

# 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	GBESSO Florence Koussi					
Project title	Habitat Assessment, Understanding Threats for the Conservation and Sustainable Use of Lactarius Foetens Verbeken and Van Rooij, A Rare, Endemic Fungal Species Confined to Dahomey-Gap and Threatened in Benin					
RSG reference	21737-1					
Reporting period	04/17 – 04/18					
Amount of grant	£4990					
Your email address	gbesflore@gmail.com					
Date of this report	10/04/17					



### 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
Assess the distribution and population demography of <i>Lactarius foetens</i> in occurring zone.				According to schedule, an ecological survey was conducted and it showed a total absence of <i>Lactarius foetens</i> in its occurring zone in Benin. Thus, an additional effort of field research was provided during fungal appearing seasons (June-August 2018) but we obtained the same results, no individual of the species was found.
Assess socioeconomic and cultural importance, subsequent impacts of utilization on the species.				A total of 411 people were interviewed across occurring zone of the species. Among them, about 85% knew Lactarius foetens. Other people mixed up the species with Cantherellus solidius, another endemic to gallery forests of Bassila.
Set an education program for conservation and sustainable use of the species in its occurring zone				A sustainable management programme (ongoing) based on education has been set and it has been implemented with stakeholders as village organizations, Office National du Bois, RF-NGO.

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

The main unforeseen difficulty was noted during ecological inventories. As the species disappeared in its foreseen study habitat, we continued the investigations in other potential habitats in its occurring zone in the country. This lengthened expected period for the project. In addition, informants during ethnomycological study were not often punctual. In order to have majority of people many meetings have been aborted. All this implied for most additional expenses.

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

- Total disappearance of *Lactarius foetens* in Benin. The species would be considered as Extinct in Wild.
- Documentation of the main; 1- local names (Naama in Yorouba;
  Goutchansou and Guiton in Anii), 2- use (food), 3- users (people of Yorouba,



Anii), 4- threats: total harvest of the species for consumption, clearing of ectomyccorhizal species (*Pterocarous erinaceus*, *Afzelia Africana*, *Isoberlinia doka*, and *Berlinia grandiflora*), urbanization, and vegetation fire, 5- habitat (gallery forest), 5-conservation status (extinct) of the species.

- Strengthening of village organizations for recognising of the species, creation of its management model as regard its use value. In addition, the public awareness for the reintroduction of the species was raised.
- Ongoing drafting of a scientific paper on results of the project.

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

The project involved 411 people gathered in four local groups (one per locality). They participated to all activities (ethnomycology, forest inventory and public awareness). An education session has been implemented including the four groups and RF-NGO.

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

The species could be considered as extinct in Benin. As regards its local importance, we plan reintroduce it in its natural habitat. As it was very poorly known by some class people, we will educate people on its recognizing and sustainable use. This study is just a preliminary work. We will continue it for a long term conservation of the species. After reintroduction, we will monitor the population in order to understand its spatial distribution, ectomycorrhizal partner trees, main factors affecting its distribution, its reproductive biology, etc.

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

We already shared a part of the results through oral presentation, pamphlet and poster during scientific seminary in my lab at the Abomey-Calavi University and in the four prospected villages. As promised, we presented the photo of the species on web page of our university. For the current future, we are writing a scientific paper for publishing it in peer reviewed 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?

The expected timescale of the project is January-December 2017. But, the activities were started in April 2017 where we received our grant. Activities were ended on August 2018 instead of April 2018 because an additional period was given by Rufford Small Grand Foundation Responsible in order to finalise the activities.



## 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
Motor-bike	600	800	- 200	Two additional months for
Fuel for motor-bike	480	640	- 160	ecological studies
ETrex Summit GPS	300	300		
Digital camera Olympus	270	270		
Stipend for 5 students	750	300	+ 450	We reduced the number of expected students in order to fill the gap related to the additional ecological inventory
Assistant fee for 5 local farmers	300	300		
Assistant fee for 5 local pupils	300	0	+ 300	We suppressed it in order to fill the gap related to the additional ecological inventory
Awareness raising	280	280		
Mini-seminar (foresters, researchers, NGOs, students)	450	440	+ 10	Less money was spent contrary to expectations
Edition of 50 copies of Pamphlet	600	300	+ 300	We reduced it in order to fill the gap related to the additional ecological inventory
Printing plasticization of 50 posters	660	660		
Total	4990	4290	+ 700	Use for the round trip in public transport, which wasn't expected. Total distance covered was 1400 km and we paid £0.5 per km.

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

- Continue the present work in its potential habitats in the West Africa (Togo and Niger) in order to assess its conservation status in the region,
- Inform the IUCN members of the current conservation status of the species,
- Perform a reintroduction activity in its natural habitats in Benin,
- Understanding distribution factors of the species and of its ectomycorrhizal partner trees,
- Estimating combing effect of climate change and land use on potential distribution of the species,
- Study its reproductive biology, etc.



- Assessing its relation with other fungi in its habitats,
- Assess impact of some invasive plants on its populations,
- Realize the experiments on the cultivation of the species,
- Continue public education on its sustainable use.

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

During education session and scientific seminary where we distributed the results of the activities to our partner's logo of Rufford was used. In addition, we thanked the foundation on web site of our university. This will be done during the publication of our scientific paper.

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

**Gbesso Florence K**, (PhD in Biogeography): Leader of the project.

Role: sampling design, preparation of slip for data collection, data collection supervision, data analysis, oral presentation, final report writing, poster realization, public education.

**Boni Soulemane**, (MSc. Mycologist): Under the supervision of **Prof. Dr. Ir. Nourou S. Yorou**, Expert in Mycology in Benin

Role: Field research (ethnomycology and ecological study)

#### Anagonou Alain,

Role: Field research (ethnomycological and ecological data collection).

**Donou Valère**, (Ph.D. Agronomist): with high experience in biometry Role: Sample design validation, forest inventories supervision.

Local population: 5 farmers (men: **Salifou Abdoul, Alanda Ousmane** and women: **Aboubakar Aliath, Fousseni Amina and Mamam Chérifath**):

Role: Assistant in data collecting, help in farmers' mobilization, facilitating communication with local population and awareness raising.

Foresters (Office National du Bois)

Role: Awareness raising.

#### **RF-NGO**

Role: Environmental education, awareness raising, and ongoing conservation program.

### 12. Any other comments?

We sincerely thank The Rufford Foundation for the funds granted in the framework of this work.





Forest investigation

Ethnomycological study with women

Ethnomycological study with men

Lactarius foetens. © Prof. NS YOROU, University of Parakou, Benin





Searching the species in the vegetation



Individual interviews



Public education