



## DARWIN INITIATIVE

### APPLICATION FOR DARWIN FELLOWSHIP PROGRAMME 2006

Please read the Guidance Notes before completing this form. Give a full answer to each section; applications will be considered on the basis of information submitted on this form. Please note the additional information requirements (CVs and letters of support as detailed in the Guidance for Applicants). Whilst this form is to be submitted by the host institution the proposed Fellow should be fully involved in development of the proposal.

**Submit by 10 March 2006**

#### 1. Contact Details

<i>Ref. (Defra/ECTF only):</i>
<p><b>Name and address of UK applicant organisation</b>            Dr Mark Newman and Philip Thomas;            Royal Botanic Garden Edinburgh,            20A Inverleith Row, Edinburgh, EH3 5LR</p>

#### 2. Darwin Fellow. A one page CV must be enclosed.

<p><b>Name and official address of proposed Darwin Fellow</b>            Mr Soulivanh Lanorsavanh; Department of Biology, Faculty of Sciences, National University of Laos. (NUOL), P.O.Box 7322, Vientiane, Lao PDR.</p>
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#### 3. Summary of proposed Fellowship (no more than 100 words)

<p>This Fellowship will assist Lao PDR in implementing key objectives of its National Biodiversity Strategy and Action Plan by targeting a key member of the next generation of botanists and biodiversity managers.</p> <p>The Fellow will carry out a task which uses the skills he has acquired as a trainee in a Darwin project and which develops his skills making him better able to perform the tasks needed in his job.</p> <p>The task to be carried out is to write a guide to an economically important group of plants which is frequently misidentified.</p>
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**4. Principals in Project. Please give the details of the individuals from the UK host organisations (and other institutions if relevant) who would be directly involved in supervising/working with the Darwin Fellow. A 1 page CV on each must be enclosed.**

Details	Main UK expert	Other UK expert	Other UK expert	Other UK expert
<b>Surname</b>	Newman	Thomas	Middleton	
<b>Forename(s)</b>	Mark	Philip	David	
<b>Post held</b>	Senior Scientific Officer	Higher Scientific Officer	Higher Scientific Officer	
<b>Institution (if different to above)</b>				
<b>Department</b>	Systematics & Evolution	Biodiversity Conservation	Systematics & Evolution	
<b>Telephone</b>				
<b>Fax</b>				
<b>Email</b>				

**5. Describe briefly the aims, activities and achievements of the UK applicant organisation. (Large institutions please note that this should describe your unit or department)**

**Aims** RBGE's mission is to explore and explain the world of plants through programmes of scientific research, horticulture, conservation and education.

**Major strategic objectives**

- Conserving plant biodiversity in the face of global environmental change and mass extinction.
- Provision of baseline taxonomic/botanical data as a foundation science.
- Understanding the evolutionary processes that have given rise to the world's botanical diversity.

**Activities** RBGE carries out an international programme of research in plant taxonomy, systematics and conservation in more than forty countries and maintains and develops living and preserved plant collections.

**Achievements** The project team has extensive expertise in Southeast Asian botany and taxonomic capacity building. They have contributed to CBD initiatives such as Global Taxonomy Initiative and Global Strategy for Plant Conservation and are committed to the implementation of the CBD.

**6. Describe briefly the aims, activities and achievements of the proposed Darwin Fellow's organisation. (Large institutions please note that this should describe your unit or department)**

The Faculty of Science at the National University of Lao PDR (NUoL), Lao PDR's only state university, aims to promote and carry out research into the natural resources on which more than 75% of the population are still directly dependent. Many of these resources are derived from Lao's diverse but poorly known flora; the long term conservation and sustainable use of such resources requires accurate identification. University staff are involved in biodiversity surveys in protected areas and have initiated conservation programmes for over-exploited groups such as orchids. Senior staff have also contributed taxonomic accounts to regional projects such as the Flore du Cambodge, du Laos et du Viet Nam as well as internationally recognised journals such as *Blumea*. The university is also developing its capacity for training taxonomists, botanists and resource managers by participating in foreign-funded projects such as the current Darwin Initiative 'Taxonomic Training in a Neglected Biodiversity Hotspot'. The herbarium, the largest in Lao, is being developed and is likely to form the core of a National Herbarium. Much of this work has been undertaken by a small number of senior foreign-trained staff who are now approaching retirement. The university has recognised the need to promote and train a younger generation and is actively seeking opportunities that will allow staff to gain experience and make professional contacts with other researchers at regional and international levels.

