CANATHIST

Biological Data Acquisition and Encoding in DaRWIN Database

Collection Department – 2024

April 2024 – Huye, Rwanda

AFRICA museum

Workshop – CANATHIST

Biological Data Acquisition and Encoding in DaRWIN Database

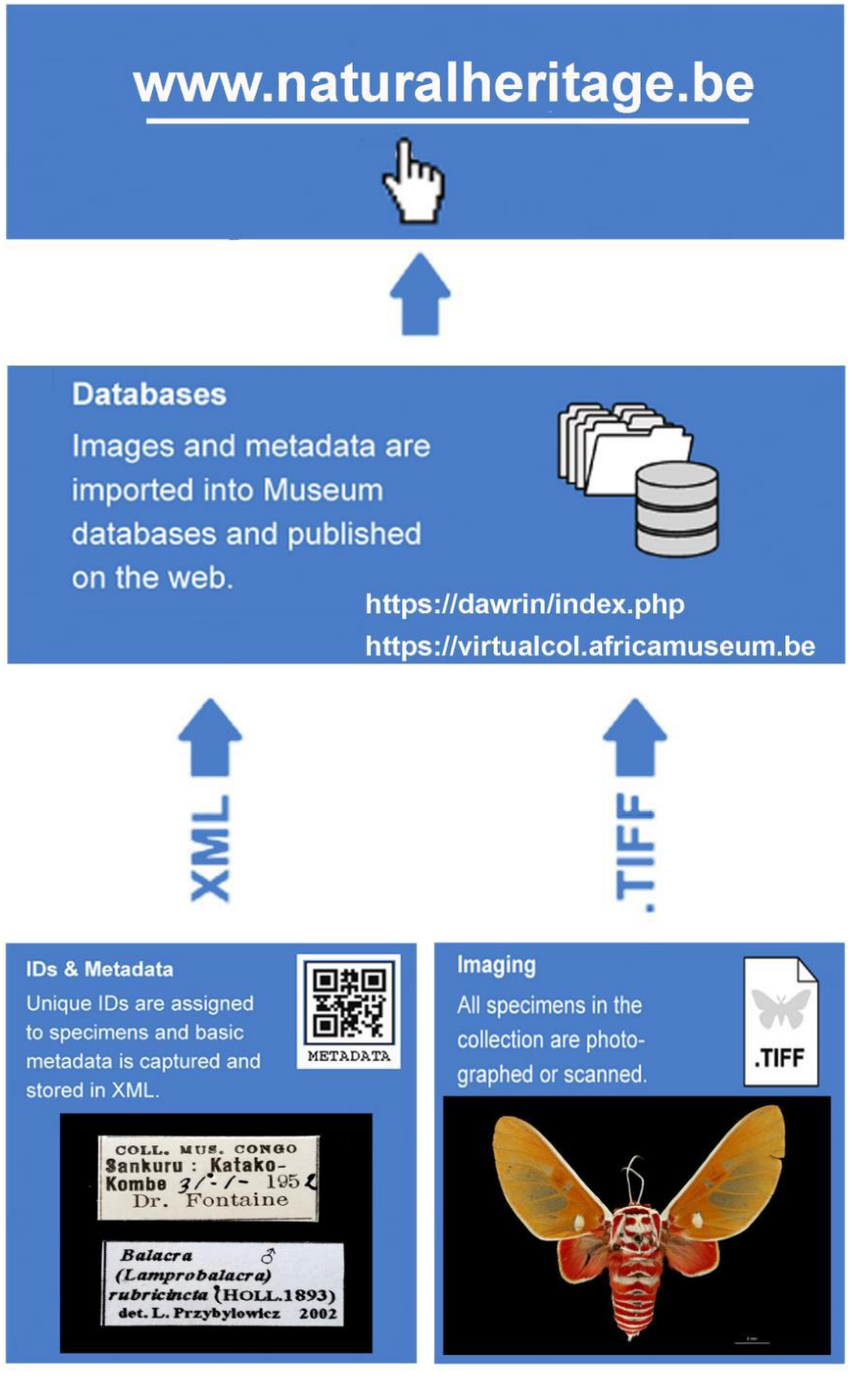
This workshop aims to provide an overview of the DaRWIN database and its tools for encoding biological data.

- New acquisition, new Global Inventory Number (N°IG)
  - The first step to register any new material in the RMCA collection
- Introduction to DaRWIN Database
  - Public and Admin interfaces
- Using the Excel Template for Metadata Import
  - Ideal for large amount of data
- Navigating the DaRWIN Interface
  - On how to make and save specific searches
- Introduction to Virtual Collection
  - Image processing and file preparation to import in Virtual Collection

Collection Department

(ex. Biological collection and data management)

- Objectives:
  - To conserve, manage, and make available the rich collections of African organisms and associated data
  - Develop tools to facilitate and accelerate access to specimens and associated data



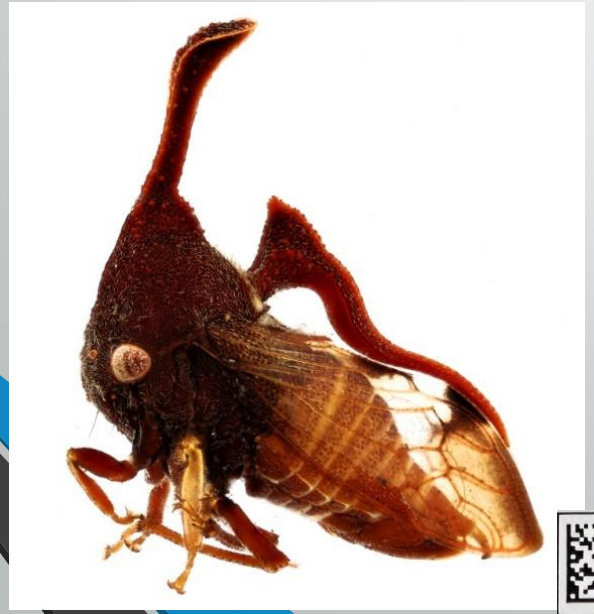
Acquisition Policy

IG N° 2024.001

<u>IG number = numéro d'Inventaire Général – N°IG</u>

First step in the process of collection registration
Number given to material coming from an expedition (in situ) or ex situ (donation, exchange,…) before any study

≠

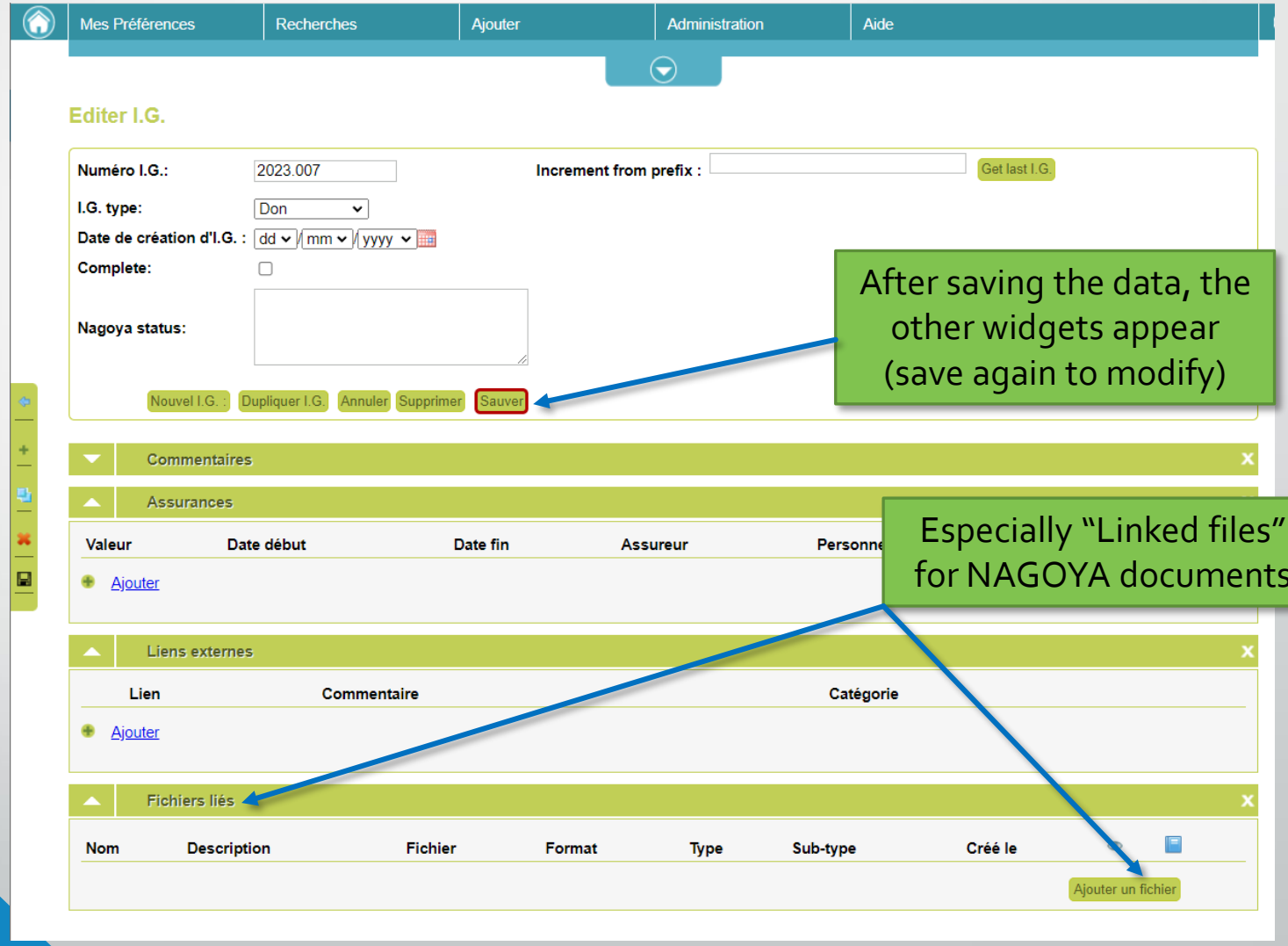


<u>Acquisition number</u>
The acquisition number (= collection number) is given when the specimen is incorporated to the MRAC collection, after a possible phase of study and / or identification

The IG sheet

Each IG number is accompanied by a complete documentation, which can be composed of different documents from various sources:

- ✓ Inventory (Excel, Word…)
- ✓ photographs of the collection (overview)
- ✓ Statement of state
- ✓ Associated documents (export, import permits, Nagoya doc. etc.…)



Search IG

I.G.	Exact	Ig type	Entre	Et	Complet	Nagoya status
2024.	☑	indéfini	dd / mm / yyyy	dd / mm / yyyy	yes or no	

Personnes

Collection

☐ Collecteur
☐ Donateur ou vendeur
☐ Identificateur

Royal Museum for Central Africa

- Acari ☐
- collectionnagoya ☐
- Cultural anthropology ☐
- *Invertebrates* ☐
- *Vertebrates* ☐
- Xylarium ☐

Commentaire

Rechercher | Get tab-delimited | Nouveau

« ‹ [1] › » 1 /1 go

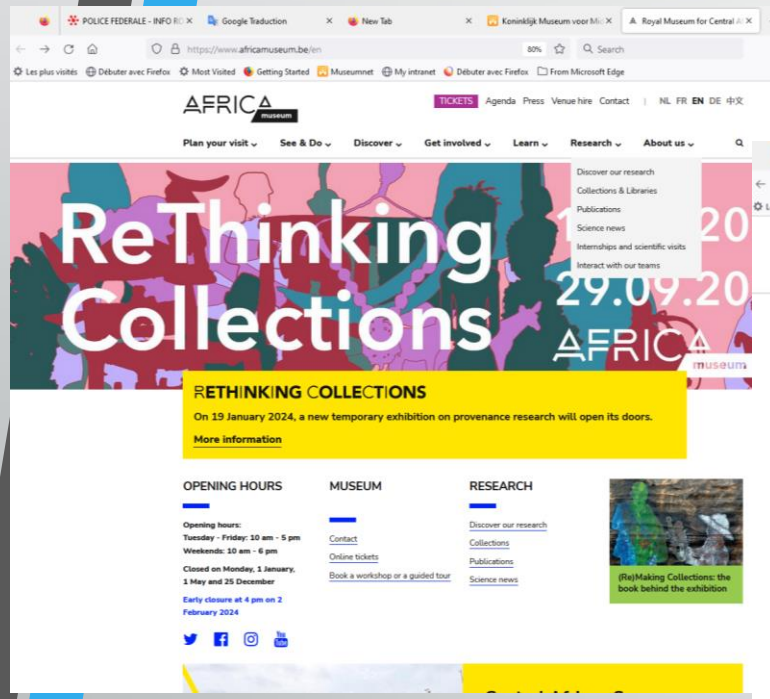
Votre requête a trouvé 1 enregistrement — Enregistrement par page: 10

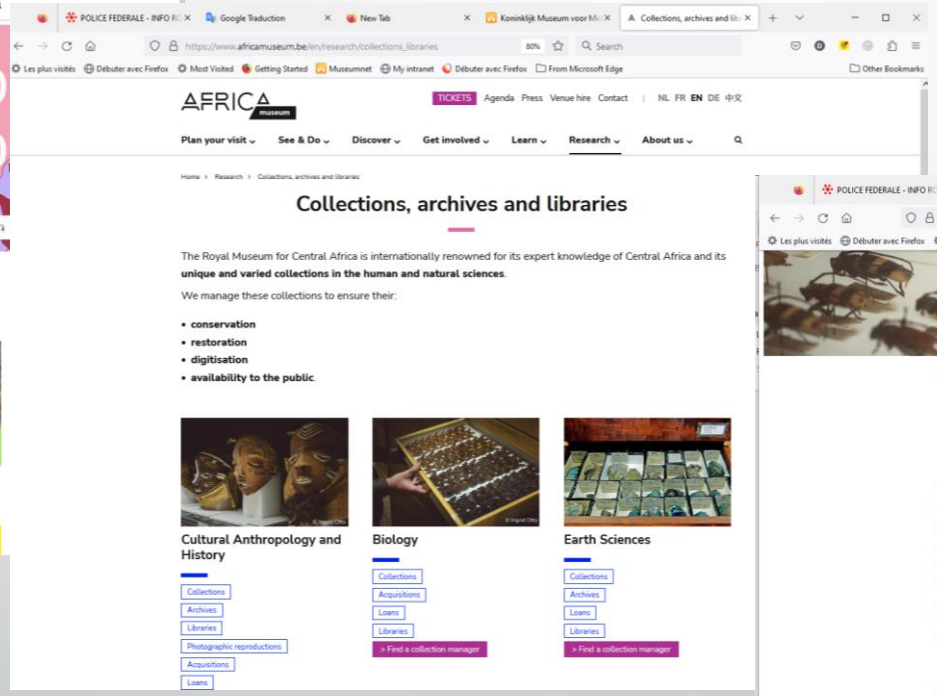
I.G. ▲	Copy	Increment	Type	Date de création d'I.G.	Commentaire	Total count	Count by collection	Nagoya status
2024.001	Copy	Increment	Undefined	09/01/2024	collect samples in Zimbabwe : 1000 snails fixed on ethanol	0		Nagoya ok. Docs attached.

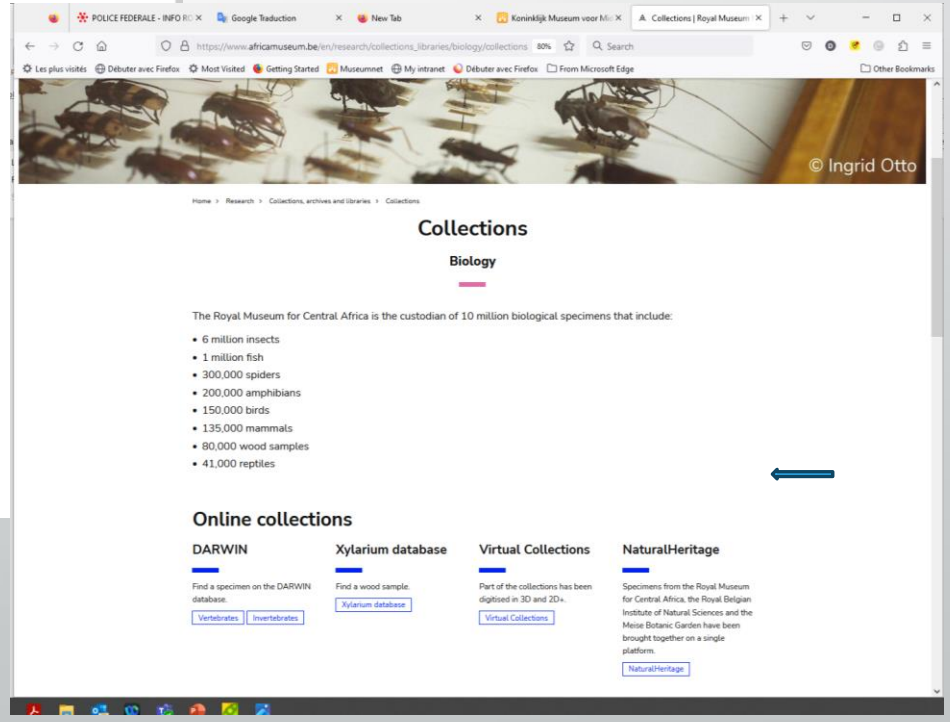
« ‹ [1] › » 1 /1 go

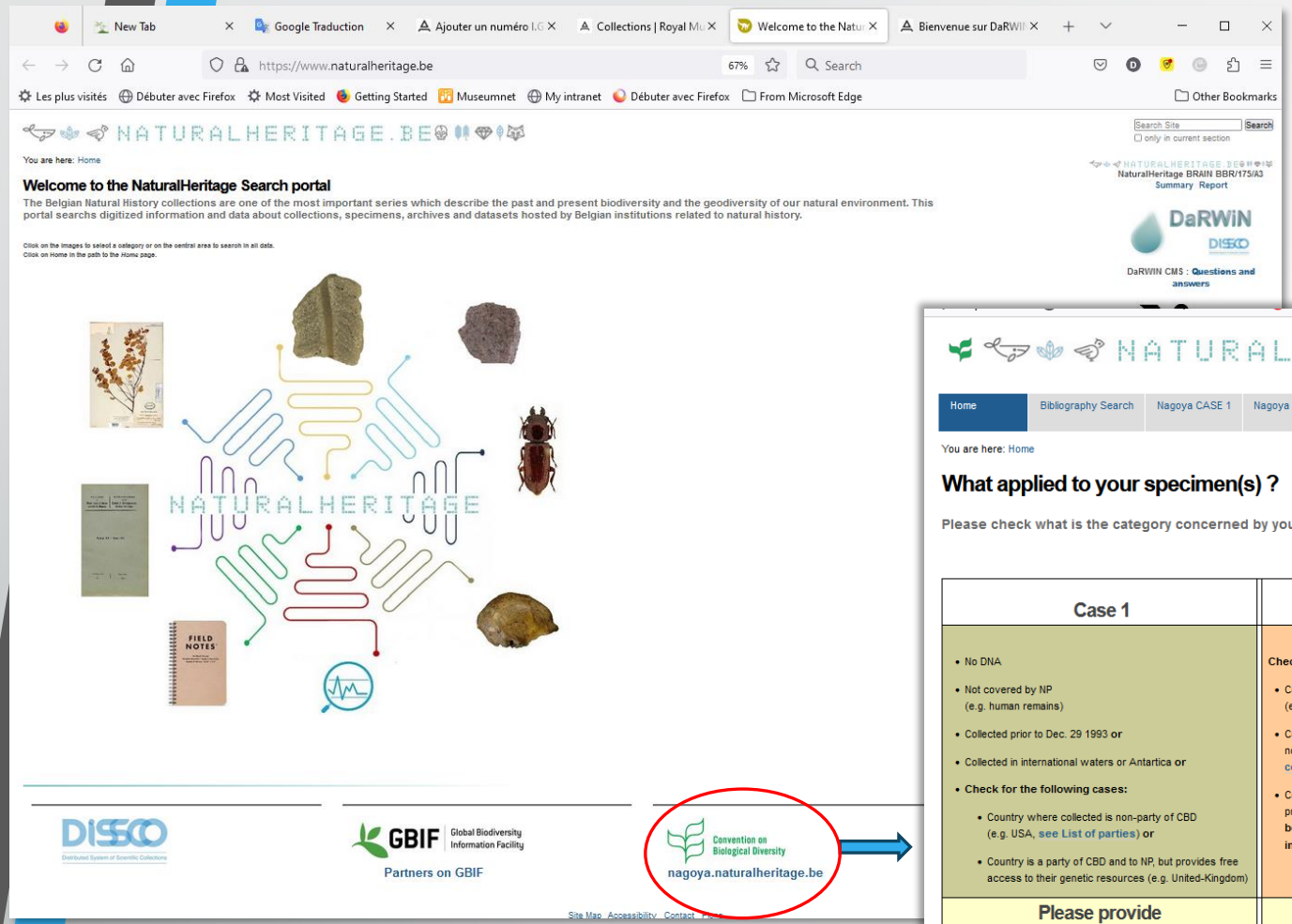
Since October 12th 2014 , in order to comply with Access and Benefit Sharing (ABS) regulation, the MRAC will acquire only Biological material that has been legally accessed (whether from in situ or ex situ source)

