucial public support through information and through enjoyment of the great diversity and beauty of plants.

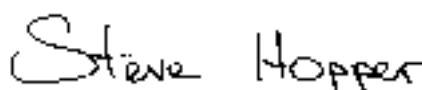
This year, I am very pleased to say that the public came in record numbers and we received almost two million visits, an all-time record in terms of reliable history. At Kew Gardens alone, we received 1.48 million, the highest since 1949. Many of these visitors were attracted by the spectacular Henry Moore exhibition, which brought in a wider audience to appreciate the gardens and achieved great publicity. Wakehurst Place also achieved a new record – remarkable in a year that was not blessed with good summer weather.

Notable organisational developments during the year have included the major construction work on the Herbarium and Library extension, the Rhizotron and Xstrata Treetop Walkway and the Shirley Sherwood Gallery, all of which open in 2008/09.

We have also considerably strengthened our senior management team with two key appointments. Professor Angela McFarlane joined us to lead our Content and Learning programme which will drive and influence the content of our public interface in the Gardens, and our web and publishing presence. Angela is a Professor of Education at Bristol University and has designed and directed highly successful educational software and multimedia projects. I am also delighted to welcome Professor David Mabberley to the team as Keeper of the Herbarium, Library, Art and Archives. Probably best known for *The Plant Book*, David has a strong international academic record. He has successfully turned around a struggling Australian revegetation organisation, and he revitalised and expanded the University of Washington Botanical Garden.

These are all very positive moves but I must draw attention to an area of considerable concern. Although we continue to be successful in obtaining funds from many sources, our underlying financial position is challenging; this impacts on our infrastructure, our ongoing levels of maintenance and the progress we can achieve in conservation. As key examples, our IT network is struggling, we have major heritage structures in a state of decay and we have no guarantees that the Millennium Seed Bank will be funded beyond 2010. The most important issue at present is to ensure that adequate funding can be put in place to enable Kew's long term strategy to be implemented.

Nonetheless, I am very pleased with the progress we have made this year. There is a great deal to look forward to, particularly in driving forward the Breathing Planet Programme and I am delighted by the positive response it has received so far. I am also very grateful for the support and hard work given by all those who work and volunteer at Kew. They have achieved a great deal this year. I would also like to thank the Chairman and the Board of Trustees for their involvement and counsel, and I echo the Chairman's recognition of all those who have supported us financially and with enthusiasm, particularly colleagues at Defra.



**Steve Hopper**  
Director

## Management Commentary

### Business aims and outcomes

Kew has a wide range of responsibilities and activities spanning the world of plant science and including public engagement with its mission. The organisation currently monitors its performance against six business outcomes, which are:

- 1 Build the quality of Kew's collections and encourage access by others, so as to maximise their use and increase their scientific, utilitarian and conservation value.
- 2 Maximise the value of Kew's work for the conservation and sustainable use of plant diversity by building the relevance, quality and utility of information that Kew provides, and improving its dissemination through a focus on service, synthesis, partnership with others and effective use of technology.
- 3 Demonstrate the excellence of Kew's scientific work and maximise its impact by disseminating the results to the broadest possible professional audience.
- 4 Support Kew's own activities, and those of policy makers and collaborators in the UK and overseas, in the conservation and sustainable use of biodiversity, through partnerships, capacity building, joint research, training and advice.
- 5 Maximise the value of Kew's work for increasing public enjoyment and understanding of plant diversity and the need to encourage conservation and sustainable use.
- 6 Generate revenue to support Kew's activities, while also ensuring that Kew meets its public service responsibilities, and shares benefits arising from its scientific work in a fair and equitable way with its partners.

Performance on these six outcomes is monitored with ten key measures as shown opposite.

**Kew is currently reviewing its strategic priorities and making corresponding changes to its performance measures. These considerations are covered in the 2008/09 Corporate Plan. The major thrust of the organisation's activity is now being aligned around the Breathing Planet Programme.**

### The Breathing Planet Programme

There are seven key actions:

- 1 **discovering, collating and accelerating global access to essential information** on the variety and distribution of the world's plant and fungal species through fundamental science, enhanced collection programmes, systematics, data capture, GIS science and novel identification tools such as web-based floras and DNA barcoding;
- 2 **identifying plant and fungal species and regions of the world most at risk** of losing their wild diversity, by applying cutting-edge IT and GIS approaches to enable priority setting for conservation programmes targeted at saving the most vulnerable areas and species first;
- 3 **helping implement global plant and fungal conservation programmes** such as creation of new sustainably managed areas through established and new partnerships in countries richest in diversity and geographical extent of remaining wild vegetation;  
*Together these actions will help retain the Earth's major remaining carbon sinks.*
- 4 **extending the Millennium Seed Bank's global partnership programmes** to secure in safe storage 25% of the world's plants by 2020, targeting species and regions most at risk from climate change such as alpine endemics, coastal species and those endemic to desertifying lands;
- 5 **establishing a global network of scientists and practitioners in restoration ecology** to use seed banks for the urgent repair and re-establishment of damaged native vegetation;  
*These two actions will help recover lost plant productivity and carbon sequestration.*
- 6 expanding plant and fungal diversity knowledge and Kew's innovative science programmes to the **identification and successful growth of locally-appropriate plant species** under changing climatic regimes on agricultural, urban and suburban lands;  
*This action will help plant-based adaptation to climate change to succeed.*
- 7 **using the high public visitation, web and media opportunities provided by Kew and partner botanic gardens to deliver enjoyable, inspiring experiences that inform** people world-wide about plant-based mitigation and adaptation strategies to cope with climate change and other significant environmental challenges facing us all.

## Performance targets and results

### Performance vs last year and target

Measure	Outcome 2006/07	Target 2007/08	Outcome 2007/08	±% vs Last year	±% vs Target	Target 2008/09
1 Total access to the behind-the-scenes collections	26,608	24,000	27,737	+4	+16	25,000
2a. Total visits to the Kew website (page views)	30,524,000	43,000,000	29,000,000	-5	-33	18,500,000
2b. Total research publications and compilations (calendar year) <sup>1</sup>	465	350	518	+11	+48	350
2c. Total species use, species conservation assessments and species conservation plans supported (calendar year)	3,848	4,000	5,780	+50	+45	6,000
2d. Total habitat conservation assessments supported through contributions of information or advice (calendar year)	12	9	9	-25	0	12
3 Total publications in the highest impact scientific journals (calendar year) <sup>1,2</sup>	78 <sup>2</sup>	40	87 <sup>2</sup>	+12	+118	55
4 Total staff contact days on projects with UK or overseas collaborators that contribute to the conservation and sustainable use of plant diversity through capacity building, joint research, training and advice	6,310	5,500	7,827	+24	+42	6,000
5a. Total visits to the gardens <sup>3</sup>	1,836,470	1,858,000	1,958,860	+7	+5	1,910,000
5b. Total Friends of Kew	71,863	72,000	78,600	+9	+9	78,000
6 Total revenue generated £000	43,244	43,771	51,257	+19	+17	49,181

<sup>1</sup> Publications are reported by calendar year. Figures for earlier years have now been updated to include items published in the relevant year which were not recorded at the time.

<sup>2</sup> Based on citation index factors for 2006.

<sup>3</sup> Visitor figures also include concerts, the ice rink, evening openings, etc. This makes the figures comparable with most other attractions.

Management Commentary *continued*Performance targets and results *continued*

## Performance over six years

Measure	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08
1 Total access to the behind-the-scenes collections	25,454	28,448	25,889	28,114	26,608	27,737
2a. Total visits to the Kew website (page views)	6,910,000	8,834,000	12,297,000	21,595,000	30,524,000	29,000,000
2b. Total research publications and compilations (calendar year) <sup>1</sup>	420	457	399	354	465	518
2c. Total species use, species conservation assessments and species conservation plans supported (calendar year)	4,888	3,701	6,996	5,482	3,848	5,780
2d. Total habitat conservation assessments supported through contributions of information or advice (calendar year)	6	9	8	19	12	9
3 Total publications in the highest impact scientific journals (calendar year) <sup>1,2</sup>	16	45	68	70	78 <sup>2</sup>	87 <sup>2</sup>
4 Total staff contact days on projects with UK or overseas collaborators that contribute to the conservation and sustainable use of plant diversity through capacity building, joint research, training and advice	4,875	4,561	5,135	7,604	6,310	7,827
5a. Total visits to the gardens <sup>3</sup>	1,374,615	1,466,096	1,713,674	1,906,764	1,836,470	1,958,860
5b. Total Friends of Kew	60,800	62,380	64,292	66,877	71,863	78,600
6 Total revenue generated £000	27,025	36,219	38,660	44,353	43,244	51,257

<sup>1</sup> Publications are reported by calendar year. Figures for earlier years have now been updated to include items published in the relevant year which were not recorded at the time.

<sup>2</sup> Based on citation index factors for 2006.

<sup>3</sup> Visitor figures also include concerts, the ice rink, evening openings, etc. This makes the figures comparable with most other attractions.

## Commentary on performance against targets

### 1. Total access to the behind-the-scenes collections

A good result, ahead of both last year and target. Wakehurst Place showed a particularly large increase, with the Millennium Seed Bank also advancing. At Kew, the Jodrell Laboratory showed a good increase. The Herbarium and Library were a little down on last year but did benefit from the London Open House event.

### 2a. Total visits to the Kew web site

Key achievements during the year were special websites for Moore at Kew – honoured in the Webby Awards, for Mediterranean Summer and for the Xstrata Treetop Walkway and Rhizotron.

It is important to note that we are now in the process of changing the way that this data is reported to eliminate the large numbers of views by automated web 'crawlers'. Also, changes to the website infrastructure will affect the logging process until October 2008. Accurate retrospective analysis will then be possible.

### 2b. Total research publications and compilations

The much higher than targeted overall number of publications (518) is partially accounted for by the publication of Heywood *et al.*, Flowering Plant Families of the World (published by Kew), in which many staff members contributed treatments of angiosperm families, but even if these treatments (each counted as a single article) were subtracted, we still greatly exceeded our annual target of 350 articles.

### 2c. Total species use, species conservation assessments and conservation plans supported

A good year with target far exceeded. This increase is due in part to mainstreaming production of conservation assessments into research activities and publication of species assessments as part of inventory and floristic work. Species use reports remain at a similar level but reflect a greater diversity of plant use. The Millennium Seed Bank added 4,087 species to its holdings.

### 2d. Total habitat conservation assessments supported through contributions of information or advice

This measure covers comprehensive assessments of defined geographical areas, e.g. nature reserves or national parks, so numbers are modest and will fluctuate. Output this year included reports from the British Virgin Islands and Turks & Caicos Islands, a Darwin Initiative funded project on Mt. Namuli in Mozambique, projects in conjunction with Rio Tinto and Alcoa–Rio Tinto–Alcan in Guinea Conakry, the Ebo Forest in Cameroon, and the Rio Cristalino conservation area in Brazil.

### 3. Total publications in the highest impact scientific journals

This year continued the upward trend in numbers of papers published in journals with impact factors greater than 2.0. Although our targets in this area continue to go up each year, we have again exceeded these targets every year since we began to emphasise this aspect of publication in 2003. These again included papers in *Nature* and *Science*, as well as *PNAS*. A review of progress on understanding flowering plant origins and evolution (*Nature*) figured among these high-profile papers.

### 4. Total staff contact days on projects with UK or overseas collaborators that contribute to the conservation and sustainable use of plant diversity

This year's contact days total shows a 24% increase on last year's figure. Increases have occurred in all categories, but in particular with regard to our UK focus. This reflects increased effort, particularly in the Jodrell, working on the uses of British plants, and on helping the UK with its response to the Global Strategy for Plant Conservation. Significantly increased numbers of contact days with policy makers and students, both at home and abroad, also reflect greater efforts and co-ordination of activities in these areas.

### 5a. Total visits to the gardens

Total visitors to Kew Gardens were up 11% against 2006/07, and the 1.48 million visits made it the most successful year in recent record. Day-paying entry figures of 547,000, although less spectacular, were the third highest, since children went free in 2001. Despite a wet summer, record visitor figures were fuelled by a heat wave in April and the highly successful Moore at Kew exhibition which ran from September to March.

Wakehurst Place received a record 475,000 visits; the 37,000 paying visits represented the highest total since 2005/06 and represents good progress on a small base.

### 5b. Total Friends of Kew

With 78,600 members, we easily exceeded the target of 72,000. This was due to a combination of the successful recruitment of 21,000 new members, about half of whom were recruited on-site at the gates – a good achievement, and an improved overall retention rate of 82%, with direct debit memberships being the key to success.

### 6. Total Revenue Generated

We greatly exceeded our target of £43.8m, generating income of £51.3m. This was mainly as a result of our success in raising external funding for our major capital projects during the year – the Herbarium and Library Extension and the Xstrata Treetop Walkway. We also increased external funding for our projects, allowing us to take forward many important areas of our scientific work.

## Management Commentary continued

### Review of Activities

Once again, Kew has had a highly successful year, meeting or exceeding nine of its ten key performance targets.

On 26 April, the billionth seed collected by the Millennium Seed Bank Project (MSBP) was presented to Gordon Brown. The seed was banked on 22 May in an International Biodiversity Day event attended by Barry Gardiner MP (the Prime Minister's Special Representative on Forestry), and delegates from China and Africa. During the year, the MSBP exceeded its target adding 4,087 species to the Bank; it is now 75% of the way to its 2010 target.

Major conservation projects accomplished during the year included work on mangroves in Africa, and vegetation surveys in Abu Dhabi and the Turks and Caicos islands. A particularly pleasing outcome took place in November when the government of Cameroon officially created the Bakossi National Park. This resulted from extensive survey work and the active support of the local people in a project that highlighted the exceptional biodiversity of the area; the work was part-funded by the Darwin Initiative. Work with land-based companies included an environmental action plan developed for a mine in Namibia and a survey for a refinery in Guinea Conakry. The aim is to generate positive conservation outcomes through early involvement in these large-scale projects.

Sometimes plant discoveries arise by happy accident and, in a well-publicised recent case in Madagascar, a French family walking in a remote area discovered a remarkable new palm genus. Now named *Tahina spectabilis*, the palm dies after producing a huge flowering structure, and the discovery generated many 'Suicidal Palm' headlines. Kew's analysis shows that it has an affinity to the small palm tribe Chuniophoeniceae found in a range from Arabia to Vietnam. As yet, there is no known evolutionary line connecting it to Madagascar and only a hundred individuals have been identified – making it a conservation priority. The local community are protecting the trees and its seeds are a potential new source of income for them.

Madagascar is home to more than 10,000 plant species and 90% of its plants occur nowhere else. This year Kew, Missouri Botanical Garden and Conservation International have published the first vegetation atlas of Madagascar – with maps produced using satellite imagery and other state of the art technologies. This pioneering atlas, the culmination of over 20 years of conservation work, warns that only 18 percent of Madagascar's native vegetation remains intact.

Other major scientific volumes published by Kew during the year included two orchid books, *Ophrys: an Introduction to the Bee Orchids of Europe* and the second edition of *Orchids of Madagascar*, and major checklists including *World Checklist and Bibliography of the Campanulaceae*, and *World Checklist of Cyperaceae*. In addition, Kew authors published 518 papers in 2007 including 87 that appeared in high impact journals.

Popular publications included *Kids' Kew* and the second edition of Ray Desmond's *History of Kew*.

The Summer Festival at Kew Gardens had a Mediterranean Theme and introduced new landscape features. In September, the Gardens hosted a spectacular exhibition of Henry Moore's sculptures featuring 28 of his pieces, and this was extremely well attended throughout the Winter and into the Spring, bringing visitor numbers up to record levels. The Exhibition catalogue *Moore at Kew* proved a bestseller and the exhibition provided the theme for the Big Draw family art event in October. Titled *Seeing Moore at Kew* this event won an award for breaking new ground.

Wakehurst Place, which also continued to grow visitor numbers despite poor summer weather, won the *We Care* award for providing good access for disabled visitors. Twenty years after the 1987 'hurricane', Wakehurst received significant media attention and mounted an exhibition about the storm, its aftermath and the process of recovery. As part of Kew's Content & Learning programme, Wakehurst continued its pioneering work in schools education and its *Save Our Seeds* venture involves school students in meaningful research for the Millennium Seed Bank. The pupils undertake seed ageing with kits supplied by Kew, looking for short-lived seeds. Their results guide the MSB's monitoring programme. Wakehurst also hosted the prestigious Post-16 Curriculum Conference, which brought the Qualifications and Curriculum Authority (QCA), A level examiners and teachers together. Keynote lectures, workshops and previews of new textbooks provided an excellent afternoon for 70 teachers from South East England.

### Looking Ahead

During the year, three important developments were under construction. The Herbarium and Library extension will provide better space and protection for the collections and make it possible to accelerate the provision of better access to this global resource. The Xstrata Treetop Walkway and Rhizotron will be the central attraction for visitors in 2008/09, bringing them into contact with life in the tree canopy and showing how tree roots teem with activity. The Shirley Sherwood Gallery will both delight visitors and enable Kew to show its botanical art treasures in calm and spacious viewing conditions.

Kew's major conservation initiative, the Breathing Planet Programme, and its associated ten-year development plan will move forward from 2009 guided by extensive collaborative partnerships and the public consultation process that has already begun for those aspects that relate to the Kew and Wakehurst sites. A new fundraising strategy will be put in place to provide the resources needed to ensure that the Breathing Planet Programme delivers its full potential for a sustainable future.

## Statutory information

### History of the body and statutory background

The Board of Trustees of the Royal Botanic Gardens, Kew was established under the National Heritage Act 1983 and came into existence on 8 August 1983. From 1 April 1984 responsibility for the Royal Botanic Gardens, Kew was transferred from the Minister of Agriculture, Fisheries and Food (now Secretary of State for Environment, Food and Rural Affairs) to the Board of Trustees. Under the above Act, RBG Kew is a Non-Departmental Public Body with exempt charitable status.

### Objectives

Subject to the provisions of the National Heritage Act 1983 the Board's general functions are to:

- carry out investigation and research into the science of plants and related subjects, and disseminate the results of the investigation and research;
- provide advice, instruction and education in relation to those aspects of the science of plants with which the Board is for the time being, in fact concerned;
- provide other services (including quarantine) in relation to plants;
- care for its collections of plants, preserved plant material, other objects relating to plants, books and records;
- keep the collections as national reference collections, ensure that they are available to persons for the purposes of study, and add to and adapt them as scientific needs and the Board's resources allow; and
- afford to members of the public opportunities to enter any land occupied or managed by the Board, for the purpose of gaining knowledge and enjoyment from the Board's collections.

### Results and appropriations

The accounts have been prepared in a form directed by the Secretary of State for Environment, Food and Rural Affairs, with the approval of Treasury, under Schedule I Part IV subsection 39(4) of the National Heritage Act 1983 and on the basis of the accounting policies set out in Note 2.

Total incoming resources for the year were £56.0m (2006/07 £46.8m) of which £25.2m (£25.2m) was Grant-in-aid from the Department for Environment, Food and Rural Affairs. Total resources expended were £45.8m (£45.3m) leaving a surplus of £10.2m (£1.5m) prior to expenditure on fixed assets.

Total reserves increased to £125.6m (£110.9m). These include a substantial amount to reflect the value of certain land and buildings to which the Trustees do not have title (see below).

### Land and buildings

The Board of Trustees do not hold title to the land and buildings used by the Royal Botanic Gardens, Kew, except for the Wellcome Trust Millennium Building and adjacent land at Wakehurst Place; the National Trust owns the freehold of the remaining land at Wakehurst Place. The land and buildings at the Kew Gardens site are owned by the Crown. The Board is liable to maintain and replace all the buildings that they use.

Information on land and buildings can be seen in Note 12.

### Other fixed assets

Significant changes in other fixed assets are shown in Notes 12 and 13.

### Investments

Investments held are in accordance with the Trustees' powers.

### Payment to creditors

It is RBG Kew's policy to settle all invoices with its creditors within 30 days unless otherwise specified in the contract, and to observe the principles of CBI Code – Prompt Payments. During 2007/08 RBG Kew settled its debts on average in 28 days.

### Reserves

The Reserves of the organisation are explained in Note 2 of the Accounts. The Board has agreed that the Unrestricted part of the Accumulated Reserves should not fall below a minimum of £1.5m to give the organisation the flexibility to cope with funding fluctuations. The Reserves Policy is reviewed on an annual basis. At present this fund stands at £9m and is being used to partly fund Kew's major capital programme.

### Research and development

The Royal Botanic Gardens, Kew is a world-leading organisation with over 200 staff working on the scientific understanding and conservation of plants and fungi. This activity covers the full range of botanic and mycological science from molecular biology to horticulture and its aim is to guide all its work so that it will produce outcomes in conservation and sustainability that benefit humanity.

Kew aims to maximise its impact through partnerships and collaboration with universities, botanic gardens, conservation organisations, industry and government. Kew holds a range of botanic and mycological collections and data that are of global importance and it aims to enhance digital access to these resources so that they can be used more effectively and rapidly at the point of need. These aims are set out in more detail in the Breathing Planet Programme on p6.

## Management Commentary continued

### Statutory information continued

#### Foundation and Friends of the Royal Botanic Gardens, Kew

The Foundation and Friends of the Royal Botanic Gardens, Kew is a registered charity (registration no. 803428) which is independently administered. Its purpose is to provide support for Kew by the raising of funds for Kew's activities. It does this by attracting sponsorship for projects and through an active and growing membership, committed volunteers and by enhancing awareness of Kew's work. Membership at 31 March 2008 was 78,600.

RBG Kew did not support the organisation financially in 2007/08.

#### RBG Kew Enterprises Limited

RBG Kew owns 100% of the issued share capital of RBG Kew Enterprises Limited. This company carries out the following activities of RBG Kew: retailing, concerts, licensing and venue hire. Its results have been fully consolidated into the accounts of RBG Kew.

#### Board of Trustees

The membership of the Board of Trustees during the year is as follows. One Trustee is appointed by the Queen; the Chairman and other Trustees are appointed by the Secretary of State for Environment, Food and Rural Affairs.

#### Chairman

Lord Selborne KBE, FRS

#### Appointed by Her Majesty The Queen

Richard Laphorne CBE

#### Trustees

Marcus Agius

Tanya Burman

Andrew Cahn CMG

Richard Deverell

Professor Jon Drori

Professor H Charles J Godfray FRS

Professor Sandy Harrison

Timothy Hornsby (appointed 1 October 2007)

George Loudon (appointed 1 October 2007)

Professor Sir William Stewart FRS

David Norman (retired 30 September 2007)

Marion Regan (retired 30 September 2007)

On appointment Trustees are briefed by Defra and offered induction by Kew to learn about the diverse areas of activity.

The Board of Trustees is responsible for agreeing the strategy of the organisation through approval of the Corporate Plan and the budgets. The Director is responsible for developing and implementing the strategy and for the day to day operation of the organisation in conjunction with the Corporate Executive. The Corporate Plan is updated annually and following approval by the Board is submitted to the Department for Environment, Food and Rural Affairs for approval by the Secretary of State.



Lord Selborne (Chairman)



Marcus Agius



Tanya Burman



Andrew Cahn



Richard Deverell



Jon Drori

## Trustees details

**Mr Marcus Agius** Group Chairman of Barclays PLC since 1st January 2007 and a Senior Independent Director of the BBC. Also Chairman of the Foundation and Friends of the Royal Botanic Gardens, Kew. Formerly: Chairman of Lazard London, Deputy Chairman of Lazard LLC, and Chairman of BAA PLC.

