



EIDPS031

Submit by Monday 14 January 2013



### APPLICATION FOR DARWIN FELLOWSHIP PROGRAMME ROUND 19

Please read the Guidance Notes before completing this form. Where no word limits are given, the size of the box is a guide to the amount of information required. Information to be extracted to the database is highlighted blue.

**1. Name and address of UK Host organisation** (NB: Notification of results will be by email and addressed to the main UK Expert listed in Section 5)

<b>Name:</b> Royal Botanic Gardens, Kew	<b>Address:</b> Kew, Richmond, Surrey TW9 3AB
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**2. Name and official address of proposed Darwin Fellow** (include email and telephone details where available)

<b>Daniel Soto</b> <b>Museo de Historia Natural "Noel Kempff Mercado"</b> <b>Casilla 2489</b> <b>Avenida Irala 565</b> <b>Santa Cruz</b> <b>Bolivia</b> <b>Tel: + 591 3 3371216 (mobile + 591 77032600) E-mail: foresdazo@hotmail.com</b>
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**3. Project dates, duration and total Darwin Initiative Grant requested**

<b>Proposed start date:</b> 1/2/2014	<b>Duration of project:</b> 4 months	<b>End date:</b> 31/5/2014	
<b>Darwin funding requested</b>	<b>2013/14</b> £6260	<b>2014/15</b> £3060	<b>Total</b> £9320

**4. Summary of proposed Fellowship** ie Purpose and expected outputs and outcome

<p>The aim of the Fellowship is to develop the Fellow's skills and confidence in plant taxonomy through guided research with the support of an expert mentor. The wider purpose is to enhance Bolivia's capacity in plant taxonomic skills to support conservation and biodiversity work and reduce the country's dependence on foreign expertise. It is expected that the Fellow will produce at least one publication in a peer-reviewed journal with an account of the genus <i>Bauhinia</i> (approximately 30 species) describing any new species that may be discovered and producing user-friendly aids to enable biodiversity workers to identify species of this genus.</p>
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**5. Principals in the 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. Please provide a one page CV for each of these named individuals. You may copy and paste this table if you need to provide details of more than one overseas project partner.

Details	Main UK expert	Other expert	Other expert
Surname	Lewis	Wood	
Forename(s)	Gwilym P.	John R.I.	
Post held	Band F, Head of Legumes	Research Associate	
Institution (if different to UK Host)		Oxford University	
Department	Herbarium, Library, Art & Archives	Department of Plant Sciences	
Telephone/ Skype			
Email			

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

The Royal Botanic Gardens, Kew is a world famous institution renowned for its scientific research in plant systematics and evolution, horticulture, biodiversity and conservation. Kew is the hub of an international network of botanists and botanical research with numerous students and scientists visiting every year. Its scientists have long experience in building capacity and furthering knowledge through an extensive learning and information programme for the benefit of scientists from all over the world. Annually its staff produces hundreds of publications both of high scientific impact and also of more popular appeal. Leguminosae (to which *Bauhinia* belongs) is a plant family of major economic importance and the Legume Team at Kew have ensured that Kew is the leading world institution in the study of this group. Kew focuses its activities on different regions of the world and Bolivia is currently one of two priority countries for Kew's South American Team.

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

The Noel Kempff Mercado Natural History Museum is a dependency of the state university in Santa Cruz Bolivia. Based around its collections it conducts scientific research in both zoology and botany and is the pre-eminent institution of its kind in eastern (lowland) Bolivia. It provides support for and collaborates in a wide range of biodiversity and environmental projects including environmental impact studies, studies of sustainable use of biological resources, biological inventories, conservation planning and similar work. It collaborates with local communities, non-governmental organisations, local and national government institutions as well international organisations. It has had links with various UK organisations including Kew and Oxford University, the latter through the Darwin and RAINFOR projects. It publishes occasional books, papers and reports and produces a regular newsletter which is widely distributed in Bolivia. It has an important education department and sees its role in terms of public education as well as scientific research.

**8. Describe briefly the proposed Fellow's current role within their organisation and their link to a Darwin project (If applicable), including the project reference number, his/her role in that project and any ongoing involvement.**

Daniel Soto has been a research associate of the Museum since 2006 and has participated in a range of projects in which the Museum has been involved. These include projects related to plant inventory work, environmental impact studies, research into the forage value of natural vegetation, the identification of wild relatives of peanuts and the impact of pre-Colombian settlements on natural vegetation.

