

### The Rufford Foundation Final Report

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

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. 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. Please note that the information may be edited for clarity. 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 Thi Thu
Project title	An assessment of plant diversity and conservation in Muong La upstream-protection forest, Son La Province, Vietnam
RSG reference	18719-1
Reporting period	December 2015-November 2016
Amount of grant	£5000
Your email address	Thu.nguyen.2k14@gmail.com
Date of this report	20 December 2016



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 provide A list of all vascular plant species in MLUPF				The project provide the list of 680 vascular plant species in which 54 species are new record for Muong La nature reserve. This is important scientific information to help MLUPF become Muong La Nature reserve
To provide a checklist of threatened plant species in MLUPF				All the recorded species were checked in IUCN Red List and The Red Book of Viet Nam, up to 29 species are listed in the Red Book of Viet Nam (2007) and 11 species are listed in the IUCN Red List.
To provide A specimen collection of collected plant species of MLUPF, which will be stored in the herbarium of the Biodiversity Centre, the Vietnam National University of Forestry for education and research purposes.				Up to more than 400 specimens of plant species of Muong La nature reserve are stored at Biodiversity Centre, Viet Nam National University of Forestry.
An assessment of the status of threatened species in MLUPF				Status is determined for each threatened species
To provide three successful training courses for local people, government officials, primary and high school, University students pupils at the local.				The project carried out successfully three training courses as we planned before.
One workshop on plant				The workshop was held in Muong la



biodiversity and	District, Son La province with 50
conservation in the	participants including scientists,
MLUPF.	government officials, and local
	people.
A recommendation for	The project provided the
biodiversity	recommendation to strengthen
conservation in MLUPF,	conservation activities for this new
Son La province.	nature reserve.
An article about plant	An article entitled "New findings
biodiversity	of flora systems in Muong La
conservation in the	nature reserve, Son La Province,
MLUPF will be published.	Viet Nam" was accepted for
	publication in the journal
	Agriculture and Rural
	Development Journal. This
	journal is administrated under
	Ministry of Agriculture and Rural
	Development in Viet Nam who
	manage all the protected area
	network of the country.
	One manuscript entitled
	"Checklist of Vascular Plants of
	Muong La nature reserve, Son La
	Province, Viet Nam" Was
	submitted to a peer review
	international journal.

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

Muong La nature reserve (which was MLUPF) is located in the west part of Hoang Lien mountain – one of the highest and most difficult topography mountain in the Indochina region, therefore, it was very difficult for transect sampling. For instance, the research team was stuck in the mountain 3 days because of heavy rain, and thus, the survey time was longer than the planned.

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

• Providing a list of the project provide the list of 680 vascular plant species for Muong La Nature reserve. This is important scientific information to help MLUPF become Muong La Nature reserve. Many of them was found only in Muong La Nature reserve but not in the nearby national park.



- Capacity building for local people, government officials, primary and high school, university students on field work skills and plant identification.
- Recommendation to strengthen conservation activities and better management of new nature reserve.

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

Local people were key informants in our PRA survey and were invited to do the botany surveys with our team. They provide their indigenous knowledge about flora system of this area. Also, they are trainees of our training courses to obtain the knowledge and skills about plant diversity of this area.

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

Muong La is one of the youngest nature reserves of Viet Nam which developed from Muong La Upstream Protection Forest (MLUPF) when our project was carrying out. There hasn't been the research about the biodiversity and the local pressure on natural resources. Therefore, beside the evidence of plant diversity obtained from this project, I would like to conduct further research about the human impact on plant diversity and in Muong La Nature reserve. Application for the Second Small grant will be submitted to assessing the human impact factors on flora systems to provide necessary solution for conservation planning of this area.

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

The result of our work will be sent to Muong La Nature reserve management Board, Son La Forest Protection Department for developing biodiversity conservation plan of this nature reserve. Also, the result will be shared with scientists at Viet Nam National University of Forestry. Moreover, we will share widely our findings, the important outcomes of our project have been publishing in national and international peer-reviewed journals, including:

One paper was accepted for publication:

Pham.T.T., Nguyen.T.T., Do.V.T., Nguyen T.N., Lo. V.T. (2016) (accepted), New findings of flora system in Muong La Nature Reserve, Son La Province, Viet Nam. Journal of Agriculture and Rural Development, ISSN: 1859-4581, Ha Noi, Viet Nam.

One manuscript was submitted to peer-reviewed international journal.



Pham.T.T., Nguyen.T.T., Do.V.T.. (2017): Vascular Plants of Muong La Nature Reserve, Son La Province, Viet Nam. Manuscript submitted to the journal of biodiversity data for publication

Plant specimen collections of Muong La nature reserve which was stored at Herbarium of Biodiversity Centre, Viet Nam National University of Forestry will be used for scientific research and education purpose. Also the our finding will be shared on the biodiversity social media network

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

The timescale was in accordance with the proposed plan of the project.

# 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
Alcohol for making specimens	20	20		
Workshop (drinks, renting the Hall, printing the document)	22	22		
Personal medication and first aid kit for team during fieldwork	50	50		
Traveling: Ha Noi - Son La (2 researchers are expect to travel 3 times to site study for different surveys, training courses and workshops at site study *£13/r	78	78		
Motorbike hire: To do transect samplings we will need to hire motorbikes to get to the study site (60 days * 2 motorbikes * £2 /motorbike /day)	240	240		
Petrol to run a motorbike: £ 2/motorbike/day * 2 motorbikes * 60days	240	240		



Wages for 1 senior expert (90 days of researching * £15 /day)	1350	1395	45	The survey team was stuck in the forest 3 days because of heavy rain
Wages for 1 researcher (90 days of researching * £12/day)	1080	1116	36	The survey team was stuck in the forest 3 days because of heavy rain
Wages to support forest rangers and local people participate surveys including (2 local people * 60 days+ 2 Forest ranger * 30 days) * £9/day	1620	1726	106	The survey team was stuck in the forest 3 days because of heavy rain
Wages for botanist to identify species in herbarium (2 botanists * 10 days *£15/day)	300	300		
TOTAL	5000	5187	187	

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

The research project about human impacts on plant diversity in Muong La Nature Reserve is important to provide necessary information for identifying conservation measures in this area. This is very important because this nature reserve has been established for just several months and need basic research on biodiversity as well as social ecology to set up the conservation plan. It is expected that the key human factors causing biodiversity degradation in this area will be identified and solution to attack the problems will be recommended for better biodiversity conservation of this area.

### 10. Did you use The Rufford Foundation 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 was used in banners and presentations of the workshop and training courses. Also, the RSGF logo was used in the acknowledgement section in my publications.

## 11. Please provide a full list of all the members of your team and briefly what was their role in the project.

N/A



#### 12. Any other comments?

We would like to sincerely thank to RSGF for your funding support. With this important funding, we are proud of being the first botany researchers landing on the untouched forest area of Muong La Nature Reserve to carry out the initial botany survey for the area.

Because of plant identification is argumentative among experts and take long time especially in finding new species. In this report we do not include the information about the potential of one new species discovered from this project. This is due to the fact that the specimen and pictures of the species are sending to Germany for double check before we can determine exactly. We will send and update the information about this species to RSGF soonest as possible. Also, we would like to thank the botany experts from Dresden University of Technology who are helping us with this piece of work.