

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	Doda James Patrice Ravonjarisoa
Project title	Fungi biodiversity study and its conservation through conservation active learning at the Ranomafana National Park
RSG reference	15322-1
Reporting period	May 2014 – May 2015
Amount of grant	£5894
Your email address	ravonjarisoa@yahoo.fr
Date of this report	20 th of May 2015

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
A To improve the conservation training by active method (interactive and living method);			Fully achieved	100 % achieved. It was well executed, and the students and the trainers were very satisfied. All participants agreed that the active training method is efficient, but it need more time than the classical method and more practical study such as field visit. In that way, we could realise and practice the Kolb's learning cycle by experiencing, examining, explaining and applying. Trainers and students became familiar with many techniques of active learning.
B - To contribute to the data collection about the fungi current status, its ecology, its distribution and to contribute the establishment of fungi conservation plan; 1. Evaluate the relationship of fungi biodiversity to forest disturbance and health 2. Research on ecology of fungi including beneficial linkages with plants and animals 3. Carry out surveys of fungi biodiversity, including engaging community involvement		Partially achieved		Our objective was too ambitious and could not be achieved in 1 year. We have collected diversity of some species of mushrooms in the two types of ecosystems: primary and secondary forest. However, identification of some species took more time than expected and analysis is still ongoing. We could not make the list of fungi especially the mycorrhizae fungi found in the park (primary and secondary forest). The evaluation of the relationship of fungi biodiversity to forest disturbance and health and the research on ecology of fungi including beneficial linkages with plants and animals was not achieved because of the time consuming for the inventory and the identification.
C - To contribute to the public awareness about fungi conservation and its relationship with biodiversity and rainforest conservation;			Fully achieved	It was well executed and the pupils with their teachers of the schools visited were very satisfied. We have informed them about the importance of fungi and their relationships with the forests. We emphasised the

				<p>message «, without Fungi no forest, without forest no water ». This was done via presentations and distribution of printed material; posters, leaflets, calendar 2015 with the world environment event dates. They want us to come again and to continue the collaboration by undertaking action on fungi conservation.</p> <p>We have visited primary and secondary schools in Antananarivo, Ranomafana and Fianarantsoa. During our ethnomycology enquiry and the survey we have undertaken public awareness to the population around the Ranomafana National Park. It was amazing for them to hear that we work on fungi because they have the habit to see researchers on lemurs or on vascular plants.</p>
D. To upgrade the Malagasy traditional knowledge about biodiversity especially the ethnomycological.		Partially achieved		<p>Enquiries were made in 17 villages as planned. All the information that we have collected need further species identification because the population gave us the Malagasy name. We had not yet in that time fungi photos from the field to show to them. But, the Malagasy people in that area know mushrooms, their uses as food, as medicine and spiritual uses.</p>

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

We have encountered difficulty on the identification of some species because it took more time than programmed. So, it is still ongoing. Some species evoked by population during ethnomycological inquiry, the colour, were too difficult to identify

Our activity calendar on January till March were perturbed by the natural disaster such as cyclone and flood which caused damage to the roads in this region. We could not undertake our survey in this period of rainy season.

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

- With this project, trainers and students on conservation are aware of the importance of active training which contributes to cultivate skills such as interpersonal communication, problem-solving, effective team-working ability and entrepreneurship.

- The project increased the interest of populations on the importance of fungi not only as important source of food and income, but also on rainy forest ecosystem health.
- This is among the first research on fungal conservation in Madagascar currently. It contributes to stir the Malagasy researcher especially the youngest to study this forgotten kingdom. We could show the biodiversity richness of Madagascar fungi, which are also threatened like other kingdom and need conservation plan.

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

Trainers and students on conservation were really interested and participated actively in our workshops. We all have agreed its importance, but we are conscious as well that its implementation is not so easy. Because, it takes time and need more field study and more practice.

Local communities were participated actively during our ethnomycological survey. We have collected many information which show that Malagasy people have their local knowledge about these taxa as a food and as drugs.

