

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	Rosemary Tonjock
Project title	Establishment of a Genebank Collection for Macro-Fungi of Conservation Importance in the Mount Cameroon Region, and Cultivation Trials of Selected Species
RSG reference	13129-B
Reporting period	May 2013 – May 2014
Amount of grant	£11,942
Your email address	rosemary32us@yahoo.com
Date of this report	9 TH JUNE 2014

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
Field collection of edible and medicinal mushrooms			yes	100% achieved. Basidiocarps of indigenous edible and medicinal species were collected in the Mount Cameroon Region. Identification of the different species was done by comparative morphology.
Culture preparation and maintenance			Yes	100% achieved. Cultures were prepared using different growth media (PDA and ME) to select the best media. Maintenance of cultures was done in a refrigerator. However, more cultures need to be prepared and added to the genebank.
Cultivation Trials			Yes	100% achieved. A cultivation trial was carryout using different locally available substrates (sawdust, empty palm fruit bunch, leguminous trees and bagasse) and the best substrate was selected for a particular mushroom. The different growth conditions were investigated.
Workshops		Yes		Workshops was organised with the local communities on the conservation and cultivation of edible and medicinal mushrooms, however more workshops are needed to teach the local communities in their different environments.

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

At the reception of the grant, there was a drop of the currency rate of exchange between the assumed exchange rate at proposal submission (1 £ sterling = 745 Francs CFA) and at grant reception (1 £ sterling = 711.99 Francs CFA). To that problem we made an adjustment of the previous budget. I was transferred from the University of Buea to the University of Bamenda. This problem was solved in that, we had a solid team and community members, and I was always present at the project site when work was to be done.

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

A genepool of some indigenous edible and medicinal macro-fungi (*Pleurotus*, *Auricularia* and *Ganoderma*) species of conservation importance in the Mount Cameroon Region have been collected from the wild and identified. The collection have formed important historic asset for the

region. Pure cultures of these indigenous edible and medicinal mushrooms have been made and maintained in a refrigerator.

Cultivation trials have been done to evaluate the suitable growth conditions for the different mushroom species (*Pleurotus*, *Auricularia* and *Ganoderma*). Appropriate growth substrate, growth conditions and other aspects related to the eventual commercialisation of this indigenous species have been identified. This will go a long way for the cultivation of mushroom with the local community hence limiting over harvesting of these particular mushrooms in the forest. This will lead to the development of local mushroom cultivation industries that will generate jobs, income and supply high protein vegetative food.

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

Selected local community members were involved throughout the entire project period, collection of edible and medicinal mushrooms species in the field and identification of species by local names. They also participated in workshops on mushroom cultivation. They have benefited in knowledge acquired and all field guides with some organisers of the workshop were from local communities.

5. Are there any plans to continue this work?

Yes. We are planning to continue with the cultivation of indigenous edible and medicinal mushrooms with community groups. Cultivation trial is important because it seeks to develop a production package of identified species. Now we have to deliver the cultivation package to the local communities, Common initiative groups and community groups around the Mount Cameroon Region. We will also continue with organising more workshops with community groups in the Mount Cameroon Region.

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

We have already shared part of the result of our work in the AETFAT conference in Stellenbosch, South Africa which took place in January 2014. We also shared our results in two workshops in which the local communities participated. Awareness programme on conservation of mushrooms will continue with the communities. We are preparing an article on the effect of substrate and substrate concentration on the growth and yield of different indigenous edible and medicinal mushrooms species in the Mount Cameroon to publish in an international scientific journal.

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

Twelve months. The actual length of the project was 12 months from May 2013-May 2014. However, work is still ongoing as some data is to be analyzed.

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
Orientation of project members (4 meetings)	100	100	0	
Contact meetings with all stakeholders	100	100	0	
Feeding during fieldwork (lump sum) x 7months	600	600	0	
Lodging and transportation for field work x 4months and transportation for cultivation x 3months, (lump sum).	1500	1500	0	
Field assistant's salary (lump sum)	800	800	0	
Field guides salary (lump sum)	500	500	0	
Consumables (Sterilization loop, polypropylene bags, Silica gel, ziplock bags, tissues, culture bottles,	1500	1500	0	
Purchase of a freezer for storage of cultures (-20° C)	722	734	+12	Additional money was provided by research modernisation allowance from my university
Public awareness materials (Website design and maintenance x 12 months)	950	950	0	Public awareness materials were prepared and used for workshop. Website was not designed because during review of my application, it was proposed that we should instead conduct workshops
Telephone and internet costs for communications with team members, NGOs and local authorities x 12 months	370	370	0	
Office supplies (HP Laser printer, realms of papers, pins, field booksink) x 12 months	500	500	0	
Printing and publishing of brochure / flyers for distribution to local	800	800	0	

communities on the cultivation of the different indigenous mushroom species (1000 copies)				
Land rental and construction of a hut for cultivation (8m by 4m) x 12 months	1750	1750	0	
Purchase of substrates (bagasse, sawdust, palm bunch, corn cob, leguminous trees) x 6 months	500	500	0	
autoclave, microwave	650	650	0	
Laminar flow hood (adapted)	600	600	0	
Total	£11,942	£11,954		1 £ sterling = 711.99 Francs CFA

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

Cultivation of mushrooms with local communities, NGOs and CIGs in order to preserve biodiversity, improve nutrition, health and to raise livelihood. Organising more workshops with community groups in the Mount Cameroon Region.

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?

Yes, the RSG logo was used on all documents distributed to the local population during the workshops. The RSGF received publicity during the AETFAT conference in January 2014 in the University of Stellenbosch, South Africa. (Attached are some pictures of the conference). I will also present part of the result of the project in Agricultural Research Connection workshop which will take place in Nairobi Kenya from 22-28th June 2014.

11. Any other comments?

It was quite a great experience. The enthusiasm of the villagers and their active participation, the commitment of the project team made it possible to attain our objectives. The research team was a great one, which worked very well with different stakeholders. The local communities are looking forward for the continuation of this work (cultivation of indigenous mushroom species with their community groups).