**Tanya Burman** Currently a full time mother and a local resident. Formerly: Head of Development and Marketing at the Natural History Museum, Regional Director for the Royal Marsden Hospital Cancer Appeal, Fund Manager for bankers Lombard Odier. MA in Natural Sciences (Cantab).

**Andrew Cahn CMC** (Chairman of the Audit Committee) Chief Executive of UK Trade and Investment, a Department that is part of both the DTI and the FCO. Formerly: Director of Government and Industry Affairs at British Airways, official at MAFF, the Cabinet Office and the FCO, and Chef de Cabinet at the European Commission.

**Richard Deverell** is the Controller of BBC Children's responsible for all the BBC's services for children. Formerly: Head of BBC News Interactive – responsible for the BBC News websites, BBC Policy and Planning and management consultancy at the LEK partnership. MA Natural Science (Cantab).

**Jonathan Drori CBE** Director of Changing Media Ltd, a London consulting group. Visiting Professor at Bristol University, specialising in misconceptions in science and in the uses of technology for learning. Adviser to public bodies on new media and audience strategies. Previously: Director of Culture Online at the Department for Culture Media and Sport, Head of Commissioning for BBC Online, Head of Digital Media and Learning Channels. As an Executive Producer and Director, responsible for many television series in science, education and the arts.

**Charles Godfray FRS** is Hope Professor of Zoology and Fellow of Jesus College, Oxford University. Until 2006 he was Director of the NERC Centre for Population Biology and Professor of Evolutionary Biology at Imperial College London. He is a Fellow of the Royal Society and an honorary research fellow at the Natural History Museum and Rothamsted Research.

**Sandy Harrison** Professor of Climate Dynamics in Geographical Sciences at the University of Bristol. President of the INQUA Commission on Palaeoclimatology, Co-chair of the Scientific Steering Committee for the Palaeoclimate Modelling Intercomparison Project, and

Member of the Integrated Land Ecosystems and Atmosphere Project (iLEAPS) of the International Geosphere-Biosphere Programme.

**Timothy Hornsby** Chair of the Horniman Museum, Chair of the Harkness Fellows Association. He is an independent member of the Consumer Council for Water, a Trustee of the International Institute for Environment and Development and of the Charles Darwin Trust. He is a Governor of the Legacy Trust, and a member of the Advisory Committee on Consumer Engagement of The Food Standards Agency. In his previous career he was Chair of the National Lottery Commission, and before that occupied the Chief Executive posts at the National Lottery Charities Board (now the Big Lottery Fund), the Royal Borough of Kingston, and the Nature Conservancy Council, after a career in academic life and subsequently in the higher Civil service.

**Richard Laphorne CBE** Chairman of Cable & Wireless plc. A Trustee of Tommy's campaign.

**George Loudon** Chairman and Director of a number of investment and other firms including Pall Mall Capital Ltd and Altius Associates Ltd; former Director of Midland Bank Plc and former Vice-Chairman of the Amsterdam Stock Exchange. Former Director of the Multiple Sclerosis International Federation. Board member of the Rijksakademie Beeldende Kunst (Amsterdam) and former Trustee of the Galapagos Conservation Trust. Trustee of the London Library. Educated at Balliol College Oxford and Johns Hopkins University in America.

**Lord Selborne KBE, FRS** (Chairman of the Trustees) Chairman of Blackmoor Estate Limited and Chairman of the Foundation for Science and Technology. Formerly: President of the Royal Geographical Society, Chancellor of Southampton University, Chair of the Joint Nature Conservation Committee, Chair of the Agricultural and Food Research Council. Kew Trustee 1993 to 1998.

**Sir William Stewart FRS** Currently Chairman of the Health Protection Agency. Formerly: Chief Scientific Adviser, Cabinet Office, and the first Head of the Office of Science and Technology. Founding Professor of Biological Sciences at the University of Dundee, Secretary of the Agricultural and Food Research Council, member of the Royal Commission on Environmental Pollution, President of the British Association for the Advancement of Science, President of the Royal Society of Edinburgh and a vice-President of the Royal Society. Educated at Dunoon Grammar School and Glasgow University.



Charles Godfray

Sandy Harrison

Timothy Hornsby

Richard Laphorne

George Loudon

William Stewart

## Management Commentary continued

### Statutory information continued

#### Director

The Director of the Royal Botanic Gardens, Kew throughout the year was Professor Stephen Hopper.

#### Internal audit

The Board has appointed internal auditors who report to the Director as Accounting Officer and an Audit Committee constituted from members of the Board of Trustees. Their purpose is to review RBG Kew's systems of internal control and make recommendations for improvements through detailed reports on areas covered and an annual report summarising their work.

#### Advisors

##### Bankers

The Royal Bank of Scotland  
26a The Quadrant  
Richmond  
Surrey, TW9 1DF

##### Auditors

Comptroller and Auditor General  
National Audit Office

The auditor for RBG Kew Enterprises Limited is  
PKF (UK) LLP.

##### Solicitors

DLA  
3 Noble Street  
London, EC2V 7EE  
Burgess Salmon  
Narrow Quay House  
Narrow Quay  
Bristol, BS1 4AH

#### Disabled persons

RBG Kew supports the employment of disabled people wherever possible, by recruitment, by retaining all those who become disabled during their employment, and generally through training, career development and promotion.

#### Employee involvement

Consultations take place with employees' representatives so that the views of employees may be taken into account in making decisions which are likely to affect their interests.

#### Volunteers and donated services


In 2007/08 over 400 volunteers donated in excess of 40,000 hours to Kew and Wakehurst Place. From horticultural work and seed cleaning to tour guiding and leading school groups, our diverse volunteers bring a wealth of experience and vital support to staff across the organisation. Also in 2007/08 40 horticultural interns from 18 different countries donated over 15,000 hours.

As successful partnerships with voluntary, community and public sector organisations continue to broaden, our future increases in volunteer placements will offer further opportunities for people with disabilities and those most likely to experience social exclusion.

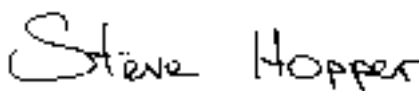
The Employee Volunteering Programme continues to promote environmental volunteering and bring our work to a wider audience whilst enhancing opportunities to work with the corporate sector.

#### The Accounting Officer confirms

- there is no relevant audit information of which the auditor is unaware;
- he has taken all the steps he ought to ensure the auditor is aware of all relevant audit information; and
- he has taken all the steps he ought to establish that the Royal Botanic Gardens, Kew's auditor is aware of the information.



**Lord Selborne** KBE, FRS  
Chairman of the Board of Trustees  
16 June 2008



**Professor Stephen D. Hopper** FLS  
Director  
16 June 2008

## Statement of Trustees' and Accounting Officer's responsibilities

Under Schedule 1 Part IV subsection 39(2) National Heritage Act 1983 the Board of Trustees of the Royal Botanic Gardens, Kew are required to prepare a statement of accounts for each financial year in the form and on the basis determined by the Secretary of State for Environment, Food and Rural Affairs, with the consent of the Treasury. The accounts are prepared on an accruals basis and must give a true and fair view of the Royal Botanic Gardens, Kew's and the group's state of affairs at the year end and of the group's income and expenditure, recognised gains and losses and cash flows for the financial year.

In preparing the accounts the Trustees and Accounting Officer are required to comply with the requirements of the Government Financial Reporting Manual and in particular to:

- **observe the Accounts Direction issued by the Secretary of State for Environment, Food and Rural Affairs including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;**
- **make judgements and estimates on a reasonable basis;**
- **state whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the financial statements; and**
- **prepare the financial statements on a going concern basis.**

The Accounting Officer for the Department for Environment, Food and Rural Affairs has designated the Director of the Royal Botanic Gardens, Kew as the Accounting Officer for the Royal Botanic Gardens, Kew. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding the Royal Botanic Gardens, Kew's assets, are set out in the Accounting Officers Memorandum issued by the Treasury and published in *Managing Public Money*.

## Statement on internal control

### 1\_Scope of responsibility

The Director, as Accounting Officer, and the Chairman, as representative of the Board of Trustees, have joint responsibility for maintaining a sound system of internal control that supports the achievement of RBG Kew's policies, aims and objectives, whilst safeguarding the public funds and assets for which the Director is responsible in accordance with the responsibilities assigned to him in Managing Public Money. In addition, the Director is accountable to the principal Accounting Officer of the Department for Environment, Food and Rural Affairs (Defra) to enable her to discharge her overall responsibility for ensuring that RBG Kew, as a Defra Non-Departmental Public Body, has adequate financial systems and procedures in place.

### 2\_The purpose of the system of internal control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of RBG Kew's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in RBG Kew for the year ended 31 March 2008 and up to the date of the approval of the Annual Report and Accounts, and accords with Treasury guidance.

### 3\_Capacity to handle risk

Strategic leadership on risk management comes from the Corporate Executive with oversight by the Audit Committee which is able to draw on the expertise of Trustees with experience of the private sector and other government bodies. Building on the methodology developed in 2005/06, organisation-wide quarterly reviews of the main risks facing Kew were carried out and risks are considered as a standing item at the Corporate Executive's fortnightly meetings. The updated Risk Register was reviewed by the Audit Committee at each of their meetings and was fully endorsed. The Audit Committee also reviewed RBG Kew's Risk Appetite and an acceptable level of risk was determined for all the key risks. The Risk Strategy is available to all staff on the intranet along with a copy of the Risk Register and other guidance on risk.

### 4\_The risk and control framework

#### Governance

RBG Kew embraces the principles and requirements of good corporate governance. The Board consists of 12 Trustees, 11 appointed by Defra and 1 by the Queen. There are three sub-committees of the Board – the Audit Committee, the Finance Committee, and the Remuneration Committee. On the Audit

Committee there are 4 Trustees, on the Finance Committee 5 Trustees and on the Remuneration Committee 6 Trustees. Each of the Committees has written Terms of Reference and minutes of their meetings are available to the full Board and discussed as necessary. The Board of Trustees meets 5 times a year, the Audit and Finance Committees three times a year and the Remuneration Committee annually. The members of the Board are detailed in the Annual Report and there is a written Code of Conduct for them.

Defra is the sponsor Department for RBG Kew and there is an agreed Management Statement and Financial Memorandum which governs the relationship between the two organisations. Formal quarterly meetings take place between Defra officials and RBG Kew management and there is regular contact at other times. Defra is consulted during the development of the Corporate Plan each year and after final approval by the Trustees it is submitted to Defra. Monthly returns of income and expenditure are submitted to Defra and the Annual Report and Accounts are approved by the Secretary of State prior to laying before Parliament.

RBG Kew has an Internal Audit function which operates to the standards defined in the Government Internal Audit Standards. They submit regular reports which include the Head of Internal Audit's independent opinion on the adequacy and effectiveness of RBG Kew's system of internal control together with recommendations for improvement. The Audit Committee reviews all the reports and approves the management responses and action plans to deal with the issues raised. The Internal Auditors update the Audit Committee on progress on all action plan points not yet completed.

The Comptroller and Auditor General is the external auditor for RBG Kew as required by the National Heritage Act 1983. The National Audit Office subcontracts the audit work based on a tender process which involves RBG Kew in the selection.

RBG Kew has in place a Whistleblowers Policy and a Fraud Management Policy which are available to all staff on the intranet.

#### Risk strategy and risk management

With the wide range and complex network of stakeholders interested in RBG Kew, it is essential that Kew's approach to, and appetite for, risk is carefully assessed. The individual objectives of Kew are interconnected and, as a result, the achievement of each of the objectives can be influenced by the actions needed to deliver the other objectives. RBG Kew's approach to this has been to adopt a policy of well thought through risk-taking to ensure an appropriate balance of inputs and a successful record of outputs against each objective.

In this context Kew has ensured that the risk management arrangements have been kept under constant review in recognition that good risk management will deliver better services, improve efficiency, help the reliability of decisions and support innovation. RBG Kew concentrates its assessment of risks

on a small number of key risks that provide a focus for the Board and Corporate Executive. The main actions and controls that help to mitigate the risks are detailed in the Risk Register along with clear responsibility and ownership for each of the controls.

The Corporate Executive has responsibility for monitoring and oversight of the risk arrangements with oversight by the Audit Committee. The Audit Committee reviews the key risks on an exceptions basis at each meeting, and at one meeting each year, does a full review of all risks and mitigating actions and controls.

### Strategy and planning

RBG Kew has a Corporate Plan which covers five years but which is updated on an annual basis. The Plan sets out in detail the objectives and key performance measures of the organisation as well as the specific actions that will be taken to achieve them. The Plan is available to all staff on the intranet and is also available in full to the public on RBG Kew's internet site [www.kew.org](http://www.kew.org).

All staff are encouraged to contribute to the development of the Plan through their Head of Department. The Plan is reviewed by the Trustees, shared with Defra and submitted to Ministers for approval.

### Change management

Throughout 2007/08 strengthening and clarification of the project and risk management arrangements has continued. The Director has led the organisation in developing a 10 year vision for Kew's Breathing Planet Programme with significant targets in all areas of activity and support services.

### Performance management

The staff performance management process within RBG Kew ensures that the organisation's goals are reflected by individual staff members' objectives and training plans. At the beginning of each year all staff meet with their line manager to agree their work and objectives for the year and identify any training needs, referring to the Corporate Plan to ensure their plans will contribute to RBG Kew's targets that are relevant to them. Regular contact is encouraged throughout the year and a formal review takes place after 6 months as well as at the end of the year.

The Key Measures for the organisation were first established in the 2001/02 Corporate Plan. They are reviewed each year to ensure they remain critical and relevant and are monitored

throughout the year. The final results are set out in the Management Commentary. In addition to the Key Measures, each Plan includes details of the actions to be taken within all the activity programmes of the organisation to ensure that objectives and the Key Measures are achieved.

### Project management

During 2007/08 RBG Kew has successfully progressed several major projects, including the Herbarium and Library Extension, the Treetop Walkway and the Shirley Sherwood Gallery. This continues the excellent record over recent years. Alongside these successes, the project management arrangements have been further strengthened through training and development opportunities.

Equally the practices for project documentation including project initiation documents, project plans and risk registers have been further enhanced. Risk assessments are carried out on all major projects.

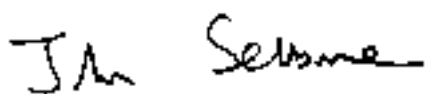
### 5\_Review of effectiveness

As Accounting Officer, the Director has responsibility for reviewing the effectiveness of the system of internal control. His review of the effectiveness of the system of internal control is informed by the work of the internal auditors and the senior managers within RBG Kew who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports.

As described above, RBG Kew has a comprehensive Internal Audit function and their work identified no significant internal control issues during the year.

Since August 2007 RBG Kew has experienced considerable difficulties with the service and information received from its cash processing supplier. This has made reconciliations of amounts banked very difficult. However, sufficient information has now been received to enable an overall reconciliation to be completed by RBG Kew staff and no material differences have been identified. The external auditors have confirmed this position.

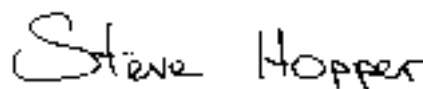
The Director and the Chairman of the Board of Trustees has been advised on the implications of the result of the Director's review of the effectiveness of the system of internal control by the Board and the Audit Committee. A plan to address weaknesses and ensure continuous improvement of the system is in place.



**Lord Selborne** KBE, FRS

Chairman of the Board of Trustees

16 June 2008



**Professor Stephen D. Hopper** FLS

Director

16 June 2008

## Remuneration Report

### Remuneration Policy

The remuneration of the Director is set by the Remuneration Committee, a sub-committee of the Board of Trustees.

In reaching its recommendations, the Committee has regard to the following considerations:

*Performance*

*Affordability*

The Director's salary is reviewed on an annual basis.

### Service Contracts

RBG Kew appointments are made in accordance with the Civil Service Commissioners' Recruitment Code, which requires appointment to be on merit on the basis of fair and open competition but also includes the circumstances when appointments may otherwise be made.

Kew Directors' appointments are open-ended until they reach retirement age. Early termination, other than for misconduct, would result in the individual receiving compensation as set out in the Civil Service Compensation Scheme. The notice period in the Director's contract is one year.

### Salary and pension entitlements

The following sections provide details of the remuneration and pension interests of the current Kew Director.

#### Salary

'Salary' includes gross salary; performance pay or bonuses; the post holder is not entitled to overtime; reserved rights to London weighting or London allowances; recruitment and retention allowances; private office allowances and any other allowance to the extent that it is subject to UK taxation.

This report is based on payments made by Royal Botanic Gardens, Kew and thus are recorded in these accounts in full.

#### Benefits in kind

The post holder does not receive any benefits provided by the employer and treated by HM Revenue & Customs as a taxable emolument.

### Remuneration (audited)

	2007/08	2007/08	2006/07	2006/07
	Salary	Benefits in kind	Salary	Benefits in kind
Professor Stephen Hopper	£137,002	£0	£62,073	£0
Professor Sir Peter Crane (part year)	£0	£0	£93,182	£0

### Pension benefits (audited)

	Accrued pension at age 60 as at 31/3/08 and related lump sum	Real increase in pension and related lump sum at age 60	CETV at 31/3/08	CETV at 31/3/07	Real increase in CETV	Employer contribution to partnership pension account
Professor Stephen Hopper	£2,787	£1,885	£54,132	£15,414	£32,046	N/A

## Civil Service Pensions

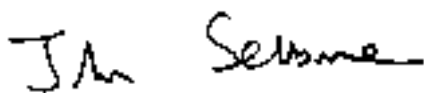
Pension benefits are provided through the Civil Service pension arrangements. From 1 October 2002, civil servants may be in one of three statutory based 'final salary' defined benefit schemes (classic, premium, and classic plus). The schemes are unfunded with the cost of benefits met by monies voted by Parliament each year. Pensions payable under classic, premium, and classic plus are increased annually in line with changes in the Retail Prices Index. New entrants after 1 October 2002 may choose between membership of premium or joining a good quality 'money purchase' stakeholder arrangement with a significant employer contribution (partnership pension account).

Employee contributions are set at the rate of 1.5% of pensionable earnings for classic and 3.5% for premium and classic plus. Benefits in classic accrue at the rate of 1/80th of pensionable salary for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. For premium, benefits accrue at the rate of 1/60th of final pensionable earnings for each year of service. Unlike classic, there is no automatic lump sum (but members may give up (commute) some of their pension to provide a lump sum). Classic plus is essentially a variation of premium, but with benefits in respect of service before 1 October 2002 calculated broadly in the same way as in classic.

The partnership pension account is a stakeholder pension arrangement. The employer makes a basic contribution of between 3% and 12.5% (depending on the age of the member) into a stakeholder pension product chosen by the employee from a selection of approved products. The employee does not have to contribute but where they do make contributions, the employer will match these up to a limit of 3% of pensionable salary (in addition to the employer's basic contribution). Employers also contribute a further 0.8% of pensionable salary to cover the cost of centrally-provided risk benefit cover (death in service and ill health retirement).

Further details about the Civil Service pension arrangements can be found at the website

[www.civilservice-pensions.gov.uk](http://www.civilservice-pensions.gov.uk)



**Lord Selborne** KBE, FRS  
Chairman of the Board of Trustees

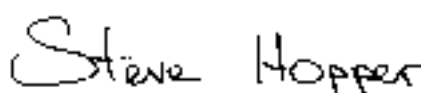
16 June 2008

## Cash Equivalent Transfer Values

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The CETV figures, and from 2003/04 the other pension details, include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Civil Service pension arrangements and for which the CS Vote has received a transfer payment commensurate with the additional pension liabilities being assumed. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost. CETVs are calculated within the guidelines and framework prescribed by the Institute and Faculty of Actuaries.

## Real increase in CETV

This reflects the increase in CETV effectively funded by the employer. It takes account of the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.



**Professor Stephen D. Hopper** FLS  
Director

16 June 2008

## Certificate and Report

Royal Botanic Gardens, Kew

### **The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament**

I certify that I have audited the financial statements of Royal Botanic Gardens, Kew for the year ended 31 March 2008 under the National Heritage Act 1983. These comprise the Consolidated Statement of Financial Activities, the Balance Sheets, the Consolidated Cash Flow Statement and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

### **Respective responsibilities of the Board of Trustees, the Director of the Royal Botanic Gardens, Kew, and auditor**

The Board of Trustees and Director as Accounting Officer are responsible for preparing the Annual Report, which includes the Remuneration Report and the financial statements in accordance with the National Heritage Act 1983 and Secretary of State directions made thereunder and for ensuring the regularity of financial transactions. These responsibilities are set out in the Statement of Trustees' and Accounting Officer's Responsibilities.

My responsibility is to audit the financial statements and the part of the remuneration report to be audited in accordance with relevant legal and regulatory requirements, and with International Standards on Auditing (UK and Ireland).

I report to you my opinion as to whether the financial statements give a true and fair view and whether the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the National Heritage Act 1983 and Secretary of State directions made thereunder. I report to you whether, in my opinion, the information, which comprises the management commentary and the corporate information, included in the Annual Report, is consistent with the financial statements. I also report whether in all material respects the incoming and outgoing resources funded by Parliament have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

In addition, I report to you if Royal Botanic Gardens, Kew has not kept proper accounting records, if I have not received all the information and explanations I require for my audit, or if information specified by relevant authorities regarding remuneration and other transactions is not disclosed.

I review whether the Statement on Internal control reflects Royal Botanic Gardens, Kew's compliance with HM Treasury's guidance, and I report if it does not. I am not required to consider whether this statement covers all risks and controls,

or form an opinion on the effectiveness of Royal Botanic Gardens, Kew's corporate governance procedures or its risk and control procedures.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. This information comprises the Chairman's letter, Director's review and the unaudited parts of the Remuneration Report included in the Annual Report. I consider the implications for my report if I become aware of any apparent misstatements or material inconsistencies with the financial statements. My responsibilities do not extend to any other information.

### **Basis of audit opinion**

I conducted my audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. My audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements and the part of the Remuneration Report to be audited. It also includes an assessment of the significant estimates and judgments made by the Board of Trustees and Accounting Officer in the preparation of the financial statements, and of whether the accounting policies are most appropriate to Royal Botanic Gardens, Kew's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements and the part of the Remuneration Report to be audited are free from material misstatement, whether caused by fraud or error, and that in all material respects the incoming and outgoing resources funded by Parliament have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements and the part of the Remuneration Report to be audited.

## Opinions

### Audit Opinion

In my opinion:

- the financial statements give a true and fair view, in accordance with the National Heritage Act 1983 and directions made thereunder by Secretary of State, of the state of Royal Botanic Gardens, Kew's and the group's affairs as at 31 March 2008 and of its incoming resources and application of resources of the group for the year then ended;
- the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the National Heritage Act 1983 and Secretary of State directions made thereunder; and
- information, which comprises the management commentary and the corporate information, included within the Annual Report, is consistent with the financial statements.

### Audit Opinion on Regularity

In my opinion, in all material respects, the incoming and outgoing resources funded by Parliament have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

### Report

I have no observations to make on these financial statements.