Daniel was part of the team of Darwin Project 16-004 "Conservation of the cerrados of Eastern Bolivia" throughout its life until the end of the post-project in 2011 and continues contributing to post-project publications and other activities. He participated in all project activities including field work, plant identification, conservation assessments, preparation of reports and field guides, and the promotion of educational material through school visits and workshops. He benefitted from project training courses and mentoring from expert visitors. He has a general knowledge of most plant families as well as specialist knowledge of *Bauhinia* and Rubiaceae, on which he has published in the journal *Brittonia*. He has developed skills in databasing and photography. He is fully aware of the importance of educational and promotional activities to support plant conservation and of how local communities need to be involved in conservation.

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

9a A clear outline of the aim and objectives of the Fellowship

The general aim of the Fellowship is to raise Daniel Soto's skills and confidence as a plant taxonomist so he can provide effective technical support for biodiversity and conservation work in Bolivia.

In particular the following skills will be developed:

1. Use of herbarium material in plant identification
2. Use of library and internet resources
3. Assessment of conservation risk, attending any red-listing or similar course that may take place in Kew at the time of his Fellowship
4. Development of user-friendly tools for plant identification
5. Preparation of scientific papers.

The expected outcomes include a checklist of *Bauhinia* in its broadest taxonomic sense in Bolivia with species correctly placed in their segregate genera (thus making use of very recent systematic studies in this group in which Dr Lewis has been involved), a paper providing a key to the identification of Bolivian species, brief diagnostic descriptions of each species, summary accounts of their ecology and distribution, a preliminary assessment of their conservation status and descriptions of any new species that may be identified during the course of the Fellowship. He will need to resolve any problems which arise during this study with the advice and support of the project principals, thus gaining skills he can apply to other groups on his return to Bolivia.

It is hoped that Daniel will benefit by being in an institution with world-wide links which will facilitate new contacts with other botanists and institutions working in related fields. It is hoped he will come to see the importance of sound plant taxonomy in underpinning the wider aims of conservation and the maintenance of sustainable livelihoods.

9b The role of the UK Host organisation, and others where relevant (including contacts)

The host institution will provide bench space, access to their plant collections, libraries, computer network and other facilities as normally provided to academic visitors to the herbarium. They will process any loans and any visits to other institutions agreed with the principal in the project (Dr Lewis). They will help the Fellow find suitable accommodation in the neighbourhood.

Dr Lewis and his colleagues in the Legume Team will mentor and advise the Fellow on all aspects of his studies of *Bauhinia* to achieve the objectives outlined in 9a above.

The other principal, John Wood, will liaise with Daniel in Bolivia before and after the completion of the Fellowship, helping with the preparatory groundwork for the Fellowship and discussing how its legacy may be secured with the Fellow and with stakeholder institutions in Bolivia. During the Fellow's stay in the UK he will be the principal point of contact for the Fellow in matters of welfare and general living in the UK. In collaboration with Kew staff he will ensure accommodation and travel issues are resolved satisfactorily including liaison with the British Embassy in La Paz over visa issues. He will act as mentor to the Fellow in general matters within the study programme planned with Dr Lewis. He will also be responsible for planning legacy activities of the Fellowship with Daniel before his return to Bolivia and assisting him in the preparation of any reports required by the Darwin Initiative or his home institution.

9c where appropriate, how the Fellowship will contribute towards sustainable development or sustainable livelihoods ie what the expected outcome of the Fellowship will be, with regard to the higher goals of the Darwin Initiative

In terms of development this Fellowship will add significantly to the bank of taxonomic skills available in Bolivia for its biodiversity and conservation studies, thus reducing the country's dependence on foreign expertise and helping it to meet its obligations under the Convention on Biological Diversity (CBD). This Fellowship will reinforce and extend the achievements of Darwin Project 16-004 and Darwin Project 162/11/010 by adding to Bolivian national expertise in this field.

More specifically it will provide expert knowledge of an important group of tropical plants which are colonisers of degraded forest in the cerrado biome and a source of potential drugs for use in the treatment of diabetes. The ability to recognise potentially important species reliably will underpin other work on *Bauhinia* and related genera and indirectly facilitate any possible sustainable medical use of *Bauhinia*, thus contributing to human welfare and raising the status of indigenous medical knowledge. The species of the genus have not been assessed for category of threat in Bolivia and this Fellowship is a necessary pre-requisite for the successful accomplishment of this task. It will enable local communities and conservation workers to pinpoint any species that are under threat of extinction or any of possible economic importance, thus having the potential to increase livelihood options for poor rural communities.

