

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

Dr M-L Susini Ondafe Belgian Focal Point to the Global Taxonomy Initiative, Royal Belgian Institute of Natural Sciences Vautierstraat 29, B-1000 Brussels, Belgium Tel.: +32 2 627 45 90 Fax: +32 2 627 41 41 Email: <u>cbd-gti@naturalsciences.be</u>

PART I – CANDIDATE INFORMATION		
Family name:	HUYNH	
First name(s):	Thien Quang	
Nationality:	Vietnamese	
Date of arrival and departure in / from Belgium	Jan 14 - Feb 03	
Number of training days:	20	
Type of visit	<ul> <li>Mainly training in taxonomy and collection management</li> <li>Mainly access to collections</li> <li>Other, <i>specify</i>Visit other facilities at RBINS</li> </ul>	
Location of training:	<ul> <li>Royal Belgian Institute of Natural Sciences, Brussels</li> <li>Royal Museum for Central Africa, Tervuren</li> <li>Botanic Garden of Meise</li> <li>Other, <i>specify</i></li> </ul>	
PART II - GENERAL INFORMATION		
Describe concisely how you have learned about the Belgian GTI Project	The information of GTI has been passed from my old university' friend who is pursuing a taxonomy-based PhD degree in Finland.	
Describe concisely how you have learned about this specific call for proposals	The information of this specific call for proposal has also been informed by same friend as above.	
Describe concisely why you needed capacity building in taxonomy and collection management	Southern Vietnam harbours one of the highest diverse ichthyological faunas. Despite limited explorations, many new species of fishes have been recently described from the area. Unfortunately, most of type specimens are currently deposited outside the country while national collections are stored separately in universities and research institutions and curated inefficiently making it difficult for researchers to access. This causes a number of difficulties for studies in biodiversity assessment, environmental impact assessment, taxonomic revision and conservation planning. Therefore, this training is needed to provide a capacity in operation of a fish collection at Southern Institute of Ecology in near future.	
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	It has been a great opportunity for me to access to RBINS collections and learnt from Dr. Olivier Pauwels and his colleagues how to curate efficiently a collection of fishes in an internationally standard manner. Specifically, I have learnt specimen preparation, storage and management, data catalogued. In fact, there was not any Vietnamese specimen can be found in the RBINS' fish collection; therefore, a potential cooperation is possible in future. Thus, this trip gave me a very good experience that should be useful for my task of creating and managing freshwater fish collection at Southern Institute of Ecology.	

Describe concisely how your gained capacity will help you in your professional duties	By witnessing the taxonomical field in Vietnam, I realized that less and less experienced ichthyologist still involved in taxonomy while scarcely young taxonomist has been trained officially. Therefore, the gained capacity building from RBINS provided me the knowledge and confidence that I could do this work with new standard for ichthyological studies in Vietnam, specifically for the establishment and operation of a fish collection.
Describe concisely how your gained capacity will be implemented in your institution	I have been tasked for the operation of fish collection at SIE and this is a good opportunity to apply what I have learnt from RBINS and RMCA. First, all fish specimens from SIE' collection will be re-examined and catalogued traditionally and digitally. Then, a list of available fishes from SIE collection will be widely provided for any scientist and expert when needed. Besides, other ichthyologists will be invited to visit our collection when completed.
Describe concisely what other support you eventually would need	The fish fauna from southern Vietnam is a part of lower Mekong fish region. Therefore, I need support for visiting and building a network with other ichthyologists in this area because this quite important proportion in my future career as fish curator. Besides, I also would like to contact with more fish experts not only in lower Mekong area but across the Southeast Asia region. Obviously, a system of fish collections if established with the same direction will help to improve the quality of research and education in this area.
Describe concisely what infrastructural and human resources you and your institution eventually still need to become fully functional	New room, shelves and jar system (if possible) will be implemented for the fish collection in purposes of storage, research and education. A new digital database is also needed for imputing, managing and publishing of fish specimens' information. We also need to be equipped with a basic set of tools such as microscope with mounted camera lucida for illustrating specimens' characteristics; W-ray machine for skeleton photography (including vertebrate counting and skeleton drawing). Besides, a new set of professional camera system for specimen photography is also needed in order to provide the best photo for publication, exhibition, and database.