### T J Burr

Comptroller and Auditor General  
National Audit Office  
151 Buckingham Palace Road  
Victoria  
London  
SW1W 9SS

27 June 2008

## Royal Botanic Gardens, Kew\_statement 1

## Consolidated Statement of Financial Activities for the year ended 31 March 2008

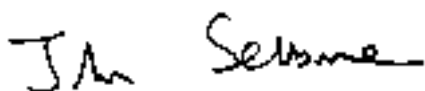
	Notes	Unrestricted £'000	Restricted £'000	Endowment £'000	2007/08 Total £'000	2006/07 Total £'000
<b>Incoming resources</b>						
Incoming resources from generated funds						
Grant-in-aid	3	25,204	–	–	25,204	25,200
Grants, gifts & donations	4	584	15,805	–	16,389	8,666
Activities for generating funds – trading	5	5,113	–	–	5,113	5,058
Investment income	6	563	19	–	582	549
Income resources from charitable activities	7	8,672	–	–	8,672	7,365
<b>Total incoming resources</b>		40,136	15,824	–	55,960	46,838
<b>Costs of generating funds – trading</b>	9	(4,064)	–	–	(4,064)	(3,810)
<b>Net incoming resources available for charitable applications</b>		36,072	15,824	–	51,896	43,028
<b>Charitable activities</b>						
Research and conservation	9	24,853	8,580	16	33,449	34,178
Visitor activities	9	6,704	1,400	–	8,104	7,283
<b>Governance costs</b>	9	133	–	–	133	110
<b>Total charitable costs</b>		31,690	9,980	16	41,686	41,571
<b>Notional cost of capital</b>	2	(3,923)	(210)	(7)	(4,140)	(3,792)
<b>Net incoming/(outgoing) resources after notional cost of capital</b>		459	5634	(23)	6,070	(2,335)
Reversal of notional cost of capital		3,923	210	7	4,140	3,792
<b>Net incoming/(outgoing) resources</b>		4,382	5,844	(16)	10,210	1,457
Gains on investment assets: Unrealised		–	–	–	–	14
Revaluation of tangible assets		4,472	–	–	4,472	3,764
<b>Net movement in reserves</b>		8,854	5,844	(16)	14,682	5,235
Reserves at 1 April		107,661	3,084	199	110,944	105,709
<b>Reserves at 31 March</b>	17	£116,515	£8,928	£183	£125,626	£110,944

All activities arise from continuing operations.  
The Notes on pages 25 to 31 form part of these accounts.

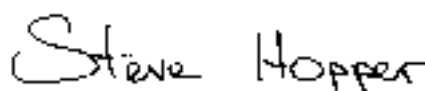
## Royal Botanic Gardens, Kew\_statement 2

## Balance Sheets 31 March 2008

	Notes	Royal Botanic Gardens, Kew		Consolidated	
		2008 £'000	2007 £'000	2008 £'000	2007 £'000
<b>Fixed assets</b>					
Tangible assets	12	116,079	101,768	116,079	101,768
Investments	13	602	626	277	301
		116,681	102,394	116,356	102,069
<b>Current assets</b>					
Stocks of goods for sale		–	–	670	860
Debtors	15	5,915	6,965	5,842	6,585
Cash at bank and in hand		7,721	6,568	8,395	7,379
		13,636	13,533	14,907	14,824
Creditors: amounts falling due within one year	16	(4,691)	(4,983)	(5,637)	(5,949)
<b>Net current assets</b>		8,945	8,550	9,270	8,875
<b>Total assets less current liabilities</b>		£125,626	£110,944	£125,626	£110,944
<b>Reserves</b>					
Unrestricted	17	116,515	107,661	116,515	107,661
Restricted	17	8,928	3,084	8,928	3,084
Endowment	17	183	199	183	199
		£125,626	£110,944	£125,626	£110,944



Lord Selborne KBE, FRS  
Chairman of the Board of Trustees  
16 June 2008



Professor Stephen D. Hopper FLS  
Director  
16 June 2008

## Royal Botanic Gardens, Kew\_statement 3

## Consolidated Cash Flow Statement for the year ended 31 March 2008

	2007/08 £'000	2006/07 £'000
Net cash inflow from operating activities	12,631	3,758
Returns on investments	582	549
Capital expenditure and financial investment	(12,197)	(5,188)
<b>Increase/(decrease) in cash at bank</b>	<b>£1,016</b>	<b>£(881)</b>

## a\_Reconciliation of net incoming resources to net cash inflow from operating activities

	2007/08 £'000	2006/07 £'000
Net incoming resources	10,210	1,457
Depreciation	2,279	2,143
Loss on sale of tangible fixed assets	25	81
Loss on revaluation of fixed assets	78	921
Decrease/(increase) in stock	190	(133)
Decrease/(increase) in debtors	743	(655)
(Decrease)/increase in creditors	(312)	493
Less investment income	(582)	(549)
	<b>£12,631</b>	<b>£3,758</b>

## b\_Analysis of cash flows

## Capital expenditure and financial investment

Payments to acquire tangible fixed assets	(12,204)	(5,198)
Receipts from sales of tangible fixed assets	7	10
	<b>£(12,197)</b>	<b>£(5,188)</b>

## Management of liquid resources

Decrease in short term cash deposits	£-	£-
--------------------------------------	----	----

## c\_Reconciliation of net cash flow to movement in net funds

	2007/08 £'000	2006/07 £'000
Increase/(decrease) in cash in period	1,016	(881)
Cash inflow from decrease in liquid resources	-	-
Movement in net funds in the period	1,016	(881)
Net funds at 1 April	7,379	8,260
<b>Net funds at 31 March</b>	<b>£8,395</b>	<b>£7,379</b>

## d\_Analysis of net funds

	1 April 2007 £'000	Cash Flow £'000	31 March 2008 £'000
Cash at bank and in hand	7,379	1,016	8,395
Liquid resources	-	-	-
<b>Net Funds</b>	<b>£7,379</b>	<b>£1,016</b>	<b>£8,395</b>

## Notes to the accounts\_year ended 31 March 2008

### 1\_Form of accounts

As stated in the Statutory Information, these accounts have been prepared in the form directed by the Department for Environment, Food and Rural Affairs. Without limiting the information given, the accounts meet the accounting and disclosure requirements of applicable accounting standards so far as those requirements are appropriate, and comply with the Statement of Recommended Practice, Accounting and Reporting by Charities 2005.

### 2\_Accounting policies

#### Accounting Convention

The accounts are prepared under the modified historical cost convention and fixed assets and investments are shown at their value to the business by reference to current costs.

#### Basis of Consolidation

The consolidated financial statements consolidate the financial statements of the Royal Botanic Gardens, Kew and its subsidiary RBG Kew Enterprises Limited for the year ended 31 March 2008.

#### Expense Allocation

Indirect costs have been allocated to the headings in the Statement of Financial Activities on the basis of headcount except for computer costs which have been allocated on the basis of computer numbers. Governance costs include the costs of strategic planning, the Annual Report and Accounts, audit and Trustees' expenses.

#### Government Grants

Grant-in-aid including capital grant is credited to income in the year in which it is received. Grant for the purchase of capital items is transferred to a capital grants reserve from which it is released as the assets are depreciated.

#### Income from Activities and Generated Funds

Income is accounted for on a receivable basis, net of VAT.

#### Land and Buildings

The Board of Trustees does not hold title to the land and buildings used by the Royal Botanic Gardens, Kew except for the Wellcome Trust Millennium Building and the land it is situated on. The remaining land and buildings are owned by the Crown. As required by the Statement of Recommended Practice, Accounting and Reporting by Charities (SORP) revised in 2005, existing buildings and their associated land used for fundraising or administration purposes plus the Wellcome Trust Millennium Building, were valued and capitalised on the Balance Sheet (see Note 12).

Land and buildings are revalued every 5 years by professionally qualified valuers, on the basis of either open market value for existing use or depreciated replacement cost. The first professional revaluation was carried out during 2001/02 and a new revaluation was carried out in 2006/07. In between professional revaluations, values are updated using indices provided by the professional valuers.

The Board of Trustees consider that the cost of obtaining valuations for all the other existing buildings at 31 March 2008, which are all heritage assets, would be onerous compared to the benefit to the readers of the Accounts and therefore no value has been placed on these as allowed by the SORP. Expenditure on new buildings over £250,000 is capitalised.

#### Collections

The Board of Trustees consider that the cost of obtaining valuations for all existing collections would be onerous compared to the benefit to the readers of the Accounts and therefore no values have been placed on these as allowed by the SORP. New items to the collections costing more than £2,000 are capitalised, except for additions to the living collections which are written off in the year of acquisition. Collections are unlikely to depreciate and are expected to have a life in excess of 50 years so no depreciation is provided against them. Impairment reviews of these collections will be undertaken.

#### Other Fixed Assets

Other fixed assets are stated at their value to the business by reference to current costs. Historic costs are not disclosed as required by the SORP as, in accordance with Treasury Non-Departmental Public Bodies Guidance, this adds no information of value to the Accounts. Capital items costing less than £2,000 are written off to other direct costs (Note 11) in the year of purchase. All other capital expenditure is capitalised as fixed assets.

## 2\_Accounting policies *continued*

### Depreciation

Depreciation is provided on all fixed assets, except land and collections, at rates calculated to write off the cost or valuation, less estimated residual value, of each asset evenly over its expected useful life, as follows:

**Buildings** between 20 and 80 years

**Gardens equipment** between 5 and 20 years

#### Scientific equipment:

Laboratory equipment over 10 years

Computer and photographic equipment  
between 4 and 10 years

**Office equipment** over 5 years

**Motor vehicles** over 5 years

**Copyrights** year of purchase

### Notional cost of capital

Notional cost of capital is calculated at 3.5% of the average capital employed by RBG Kew in the year.

### Pensions

Pension arrangements are described in Note 21 to the accounts. Pension contributions payable by RBG Kew are expensed as incurred.

### Investments

Investments are stated at current market value at the balance sheet date. Valuations are kept up-to-date such that when investments are sold there is no gain or loss arising. As a result the Statement of Financial Activities only includes unrealised gains and losses arising from the revaluation of the investment portfolio throughout the year. As explained in the fixed asset accounting policy note, historical cost disclosures have not been provided.

### Stocks

Stocks are valued at the lower of cost and net realisable value which is considered to be equivalent to their value to the business.

### Net Liquid Resources

Liquid resources comprise short term cash deposits.

### Reserves

Reserves are analysed under the headings Unrestricted, Restricted and Endowment Funds.

### Restricted Funds

These are funds which have been given to RBG Kew for specific purposes by donors.

### Endowment Funds

These are capital funds where Trustees have no power to convert the capital to income. However, the income generated by these funds can be used for the purposes for which the endowment was given.

### Accumulated Reserves

The Board of Trustees, with the approval of the Secretary of State for Environment, Food and Rural Affairs, may undertake certain activities the proceeds from which, together with donations and funds from other sources, including those profits of RBG Kew Enterprises Limited which have been covenanted to RBG Kew, but excluding Grant-in-aid, are taken to the Accumulated Reserves. These funds may be used at the Board's discretion within the terms of section 24 of the National Heritage Act 1983.

### Revaluation Reserve

This represents the cumulative difference between historic and current costs of fixed assets.

### Taxation

The Royal Botanic Gardens, Kew is an exempt charity as a consequence of Schedule 5 subsection 4 of the National Heritage Act 1983. RBG Kew Enterprises Limited covenants most of its profits to the Royal Botanic Gardens, Kew and consequently only a small amount of taxation may be payable, mainly due to timing differences. The Royal Botanic Gardens, Kew and RBG Kew Enterprises Limited are group registered for VAT purposes and are able to recover part of their input VAT.

**3\_Grant-in-aid**

	2007/08	2006/07
	£'000	£'000
Total Grant-in-aid received		
from Defra during the year	£25,204	£25,200

**4\_Grants, gifts and donations**

	2007/08	2006/07
	£'000	£'000
Income received from RBG Kew Foundation	8,500	2,387
Millennium Seed Bank project income	3,628	3,715
Other project income	2,214	2,063
EU project income	524	320
Contribution in kind (i)	1,400	–
Grant for maintaining Wakehurst Place	76	71
Donations	47	110
	£16,389	£8,666

(i) The contribution in kind was free advertising space provided for the Henry Moore exhibition.

**5\_Activities for generating funds – trading**

	2007/08	2006/07
	£'000	£'000
Retailing	3,186	3,112
Commercial Development (i)	1,927	1,946
	£5,113	£5,058

(i) Commercial Development consists of concerts, licensing and venue hire.

**6\_Investment income**

	2007/08	2006/07
	£'000	£'000
Interest receivable	572	540
Charities Official Investment Fund	10	9
	£582	£549

All interest receivable is from cash at bank and short term cash deposits.

**7\_Incoming resources from charitable activities**

	2007/08	2006/07
	£'000	£'000
Admissions	5,782	4,953
Catering contracts	1,081	963
Education charges	140	134
Rents receivable	98	93
Sale of fixed assets	7	10
Other income from third parties (i)	1,564	1,212
	£8,672	£7,365

(i) Other income from third parties consists of supplies made of goods and services from, amongst other things, consultancies, provision of photographs, reproduction fees and identification services.

**8\_Key performance target – total revenue generated**

RBG Kew had a Key Performance Target for Total Revenue Generated in 2007/08 of £43.8m. Actual Revenue Generated, as defined for this target, was £51.3m. The increase is due to the increased funds raised for our capital projects.

**9\_Resources expended**

	Staff Costs £'000	Depreci- ation £'000	Other Direct Costs £'000	Allocated Support Costs £'000	2007/08 Total £'000	2006/07 Total £'000
Trading costs	1,455	29	2,580	–	4,064	3,810
Research and conservation	15,039	1,695	7,315	9,400	33,449	34,178
Visitor activities	2,498	555	3,706	1,345	8,104	7,283
Governance costs	59	–	–	74	133	110
Support Costs	4,722	–	6,097	(10,819)	–	–
	£23,773	£2,279	£19,698	£–	45,750	£45,381
<b>Note</b>	<b>10</b>	<b>12</b>	<b>11</b>			

**10\_Trustees' remuneration and staff costs****a\_Trustees' remuneration**

Trustees do not receive any remuneration for their services.

Travelling and subsistence expenses of 2 Trustees (2006/07 1) have been charged at cost as part of other direct costs – Note 11.

**b\_Employees with earnings above £60,000**

Number of employees at:	2007/08	2006/07
£60,000 – 69,999	6	5
£70,000 – 79,999	5	3
£90,000 – 99,999	1	3
£100,000 – 109,999	1	–
£130,000 – 139,999	1	–

**c\_Staff salaries and social security, including the Director**

	2007/08	2006/07
	£'000	£'000
Salaries	19,326	17,951
Social security costs	1,404	1,361
	20,730	19,312
Staff pensions – Note 21	3,043	2,867
	£23,773	£22,179

**d\_The average weekly number of employees during the year analysed by function**

	2007/08	2006/07
Botanical science	239	246
Horticulture and public education	214	213
Visitor services and marketing	53	46
Information services	69	67
Support services and estates management	63	74
Directorate	13	13
RBG Kew Enterprises Ltd	56	58
	707	717

**11\_Other direct costs**

	2007/08 £'000	2006/07 £'000
Cost of sales	1,919	1,719
Materials	3,049	3,284
Direct project costs	1,887	2,236
Repairs and maintenance	3,196	2,933
Minor new building works	1,020	2,522
Hire charges	279	297
Rates and utilities	1,092	1,367
Trustees' travel and subsistence	1	1
Staff travel and subsistence	636	534
General services	5,322	4,160
Bad debt provisions	21	45
Professional fees – audit	32	28
– other	1,166	1,010
Revaluations	78	923
	£19,698	£21,059

Unrecovered VAT for the year of £426,000 has been charged against these accounts (2006/07 £306,000).  
£32,000 (2006/07 £28,000) was paid to the external auditors for audit fees. No other fees were paid to the external auditors.

**12\_Tangible assets\_Royal Botanic Gardens, Kew and Consolidated**

	Land	Dwellings	Buildings	Collections	Gardens Equipment	Scientific Equipment	Office Equipment	Motor Vehicles	Grant Aided Total
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
<b>Valuation</b>									
At 1 April 2007	29,056	13,517	66,985	20	3,326	7,480	146	559	121,089
Additions	–	–	11,680	5	340	161	8	10	12,204
Disposals	–	–	–	–	(54)	(398)	(20)	(7)	(479)
Revaluation	1,271	370	3,253	–	204	149	6	54	5,307
At 31 March 2008	30,327	13,887	81,918	25	3,816	7,392	140	616	138,121
<b>Depreciation</b>									
At 1 April 2007	–	2,472	10,288	–	1,273	4,805	121	362	19,321
Charge for the year	–	225	1,031	–	254	666	12	91	2,279
Disposals	–	–	–	–	(41)	(379)	(20)	(7)	(447)
Revaluation	–	68	547	–	85	170	7	12	889
At 31 March 2008	–	2,765	11,866	–	1,571	5,262	120	458	22,042
<b>Net book value</b>									
At 31 March 2008	£30,327	£11,122	£70,052	£25	£2,245	£2,130	£20	£158	£116,079
At 31 March 2007	£29,056	£11,045	£56,697	£20	£2,053	£2,675	£25	£197	£101,768

(a) Fixed assets with a net book value of £32k were disposed of during the year for £7k.

(b) As explained in Note 2 existing buildings at 31 March 2001 that were not used for fundraising or administration purposes have not been capitalised. There are over 250 buildings on the Kew site including the magnificent public glasshouses – The Palm House, The Temperate House and the Princess of Wales Conservatory. The age range of the buildings is also extensive, stretching from the 19th Century and throughout the 20th Century.

(c) The valuations of the land and buildings were carried out by Powis Hughes & Associates, Chartered Surveyors, and Fanshawe, Chartered Quantity Surveyors. The valuations were made on an existing use basis at 31 March 2007 and were prepared in accordance with the Royal Institution of Chartered Surveyors Appraisal and Valuation Manual. The land was valued at £28,770,000 and the buildings at £63,145,000.

**13\_Investments**

	Royal Botanic Gardens, Kew		Consolidated	
	2008	2007	2008	2007
	£'000	£'000	£'000	£'000
<b>Valuation</b>				
At 1 April	626	612	301	287
Revaluation	(24)	14	(24)	14
At 31 March	£602	£626	£277	£301

Investments at 31 March are analysed as follows:

	Royal Botanic Gardens, Kew		Consolidated	
	2008	2007	2008	2007
	£'000	£'000	£'000	£'000
RBG Kew Enterprises Limited	325	325	-	-
Charities Official Investment Fund	277	301	277	301
	£602	£626	£277	£301

**14\_Trading subsidiary**

The subsidiary undertaking is as follows:

Name\_RBG Kew Enterprises Limited

Registered in\_England & Wales

Activity\_Retailing and commercial development

Proportion of shares held\_Ordinary shares 100%

\_Redeemable shares 100%

A summary of the results of the subsidiary is shown below.

All values are at historic costs.

	Note	2007/08	2006/07
		£'000	£'000
Turnover		5,005	4,981
Cost of sales		(2,061)	(1,779)
<b>Gross profit</b>		2,944	3,202
Net other expenses	1	(2,007)	(2,263)
Interest receivable		53	29
<b>Net profit</b>		990	968
Gift Aid paid to RBG Kew		(990)	(968)
<b>Profit for year</b>		£-	£-

	2008	2007
	£'000	£'000
<b>Balance sheet</b>		
Current assets	1,832	1,932
Current liabilities	(1,507)	(1,607)
	£325	£325
Share capital and reserves	£325	£325

Note 1\_Other expenses are stated after £300,000 income (2006/07 £0) from Orange plc for sponsorship of the Millennium Seed Bank project.

**15\_Debtors**

	Royal Botanic Gardens, Kew		Consolidated	
	2008	2007	2008	2007
	£'000	£'000	£'000	£'000
Trade debtors	1,105	679	1,482	843
Prepayments and accrued income	1,662	2,307	1,773	2,404
Owed by subsidiary	552	641	-	-
Owed by RBG Kew Foundation	1,774	2,664	1,765	2,664
Owed by Central Government Departments	173	153	173	153
Travel advances to staff	25	46	25	46
Staff loans	10	10	10	10
Value added tax	614	465	614	465
Total debtors	£5,915	£6,965	£5,842	£6,585

**16\_Creditors: Amounts falling due within one year**

	Royal Botanic Gardens, Kew		Consolidated	
	2008	2007	2008	2007
	£'000	£'000	£'000	£'000
Trade creditors	141	-	141	3
Accruals	3,465	3,661	3,603	3,836
Other	1,085	1,322	1,893	2,110
Total creditors	£4,691	£4,983	£5,637	£5,949

## 17\_Statement of reserves\_Royal Botanic Gardens, Kew and Consolidated

	At 1 April 2007 £'000	Income £'000	Expenditure £'000	Revaluation £'000	At 31 March 2008 £'000
<b>Unrestricted</b>					
Government Capital Grants	27,373	6,282	(1,328)	–	32,327
Capital Revaluation Reserve	71,594	–	(969)	4,472	75,097
General	8,694	33,854	(33,457)	–	9,091
<b>Total Unrestricted</b>	<b>107,661</b>	<b>40,136</b>	<b>(35,754)</b>	<b>4,472</b>	<b>116,515</b>
<b>Restricted</b>					
Capital Grants	2,801	5,922	(70)	–	8,653
Capital Revaluation Reserve	1	–	1	–	2
Donations	282	57	(66)	–	273
Projects	–	9,845	(9,845)	–	–
<b>Total Restricted</b>	<b>3,084</b>	<b>15,824</b>	<b>(9,980)</b>	<b>–</b>	<b>8,928</b>
<b>Endowment</b>					
Scott-Marshall	196	–	(16)	–	180
Robin Spare Book Fund	3	–	–	–	3
<b>Total Endowment</b>	<b>199</b>	<b>–</b>	<b>(16)</b>	<b>–</b>	<b>183</b>
<b>Total Reserves</b>	<b>£110,944</b>	<b>£55,960</b>	<b>£(45,750)</b>	<b>£4,472</b>	<b>£125,626</b>

The Capital Grants fund represents monies given by third parties for specific projects which are used to purchase capital equipment. It is released as the assets are depreciated or are disposed of.

The Donations fund represents money given mainly by members of the public for specific purposes ranging from the purchase of books for the Library to money to support different parts of the gardens. There are 8 different accounts within Donations.

Projects are where RBG Kew receives money from third parties to fund various activities such as specific areas of research, developments in the gardens, restoration of buildings etc, much of this money coming via the Foundation. There were over 70 such projects this year.

The income from the Scott-Marshall endowment is to be used to provide travel scholarships for horticultural staff at RBG Kew.

The income from the Robin Spare Book Fund is to be used to purchase books for the School of Horticulture library at RBG Kew.

## 18\_Analysis of net assets between reserves

	Unrestricted £'000	Restricted £'000	Endowment £'000	Total £'000
Reserves balances at 31 March are represented by:				
Tangible assets	107,424	8,655	–	116,079
Investments	–	94	183	277
Current assets	11,407	3,500	–	14,907
Creditors	(2,316)	(3,321)	–	(5,637)
	<b>£116,515</b>	<b>£8,928</b>	<b>£183</b>	<b>£125,626</b>

## 19\_Analysis of reserves

	Unrestricted £'000	Restricted £'000	Endowment £'000	Total £'000
Capital Grants				
– Government	32,327	–	–	32,327
– Other capital grants	–	8,653	–	8,653
Accumulated Reserves	9,091	244	110	9,445
Revaluation Reserve	75,097	31	73	75,201
	<b>£116,515</b>	<b>£8,928</b>	<b>£183</b>	<b>£125,626</b>

## 20\_Capital grants

	Other Grants £'000	Government Grants £'000	Total £'000
Historic net book value of fixed assets at 1 April 2007	2,801	27,373	30,174
Acquired during the year with Grant-in-aid	–	6,282	6,282
Acquired during the year with capital grants	5,922	–	5,922
	<b>8,723</b>	<b>33,655</b>	<b>42,378</b>
Less historic depreciation			
– Tangible assets	(70)	(1,317)	(1,387)
Release on assets disposed of during the year	–	(11)	(11)
Historic net book value of fixed assets at 31 March 2008	<b>£8,653</b>	<b>£32,327</b>	<b>£40,980</b>

## 21\_Pension commitment

The staff of the Royal Botanic Gardens, Kew are employed by the Trustees and they are eligible to be members of the Principal Civil Service Pension Scheme, PCSPS. This is an unfunded multi-employer defined benefits scheme to which the conditions of the Superannuation Acts 1965 and 1972 and subsequent amendments apply.

