

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	Pham Thanh Trang
Project title	Plant diversity and conservation in Quang Truc Forest, Dak Nong Province, Vietnam
RSG reference	19149-1
Reporting period	February 2016-January 2017
Amount of grant	£5000
Your email address	Phamtrang.botanydep@gmail.com
Date of this report	20 February 2017

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 check list of vascular plants in Quang Truc Forest				The check list of 654 vascular plant species was established for Quang Truc Forest.
To provide a checklist of threatened plant species in Quang Truc Forest				All the recorded species were checked in IUCN Red List and The Red Book of Viet Nam and the Degree 32 issued by Vietnamese Government about list of threatened species needing to be conserved, up to 34 threatened species are found with 27 species are listed in the Red Book of Viet Nam (2007) and 16 species are listed in the IUCN Red list and 6 species are listed in Degree 32/ND-CP/2006 issued by Vietnamese government.
A comparison of plant component in this area with that of two rich biodiversity areas near by				A report comparing of plant component in this area with that of two neighbouring rich biodiversity areas was completed. This report is revised into an article publishing in a professional journal
New country records or new species for Vietnam might be found, in which case a description for the new species and new records will be published				A new species was found. A description for this species is submitted for publication to Journal of the Japanese Society for Plant systematics. This is the result of the cooperation among research team in Viet Nam, scientists from Kyushu University (Japan), Institute of Forest and Wildlife research – Forestry Administration (Cambodia), National University of Laos (Laos). The specimen of the new species in Quang Truc Forest was compared with the specimen of this species in neighbour

				area of Cambodia. Then the new described species is from both Viet Nam and Cambodia.
To provide collection of plant specimen in Quang Truc Forest				A collection of more than 300 specimen of plant species of Quang Truc Forest are stored at Biodiversity Centre, Viet Nam National University of Forestry.
An assessment of the conservation status of threatened species in Quang Truc Forest.				Status is determined for each threatened species in Quang Truc Forest.
Distribution maps of threatened species				All the threatened species was located by GPS during our surveys. Each of them is represented on one distribution map.
To provide three training courses about plant diversity and conservation status of threatened species for government officials and forest rangers; for local people living in and around Quang Truc Forest; and for pupils the high school in this area				Three training courses were carried out successfully.
Recommendations for plant conservation in this area.				The project provided the recommendation to strengthen conservation activities for this forest area. Importantly, we recommended that this area should be developed to be a new Nature reserve in Dak Nong Province because of its biodiversity importance.
At least one article will be published in a professional journal				An article entitled "Comparison of Plant Diversity of Forest in and outside protected areas in Dak Nong Province, Viet Nam" was accepted for publication in the Journal of Forestry

				<p>science and Technology.</p> <p>- One manuscript entitled "<i>Lagerstroemia ruffordii</i>, sp. nov. (Lythraceae), a new species from Cambodia and Vietnam" Was submitted to a peer review international journal in Japan.</p>
--	--	--	--	---

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

The climate at the study area includes rainy and dry seasons; therefore, it was very difficult for the research team to carry out the surveys in the rainy seasons.

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

- The project provides the list of 654 vascular plant species for Quang Truc Forest in which 34 threatened species, a new species for Viet Nam and Cambodia were recorded. All of the project result was published in Vietnamese and international journals. Therefore, the biodiversity importance of Quang Truc Forest is determined through this project outcome.
- Capacity building for local people, local government officials, students about the botany surveys, biodiversity importance of this area as well as the need to take more actions to conserve this forest area.
- Recommendation for conservation plan in this area especially the need to develop this area to be the new nature reserve in Dak Nong province, Viet Nam.

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

Local people were involved in the project both PRA survey and transect sampling to provide their indigenous knowledge. Moreover, the capacity of local people are improved through the training course providing by the project. In fact, the researchers and local people have exchanged the knowledge when they participate together in this project.

5. Are there any plans to continue this work?

The result of this project indicates that this is the forest outside protected areas with plant diversity significance. Of these, up to 34 threatened species are found with

different level of threaten. We have discussed with local foresters, scientist to identify the most threatened species to take steps for conservation of these species. Hence, the next step we plan to request the second grant for further research of conservation of this species group in Quang Truc Forest.

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

The result of our work will be sent to Vietnam forest administration, Dak Nong forest protection department, Dak Nong department of natural resources and environment, the forest protection division of Tuy Duc district, Dak Nong province for future conservation plan of this area. The report of the project sent to Viet Nam National University for the further consideration and research by the university scientists about flora conservation in this area. In addition, the research team have tried to publish the project result in national and international peer-reviewed journals, including:

- One paper was accepted for publication:

Pham.T.T., Nguyen.T.T., Hoang T.L (In press 2017), "Comparison of Plant Diversity of Forest in and outside protected areas in Dak Nong Province, Viet Nam" The Manuscript was accepted for publication in the Journal of Forestry science and Technology, ISSN: 1859 – 3828, Ha Noi, Viet Nam.

- One manuscript was submitted to peer-reviewed international journal.

Pham T.T., Tagane S., Chhang P., Yahara T., Souladeth P., Nguyen T.T. (2017). *Lagerstroemia ruffordii*, sp. nov. (Lythraceae), a new species from Cambodia and Vietnam. Manuscript submitted to Journal of The Japanese Society for Plant Systematics.

Plant specimen collections of Quang Truc Forest will be used for scientific research and education purpose at Viet Nam National University of Forestry

When the paper about the new species discovered in this area is published, the specimen of this species will be stored in different Herbariums in and outside Viet Nam.

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 took longer than the proposed plan of the project because of the weather condition, which did not allow the research team to carry out the fieldwork.

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
Medicines	100	100		
Salary for Forest inventory of 3 researchers: 50 days/field trip x 3 man- days x 12£/man-day	1800	1800		
Salary for Forest inventory of 2 assistants: 50 days/field trip x 2 man- days x 9 £/man-day	900	900		
Salary for PRA surveys 0 of 30 man- days x 3 researchers x £12	1080	1080		
Training course salary for 3 courses * *3days/courses *1 expert*£12	108	108		
Travelling return tickets Hanoi – Dak Nong for 3 researchers * 4times *£26)	312	312		
Motorbike hiring for local travelling when doing forest inventory	500	600	100	The price of motorbike hiring is higher than expectation
Logistics: Fax, telephone, post, internet, drinking water and other 'small' items for forest inventory and the workshops (topographic maps, nylon string, marker	200	200		
TOTAL	5000	5100	100	

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

The most threatened species are identified for prioritised conservation activities. We plan to request the second grant for further research of conservation of this species group in Quang Truc Forest. This is the emergent step to protect these high-risk species before they disappear from natural forest in Quang Truc.

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?

During the training courses, we use the RSGF logo on presentations. Also, the Rufford was named in acknowledgement of the publications. Also, the new species discovered by this project was named Rufford (*Lagerstroemia ruffordii*, sp. nov. (Lythraceae)) as we want to thank to Rufford for their funding to carry out this project.

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

12. Any other comments?

Thank to this grant, the research team have chance to carry out the survey to make the first check list of vascular plants; the threatened species, the specimen collection, and especially a new plant species for Quang Truc Forest, Tuy Duc District, Dak Nong Province, Vietnam. Thank to this project, the scientist from Viet Nam, Laos, Cambodia and Japan can work together and we will continue cooperate and widen our network in the future to contribute more to biodiversity conservation in Vietnam as well as Indochina region.

Because of weather condition with the long rainy season in Dak Nong province, the project team couldn't complete the project as we planned. However, the output of the project is significant and it is important for decision-making of biodiversity conservation in this area.