**7. Describe briefly the proposed Fellow's current role within their organisation and link to a Darwin project.**

Mr Soulivanh Lanorsavanh is currently the leading assistant lecturer in botany and plant morphology in the Department of Biology. He also has responsibility for the curation of the Department's herbarium and is involved with several international projects e.g. the EU funded BIOTIK project which is developing computer-aided identification tools for selected tree species and the UNESCO-funded project 'Orchid Conservation in Lao PDR'.

Mr Soulivanh has been working with the current Darwin Project since it began in 2004. He has been one of the most outstanding trainees and has demonstrated a sound theoretical knowledge, a willingness to learn and, importantly, an interest and ability to train others. Project leaders have identified him as a future head of department and potential Director of the Herbarium.

**8. Provide a concept note on the Darwin Fellowship. This should include:**

- a clear outline of the aim and objectives of the Fellowship
- the programme of work, including key milestones through the duration of the Fellowship and their timing
- the role of the UK applicant organisation, and others where relevant (including contacts)
- where appropriate, how the Fellowship will contribute towards sustainable development or sustainable livelihoods

**Aims and Objectives**

South East Asia is recognised as one of the world's key centres of biodiversity. It is also an area characterised by a long history of conflict and over-exploitation. In this area Lao PDR represents ***an extreme case of a country that is rich in biodiversity but poor in resources***. Over 40% of the primary forest remains but is under increasing pressure. 75% of the population depend directly on natural resources - as population increases, pressures for development and exploitation also increase. Three of the main objectives of the Lao Government's ***National Biodiversity Strategy To 2020 And Action Plan To 2010*** (NBSAP) (published 2004) are to 'Identify and improve the knowledge base of its biological diversity, manage biodiversity on regional basis and plan and implement a *biodiversity specific human resource management program*'. Implementation of these objectives is hampered by a lack of resources and trained staff; the Lao government recognises this and is actively seeking assistance from botanical institutions such as the RBGE which have significant regional experience. The Lao government is also seeking to build links with botanical institutes in the SE Asian region, especially in Thailand where botanical research and training (MSc and PhD level) are well advanced.

The current RBGE-led Darwin Initiative Project '*Taxonomic Training in a Neglected Biodiversity Hotspot in Lao PDR*' has been assisting the Lao Government to meet these aims through a programme of training and capacity building with key biodiversity institutions such as the National University of Lao PDR (NUoL) and the Forest Research Center. Part of the remit of this project is to assist the Lao institutions to develop their links with other Asian institutes; the UK staff involved in this proposal are in an ideal position to do this due to their close links and work as editors and contributors on projects such as the Flora of Thailand and the Flore du Cambodge, du Laos et du Viet Nam.

This Fellowship targets one of the outstanding trainees from the Darwin project who is very likely to become one of the leading botanists and the head of the main herbarium in Lao PDR.

During the Fellowship he will work at the RBGE and visit other key UK botanical institutions such as RBG Kew and the British Museum. Depending on additional funding he will also be able to visit the Natural History Museum in Paris, the editorial centre for the Flore du Cambodge, du Laos et du Viet Nam. At the end of the placement in the UK he will travel to Thailand to work for one month at the Bangkok Forestry Herbarium (BKF). BKF is Thailand's principal institution for the compilation of the Flora of Thailand and is also responsible for the monitoring of threatened species. Additionally it is one of the leading institutes involved in the forthcoming botanical projects of the Mekong River Commission such as the Guide to the Aquatic Plants of the Lower Mekong Basin. This multinational project is being developed in collaboration with the current Darwin Initiative. The Fellow will work under the supervision of the Director and Managing Editor of the Flora, Dr Kongkanda Chayamarit. BKF have generously agreed to waive all overheads.

