

Global Taxonomic Database of Gracillariidae www.gracillariidae.net – a machine-human teaming taxonomic service system, updatable in real time



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Working on Biodiversity data:

- Objectives
- Action
- Implementation
- Timeline
- Policy
- Strategy
- Documentation
- Facts and Evidences
- Translation of data
- Intelligent dissemination of data

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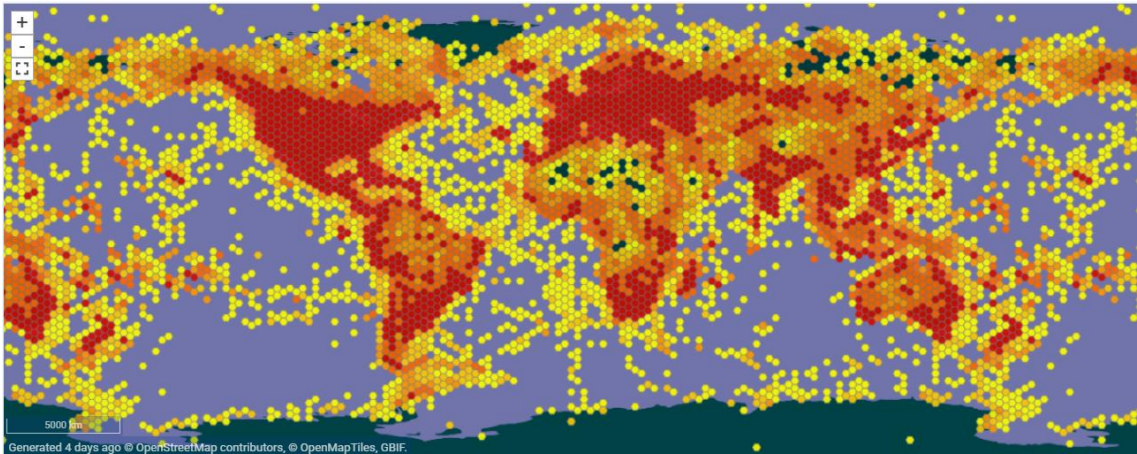
There are now around 3,500 registered herbaria in 183 countries totalling nearly 400 mln specimens

ca. 400 mln specimens of insects in the collections
>43 mln records on insects in GenBank



2,230,054 species names in the Catalogue of Life

Bogotá_2025



iNaturalist 125,400,064 Occurrences
Publication date: August 19, 2025



HET VLAAMS BIODIVERSITEITSPORTAAL

Welkom bij het Vlaams Biodiversiteitsportaal, het centrale toegangspunt voor uitgebreide en actuele informatie over de biodiversiteit in Vlaanderen. Ontdek gedetailleerde gegevens over de verspreiding, status en trends van planten- en diersoorten, verrijkt met geografische data, interactieve kaarten en analyses.

Dit portaal biedt je een toegankelijke en onderbouwde manier om de biodiversiteit in Vlaanderen te verkennen en te leren kennen. Bovendien vormt het een essentiële basis voor een robuust en wetenschappelijk onderbouwd biodiversiteitsbeleid.

ONZE BIODIVERSITEITSDATA

Deze data wordt verzameld en geïntegreerd door een netwerk van wetenschappers, natuurbeschermers en vrijwilligers, waardoor een betrouwbare en actuele bron van informatie ontstaat.