RBG Kew's contributions to the PCSPS are affected by a surplus or deficit in the scheme but as it is a multi-employer scheme RBG Kew is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. A full actuarial valuation was carried out by the Scheme Actuary, Hewitt Bacon Woodrow, in March 2003 and details can be found in the resource accounts of the Cabinet Office: Civil Superannuation ([www.civilservice-pensions.gov.uk](http://www.civilservice-pensions.gov.uk)). For 2007/08 contributions of £2,981,000 were paid to the Paymaster General at rates which ranged from 17.1% to 25.5% depending on salary. The Scheme Actuary reviews employer contributions every four years following a full scheme valuation.

RBG Kew Enterprises operates a Group Personal Pension Plan for its employees, which is a defined contribution scheme. It made pension contributions of £62,000 to this scheme during the year. 50 staff were members of the defined contribution scheme at 31 March 2008 and the remaining staff were members of the PCSPS.

## 22\_Commitments

Construction contracts on two capital projects totalling £14.0m were partially complete at 31 March 2008.

There were no other major capital commitments at 31 March 2008.

## 23\_Related party transactions

RBG Kew has dealings with the Department for Environment, Food and Rural Affairs and its sponsored bodies, and other Government Departments and their sponsored bodies.

As stated in the Statutory Information the purpose of the Foundation and Friends of the Royal Botanic Gardens, Kew is to provide support for Kew and, as shown in Note 4, £8.5m was received in 2007/08 (2006/07 £2.4m).

Mr Richard Laphorne was formerly a Director of Orange plc. This company has a contract with RBG Kew Enterprises Ltd to sponsor the Millennium Seed Bank project and this year £300,000 (2006/07 £0) was received.

Enquiries about the Trustees' Register of Interests should be sent to the Head of Legal and Governance, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3AB.

## 24\_Financial instruments

FRS 13 – Derivatives and other Financial Instruments, requires disclosure of the role financial instruments have had during the period in creating and changing the risks an entity faces in undertaking its activities. Because RBG Kew's activities are financed mainly by Government Grants and visitor income, it is not exposed to the degree of financial risk faced by business entities. In addition, RBG Kew has no powers to borrow funds and only a limited number of transactions are in foreign currency. Financial assets and liabilities are generated by day to day operational activities and are not held to change the risks facing RBG Kew in undertaking its activities.

## 25\_Financial Statements authorisation

These Financial Statements were authorised by the Accounting Officer for issue on 27 June 2008.

## Royal Botanic Gardens, Kew\_Five year financial summary

## Summary Statement of Financial Activities

	2003/04	2004/05	2005/06	2006/07	2007/08
	£'000	£'000	£'000	£'000	£'000
<b>Incoming resources</b>					
Grant-in-aid	24,783	24,899	25,537	25,200	25,204
Grants, gifts and donations	4,443	5,921	9,321	8,666	16,389
Income from activities	9,248	10,707	13,363	12,423	13,785
Investment income	526	669	617	549	582
<b>Total incoming resources</b>	<b>39,000</b>	<b>42,196</b>	<b>48,838</b>	<b>46,838</b>	<b>55,960</b>
<b>Resources expended</b>					
Charitable expenditure	32,123	35,079	38,620	41,571	41,686
Cost of generating funds	2,863	3,603	4,707	3,810	4,064
<b>Total resources expended</b>	<b>34,986</b>	<b>38,682</b>	<b>43,327</b>	<b>45,381</b>	<b>45,750</b>
<b>Net incoming resources</b>	<b>4,014</b>	<b>3,514</b>	<b>5,511</b>	<b>1,457</b>	<b>10,210</b>
Unrealised movements on investments	23	20	50	14	-
Revaluation of tangible assets	3,049	5,139	3,346	3,764	4,472
<b>Net movement in reserves</b>	<b>7,086</b>	<b>8,673</b>	<b>8,907</b>	<b>5,235</b>	<b>14,682</b>
Reserves at 1 April	81,043	88,129	96,802	105,709	110,944
<b>Reserves at 31 March</b>	<b>£88,129</b>	<b>£96,802</b>	<b>£105,709</b>	<b>£110,944</b>	<b>£125,626</b>

## Summary Balance Sheet

	2004	2005	2006	2007	2008
	£'000	£'000	£'000	£'000	£'000
Fixed assets	77,131	86,488	96,248	102,069	116,356
Current assets	16,272	16,739	14,917	14,824	14,907
Creditors	(5,274)	(6,425)	(5,456)	(5,949)	(5,637)
<b>Total assets less current liabilities</b>	<b>£88,129</b>	<b>£96,802</b>	<b>£105,709</b>	<b>£110,944</b>	<b>£125,626</b>
Unrestricted	85,469	94,273	102,424	107,661	116,515
Restricted	2,517	2,372	3,095	3,084	8,928
Endowment	143	157	190	199	183
<b>Total reserves</b>	<b>£88,129</b>	<b>£96,802</b>	<b>£105,709</b>	<b>£110,944</b>	<b>£125,626</b>

## Corporate information

### Health and safety statement

The Royal Botanic Gardens, Kew (Kew) recognises the importance of managing health and safety risks, and does this by an effective Health and Safety Management System. Its commitment is made known to all new staff, who receive copies of the General Statement on Health and Safety on arrival. This and all other Health and Safety policies are available to staff on the Intranet and on paper via line managers. The Statement makes clear the commitment of the Trustees, as the employers, to ensuring a safe workplace for their employees and visitors. Easy to read information on Health and Safety is included in the Staff Handbook, which is issued to all staff. Information on key health and safety activities for the year is published in the corporate Operational Plan, which is updated annually and is available on Kew's intranet. Responsibility for day-to-day activity rests with the Director and Heads of Department. Heads of Department submit annual Departmental action plans, and report on progress at the end of the year. The Director conducts a review of progress in the autumn.

This review is based on the assurance arising from the health and safety management system comprising the departmental risk analyses and action plans. At the beginning of 2008, an external review was conducted into the management of health and safety risks within the Estates Department and across the whole of Kew, and appropriate recommendations were made and actions are currently being considered. Such an extensive review enables the Director to assure the Board of Trustees that an appropriate system and relevant procedures are in place to mitigate known operational risks.

Activities identified as involving the most significant risks to staff include working at height (notably in arboriculture and work on fragile roofs), use of field machinery, use and storage of chemicals, and fieldwork in remote locations. Systems are currently in place to control the risks from these activities, however they are also under review. There were two significant incidents associated with overseas work in the last year; lessons have been learned from these episodes and fortunately, both people have made good recoveries. The visitors to Kew most likely to have an accident are children under the age of 10, playing in the popular Climbers and Creepers play area, but the majority of these result in minor bumps. It should also be noted that we continue to be mindful of our visitors who may be senior in years and those with disabilities to ensure that we match our procedures and risk mitigation techniques to their needs and safety requirements.

Staff receive health and safety training when appointed, and as their work changes. Refresher training is also provided within Departments as appropriate. Specialist training for First Aiders, Fire Wardens and other key competencies is arranged by the Corporate Health and Safety Co-ordinator. A new person, who currently holds the NEBOSH National Certificate in

Occupational Health and Safety, was appointed to the role of Corporate Health and Safety Co-ordinator at the end of 2007.

The Local Health and Safety Committee meets twice a year, and is the forum where the Safety Representatives of the three recognised Trade Unions and the Director can openly discuss issues or concerns. The Trade Union representatives have the opportunity to raise issues with the Director at other times without undue restriction or delay. Trade Union Safety Representatives are consulted on all new policies and procedures. The Trade Union Safety Representatives receive information about accidents so they can carry out their own investigations. The external review, conducted earlier this year, has identified shortcomings in the risk assessment process across Kew. Recommendations for addressing these are included in the Health and Safety Action Plan for Kew and are currently under active consideration.

In the reporting year April 2007 to March 2008, seven accidents were reported under RIDDOR. These involved four members of staff, one volunteer and two contractors; none involved visiting members of the public. None of the accidents were fatalities. During this period, there were over 1.9 million visitors (1.48 million visitors to Kew Gardens including evening events and private functions, and 475,000 at Wakehurst Place). The average number of Kew staff was 700 including both permanent and short-term appointments. For comparison, eight accidents were reported under RIDDOR last year, when there were 1.8 million visitors in total.

No enforcement notices have been served on Kew, nor were there any convictions for health and safety offences.

### Customer Charter statement

As public servants we have a duty to serve the public well and, as a leading visitor attraction with two important sites, we must also meet the needs of an increasingly competitive and demanding market. Our Customer Charter sets out a comprehensive set of standards that govern the quality of our visitor attractions (at Kew and Wakehurst Place) and the access and information available to visitors. It also covers visitor care and complaints procedures.

At the same time, Kew is possibly the world's leading centre for information on plant diversity and we respond to an astonishingly wide variety of enquiries from a host of different and very diverse users. Accordingly, the Charter defines our role in handling public enquiries.

We use visitor surveys to monitor performance. Free information leaflets, including a map, are given to visitors on entry. These leaflets include a survey form and we analyse the results on an ongoing basis. Our stated aim is to achieve 80% of visitors stating that their visit was "very enjoyable" and 60% rating value for money as "excellent".

## Corporate information continued

This year 81% of our visitors rated their visit as "very enjoyable", down from 85% in 2006/07. If the scores for "very enjoyable" and "fairly enjoyable" are added together however, 97% of visitors enjoyed their visits, up from 95% in the previous financial year. The number of visitors rating value for money as "excellent" fell from 35% to 33%, but the number rating it as "good" rose from 37% to 38%, giving a total of 71% thinking their visit was value for money (down from 72% last year).

During the year we continued our feedback and training programme to involve front-line staff in setting improved standards for visitor care.

Kew is a member of the Association of Leading Visitor Attractions (ALVA), a body that represents those organisations receiving over a million visits each year. ALVA has developed robust bench-marking surveys to monitor, and thus improve, quality and Kew has played an active role in this process. During the year Kew continued to actively participate in the ALVA 'mystery guest' scheme.

Kew's Customer Charter is available from the Ticket Offices at Kew and Wakehurst Place and on the Internet at [www.kew.org/aboutus/charter.pdf](http://www.kew.org/aboutus/charter.pdf)

### Diversity statement

#### Policy

Kew is committed to ensuring that those employed within the organisation (on a paid or voluntary basis) are assisted in using and developing their skills, potential and sense of self-worth, regardless of their gender, race, colour, national origin, religious beliefs, sexuality, marital status, age or disability. Kew's policies and practice also ensures that no job applicant receives less favourable treatment on the grounds laid out above. Kew actively monitors diversity to help identify opportunities for progress. This includes revising policies and practices in line with changes to legislation, working with line managers to support staff and volunteers in the workplace and increasing staff awareness through informal education initiatives, structured training and publication of diversity and equality materials.

#### Ethnicity

The ethnic profile of new employees recruited during 2007/08 is 7% non-white and 67% white with 26% giving no response. This shows an increase in non-white recruits compared with the non-white proportion of staff at the time of the last analysis carried out in June 2006 which showed the percentage of non-white employees for Kew as 4.9%. This compared with the overall UK Civil Service figure of 8.1%.

#### Gender

Based on averages for 2007/08, out of the total 700 staff, 54% are female and 46% are male, which is slightly more even than the previous year when the figures were 56% and 44% respectively.

Looking at gender distribution by Band, 69% of all employees are Band C or below or are students; 76% of female employees are in these categories compared with 62% of male employees. Last year 75% of females were employed in the lower Bands and 57% of males so the gender disparity at the lower levels has reduced. At Band F or Director level, female employees make up 24% of the group or 12 employees, a slightly lower percentage than the 27% reported last year. The gender balance by department remains similar to the situation reported last year with more females than males employed in the science, commercial and support departments, but the reverse in the Horticulture and Public Experience department.

#### Working patterns

Kew recognises that diversity encompasses different working patterns. 15% of all employees work part-time, very similar to the 16% last year. Part-time working is practised by both genders, although of the 103 part-time employees, 81% are female and 19% are male. A variety of flexible working arrangements are in place throughout the organisation including the practice of flexi-time. Partial retirement has recently been implemented to allow further flexibility for eligible employees.

#### Disability

Kew has established a Disability Steering Group and a Disability Project Team with the first main project to develop a Disability Equality Scheme and Action Plan. The last formal survey of staff that contained a disability section (2001) saw 21 respondents define themselves as disabled under the DDA definition. Since that time, the organisation has supported a large group of staff, students and volunteers across all functional areas with a range of adjustments to ensure a positive work experience at Kew. Recent legislative changes have also driven the development of strategies for further inclusion and education across the organisation.

## Publications

We achieved an excellent level of publication in higher impact journals during the year.

By convention, publications are always reported for the calendar year and, during 2007, our staff and honorary research colleagues produced or co-authored the 518 publications that are listed on the following pages.

Among these papers, those 87 marked with an asterisk were published in journals with a citation impact factor (CIF) greater than 2.

- Aguirre-Hudson, B., Kokubun, T., Spooner, B.M.** & Tibell, L. (2007). Taxonomy of *Calicium victorianum* (F. Wilson) Tibell (Caliciaceae, Lecanorales), a lichenized ascomycete new to Europe. *Lichenologist* 39(5): 401–407.
- see also under Aramendia, L.A.I.
- Agyili, J., **Sacande, M.**, Koffi, E. & Pehrah, T. (2007). Improving the collection and germination of West African *Garcinia kola* Heckel seeds. *New Forests* 34(3): 269–279.
- \***Ali, N., Probert, R., Hay, F.**, Davies, H. & **Stuppy, W.** (2007). Post-dispersal embryo growth and acquisition of desiccation tolerance in *Anemone nemorosa* L. seeds. *Seed Science Research* 17(5): 155–163.
- Alpieva, K., **Kokubun, T.**, Taskova, R., Evstatieva, L. & Handjjeva, N. (2007). LC-ESI-MS analysis of iridoid glucosides in *Lamium* species. *Biochemical Systematics and Ecology* 35(1): 17–22.
- \***Andrade, I.M., Mayo, S.J.**, Van den Berg, C., **Fay, M.F.**, Chester, M., **Lexer, C.** & **Kirkup, D.** (2007). A preliminary study of genetic variation in populations of *Monstera adansonii* var. *klotzschiana* (Araceae) from north-east Brazil, estimated with AFLP molecular markers. *Annals of Botany* 100(6): 1143–1154.
- Andrews, S.** (2007). A handful of hollies. *Plantsman* 6: 15–17.
- (2007). Tree of the year: *Carya ovata*, part 1. *International Dendrological Society Year Book 2006*: 9–23.
- (2007). Recent botanical and dendrological publications. *International Dendrological Society Year Book 2006*: 187–196.
- see also under Upson, T.
- Aplin, D.M., **Linington, S.H.** & Rammeloo, J. (2007). Are Indices Seminum really worth the effort? *Sibbaldia* 5: 93–107.
- Aramendia, L.A.I. & **Aguirre-Hudson, B.** (2006 [2007]). Mariano La Gasca en el exilio inglés (1824–1834). *Rev. Real Academia de Ciencias (Zaragoza)* 61: 135–146.
- Araújo, A.C., César, E.A., **Simpson, D.A.** & **Zappi, D.C.** (2007). Preliminary list of the Cyperaceae in northeastern Brazil. 3. 56 pp. (Repatriation of Kew Herbarium data for the flora of northeastern Brazil series)
- Ashton, P.S.** see under Quek, S.P.
- Atahuachi, M.B. & **Rico Arce, M.L.** (2007). A new species of *Acacia* (Leguminosae: Mimosoideae) endemic to Bolivia. *Kew Bulletin* 62(4): 605–608.
- Avery, P.B., Faull, J. & **Simmonds, M.S.J.** (2007). Effects of *Paecilomyces fumososeus* and *Encarsia formosa* on the control of greenhouse whitefly: preliminary assessment of a compatibility study. *BioControl* Subject: Biomedical and Life Sciences and Earth and Environmental Science:
- Bacchetta, G., Fenu, G., Mattana, E. & **Uljan, T.** (2007). Preliminary results on the conservation of *Lamyropsis microcephala* (Moris) Dittrich & Greuter (Asteraceae), a threatened endemic species of the Gennargentu Massif, Sardinia (Italy). *Flora Montiberica* 36: 6–15.
- Baker, W.J.** (2007). Palm Research in 2006. *Palms* 50: 151–154.
- & **Dransfield, J.** (2007). Arecaceae of Papua. In Marshall, A.J. & Beehler, B.M. (eds) *The Ecology of Papua*. Singapore: Periplus Editions. 359–370.
- see also under Trénel, P.
- Banks, H.**, Stafford, P. & **Crane, P.R.** (2007). Aperture variation in the pollen of *Nelumbo* (Nelumbonaceae). *Grana* 46(3): 157–163.
- \***Barbará, T.**, Martinelli, G., **Fay, M.F.**, **Mayo, S.J.** & **Lexer, C.** (2007). Population differentiation and species cohesion in two closely related plants adapted to neotropical high-altitude ‘inselbergs’, *Alcantarea imperialis* and *Alcantarea geniculata* (Bromeliaceae). *Molecular Ecology* 16(10): 1981–1992.
- \* — , **Palma-Silva, C.**, **Paggi, G.M.**, Bered, F., **Fay, M.F.** & **Lexer, C.** (2007). Cross-species transfer of nuclear microsatellite markers: potential, limitations, and alternatives. *Molecular Ecology* 16: 3759–3767.
- see also under **Lexer, C.**
- \*Barker, N.P., Weston, P.H., Rutschmann, F. & **Sauquet, H.** (2007). Molecular dating of the ‘Gondwanan’ plant family Proteaceae is only partially congruent with the timing of the break-up of Gondwana. *Journal of Biogeography* 34(12): 2012–2027.
- \***Barraclough, T.G.**, Fontaneto, D., Ricci, C. & Herniou, E.A. (2007). Evidence for inefficient selection against deleterious mutations in cytochrome oxidase I of asexual bdelloid rotifers. *Molecular Biology and Evolution* 24(9): 1952–1962.
- see also under **Chase, M.W.**
- see also under Davies, T.J.
- see also under Dunn, R.R.
- see also under Fontaneto, D.
- see also under Perret, M.
- see also under Purcell, D.
- Bateman, R.M.** (2007). Whatever happened to the genus *Orchis*? *Orchid Review* 115: 322–329.
- , Hilton, J. & **Rudall, P.J.** (2007). Parallel morphological and molecular research programmes are essential for phylogeny reconstruction: the example of seed-plant relationships. In Antonov, A.S., Lyubersky, V.A., Gelfona, M.S., Hestin, V.V. & Rusin, L.Y. (eds) *Computational phylogenetics and molecular systematics*. Moscow: KMK Press. 18–21.
- , Kenrick, P. & Rothwell, G.W. (2007). Do eligulate herbaceous lycopsids occur in Carboniferous strata? *Hestia eremosa* gen. et sp. nov. from the Mississippian of Oxroad Bay, East Lothian, Scotland. *Review of Palaeobotany and Palynology* 144: 323–335.
- see also under **Chase, M.W.**
- see also under **Fay, M.F.**
- see also under **Pillon, Y.**
- see also under **Roberts, D.L.**
- see also under **Rudall, P.J.**
- see also under Tremblay, R.L.
- Bayton, R.P.** (2007). A revision of *Borassus* L. (Arecaceae). *Kew Bulletin* 62: 561–585.
- \*Beaulieu, J.M., **Leitch, I.J.** & Knight, C.A. (2007). Genome size evolution in relation to leaf strategy and metabolic rates revisited. *Annals of Botany* 99(3): 495–505.
- \* — , Moles, A.T., **Leitch, I.J.**, **Bennett, M.D.**, **Dickie, J.B.** & Knight, C.A. (2007). Correlated evolution of genome size and seed mass. *New Phytologist* 173(2): 422–437.
- Becker, T. & **Müller, J.V.** (2007). Floristic affinities, life-form spectra and habitat preferences of the vegetation of two semi-arid regions in Sahelian West and Southern Africa. *Basic & Applied Dryland Research* 1: 33–50.
- Beentje, H.J.** & Bandeira, S. (2007). Field guide to the mangrove trees of Africa and Madagascar. Kew: RBG Kew. 91 pp.
- & **Ghazanfar, S.A.** (eds) (2007). Polygalaceae. Kew: Royal Botanic Gardens, Kew. Flora of Tropical East Africa 62 pp.
- & **Ghazanfar, S.A.** (eds) (2007). Dryopteridaceae. Kew: RBG Kew. Flora of Tropical East Africa 54 pp.
- & **Ghazanfar, S.A.** (eds) (2007). Sterculiaceae. Kew: RBG Kew. Flora of Tropical East Africa 134 pp.
- & Mbago, F.M. (2007). A guide to the fig trees of western Tanzania with special emphasis on Gombe and Mahale National Parks. *Journal of East African Natural History* 96(1): 1–26.
- Beentje, H.J.** (eds) see under Shubert, E.
- Bell, C.M. & **Simmonds, M.S.J.** (2007). Plant substances as alternatives for animal products in traditional medicines. 94 pp.
- \***Bello, M.A.**, Hawkins, J.A. & **Rudall, P.J.** (2007). Floral morphology and development in Quillajaceae and Surianaceae (*Fabales*), the species-poor relatives of Leguminosae and Polygalaceae. *Annals of Botany* 100(7): 1491–1505.

- Belyaeva, I.** (2007). Typification of the names published by Edmond Boissier in *Salix* L. *Candollea* 62: 131–140.
- Bennett, M.D.** *see under* Beaulieu, J.M.
- *see under* Gregory, T.R.
- \*Bininda-Emonds, O.R.P., Cardillo, M., Jones, K.E., MacPhee, R.D.E., Beck, R.M.D., **Grenyer, R.**, Price, S.A., Vos, R.A., Gittleman, J.L. & Purvis, A. (2007). The delayed rise of present-day mammals. *Nature* 446(7135): 507–512.
- Bouchenak-Khelladi, Y.** *see under* Hodgkinson, T.R.
- Brickell, C. & **Mathew, B.F.** (2007). Plate 575. *Daphne wologensis*. Thymelaeaceae. *Curtis's Botanical Magazine* 24(1): 18–21.
- Bridson, D.M.** *see under* Davis, A.P.
- Briggs, M.** *see under* Davis, A.P.
- Broome, J.** *see under* Hind, D.J.N.
- Brouillette, L.C., Rosenthal, D.M., Rieseberg, L.H., **Lexer, C.**, Malmberg, R.L. & Donovan, L.A. (2007). Genetic architecture of leaf ecophysiological traits in *Helianthus*. *Journal of Heredity* 98(2): 142–146.
- Brummitt, R.K.** (2007). Leguminosae – Papilionoideae, genera 1–7, 19–21. *Flora Zambesiaca* 3(3): 23–50, 119–209.
- \*— (2007). Report of the Nomenclature Committee for Vascular plants. *Taxon* 56: 1289–1296.
- \*— (2007). R. E. G. Pichi Sermolli (1912–2005). *Taxon* 56: 1304–1307.
- (2007). Acanthaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 22–24.
- (2007). Achariaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 24–25.
- (2007). Adoxaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 26–27.
- (2007). Alseuosmiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 28–28.
- (2007). Alzateaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 28–28.
- (2007). Amborellaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 29–30.
- (2007). Aphanopetalaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 34–34.
- (2007). Aphloiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 34–34.
- (2007). Aristolochiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 44–45.
- (2007). Avicenniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 53–53.
- (2007). Aucubaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 52–53.
- (2007). Begoniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 58–59.
- (2007). Bignoniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 62–64.
- (2007). Bonnetiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 66–68.
- (2007). Bruniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 72–72.
- (2007). Buddlejaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 72–73.
- (2007). Campanulaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 82–84.
- (2007). Caprifoliaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 86–87.
- (2007). Carlemanniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 88–89.
- (2007). Celastraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 92–94.
- (2007). Cercidiphyllaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 95–96.
- (2007). Circaeasteraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 99–100.
- (2007). Cneoraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 104–104.
- (2007). Columelliaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 105–106.
- (2007). Coriariaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 110–111.
- (2007). Coridaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 111–112.
- (2007). Cornaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 112–113.
- (2007). Corynocarpaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 113–113.
- (2007). Cryperoniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 115–115.
- (2007). Ctenolophonaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 115–115.
- (2007). Curtisiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 119–119.
- (2007). Cyclocheilaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 119–120.
- (2007). Datisceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 122–123.
- (2007). Desfontainiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 123–123.

