

### The Rufford Small Grants Foundation

### **Final Report**

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

### Josh Cole, Grants Director

Grant Recipient Details			
Your name	Nguyen Duc Anh		
Project title	The cave millipede fauna of Phong Nha - Ke Bang region,		
	North Center of Vietnam		
RSG reference	8977-1		
Reporting period	Final Report		
Amount of grant	6000		
Your email address	ducanh410@yahoo.com		
Date of this report	15 July 2012		



# **1.** Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
- To understand species diversity of millipedes in the Phong Nha – Ke Bang region.			x	The biodiversity of millipede in Phong Nha-Ke Bang region is carefully investigated and will be examined, identified. It requires a time for species identification and description. The results will be published soon.
- To establish a baseline data to help further studies on soil ecosystem management and global-level biodiversity of the millipedes.			x	The result has been included in the database of soil organisms in Vietnams in the Institute of Ecology and Biological Resources (IEBR) and will be published on website: Soil Organism of Vietnam by next year. A part of results will be included in worldwide catalogue of the family Paradoxosomatidae, which will be published
- To set up a millipede collection for further environmental education.			X	All millipede specimens are kept in the collection at the Department of Soil Ecology in IEBR. Images are stored at the database of soil organisms and will be published on website
- To propose applications of practical solutions for conservation of the millipede fauna, biodiversity and cave systems in Phong Nha-Ke Bang region.		X		Some solutions have proposed for conserving the nature of Phong Nha- Ke Bang region. However, it requires more research on other invertebrate group, such as spiders and insects or relevant and suitable solutions.

# **2.** Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

The Phong Nha – Ke Bang region is huge area located in three districts, Minh Hoa, Quang Ninh, Bo Trach, of Quang Binh province. The research survey has focused on a small area in Minh Hoa district, and in a core area of Phong Nha-Ke Bang National Park. It is still required to have another field survey in other parts of the region.



#### 3. Briefly describe the three most important outcomes of your project.

- A new species, *Sellanucheza hoffmani* Nguyen, 2011 was described from the region. Other new species, *Eutrichodesmus sp., Sinocallipus sp., Glyhiulus sp.* etc will be published soon.
- Distributional data of each recorded species is documented and be prepared for published. A part of the project is used for my PhD dissertation.
- Specimens and images of the millipede fauna of the region are categorised and preserved for further study in the IEBR.

# 4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

I have collaborated with staff of Phong Nha – Ke Bang National Park to conduct the field survey and to collect material. During conduct of research, they were aware of the value of cave biodiversity in general and millipede in particular. All research results will be sent back to them for environmental education.

In addition, when conducting project in Thuong Hoa commune, local community was participated in collecting material and exploring caves. They were also raised their awareness on biodiversity, its importance on their livelihoods. Some students from College of Science (Hanoi National University) were joined in the project and introduced about millipedes, including what millipede are, why they are important, how to collect and preserve them.

#### 5. Are there any plans to continue this work?

Cave fauna is more complicated, but very interesting with many new species and life forms. Because 1 year is very short time to understand, it is strongly believed that the cave fauna of Phong Nha – Ke Bang region is still fully unexplored with many unknown species. Therefore, I have a plan to continue my work on the cave fauna of Phong Nha-Ke Bang region by publishing my previous results, collecting more samples. When it is ready, a book "The millipede of Phong Nha-Ke Bang region" is published.

### 6. How do you plan to share the results of your work with others?

All research results will be shared with both local and international community. New species and new records will be described and published in international journals. Specimen collection is preserved in the Institute of Ecology and Biological Resources (IEBR) for further study and shared with other museum, for example Hungarian Museum of Natural History (Hungary), Field Museum of Natural History (USA). All distributional data and images will be published on the website Soil Organisms of Vietnam, which is going to appear by next year.

# 7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The project received financial support on 10 July 2011. It has been undertaken within 12 months. Most research results have not been published yet, but they will be planned to publish before long.



# 8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Expendable supplies	500	500		
Digital camera with macro lenses	1200	1400	Over 200	The macro lenses is over estimated but it is essential for taking images
Travelling	793	900	Over 107	Petroleum costs were increased in Vietnam. It led travelling costs to be increased.
Local guidance	450	450		
Facilities charge in local	805	805		
Accommodation	1261	1261		
Field assistants	721	721		
TOTAL	6000	6307		Exchange rate: 1f = 32,800 VND

#### 9. Looking ahead, what do you feel are the important next steps?

- -To expand field surveys in the Phong Nha Ke Bang region, and explore more caves and forest areas, collect more samples.
- To identify millipede specimens, describe and publish new taxa.
- To complete the publication "Millipede fauna of the Phong Nha Ke Bang region"
- To prepare documents for environmental education, biodiversity conservation and ecotourism in the Phong Nha – Ke Bang region.

### **10.** Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

The RSGF logo will be used during introduction and the training for local people and students on millipedes. The logo will be appeared on the website of Soil Organism of Vietnam

#### 11. Any other comments?

A demo of the website Soil Organism of Vietnam is temporarily deposited here: <u>http://millipede.byethost3.com/</u>