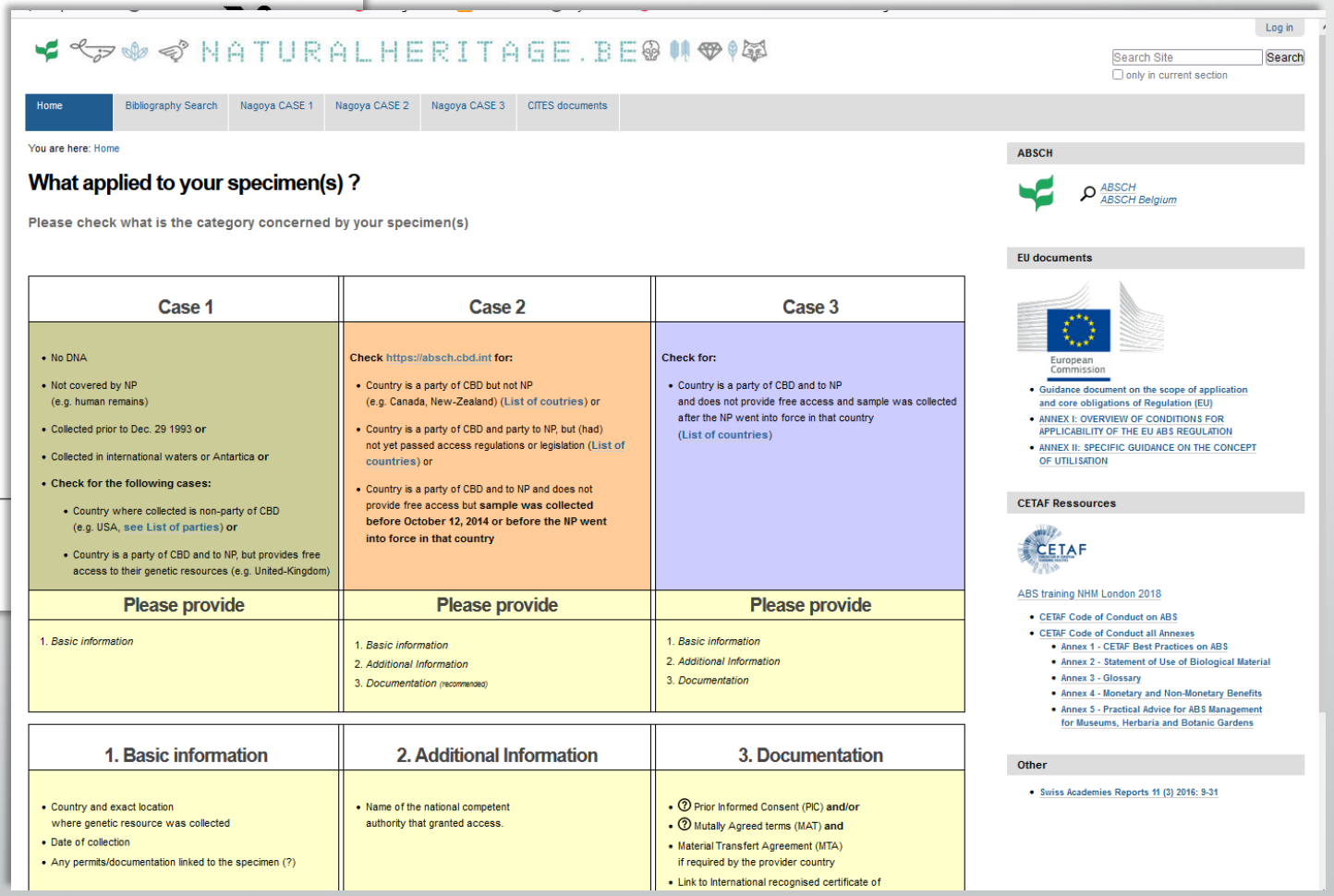
What documents?







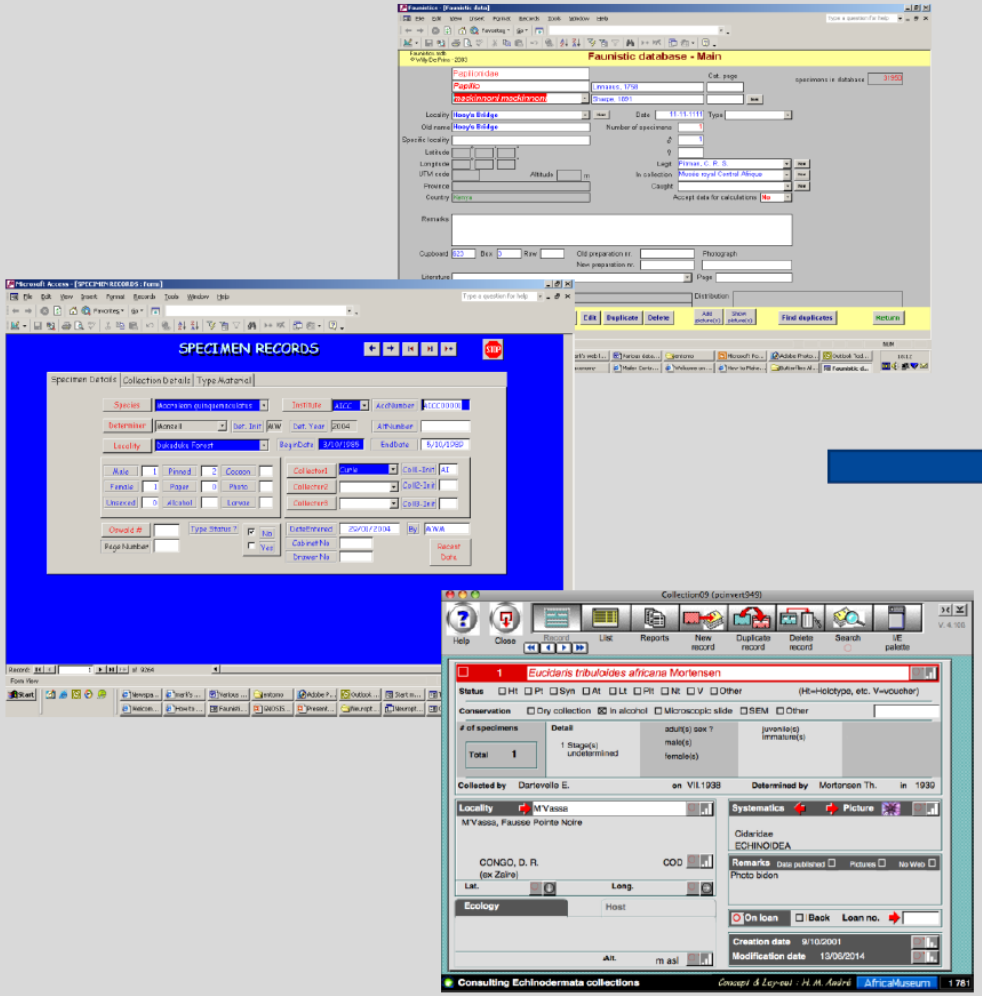

https://www.naturalheritage.be
NATURALHERITAGE.BE
You are here: Home
Welcome to the NaturalHeritage Search portal
The Belgian Natural History collections are one of the most important series which describe the past and present biodiversity and the geodiversity of our natural environment. This portal searchs digitized information and data about collections, specimens, archives and datasets hosted by Belgian institutions related to natural history.
Click on the images to select a category or on the central area to search in all data.
Click on Home in the path to the Home page.
NATURALHERITAGE
FIELD NOTES
DaRWIN
DaRWIN CMS : Questions and answers
DISSCO
GBIF Global Biodiversity Information Facility
Partners on GBIF
Convention on Biological Diversity
nagoya.naturalheritage.be
Site Map Accessibility Contact


NATURALHERITAGE.BE
Log in
Search Site
Search
only in current section
Home
Bibliography Search
Nagoya CASE 1
Nagoya CASE 2
Nagoya CASE 3
CITES documents
You are here: Home
What applied to your specimen(s) ?
Please check what is the category concerned by your specimen(s)
Case 1
No DNA
Not covered by NP (e.g. human remains)
Collected prior to Dec. 29 1993 or
Collected in international waters or Antartica or
Check for the following cases:
Country where collected is non-party of CBD (e.g. USA, see List of parties) or
Country is a party of CBD and to NP, but provides free access to their genetic resources (e.g. United-Kingdom)
Case 2
Check https://absch.cbd.int for:
Country is a party of CBD but not NP (e.g. Canada, New-Zealand) (List of coutries) or
Country is a party of CBD and party to NP, but (had) not yet passed access regulations or legislation (List of countries) or
Country is a party of CBD and to NP and does not provide free access but sample was collected before October 12, 2014 or before the NP went into force in that country
Case 3
Check for:
Country is a party of CBD and to NP and does not provide free access and sample was collected after the NP went into force in that country (List of countries)
Please provide
1. Basic information
Please provide
1. Basic information
2. Additional Information
3. Documentation (recommended)
Please provide
1. Basic information
2. Additional Information
3. Documentation
1. Basic information
Country and exact location where genetic resource was collected
Date of collection
Any permits/documentation linked to the specimen (?)
2. Additional Information
Name of the national competent authority that granted access.
3. Documentation
(?) Prior Informed Consent (PIC) and/or
(?) Mutally Agreed terms (MAT) and
Material Transfert Agreement (MTA) if required by the provider country
Link to International recognised certificate of
ABSCH
ABSCH
ABSCH Belgium
EU documents
European Commission
Guidance document on the scope of application and core obligations of Regulation (EU)
ANNEX I: OVERVIEW OF CONDITIONS FOR APPLICABILITY OF THE EU ABS REGULATION
ANNEX II: SPECIFIC GUIDANCE ON THE CONCEPT OF UTILISATION
CETAF Ressources
CETAF
ABS training NHM London 2018
CETAF Code of Conduct on ABS
CETAF Code of Conduct all Annexes
Annex 1 - CETAF Best Practices on ABS
Annex 2 - Statement of Use of Biological Material
Annex 3 - Glossary
Annex 4 - Monetary and Non-Monetary Benefits
Annex 5 - Practical Advice for ABS Management for Museums, Herbaria and Botanic Gardens
Other
Swiss Academies Reports 11 (3) 2016: 9-31

Tool for access to the metadata: DaRWIN

Before 2013

Data available in 10 different systems



Today

One CMS for all zoological collections

DaRWIN

Data Research Warehouse Information Network

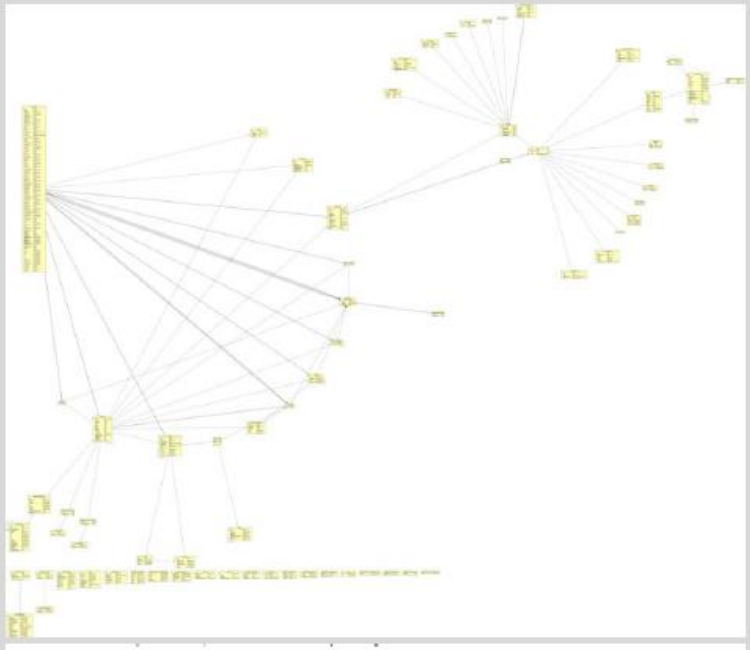
AFRICA museum

Why DaRWIN?

(Data Research Warehouse Information Network)

DaRWIN is an **open-source** on-line system for the management of **Natural History** and **paleontological collections** which has been developed and maintained by the Royal Belgian Institute of Natural Sciences in Brussels since 2010 and is also being used by the Royal Museum for Central Africa since 2013.

The maintenance of the CMS DaRWIN is carried out by the same people at the IRSNB and at the RMCA: Franck Theeten, Phillipe Vignaux and Jean-Marc Herpers



DaRWIN project

museum
Royal Belgian Institute of Natural Sciences

belspo
Belgian Federal Science Policy Office

AFRICA museum

Advantages and disadvantages of DaRWIN

DaRWIN web interface very complete

→ Very useful when 1 or 2 specimens to encode

→ Powerful to search for specimens, create labels, loans

→ Data can be export to international … GBIF

→ Time consuming if a lot of specimens

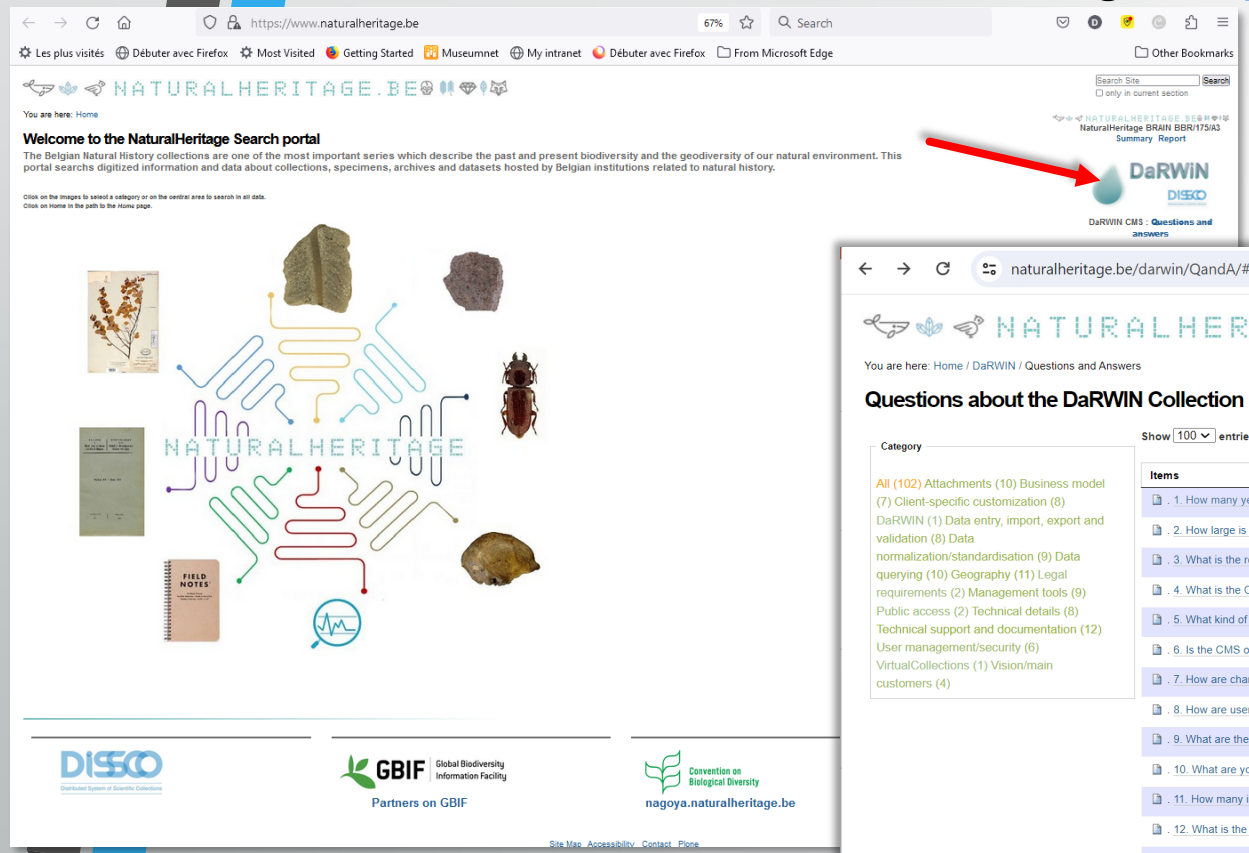
→ No common template for data coming from outside RMCA

