

Darwin Fellowship - Interim Report

(Please check guidance for submission deadlines, max 3 pages.)

Ref	EIDPS033
Main Darwin Project	13-007: Taxonomic training in a neglected biodiversity hotspot in Lao PDR
Name of Darwin Fellow	Phetlasy Souladeth (<i>Revision of Eriocaulon for Cambodia, Laos and Vietnam</i>)
UK Organisation	Royal Botanic Garden Edinburgh
Your Organisation(s)	National University of Laos
Your role within your Organisation	Lecturer in Botany, Faculty of Forestry (National University of Laos)
Start/end date of Fellowship	1 Oct 2013 to 31 Oct 2014
Location	Edinburgh, UK
Darwin fellowship funding (£)	£20,590
Type of work (eg research, training, other, please specify)	Research
Main contact in UK Organisation	Royal Botanic Garden Edinburgh
Author(s), date	Phetlasy Souladeath, May 2014 (submitted by Mark Newman December 2014)

1. Background

- Briefly describe your involvement in the Darwin project before the start of your fellowship.

I am a junior lecturer in the Department of Forest Management, Faculty of Forestry, National University of Laos where I can reach in teaching and research. My research area is on plant taxonomy, I was trained during the Darwin projects 13007 on "Taxonomic training in a neglected biodiversity hotspot in Lao PDR". Since the end of the project, I have continued to follow this career, going on to gain MSc from Khon Kaen University (Thailand) in 2012.

- Describe aim and objectives of the Fellowship, and programme of work

Due to the insufficient documents of Eriocaulaceae in Indo-chine region, the species diversity of this family was first reported only 27 species in the flora of Indochina by Lecomte in 1992. Therefore the aims of this project we are preparing a taxonomic revision of the Eriocaulaceae of Cambodia, Laos and Vietnam, a critical group of wetland plants, to develop techniques already learned in project 13007 and learn valuable new techniques.

- Briefly describe the roles of the UK and Fellow's institutions

The Royal Botanic Garden Edinburgh has been closely involved in SE Asian botany for at least 50 years. RBGE has signed a co-publication agreement with the Muséum National d'Histoire Naturelle, Paris in order to accelerate the completion of the Flora of Cambodia, Laos and Vietnam. Dr Mark Newman is a member of the editorial board of this Flora, as well as being an expert in the monocotyledonous family Zingiberaceae, and he has collected widely in CLV.

The main role of the RBGE is to act as host to the Fellow, providing experience of an internationally renowned herbarium which could not be gained in Lao PDR. The follow is available to learn more in taxonomy and all processing of a herbarium. All of this being done as part of a taxonomic revision which will be published in the Flora of CLV.

2. Progress

- Provide a brief account of your work since the start of your fellowship, showing progress against the programme of work.

More than 100 specimens were collected from some part of Lao PDR and some of these will be deposited at RBGE for duplication. I have consulted all of materials from relevant herbaria such as the Institute of Tropical Biology herbarium in Ho Chi Minh City, Vietnam (VNM), the Royal Botanic Garden Kew (K), and I am currently working on identification of all materials from CLV at the Muséum National d'Histoire Naturelle, Paris (P). Apart from this I've got opportunity to discuss with the UK expert on Eriocaulaceae (Dr. Sylvia Phillips) who is an Honorary Research Fellow at Kew. I have been trained on Nomenclature and IUCN conservation assessments by relevant experts on these fields in RBGE. Thus, I will be continuing to develop my project.

- Provide an account of any problems encountered and how you have or are planning to overcome them.

Because of herbarium specimens of Eriocaulon from CLV in RBGE is so small, most of the materials are deposited in MNHN (P) and Kew (K) so that I had to borrow to RBGE. Now I am available to study all of them, is starting from taxonomic work (identification, classification and nomenclature).

- Are there any issues you would like to raise?

I would like to learn methods, such as the correct application of IUCN threat criteria, and how to present taxonomic material on the internet.

3. Achievements and Outcomes

- What have been the main achievements and outcomes to date, and how do they relate to the overall aim and objectives of the Fellowship.

By preparing a taxonomic revision of the Eriocaulaceae of Cambodia, Laos and Vietnam, I have been recorded more than 600 herbarium specimens from relevant herbaria into the database which is can be useful for taxonomic work. I have finished taxonomic description of some species which has clearly distinguishes from other species. In addition, I have identified all of unknown and misnamed specimens. This is meant that I have obtained to update the new information of the CLV collections.

4. Next Steps

- Briefly describe forthcoming activities, events, milestones

For the next step of this research project, I will complete on taxonomic work of Eriocaulaceae in Cambodia, Laos and Vietnam; its identification, description of species and new to science. Assessment of the conservation status of all species, and crucially based on IUCN red list categories and criteria. An interactive key to the species, it is also will be available through the internet. I will prepare to present the result of the project to the "Flora of Thailand Meeting" which is going to be held on Kew in the beginning of September 2014. All of these will be improved infrastructure and systematic research resources in Lao PDR.