- (2007). Diapensiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 123–124.
- (2007). Emblingiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 138–139.
- (2007). Eucommiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 144–144.
- (2007). Flacourtiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 149–150.
- (2007). Garryaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 152–152.
- (2007). Geissolomataceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 152–152.
- (2007). Gelsemiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 152–153.
- (2007). Gentianaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 153–154.
- (2007). Gesneriaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 155–157.
- (2007). Glaucidiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 157–158.
- (2007). Globulariaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 158–158.
- (2007). Goodeniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 159–159.
- (2007). Grubbiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 160–161.
- (2007). Haloragaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 162–163.
- (2007). Hamamelidaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 163–164.
- (2007). Hippuridaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 166–167.
- (2007). Hugoniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 167–168.
- (2007). Hydrangeaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 169–170.
- (2007). Hydroleaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 170–171.
- (2007). Hydrophyllaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 171–172.
- (2007). Irvingiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 174–174.
- (2007). Ixonanthaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 175–175.
- (2007). Lacistemataceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 178–178.
- (2007). Lactoridaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 179–179.
- (2007). Lamiaceae (Labiatae). *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 179–181.
- (2007). Lardizabalaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 181–182.
- (2007). Leitneriaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 189–189.
- (2007). Lennoaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 189–189.
- (2007). Lentibulariaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 190–191.
- (2007). Linaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 192–193.
- (2007). Lissocarpaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 193–193.
- (2007). Loasaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 193–194.
- (2007). Loganiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 194–195.
- (2007). Maesaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 204–204.
- (2007). Martyniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 203–204.
- (2007). Medusagynaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 204–204.
- (2007). Melanophyllaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 205–205.
- (2007). Menyanthaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 212–213.
- (2007). Meliosmaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 210–210.
- (2007). Montiniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 217–218.
- (2007). Morinaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 219–219.
- (2007). Myrsinaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 224–225.

- (2007). Nitrariaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 229–229.
- (2007). Ochnaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 232–233.
- (2007). Oncothecaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 237–238.
- (2007). Opiliaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 238–238.
- (2007). Pedaliaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 245–245.
- (2007). Phrymaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 250–250.
- (2007). Picramniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 253–254.
- (2007). Plantaginaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 257–257.
- (2007). Plocospermataceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 258–258.
- (2007). Polemoniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 260–262.
- (2007). Primulaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 266–268.
- (2007). Ptaeroxylaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 269–270.
- (2007). Pteleocarpaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 270–270.
- (2007). Quinaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 271–272.
- (2007). Rutaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 287–288.
- (2007). Sabiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 288–289.
- (2007). Salicaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 289–290.
- (2007). Sambucaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 290–291.
- (2007). Samolaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 291–291.
- (2007). Sapindaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 292–294.
- (2007). Sarentodoxaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 297–297.
- (2007). Saururaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 298–299.
- (2007). Schlegeliaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 300–300.
- (2007). Scrophulariaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 300–302.
- (2007). Scyphostegiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 303–303.
- (2007). Simaroubaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 303–304.
- (2007). Sphaerosepalaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 308–308.
- (2007). Sphenocleaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 308–309.
- (2007). Stachyuraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 309–309.
- (2007). Staphyleaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 309–310.
- (2007). Stilbaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 312–312.
- (2007). Strasburgeriaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 312–312.
- (2007). Symphoremataceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 314–314.
- (2007). Tetracarpaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 316–317.
- (2007). Tetracentraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 317–317.
- (2007). Tetrachondraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 317–317.
- (2007). Tetradiclidaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 317–318.
- (2007). Theophrastaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 319–319.
- (2007). Thomandersiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 319–320.
- (2007). Ticondendraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 321–321.
- (2007). Trapellaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 323–323.
- (2007). Triplotegiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 193–194.

— (2007). Trochondraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 324–324.

— (2007). Vahliaaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 328–329.

— (2007). Zygophyllaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 337–338.

—, Chikuni, A.C., **Lock, J.M. & Polhill, R.M.** (2007). Leguminosae – Caesalpinioideae, genera 1–4, 6, 10, 24, 28–39. *In* Timberlake, J.R., Pope, G.V., M. P.R. & Martins, E.S. (eds) Flora Zambesiaca. Kew: RBG Kew. Vol. 2: 13–22, 36–39, 49–50, 116–121, 171–211.

— & **Cheek, M.R.** (2007). Hoplestigmataceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 167–167.

— & Chinnock, R.J. (2007). Myoporaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 220–221.

— & **Green, P.S.** (2007). Oleaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 234–235.

— & Heywood, V.H. (2007). Euphomiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 147–147.

— & **Stannard, B.L.** (2007). Hydrostachyaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 172–172.

— & **Stannard, B.L.** (2007). Kirkiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 177–177.

— *see also under* Culham, A.

— *see also under* Heywood, V.H.

— *see also under* Lansdown, R.V.

— *see also under* Orchard, A.E.

— *see also under* Staples, G.W.

— *see also under* **Utteridge, T.M.A.**

— *see also under* **Wilmot-Deary, M.C.**

Buchwald-Werner, S. & **Simmonds, M.S.J.** (2007). Response of an insect pest, *Spodoptera littoralis* to the stimulant glucose. *Planta Medica* 73(9): 961–962.

\*Burgman, M.A., Keith, D., **Hopper, S.D.**, Widyatmoko, D. & Drill, C. (2007). Threat syndromes and conservation of the Australian flora. *Biological Conservation* 134: 73–82.

**Butler, L.H.** (2007). Seed development, re-hydration and variation in seed survival. PhD Thesis. London: University of Reading. 1–241 pp.

Calderon, N., **Zappi, D.C., Taylor, N.P.** & Ceroni, A. (2007). Taxonomy and conservation of *Haageocereus* Backeb. (Cactaceae) in Peru. *Bradleya* 25: 45–124.

**Chase, M.W.** (2007). Barcoding life. *In* McGraw-Hill Yearbook of Science and Technology, 2008. New York: McGraw-Hill. 35–37.

\* —, **Cowan, R.S.**, Hollingsworth, P.M., Van den Berg, C., Madriñan, S., Petersen, G., Seberg, O., Jørgensen, T., Cameron, K.M., Carine, M., Pedersen, N., Hedderson, T.A.J., Conrad, F., Salazar, G.A., Richardson, J.E., Hollingsworth, M.L., **Barracough, T.G., Kelly, L.** & Wilkinson, M. (2007). A proposal for a standardised protocol to barcode all land plants. *Taxon* 56(2): 295–299.

—, **Fay, M.F., Bateman, R., Hedrén, M. & Pillon, Y.** (2007). Allotetraploid evolution in *Dactylorhiza* (Orchidaceae). *Lankesteriana* 7: 187–189.

— *see also under* Endress, M.E.

— *see also under* **Fay, M.F.**

— *see also under* **Forest, F.**

— *see also under* **Frohlich, M.W.**

— *see also under* Gonzáles, F.

— *see also under* Haston, E.

— *see also under* Hodkinson, T.R.

— *see also under* Jones, E.

— *see also under* **Lucas, E.J.**

— *see also under* **Paun, O.**

— *see also under* **Pillon, Y.**

— *see also under* **Simpson, D.A.**

— *see also under* Sotuyo, S.

— *see also under* **Vorontsova, M.S.**

— *see also under* Yoong Lim, K.

— *see also under* Zhu, X.-Y.

Chayamarit, K., Chantaranothai, P., Middleton, D., Parnell, J., **Simpson, D. & Wilkin, P.** (2007). What constitutes a new taxon record for Thailand? *Thai Forest Bulletin (Botany)* 35: 1–3.

**Cheek, M.R.** (2007). Bombacaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 65–65.

— (2007). Brownlowiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 71–71.

— (2007). Byttneriaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 76–76.

— (2007). Helicteraceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 165–165.

— (2007). Malvaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 201–202.

— (2007). Muntingiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 220–220.

— (2007). Pentapetaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 247–248.

— (2007). Sparrmanniaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 307–308.

— (2007). Sterculiaceae. *In* Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 311–312.

— (2007). The identity and conservation status of *Indagator fordii* (Brownlowiaceae/Malvaceae-Brownlowioideae, formerly Tiliaceae), a monotypic tree genus from Queensland, Australia. *Kew Bulletin* 62: 641–645.

— & Dorr, L. (2007). Sterculiaceae. *In* Beentje, H.J. & Ghazanfar, S.A. (eds) Flora of Tropical East Africa. Kew: RBG Kew. 134.

— *see also under* **Brummitt, R.K.**

— *see also under* Mwachala, G.M.

— *see also under* **Rudall, P.J.**

— *see also under* Soltis, D.E.

- Chester, M., Cowan, R.S., Fay, M.F. & Rich, T.C.G.** (2007). Parentage of endemic *Sorbus* L. (Rosaceae) species in the British Isles: evidence from plastid DNA. *Botanical Journal of the Linnean Society* 154: 291–304.
- see also under **Andrade, I.M.**
- see also under **Davis, A.P.**
- see also under **Maurin, O.**
- Cheung, K.** see under **Lysak, M.A.**
- \*Christin, P., Salamin, N., **Savolainen, V.**, Duvall, M.R. & Besnard, G. (2007). C4 photosynthesis evolved in grasses via parallel adaptive genetic changes. *Current Biology* 17: 1241–1247.
- , Salamin, N., **Savolainen, V.** & Besnard, G. (2007). A phylogenetic study of the phosphoenolpyruvate carboxylase multigene family in *Poaceae*: understanding the molecular changes linked to C4 photosynthesis evolution. *Kew Bulletin* 62(3): 455–462.
- Clark, L.G., **Dransfield, S.**, Triplett, J. & **Sánchez-Ken, J.G.** (2007). Phylogenetic relationships among the one-flowered, determinate genera of Bambuseae (Poaceae: Bambusoideae). In Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) *Monocots: Comparative Biology and Evolution – Poales*. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 315–332.
- Clarkson, J.J.** see under Yoong Lim, K.
- Clayton, D.W.** see under **Harman, K.T.**
- see under **Renvoize, S.A.**
- Cleiton José, A.** (2007). Physiological and molecular responses of *Talauma ovata* seeds to drying and imbibition. Thesis. Lavras, Minas Gerais, Brazil: Universidade Federal de Lavras.
- Clennett, C.** (2007). Within these walls. *Kew* 57: 33–36.
- (2007). A taxonomic revision of *Erythronium* L. (Liliaceae). Thesis. London: Open University. 290 pp.
- Clubbe, C.** see under Hamilton, M.A.
- \*Coelho, M.A.N. & **Mayo, S.J.** (2007). Typifications of names of Brazilian taxa of *Anthurium* sect. *Urospadix* (Araceae). *Taxon* 56(1): 211–225.
- Coneybeer, J.** see under **Probert, R.J.**
- Coode, M.J.E.** (2007). *Elaeocarpus* for Flora Malesiana: *E. forbesii*, a Philippine species with unusual features, and some possible associates. *Kew Bulletin* 62(2): 321–328.
- (2007). *Elaeocarpaceae* for Flora Malesiana: new information on *Elaeocarpus* from Borneo and Sulawesi. *Kew Bulletin* 62(2): 329–332.
- (2007). *Elaeocarpus* for Flora Malesiana – the Coilopetalum group in the Lesser Sunda Islands *Kew Bulletin* 56(4): 875–883.
- (2007). *Elaeocarpus* for Flora Malesiana – the Verticillatae subgroup of the Monocera group and a new Philippine species *Kew Bulletin* 56(4): 885–901.
- Cook, F.E.M.** (2007). What's in the pack? Palm potpourri ingredients. *Palms* 51(3): 127–137.
- Cope, T.** see under **Renvoize, S.A.**
- Cowan, R.S.** see under **Chase, M.W.**
- see under **Chester, M.**
- see under O'Reilly, C.L.
- Cowley, J.** (2007). The genus *Roscoea*. Kew: RBG Kew. 190 pp. (Botanical Magazine Monographs)
- Crane, P.R.** & Carvell, W.N. (2007). The importance of history. *Kew Bulletin* 24: 134–154.
- see also under **Banks, H.**
- see also under **Forest, F.**
- Crawford, A., Steadman, K.J., Plummer, J.A., Cochrane, A. & **Probert, R.J.** (2007). Analysis of seed-bank data confirms suitability of international seed-storage standards for the Australian flora. *Australian Journal of Botany* 55: 18–29.
- Cribb, P.J.**, Hermans, J. & **Roberts, D.L.** (2007). *Erasanthe* (Orchidaceae, Epidendroideae, Vandeeae, Aerangidinae), a new endemic orchid genus from Madagascar. *Adansonia* 29(1): 27–30.
- & Hermans, J. (2007). Field Guide to the Orchids of Madagascar. Second edn. 512 pp.
- see also under **Du Puy, D.**
- see also under Fischer, G.A.
- see also under Hermans, J.
- see also under Salazar, G.A.
- see also under Van der Niet, T.
- Culham, A., **Lucas, E.J. & Brummitt, R.K.** (2007). Melianthaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 209–210.
- & **Brummit, R.K.** (2007). Surianaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 313–314.
- Darbyshire, I.** & Kelbessa, E. (2007). *Isoglossa asystasioides*, a striking new species of Acanthaceae from Tanzania. *Kew Bulletin* 62(4): 617–621.
- & **Vollesen, K.** (2007). The transfer of the genus *Peristrophe* to *Dicliptera* (Acanthaceae), with a new species described from eastern Africa. *Kew Bulletin* 62(1): 119–128.
- Davies, H.** see under **Ali, N.**
- Davies, J.** see under **Daws, M.I.**
- Davies, S.J. see under Quek, S.P.
- \*Davies, T.J., Meiri, S., **Barracough, T.G.** & Gittleman, J.L. (2007). Species co-existence and character divergence across carnivores. *Ecology Letters* 10(2): 146–152.
- \***Davis, A.P., Chester, M., Maurin, O. & Fay, M.F.** (2007). Searching for the relatives of *Coffea* (Rubiaceae, Ixoroideae): the circumscription and phylogeny of Coffeae based on plastid sequence data and morphology. *American Journal of Botany* 94(3): 313–329.
- , **Govaerts, R. & Bridson, D.M.** (2007). New combinations in Madagascan Vanguerieae (Rubiaceae) for the genera *Psydrax*, *Pyrostria* and *Rytigynia*. *Blumea* 52(1): 139–145.
- , **Govaerts, R. & Briggs, M.** (2007). Indian Ocean *Mapouria* species transferred to *Psychotria* (Rubiaceae-Psychotriaceae). *Blumea* 52(1): 245–262.
- , Maurin, O., Chester, M., Mvungi, E.F. & **Fay, M.F.** (2007). Phylogenetic relationships in *Coffea* (Rubiaceae) inferred from sequence data. *Association Scientifique Internationale du Café* 21 e Colloque: 868–875.
- & **Bridson, D.M.** (2007). Rubiaceae. In Heywood, V.H., K., B.R., A., C. & O., S. (eds) *Flowering Plant Families of the World*. Kew: RBG Kew. 284–286.
- & Figueiredo, E. (2007). A checklist of the Rubiaceae (coffee family) of *Bioko* and *Annobon* (Equatorial Guinea, Gulf of Guinea). *Systematics and Biodiversity* 5(2): 159–186.
- see also under **Maurin, O.**
- see also under Ruhsam, M.
- see also under Sohmer, S.H.
- \***Daws, M.I.**, Ballard, C., Mullins, C.E., Garwood, N.C., Murray, B.G., Pearson, T.R.H. & Burslem, D.F.R.P. (2007). Allometric relationships between seed mass and seedling characteristics reveal trade-offs for neotropical gap-dependent species. *Oecologia* 154(3): 445–454.
- , Beardmore, T. & **Pritchard, H.W.** (2007). Are there any recalcitrant seeded *Acer* L. species? Evidence based on seed mass and physiological characterisation. In Proceedings of the IUFRO Tree Seeds Meeting 2006. 16–29.
- \*— , Bolton, S., Burslem, D.F.R.P., Garwood, N.C. & Mullins, C.E. (2007). Loss of desiccation tolerance during germination in neo-tropical pioneer seeds: implications for seed mortality and germination characteristics. *Seed Science Research* 17(4): 273–281.

- , Bolton, S., Burslem, D.F.R.P., Mullins, C.E. & Garwood, N.C. (2007). Loss of desiccation tolerance in imbibed seeds: Implications for seed mortality. *In* 5th International Workshop on Desiccation Tolerance & Sensitivity of Seeds & Vegetative Plant Tissue. 73. South Africa.: South African Journal of Botany. 501–501.
- \* ——, **Davies, J., Vaes, E., van Gelder, R. & Pritchard, H.W.** (2007). Two-hundred-year seed survival of *Leucospermum* and two other woody species from the Cape Floristic region, South Africa. *Seed Science Research* 17: 73–79.
- , **Davies, J., Pritchard, H.W., Brown, N.A.C. & Van Staden, J.** (2007). Butenolide from plant-derived smoke enhances germination and seedling growth of arable weed species. *Plant Growth Regulation* 51(1): 73–82.
- , **Hall, J., Flynn, S. & Pritchard, H.W.** (2007). Do invasive species have bigger seeds? Evidence from intra- and inter-specific comparisons. *South African Journal of Botany* 73: 138–143.
- , **Kabadajic, A., Manger, K. & Kranner, I.** (2007). Extreme thermo-tolerance in seeds of desert succulents is related to maximum annual temperature. *South African Journal of Botany* 73(2): 262–265.
- , Wood, C.B., Marks, T.R. & **Pritchard, H.W.** (2007). Desiccation sensitivity in the Arecaceae: Correlates and frequency. *In* Abstract from the 5th International Workshop on Desiccation Tolerance & Sensitivity of Seeds & Vegetative Plant Tissue. 73. South Africa: South African Journal of Botany. 483–483.
- see also under Glidewell, S.
- see also under Gorian, F.
- see also under Jankowska-Blaszczuk, M.
- see also under Suzuki, K.
- Dawson, S.E.** (2007). The identity of *Ixora modesta* Hierin (*Rubiaceae: Pavetteae*). *Kew Bulletin* 62(2): 351–352.
- De Kok, R.P.J.** (2007). The genus *Vitex* L. (*Lamiaceae*) in New Guinea and the South Pacific Islands. *Kew Bulletin* 62(4): 587–603.
- Dent, D.H.** see under Wishnie, M.H.
- Devey, D.S. (2007). Systematics and conservation of Mediterranean insect-mimicking orchids (*Ophrys*). PhD Thesis. London: University of Reading. 173 pp.
- see also under Pillon, Y.
- Dickie, J.B.** see under Beaulieu, J.M.
- see under Moles, A.T.
- Dransfield, J.** see under Baker, W.J.
- see under Shapcott, A.
- see under Trénel, P.
- Dransfield, S.** see under Clark, L.G.
- Dring, J.V.** see under Reynolds, T.
- Drinkell, C.** (2007). Plate 586. *Dracula cordobae*. *Orchidaceae*. *Curtis's Botanical Magazine* 24(2): 101–107.
- see also under Gale, S.
- Du Puy, D. & Cribb, P.J.** (2007). The genus *Cymbidium*. Kew: RBG Kew. 369 pp. (Botanical Magazine Monographs)
- see also under Hermans, J.
- Dunn, R.R., Gove, A.D., **Barracough, T.G., Givnish, T.J. & Majer, J.D.** (2007). Convergent evolution of an ant-plant mutualism across plant families, continents, and time. *Evolutionary Ecology Research* 9(8): 1349–1362.
- Duvall, M.R., Davis, J.I., Clark, L.G., Noll, J.D., Goldman, D.H. & **Sánchez-Ken, J.G.** (2007). Phylogeny of the grasses (*Poaceae*) revisited. *In* Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) *Monocots: Comparative Biology and Evolution – Poales*. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 237–247.
- Edmonds, J.M.** (2007). Forsskal's *Solanum* sect. *Solanum* (*Solanaceae*) specimens. *Kew Bulletin* 62: 657–670.
- Edwards, S. & Leon, C.** (2007). Plate 584. *Isotrema manshuriense*. *Aristolochiaceae*. *Curtis's Botanical Magazine* 24(2): 86–92.
- Elliott, M.S., Abuhamdah, S., **Howes, M.-J.R., Lees, G., Ballard, C.G., Holmes, C., Burns, A., Chazot, P.L., Perry, E.K. & Francis, P.T.** (2007). The essential oils from *Melissa officinalis* L. and *Lavandula angustifolia* Mill. as potential treatment for agitation in people with severe dementia. *International Journal of Essential Oil Therapeutics* 1: 143–152.
- Endress, M.E., Van der Ham, R.W.J.M., Nilsson, S., Civeyrel, L., **Chase, M.W., Sennblad, B., Potgieter, K., Joseph, J., Powell, M., Lorence, D., Zimmerman, Y.M. & Albert, V.A.** (2007). A phylogenetic analysis of alyxieae (*Apocynaceae*) based on *rbcL*, *matK*, *trnL* intron, *trnL-F* spacer sequences, and morphological characters. *Annals of the Missouri Botanical Garden* 94(1): 1–35.
- \***Farjon, A.** (2007). In defence of a conifer taxonomy which recognises evolution. *Taxon* 56(3): 639–641.
- Fay, M.F., Smith, R.J., Zuiderduin, K., Hooper, E., Samuel, R., Bateman, R.M. & Chase, M.W.** (2007). How does hybridization influence the decision making process in conservation? The genus *Orchis* (*Orchidaceae*) as a case history. *Lankesteriana* 7: 135–137.
- , **Thomas, V.E.** & Knapp, S. (2007). Plate 602. *Melissia begoniifolia*. *Solanaceae*. *Curtis's Botanical Magazine* 25: 243–250.
- & **Hall, T.** (2007). *Gethyum atropurpureum*. *Alliaceae*. *Curtis's Botanical Magazine* 24(2): 121–126.
- see also under **Andrade, I.M.**
- see also under **Barbará, T.**
- see also under **Chase, M.W.**
- see also under **Chester, M.**
- see also under **Davis, A.P.**
- see also under **Leitch, I.J.**
- see also under **Lexer, C.**
- see also under **Manley, V.J.**
- see also under **Maurin, O.**
- see also under **Paun, O.**
- see also under **Pillon, Y.**
- see also under Shapcott, A.
- see also under **Wilford, R.**
- \*February, E.C., Higgins, S.I., **Newton, R.J.** & West, A.G. (2007). Trees distribution on a steep environmental gradient in an arid savanna. *Journal of Biogeography* 34(2): 270–278.
- , West, A.G. & **Newton, R.** (2007). The relationship between rainfall, water source and growth for an endangered tree. *Austral Ecology* 32: 397–402.
- Fellows, L.E.** see under **Kite, G.C.**
- \*Finch-Savage, W.E., Cadman, C.S.C., **Toorop, P.E., Lynn, J.R. & Hilhorst, H.W.M.** (2007). Seed dormancy release in *Arabidopsis Cvi* by dry after-ripening, low temperature, nitrate and light shows common quantitative patterns of gene expression directed by environmentally specific sensing. *Plant Journal* 51: 60–78.
- \*Fischer, G.A., Gravendeel, B., Sieder, A., Andriantiana, J., Heiselmayer, P., **Cribb, P.J., Smidt, E.D.C., Samuel, R. & Kiehn, M.** (2007). Evolution of resupination in malagasy species of *Bulbophyllum* (*Orchidaceae*). *Molecular Phylogenetics and Evolution* 45(1): 358–376.
- , Sieder, A., **Cribb, P.J.** & Kiehn, M. (2007). Description of two new species and one new section of *Bulbophyllum* (*Orchidaceae*) from Madagascar. *Adansonia* 29(1): 19–25.
- Flynn, S.** see under **Daws, M.I.**
- \*Fontaneto, D., Herniou, E.A., **Barracough, T.G., Ricci, C. & Melone, G.** (2007). On the reality and recognisability of asexual organisms: morphological analysis of the masticatory apparatus of *bdelloid rotifers*. *Zoologica Scripta* 36(4): 361–370.