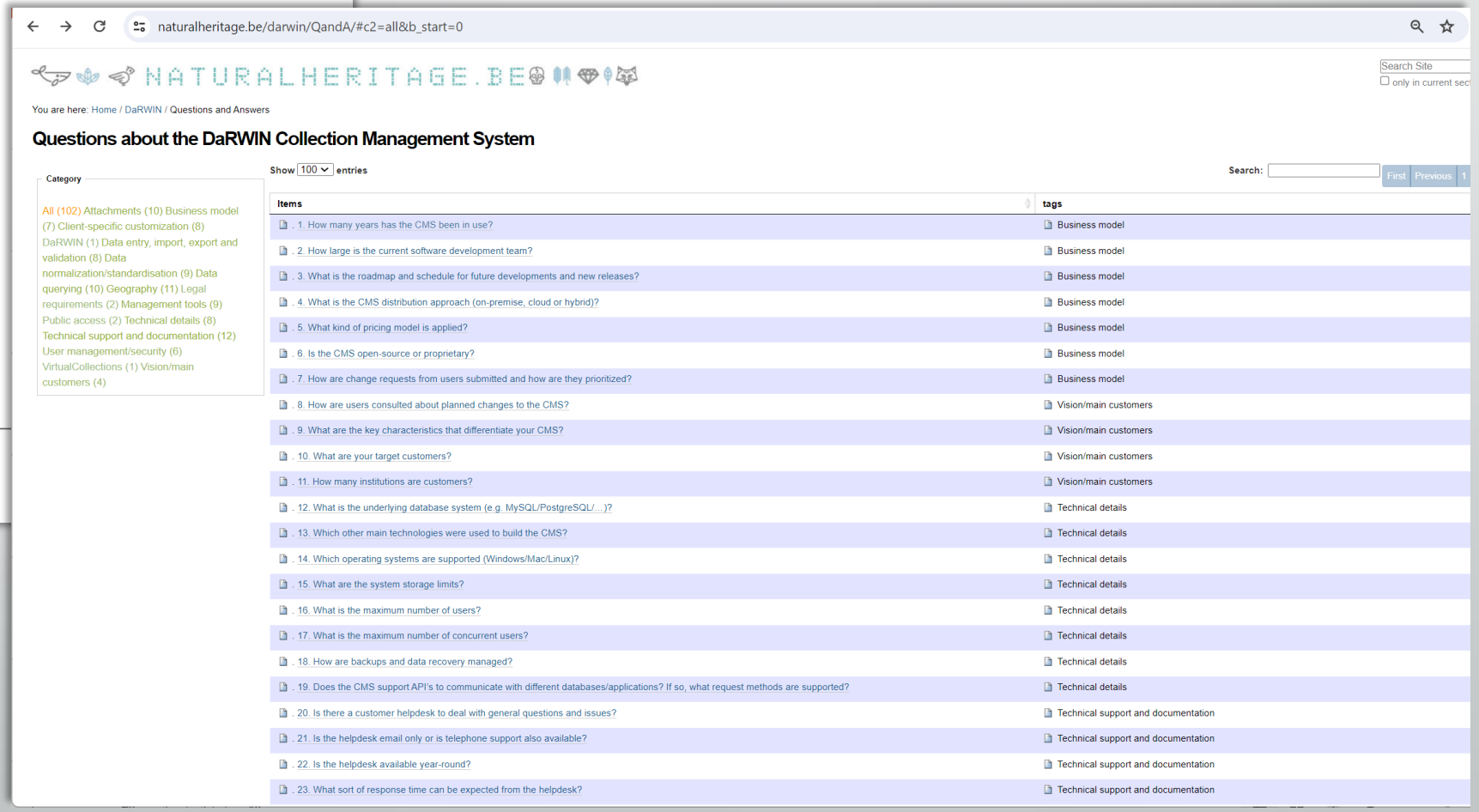
→ Need to be connected to DaRWIN server

Spreadsheet templates for data import in DaRWIN

DaRWIN Collection Management System

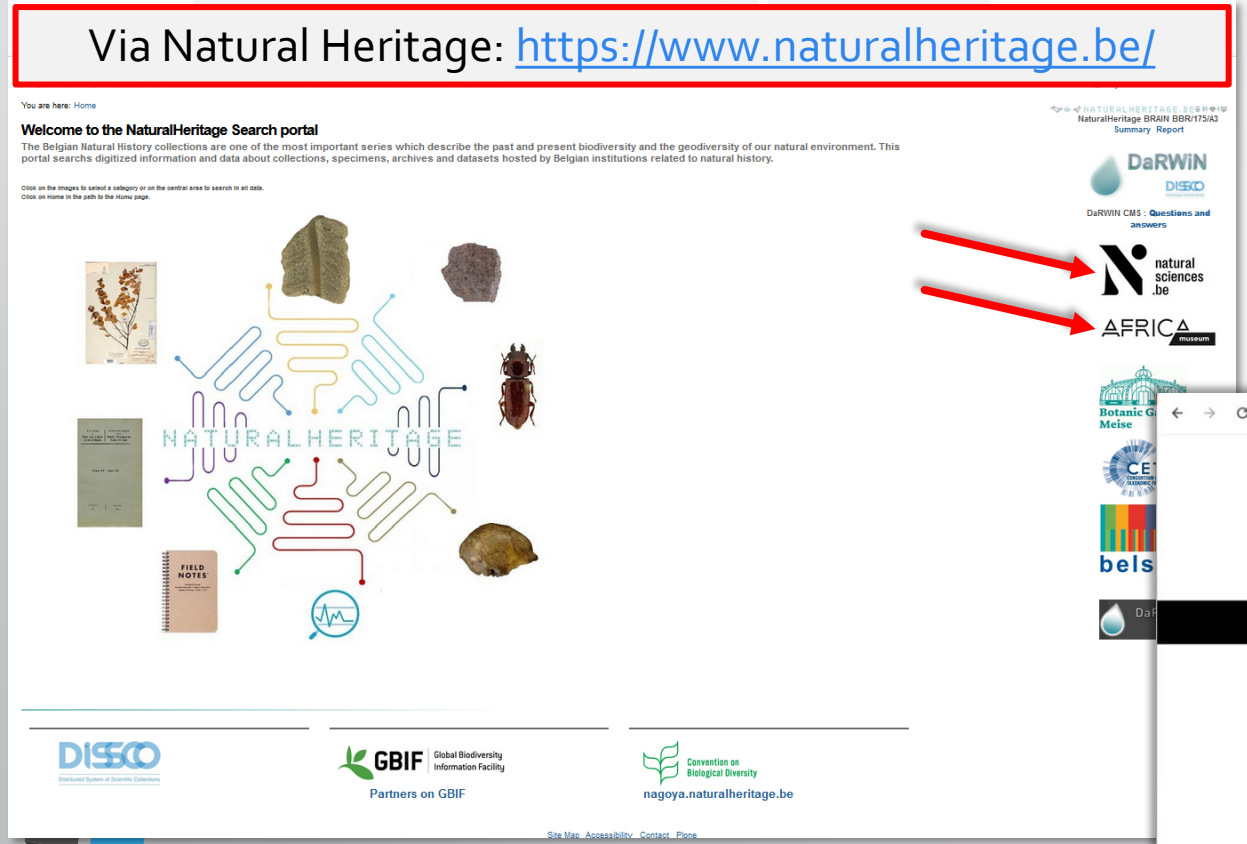
Via Natural Heritage: https://www.naturalheritage.be/



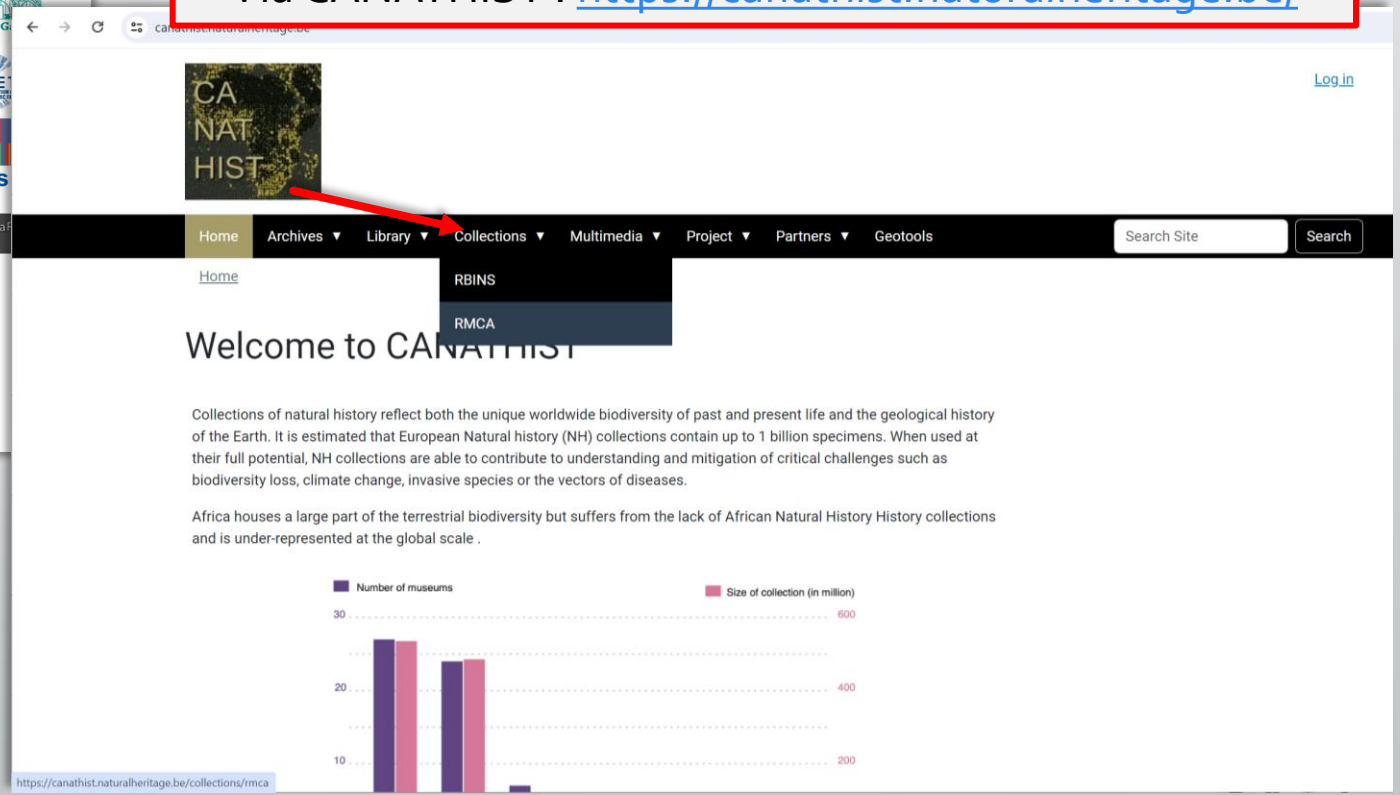


The DaRWIN Public

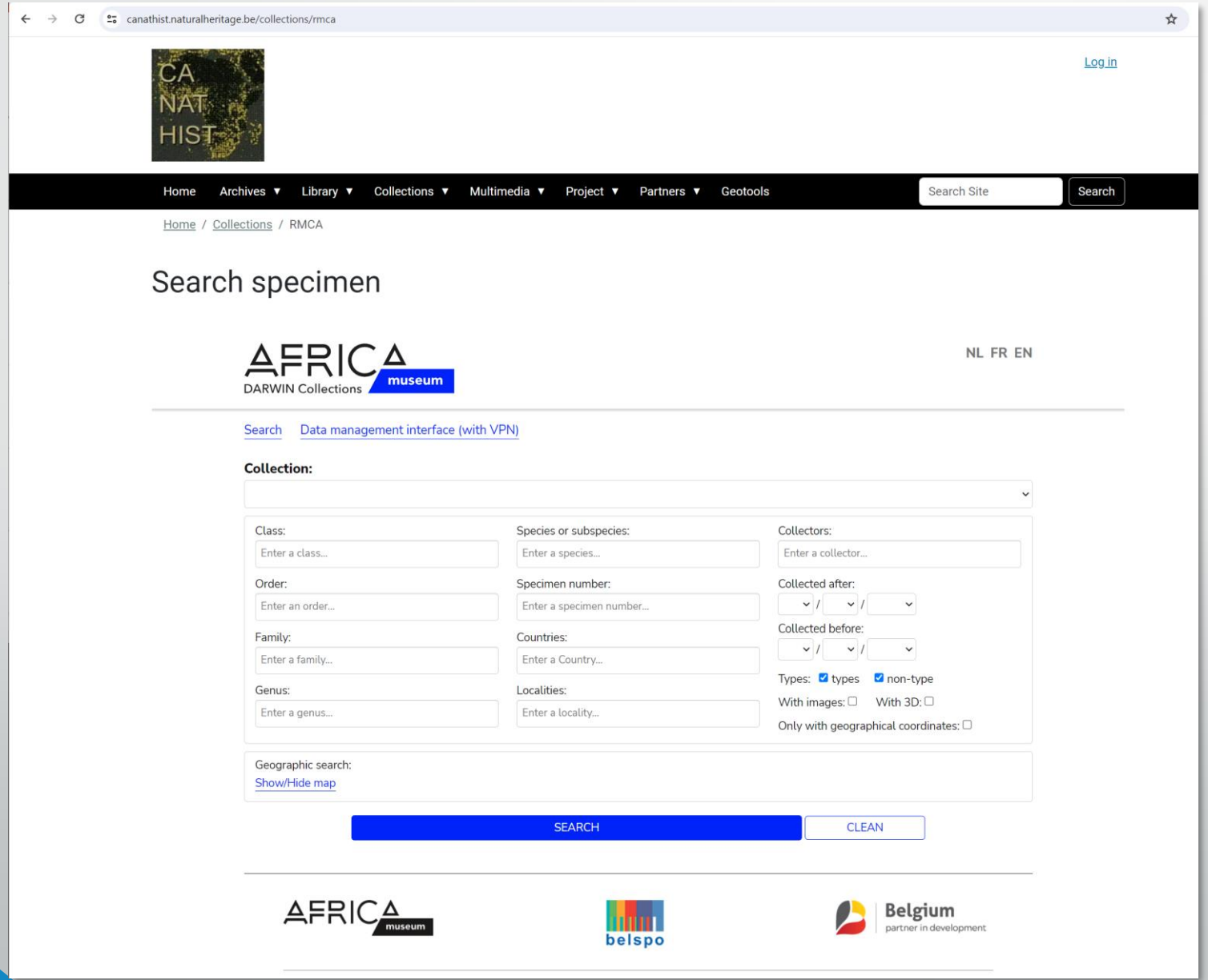
Via Natural Heritage: https://www.naturalheritage.be/



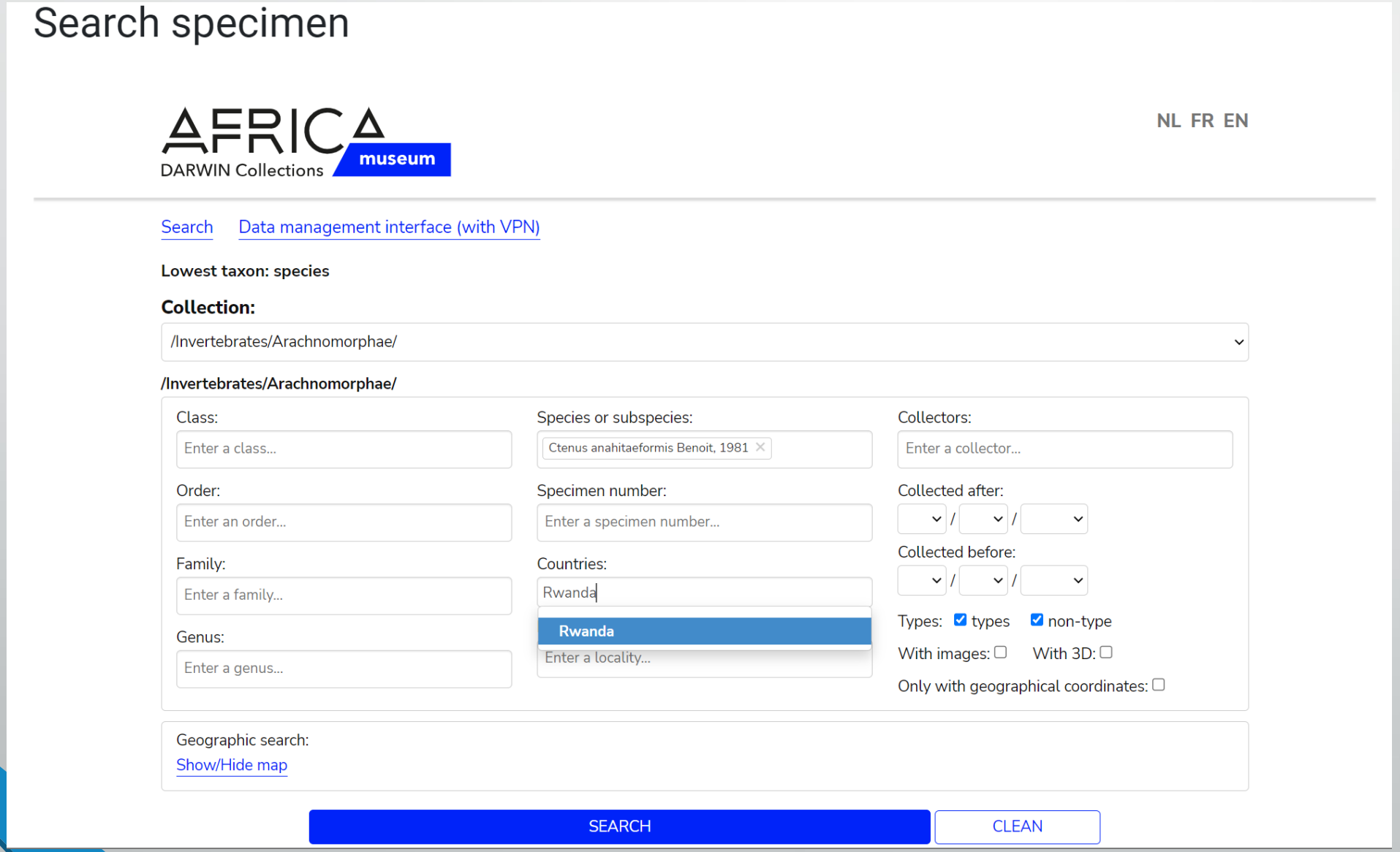
Via CANATHIST : https://canathist.naturalheritage.be/