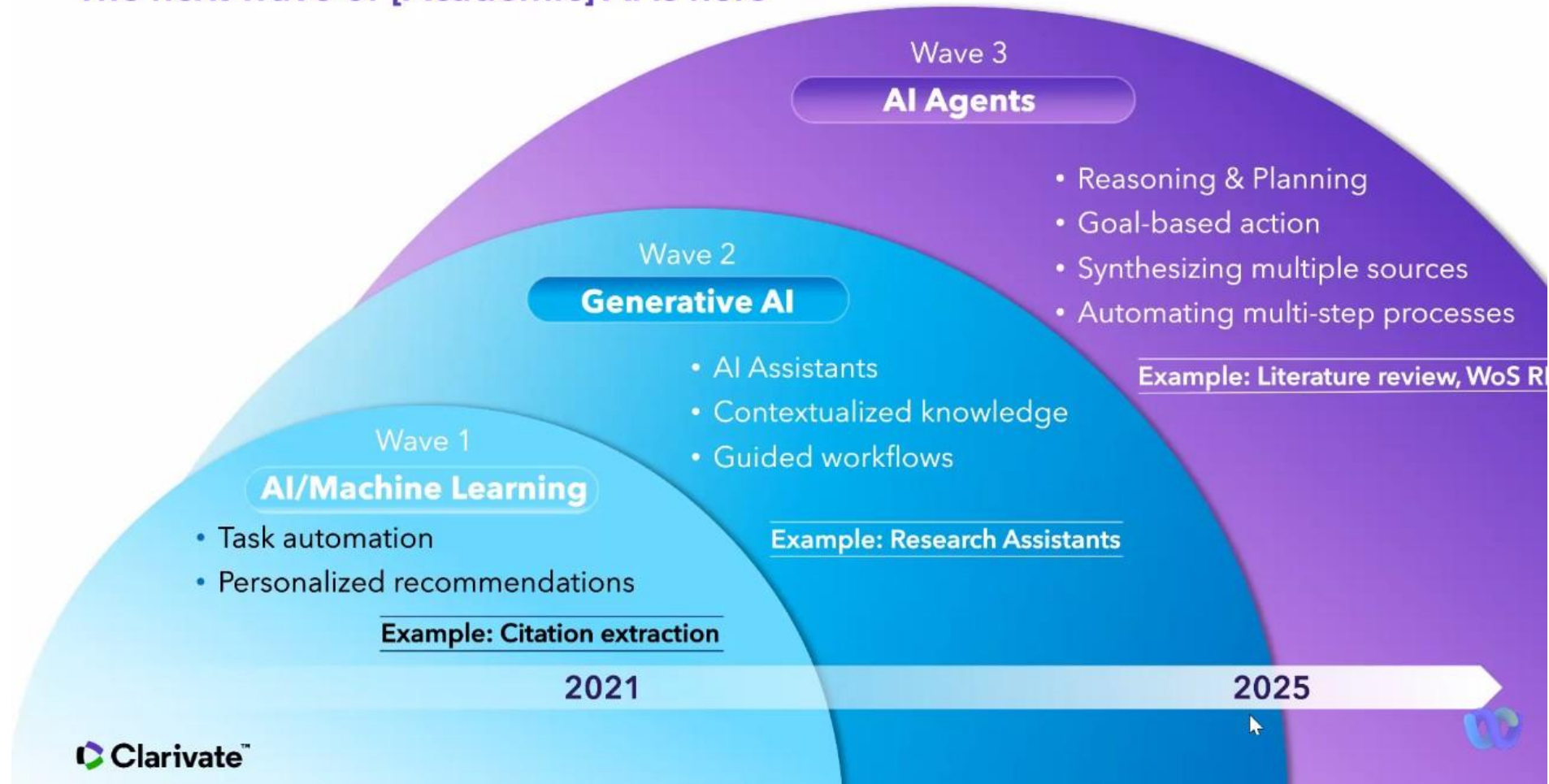
Het portaal werkt nauw samen met de Global Biodiversity Information Facility (GBIF), een wereldwijd netwerk dat vrije toegang biedt tot biodiversiteitsgegevens van over de hele wereld. Door gegevens uit Vlaanderen te delen met GBIF, draagt het Vlaams Biodiversiteitsportaal bij aan een groter, mondiaal begrip van biodiversiteit en helpt het bij het bevorderen van wereldwijde inspanningen voor natuurbescherming en duurzaam beheer van natuurlijke hulpbronnen. Deze samenwerking zorgt ervoor dat de data uit Vlaanderen niet alleen lokaal, maar ook internationaal impact heeft.

