



Semantic Web-based integration of digital resources on birds

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STERNA (Semantic Web-based Thematic European Reference Network Application) develops a distributed **digital library** solution that allows for semantic search of, and improves access to, bird-related content from the **natural history** and **cultural** domains.

The project is related to the European Digital Library initiative and demonstrates how integrated access to heterogeneous collections of many institutions can be realized based on Semantic Web technologies and standards such as **RDF** (Resource Description Framework) and **SKOS** (Simple Knowledge Organization System).

A variety of contributors provide services for **users interested in birds**: from **amateurs** to **land managers** to **scientists**.

structure content item [new | delete] A. [show] [referrers | system | tracking]

[overview | current structure | recycle bin]

item move [above | below | into] [link]

RMCA - Model examples

- Type specimens of birds
 - RMCA A.24760
 - RMCA A.58986**
- Taxon concepts
 - Cinnyris stuhlmanni chapini
 - Francolinus squamatus squamatus
- Taxon names
 - Cinnyris stuhlmanni chapini (Prigogine, 1952)
 - Francolinus squamatus squamatus Cassin, 1857
- References
 - A revised Check List of African Non-Passerine birds
 - The Birds of Africa
 - Volume 6
 - Fry (in: Fry, Keith & Urban (eds.)) (2000:244)
 - Type specimens of birds in the Royal Museum for Central Africa Louette, Meirte, Louage & Reygel (2009)
 - Annales du Musée royal du Congo Belge, Zoologie
 - Revue de Zoologie et de Botanique Africaines
 - Rev.Zool.Bot.Afr. vol.46 pag.412
 - Rev.Zool.Bot.Afr. vol.49 pag.353
- Type designation
 - RMCA A.24760 Lectotype
 - RMCA A.58986 Holotype
- Gatherings
 - RMCA A.24760
 - RMCA A.58986 - Mt. Mohi

specimen data [node data]

tab page [edit]

RMCA A.58986
specimen / specimen data

taxon concept Cinnyris stuhlmanni chapini

taxon name Cinnyris stuhlmanni chapini (Prigogine, 1952)

source id RMCA A.58986

taxon type status RMCA A.58986 Holotype

sex M

age

type 3D Skin

owner Royal Museum for Central Africa

expert Prigogine, A.

donator

collection Vertebrates - Ornithology

gathering RMCA A.58986 - Mt. Mohi

record basis

audience

reference Louette, Meirte, Louage & Reygel (2009)

link to web content

http://biology.africamuseum.be/STERNAImages/Ornithology/STERNAImages/Details.php?image=_PHM7998

http://biology.africamuseum.be/STERNAImages/Ornithology/STERNAImages/Details.php?image=_PHM8001

http://biology.africamuseum.be/STERNAImages/Ornithology/STERNAImages/Details.php?image=_PHM8002

Local Query Tool **STERNA** D.

A simple user interface to query your local pywrapped databases.

Start » QueryTool » Details

(inst=RMCA)AND(col=36)AND(cat=RMCA A.58986)

Units details:

Cinnyris stuhlmanni chapini (Prigogine, 1952)

Unit ID : RMCA A.58986

Kind of Units: 3D Skin

Identification(s):

Name	Reference	Taxonomy	Comments
Cinnyris stuhlmanni chapini (Prigogine, 1952)	Fry, 2000	family: Nectariniidae	basionym: Cinayris afer chapini Prigogine, 1952

Unit Identifier Details:

Gathering:

Locality: Congo, The Democratic Republic Of The
Locality: Mt. Mohi alt:3240m

Collector(s): Prigogine, A.

Other info:
Altitude lower Value: 3240
Altitude UnitOfMeasurement: m
Date: 1951-12-10

B. ↓

Cinnyris stuhlmanni chapini
taxon concept / taxon concept data

valid name Cinnyris stuhlmanni chapini (Prigogine, 1952)

preferred name Ruwenzori Double-collared Sunbird

alternative name

synonym Nectarinia stuhlmanni chapini (Prigogine, 1952)

rank Subspecies

higher taxon Nectariniidae

expert

taxon status IUCN Red List - Lower Risk / Least Concern

reference Fry (in: Fry, Keith & Urban (eds.)) (2000:244)

link to web content http://www.ubio.org/browser/details.php?name&id=1714347

Specimen Unit Details:

Other data:

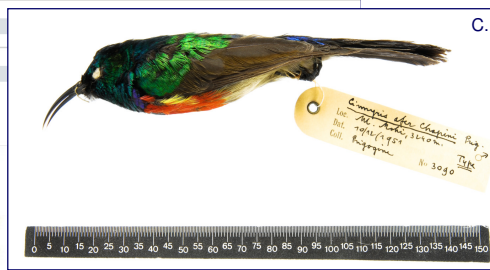
Date Last Edited: 2009-10-29

Collectors field number: 3090

Type Status: Holotype

Sex: M

Link to image Link to image Link to image



Printscreens of the provisional STERNA toolset with interlinked taxonomic issues:

- A. Specimen data
- B. Taxon concept (basionym and synonyms: ITIS, uBio)
- C. Image

RMCA works to enrich content semantically, and advises on compliance with biodiversity information standards, and on interoperability, for instance via development of a **BioCASE** portal, based on **ABCD** (see printscreen D).

- RMCA provides information on:
- Afrotropical bird specimens (and ornithological publications):
987 type specimens of 226 nominal species and Albertine Rift Birds (ENBI WP13)
 - Ethnographical objects (composed of beaks or feathers)



The semantic integration of resources into one Web-accessible network is an ongoing challenge. On top of a basic semantic layer provided by **interlinked thesauri and classification schemes**, domain and core **ontologies** will be needed to allow for higher-level integration, reasoning, and other capabilities.

The semantic search **prototype** will be available in December 2009.

Project results will be of interest to digital library initiatives such as **Europeana** and the Biodiversity Heritage Library (**BHL**) and those providing mobilisation of biodiversity data like Global Biodiversity Information Facility (**GBIF**).

More info: <http://www.sterna-net.eu>
Contact: stijn.coleman@africamuseum.be

