

# REPORT

## Taxonomic training & access to collections in Belgium (projects executed between 1 April 2010 and 31 March 2011)

### 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](mailto: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

Dr Yves Samyn  
Belgian National Focal Point to the Global Taxonomy Initiative  
Royal Belgian Institute of Natural Sciences  
Vautierstraat 29  
B-1000 Brussels  
Belgium  
Tel.: +32 2 627 41 24  
Fax: +32 2 627 41 41  
Email: [cbd-gti@naturalsciences.be](mailto:cbd-gti@naturalsciences.be)

## PART I – CANDIDATE INFORMATION

Family name:	Morffe Rodríguez
First name(s):	Jans
Nationality:	Cuban
Date of arrival and departure in / from Belgium	October 22/November 15, 2010
Number of training days:	25
Type of visit	<input type="checkbox"/> Mainly training in taxonomy and collection management <input checked="" type="checkbox"/> Mainly access to collections <input type="checkbox"/> Other, <i>specify</i>
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 type="checkbox"/> Other, <i>specify</i>

## PART II - GENERAL INFORMATION

Describe concisely how you have learned about the Belgian GTI Project	First by mean of a colleague, that received the financing twice. Later, I searched for more information in the web.
Describe concisely how you have learned about this specific call for proposals	Searching in the GTI website.
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	I was interested in the review of type material deposited in collections from Brazil, France and UK. Such material is needed in order to clarify the taxonomical status of several genera and species of Hystrignathidae, mainly from Cuba and America. Also, I was interested in to obtain nematodes from African Passalidae deposited in the collections of the Royal Museum for Central Africa, Tervuren.
If this was not your first study visit financed via the Belgian GTI National Focal Point, describe concisely why you needed further support	This was my first study financed by GTI.

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 mainly the access to material from collections.
Describe concisely how your gained capacity will help you in your professional duties	The capacity gained will be used in my future PhD. As well as other studies that will be carried out on Hystrignathidae and other groups of nematodes from arthropods.
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 a future taxonomic revision of the group or a monography on Cuban Hystrignathidae SEM studies would be need in order to increase the knowledge on the ultrastructure of the cuticle. Mainly considering the shortage of SEM studies on the group and parasitic nematodes of arthropods in general.
Describe concisely what infrastructural and human resources you and your institution eventually still need to become fully functional	The resources that we need are mainly infrastructural: adequate cabinets for maintain the collections, boxes for the storage of mountings, slides and coverslips, mounting medium (glycerine).
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 ( <i>i. e.</i> Thelastomatoidea and Rhigonematida) 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. 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

What is your taxon of interest	Family Hystrignathidae (Nematoda: Oxyurida)
Describe concisely the different methodologies for collecting your taxon.	<p>Hystrignathids are parasitic nematodes, specific of the intestine of Passalidae (Coleoptera). Passalid beetles inhabit rotting logs that must be broken for collect them manually. The best is to maintain the hosts alive in jars with wood chips, as source of food and humidity until arrive to the lab.</p> <p>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.</p> <p>Finally, parasites are killed in tap water (60-70°C) and fixed in 70% ethanol or TAF (triethanolamine-formaline).</p>
Describe concisely how to best preserve collected specimens of your taxon for taxonomic purposes	<p>For a long storage the best is the use of vials with 70% ethanol (long conservation in TAF eventually affects the cuticle and hardens the specimens).</p> <p>For the taxonomic study the mounting on slides is needed. 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.</p> <p>As glycerine mounts, specimens can be stored in slides boxes safely for long periods of time.</p>
Describe concisely the best practice in the management of a collection of your taxon	<p>The best practice for the management of a collection of my taxon (and of parasitic nematodes of arthropods in general) consist in the correct conservation of the specimens, as permanent mounts stored in adequate boxes, as described above. Is recommended the digitalization of the information associated to the material, as a database. Also, is better to take pictures of the species, in order to facilitate the access to the material and to avoid the unnecessary manipulation of the mounts.</p>
Describe concisely how you intend to make your taxonomic data available to other colleagues	<p>The new species described and the new records are published in scientific journals (<i>i.e.</i> ZooKeys) available online. Also, several results have been presented in scientific events and symposia and used in some matheries of the career of Biology, University of Havana.</p> <p>At present, we´re working on the database of the Helminthological Collection of our institution, that in the future, will be available online for the interested colleagues.</p>

<p>Have you been briefed on the aims, scope and contents of the journal <i>AbcTaxa</i>?</p>	<p>Yes, I have.</p>
<p>Do you think you have enough capacity to make a contribution to <i>Abc Taxa</i>?</p>	<p> <input type="checkbox"/> No, I still lack capacity  <input type="checkbox"/> Yes, if I get adequate guidance and support from my tutors  <input type="checkbox"/> Yes, I feel able to do this autonomously  <input checked="" type="checkbox"/> Other, <i>specify</i> Yes, I feel able to do this, with some support in order to have access to material from foreign collections and maybe to SEM techniques. </p>
<p>If you feel capable to contribute meaningfully to <i>Abc Taxa</i>, are you willing to do so</p>	<p> <input type="checkbox"/> No  <input type="checkbox"/> No, I have no time to develop such a capacity building manual  <input checked="" type="checkbox"/> Yes, I will send a proposal along the lines stipulated on the website of </p>

Brussels, 30 January 2010



Belgian National Focal Point to the  
Global Taxonomy Initiative