- , Herniou, E.A., **Barracough, T.G.** & Ricci, C. (2007). On the global distribution of microscopic animals: New worldwide data on bdelloid rotifers. *Zoological Studies* 46(3): 336–346.
- \*——, Herniou, E.A., Boschetti, C., Caprioli, M., Melone, G., Ricci, C. & **Barracough, T.G.** (2007). Independently evolving species in asexual bdelloid rotifers. *PLoS Biology* 5(4): 914–921.
- \***Forest, F., Chase, M.W., Persson, C., Crane, P.R. & Hawkins, J.A.** (2007). The role of biotic and abiotic factors in evolution of ant dispersal in the Milkwort family (Polygalaceae). *Evolution* 61(7): 1675–1694.
- \*——, **Grenyer, R., Rouget, M., Davies, T.J., Cowling, R.M., Faith, D.P., Balmford, A., Manning, J.C., Proches, S., van der Bank, M., Reeves, G., Hedderston, T.A.J. & Savolainen, V.** (2007). Preserving the evolutionary potential of floras in biodiversity hotspots. *Nature* 445: 757–760.
- \*——, Nanni, I., **Chase, M.W., Crane, P.R.** & Hawkins, J.A. (2007). Diversification of a large genus in a continental biodiversity hotspot: temporal and spatial origin of *Muraltia* (Polygalaceae) in the Cape of South Africa. *Molecular Phylogenetics and Evolution* 43(1): 60–74.
- see also under Manning, J.
- \***Frohlich, M.W. & Chase, M.W.** (2007). After a dozen years of progress the origin of angiosperms is still a great mystery. *Nature* 450: 1184–1188.
- \***Funch, R.R. & Harley, R.M.** (2007). Reconfiguring the boundaries of the Chapada Diamantina National Park (Brazil) using ecological criteria in the context of a human-dominated landscape. *Landscape and Urban Planning* 83: 355–362.
- Furness, C.A.** (2007). Why does some pollen lack apertures? A review of inaperturate pollen in eudicots. *Botanical Journal of the Linnean Society* 155: 29–48.
- , Magallon, S. & **Rudall, P.J.** (2007). Evolution of endoapertures in early-divergent eudicots, with particular reference to pollen morphology in Sabiaceae. *Plant Systematics and Evolution* 263: 77–92.
- & Hesse, M. (2007). Understanding pollen diversity and its role in plant systematics. Proceedings of the symposium held at the XVII IBC, Vienna, July 2005. In *Plant Systematics and Evolution*. Vienna: Vol. 263: 134.
- & Hesse, M. (2007). Preface: Understanding pollen diversity and its role in plant systematics. *Plant Systematics and Evolution* 263(1–2): 1–2.
- see also under **Simpson, D.A.**
- Gale, R.** (2007). Charcoal. 78–80 in Rawlings, M. By a Crystal Brook, Early Riverside Settlement and a medieval chapel at Sutton Poyntz, Dorset.: Salisbury: Wessex Archaeology Ltd.
- (2007). Charcoal. 115–116 in Hunn, J. Lobs Hole, Stevenage: a Romano-British Farmstead *Heritage Network Monograph Series No. 1*.
- (2007). Charcoal. 85–90 in Germany, M. Neolithic and Bronze Age Monuments and Middle Iron Age settlement at Lodge Farm, St Osyth, Essex. *East Anglian Archaeology* 117.
- Gale, S.** (2007). Autogamous seed set in a critically endangered orchid in Japan: pollination studies for the conservation of *Nervilia nipponica*. *Plant Systematics and Evolution* 268(1–4): 59–73.
- & **Drinkell, C.** (2007). Plate 596. *Calanthe arisanensis*. Orchidaceae. *Curtis's Botanical Magazine* 24: 206–210.
- García-Mateos, R., Soto-Hernández, M., Zavala-Chavez, F. & **Kite, G.** (2007). Quinolizidine alkaloids in *Callia secundiflora* (Fabaceae). *Agrociencia* 41(2): 161–167.
- Gardiner, L.M.** (2007). *Vanda tricolor* Lindl. conservation in Java, Indonesia: genetic and geographic structure and history. *Lankesteriana* 7: 272–280.
- Gasson, P.E.** see under **Lucas, E.J.**
- Ghazanfar, S.A.** (2007). Crassulaceae – Apiaceae In *Flora of Oman*. Meise: National Botanic Garden of Belgium. *Flora of Oman*. Vol. 2: 220.
- (2007). Plants of Oman. In *Pride*. Oman: Al Roya Publishers. 14–18.
- (2007). Salt Lovers. In *Pride*. Oman: Al Royal Publishers. 68–70.
- Ghazanfar, S.A. (eds)** see under **Beentje, H.J.**
- Glidewell, S., **Pritchard, H.W.** & Daws, M.I. (2007). Associations between the biophysics of water and desiccation stress in *Vitellaria paradoxa* seeds. In 5th International Workshop on Desiccation Tolerance & Sensitivity of Seeds & Vegetative Plant Tissue. 73. South Africa: South African Journal of Botany. 484–484.
- \*Godfrey, H.C.J., Clark, B.R., Kitching, I.J., **Mayo, S.J.** & Scoble, M.J. (2007). The web and structure of taxonomy. *Systematic Biology* 56: 943–955.
- Gómez-Acevedo, S.L., Magallón, S. & **Rico Arce, M.L.** (2007). Floral development in three species of *Acacia* (Leguminosae, Mimosoideae). *Australian Journal of Botany* 55(1): 30–41.
- \*Gonçalves, E.G., **Mayo, S.J.**, Van Sluys, M.A. & Salatino, A. (2007). Combined genotypic-phenotypic phylogeny of the tribe Spathicarpeae (Araceae) with reference to independent events of invasion to Andean regions. *Molecular Phylogenetics and Evolution* 43(3): 1023–1039.
- Gondwe, D., **Sacandé, M.** & Kambadya, F. (2007). *Sterculia quinqueloba* (Garcke) K. Schum. Release Seed leaflet no. 133. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/133net.pdf>
- \*González, F., Betancur, J., **Maurin, O.**, Freudenstein, J. & **Chase, M.W.** (2007). Metteniusaceae, an early-diverging family in the lamiid clade. *Taxon* 56(3): 795–800.
- Gorian, F., Pasquini, S. & **Daws, M.I.** (2007). Seed size and chilling affect germination of *Larix decidua* Mill. seeds. *Seed Science and Technology* 35(2): 508–513.
- Govaerts, R., Simpson, D.A., Bruhl, J., Egorova, T., Goetghebeur, P. & Wilson, K.** (2007). World Checklist of Cyperaceae – Sedges. Kew: RBG Kew. 765 pp.
- , **Wilkin, P., Saunders, R.M.K., Raz, L., Valdes, O.T., Maas-van de Kamer, H.P. & Zhang, D.-X.** (2007). World Checklist of Dioscoreales. Yams and their allies. London: RBG Kew. 65 pp.
- see also under **Davis, A.P.**
- Goyder, D.J.** (2007). Plate 585. *Asclepias barjoniifolia*. (Apocynaceae: Asclepiadoideae). *Curtis's Botanical Magazine* 24(2): 93–100.
- (2007). Apocynaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 38–40.
- , Nicholas, A. & Liede-Schumann, S. (2007). Phylogenetic relationships in subtribe Asclepiadinae (Apocynaceae: Asclepiadoideae). *Annals of the Missouri Botanical Garden* 94(2): 423–434.
- see also under Harris, T.
- Grace, O.M.** & Sands, M.J.S. (2007). *Balanites maughamii* Sprague. In Van der Vossen, H. & Oyen, L. (eds) *Plant resources of Tropical Africa* 14. Vegetable Oils. Leiden, The Netherlands: Backhuys.
- \***Grayer, R.J.** & Williams, C.A. (2007). Jeffrey B. Harborne (1928–2002) – An appreciation. *Phytochemistry* 68: 22–24.
- see also under Greenham, J.R.
- see also under Kukic, J.
- see also under **Marin, P.D.**
- Green, P.S.** see under **Brummitt, R.K.**
- Greenham, J.R., **Grayer, R.J.**, Harborne, J.B. & Reynolds, V. (2007). Intra- and interspecific variations in vacuolar flavonoids among *Ficus* species from the Budongo Forest, Uganda. *Biochemical Systematics and Ecology* 35(2): 81–90.
- \*Gregory, T.R., Nicol, J.A., Tamm, H., Kullman, B., Kullman, K., **Leitch, I.J.**, Murray, B.G., Kapraun, D.F., Greilhuber, J. & Bennett, M.D. (2007). Eukaryotic genome size databases. *Nucleic Acids Research* 35(D332–D338 S. Iss. S1):
- Grenyer, R.** see under Bininda-Emonds, O.R.P.
- see under **Forest, F.**
- Hall, J.** see under **Daws, M.I.**

- Hall, T. (2007). Plate 578. *Iris narynensis*. Iridaceae. *Curtis's Botanical Magazine* 24(1): 34–41.
- see also under **Fay, M.F.**
- Hamilton, K. (2007). *Ex situ* conservation of Australian *Citrus* species: investigations on seed biology, cryopreservation and *in vitro* culture. PhD Thesis. Queensland, Australia: Griffith University. 1–304 pp.
- Hamilton, K.N., Ashmore, S.E., Drew, R.A. & Pritchard, H.W. (2007). Seed morphology and ultrastructure in *Citrus garrawayi* (Rutaceae) in relation to germinability. *Australian Journal of Botany* 55(6): 618–627.
- Hamilton, M.A., Robbins, S.K., Johnson, N.P., Sanchez, M.D. & Clubbe, C. (2007). Report on the status of *Acacia anegadensis* Britton: including a germination and cultivation protocol: internal report / Royal Botanic Gardens, Kew, UK Overseas Territories Science Team. Kew: RBG Kew.
- Hanson, L. see under **Leitch, I.J.**
- Harley, M. see under **Sannier, J.**
- Harley, R.M. see under **Funch, R.R.**
- Harman, K.T. & Clayton, D.W. (2007). Recent developments in Kew's grass databases (GrassBase). *Kew Bulletin* 62(3): 375–379.
- Harris, T. & Goyder, D.J. (2007). A new species of *Secamone* (Apocynaceae: *Secamonoideae*) from southern Tanzania and a re-evaluation of *S. whytei*. *Kew Bulletin* 62(2): 281–284.
- Harrison, C. (2007). In a class of their own. *Kew* 56: 26–29.
- Harvey, Y. see under **Pinniger, D.**
- \*Haston, E., Richardson, J.E., Stevens, P.F., Chase, M.W. & Harris, D.J. (2007). A linear sequence of Angiosperm Phylogeny Group II families. *Taxon* 56(1): 7–12.
- Hawkins, J.A. see under **Forest, F.**
- Hay, F. see under **Ali, N.**
- see under **Probert, R.J.**
- Hepper, F.N. (2007). Changes in street bark during 60 years. *Arbicultural Journal* 29: 291–295.
- (2007). A year spent in Egypt by the Royal Danish Expedition, 1761–1762. *Bulletin of the Association for the study of travel in Egypt and the Near East* 31: 17–18.
- (2007). The history of Petersham Common. *Richmond History* (28): 64–74.
- (2007). Continuing plant studies of plants and animals and their Arabic names from the Royal Danish Expedition, 1761–1762. In *Natural Resources and Cultural Connections of the Red Sea*. Oxford: Archaeopress. 57–62.
- (2007). Lake Chad: the disappearing Sahara sea. *The Nigerian Field* 72: 47–59.
- Hermans, J., Hermans, C., Du Puy, D., Cribb, P.J. & Bosser, J. (2007). The orchids of Madagascar: annotated checklist. 2nd ed. edn. Kew: RBG Kew. 398 pp.
- Herring, C. see under **Reynolds, T.**
- Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) (2007). Flowering plant families of the world. Kew: RBG Kew. 424–424 pp.
- & Brummitt, R.K. (2007). Pottingeriaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 265–265.
- Hind, D.J.N. (2007). Asteraceae (Compositae). In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG Kew. 46–52.
- , Strange, K. & Broome, J. (2007). Plate 576. *Helichrysum arwae* (Compositae). *Curtis's Botanical Magazine* 21: 22–29.
- , Strange, K. & Broome, J. (2007). Plate 603. *Helichrysum orientale* (Compositae). *Curtis's Botanical Magazine* 24(4): 251–259.
- Hodkinson, T.R., Salamin, N., Chase, M.W., Bouchenak-Khelladi, Y., Renvoize, S.A. & Savolainen, V. (2007). Large trees, supertrees, and diversification of the grass family. In Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) *Monocots: Comparative Biology and Evolution – Poales*. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 248–258.
- Hoffmann, P. (2007). Euphorbiaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 144–146.
- (2007). Pandaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 240–241.
- (2007). Phyllanthaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 250–252.
- (2007). Microdendraceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 254–255.
- & McPherson, G. (2007). Revision of *Wielandia*, including *Blotia* and *Petalodiscus* (Phyllanthaceae Euphorbiaceae S.l.). *Annals of the Missouri Botanical Garden* 94(3): 519–553.
- see also under **Vorontsova, M.S.**
- Hopkins, H.C.F. (2007). *Geissois Bradfordii*, a new species of Cunoniaceae from New Caledonia. *Kew Bulletin* 62(2): 275–280.
- , Fogliani, B. & Pillon, Y. (2007). Four new species in the endemic genus *Codia* (Cunoniaceae) from New Caledonia. *Kew Bulletin* 62(2): 259–274.
- \*Hopper, S.D. (2007). New life for systematics. *Science* 316(5828): 1097.
- & Brown, A.P. (2007). A revision of Australia's hammer orchids (Drakaea: Orchidaceae), with some field data on species-specific sexually deceived wasp pollinators. *Australian Systematic Botany* 20(3): 252–285.
- & Nicolle, D. (2007). Diamond gum (*Eucalyptus rhomboidea*: Myrtaceae), a new threatened species endemic to the Bremer Range of the Southwest Australian Floristic Region. *Nuytsia* 17: 185–194.
- see also under **Burgman, M.A.**
- see also under **Krauss, S.L.**
- see also under **Phillips, R.D.**
- Hörandl, E. & Paun, O. (2007). Patterns and sources of genetic diversity in apomictic plants: implications for evolutionary potentials. In Hörandl, E., Grossniklaus, U., Sharbel, T. & van Dijk, P. (eds) *Apomixis: evolution, mechanisms and perspectives*. Ruggell, Liechtenstein: A.R.G. Gantner Ver. 169–194.
- Houghton, P.J., Howes, M.J., Lee, C.C. & Steventon, G. (2007). Uses and abuses of *in vitro* tests in ethnopharmacology: visualizing an elephant. *Journal of Ethnopharmacology* 110(3): 391–400.
- Howes, M.-J.R. see under **Elliott, M.S.**
- see under **Houghton, P.J.**
- \*Jankowska-Blaszczyk, M. & Daws, M.I. (2007). Impact of red:far red ratios on germination of temperate forest herbs in relation to shade tolerance, seed mass & persistence in the soil. *Functional Ecology* 21(6): 1055–1062.
- \*Jansen, S., Sano, Y., Choat, B., Rabaey, D., Lens, F. & Dute, R.R. (2007). Pit membranes in imperforate tracheary elements of Rosaceae and related families: new records of tori and pseudo-tori. *American Journal of Botany* 94: 503–514.
- see also under **Lens, F.**
- see also under **Schmitz, N.**
- see also under **Stepanova, A.**
- see also under **Watanabe, T.**
- Jansen-Jacobs, M.J. (2007). Series A: A Phanerogams Fascicle 24. Hernandiaceae – Piperaceae 24. 216 pp. (Flora of the Guianas (24).)

- (2007). Series A: Phanerogams Fascicle 25 105a. Eremolepidaceae and 105b. Loranthaceae. 106 Viscaceae. Kew: RBG Kew. (Flora of the Guianas (25).)
- Jerry, A.C., **Simpson, D.A.**, Foley, M.J.Y. & Porter, M. (2007). Sedges of the British Isles. 1. 575 pp. (Botanical Society of the British Isles Handbook)
- Jones, E., **Simpson, D.A.**, Hodkinson, T.R., **Chase, M.W.** & Parnell, J.A.N. (2007). The Juncaceae-Cyperaceae interface: A combined plastid sequence analysis. In Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) *Monocots: Comparative Biology and Evolution – Poales*. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 55–61.
- Joseph, J.A. & Lexer, C.** (2007). A set of novel DNA polymorphisms within candidate genes potentially involved in ecological divergence between *Populus alba* and *P. tremula*, two hybridising European forest trees. *Molecular Ecology Notes* Published advanced online, doi:10.1111/j.1471-8286.2007.01919.x.
- see also under Endress, M.E.
- see also under **Lexer, C.**
- Kabadajic, A.** see under **Daws, M.I.**
- \*Karrenberg, S., **Lexer, C.** & Rieseberg, L.H. (2007). Reconstructing the history of selection during homoploid hybrid speciation. *American Naturalist* 169(6): 725–737.
- Kelly, L.** see under **Chase, M.W.**
- Kestenholz, C., **Stevenson, P.C.** & Belmain, S.R. (2007). Comparative study of field and laboratory evaluations of the ethnobotanical *Cassia sophora* L. (Leguminosae) for bioactivity against the storage pests *Callosobruchus maculatus* (F.) (Coleoptera: Bruchidae) and *Sitophilus oryzae* (L.) (Coleoptera: Curculionidae). *Journal of Stored Products Research* 43(1): 79–86.
- Kirkup, D.** see under **Andrade, I.M.**
- Kite, G.C.**, Horn, J.M., Romeo, J.T., **Fellows, L.E.**, Lees, D.C., Scofield, A.M. & Smith, N.G. (2007). *a*-Homonojirimicina y 2,5-Dihidroximetil-3,4-dihidroxipirrolidina: alcaloides inhibitorios de glucosidasa en la plolla *Urania fulgens*. In Leigh, E.G., Herre, E.A., Jackson, J.B.C. & Santos-Granero, F. (eds) *Ecología y Evolución en los Trópicos*. Smithsonian Tropical Research Institute.
- \*—, **Porter, E.A. & Simmonds, M.S.J.** (2007). Chromatographic behaviour of steroidal saponins studied by high-performance liquid chromatography–mass spectrometry. *Journal of Chromatography A* 1148(2): 177–183.
- \*—, **Stoneham, C.A. & Veitch, N.C.** (2007). Flavonol tetraglycosides and other constituents from leaves of *Styphnolobium japonicum* (Leguminosae) and related taxa. *Phytochemistry* 68(10): 1407–1416.
- see also under Garcia-Mateos, R.
- see also under **Marin, P.D.**
- see also under San Miguel-Chávez, R.
- Kitschke, M.** see under **Lysak, M.A.**
- \*Koch, M.A., Dobes, C., Kiefer, C., Schmickl, R., Klimes, L. & **Lysak, M.A.** (2007). Supernetwork identifies multiple events of plastid trnF(GAA) pseudogene evolution in the Brassicaceae. *Molecular Biology and Evolution* 24(1): 63–73.
- Kokubun, T.**, Irwin, D., Legg, M., **Veitch, N.C. & Simmonds, M.S.J.** (2007). Serialynic acid, a new phenol with an isopentenyl side chain from *Antrodia serialis*. *Journal of Antibiotics* 60(4): 285–288.
- \*—, Rozwadowski, Z. & Duddeck, H. (2007). Benzaldehyde derivatives from *Sarcodontia crocea*. *Journal of Natural Products* 70(9): 1539–1541.
- , Shiu, W.K.P. & Gibbons, S. (2007). Inhibitory activities of lichen-derived compounds against methicillin- and multidrug-resistant *Staphylococcus aureus*. *Planta Medica* 73(2): 176–179.
- see also under **Aguirre-Hudson, B.**
- see also under Alipieva, K.
- see also under Kostadinova, E.P.
- \*Kostadinova, E.P., Alipieva, K.I., **Kokubun, T.**, Taskova, R.M. & Handjieva, N.V. (2007). Phenylethanoids, iridoids and a spirostanol saponin from *Veronica turilliana*. *Phytochemistry* 68: 1321–1326.
- Kranner, I.** see under **Daws, M.I.**
- Krauss, S.L., Hermanutz, L., **Hopper, S.D.** & Coates, D.J. (2007). Population-size effects on seeds and seedlings from fragmented eucalypt populations: implications for seed sourcing for ecological restoration. *Australian Journal of Botany* 55: 390–399.
- Kukic, J., Savic, M., Gavrilovic, I., **Grayer, R.**, Marin, P., Tomic, M. & Petrovic, S. (2007). Behavioral and chemical characterisation of MeOH extracts of two *Stachys* taxa. *Planta Medica* 73(9): 998–998.
- Kynast, R.G.**, Galatowitsch, M.W., Huettl, P.A., Phillips, R.L. & Rines, H.W. (2007). Adding B-chromosomes of *Zea mays* L. to the genome of *Avena sativa* L. *Maize Genet Coop Newsletter* 81: 17–19.
- Lansdown, R.V. & **Brummitt, R.K.** (2007). Callitrichaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 79–80.
- \***Leitch, I.J.** (2007). Genome sizes through the ages. *Heredity* 99: 121–122.
- \*—, Beaulieu, J.M., Cheung, K., **Hanson, L., Lysak, M.A. & Fay, M.F.** (2007). Punctuated genome size evolution in Liliaceae. *Journal of Evolutionary Biology* 20(6): 2296–2308.
- see also under Beaulieu, J.M.
- see also under Gregory, T.R.
- \*Lens, F., Baas, P., **Jansen, S.** & Smets, E. (2007). A search for phylogenetically informative wood characters within Lecythidaceae s.l. *American Journal of Botany* 94: 483–502.
- \*—, Schonenberger, J., Baas, P., **Jansen, S.** & Smets, E. (2007). The role of wood anatomy in phylogeny reconstruction of Ericales. *Cladistics* 23(3):
- Leon, C.** see under **Edwards, S.**
- Lewis, G.P.** see under Sotuyo, S.
- Lexer, C.** (2007). Plant hybridization and speciation. In *Yearbook of Science & Technology*. McGraw-Hill, U.S.A.
- \*—, Buerkle, C.A., **Joseph, J.A.**, Heinze, B. & **Fay, M.F.** (2007). Admixture in European *Populus* hybrid zones makes feasible the mapping of loci that contribute to reproductive isolation and trait differences. *Heredity* 98: 74–84.
- \*—, **Van Loo, M. & Barbará, T.** (2007). Towards forest community and ecosystem genomics. *New Phytologist* 173: 673–676.
- see also under **Andrade, I.M.**
- see also under **Barbará, T.**
- see also under Brouillette, L.C.
- see also under **Joseph, J.A.**
- see also under Karrenberg, S.
- see also under Rieseberg, L.H.
- Li, A.-R., Guan, K.-Y. & **Probert, R.J.** (2007). Effects of light, scarification, and gibberellic acid on seed germination of eight *Pedicularis* species from Yunnan, China. *HortScience* 42: 1259–1262.
- Linington, S.H.** (2006 [2007]). The Millennium Seed Bank Project: conserving plants from across the world. In *Seminário internacional os jardins botânicos como patrimônio universal*. Botanical gardens as an universal heritage. Faial Botanic Garden 20th anniversary. Horta, Azores: 81–86.
- see also under Aplin, D.M.
- Lock, J.M.** see under **Brummitt, R.K.**
- Lucas, E.J.** (2007). Myrtaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 225–226.