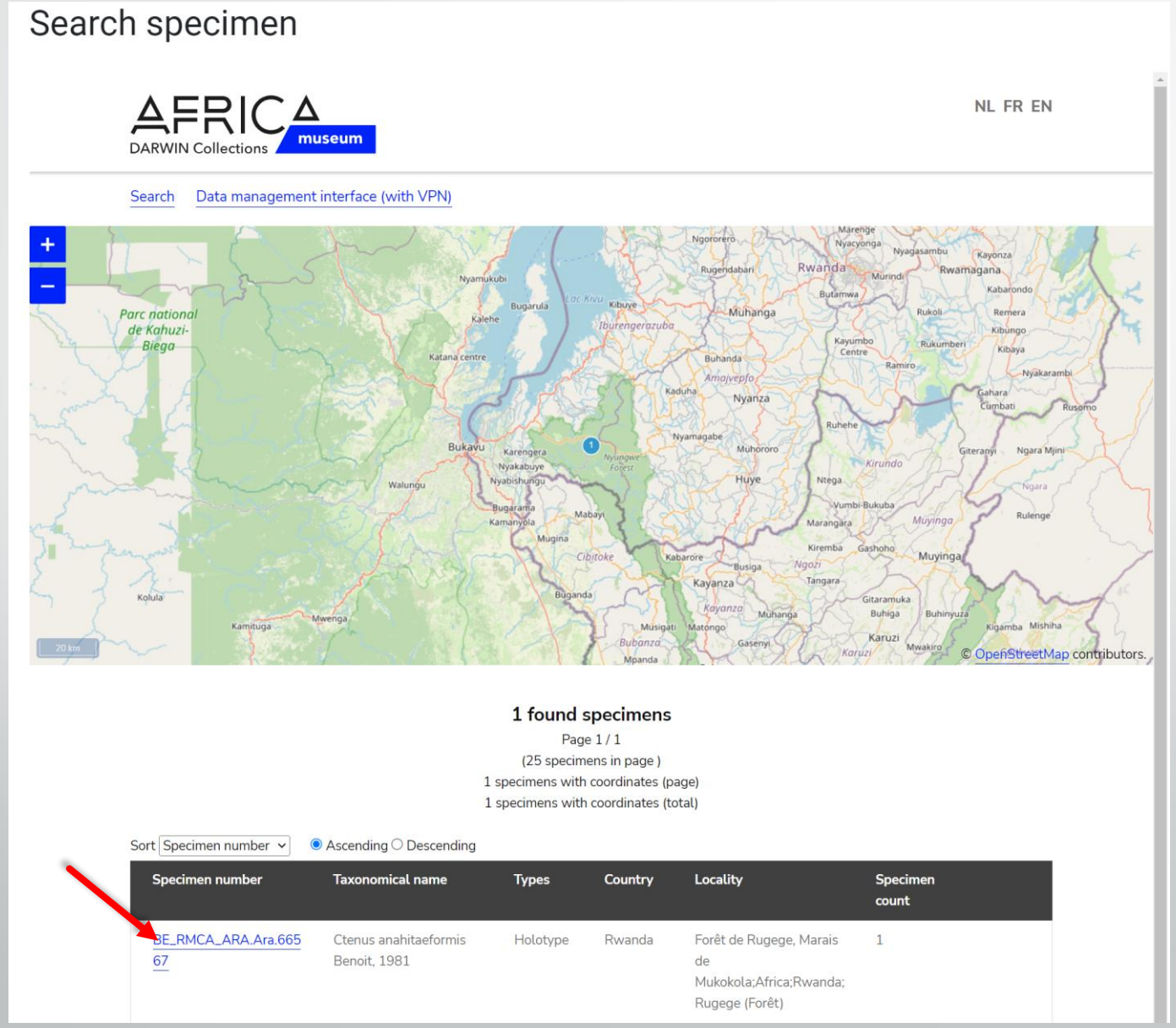
The DaRWIN Public



The DaRWIN Public



The DaRWIN Public



The DaRWIN Public

AFRICA museum
DARWIN Collections

NL FR EN

Search | Data management interface

Ctenus anahitaeformis Benoit, 1981

BE_RMCA_ARA.Ara.66567

> Stable CETAF identifier (permalink)
> Image link

Collection: **/Invertebrates/Arachnomorphae/Araneae/**

Specimen number: **BE_RMCA_ARA.Ara.66567**

Taxonomical name: ***Ctenus anahitaeformis Benoit, 1981***

Class: ***Arachnida***

Order: ***Araneae***

Family: ***Ctenidae***

Begin of collecting period: **11/8/1949**

End of collecting period: **17/8/1949**

Collectors: **Laurent (Dr.)**

Donator:

History of scientific identifications:

- **1979-xx-xx: Ctenus anahitaeformis Benoit, 1981**

Zoological type: **Holotype**

Specimen count: **1**

Specimen count (females):

Country: **Rwanda**

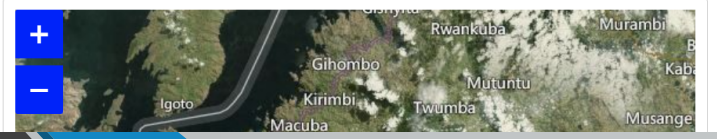
Locality:

- administrative area:
  - Continent: **Africa**
  - Country: **Rwanda**
  - Municipality: **Rugege (Forêt)**
- area:
  - Exact_site: **Forêt de Rugege, Marais de Mukokola**

Latitude: **-2.5**

Longitude: **29.25**

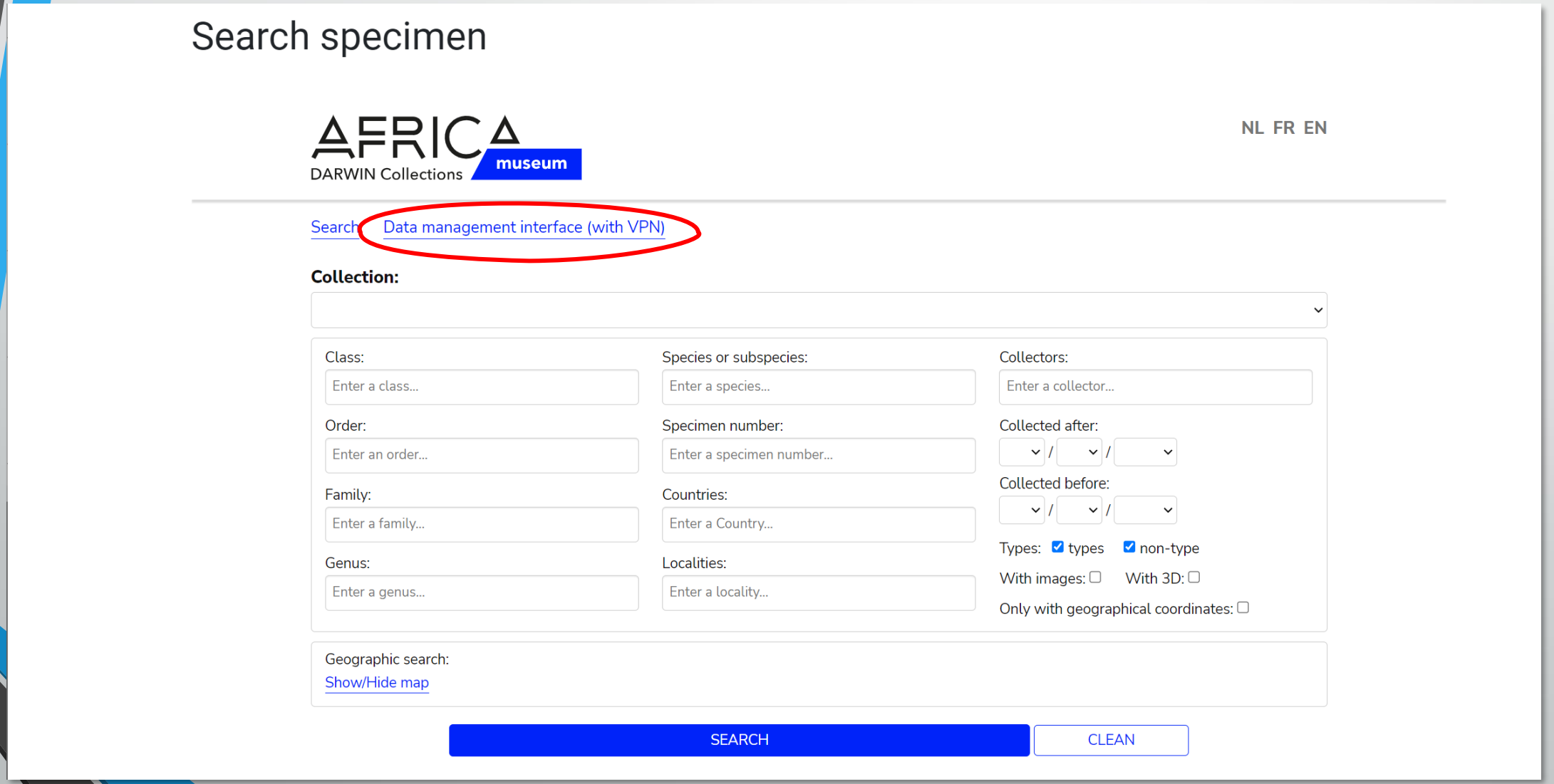
Show/Hide Map



https://virtualcol.africamuseum.be/providence/pawtucket/service.php/IIIF/represe

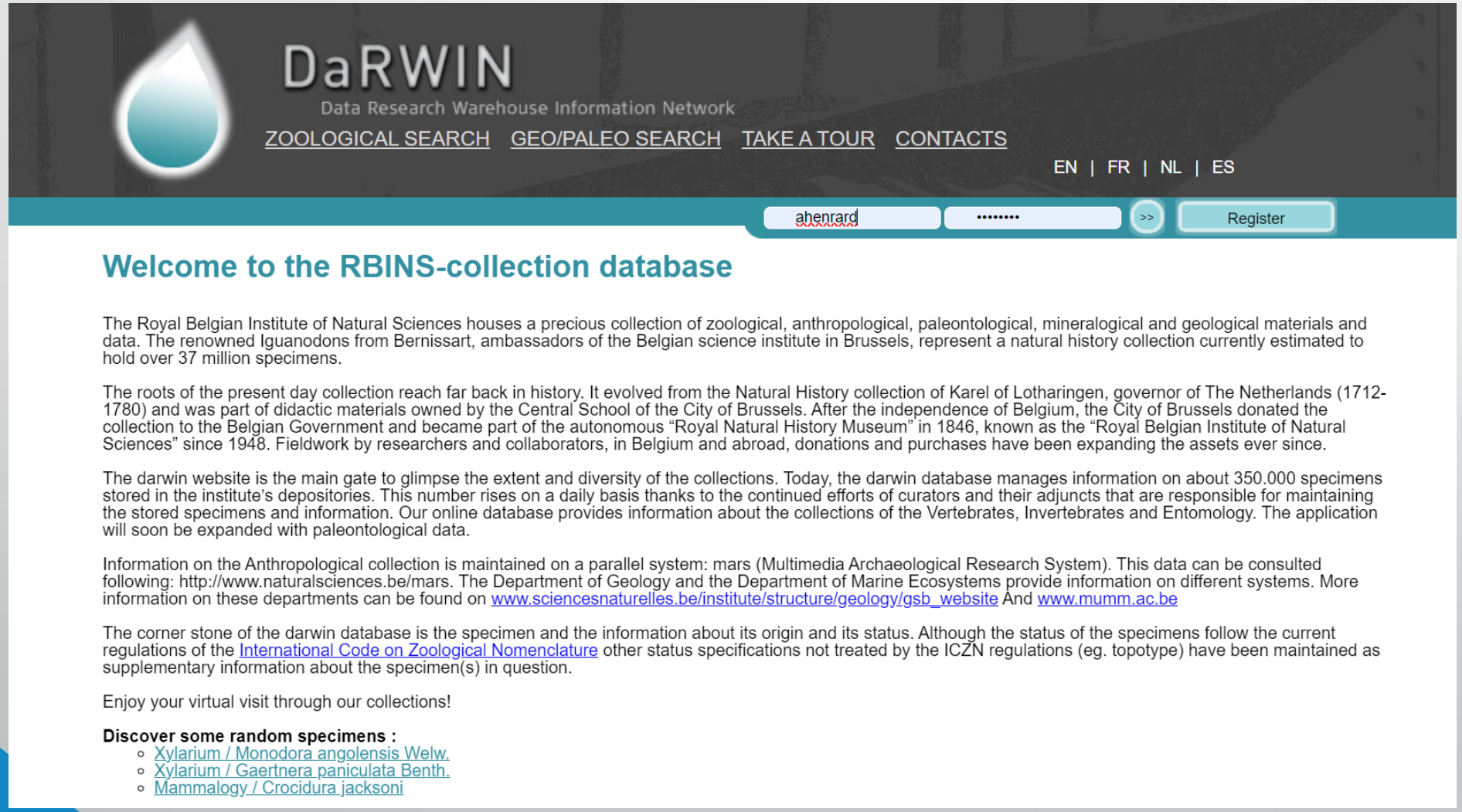
The DaRWIN Interface

Data management interface (with VPN)



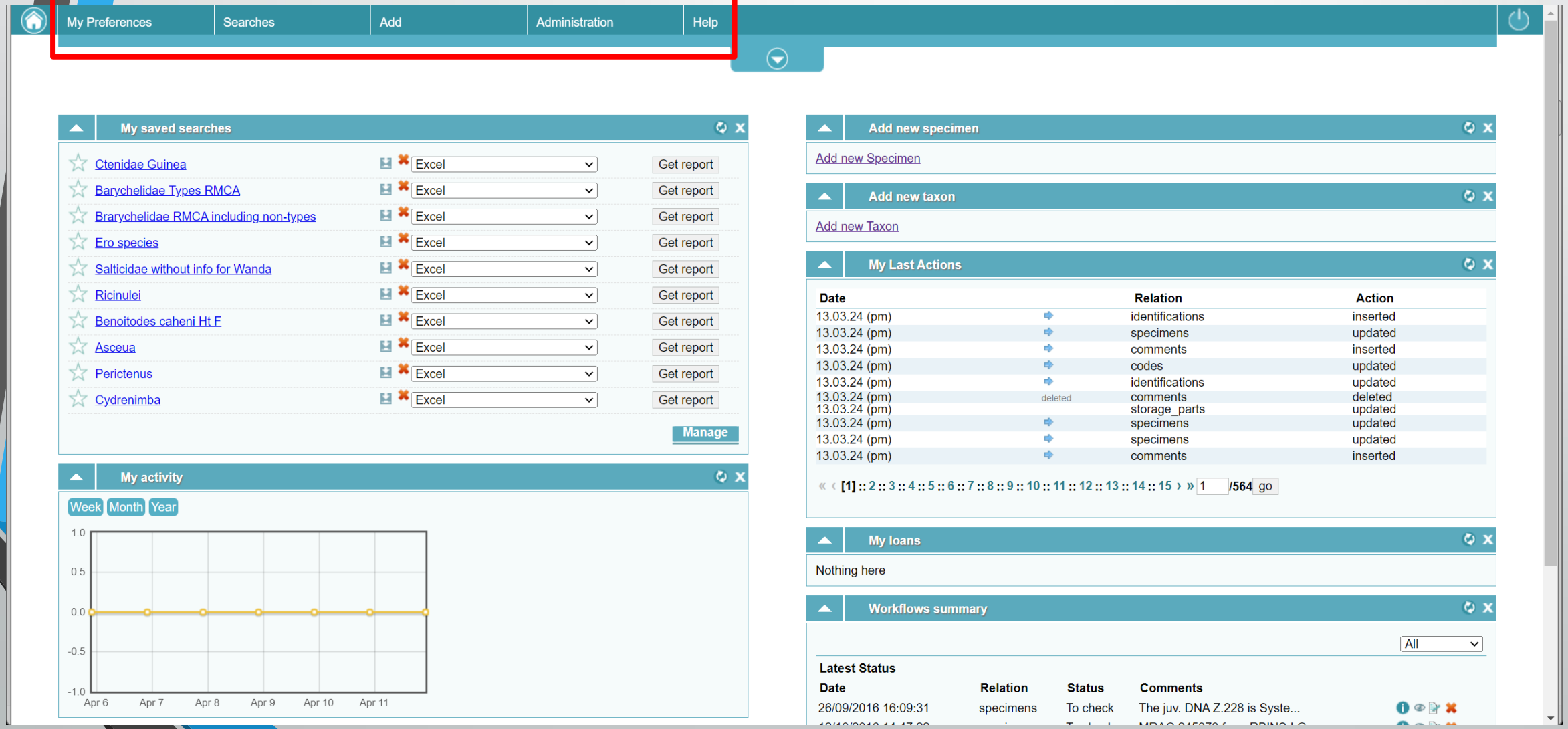
The DaRWIN Interface

Data management interface (with VPN)



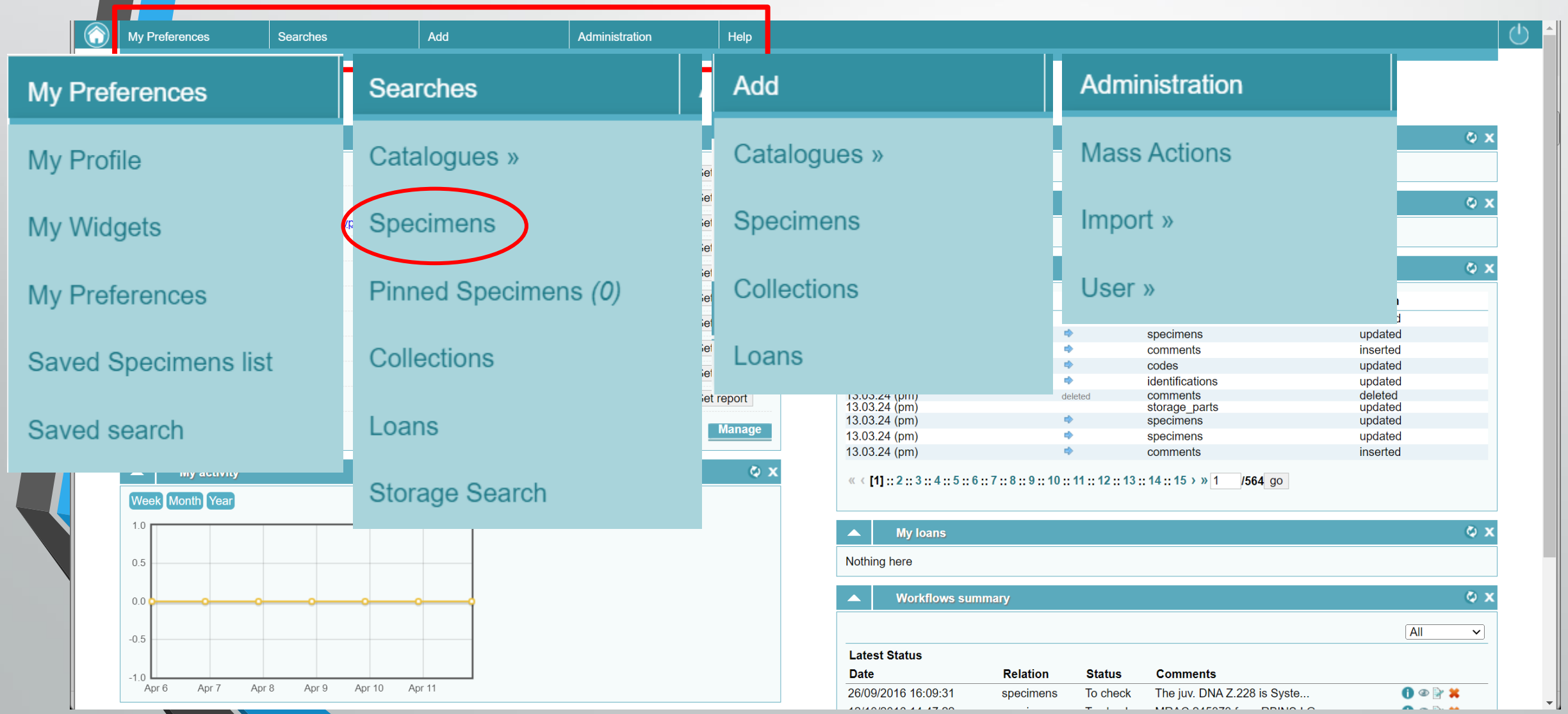
The DaRWIN Interface

[Data management interface (with VPN)]



