

## Darwin Fellowship - Interim Report

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

Darwin Main Project Ref No	162/12/030
Darwin Project Title	Building Capacity for Plant Biodiversity, Inventory and Conservation in Nepal
Name of Darwin Fellow	Ram Chandra Poudel: EIDPS15
UK Organisation	Royal Botanic Garden Edinburgh 20a Inverleith House, Edinburgh, EH3 5LR, UK
Your Organisation(s)	Ethnobotanical Society of Nepal (ESON) c/o Tribhuvan University, Central Department of Botany, Kirtipur, Kathmandu, Nepal
Your role within your Organisation	Researcher and Project Coordinator
Start/end date of Fellowship	10 <sup>th</sup> September 2007 - 9 <sup>th</sup> September 2008
Location	Edinburgh
Darwin fellowship funding (£)	28,361
Type of work (eg research, training, other, please specify)	Postgraduate study: MSc in Biodiversity and Taxonomy of Plants
Main contact in UK Organisation	Mark Watson
Author(s), date	Ram Poudel & Mark Watson 20th May 2008

### 1. Background

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

Under the Darwin Initiative project (No. 162/12/030) "Building Capacity for Plant Biodiversity, Inventory and Conservation in Nepal" led by Royal Botanic Garden Edinburgh (RBGE), Ram Poudel participated as a Darwin Scholar and attended the three workshops in Nepal covering different aspects of plant biodiversity documentation and conservation. Along with the theoretical classes, practical training in the field was also taken with the internationally recognized experts covering collection, proper documentation and conservation of the plants and associated habitats. Under the guidance of the British and Nepalese Flora of Nepal coordinators, the skills and knowledge acquired through training was used to research a plant group for the personal project and to write a Flora of Nepal account. Other training on herbarium management techniques was undertaken.

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

The aim of the Darwin Fellowship is to give a promising emerging Nepalese botanist the highest quality training in biodiversity research through the MSc in The Biodiversity and Taxonomy of Plants based at RBGE and awarded by the

University of Edinburgh. This course has been rated world class and the very best of its kind by a recent education review of the RBGE.

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

RBGE's mission statement is 'to explore and explain the world of plants'. It has an international reputation as a centre for excellence in plant taxonomy, molecular systematics and biodiversity science based on its rich herbarium, living collections, library and archives. RBGE has wide-ranging education activities which include PhD, MSc, BSc, HND courses as well diverse public education programmes. RBGE contributes to many Flora projects worldwide, and coordinated the recently completed European Garden Flora (2000), Flora of Bhutan (2002) and Ethnoflora of the Socotra Archipelago (2004). The Floras Group manages the Flora of Nepal in collaboration with the University of Tokyo and Tribhuvan University and the Department of Plant Resources in Kathmandu. The Group is developing innovative biodiversity informatics tools to aid compilation of Floras and has an active fieldwork schedule. In addition to the Nepal project RBGE has successfully undertaken Darwin projects in Bhutan, Vietnam, Turkey, Laos, Peru and Chile.

The aim of ESON is to maximize the benefits from Nepal's rich biodiversity through research, conservation and sustainable developments. ESON conducts national and international workshops, research, training, and community participatory projects on sustainable utilization and conservation of plant biodiversity. The current projects are "Community-based conservation and sustainable utilization of medicinal plants in Rasuwa, Himalaya" supported by Plantlife International, UK and "Plant Biodiversity Inventory, Identification of Hotspots, and Conservation strategies for Threatened Species and Habitats in Kanchenjunga-Singalila Ridge, Eastern Nepal", supported by Critical Ecosystem Partnership Fund, USA. ESON provides support for the MSc course taught by the Central Department of Botany at Tribhuvan University. ESON's main achievements are the publication of three books; preparation of plant databases, a national report on important medicinal plants and plant areas, case studies of community based projects and the development of a robust network of national and international research institutions, individual experts and donor agencies.

## 2. Progress

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

Mr Poudel has actively participated in the first two taught sessions of the MSc course and completed and passed all written assignments. He attended the MSc field course in Belize in January 2008. Mr Poudel successfully passed all his written exams at the end of the taught component of the course in April 2008. He has started on his research project working on the taxonomy of Nepalese Rhododendrons under the supervision of Mark Watson

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

The friendly family environment in RBGE and very cooperative staff and students in the institutions never let me feel any problems both in academic and social issues. However, sometimes limitations in my language hindered me on getting the first class results on my assignments and exams which I had hoped for.

- Are there any issues you would like to raise?

This intensive highly advanced one year course is quite a step up from the still traditional education available in Nepal. It is sometimes hard to catch up with the knowledge gaps given the time available.

### **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.

The course was joined in mid September 2007. Major courses included those on Angiosperms biodiversity, Plant and fungi, Phylogenetics and population genetics, Herbarium taxonomy and Plants and people. These provided training and familiarization with updated information and research methodologies on a wide range of organisms in the plant kingdom. The two weeks field visit in the tropical evergreen forest of Belize (Central America) provided detailed knowledge on the study of ecology and biodiversity interactions in rich and diverse habitats. This fieldwork was most significant to learn the plant identification techniques used by highly dedicated world experts of the tropical forests.

Theoretical exams were successfully passed and now Mr Poudel is actively working on his summer research project on Himalayan Rhododendrons. For the project Rhododendrons from living collections at RBGE, dried specimens at Edinburgh herbarium, British Museums herbarium and Tokyo University herbarium will be extensively studied. Molecular, morphometrics and SEM analysis are the major components of this project.

### **4. Next Steps**

- Briefly describe forthcoming activities, events, milestones

Research on Rhododendrons will be conducted during May to August with the thesis submitted at the end of August. Final assessment for the MSc will be in early September.