**Outputs:** A major output from the Fellowship will be a guide to the commonly traded and medicinally important species of the Menispermaceae in Lao PDR. These plants play a major role in traditional medicine and are highly valued and commonly traded NTFPs. Considerable confusion about the species present and which common local names should be applied to them is hampering conservation and sustainable use. The Fellow will use the skills that he has gained during the Darwin Initiative project to produce a bi-lingual guide that will be useful to both specialist and non-specialist users. It will also be available on the internet. Other outputs include the reports required by the Darwin Initiative and a presentation during the current Darwin Initiative's final workshop in Lao PDR.

**Work programme and milestones**

September 2006; arrival at RBGE; orientation and meetings with Heads of Departments; training in herbarium and database management; start project

October 2006; continuation of project work at RBGE; 1 week visit to RBG Kew and British Museum

November 2006; continuation of project work at RBGE, draft report for Darwin Fellowship Programme

December 2006; Travel to Bangkok; 4 weeks working at Bangkok Forestry Herbarium with Thai experts on medicinal plants; main activities; continuation of project work of guide to medicinal plants of the Menispermaceae in Lao PDR.

January 2007; Completion of guide; final report for Darwin Fellowship Programme

February 2007; presentation of results at final workshop of current Darwin Initiative

**Roles of Project Staff**

RBGE: Dr MF Newman; main supervisor; Dr D Middleton; taxonomic consultant; Mr P Thomas; logistics and coordination

BKF: Dr Kongkanda Chayarit; supervision at Bangkok Forestry Herbarium

**Contribution towards sustainable development or sustainable livelihoods**

This fellowship will enhance the Lao PDR's ability to meet the central goal of the NBSAP "to maintain the diverse biodiversity as one key to poverty alleviation and protect the current asset base of the poor".

- 9. Legacy. Provide information on how the Darwin Fellow will utilise, promote and disseminate the benefits of the Fellowship on return to his/her home country. Will a strategy be developed during the Fellowship to ensure this is achieved?**

Mr Soulivanh will return to the National University of Lao PDR to continue his work in the Faculty of Science. His role in that department as lecturer and herbarium technician/ trainee manager will provide many opportunities to utilise, promote and disseminate the benefits derived from this Fellowship e.g. the project that he will complete during his Fellowship will serve as a model for other key groups of plants that are heavily exploited but frequently misidentified. His teaching duties already include supervision of student projects; these will be targeted at such groups in the future.

**10. How will the Fellowship assist the Fellow's organisation and/or local communities and/or home country in working towards the objectives (or implementation) of the Convention on Biological Diversity? References to the Convention should be specific, for example, by referring to articles, cross-cutting or thematic issues<sup>1</sup>.**

The Fellowship is aimed at helping Lao PDR implement key objectives of its National Biodiversity Strategy and Action Plan. These objectives were formulated in response to Lao's obligations under the CBD. They specifically relate to the following articles in the CBD: Articles 12 (Training); 8 (In-situ conservation), 6 (Conservation & sustainable use), 18 (technical scientific cooperation), 7 (Identification and Monitoring), 16 (Access and transfer of technology, 10%). It will also assist in the implementation of Articles 5 (Co-operation) and 17 (Information exchange). Cross-cutting themes that the Fellowship is orientated towards include: Global Taxonomy Initiative (30%), Global Strategy for Plant Conservation (15%), Protected Areas (15%) and Forest and Mountain Biodiversity (20%)

**11. What collaboration has there been with the Darwin Fellow to date in developing the proposal, and what collaboration is planned for the duration of the Fellowship? Where relevant, describe any consultation or collaboration by the proposed Fellow within his/her own country.**

The initial ideas that have been developed for this application to the Darwin Fellowship Scheme were suggested by our senior Lao partners (Mr Soulivanh's managers) during the visits to Lao by UK staff of the current Darwin Initiative in October 2005. They were seeking opportunities that would contribute to the development of their key staff members, be consistent with the objectives of the National Biodiversity Action Plan and build on the work of the current Darwin Initiative project. Discussions were then held with Mr Soulivanh and from that, this proposal was developed.

