

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:	Morffe Rodríguez
First name(s):	Jans
Nationality:	Cuban
Date of arrival and departure in / from Belgium	3-11-2012/24-11-2012
Number of training days:	22
Type of visit	<input type="checkbox"/> Mainly training in taxonomy and collection management <input checked="" type="checkbox"/> Mainly access to collections <input checked="" type="checkbox"/> Other, <i>specify</i> Access to SEM techniques.
Location of training:	<input checked="" type="checkbox"/> Royal Belgian Institute of Natural Sciences, Brussels <input checked="" type="checkbox"/> Royal Museum for Central Africa, Tervuren <input type="checkbox"/> National Botanic Garden of Belgium, Meise <input checked="" type="checkbox"/> Other, <i>specify</i> Museum of Natural History, Paris, France

PART II - GENERAL INFORMATION

Describe concisely how you have learned about the Belgian GTI Project	I learned about GTI by mean of a colleague that was granted with such project.
Describe concisely how you have learned about this specific call for proposals	By the website of the Belgian GTI.
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	In order to continue the taxonomical revision of Hystrignathidae, this project was focused in SEM studies of hystrignathids from Cuba, South America and Congo. Such technique permits the observation of features of great importance for the description of new taxa as well as its classification. Also, the access to type material was needed for comparisons purposes.

Describe concisely what support (e.g. training, access to collections,...) you have received and how this training can be related to taxonomy and /or collection management	The support received was the access to SEM techniques, access to collections and to literature on the group. All of these supports are related with the taxonomical revision of the family Hystrignathidae.
Describe concisely how your gained capacity will help you in your professional duties	The capacity gained will help in my PhD. As curator of the helminthological collection of my institution, such capacity will be helpful for the classification of several unidentified species, which contributes to improve the organization of the collection and its better management.
Describe concisely how your gained capacity will be implemented in your institution	The revision of material from collections will help to the classification of unidentified species of our collection. The material from the Congo will increase de wealth of such collection.
Describe concisely what other support you eventually would need	For further research on Hystrignathidae, molecular studies would be needed in order to establish the phylogenetical position of the family and the genera. This is necessary, considering the shortage of such studies on the group. SEM studies of other species would be needed too , as well as the revision of types from other collections.
Describe concisely what infrastructural and human resources you and your institution eventually still need to become fully functional	Mainly infrastructural resources: adequate cabinets for maintain the collections, slide boxes for the storage of mountings, slides and coverslips, mounting medium (glycerine) as well as microscopy equipment.
Describe concisely how you think the Belgian GTI National Focal Point could further construct capacity for you and your institution	Mainly by mean of the access to type material of Hystrignathidae and other groups of nematodes deposited in foreign collections. This is very necessary for the current taxonomical studies that we´re carrying out in our institution. Also, by the access to material of Passalidae (hosts of Hystrignathidae) deposited in the Royal Museum for Central Africa, Tervuren, in order to study the family in Africa, where the group is poorly known. The access and training on SEM and molecular techniques, as well as the access to such facilities could be useful for future studies of Cuban zoo-parasitic nematodes.

PART III – TAXON SPECIFIC INFORMATION

<p>What is your taxon of interest</p>	<p>Family Hystrignathidae (Nematoda: Oxyurida)</p>
<p>Describe concisely the different methodologies for collecting your taxon.</p>	<p>Hystrignathids are parasites specific of the intestine of Passalidae (Coleoptera). Passalid beetles inhabit rotting logs that must be broken for collect them manually. passalids are attracted by light-traps, but by such traps only a few specimens are captured. The best is to maintain the hosts alive in jars with wood chips, as source of food and humidity until arrive to the lab. Beetles must be killed with ethyl-ether or acetone and immediately dissected in order to extract the intestines, that must be excised with needles in normal saline (0,9% NaCl or Ringer´s solution). This step ensures to obtain the nematodes alive, without damage of the cuticle or internal structures. Finally, parasites are killed in tap water (60-70°C) and fixed in 70% ethanol or TAF (triethanolamine-formaline).</p>
<p>Describe concisely how to best preserve collected specimens of your taxon for taxonomic purposes</p>	<p>For a long storage the best is the use of vials with 70% ethanol (long conservation in formaldehyde or similar fixing media affects the cuticle and hardens the specimens). For the study of the internal structures the mounting on slides is required. Anhydrous glycerine is the recommended medium. For this is necessary to transfer gradually the specimens to such medium, via slow evaporation method (Seinhort´s method) and then make the mount on slides, sealing the preparations with wax rings or nail polish. As glycerine mounts, specimens must be stored in slides boxes (slides horizontally, in order to prevent the movement of the specimens embedded in the liquid medium).</p>
<p>Describe concisely how you intend to make your taxonomic data available to other colleagues</p>	<p>All data on new taxa and new records of species will be published in scientific journals. Also, such results would be presented in scientific events and symposia and used in some matheries of the career of Biology, University of Havana.</p>
<p>Describe how your taxonomic work helps improving the status of biodiversity in your country</p>	<p>This work increases the knowledge on one of the more neglected taxa of Cuban fauna. New species and genera have been described or are under description and new localities and hosts have been recorded.</p>

<p>Describe how your project could help reduce poverty in your country</p>	<p>A better knowledge of biodiversity is essential for an adequate conservation of the species and sustainable development. Both of these topics permit the establishment of a theoretical basis for the adequate development of human society, based on a harmonic relation with nature. This includes the sustenance of the population health as well as its better life quality.</p>
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Global Taxonomy Initiative