But they learned as well the others importance of fungi for the nature, particularly the forest. Our project has recruited local guides, cooks and porters from the village around the park. They were very satisfied. During our collaboration, their curiosity and their knowledge about fungi arise and that contribute to their participation on its conservation.

5. Are there any plans to continue this work?

Yes, we are planning:

- To focus our active training programme on leadership and planning conservation projects to the environment students.
- To complete our data collection about the fungi current status, its ecology, its distribution, its threats and to undertake its assessment regularly to know its status in accordance with the IUCN Red List.
- To continue the public awareness by reinforcing the school club for fungi conservation.
- To continue the ethnomycological study in another area such as Antananarivo and Mahajanga.

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

One of the objectives of this project was to share and make freely available the results, as useful tools for fungal conservation. At the moment, we use:

1. Flyers, posters to be distributed to the local communities, schools, our environment students and trainers about the fungi biodiversity richness of Madagascar.
2. We have sent preliminary results to the Madagascar National Par and the minister of ecology and forests.

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

12 months. This time was not sufficient to achieve my ambitious objective about the fungi data collection of its current status, its ecology, its distribution and to contribute the establishment of fungi conservation plan. But it was sufficient to achieve the inventory at the 38 limited plots. Field Work was done in time. However, identification of species was difficult and took more time than estimated.

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.

Ar (Ariary) Malagasy currency

Fortunately, our exchange rate on Wednesday 21st May 2014 when I received the fund was higher (1£ = 4 002, 14 Ar) than we are expected in our budget plan (1£ = 3750 Ar).

But we have modified our budget because we have underestimated the center albino station fee for the Principal Investigator and for the students, to that problem we made an adjustment of the previous budget.

Item	Budgeted Amount	Actual Amount	Difference	Comments
A2 Education material	1064	1064	0	
A3 Preliminary visit at the site	300	300	0	
A4 Communication	540	540	0	
A5 Entrance fee	105	105	0	
A6 Transportation	1500	1500	0	
B1 field-trip material	250	250	0	
B2 Equipment rental	16	16	0	
B3 Student per diem	120	120	0	
B4 CAFF/CORE specimen collect supervisor: per diem	162	0	+162	Finally, our project does not need the assistance of this person.
B5 Station fee Center Valbio Principal Investigator	15	500	-485	It was 25£ per day x 20 days
B6 Station fee Center Valbio Student	10	300	-290	It was 15£ per day x 20 days
B7 Research technician salary	150	150	0	
B8 Local guide and local cook per diem	64	64	0	
B9 Food	162	162	0	
C1 day workshop room rental	37	37	0	
C2 Food: + Coffee break	400	90	+ 310	We have to reduce to expanses for food and

				coffee break during the workshop
C3 Lecturer theoretical training + field training	96	96	0	
D1 organisation and accommodation	803	500	+303	We have to reduce this budget as well
D2 Other expenses	100	100	0	
TOTAL	5894	5894		

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

1. Continuing our active training on conservation by stirring the student to undertake research project. We impact and involve them in a stage focused on further scientific investigation on one fungi species.
2. Continuing our data collection about fungi biology, ecology, distribution and threat and to undertake assessment programme that can help establish the fungi status according the IUCN Red List and its conservation plan.
3. Continuing the ethnomycological study and to extend the investigation in another area of Madagascar such us the highland and the west coast as a dry forest.

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?

Yes, the RSGF logo was used in the posters, flyers presentation, and the 2015 calendar distributed to local population, pupils, students and some colleagues and all oral presentations delivered during the course of the project. It was used also in the poster of World Wetlands Day celebrated on 2 February 2015 that our Environment field was organised.

11. Any other comments?

It is a great opportunity for us as a trainer to have the support of The Rufford Foundation support in this period that we change our education system, and to move on LMD system. This new system needs full implication of students and trainers on conservation into research and actions. Your support let us to know, study and reveal the richness of Madagascar biodiversity, the importance of fungi and the need for its conservation.

We are looking forward for the continuation of your support to fungi conservation.