

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 (<u>cbd-gti@naturalsciences.be</u>) 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-qti@naturalsciences.be</u>

PART I – CANDIDATE INFORMATION		
Family name:	Naturinda	
First name(s):	Zerubabeeli	
Nationality:	Ugandan	
Date of arrival and departure in / from Belgium	1/10/2017 to 28/10/2017	
Number of training days:	28	
Type of visit	 Mainly training in taxonomy and collection management Mainly access to collections Other, <i>specify</i>(identification of the remaining ants to species level, digitising the ants and making a database for all the ants collections) 	
Location of training:	 Royal Belgian Institute of Natural Sciences, Brussels Royal Museum for Central Africa, Tervuren Botanic Garden of Meise Other, <i>specify</i> 	
PART II - GENERAL INFORMATION		
Describe concisely how you have learned about the Belgian GTI Project	I was a beneficiary of the project in the previous year and knew normally when they make calls for interest. On application I was among the selected grantees.	
Describe concisely how you have learned about this specific call for proposals	On checking on the taxonomy.be link, I was able to get information about the call and then i submitted in my proposal for consideration. Thanks to GTI for my consideration.	
Describe concisely why you needed capacity building in taxonomy and collection management	There was need for me to identify all the samples to species level to have complete dataset for analysis to study the different relationships within certain species in terms of abundance, and evenness given the different management practices in the different land uses in Mt. Elgon Region, Uganda.	
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	More skills have been added unto me in terms of Ants identification up to species level, I can be able to train students on ants collections and management. Skills on publishing a good scientific article. I was also able to get text books on taxonomy and insect storage boxes. The chapter of biodiversity conservation can be correctly addressed with the taxonomic knowledge. Thank you GTI.	

Describe concisely how your gained capacity will help you in your professional duties	Ants species identification will help me to further research in the fields of ecology especially looking at the influence and effects on the changing climate and environmental degradation. Policy recommendations towards biodiversity conservation shall be drawn on an informed scientific basis. Emphasis will be put towards sustainable use of the Natural ecosystems for posterity.
Describe concisely how your gained capacity will be implemented in your institution	I have already started sharing my Knowldege on taxonomy and entomology with Makere University students of forestry, Busitema University students and some staff members at NaFORRI, Uganda. I have also started sharing knowledge on imsect collection methods at NaFORRI and use of e-resources like antweb, Antiwiki and antmaps.
Describe concisely what other support you eventually would need	A continued collaboration in terms of research and capacity building. More training in entomology is needed to be an expert. This will contribute in building my career and also becoming an asset to my country. I thank the GTI Team for a continued support.
Describe concisely what infrastructural and human resources you and your institution eventually still need to become fully functional	We need of a fully functioning laboratory. My institute lacks a laboratory for entomology studies. Equipment like Microscopes, Insect collection kits are highly needed.
Describe concisely how you think the Belgian GTI National Focal Point could further construct capacity for you and your institution	Another invitation to RBINS for future research projects would be of a significant value. Partnerships in biodiversity research projects are needed by my institution. There is need to build capacity of students through trainings and visiting other collection centres for knowledge acquisition and exposure.

	PART III – TAXON SPECIFIC INFORMATION		
W in	/hat is your taxon of terest	Phylum Arthropoda; Class Insecta; Order Hymenoptera; Family Formicidae; Many genera(all)	
D yc ta ot	escribe concisely how ou intend to make your ixonomic data available to ther colleagues	The identified and digitised ants will be uploaded on the RBINS website and Antweb for public access and use. The published research papers will be made available online for use by other people. Research reports will also be made available to the funding organisations including GTI Belgian National Focal Point, VLIROUS, Lueven University, Busitema University	
D ta in bi	escribe how your ixonomic work helps aproving the status of odiversity in your country	To improve the conservation of biodiversity in Uganda public awareness and political/financial support has to be obtained. Currently very few is known about local biodiversity and its importance for the Elgon region. This study aims to indicate the role of agroforestry systems for the conservation of biodiversity in human-modified land use systems outside the borders of the Mt. Elgon National Park in eastern Uganda.	
		Land use changes around Mt. Elgon are happening on a large scale and often in an irreversible way this study is of high importance for the documentation and taxonomy of species that might get lost very soon.	
		Besides the ants identification, I have been able to identify <i>P.bliteus</i> (Hymenoptera: Encyrtidae) a known biological control agent of <i>Glycapsis brimblecombei</i> (Hemiptera: Psyllidea), a currently invasive Eucalyptus Pest identified in Uganda's Eucalyptus plantations. This could be a great success to overcome the foreseen economic and biodiversity losses due to the pest attack.	
D cc in	escribe how your project buld help reduce poverty your country	Our project could contribute to poverty reduction by promoting sustainable agriculture in the Mt. Elgon region. The study of the ants communities in small holder coffee plantations and other land use systems around Mt. Elgon will indicate the effects of different management systems on biodiversity. It will also provide evidence that can convince policy makers and foreign donors to support the extension of sustainable management practices, certified coffee production or PES schemes in the region.	

Pictures illustrating some of the work during the study visit at RBINS 2017



Plates **a**), show grouped and identified ants species, **b**) and **c**) illustrate identification of ants in progress.

Plates d), e) and **f)** show a sample of a Tetramorium spp which is likely to be a new specie in both Frontal, lateral and dorsal views respectively.

h) and **i**) show the award of certificates by Dr. Wouter to the GTI grantees specialising in Order Hymenoptera year 2017

Pictorials of P.bliteus(Hymenoptera: Encyrtidae) a known biological control agent of Glycapsis Brimblecombei (Hemiptera: Psyllidea), a currently invasive Eucalyptus Pest identified in Uganda's Eucalyptus plantations.



1) 2) Images(1) and (2) show the digitised samples of P.bliteus(Hymenoptera: Encyrtidae) at RBINS to help in their Identification. Thanks to Dr. Wouter and Other specialists who helped in the identification process.



Plates: 3) shows the Glycapsis Brimblecombei (Hemiptera: Psyllidea) infestation in Mbale Uganda. 4) Shows the collection of samples of P.bliteus(Hymenoptera: Encyrtidae) in a Eucalyptus field in Mbale Uganda.