Waarnemingen 46,823,610	Soorten 68,294	Datasets 262	Soortenlijsten 35
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[partners](#)

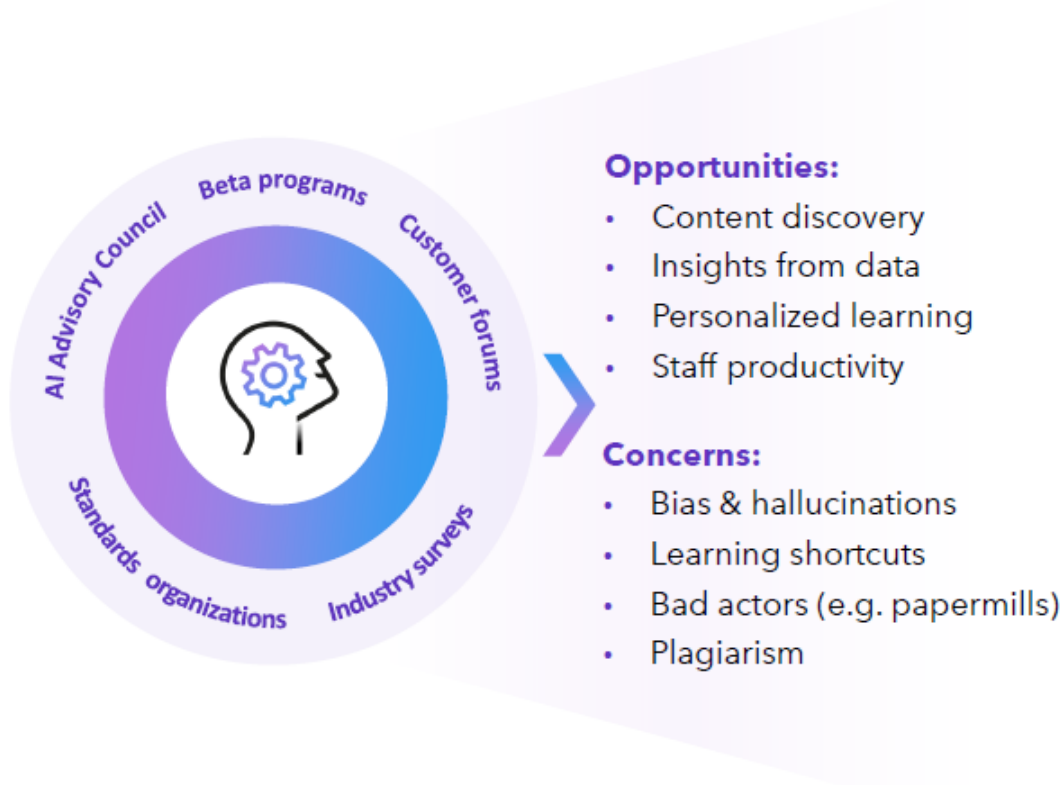
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The next wave of [Academic] AI is here



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Responsible AI principles, informed by the academic community



AI Framework	
 Transparent	• Clear information about the content sources used • Proper attribution and easy access to cited works
 Ethical	• Measures to reduce bad information • Collaboration with publishers to ensure clear usage rights • Collaboration with industry org. for responsible AI implementations
 Safe	• Human-in-the-loop • Uphold privacy & security standards • Adherence to evolving global regulations

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Gracillariidae.net



Global Taxonomic Database of Gracillariidae (Lepidoptera)

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[Publications](#)

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Looking for names:

Welcome jdp

[Admin](#)

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Statistics

last_updated	04 Sep 2025
Families	1
Tribes	6
Genera	168
Species(accepted)	2078
Species(synonyms)	415
Species(misapplied)	304
Subspecies	9
Plants	3531
Parasitoids	1253
Photos	5639
Types	3812
Publications	5179