**12. Provide details of the Darwin Initiative project that the proposed Fellow was associated with, including his/her role in that project and any ongoing involvement.**

The current Darwin Project aims to provide practical and theoretical training in tropical plant taxonomy to the major institutions associated with biodiversity documentation, protection and utilisation; to enable them to train others in the future; to promote collaboration between institutes and agencies responsible for protection and management of natural resources; to enhance capacity of key research institutes; assist in implementing the objectives of the National Biodiversity Strategy and Action Plan (NBSAP) and meet the obligations of the CBD; produce a foundation for both the first national species and threatened plant database. The project also contributes to international initiatives such as the Global Taxonomy Initiative, the Global Strategy for Plant Conservation and regional biodiversity initiatives such as the Flore du Cambodge, du Laos et du Viet Nam.

Mr Soulivanh has been a key trainee in this project and is due to assume the role of assistant trainer in the final year.

**13. Duration of the Fellowship: what are the intended start and finish dates?**

September 2006 – December 2006

**14. Where will the Darwin Fellow be based? Please be specific with organisational details and dates (where more than one location).**

Mr Soulivanh will be based at the RBGE for the first three months. During this time he will work closely with the UK applicants. He will also have the opportunity to visit the British Museum and RBG Kew. Depending on additional funding being obtained he will also visit the herbarium of the Museum National d'Historin Natural Paris

In December he will be working at the Bangkok Forestry Herbarium (BKF) in Thailand under the supervision of Dr Kongkanda Chayamarit

<sup>1</sup> Refer to the Guidance Notes for Applicants for further information

**15. Financial Aspects.**

<b>Fellow payment</b>			
London: £1200/month	Number of months 1 week	2006/7 £	2007/8 £
UK (outside London): £1000/month	Number of months 3	£	£
Overseas location £/month* Rates as supplied by M. Okot	Number of months 1	£	£
<b>Host Organisations' costs</b>			
UK: £300/month	Number of months 3	2006/7 £	2007/8 £
Overseas location: £ /month*	Number of months		£
<b>A. Total Fellow &amp; Host Organisation Costs</b>		£	£

<b>Actual travel costs (Return journey to Fellowship location)</b>		
Return airfare. <i>Details</i> Return fare from Bangkok to Scotland	2006/7 £	2007/8 £
Travel to/from airports. <i>Details</i> Return rail travel from Vientiane to Bangkok International Airport	£	£
Visas etc. <i>Details</i> Passport application and visa costs for entry to UK	£	£
<b>B. Total Fellowship Travel Costs (Actual costs up to £2000 will be paid)</b>	£	£

<b>Actual travel costs 'Other Travel'</b>		
<b>Specify purpose. Maximum £500 within country of Fellowship location, £1500 for international travel.</b>		
Airfares <i>Details</i> Return train tickets from Edinburgh to London	2006/7 £	2007/8 £
Subsistence <i>Details (including number of days)</i> <i>Contact Defra for rates</i>	£	£
Travel to/from airports. <i>Details</i>	£	£

\* Figures available from Margaret Okot on 0207 082 8430

Visas etc. <i>Details</i>	£	£
<b>C. Total (Other travel) costs</b>	£	£

<b>D. ACADEMIC FEES</b>	2006/7	2007/8
<i>Details</i>	£	£

<b>TOTAL FELLOWSHIP COSTS (A + B + C + D)</b>	£	£
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**16. Other sources of funding: provide details and amounts**

In kind funding from Bangkok Forestry Herbarium (1 month institutional overhead) estimated at £XX

**FCO NOTIFICATION**

Please check the box if you think that there are sensitivities that the Foreign and Commonwealth Office will need to be aware of should they want to publicise details of the Darwin Fellowship and the resultant work in the UK or the Darwin Fellow's home country

**CERTIFICATION**

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

I enclose CVs for project principals and letters of support as requested in the Guidance Notes.

<b>Name (block capitals)</b>	Dr Mary Gibby
<b>Position in the organisation</b>	Director of Science

**Signed**



**Date:**

9 March 2007

Please return completed form to The Edinburgh Centre for Tropical Forests (ECTF) by 10 March 2006 by email to [darwin-applications@ectf-ed.org.uk](mailto:darwin-applications@ectf-ed.org.uk). A hard copy of the full application should also be sent to ECTF, Darwin Applications Unit, Pentlands Science Park, Bush Loan, Penicuik, Edinburgh EH26 OPH.