- \* —, Harris, S.A., Mazine, F.F., Belsham, S.R., **Nic Lughadha, E.M.**, **Telford, A.**, **Gasson, P.E.** & **Chase, M.W.** (2007). Suprageneric phylogenetics of Myrtales, the generically richest tribe in Myrtales (Myrtales). *Taxon* 56(4): 1105–1128.
- see also under Culham, A.
- \***Lysak, M.**, **Cheung, K.**, **Kitschke, M.** & Bure?, P. (2007). Ancestral chromosomal blocks are triplicated in Brassicaceae species with varying chromosome number and genome size. *Plant Physiology* 145: 402–410.
- see also under Koch, M.A.
- see also under **Leitch, I.J.**
- Mackinder, B.A.** & **Wieringa, J.J.** (2007). Novitates Gabonensis 58: two new species of *Berlinia* (Leguminosae – Caesalpinioideae: Detarieae). *Kew Bulletin* 62(1): 159–164.
- Manger, K.** see under **Daws, M.I.**
- Manley, V.J., Cheffings, C.M. & **Fay, M.F. (eds)** (2007). Plant Diversity Challenge: 3 Years – 16 Targets – 1 Challenge. Progress in the UK towards the Global Strategy for Plant Conservation. Peterborough, UK: Joint Nature Conservation Committee. Plantlife International, Joint Nature Conservation Committee, Royal Botanic Gardens Kew 1–20 pp.
- \*Manning, J., **Forest, F.** & **Vinnersten, A.** (2007). The genus *Colchicum* L. redefined to include *Androcymbium* Willd. based on molecular evidence. *Taxon* 56(3): 872–882.
- Marin, P.D.**, **Veitch, N.C.**, **Grayer, R.J.**, **Kite, G.C.**, **Sokovic, M.** & **Janackovic, P.** (2007). Flavonoids from *Phlomis fruticosa* (Lamiaceae) growing in Montenegro. *Biochemical Systematics and Ecology* 35: 462–466.
- Mathew, B.F.** (2007). Plate 577. *Iris bloudowii*. Iridaceae. *Curtis's Botanical Magazine* 24(1): 30–33.
- & **Seberg, O.** (2007). Amaryllidaceae. In Heywood, V.H., **Brummitt, R.K.**, **Culham, A.** & **Seberg, O. (eds)** Flowering Plant Families of the World. Kew, UK: RBG, Kew. 328–329.
- & **Seberg, O.** (2007). Iridaceae. In Heywood, V.H., **Brummitt, R.K.**, **Culham, A.** & **Seberg, O. (eds)** Flowering Plant Families of the World. Kew, UK: RBG, Kew. 328–329.
- see also under **Brickell, C.**
- see also under **Rix, M.**
- \***Maurin, O.**, **Davis, A.P.**, **Chester, M.**, **Mvungi, E.F.**, **Jaufeerally-Fakim, Y.** & **Fay, M.F.** (2007). Towards a phylogeny for *Coffea* (Rubiaceae): Identifying well-supported lineages based on nuclear and plastid DNA sequences. *Annals of Botany* 100(7): 1565–1583.
- see also under **Davis, A.P.**
- see also under **González, F.**
- see also under **Vorontsova, M.S.**
- Mayo, S.J.** see under **Andrade, I.M.**
- see under **Barbará, T.**
- see under **Coelho, M.A.N.**
- see under **Godfrey, H.C.J.**
- see under **Goncalves, E.G.**
- Moat, J. & Smith, P.P.** (2007). Atlas of the vegetation of Madagascar / Atlas de la végétation de Madagascar. London: Royal Botanic Gardens, Kew. 1–124 pp.
- \***Moles, A.T.**, **Ackerly, D.D.**, **Tweddle, J.C.**, **Dickie, J.B.**, **Smith, R.D.**, **Leishman, M.R.**, **Mayfield, M.M.**, **Pitman, A.J.**, **Wood, J.T.** & **Westoby, M.** (2007). Global patterns in seed size. *Global Ecology and Biogeography* 16(1): 109–116.
- Mossebo, D.C.**, **Njouonkou, A.L.**, **Courtecuise, R.** & **Akoa, A.** (2007). Enzymatic activities and decay characteristics in some wood-rotting *Basidiomycetes* from Cameroon and determination of the time-dependent activity of syringaldazine in spot tests. *Cryptogamie Mycologie* 28(2): 107–121.
- Muasya, A.M.**, **Simpson, D.A.** & **Smets, E.** (2007). *Isolepis levynsiana*, a new name for *Cyperus tenellus* (Cyperaceae). *Novon* 17(1): 59–59.
- Muellner, A.N.**, **Vassiliades, D.D.** & **Renner, S.S.** (2007). Placing Biebersteiniaceae, a herbaceous clade of *Sapindales*, in a temporal and geographic context. *Plant Systematics and Evolution* 266(3–4): 233–252.
- Müller, J.V.** (2007). Herbaceous vegetation of seasonally wet habitats on inselbergs and lateritic crusts in West and Central Africa. *Folia Geobotanica* 42: 29–61.
- & **Wezel, A.** (2006 [2007]). Inundated grasslands with *Echinochloa colona* in semi-arid and sub-humid tropical West Africa. *Belgian Journal of Botany* 139(2): 203–219.
- see also under **Becker, T.**
- Muthoka, P.N.** (2007). Comparative longevity studies in selected succulent genera: *Euphorbia*, *Kalanchoe* and *Edithcolea*. PhD Thesis. Maseno, Western Kenya, Africa: Maseno University. 1–156 pp.
- Mwachala, G.M.**, **Cheek, M.J.**, **Fischer, E.** & **Muasya, A.M.** (2007). A new species of *Dracaena* L. (Dracaenaceae – Ruscaceae) from Mt Kupe and the Bakossi Mts, Cameroon. *Kew Bulletin* 62(4): 613–621.
- & **Mbugua, P.** (2007). Dracaenaceae. In **Beentje, H.J.** & **Ghazanfar, S.A. (eds)** Flora of Tropical East Africa. Kew: RBG Kew. 44.
- Nadarajan, J.**, **Staines, H.J.**, **Benson, E.E.**, **Marzalina, M.**, **Krishnapillay, B.** & **Harding, K.** (2007). Optimization of cryopreservation for *Sterculia cordata* zygotic embryos using vitrification techniques. *Journal of Tropical Forest Science* 19(2): 79–85.
- Nandha, B. & Sarasan, V.** (2007). Micropropagation of *Aloe calcairophila* and *Aloe polyphylla*: the effect of different carbon sources on shoot multiplication and rooting. *Bradleya* 25: 33–36.
- Newton, R.J.** see under **February, E.C.**
- Nic Lughadha, E.M.** see under **Lucas, E.J.**
- Nyamongo, D.O.** (2007). Seed dormancy and comparative longevity in two sub-species of *Vernonia galamensis* (nairobiensis & afro-montana var. gibbosa) (Cass.) Less. PhD Thesis. Maseno, Western Kenya, Africa: Maseno University. 1–257 pp.
- Orchard, A.E.**, **George, A.S.** & **Brummitt, R.K.** (2007). Publication and typification of the name *Stenocarpus sinuatus* (Proteaceae). *Journal Adelaide Botanical Garden* 21: 85–87.
- O'Reilly, C.L.**, **Cowan, R.S.** & **Hawkins, J.A.** (2007). Amplified fragment length polymorphism genetic fingerprinting challenges the taxonomic status of near-endemic species *Chara curta* Nolte ex Kütz. (Characeae). *Botanical Journal of the Linnean Society* 155: 467–476.
- Owens, S. & Rix, M.** (2007). Plate 595. *Franklinia alatamaha*. Theaceae. *Curtis's Botanical Magazine* 24(3): 186–189.
- Paggi, G.M.** see under **Barbará, T.**
- Palma-Silva, C.** see under **Barbará, T.**
- \***Paun, O.**, **Fay, M.F.**, **Soltis, D.E.** & **Chase, M.W.** (2007). Genetic and epigenetic alterations after hybridization and genome doubling. *Taxon* 56: 649–656. Science Programmes CPB, Science Teams LSSy Notes: Yes (Journal website). *Taxon* 56: 649–656.
- see also under **Hörandl, E.**
- see also under **Terrab, A.**
- \***Perret, M.**, **Chautems, A.**, **Spichiger, R.**, **Barracough, T.G.** & **Savolainen, V.** (2007). The geographical pattern of speciation and floral diversification in the Neotropics: the tribe Sinningieae (Gesneriaceae) as a case study. *Evolution* 61(7): 1641–1660.
- Phillips, R.D.**, **Brown, A.P.**, **Dixon, K.W.** & **Hopper, S.D.** (2007). Orchid biogeography and rarity in a biodiversity hotspot: the Southwest Australian Floristic Region. *Lankasteriana* 7(93–96):
- Phulphong, K. & Simpson, D.A.** (2007). A new species of *Carex* (Cyperaceae) from Thailand. *Kew Bulletin* 62(2): 293–296.

- \*Pillon, A., Fay, M.F., Hedrén, M., Bateman, R.M., Devey, D., Shipunov, A.B., Van der Bank, M. & Chase, M.W. (2007). Evolution and temporal diversification of western European polyploid species complexes in *Dactylorhiza* (Orchidaceae). *Taxon* 56(4): 1185–1208.
- , Qamaruz-Zaman, F., Fay, M.F., Hendoux, F. & Piquot, Y. (2007). Genetic diversity and ecological differentiation in the endangered fen orchid (*Liparis loeselii*). *Conservation Genetics* 8(1): 177–184.
- \*——— & Chase, M.W. (2007). Taxonomic exaggeration and its effects on orchid conservation. *Conservation Biology* 21(1): 263–265.
- see also under Chase, M.W.
- Pinniger, D. & Harvey, Y. (2007). The Stockholm beetle (*Trogoderma angustum*) – a new risk to herbarium collections. *Natural Sciences Collections Association News*(12): 2–3.
- Pinto, L.V.A. (2007). Germinação de sementes de lobeira (*Solanum lycocarpum* St. Hil): mecanismo e regulação. Thesis. Lavras, Minas Gerais, Brazil: Universidade Federal de Lavras.
- \*———, da Silva, E.A.A., Davide, A.C., Mendes de Jesus, V.A., Toorop, P.E. & Hillhorst, H.W.M. (2007). Mechanism and control of *Solanum lycocarpum* seed germination. *Annals of Botany* 100(6): 1175–1187.
- Polhill, R.M. (2007). Eremolepidaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 139–139.
- (2007). Loranthaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 195–196.
- (2007). Misodendraceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 215–215.
- (2007). Viscaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 333–334.
- see also under Brummitt, R.K.
- see also under Timberlake, J.R.
- Ponsonby, L. see under Stiff, R.L.A.
- Pope, G.V. see under Timberlake, J.R.
- Porter, E.A. see under Kite, G.C.
- Powell, M. see under Endress, M.E.
- \*Prenner, G. & Rudall, P.J. (2007). Comparative ontogeny of the cyathium in *Euphorbia* (Euphorbiaceae) and its allies: exploring the organ-flower-inflorescence boundary. *American Journal of Botany* 94(10): 1612–1629.
- Pritchard, H.W. (2007). Cryopreservation of desiccation-tolerant seeds. In Day, J.G. & Stacey, G. (eds) Cryopreservation and freeze-drying protocols (Methods in molecular biology). 2nd. ed. Totowa, N.J. Humana Press. 185–201.
- see also under Daws, M.I.
- see also under Glidewell, S.
- see also under Hamilton, K.N.
- see also under Suzuki, K.
- Probert, R., Adams, J., Coneybeer, J., Crawford, A. & Hay, F. (2007). Seed quality for conservation is critically affected by pre-storage factors. *Australian Journal of Botany* 55(3): 326–335.
- see also under Ali, N.
- see also under Crawford, A.
- see also under Li, A.-R.
- \*Purcell, D., Sompong, U., Yim, L.C., Barraclough, T.G., Peerapornpisal, Y. & Pointing, S.B. (2007). The effects of temperature, pH and sulphide on the community structure of hyperthermophilic streamers in hot springs of northern Thailand. *Fems Microbiology Ecology* 60(3): 456–466.
- \*Quek, S.P., Davies, S.J., Ashton, P.S., Itino, T. & Pierce, N.E. (2007). The geography of diversification in mutualistic ants: a gene's-eye view into the Neogene history of Sundaland rain forests. *Molecular Ecology* 16(10): 2045–2062.
- Rakotonasolo, F. (2007). Etude des représentants Malgaches de la tribu Gardenieae (Rubiaceae), en particulier *Hyperacanthus* E Mey. ex Bridson. PhD Thesis. Antananarivo, Madagascar: University of Antananarivo. 240 pp.
- Ramsay, M.M. see under Rowntree, J.K.
- Renvoize, S., Clayton, D., Cope, T. & Williamson, H. (2007). An electronic world grass flora. In Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) Monocots: Comparative Biology and Evolution – Poales. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 267–270.
- see also under Hodkinson, T.R.
- see also under Stancik, D.
- \*Reynolds, T. (2007). The evolution of chemosystematics. *Phytochemistry* 68: 2887–2895.
- , Dring, J.V. & Herring, C. (2007). Phenolics in *Lonchocarpus* (Leguminosae), a review with some new findings. *Kew Bulletin* 62: 1–36.
- Rico Arce, M.L. (2007). A checklist and synopsis of American species of *Acacia* (Leguminosae: Mimosoideae). *Conabio*: 207.
- (2007). *Acacia, Acaciella, Cujaba*. In Familia Leguminosae, Subfamilia Mimosoideae. Flora del Bajío de Regiones Adyacentes. Vol. 150: 8–50, 50–68, 85–89.
- & Magaña Rueda, P. (2007). La nomenclatura botánica en la sistemática del siglo XXI. *Ciencias* 87(Special issue on the agaves of Mexico): 70–76.
- see also under Atahuachi, M.B.
- see also under Gómez-Acevedo, S.L.
- Rieseberg, L.H., Kim, S.C., Randell, R.A., Whitney, K.D., Gross, B.L., Lexer, C. & Clay, K. (2007). Hybridization and the colonization of novel habitats by annual sunflowers. *Genetica* 129(2): 149–165.
- Rix, M. & Egrik, E.B. (eds) (2007). Flowers of Anatolia = Anadolu'nun çiçekleri / Fatih Orbay. Istanbul: Tekfen Holding A S. 338 pp.
- & Mathew, B.F. (2007). Plate 582. *Puschkinia peshmenii*. Hyacinthaceae. *Curtis's Botanical Magazine* 24(1): 54–57.
- & Strange, K. (2007). Plate 579. *Fritillaria gussichae*. *Curtis's Botanical Magazine* 24: 42–45.
- & Zarrei, M. (2007). Plate 580. *Fritillaria karelini*. Liliaceae *Curtis's Botanical Magazine* 24: 46–49.
- & Zarrei, M. (2007). Plate 581. *Fritillaria gibbosa*. Liliaceae *Curtis's Botanical Magazine* 24: 50–53.
- see also under Owens, S.
- see also under Strange, K.
- see also under Wilford, R.
- see also under Zarrei, M.
- \*Roberts, D.L. & Bateman, R.M. (2007). Do ambush predators prefer rewarding or non-rewarding orchid inflorescences? *Biological Journal of the Linnean Society* 92(4): 763–771.
- see also under Cribb, P.J.
- Roberts, P.J. & Spooner, B.M. (2007). Heterobasidiomycetes from the Kimberley region, Western Australia. *Kew Bulletin* 62(1): 153–158.
- Rocha, E.A., Agra, M.F., Taylor, N.P. & Zappi, D.C. (2007). Lista Anotada de Cactaceae no Estado da Paraíba, Brasil. In Bradea. Rio de Janeiro: Vol. 01: 61–68.
- , Machado, I.C. & Zappi, D.C. (2007). Floral biology of *Pilosocereus tuberculatus* (Werderm). Byles and Rowley: a bat pollinated cactus endemic from the caatinga in northeastern Brazil. *Bradleya* 25: 129–144.

- \***Rønsted, N., Salvo, G. & Savolainen, V.** (2007). Biogeographical and phylogenetic origins of African fig species (*Ficus* section *Galoglychia*). *Molecular Phylogenetics and Evolution* 43(1): 190–201.
- Rosselli, S., Bruno, A., **Simmonds, M.S.J.**, Senatore, F., Rigano, D. & Formisano, C. (2007). Volatile constituents of *Scutellaria rubicunda* Hornem subsp. *linnaeana* (Caruel) Rech. (Lamiaceae) endemic in Sicily. *Biochemical Systematics and Ecology* 35(11): 797–800.
- , Maggio, A.M., Raceuglia, R.A., **Simmonds, M.S.J.**, Arnold, N.A. & Bruno, M. (2006 [2007]). Guaianolides from the aerial parts of *Centaurea hololeuca*. *Natural Product Communications* 1(4): 281–285.
- Roux, J.P., **Shaffer-Fehre, M. & Verdcourt, B.** (2007). Dryopteridaceae. In Beentje, H.J. & Ghazanfar, S.A. (eds) *Flora of Tropical East Africa*. RBG Kew. 54.
- \***Rowntree, J.K.**, Duckett, J.G., Mortimer, C.L., **Ramsay, M.M.** & Pressel, S. (2007). Formation of specialized propagules resistant to desiccation and Cryopreservation in the threatened moss *Ditrichum plumbicola* (*Ditrichales*, *Bryopsida*). *Annals of Botany* 100(3): 483–496.
- \***Rudall, P.**, Sokoloff, D.D., Remizowa, M.V., Conran, J.G., Davis, J., Macfarlane, T.D. & Stevenson, D.W. (2007). Morphology of Hydatellaceae, an anomalous aquatic family recently recognized as an early-divergent angiosperm lineage. *American Journal of Botany* 94(7): 1073–1092.
- (2007). *Anatomy of Flowering Plants. An Introduction to structure and development*. 3rd (revised) edn. UK: Cambridge University Press.
- , Strange, A., Cunniff, J. & **Cheek, M.** (2007). Floral anatomy of *Kupea martinetegei* (*Triuridaceae*). *Kew Bulletin* 62(2): 287–292.
- \* — & **Bateman, R.M.** (2007). Developmental bases for key innovations in the seed-plant microgametophyte. *Trends in Plant Science* 12(7): 317–326.
- see also under **Bateman, R.M.**
- see also under **Bello, M.A.**
- see also under **Furness, C.A.**
- see also under **Prenner, G.**
- see also under **Sajo, M.G.**
- Ruhsam, M. & **Davis, A.P.** (2007). A taxonomic revision of the genus *Flagenium* Baill. (Rubiaceae-Octotropideae). *Botanical Journal of the Linnean Society* 155(4): 557–570.
- Sacande, M.** (2007). *Azelia africana*. Release Seed leaflet no. 118. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/118net.pdf>
- (2007). *Borassus akeassii* Bayton, Ouedraogo & Guinko sp. nov. Release Seed leaflet no. 121. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/121net.pdf>
- (2007). *Lannea microcarpa* Engl. Release Seed leaflet no. 123. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/123net.pdf>
- , **Vautier, H.** & Sanon, M.D. (2007). *Dalbergia melanoxylo* Guill. & Perr. Release Seed leaflet no. 135. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/135net.pdf>
- & Clethero, C.L. (2007). *Parkia biglobosa* (Jacq.) G. Don. Release Seed leaflet no. 124. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/124net.pdf>
- & Sanogo, S. (2007). *Anogeissus leiocarpus* (DC.) Guill. & Perr. Release Seed leaflet no. 119. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/119net.pdf>
- & Sanon, M.D. (2007). *Pterocarpus lucens* Lepr. Release Seed leaflet no. 125. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/125net.pdf>
- & Sanon, M.D. (2007). *Combretum micranthum* G. Release Seed leaflet no. 129. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/129net.pdf>
- & Sanon, M.D. (2007). *Combretum nigricans* Lepr. Ex Guill. & Perr. Release Seed leaflet no. 130. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/130net.pdf>
- & Sanon, M.D. (2007). *Sterculia setigera* Delille. Release Seed leaflet no. 134. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/134net.pdf>
- see also under **Agyilli, J.**
- see also under **Gondwe, D.**
- see also under **Sama, B.**
- see also under **Sanogo, S.**
- see also under **Sanon, M.D.**
- see also under **Vautier, H.J.**
- see also under **Vautier, H.**
- Sajo, M.G., Longhi-Wagner, H. & **Rudall, P.J.** (2007). Floral development and embryology in the early-divergent grass *Pharus*. *International Journal of Plant Sciences* 168: 181–191.
- Salazar, G.A. & **Cribb, P.J.** (2007). On the identity of *Eulophia filicaulis* Lindl. (*Orchidaceae*) *Kew Bulletin* 62(1): 147–149.
- Salvo, G.** see under **Rønsted, N.**
- Sama, B. & **Sacande, M.** (2007). *Pentadesma butyracea* Sabine. Release Seed leaflet no. 131. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/131net.pdf>
- \*San Miguel-Chávez, R., Soto-Hernández, M., Ramos-Valdivia, A.C. & **Kite, G.** (2007). Alkaloid production in elicited cell suspension cultures of *Erythrina Americana* Miller. *Phytochemistry* Rev(6): 167–173.
- Sánchez-Ken, J.G.** & Clark, L.G. (2007). Phylogenetic relationships within the Centothecoideae + Panicoideae Clade (Poaceae) based on *ndhF* and *rp16* intron sequences and structural data. In Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) *Monocots: Comparative Biology and Evolution – Poales*. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 487–502.
- , Clark, L.G., Kellogg, E.A. & Kay, E.E. (2007). Reinstatement and emendation of subfamily Micrairoideae (Poaceae). *Systematic Botany* 32(1): 71–80.
- see also under **Clark, L.G.**
- see also under **Duvall, M.R.**
- Sannier, J., Asmussen-Lange, C.B., **Harley, M.** & Nadot, S. (2007). Evolution of microsporogenesis in palms (Arecaceae). *International Journal of Plant Sciences* 168(6): 877–888.
- Sanogo, S. & **Sacande, M.** (2007). *Carapa procera* DC. Release Seed leaflet no. 136. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/136net.pdf>
- Sanon, M.D. & **Sacande, M.** (2007). *Borassus aethiopicum* Mart. Release Seed leaflet no. 120. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/120net.pdf>
- & **Sacandé, M.** (2007). *Combretum aculeatum* Vent. Release Seed leaflet no. 127. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/127net.pdf>
- Sarasan, V.** see under **Nandha, B.**
- Sauquet, H.** & Cantrill, D.J. (2007). Pollen diversity and evolution in Proteoideae (Proteales: Proteaceae). *Systematic Botany* 32(2): 271–316.
- see also under **Barker, N.P.**
- \***Savolainen, V.** & Lehmann, L. (2007). Evolutionary biology – Genetics and bisexuality. *Nature* 445(7124): 158–159.
- see also under **Christin, P.**
- see also under **Forest, F.**
- see also under **Hodkinson, T.R.**
- see also under **Perret, M.**
- see also under **Rønsted, N.**

— see also under Soltis, D.E.