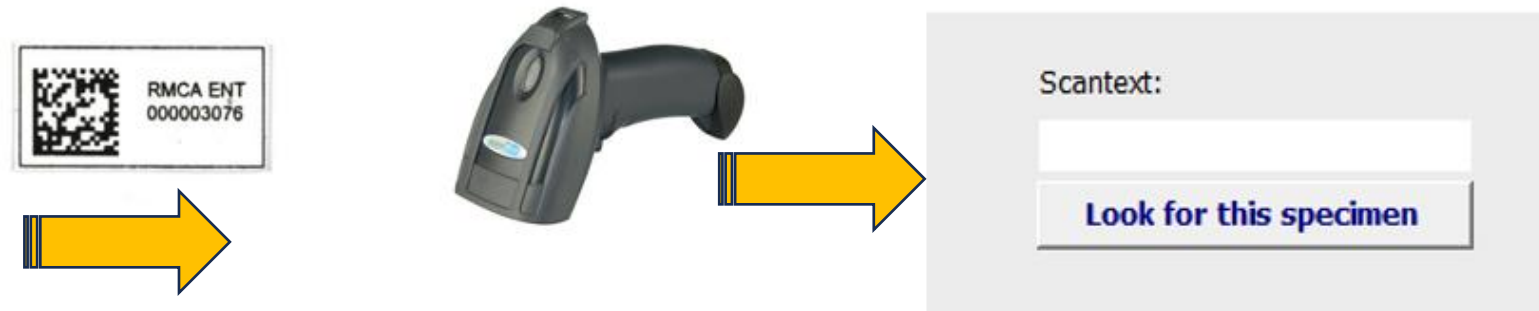
Welcome

This website provides an online database of all Gracillariidae (Lepidoptera) species of the World, updated with the latest information obtained from 5150+ published sources and from our own studies.

The current list is continuously updated and information on the original description, type locality, types and their depository, distribution and foodplants is added on a regular basis.

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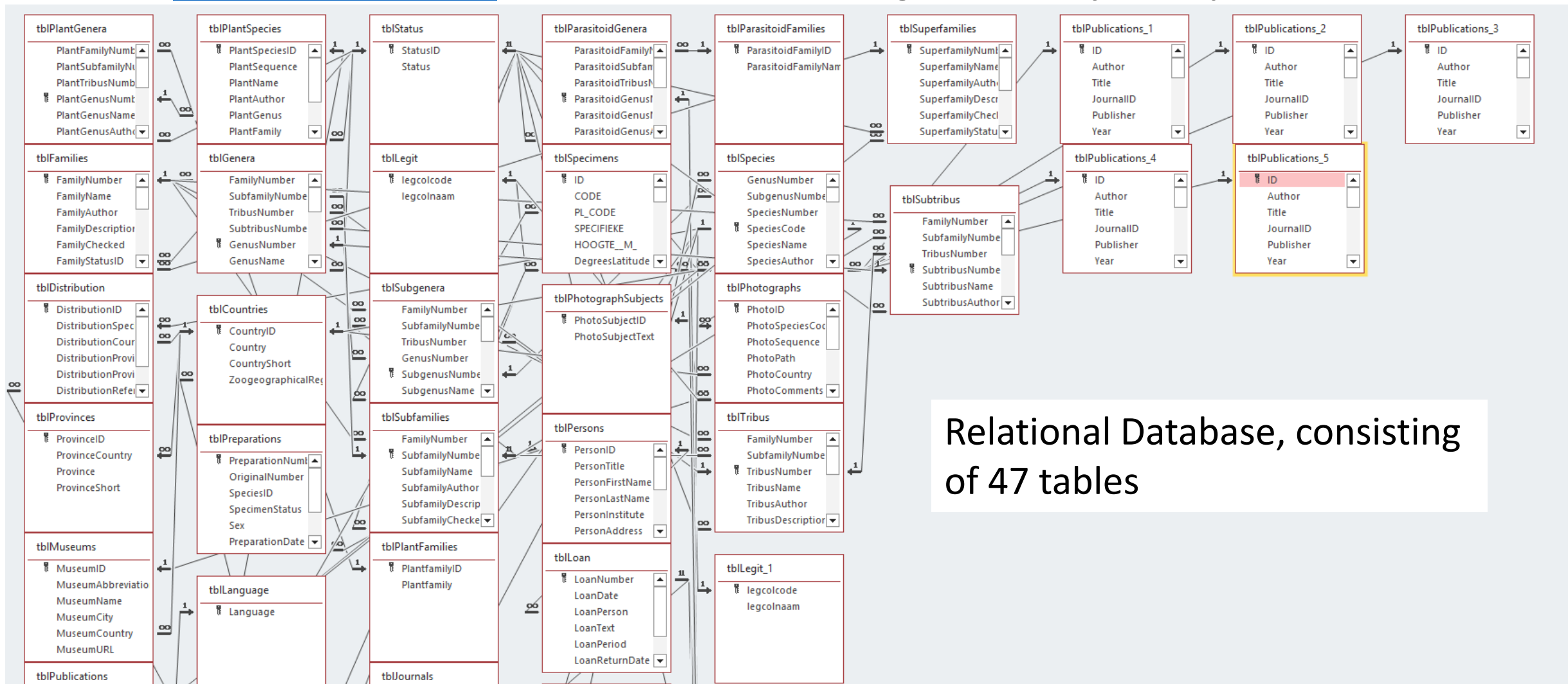
DATABASE STRUCTURE, ARCHITECTURE AND USE