**10. 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?**

On his return the Fellow will make use of the skills learned during the Fellowship to give a presentation at the next national congress in 2014 and ensure that the Bolivian herbaria have well-named reference collections of *Bauhinia* for use by other biodiversity workers. He will give a workshop to other research staff and students linked to the Museum and will be able to mentor students and younger research workers on taxonomic matters. It is particularly hoped that the Fellowship will enhance his confidence and his skills in making good taxonomic decisions in tropical plant groups including other groups in which he has interest such as Rubiaceae. This will enhance his capacity to advise government agencies, conservation organisations and communities on priority species for conservation.

At a more general level the Fellowship will enhance the Museum's capacity to carry out effective biodiversity and conservation studies and contribute to filling the important taxonomic skills gap amongst Bolivian biodiversity workers in general.

Legacy issues will be a focus of ongoing discussion throughout his Fellowship at Kew.

**11. 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 CBD/CITES/CMS? Please refer to specific Articles or cross cutting themes as appropriate.**

The Fellowship will assist the Museum and Bolivia to work towards the implementation of several articles of the CBD and in particular Articles 7, 8, 12, 16, 17 and 18. Under Articles 7 and 8 Daniel's Fellowship will facilitate the identification of important components of biological diversity and produce preliminary understanding of their distribution so enabling the identification of priorities for conservation monitoring. The Fellowship will provide technical and research education in a collaborative context thus working towards the goal set out in Article 12. Articles 16 – 18 refer to access to data, technical cooperation, repatriation of data, exchange of information and scientific cooperation. The Fellowship precisely meets these objectives by bringing together a leading British institution working in biodiversity and biodiversity conservation with a Bolivian scientist. The development of collaboration in the terms set out in these articles is essential both for Bolivia and the UK institution as both conservation initiatives and scientific research only really flourish through international and inter-institutional collaboration.

**12. 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.**

Planning for this Fellowship goes back about two years to when John Wood discussed the possibility of Darwin Fellowships with the Darwin project team. Daniel Soto was interested in the possibilities of further taxonomic studies in Rubiaceae or in *Bauhinia*, in both of which he had developed research interests during Darwin project 16-004. After enquiries at Kew, *Bauhinia* was decided on because of its greater ecological importance and, crucially, the availability of an appropriate supervisor (Gwilym Lewis). The date for application was postponed from 2011 to 2012 to allow Daniel to study *Bauhinia* more extensively in Bolivia both in the field and the herbarium. This enabled Daniel to see collections in La Paz and make contacts with staff there and in Cochabamba. He was able to prepare a preliminary checklist of *Bauhinia* in anticipation of this Fellowship. Further preliminary field and herbarium work is planned to take place during Wood's expected visit to Bolivia in March-April 2013 when material for loan to Kew will be identified. Once the Fellowship is approved data and materials for study during the Fellowship will be gathered and collated and field work will take place to build up the bank of photographs and specimens.

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

The Fellow will be based in the Herbarium of the Royal Botanic Gardens at Kew throughout the Fellowship. He will have access to all the facilities provided by Kew including the institution's collections, libraries, computers, internet resources and databases as well as having the opportunity to meet other scientists and attend occasional lectures and workshops. Suitable accommodation will be found within the near vicinity. Occasional visits may be made to nearby institutions such as the Natural History Museum in London but these are not expected to be frequent.

It is expected that the Fellow will send in advance and/or bring selected plant specimens on loan with him from Bolivia to facilitate his studies. Once the Fellowship has been approved the principals will request loan material from any institution where key Bolivian collections are known to be held but given Kew's extensive plant collections, the amount of loan material is not likely to be great.

**14. Provide a programme of work, including key milestones, through the duration of the Fellowship**

Activity	Duration	2013/14									2014/2015					
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Planning for Fellowship: work programme, visa, accommodation etc.					X	X	X	X								
Preliminary field work by Fellow in Bolivia			X	X	X	X	X	X								
Organising and processing specimens to be sent on loan						X	X	X								
Arrival in UK									X							
Joint evaluation of literature and material to microplan Fellowship									X							
Check specimen identifications, consult type material and prepare species descriptions									X	X	X					
Analysis and resolution of taxonomic problems arising									X	X	X					
Preparation of conservation assessments											X	X				
Preparation of keys and other diagnostic outputs											X	X				
Write-up and complete a draft account of <i>Bauhinia</i> in Bolivia												X				
Return to Bolivia to begin dissemination activities													X	X		

**Note: This work programme includes pre-fellowship planning (August 2013 to January 2014) and post-fellowship dissemination activities.**

**15. Costs. Using UK Government Financial Years ie April 2013 – March 2014 etc), please set out your budget for the Fellowship**

