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With the support of THE BELGIAN **DEVELOPMENT COOPERATION** 

# REPORT

## Taxonomic training & access to collections in Belgium

#### NOTICE

The present questionnaire must arrive with the Belgian National Focal Point to the Global Taxonomy Initiative within one month of the official closure of the capacity building visits. Electronic submission on the general e-mail address of the Belgian GTI NFP (cbd-gti@naturalsciences.be) is strongly encouraged. If electronic submission should however be impossible, paper copies may be sent by fax or ordinary mail. The Belgian GTI NFP will acknowledge receipt of all project reports.

If grantees have relevant pictures to illustrate their capacity building visit, these may be annexed to the report. The Belgian National Focal Point might use some of these pictures in one of its reporting activities, but only after the copyright holder has given his permission.

### Contact and further information

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PART I – CANDIDATE INFORMATION		
Family name:	RODRIGUES DE MORAES	
First name(s):	Pedro Luís	
Nationality:	Brazilian	
Date of arrival and departure in / from Belgium	18 January 2012, 29 February 2012	
Number of training days:	28	
Type of visit	<ul> <li>Mainly training in taxonomy and collection management</li> <li>Mainly access to collections</li> <li>Other, <i>specify</i>Repatriation of Brazilian collections</li> </ul>	
Location of training:	<ul> <li>Royal Belgian Institute of Natural Sciences, Brussels</li> <li>Royal Museum for Central Africa, Tervuren</li> <li>National Botanic Garden of Belgium, Meise</li> <li>Other, <i>specify</i></li> </ul>	
PART II - GENERAL INFORMATION		
Describe concisely how you have learned about the Belgian GTI Project	Initially by the internet, in 2003, when I became aware of the first call for proposals to the Belgian Focal Point to the GTI. My proposal was selected and I visited Belgium for the first time in 2004.	
Describe concisely how you have learned about this specific call for proposals	Regarding the present proposal, I received an email from the CDB-GTI team informing about the new call, in February 2010.	
If this was your first study visit financed via the Belgian GTI National Focal Point, describe concisely why you needed capacity building in taxonomy and collection management		
If this was not your first study visit financed via the Belgian GTI National Focal Point, describe concisely why you needed further support	The requested support was asked for accessing again the collections of Brazilian plants kept in Herbarium Martii at BR. The objective was the conclusion of a Catalogue of the Brazilian plants collected by Prince Maximilian of Wied in 1815-17, which I started compiling in 2008, when I visited several European herbaria, including BR. The main set of plants collected by Wied in Brazil is housed at BR.	

I had the privilege of an unrestricted access to the collections housed at BR, which permitted me achieving the objective of completing the Catalogue. The Catalogue will reveal all the collections gathered by the Wied expedition, from what is already located in different herbaria. This will give a fair dimension of its importance, since about half of the specimens are nomenclatural types.
As a taxonomist, the challenge of unearthing species/specimens collected by the Wied expedition has promoted me an unique opportunity of learning about historical, taxonomic, and nomenclatural issues related to these collections. The precious information acquired by working with this historical material will allow further investigations on the taxonomic status of many doubtful and overlooked names.
Almost all of the species/specimens analysed for the Catalogue have been digitally photographed and/or scanned in high resolution. These images will be printed and deposited at Herbarium Rio Clarense (HRCB), therefore being a physical register of the material collected in Brazil, which has no duplicates kept in our institutions.
For processing the thousands of images acquired by this work, and for databasing all information, I will need the help of trainees and/or students. The sponsorship of this work would be desirable in terms of fellowships and grants.
Along with the human resources mentioned above, the pursuit of a computer and a high resolution printer will be necessary.
The two opportunities I had from the Belgian GTI National Focal Point, for studying the collections at BR, have proved to be priceless in terms of the access to the historical material of the Brazilian flora. The repatriation of this fundamental source of information is the base for the taxonomic treatment of the different groups of plants. Although the team of the LAPI project at BR is doing a wonderful job in databasing and imaging the nomenclatural types held in Herbarium Martii, there are a lot of other important collections that still remain unknown, since they are not entering in this database. Related to them, any specific search for different groups of plants, or for material by different collectors, still will reveal a wealthy universe of information. Thus, the continuity of such collaboration would be always fundamental for the achievement of new results from the historical collections held by the Belgian institutions, like the National Herbarium, which unfortunately has no personnel currently working with them.

PART III – TAXON SPECIFIC INFORMATION		
What is your taxon of interest	Kingdom Plantae. As a specialist, the family Lauraceae.	
Describe concisely the different methodologies for collecting your taxon.	Traditionally, the vouchers of plants for taxonomic purposes are prepared from gatherings of fertile material that are dried and mounted in exsiccatae. Apart from the different efforts involved in collecting herbs or trees, sampling the Brazilian flora faces the different scales of the geographical distribution of the different taxa. The main difficulty is related to the logistics for undertaking an effective field work, by maximizing the results at the lowest cost possible. Nowadays, along with the dried specimens collected for distribution to as many herbaria as possible, samples of leaf material dehydrated in silica gel, for DNA extraction, as well as samples preserved in the classic plant fixative FAA, for anatomical studies, are also acquired.	
Describe concisely how to best preserve collected specimens of your taxon for taxonomic purposes	The dried specimens mounted in exsiccatae are best preserved in herbaria that keep the collections under proper storing conditions in order to avoid attack by insects and fungi. In Brazil, most of our official herbaria store the collections at low temperatures and humidity, having also as a routine practice the execution of a chemical expurgation once or twice a year.	
Describe concisely the best practice in the management of a collection of your taxon	Once inserted in a herbarium, the exsiccatae must be well classified preferentially by specialists, and the duplicates distributed to other herbaria. The availability of information on the collections held by the herbarium, in databases of open access to the community, is also an important tool for the dissemination of knowledge to people that would be interested in such taxa. Publications of results involving the collections are fundamental for disseminating information on distribution, status of conservation, phenology, etc.	
Describe concisely how you intend to make your taxonomic data available to other colleagues	The "Catalogue of the Brazilian plants collected by Prince Maximilian of Wied" has been submitted for publication in the Scripta Botanica Belgica. A website with the images of the specimens is also planned to be released.	

Have you been briefed on the aims, scope and contents of the journal <i>AbcTaxa</i> ?	Yes, and I have already published a taxonomic treatment of Brazilian Cryptocarya in volume 3.
Do you think you have enough capacity to make a contribution to <i>Abc Taxa</i> ?	<ul> <li>No, I still lack capacity</li> <li>Yes, if I get adequate guidance and support from my tutors</li> <li>Yes, I feel able to do this autonomously</li> <li>Other, <i>specify</i></li> </ul>
If you feel capable to contribute meaningfully to <i>Abc Taxa</i> , are you willing to do so	<ul> <li>No</li> <li>No, I have no time to develop such a capacity building manual</li> <li>Yes, I will send a proposal along the lines stipulated on the website of a revision of Brazilian species of Persea (Lauraceae), similar to what I have done with the Brazilian Cryptocarya. This revision will encompass at least 24 species that are poorly known and collected.</li> </ul>