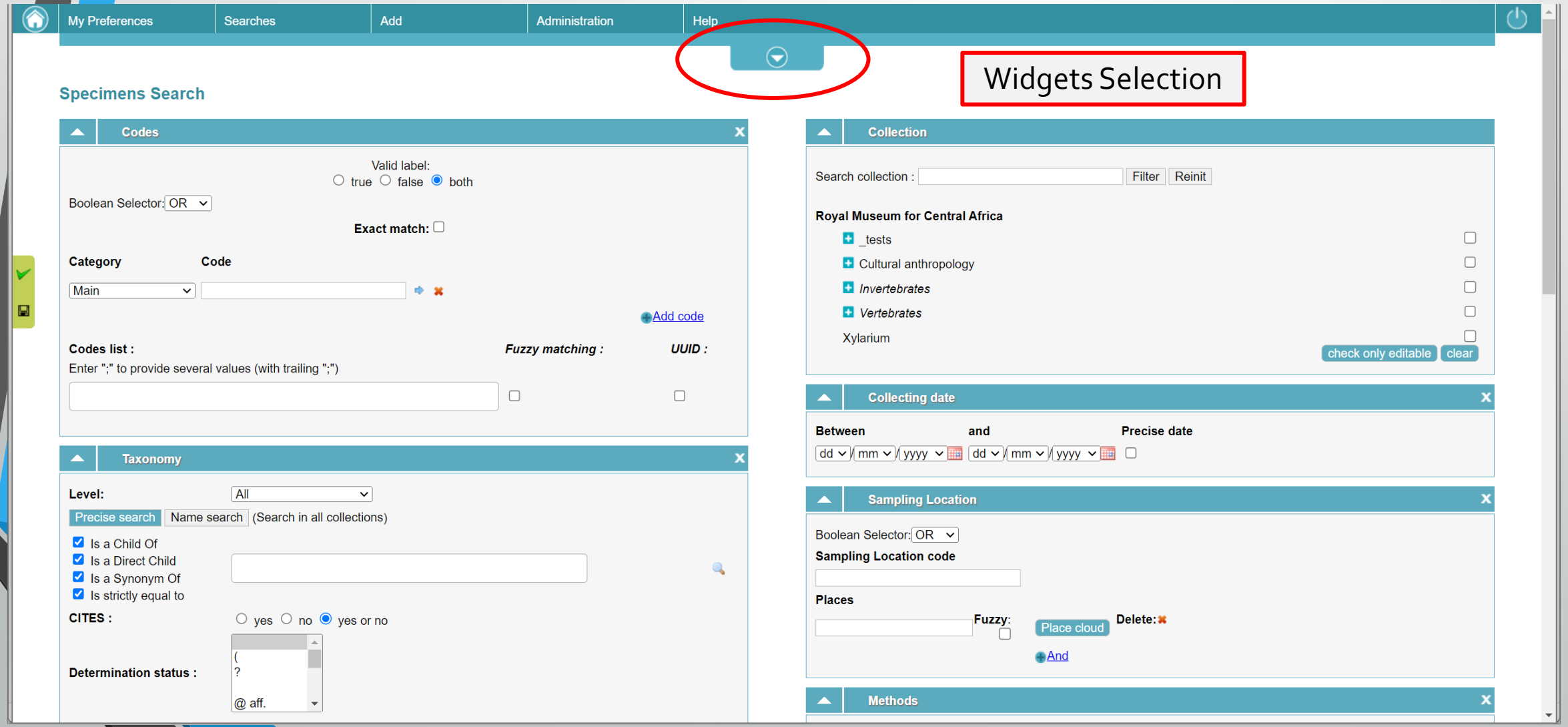
The DaRWIN Interface

[Data management interface (with VPN)]



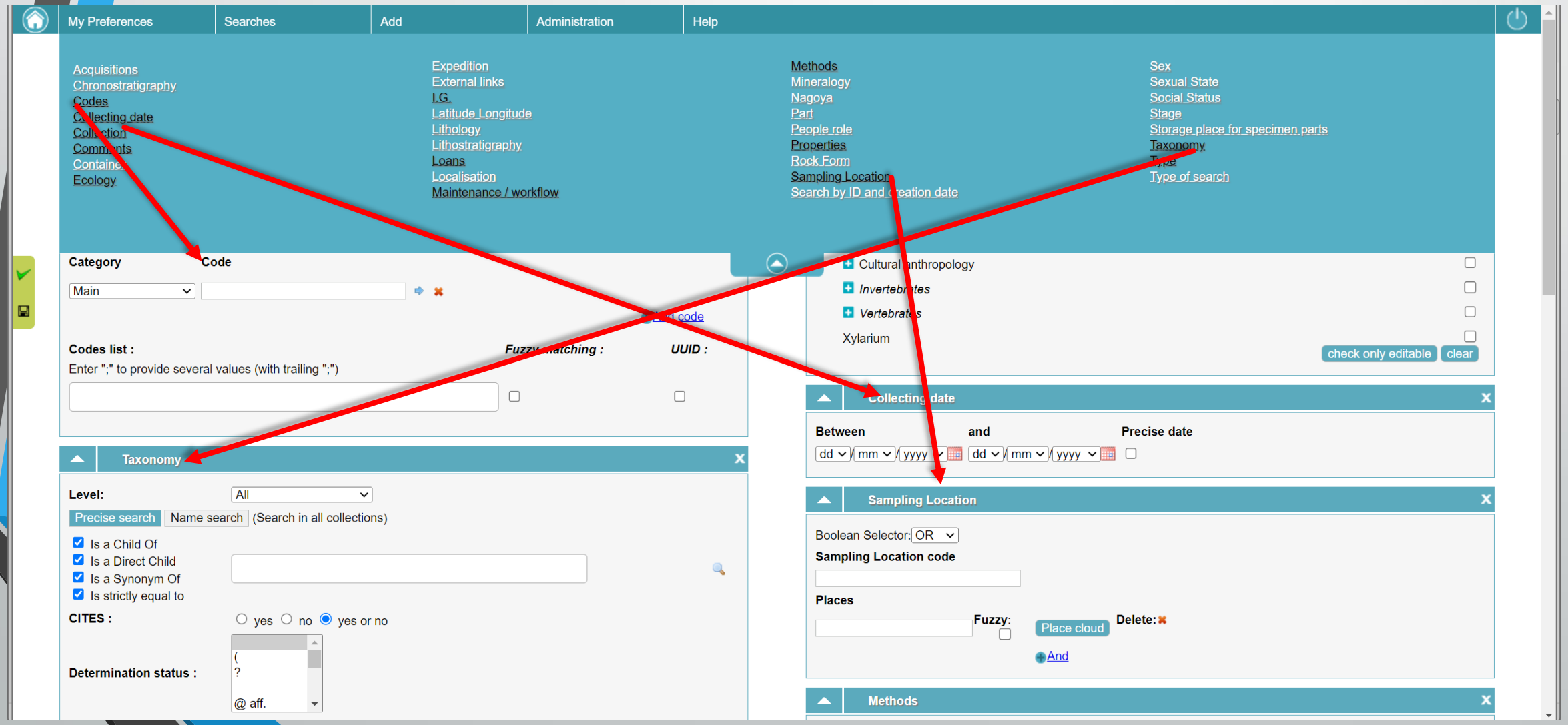
The DaRWIN Interface

Widgets



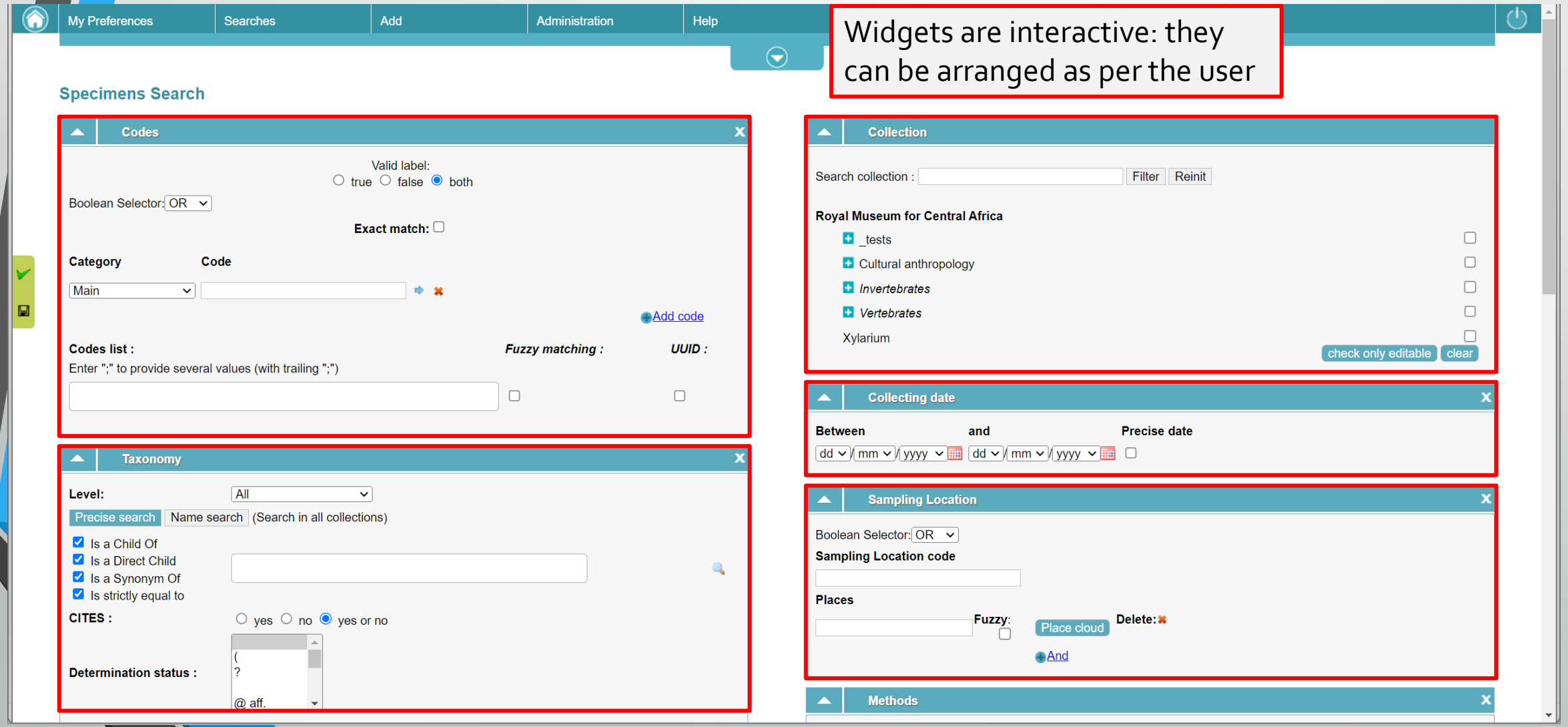
The DaRWIN Interface

Widgets



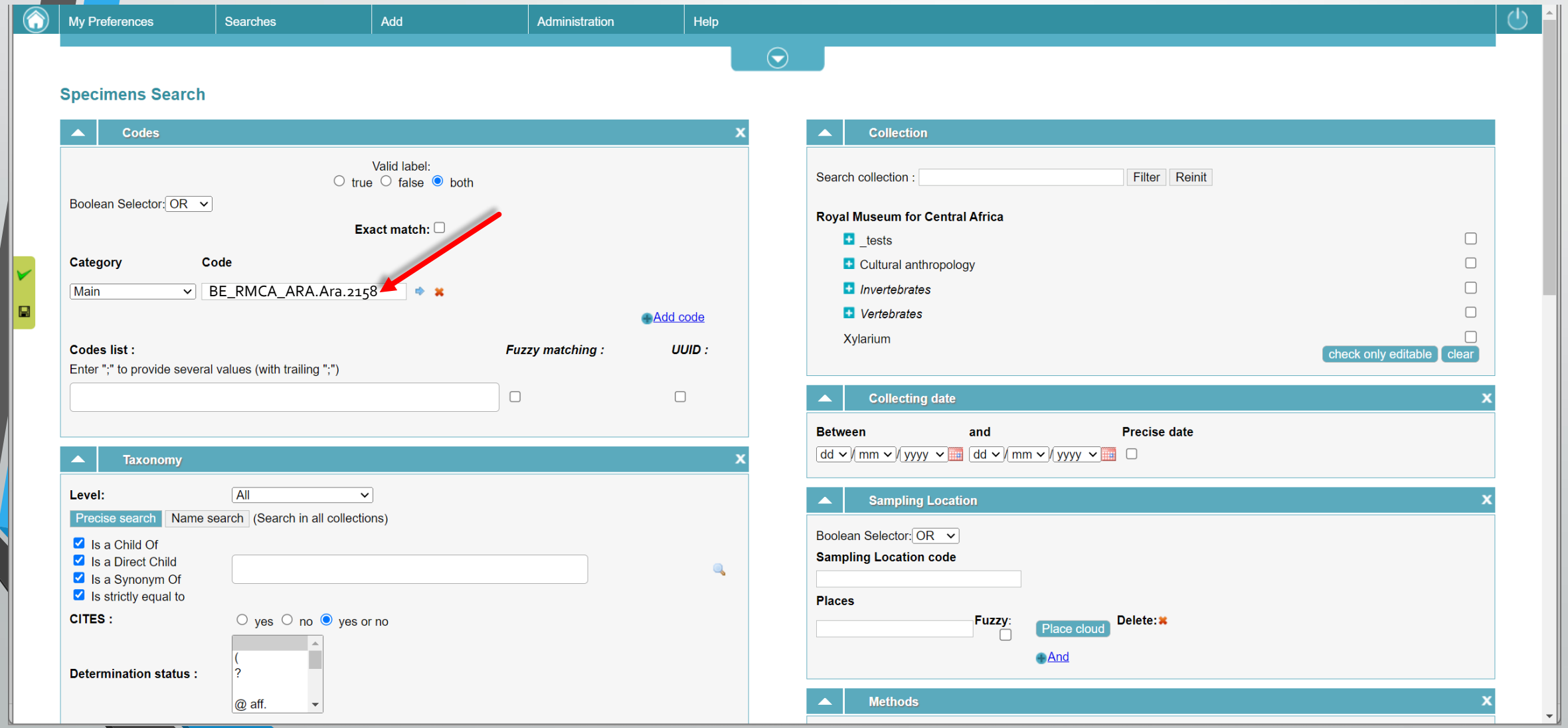
The DaRWIN Interface

Widgets



The DaRWIN Interface

Search for Specimens



The DaRWIN Interface

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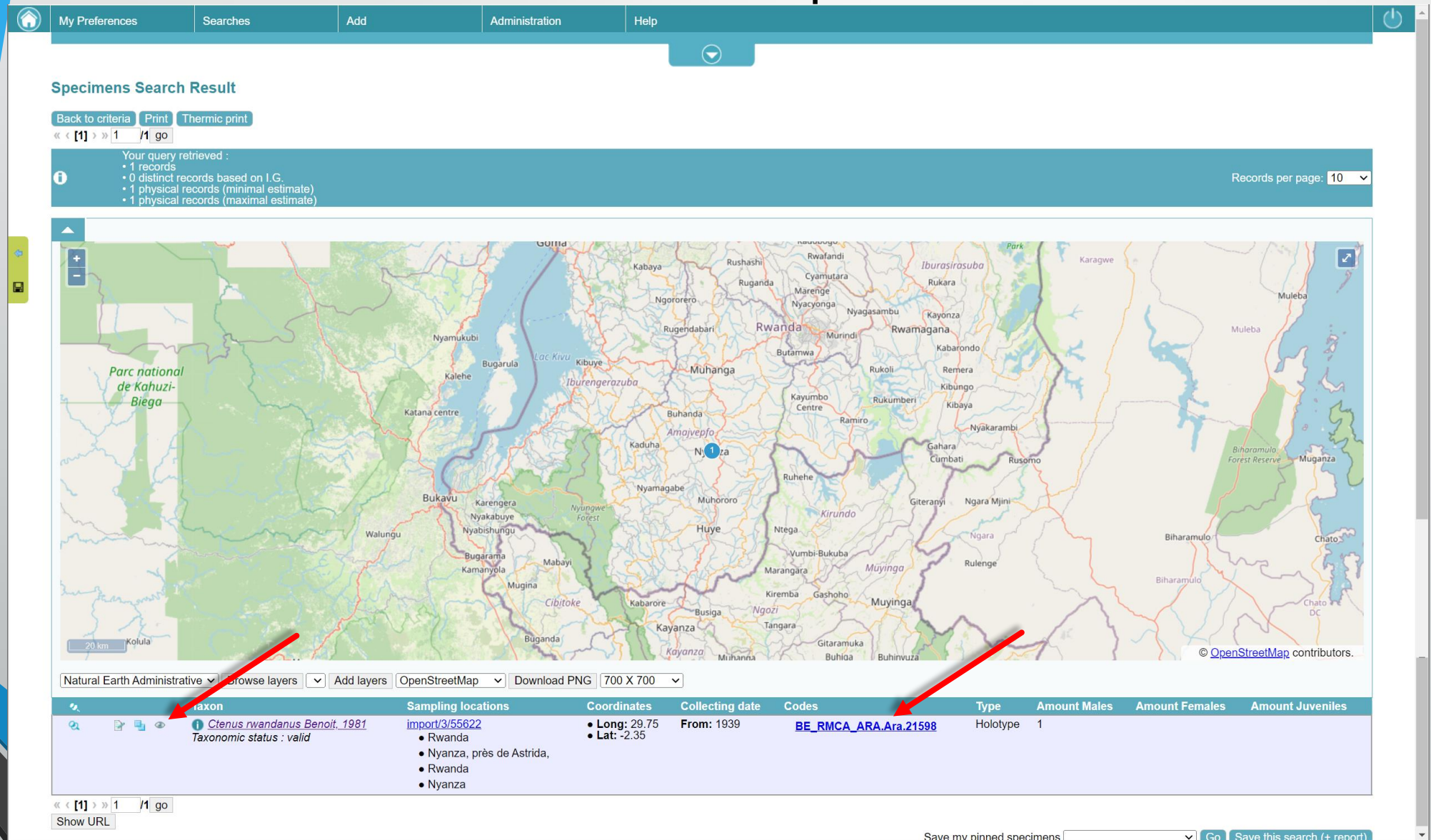


The DaRWIN Interface

Search for Specimens

My Preferences | Searches | Add | Administration | Help

View Specimen | Thermic print

Codes

Category	Code	Barcode
secondary	Arachnomorpha	
main	BE_RMCA_ARA.Ara.21598	
secondary	Ctenus rwandanus Benoit, 1981	
Original and stable id	43415	
UUID	a0a38e02-0581-4442-be05-0e73e5981d18	

Collection

Araneae

Taxonomy

Ctenus rwandanus Benoit, 1981

Taxonomy: RMCA reference

Type

Type Holotype

Collecting date

Gathering date from 01/01/1939 00:00:00
Gathering date to 31/12/2038 00:00:00

Sampling location

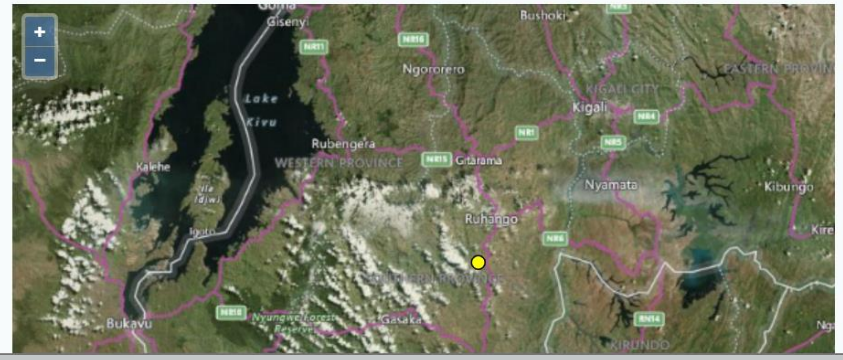
Station visible ? Yes
Sampling location code import/3/55622
Latitude -2.35
Longitude 29.75
Sampling location places