\*Schiodt, C.B., **Veitch, N.C.** & Welinder, K.G. (2007). Roles of distal arginine in activity and stability of *Coprinus cinereus* peroxidase elucidated by kinetic and NMR analysis of the Arg51Gln, -Asn, -Leu, and -Lys mutants. *Journal of Inorganic Biochemistry* 101(2): 336–347.

\*Schmitz, N., **Jansen, S.**, Verheyden, A., Kairo, J., Beeckman, H. & Koedam, N. (2007). Comparative anatomy of intervessel pits in two mangrove species growing along a natural salinity gradient in Gazi Bay, Kenya. *Annals of Botany* 100(2): 271–281.

**Schrire, B.** (2007). Going...going...is it gone? *Streblotrichia speciosa* – the Phillip island glory pea. *Curtis's Botanical Magazine* 24(3): 196–197.

— see also under Soares, M.

**Shaffer-Fehre, M.** see under Roux, J.P.

Shapcott, A., Rakotoarinivo, M., **Smith, R.J.**, Lysaková, G., **Fay, M.F.** & **Dransfield, J.** (2007). Can we bring Madagascar's critically endangered palms back from the brink? Using an understanding of genetics and ecology to guide a conservation and recovery programme for the iconic and critically endangered palm *Beccariophoenix madagascariensis*. *Botanical Journal of the Linnean Society* 154: 589–608.

Sharma, H.C., Gowda, C.L.L., **Stevenson, P.C.**, Ridsdill-Smith, T.J., Clement, S.L., Ranga Rao, G.V., Romies, J., Miles, M. & Bouhssini, M. (2007). Host plant resistance and insect pest management in chickpea. In S S Yadav, R.R., B Sharma (ed.) Chickpea Breeding and Management. CABI, Oxford.

**Shaw, D.** (2007). Aspects of Chinese herbal medicine with relation to their hepatotoxicity. PhD Thesis. Kings College, University of London. 1–312 pp.

**Sheahan, M.C.** (2007). Zygophyllaceae. In Kubitzki, K. (ed.) The families and genera of flowering plants. Vol. 9. Flowering Plants. Eudicots: Berberidopsidales, Buxales, Crossosomatales, Fabales p.p., Geraniales, Gunnerales, Myrtales p.p., Proteales, Saxifragales, Vitales, Zygophyllales, Clusiaceae Alliance, Passifloraceae Alliance, Dilleniaceae, Huaceae, Picramniaceae, Sabiaceae. Berlin: Springer-Verlag. 488–500.

Shubert, E. & **Beentje, H.J.** (eds) (2007). Hybridization in plants. Systematics and Biodiversity 5. 241–344 pp.

**Simmonds, M.S.J.** see under Avery, P.B.

— see under Bell, C.M.

— see under Buchwald-Werner, S.

— see under **Kite, G.C.**

— see under **Kokubun, T.**

— see under Rosselli, S.

— see under **Stevenson, P.C.**

**Simpson, D.A.**, Muasya, A.M., Alves, M.V., Bruhl, J.J., Dhooge, S., **Chase, M.W.**, **Furness, C.A.**, Ghamkhar, K., Goetghebeur, P., Hodkinson, T.R., Marchant, A.D., Reznicek, A.A., Nieuwborg, R., Roalson, E.H., Smets, E., Starr, J.R., Thomas, W.W., Wilson, K.L. & Zhang, X. (2007). Phylogenetics of Cyperaceae based on DNA sequence data – a new *rbcl* analysis. In Columbus, J.T., Friar, E.A., Porter, J.M., Prince, L.M. & Simpson, M.G. (eds) Monocots: Comparative Biology and Evolution – Poales. California, USA: Rancho Santa Ana Botanic Garden. Vol. 2: 72–83.

— & Jermy, A.C. (2007). The status of *Trichophorum cespitosum* nothosubsp. *foersteri* (Cyperaceae). *Kew Bulletin* 62(1): 165.

— & Muasya, A.M. (2007). Phylogeny of Cyperaceae: an overview. In Barbosa, L. & Santos, J., N A (eds) A botânica no Brasil: pesquisa, ensino e políticas públicas ambientais. Sao Paulo: Sociedade Botânica do Brasil. 308–310.

— see also under Araújo, A.C.

— see also under Chayamarit, K.

— see also under **Govaerts, R.**

— see also under Jermy, A.C.

— see also under Jones, E.

— see also under Muasya, A.M.

— see also under Phulphong, K.

**Smith, P.P.** & **Tenner-Trivedi, C.** (2006 [2007]). Climate change: the role of botanic gardens. In Aubert, S., Danton, P. & Perrier, C. (eds) Which Future for the Alpine and Arctic Botanical Gardens? Proceedings of the International Congress of Alpine & Arctic Botanical Gardens. Villar d'Arène, Col du Lautaret. Col du Lautaret: Jardin Botanique Alpin du Lautaret.: 67–71.

— see also under **Moat, J.**

**Smith, R.J.** see under **Fay, M.F.**

— see under Shapcott, A.

Soares, M., Abreu, J., Nunes, H., Silveira, P., **Schrire, B.** & Figueiredo, E. (2007). The Leguminosae of Angola: diversity and endemism. *Systematics and Geography of Plants* 77: 141–212.

Sohmer, S.H. & **Davis, A.P.** (2007). The genus *Psychotria* (Rubiaceae) in the Philippine Archipelago. 27. Fort Worth: Botanical Research Institute of Texas. 267 pp. (Sida, Botanical Miscellany).

\*Soltis, D.E., Clayton, J.W., Davis, C.C., Gitzendanner, M.A., **Cheek, M.**, **Savolainen, V.**, Amorim, A.M. & Soltis, P.S. (2007). Monophyly and relationships of the enigmatic family Peridiscaceae. *Taxon* 56(1): 65–73.

\*Sotuyo, S., Delgado-Salinas, A., **Chase, M.W.**, **Lewis, G.P.** & Oyama, K. (2007). Cryptic speciation in the *Caesalpinia hintonii* complex (Leguminosae: Caesalpinioideae) in a seasonally dry Mexican forest. *Annals of Botany* 100: 1307–1314.

— & **Lewis, G.P.** (2007). A new species of *Caesalpinia* from the Rio Balsas Depression, Mexico, and an updated taxonomic circumscription of the *Caesalpinia hintonii* complex (Leguminosae: Caesalpinioideae: Caesalpinieae: Poincianella Group). *Brittonia* 59(1): 33–36.

**Spooner, B.M.** see under **Aguirre-Hudson, B.**

— see under **Roberts, P.J.**

Stancik, D. & **Renvoize, S.** (2007). Two new and little-known species of *Fesuca* (Poaceae) from the Bolivian Andes. *Kew Bulletin* 62(3): 485–492.

**Stannard, B.** (2007). The inclusion of *Pleioikirkia* in *Kirkia* (Kirkiaceae), and corresponding combination. *Kew Bulletin* 62(1): 151–152.

— see also under **Brummitt, R.K.**

Staples, G.W. & **Brummitt, R.K.** (2007). Convolvulaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 108–110.

Stepanova, A., Chavchavadze, E.S. & **Jansen, S.** (2007). Comparative wood anatomy of perennial shoots of *Potentilla* (Rosaceae). *Jawa Journal* 28(4): 405–421.

**Stevenson, P.C.**, Dhillon, M.K., Sharma, H.C. & El Bouhssini, M. (2007). Insect pests of lentil and their management. In Yadav, S., Stevenson, P.C., Dixon, J. & McNeil, D. (eds) The lentil: An ancient crop for modern times. Dordrecht, The Netherlands: Springer. 331–349.

\* — , **Veitch, N.C.** & **Simmonds, M.S.J.** (2007). Polyoxygenated cyclohexane derivatives and other constituents from *Kaempferia rotunda* L. *Phytochemistry* 68(11): 1576–1586.

— see also under Kestenholtz, C.

— see also under Sharma, H.C.

— see also under Yadav, S.

**Stevenson, P.C.** (eds) see under Yadav, S.

**Stiff, R.L.A.** & **Ponsonby, L.** (2007). Exploratrices intrépides: Margaret Mee & Marianne North: oeuvres des collections des Royal Botanic Gardens, Kew 184 pp.

**Stoneham, C.A.** see under **Kite, G.C.**

**Strange, K.** (2007). Paul Furse and his plant collections at Kew. *Curtis's Botanical Magazine* 24(1): 71–80.

— & **Rix, M.** (2007). Plate 574. *Linum doerfleri*. Linaceae. *Curtis's Botanical Magazine* 24(1): 12–17.

— see also under **Hind, D.J.N.**

— see also under **Rix, M.**

**Stuppy, W.** see under **Ali, N.**

- Suzuki, K., **Daws, M.I. & Pritchard, H.W.** (2007). Responses of *Liriope platyphylla* F.T. Wang & T. Tang and *Ophiopogon japonicus* (L.f.) Ker Gawl. seeds to desiccation. *Seed Science and Technology* 35: 129–133.
- Taylor, N.P.** see under Calderon, N.
- see under **Rocha, E.A.**
- Tebbs, M.** (2007). Piperaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 255–256.
- Telford, A.** see under **Lucas, E.J.**
- Tenner-Trivedi, C.** see under **Smith, P.P.**
- \*Terrab, A., Talavera, S., Arista, M., **Paun, O.**, Stuessy, T.F. & Tremetsberger, K. (2007). Genetic diversity and geographic structure at chloroplast microsatellites (cpSSRs) in endangered West Mediterranean firs (*Abies* spp., Pinaceae). *Taxon* 56: 409–416.
- Thomas, V.E.** see under **Fay, M.F.**
- Timberlake, J.R., Pope, G.V., Polhill, R.M.** & Martins, E.S. (eds) (2007). Flora Zambesiaca: Mozambique, Malawi, Zambia, Zimbabwe Botswana. Kew: RBG Kew. 3. 218 pp.
- Toorop, P.E.** see under Finch-Savage, W.E.
- see under **Pinto, L.V.A.**
- Tremblay, R.L., **Bateman, R.M.**, Brown, A.P., Hachadourian, M., Hutchings, M.J., Kell, S., Koopowitz, H., Lehnebach, C. & Whigham, D. (2007). Density-induced rates of pollinaria removal and deposition in the purple enamel-orchid, *Elythranthera brunonis* (Endl.) A.S. George. *Lankersteriana* 7: 229–242.
- \*Trénel, P., Gustafsson, M.H.G., **Baker, W.J.**, Asmussen-Lange, C.B., **Dransfield, J.** & Borchsenius, F. (2007). Mid-Tertiary dispersal, not Gondwanan vicariance explains distribution pattern in the wax palm subfamily (Ceroxyloideae: Arecaceae). *Molecular Phylogenetics and Evolution* 45: 272–288.
- Ulian, T.** see under Bacchetta, G.
- Upton, T. & **Andrews, S.** (2007). The first international Lavender conference. *Lavender Bag* 27: 15.
- Utteridge, T.M.A. & Brummitt, R.K.** (2007). Icacinaceae In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 173–173.
- & **Brummitt, R.K.** (2007). Leptaulaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 191–192.
- & **Brummitt, R.K.** (2007). Metteniusaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 215–215.
- & **Brummitt, R.K.** (2007). Stemonuraceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) Flowering Plant Families of the World. Kew, UK: RBG, Kew. 310–311.
- Vaes, E.** see under **Daws, M.I.**
- Van der Bank, M.** see under **Pillon, Y.**
- Van der Burgt, X.M., Eyakwe, M.B. & Newbery, D.M. (2007). *Englerodendron korupense* (Fabaceae, caesalpinioideae), a new tree species from Korup National Park, Cameroon. *Adansonia* 29(1): 59–65.
- Van der Niet, T. & **Cribb, P.J.** (2007). Correction to the status of *Satyrium hallackii* var. *ballii* (Orchidaceae). *Kew Bulletin* 62(1): 166.
- Van Loo, M.** see under **Lexer, C.**
- Vautier, H.J. & Sacandé, M.** (2007). *Prosopis africana* (Guill. & Perr.) Taub. Release Seed leaflet no. 132. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/132.net.pdf>
- , Sanon, M.D. & **Sacandé, M.** (2007). *Detarium microcarpum* Guill. & Perr. Release Seed leaflet no. 122. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/122net.pdf>
- Vautier, H., Sanon, M. & **Sacandé, M.** (2007). *Combretum glutinosum* Perrot. ex DC. Release Seed leaflet no. 128. Forest & Landscape, Horsholm, Denmark. Available at <http://en.sl.life.ku.dk/upload/128.net.pdf>
- see also under **Sacandé, M.**
- \***Veitch, N.C.** (2007). Isoflavonoids of the Leguminosae. *Natural Product Reports* 24(2): 417–464.
- see also under **Kite, G.C.**
- see also under **Kokubun, T.**
- see also under **Marin, P.D.**
- see also under Schiødt, C.B.
- see also under **Stevenson, P.C.**
- Verdcourt, B.** (2007). A solution to the problem of *Hibiscus zeylonica* L. (Malvaceae). *Kew Bulletin* 62: 633–635.
- see also under Roux, J.P.
- Vermeulen, J.J. & **Wood, J.J.** (2007). Plate 587. *Bulbophyllum plumatum*. Orchidaceae. *Curtis's Botanical Magazine* 24(2): 108–113.
- Vollesen, K.** (2007). Synopsis of the species of *Acanthus* (Acanthaceae) in tropical East and Northeast Africa and in tropical Arabia. *Kew Bulletin* 62(2): 233–250.
- see also under **Darbyshire, I.**
- Vorontsova, M.S. & Hoffmann, P.** (2007). First record of pistillate flowers of *Paranecepsia* (Euphorbiaceae sensu stricto). *Kew Bulletin* 62(2): 285–286.
- \* —, **Hoffman, P., Maurin, O. & Chase, M.W.** (2007). Molecular phylogenetics of tribe Poranthereae (Phyllanthaceae Euphorbiaceae *Sensu lato*). *American Journal of Botany* 94(12): 2026–2040.
- , **Hoffmann, P., Kathriarachchi, H., Kolterman, D.A. & Chase, M.W.** (2007). *Andrachne cuneifolia* (Phyllanthaceae Euphorbiaceae s.l.) is a *Phyllanthus*. *Botanical Journal of the Linnean Society* 155(4): 519–525.
- Walters, G.** see under **Wilford, R.**
- \*Watanabe, T., Broadley, M.R., **Jansen, S.**, White, P.J., Takada, J., Satake, K., Takamatsu, T., Tuah, S.J. & Osaki, M. (2007). Evolutionary control of leaf element composition in plants. *New Phytologist* 174: 516–523.
- Weber, O. & Wilkin, P.** (2007). Plate 588. *Stenomesson pearcei*. Amaryllidaceae. *Curtis's Botanical Magazine* 24(2): 114–120.
- Wilford, R.** (2007). The Alpine Houses of Kew. *Curtis's Botanical Magazine* 24(1): 63–70.
- (2007). Cultivation. In Cowley, J. (ed.) The Genus Rosocea. Kew: Royal Botanic Gardens, Kew. 167–175.
- (2007). Plant Awards 2006–2007. *Colchicum speciosum* Steven, F C C. *Strumaria chaplinii* (W. F. Barker) Snijman, A. M., *Primula verticillata* Forsskai, A. M. *Coris monspeliensis* L. P. C., *Strumaria karoopoortensis* (D. & U. Muller-Doblies) Snijman, B. C. *Alpine Gardener* 75: 479–480, 481–482, 484, 528, 531.
- (2007). Plate 598. *Tulipa korolkowii*. *Curtis's Botanical Magazine* 24(4): 217–222.
- (2007). *Tulipa montana*. In Daffodil, snowdrop and tulip yearbook 2007–2008. London: RHS. 74.
- & **Fay, M.F.** (2007). Plate 597. *Tulipa sprengeri*. *Curtis's Botanical Magazine* (24): 211–216.
- & **Rix, M.** (2007). Plate 583. *Polygonatum graminifolium*. *Curtis's Botanical Magazine* 24(1): 58–62.
- & **Walters, G.** (2007). Plate 573. *Geranium glaberrimum*. *Curtis's Botanical Magazine* 24(1): 7–11.
- Wilkin, P., Hladik, A., Labat, J.N. & Barthelat, F.** (2007). A new edible yam (*Dioscorea* L.) species endemic to Mayotte, new data on *D. comorensis* R. Knuth and a key to the yams of the Comoro Archipelago. *Adansonia* 29: 215–228.
- , Thapayai, C. & Chayamrit, K. (2007). Lectotypification of *Dioscorea* L. (*Dioscoreaceae*) names from Thailand. *Kew Bulletin* 62(2): 251–258.

— see also under *Chayamarit, K.*

— see also under *Govaerts, R.*

— see also under *Weber, O.*

— see also under *Zarrei, M.*

**Wilkinson, H.** & Culham, A. (2007). Menispermaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 211–212.

— (2007). Leaf teeth in certain Salicaceae and 'Flacourtiaceae'. *Botanical Journal of the Linnean Society* 155(2): 241–256.

— & Wanntorp, L. (2007). Gunneraceae. In Kubitzki, K. (ed.) *The families and genera of flowering plants*. Vol. 9. Flowering Plants. Eudicots: Berberidopsidales, Buxales, Crossosomatales, Fabales p.p., Geraniales, Gunnerales, Myrtales p.p., Proteales, Saxifragales, Vitales, Zygophyllales, Clusiaceae Alliance, Passifloraceae Alliance, Dilleniaceae, Huaceae, Picramniaceae, Sabiaceae. Berlin: Springer-Verlag. 177–183.

**Williamson, H.** see under *Renvoize, S.A.*

**Wilmot-Deary, M.C.** (2007). Ceratophyllaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 94–95.

— & **Brummitt, R.K.** (2007). Cannabaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 84–85.

— & **Brummitt, R.K.** (2007). Moraceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 218–219.

— & **Brummitt, R.K.** (2007). Ulmaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 326–327.

— & **Brummitt, R.K.** (2007). Urticaceae. In Heywood, V.H., Brummitt, R.K., Culham, A. & Seberg, O. (eds) *Flowering Plant Families of the World*. Kew, UK: RBG, Kew. 327–328.

Wishnie, M.H., **Dent, D.H.**, Mariscal, E., Deago, J., Cedeno, N., Ibarra, D., Condit, R. & Ashton, P.M.S. (2007). Initial performance and reforestation potential of 24 tropical tree species planted across a precipitation gradient in the Republic of Panama. *Forest Ecology and Management* 243(1): 39–49.

**Wood, J.J.** see under *Vermeulen, J.J.*

**Wood, J.R.I.** (2007). The *Salvias* (Lamiaceae) of Bolivia. *Kew Bulletin* 62(2): 177–222.

Yadav, S., McNeil D & **Stevenson, P.C.** (eds) (2007). *The lentil: An ancient crop for modern times*. Dordrecht, Netherlands: Springer. 460 pp.

—, McNeil, D. & **Stevenson, P.C.** (2007). Uses and consumption of lentil. In Yadav, S., Stevenson, P.C., Dixon, J. & McNeil, D. (eds) *The lentil: An ancient crop for modern times*. Dordrecht, The Netherlands: Springer. 460–460.

Yang, Q. & **Zmarzty, S.** (2007). Flacourtiaceae. In Wu, Z. & Raven, P.H.c.-c.o.e.c. (eds) *Flora of China*. Beijing. St Louis: Science Press, Missouri Botanical Garden press. Vol. 13:

\*Yang, Z.H., Huang, J.X. & **Yao, Y.J.** (2007). Autoscreening of restriction endonucleases for PCR-restriction fragment length polymorphism identification of fungal species, with *Pleurotus spp.* as an example. *Applied and Environmental Microbiology* 73: 7947–7958.

**Yao, Y.J.** see under *Yang, Z.H.*

**Yesilyurt, J.C.** (2007). *Doryopteris majestosa* (Pteridaceae), a new species from South America. *American Fern Journal* 97: 212–219.

\*Yoong Lim, K., Kovarik, A., Matyasek, R., **Chase, M.W.**, **Clarkson, J.J.**, Grandbastien, M.A. & Leitch, A.R. (2007). Sequence of events leading to near-complete genome turnover in allopolyploid *Nicotiana* within five million years. *New Phytologist* 175: 756–763.

**Zappi, D.C.** (2006 [2007]). *Rudgea*. In Harling, G. & Person, C. (eds) *Flora of Ecuador*. Rubiaceae (part 5), tribe 18. Psychotriaceae (2). Vol. 162: 74–113.

— see also under *Araújo, A.C.*

— see also under *Calderon, N.*

— see also under *Rocha, E.A.*

**Zarrei, M.**, Zarre, S., **Wilkin, P.** & **Rix, M.** (2007). Systematic revision of the genus *Gagea Salisb.* (Liliaceae) in Iran. *Botanical Journal of the Linnean Society* 154(4): 559–588.

— see also under *Rix, M.*

\*Zhu, X.-Y., **Chase, M.W.**, Qiu, Y.-L., Kong, H.-Z., Dilcher, D.L., Li, J.-H. & Chen, Z.-D. (2007). Mitochondrial *matR* sequences help to resolve deep phylogenetic relationships in rosids. *BMC Evolutionary Biology* 7: 217.

**Zmarzty, S.** (2007). Flora da Reserva Ducke, Amazonas, Brasil: Flacourtiaceae. *Rodriguesia* 58: 663–694.

— see also under *Yang, Q.*

## Royal Botanic Gardens, Kew\_contact details

The Director  
Royal Botanic Gardens, Kew  
Richmond,  
Surrey,  
TW9 3AB  
United Kingdom

Email: [director@kew.org](mailto:director@kew.org)  
Tel: +44 (0) 20 8332 5000  
Fax: +44 (0) 20 8332 5197

## Kew and Wakehurst Place\_visitor information

### **Kew Gardens**

Tel: +44 (0) 20 8332 5655

### **Wakehurst Place**

Tel: +44 (0) 1444 894 066

[www.kew.org](http://www.kew.org)

Published by TSO (The Stationery Office) and available from:

**Online**

[www.tsoshop.co.uk](http://www.tsoshop.co.uk)

**Mail, Telephone, Fax & E-mail**

PO Box 29, Norwich, NR3 1GN

Telephone orders/General enquiries 0870 600 5522

Order through the Parliamentary Hotline Lo-Call 0845 7 023474

Fax orders: 0870 600 5533

E-mail: [customer.services@tso.co.uk](mailto:customer.services@tso.co.uk)

Textphone: 0870 240 3701

**TSO Shops**

16 Arthur Street, Belfast BT1 4GD

028 9023 8451 Fax 028 9023 5401

71 Lothian Road, Edinburgh EH3 9AZ

0870 606 5566 Fax 0870 606 5588

**The Parliamentary Bookshop**

12 Bridge Street, Parliament Square,

London SW1A 2JX

**TSO@Blackwell and other Accredited Agents**

