

Final Evaluation Report

Your Details	
Full Name	Arthur de Souza Soares
Project Title	Anatomy and systematics of <i>Oocephalus</i> (Benth.) Harley & J.F.B. Pastore: Taxonomic resolutions for conservation application
Application ID	29392-1
Grant Amount	£2,250
Email Address	soares.as@outlook.com
Date of this Report	February 10, 2022

1. 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
Anatomical analyses				The anatomical analyses of <i>Oocephalus</i> cauline leaves were aborted due the COVID-19 pandemic.
Morphological description				All currently species were fully described, including the ones new to science. This is an important step towards the taxonomic revision of the genus
Phylogeny of <i>Oocephalus</i>				The phylogeny of <i>Oocephalus</i> it is in its final steps. The phylogenetic tree using target sequencing was already produced and the article is under discussion and soon it will be submitted to a peer reviewed journal.
<i>Oocephalus</i> species Conservation assessments				

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

The COVID-19 pandemic, that continues taking lives around the world, affected every single person in the past 2 years. I went through an emotional breakdown during this period, losing my mother to this disease, which affected my work and personal life. Additionally, I had to give up of one of my objectives with my project because I would have to travel to other places to do the proper analyses. Besides that, many laboratories in Brazil were shut down to avoid the virus from spreading.

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

During the 4 years developing my project, 2 of these were funded by The Rufford Foundation. Some new species of *Oocephalus* were described, increasing the knowledge about this genus near endemic from the most species rich Brazilian environment. With these results we can understand the patterns of distribution of the species and identify priority areas from conservation of campos rupestres.

4. What do you consider to be the most significant achievement of this work?

5. Briefly describe the involvement of local communities and how they have benefited from the project.

6. Are there any plans to continue this work?

The Brazilian campo rupestre is one important environment with a rich and, yet, poorly understood flora, considering genus such as *Oocephalus*, which has lower records registered in collections, considering the size of its area of occurrence. So, the taxonomy of this group will be continued even with the achievements of this project.

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

The results of this project will be shared through papers published in peer reviewed journals and through my social medias.

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

The grant was used to cover the laboratory expenses from late 2019 and early 2020 (4 months in total), helping to achieve rapidly the objectives of a 4-year project.

9. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Extractions (x53)		£95		
Hybridisation (x2)		£59		
Libraries (x40)		£1,200		
Macrogen Sequencing		£213		
Consumables (x3 months)		£660		
Total	£2,250	£2,227	-£23	The budget amount was calculated by sample (an average £45.00/sample) and the values of each step of the process wasn't given.

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

Publishing the data gathered and spread the results are the following and more important step. However, continue with the taxonomy and systematic of the endemic groups of campo rupestre vegetation is essential to its understanding, therefore, its conservation.

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

I haven't seen the Rufford Foundation logo during this project. However, I was able to talk about the foundation to many people that take interest in my project or share similar interests.

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

Arthur de Souza Soares – PhD Candidate in Systematics and Evolution at Federal University of Rio Grande do Norte Brazil: project leader, conducted field work, carried out the laboratory methodology and wrote the manuscripts.

Dr. Jomar Gomes Jardim – Full Professor at Federal University of Southern Bahia, Brazil: conducted field work, wrote the manuscripts, and discuss the systematic, conservation and taxonomy.

Dr. José Floriano B. Pastore – Full Professor at Federal University of Santa Catarina, Brazil: conducted field work, wrote the manuscripts, and discuss the systematic, conservation and taxonomy.

Dr. Raymond Mervyn Harley – Honorary researcher at Royal Botanical Gardens, Kew, UK: conducted field work, wrote the manuscripts, and discuss the systematic, conservation and taxonomy.

Dr. Felix Forest – Senior Research Leader, Analytical Methods, Royal Botanic Gardens, Kew, UK: supervised laboratory work and wrote the manuscripts.

13. Any other comments?