# Report on Individual and Institutional Capacity Building in Taxonomy and Collection Management

#### as provided by the

### Belgian Focal Point to the Global Taxonomy Initiative Royal Belgian Institute of Natural Sciences – Rue Vautier 29 – 1000 BRUSSELS - Belgium

## 1. Coordinates trainee

Name: KABLAN Kan Aurore Bel Martine

Country: Côte d'Ivoire

Date of arrival and departure in / from Belgium: from 03 November to 20 November 2008

Number of training days: to refer to the program below:

- 04/11/08:- Morning: KBIN- administration
  - Afternoon: RMCA- training's organization
- 05/11/08:- Morning and afternoon: KBIN- Taxonomy's theoretical course
- 06/11/08:- Morning and afternoon: RMCA- species identification
- 07/11/08:- Morning and afternoon: KBIN- Taxonomy's theoretical course
- From 08/11 to 11/11/08:-Week end and holiday
- From 12/11 to 19/11/08: Morning and afternoon: RMCA- training about Myriapoda Diplopoda.

Location of training (e.g. RBINS, RMCA, RBG, ...): Royal Belgian Institute of Natural Sciences (RBINS) and Royal Museum of Central Africa (RMCA)

Taxon for which training was received: Myriapoda Diplopoda

# 2. Taxon specific reporting

Describe the different methodologies for collecting your taxon.

Myriapoda Diplopoda are alive organisms, which are essentially met in the litter. There are some which frequently moves while others move very little. Others run away from light, moving only with the darkness. Also, various methods make it possible to collect them.

On the ground, we collect the moving specimens. Then, we take a sample of the litter that we filter in order to capture the animals, which took refuge there. It is the method of the capture at sight.

With the filtered litter, we carry out the method of Winkler. The litter is put in a bag, which has some openings. This bag is hung in the higher part of the device of Winkler that we close again carefully to avoid any intrusion. In the lower part, we place a bottle full of alcohol pure, in which animals coming from the bag will fall. After 48 hours, we will check. And we repeat still the operation.

On the ground, we carry out traps in order to take animals that will move when we will go out the ground and in the darkness; it is pitfall traps method. We dig a hole, which has the same size that a bottle. We put this bottle in the hole and pour there some solution, in which animals fall and remain. This solution must not cause animals damage. To avoid traps filling, we make a roof with a plate and stakes. These traps are checked each 48 hours. Remark: Two methods are shown on photographies below:



Photography1: Litter's excavation after sifting (capture at sight)

Photography2: A pitfalls trap's realization

Describe how to preserve the collected specimens for taxonomic purposes

The collected specimens are examined and preserved in alcohol 70%. The purpose of this examination is to determine the corresponding species. However the Taxonomy of Diplopoda is primarily based on the gonopods. Then the specimen is dissected for taking out the gonopods. As soon as the identification is finished, the gonopods are put in a tube, which is containing of the alcohol and that we close by a cotton plug. The specimen also is put in a tube more large than the first and full of alcohol. At side of the specimen, we put the tube containing the gonopods. Thereafter, we label the large tube and then we close again it with a cotton plug. Moreover, a label must contain some following informations:

- \* the family to which the specimen belongs
- \* names of Kind and Species corresponding to the specimen, follow-up of the name of the author
- \* the name of the one which determines specimen's name
- \* information on the date and the place of sampling
- \* the name of the person who has made sampling.
- Finally, all the tubes are arranged in collar bottles broad able to be well closed again

Note: It is necessary to take care to maintain the level of alcohol in the tubes and the bottles.

#### Describe how to curate a collection.

A collection set made up starting from the specimens collected during samplings. Each tube, which contains a specimen, must obligatorily carry a label. Initially, with the constitution of the collection, it would be good to establish the conditions of presentation and tidying tubes and bottles. However, it proves much simpler to allot to each tube containing a specimen, a reference and a sequence number. These references would refer to a file, which comprises alphabetically all the species of the collection. The tubes are thus arranged by Order, Family, Genus...

#### Describe how your collection will be made accessible for other scientists by means of a relational database.

The collection will be integrated in the database of the "Conservation and Suitable Management of Below-Ground Biodiversity Project". In addition, the species richness of the Diplopoda's community will be used to improve data on the monograph of biodiversity in Côte d'Ivoire.

Describe in detail the taxonomic characters at the different hierarchical levels (e.g. on order level, family, genus, species) and use this information to describe in detail one species.

\*Class: Diplopoda.

The class of Diplopoda is made up individuals having an articulated body, many legs so that there are two pairs of legs by apparent segment.

\*Subclass: Chilognatha

Body has a big size with hard teguments and, which is charged with rock salt. Generally, this body has a high number of rings.

\*Order: Spirostreptida

Spirostreptida are met in tropical zone. Body is lengthened and is in the shape of cylinder. They have a lot of simple eyes and a sort of depression, which serves as antennas quarters.

\*Family: Spirostreptidae

No line is present on specimens face. Anal tip has a anal slot and a typical rounded tip.

\*Genus: Urotropis

Principal characteristic of Urotropis is telocoxites anterior lamella. This lamella has a vertical point.

\*Species: Urotropis trispina

In alcohol, specimen appears blackish ringed of grayish. It has a big and bright head, red-brow legs and antenna. Gonopods are typical. Telocoxites posterior lamella widens abruptly on the lateral side. The vertical point of telocoxites anterior lamella is higher than the telocoxites top. By caudal view, this lamella presents two spines, whose the internal is shorter than the external.

Telopodite has a high structure which progressively widens in lamella towards exterior, then diminishes into a pointed tip.

The seminal branch is length and winds up into spiral.



Photography: Presentation of Urotropis trispina's gonopods.

\*On left, the all structure that make up gonopods; the right telocoxite is without telopodite and the other one has telopodite.

\*On right, the telopodite alone, extracted from right telocoxite.

This Questionnaire must be submitted electronically (or by fax) within one month after the official closure of the training.

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