Continent - Administrative Area
Africa

Country - Administrative Area
Rwanda

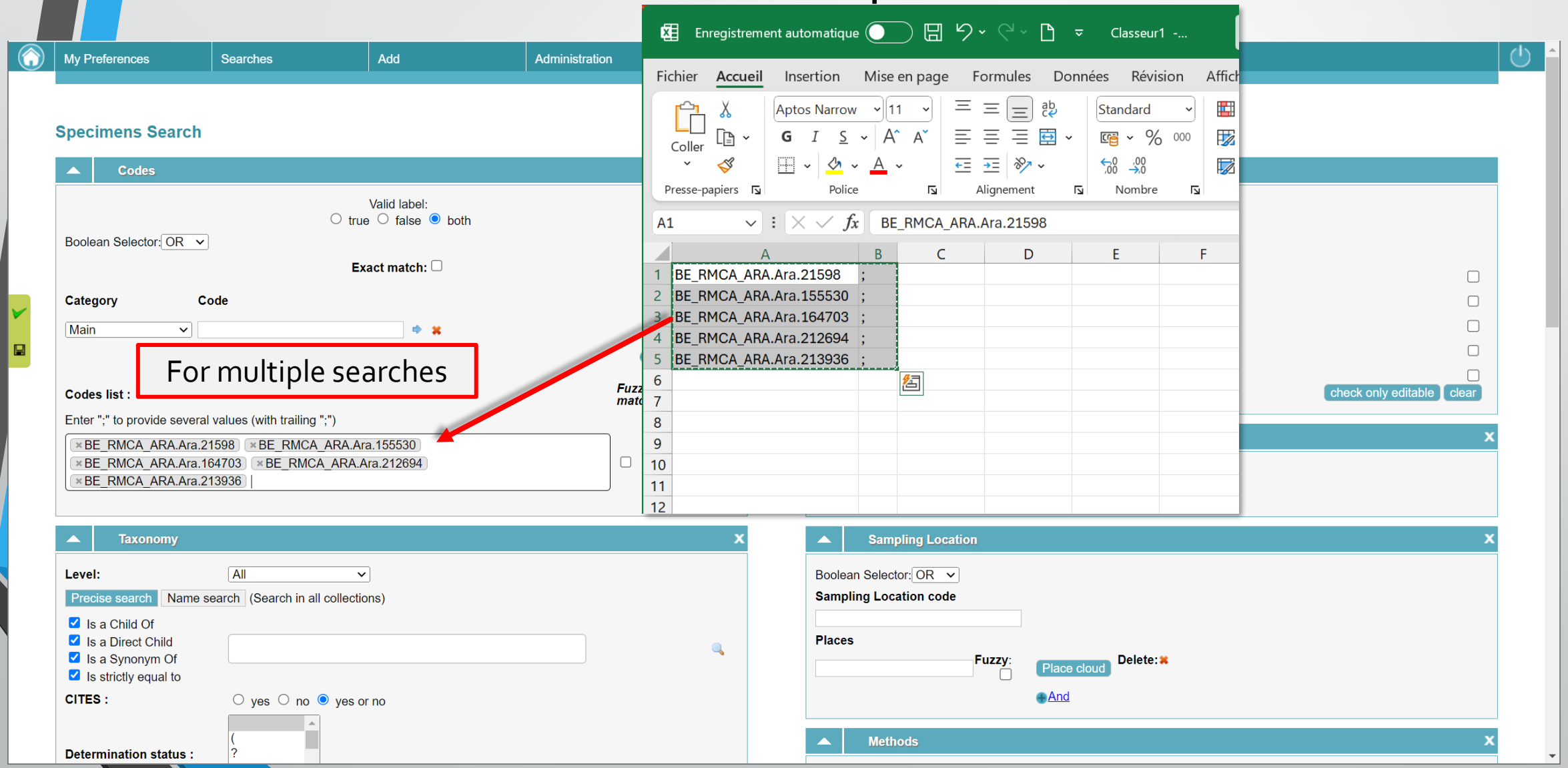
Municipality - Administrative Area
Nyanza

Exact_site - Area
Nyanza, près de Astrida,



The DaRWIN Interface

Search for Specimens



The DaRWIN Interface

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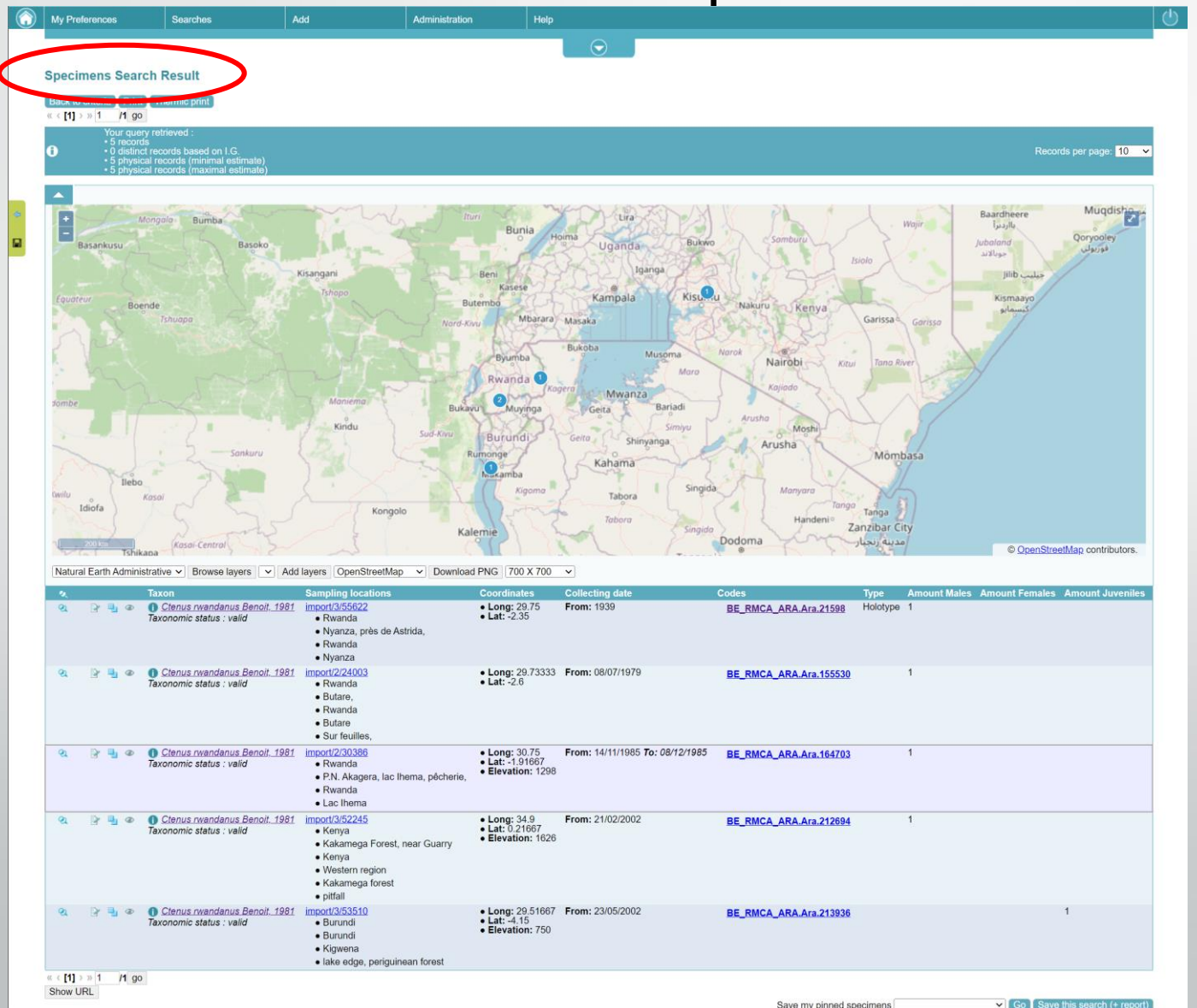
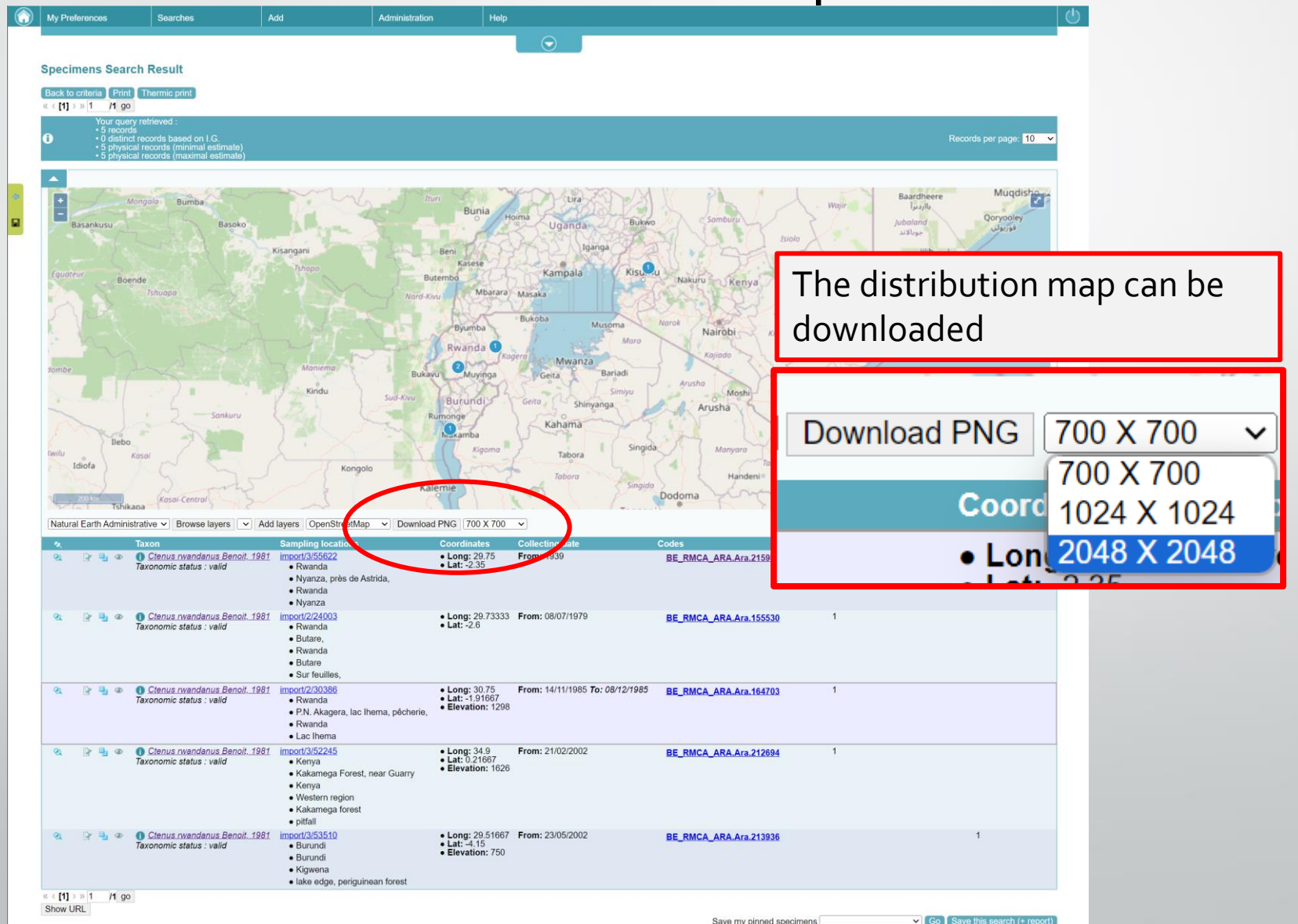