Describe concisely how	Further support from Belgian GTI National Focal Point will help
you think the Belgian GTI	to improve critically the capacity of fish taxonomical studies at
National Focal Point could	SIE, including:
further construct capacity	- Providing the basic set of needed equipments as above.
for you and your institution	<ul> <li>Creating the possibility of a long-term joined project</li> </ul>
	between SIE and Belgian scientist in the field of
	ichthyology. This expected project will comprise several
	section, such as: field survey of fish diversity in southern
	Vietnam, especially at the upper part of Dong Nai river
	system (the most important inland river of southern
	Vietnam); those part of 3S river (Srepok, Sesan,
	Sekong) which are important tributaries of Mekong River
	and last but not least is the short rivers system in south
	central Vietnam, where water and fish resource are key
	economy to local communities
	<ul> <li>Encouraging Belgian experts to actively join in the</li> </ul>
	taxonomic revision of many interesting fish taxa from
	Vietnam and Southeast Asia.
	- Providing technical training for young students and early
	professional researchers that contribute potentially for
	taxonomical study in Vietnam (in the light of Fishbase
	project at RMCA supporting for African countries).

PART III – TAXON SPECIFIC INFORMATION		
What is your taxon of interest	Due to historical context, RBINS collection does not likely comprise Vietnamese fish specimens. However, with kindly support from Dr. Olivier Pauwels and his colleagues, I was able to find and examine several interesting specimens originated from Southeast Asian countries such as Thailand, Malaysia and Indonesia. These specimens give me advantages in this research since many of them also have distribution in southern Vietnam as well. These taxa include: Anguilla bicolor (Anguilliformes); Acanthophthalmus kuhli, Barbus gonionotus, Barbus hexazona, Barilius sp, Botia halodes, Brachydanio albolineatus, Danio regina, Gastromyzon borneensis, Homaloptera smithi, Rasbora sumatrana, Schistura nicholsi, Tanichthys albonubes, Tor douronensis (Cypriniformes); Betta pugnax, Betta splendens, Channa limbata, Channa melasoma (Perciformes); Bagarius bagarius, Bagarius suchus , Bagarius yarrelli, Clarias meladerma, Clarias nieuhofii, Glyptothorax major, Glyptothorax platypogon, Glyptothorax trilineatus, Leiocassis micropogon, Oreoglanis siamensis, Pseudecheneis sulcatus (Siluriformes); Interestingly, I have found several common fish from Vietnam that stored at the collection of RMCA, such as Clarias batrachus, Anabas testudineus, Channa striata, Mastacembelus armatus	
Describe concisely how you intend to make your taxonomic data available to other colleagues	A list of freshwater fish from Southeast Asia that currently housed at RBINS can be published in collaboration with Vertebrates Recent Department although more time is needed for carefully checking the huge collection in RBINS. This will provide a reference source for those who want to study about Southeast Asian fishes at RBINS.	
Describe how your taxonomic work helps improving the status of biodiversity in your country	The information of number of fish species and their resources is still lacking in Vietnam even several scattered national publications have been done. Therefore, establishing the first high standard collection in Vietnam with correct identification is extremely important for further related research as ecology and resource. Furthermore, making the collection available to the general public, especially to young generation and worldwide researchers will help to raise awareness of biodiversity protection.	
Describe how your project could help reduce poverty in your country	Our project results will provide fundamental information for (1) programmes of co-management of the fish resource in the areas, where the diversity of fishes will be conserved and daily life of fishermen is guaranteed; (2) selection of potential economic species that provide high benefits for local villagers through breeding programmes; (3) selection of sites and species for fishing tour guided by local fishermen that allow them living comfortably and joining biodiversity conservation efforts.	