Digitisation of the Belgian collection of saproxylic and xylobiont beetles conserved at the Royal Belgian Institute of Natural Sciences

Biodiversity Platform Digitisation Project Call 2009-2010 & Project Call 2010-2011

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Biodiversity Platform Digitization Project Call (2009-2010)

Inventory of the Belgian bark beetles (Scolytidae), powder beetles (Lyctidae) and their associated saproxylic beetle fauna

Biodiversity Platform Digitisation Project Call (2010-2011)

Rationale

Saproxylic/xylobiont beetles are an important part of forest biodiversity

Interest by **forest engineers** – species causing damage

Nature conservationists – indicators of diversity (rare species)

Many species are threatened by over-exploitation of wood.

Objective

Digitise all records of in collections RBINS (DarWin)

Call 2009-2010

Lucanidae, Cetoniidae, Buprestidae and Cerambycidae

Call 2010-2011

Scolytidae (73 species, 9,000 specimens), Lyctidae (5 species, 200 specimens). Families **predating** on Scolytidae: such as Cleridae (14 species, 1,464 specimens), or simply **associated** with them: Rhizophagidae (10 species, 1,305 specimens), Colydiidae (14 species, 542 specimens), Eucnemidae (5 species, 100 specimens).

for the whole country and to make the database available to a large public.

1) the method(s) used for digitisation:

All label data of collections at RBINS have been digitised in an Access database,

fields:

species name, sex, locality, collection date, trapping method, ecological data, collector, repository (box, drawer, depository).

All records received a unique Identifier.

All digitised specimens received a yellow control label to avoid multiple digitisations in the future.

(2) the origin of the collection(s) used:

All collections that have been digitised are stored or will be stored at RBINS (guarantees continuity of the records for further reference).

In addition, the co-promoters of the project have contacted citizen researchers (>50) to participate in the digitisation of their collections by providing a template database in order to enlarge the federal database of xylobionts. So far, about 40 persons sent their records (e.g. longhorn beetles >6,000 recs)

(3) the quality and status of the material

Identification of most insect material is accurate or can be assured;

Quality of the geographic information on the labels varies from “Belgium” to very detailed data on localities.

Imprecise data such as “Belgium” only and or sites with the same name (homonyms) that cannot be traced are not encoded in the database.

Results

Call 2009-2010

Family	Number of records	Number of specimens
Buprestidae	1352	2688
Cetoniidae	1324	2777
Lucanidae	516	528
Dynastidae	121	121
Cerambycidae	8483	18451
Total	11.796	24.565

Call 2010-2011

6,000 records from Citizen researchers

2,450 records of Scolytidae in database

Output

A **database** containing a total of 17,165 records has been transferred to BEBIF. Apart from the mother database in DaRWIN at RBINS (see website www.natuurwetenschappen.be/darwin), a copy is available at INBO (A. Thomaes).

Distribution maps with free on-line access (BEBIF) for xylobiont species.

An **updated catalogue** for Cerambycidae is be available on www.species.be. Instead of the 91 species, the number is raised to 127 species.

The dry collection of the xylobiont species at RBINS has been updated (un-identified specimens have been identified and incorporated in the collection) what will result in a better access to the **reference collection** at RBINS.

7 short notes are in preparation on a new species, updating of distribution of species, expansion of invasive species etc.

Future activities

Links of the catalogue on www.species.be with the maps of GBIF and photos of all species.

An additional 4.500 records of longhorn beetles from citizen researchers will be added to the database.

A list of ‘hotspots’: localities where a higher than average number of rare species has been found, and which may represent hotspots for forest biodiversity.

Trends in distribution change and occurrence will be examined

Thank you for your attention