A unique digital code read by a hand scanner and searched in the databank.



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Relational Database, consisting of 47 tables



COMPLEX ARCHITECTURE – SIMPLE USE

website

The image displays four screenshots of the GRACILARIIDAE database interface, organized into a 2x2 grid. Each screenshot represents a different functional module of the database.

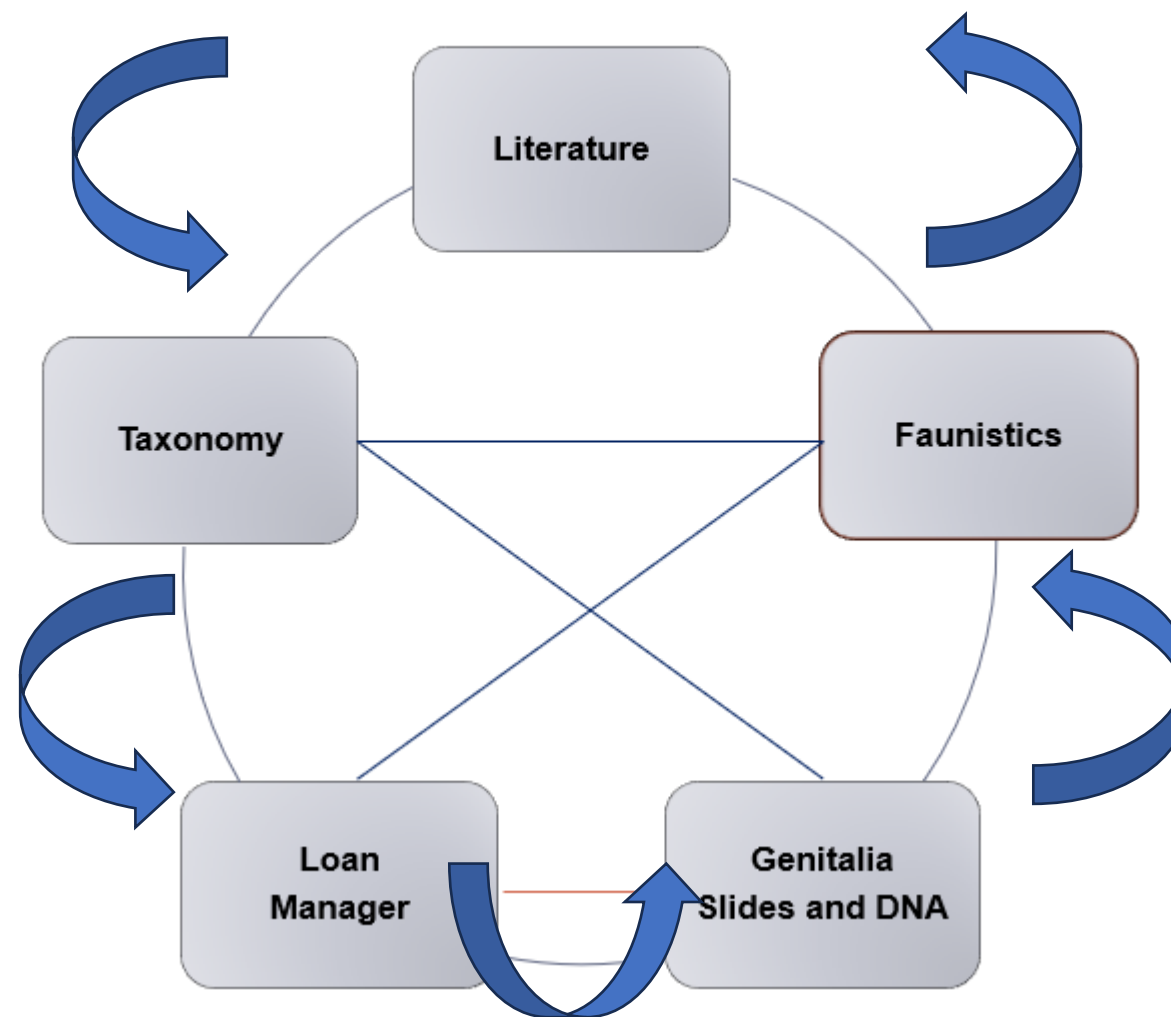
- Top Left: Literature module — Main form**
 - This form is used for entering bibliographic references.
 - Fields include: Code number, Author, Year, Title, Journal, Publisher, Volume, Issue, Pages, Language, Periodic, BSL, and DOI.
 - A 'Taxonomic keyword list' is provided on the right, with a search bar and a list of keywords (e.g., 12 Insects, 3-moles, 1-moles, etc.).
 - Buttons for 'Add taxonomic keywords' and 'Add geographical keywords' are present.
- Top Right: Gracilariidae Taxonomy module — Species group data**
 - This form is used for entering taxonomic data for a species group.
 - Fields include: Gracilariidae, Caloptilia, Habitat, Date, Species, Species code, and a list of specimens.
 - Buttons for 'AddChange' and 'Remove' are present.
- Bottom Left: Gracilariidae Faunistic module — Main form**
 - This form is used for entering faunistic data for a species group.
 - Fields include: Gracilariidae, Faunistic, Date, Species, Species code, and a list of specimens.
 - Buttons for 'AddChange' and 'Remove' are present.
- Bottom Right: Genitalia preparations - Microlepidoptera**
 - This form is used for entering data for genitalia preparations.
 - Fields include: Preparation number, Original number, Species, Specimen status, Sex, Preparation date, Preparator, Label data, and Comments.
 - Buttons for 'AddChange' and 'Remove' are present.