	Unit cost	No of months		Total		
		2013/14	2014/15	2013/14	2014/15	
<b>Fellow's Subsistence contribution</b>						
Arrival allowance	£300	NA	NA	300		
London based	£1,200 pcm	2	2	2400	2400	
UK (outside London)	£1,000 pcm					
Overseas	£tbc*	2		600		
<b>Host organisation's costs</b>						
UK	£300 pcm	2	2	600	600	
Overseas	£tbc*					
<b>Total Fellow and Host costs</b>						
<b>Travel costs to Fellowship location (up to £2,000)</b>						
Return airfare	Details: Santa Cruz – London			1000		
Travel to/from airports	Details: £15 (Bolivia), £55 (UK)			35	35	
Visas, insurance, medical cover etc	Details: Visa (£100), Insurance (£150), Travel with subsistence to La Paz for visa processing (£250)			500		
<b>Additional travel costs (up to £500 local travel OR £1,500 for international travel)</b>						
Purpose of additional travel	Details: Visits to other institutions (Natural History Museum, Oxford)			75	25	
Airfares/train fares	Details: Flight to Beni/Pando			200		
Travel to/from airports/stations	Details: Bus fares			60		
Subsistence costs (inc number of days and rates)*	Details: 12 days at £20 per day			240		
Visas etc	Details:					
<b>Total travel costs</b>						
<b>Fees and training costs</b>						
Academic fees	Details:					
English language training costs**	Details:			250		
<b>Total fees</b>						
<b>TOTAL REQUEST FROM DARWIN</b>				<b>£</b>	<b>6260</b>	<b>3060</b>

\*for advice on rates please call the Darwin Application Unit 0131 440 5181

\*\*these costs are ringfenced and should be surrendered if not used.

**16. Other sources of funding: provide details and amounts**

Time of two principals (Lewis and Wood), representing £6000 (total 9 days including overheads) and £ 2000 (approximately one month's work) respectively

## 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

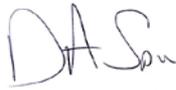
I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the project schedule should this application be successful.

I enclose CVs for project principals and letters of support as requested in the Guidance Notes. Our most recent audited accounts and annual report can be found at:

<http://www.kew.org/about-kew/our-work/annual-report-accounts/index.htm>

<b>Name (block capitals)</b>	David A Simpson
<b>Position in the organisation</b>	Acting Keeper (Director), Herbarium, Library, Art & Archives

Signed



Date:

21 December 2012

## Fellowship Application - Checklist for submission

	Check
Have you provided actual start and end dates for the Fellowship?	X
Have you provided your budget based on UK government financial years ie April – 31 March? 1	X
Have you checked that your budget is complete, correctly adds up and that you have included the correct final total on the top page of the application?	X
Is the concept note within 1,000 words?	X
Has your application been signed by a suitably authorised individual? <b>(clear electronic or scanned signatures are acceptable)</b>	X
Have you included a 1 page CV for the proposed Fellow and the UK experts listed in Section 5?	X
Have you provided the relevant letters of support?	X
Have you included a copy of your most recent annual report and accounts? <b>An electronic link to a website is acceptable.</b>	X
Have you read the Guidance Notes?	X
Have you checked the Darwin website immediately prior to submission to ensure there are no late updates?	X

Once you have answered Yes to the questions above, please submit the application, not later than 2359h GMT on **Monday 14 January 2014** to [Darwin-Applications@itsi.co.uk](mailto:Darwin-Applications@itsi.co.uk) using the name of the proposed Fellow as the subject of your email. If you are e-mailing supporting documentation separately please include in the subject line an indication of the number of e-mails you are sending (eg whether the e-mail is 1 of 2, 2 of 3 etc).

**DATA PROTECTION ACT 1998:** Applicants for grant funding must agree to any disclosure or exchange of information supplied on the application form (including the content of a declaration or undertaking) which the Department considers necessary for the administration, evaluation, monitoring and publicising of the Darwin Initiative. Application form data will also be held by contractors dealing with Darwin Initiative monitoring and evaluation. It is the responsibility of applicants to ensure that personal data can be supplied to the Department for the uses described in this paragraph. A completed application form will be taken as an agreement by the applicant and the grant/award recipient also to the following:- putting certain details (ie name, contact details and location of project work) on the Darwin Initiative and Defra websites(details relating to financial awards will not be put on the websites if requested in writing by the grant/award recipient); using personal data for the Darwin Initiative postal circulation list; and sending data to Foreign and Commonwealth Office posts outside the United Kingdom, including posts outside the European Economic Area. Confidential information relating to the project or its results and any personal data may be released on request, including under the Environmental Information Regulations, the code of Practice on Access to Government Information and the Freedom of Information Act 2000.