

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. 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	Daniela Dutra
Project title	Resource management, trade and conservation of wild harvested epiphytic orchid species in Oaxaca, Mexico
RSG reference	33.10.09
Reporting period	March 2010-March 2011
Amount of grant	£6000
Your email address	ddutra@hawaii.edu
Date of this report	05/01/2011

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
1. Conduct a market study to assess the volume and diversity of wild-collected epiphytes			X	
2. Assess the vulnerability of the species to harvest		X		
a) Community interviews and needs assessment			X	
b) Demography study		X		Project was set up and first year data collected. Two more years of data collection are still needed.
3. Develop seed propagation protocols for overharvested species		X		

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

The orchid species being harvested by local communities are all under local and federal ban. One of our objectives was to assess the vulnerability of the species to harvest by taking into consideration the ecology of each species and the needs of local communities. This included interviews with community members. However, since orchid collection is considered an illegal activity, community members did not want to give out any information with fear that repercussions would follow. We had to restructure all the questions to emphasise that the questions being asked were about harvest before the ban. Although this method does not give us precise figures on current events, it does give us a good estimate on numbers of plants being harvested, species diversity, and local knowledge while opening the dialogue with community members.

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

- a) A demography study was set up on four populations in different areas and data were collected. Detailed information on orchid population biology will be used to inform conservation planning with the objective of insuring the long-term viability of species. This part of the study will continue for another 2 years since consecutive data collection is needed to understand patters of growth for demography studies.
- b) A detailed market study was conducted over a 1-year period (2010-2011). The study assessed the volume and diversity of wild-collected epiphytes sold in Oaxaca. We gathered important information including where species are coming from, who is selling them, the price, and when they show up in markets around the city of Oaxaca. This information is extremely important for conservation initiatives in the area.
- c) We conducted surveys in four different communities who directly harvest orchids. These surveys assessed traditional ecological knowledge related to orchid harvest, and the need for a conservation project in the area. The results showed that most people have harvested orchids

for generations and continue to do so even though it is considered an illegal activity. Communities may get permission to harvest if a demography study has being conducted giving information on safe numbers of plants that can be taken from the forest. These surveys were used to gauge interest of people to participate in a project that will allow them to harvest legally or/and cultivate orchids from seed. We now know who in the communities depend on orchid harvest and the traditional ecological knowledge related to orchid species that can be used to implement a conservation plan for the area.

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

The results of the studies being conducted will directly be used to implement a conservation plan in the area that will allow community members to legally harvest and grow orchid species. The findings will be directly used to provide a series of recommendations for management strategies that combine ecological knowledge and community involvement in order to develop sustainable harvest estimations and in situ and ex situ conservation activities, such as seed and vegetative propagation programmes.

5. Are there any plans to continue this work?

Yes, we will continue the project. The demography studies for targeted species will continue for 2 more years and after that we will be able to analyse the data and develop a set of recommendations for the local communities with respect to orchid harvest. In the mean time, we are working on setting up a project that will use seeds and will allow community member to grow these target species with minimum impact.

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

The results of this project will be published in peer-review publications and will help shed light on the conservation of hundreds of orchid species worldwide that are being overharvested from the wild. Participatory community workshops will be offered to local communities during the development of a management plan for the species. I will share the results of this study with NGOs and governmental agencies working on conservation issues in the region.

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

The RSG grant was used during March 2010 and March 2011 as anticipated. The project is currently ongoing.

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
1.Equipment	£1,245	£1,023	£222	The GPS unit we planned on buying was purchased with another small grant.

2.Expendable supplies	£217.84	£315.00	£-97.16	
3.Local travel				
a)Logging	£1,120.31	£835.63	£284.68	We stayed with community members some of the days spent in the field and did not have to pay for housing
b)Food	£896.24	£932.44	£-36.20	
c)Transportation	£1,120.31	£1,312.78	£-192.47	Cost of transportation was higher than we predicted
4.Extra man power	£2240	£3,250.00	£-1010.00	We hired extra field assistants in order to accomplish the goals of the project
Total	£6,839.7	£7,668.85	£-829.15	The over budget was covered with funds acquired from a small grant through University of Hawaii

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

We will continue with the demography studies for the orchid species in the next 2 years. This will provide a series of recommendations for management strategies in order to develop sustainable harvest estimations and in situ and ex situ conservation activities, such as seed and vegetative propagation programs. Also, seed propagation protocols will need to be completed and implemented with workshops in order to provide local communities with extra tools to propagate these species without damaging threatened populations.

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?

The RSGF logo was used at the website for University of Hawaii as one of the highlighted projects of the ethnobotany programme. It was also used on posters and presentations at conferences.