The DaRWIN Interface

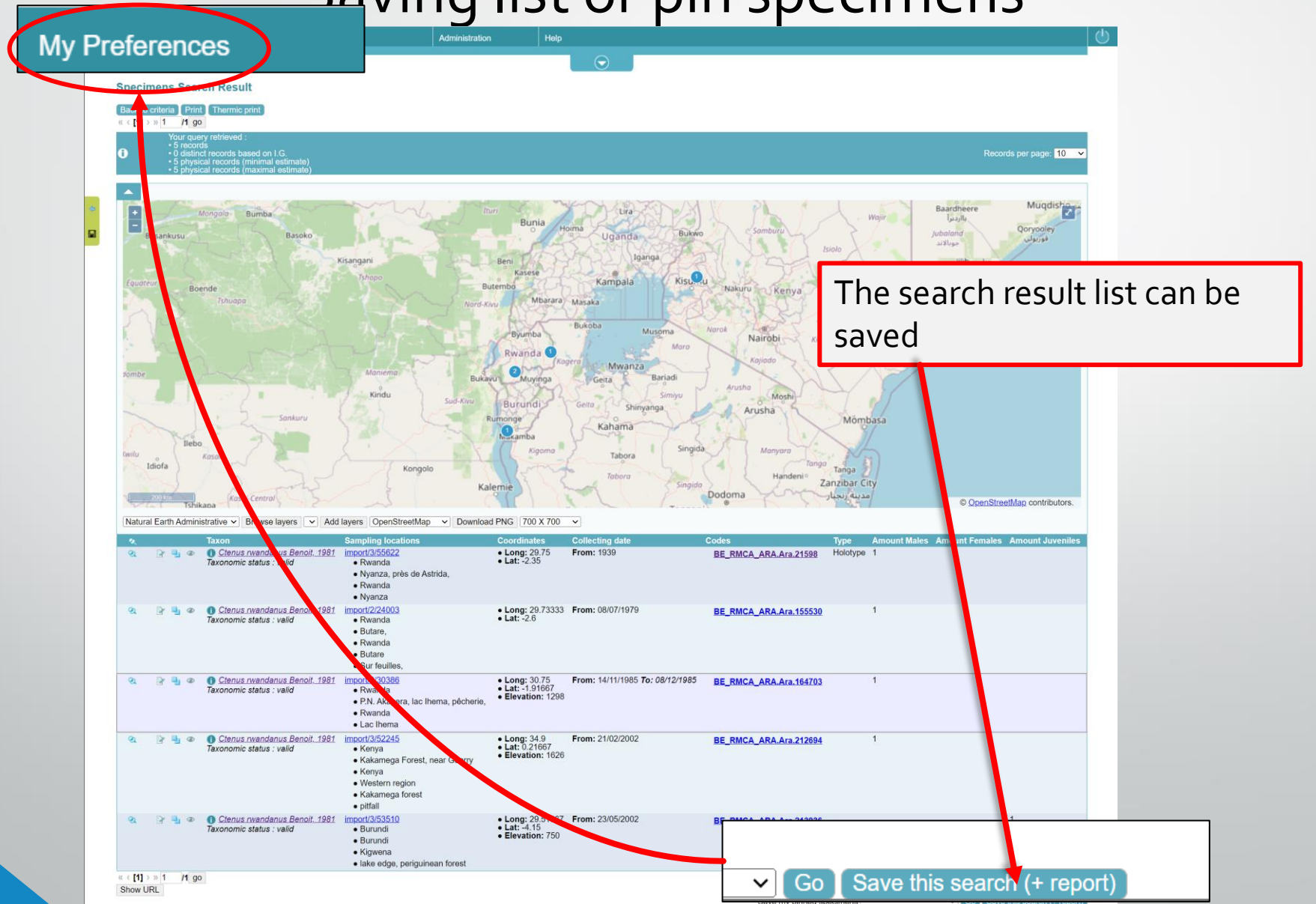
Distribution map



The distribution map can be downloaded

The DaRWIN Interface

Saving list or pin specimens

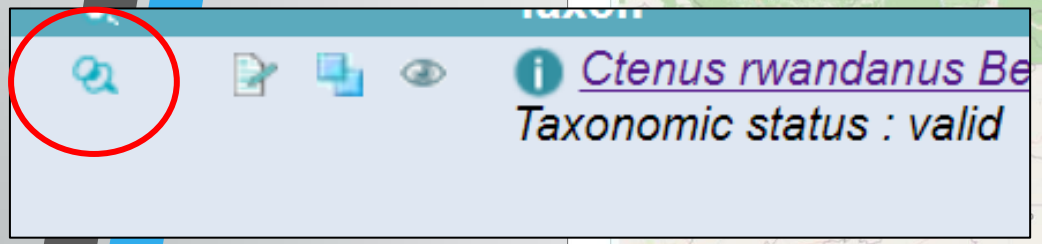


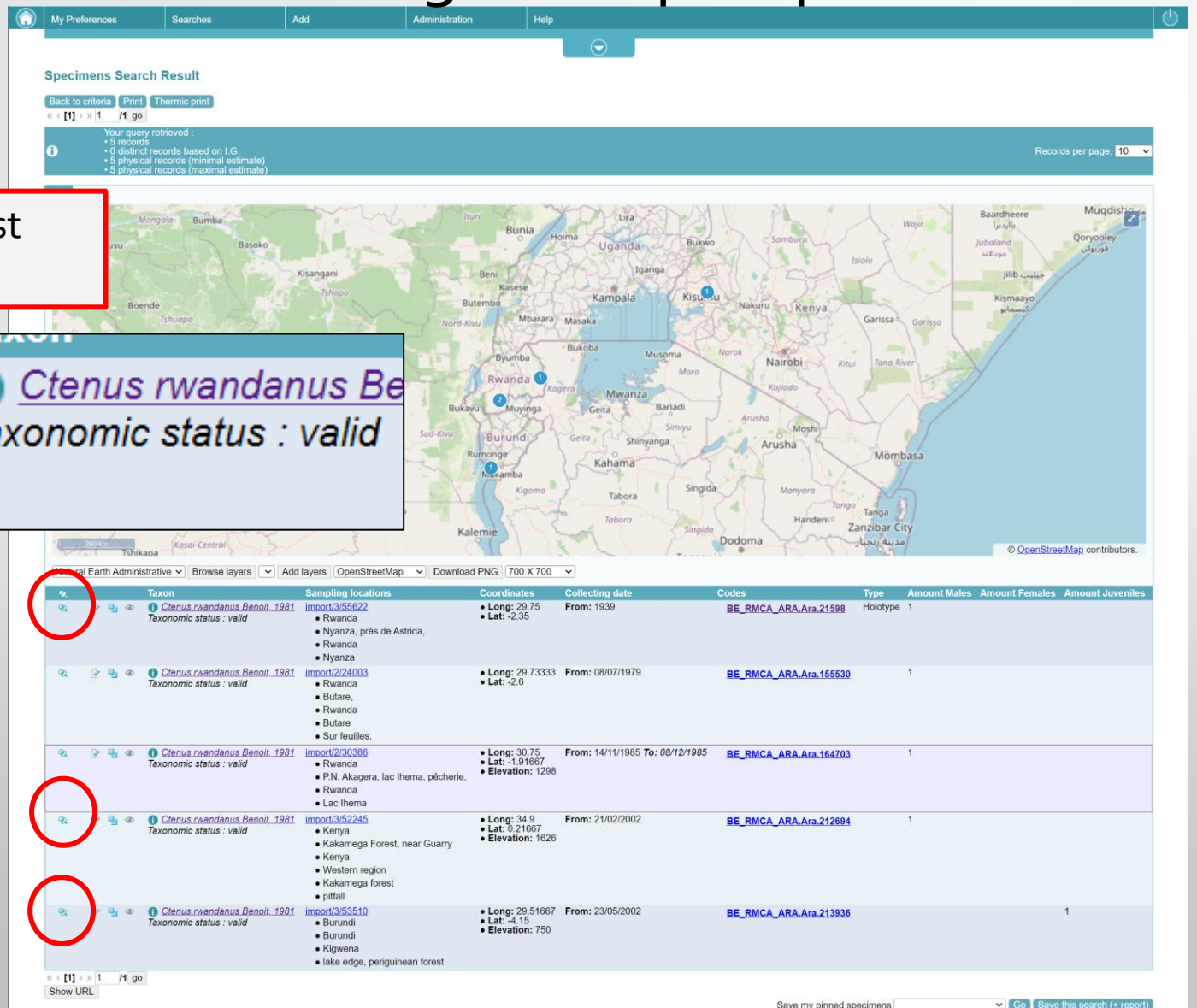
The search result list can be saved

The DaRWIN Interface

Saving list or pin specimens

Pin the samples of interest and save them on the list



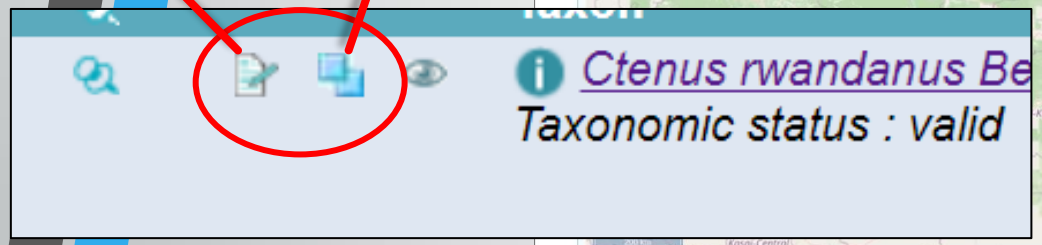


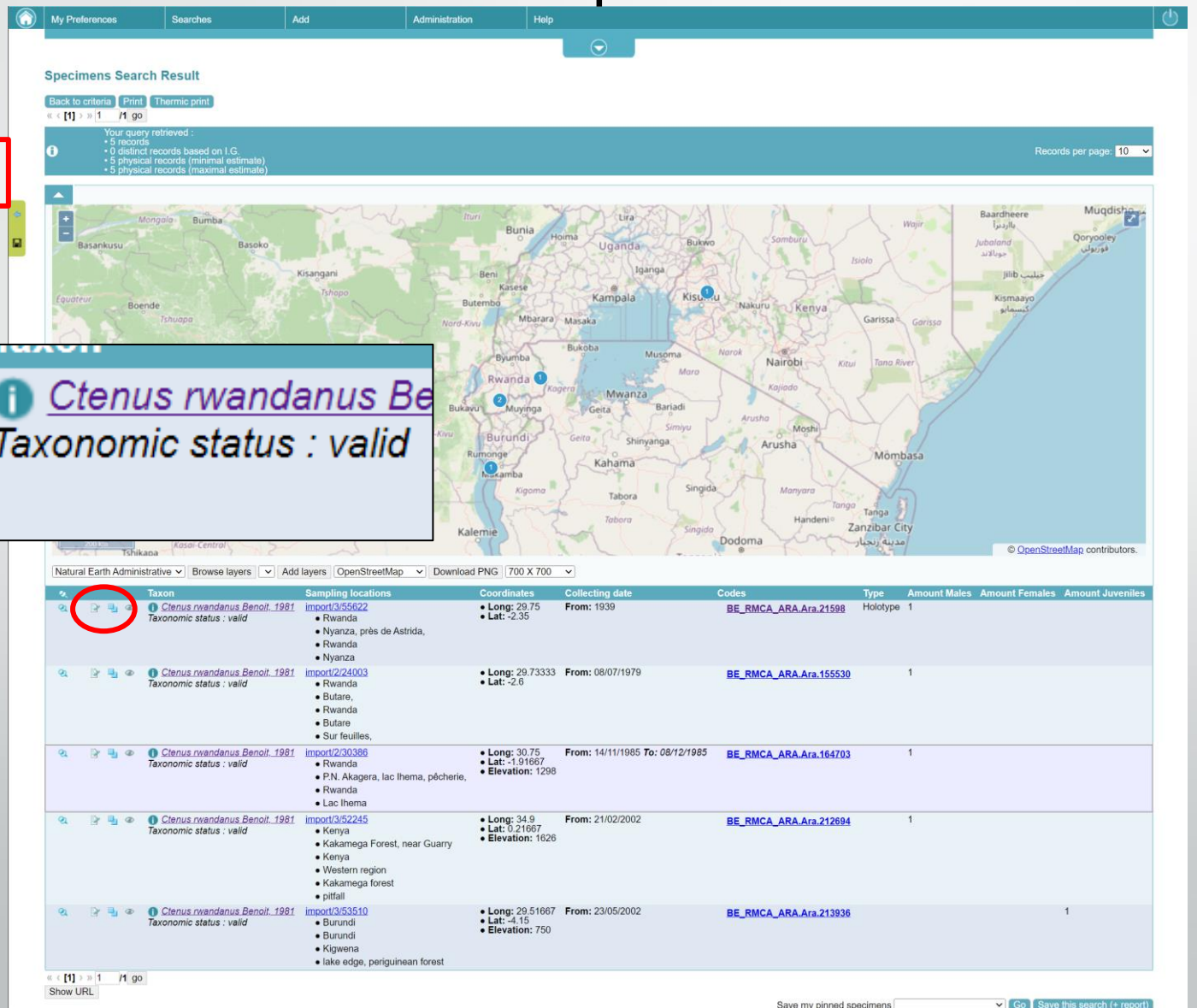
The DaRWIN Interface

Edit and duplicate functions

Edit

Duplicate

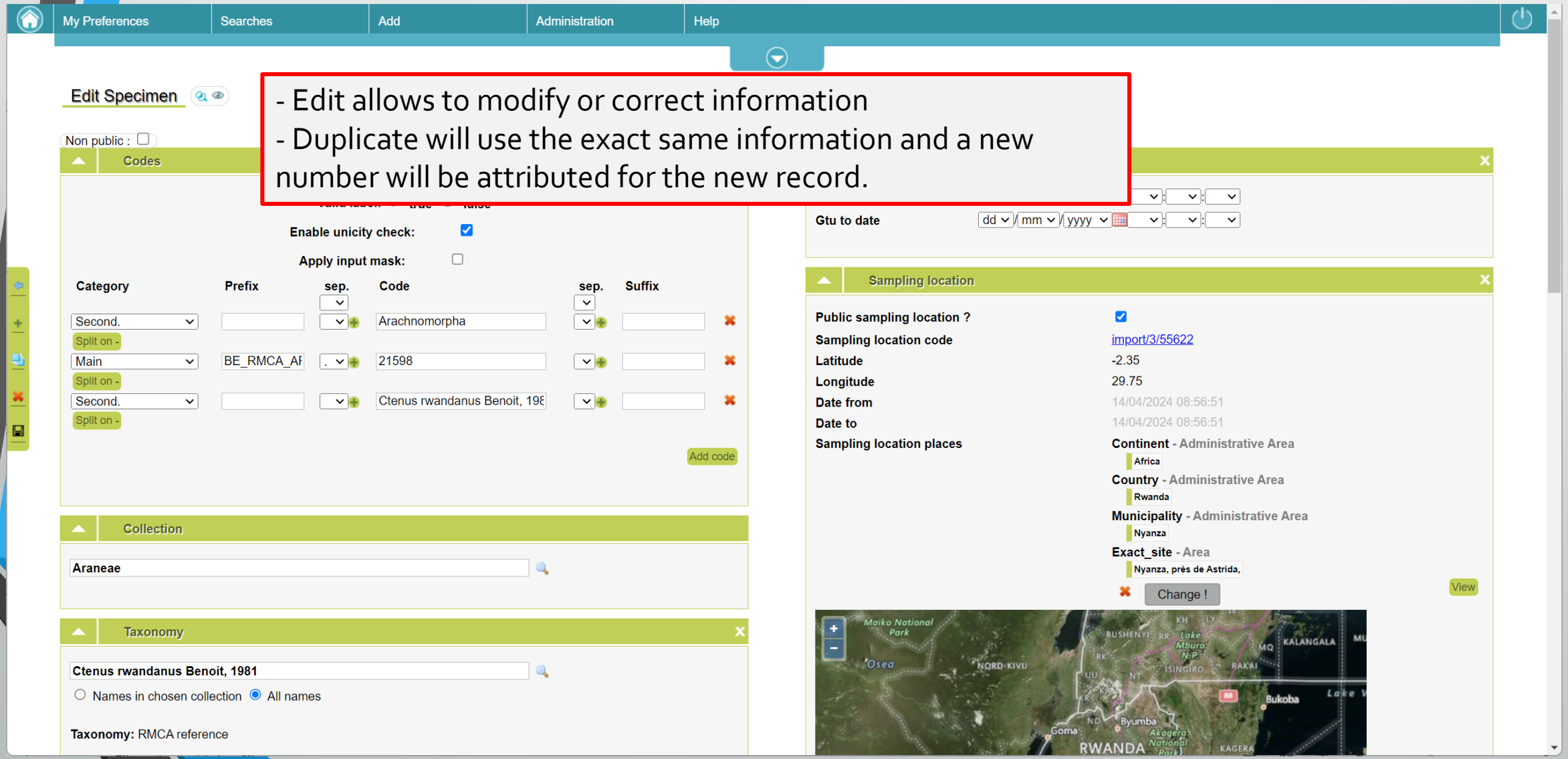




The DaRWIN Interface

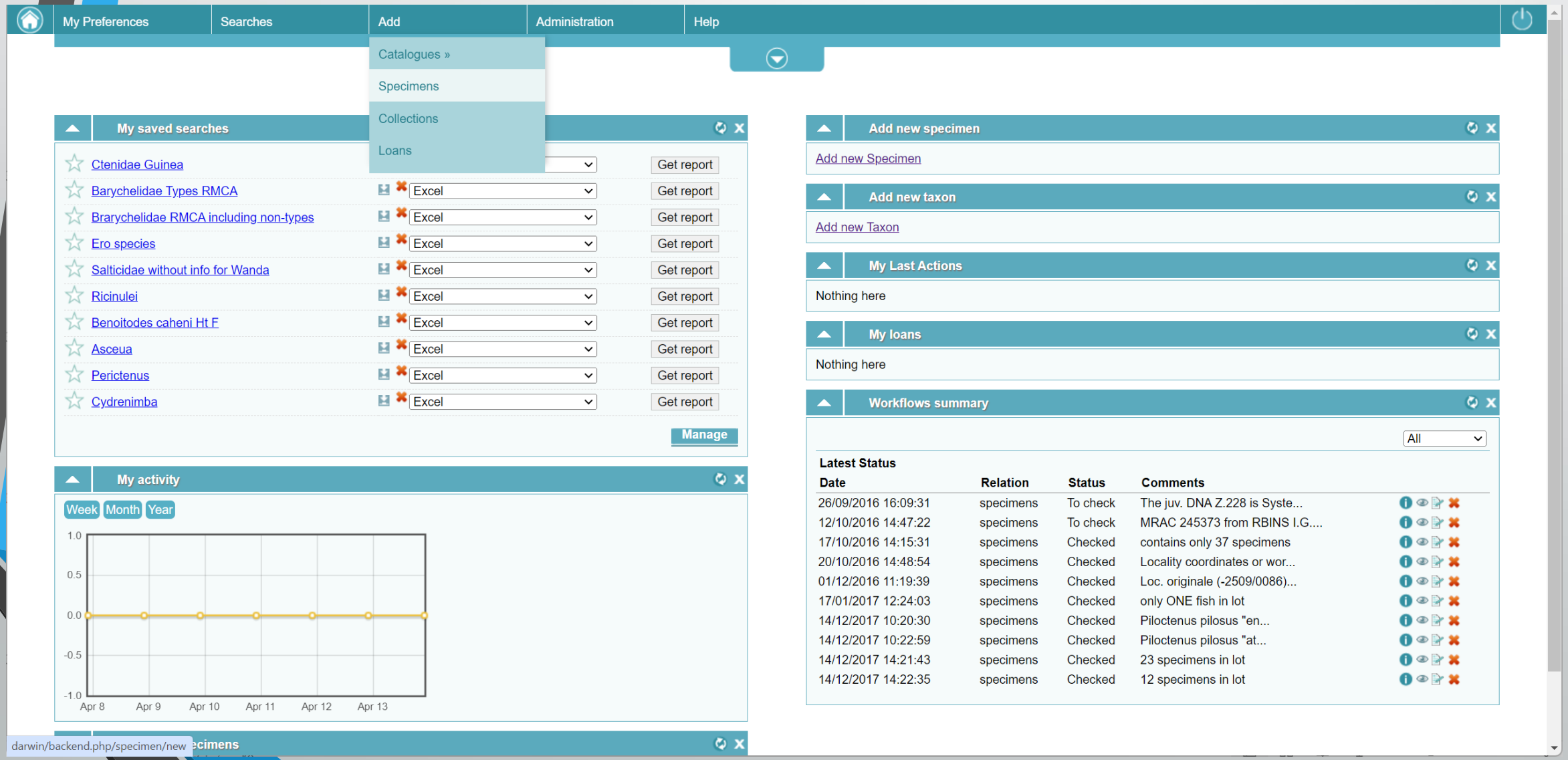
Edit and duplicate functions

- Edit allows to modify or correct information
- Duplicate will use the exact same information and a new number will be attributed for the new record.



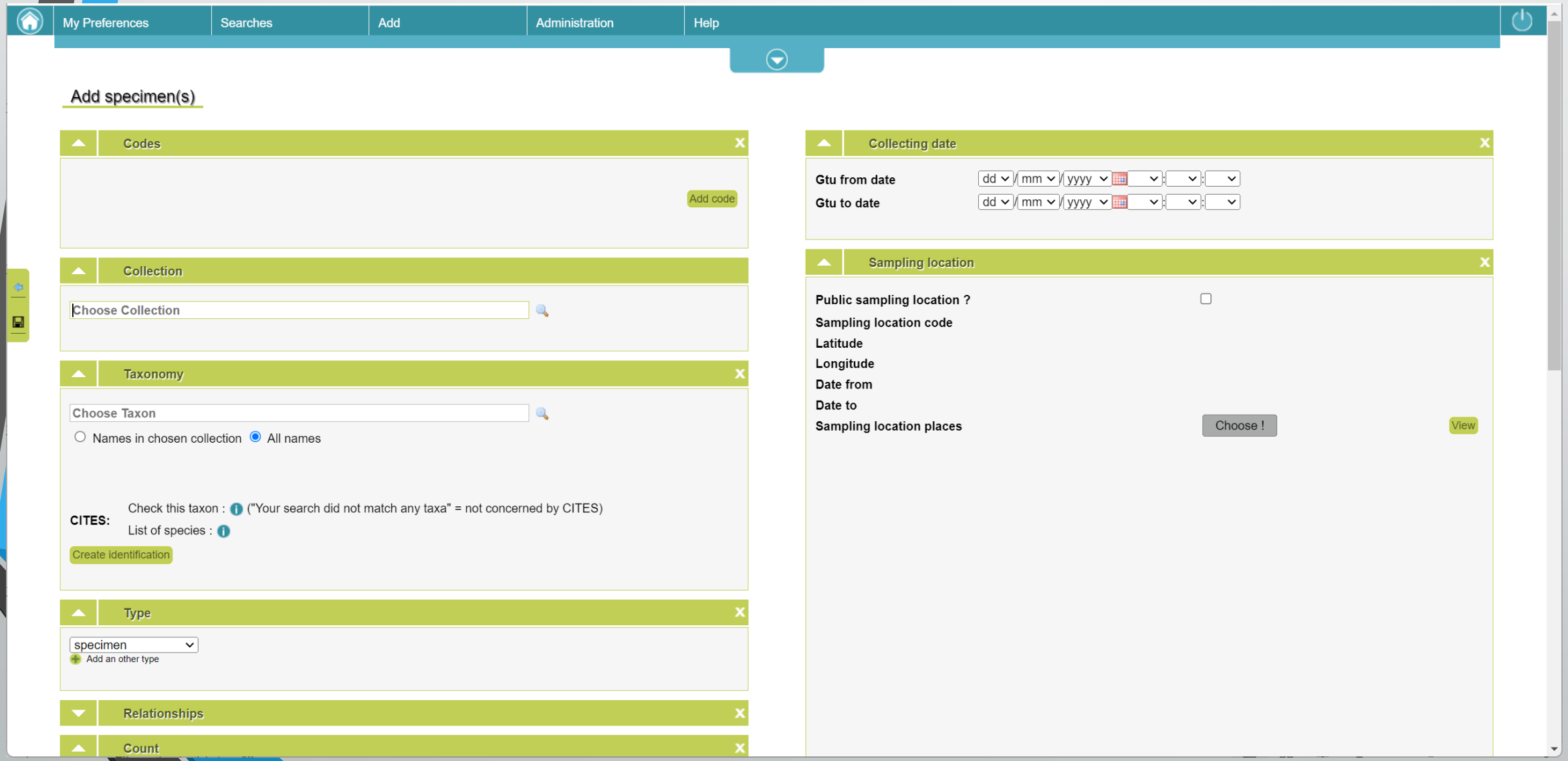
The DaRWIN Interface

Add specimen



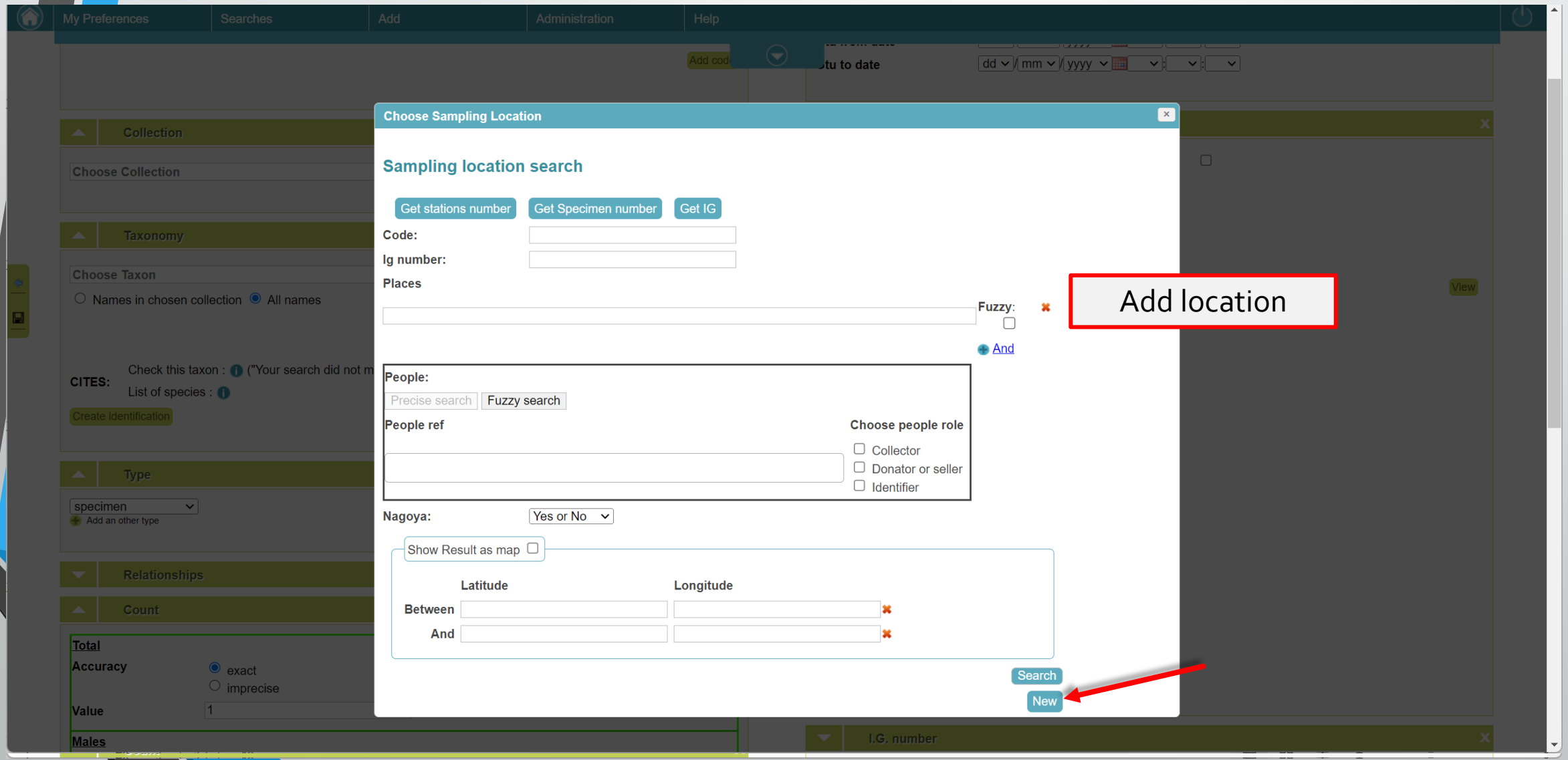
The DaRWIN Interface

Add specimen



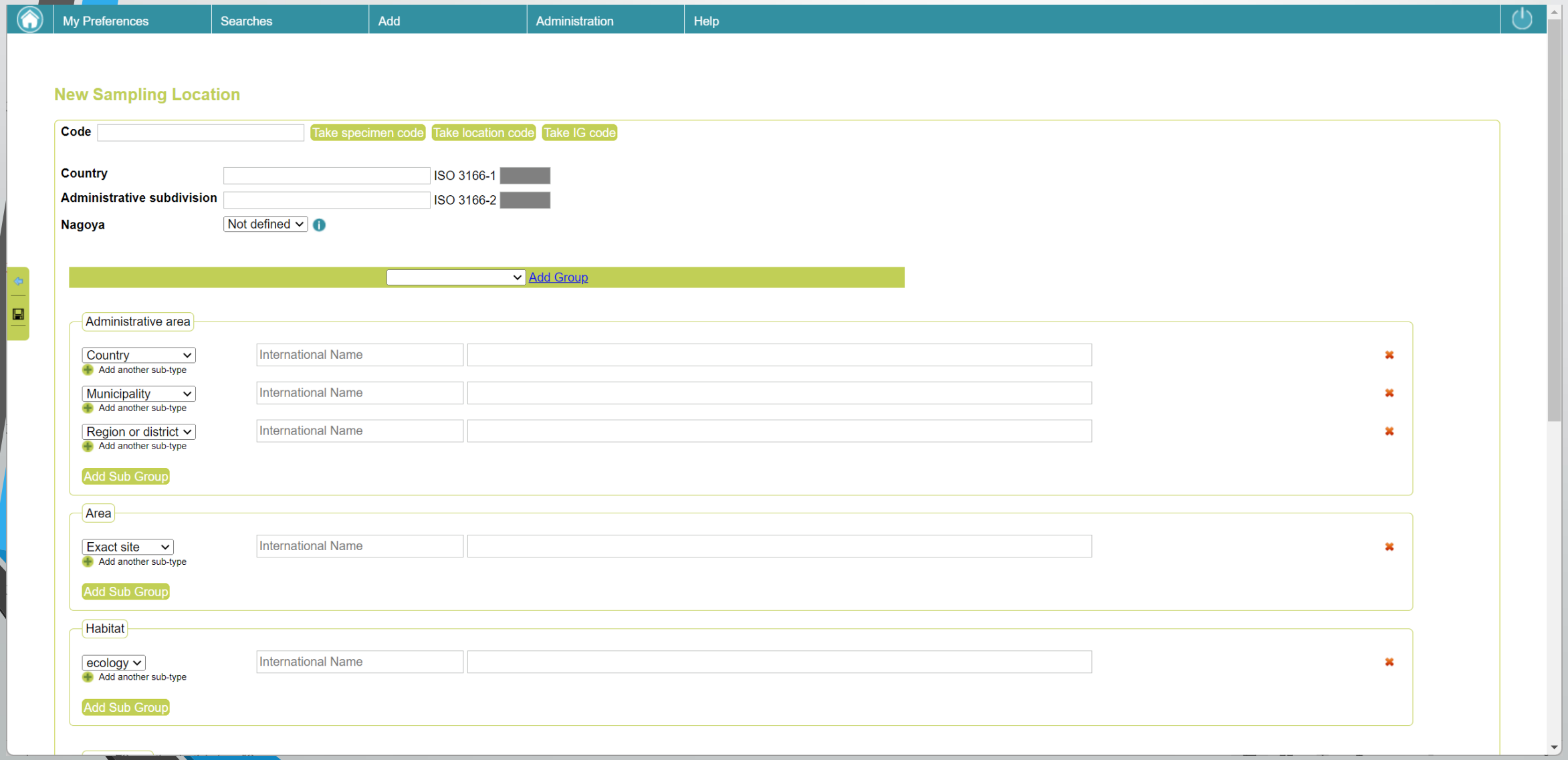
The DaRWIN Interface

Add location

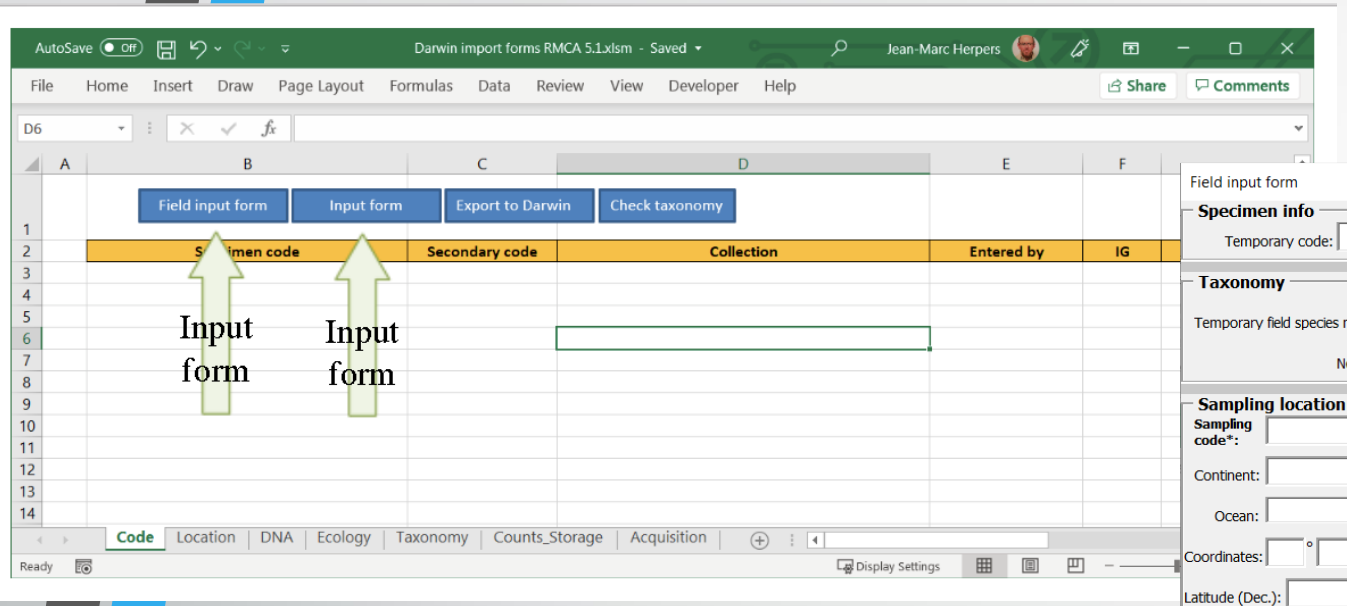


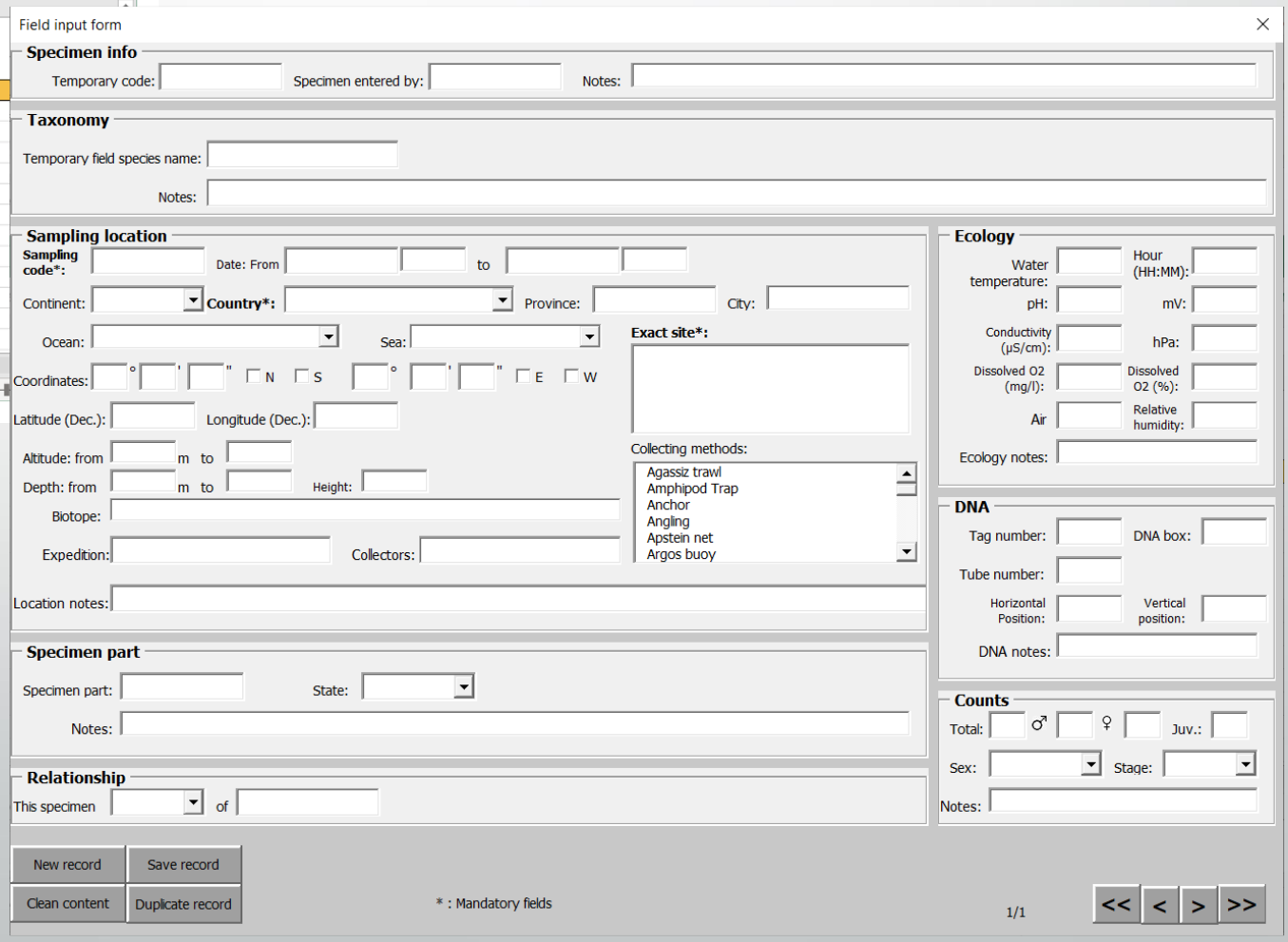
The DaRWIN Interface

Add location



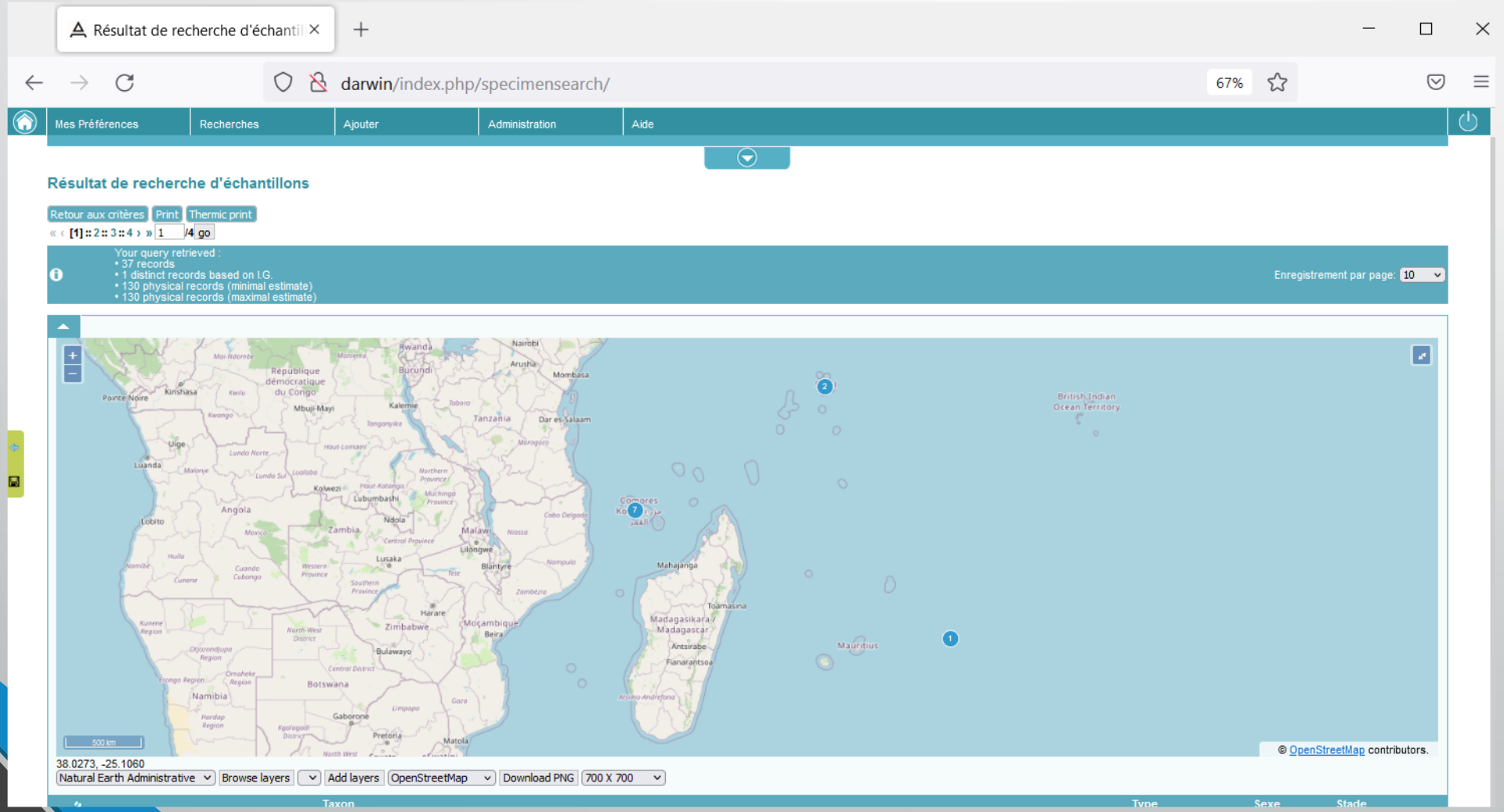
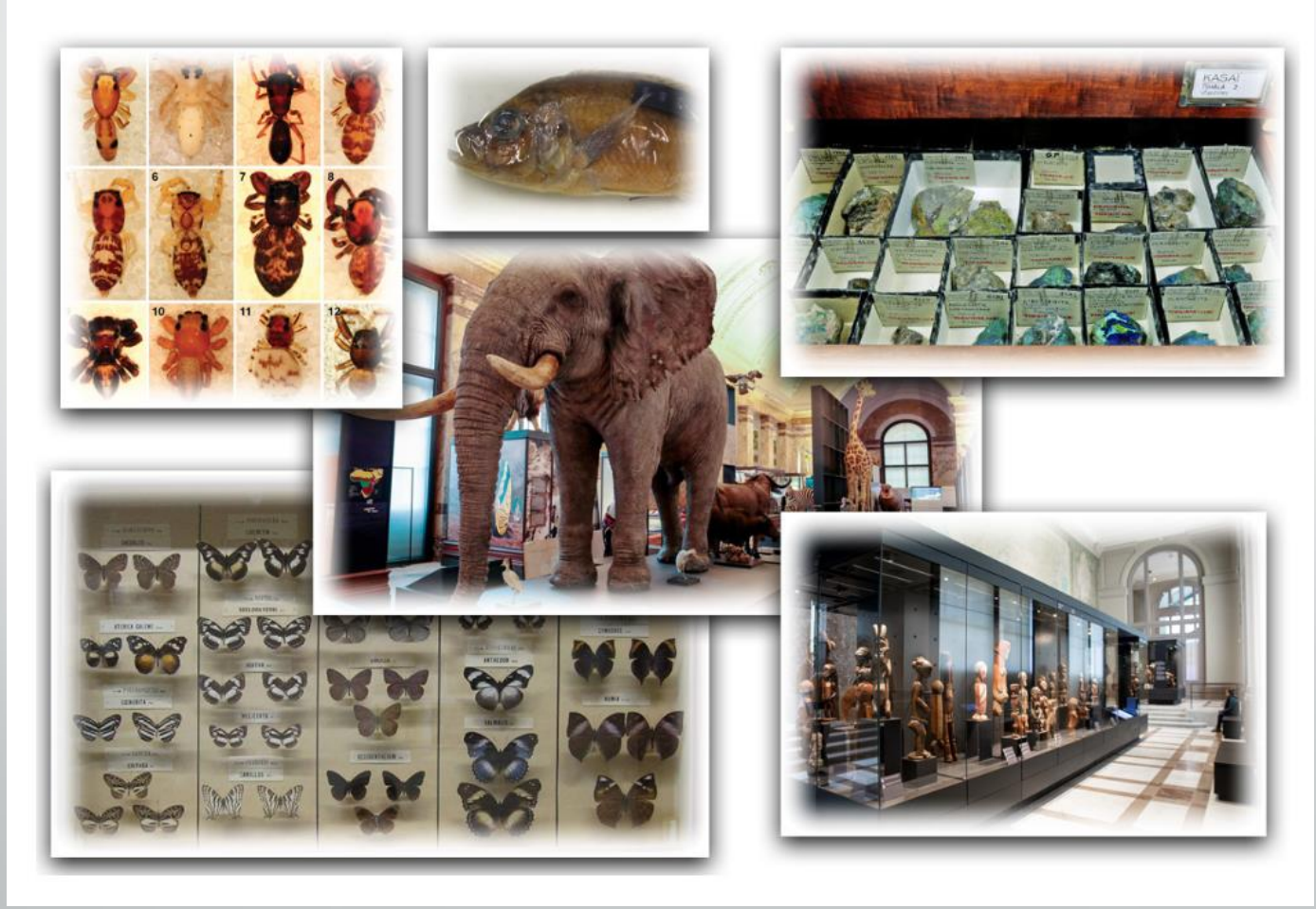
Using the Excel Template for Metadata Import in Darwin





Navigating the DaRWIN Interface

- How to make and save specific searches
  http://darwin/backend.php/



Thank you !