Internal use

Dr. Jurate De Prins

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DATA STRUCTURE AND ARCHITECTURE



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DIGITAL LOAN MANAGER



Afromoths Loan manager — Add or edit a loan

Loan number: Loan date: Loan person: Loan period (days): Calculated date of return:

Dr. Cees Gielis
Naturalis
Mr. Haafkensstraat 36
NL-4128 CJ Lexmond
Netherlands
Phone 0031-3474-1555
Fax
c.gielis@net.hcc.nl

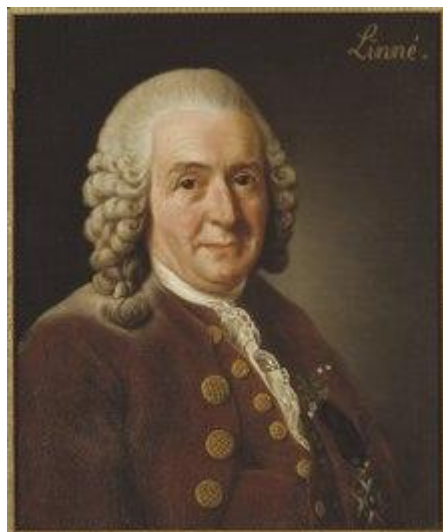
Scanned	Free text	Loan details	Loan returned
RMCA ENT 000003136	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003137	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003138	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003139	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003140	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003141	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003142	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003143	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003144	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003145	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003146	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003147	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003148	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003149	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003150	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003151	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003152	☐	Alucitidae unidentified sp.	Alucitidae
RMCA ENT 000003153	☐	Alucitidae unidentified sp.	Alucitidae
			Lubumbashi (Elisabethville) Democratic Republic of Congo
			Kakamega Forest Kenya
			Aberdare Nat. Park Kenya
			Aberdare Nat. Park Kenya
			Aberdare Nat. Park Kenya
			Aberdare Nat. Park Kenya
			Aberdare Nat. Park Kenya
			Aberdare Nat. Park Kenya
			Olulua Forest Kenya
			Olulua Forest Kenya
			Rwankwi Democratic Republic of Congo
			Arabuko Sokoke Forest Kenya
			Aberdare Nat. Park Kenya
			Kenya, Mount Kenya
			Lubumbashi (Elisabethville) Democratic Republic of Congo
			Lubumbashi (Elisabethville) Democratic Republic of Congo
			Lubumbashi (Elisabethville) Democratic Republic of Congo
			Lubumbashi (Elisabethville) Democratic Republic of Congo

Record: 1 of 31 No Filter Search

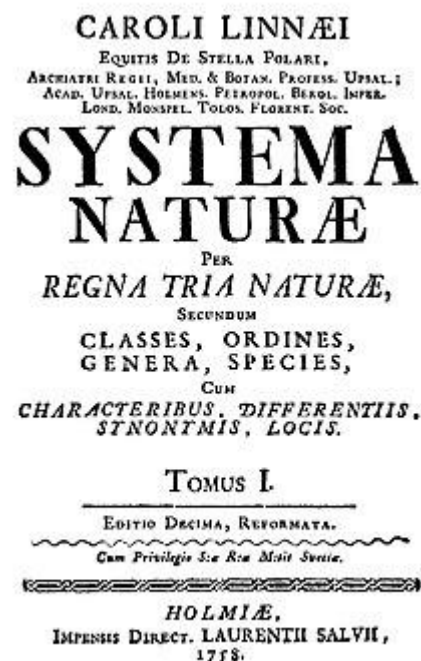
Material returned on: Comments on return: Loan closed ☒

Click arrow to select report

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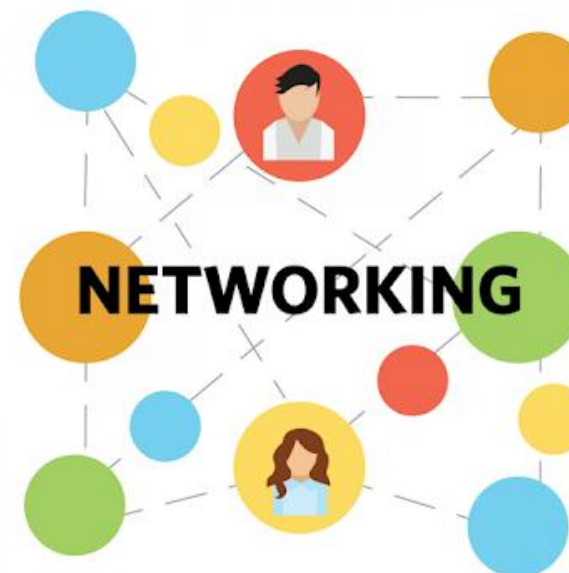


1758



Static Data

- ✓ Universal binominal nomenclature in one language
- ✓ Unique taxa names
- ✓ Biodiversity knowledge democratisation and accessibility
- ✓ Unlimited possibilities to continue



2025



Circular Data, Updatable in real-time

- ✓ Universal programming in SQL
- ✓ Unique machine-readable coding
- ✓ Biodiversity knowledge accessibility through the internet
- ✓ Unlimited possibilities to add and sort data

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Moths Back Office

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Plants + Add

Provinces + Add

Publications + Add

Sections + Add

Select moth species to change

citrellid
 Search

Action:

Go
 0 of 100 selected

☐	SCIENTIFIC NAME	AUTHORSHIP					
☐	Acrocercops acanthidias	Meyrick, 19					
☐	Acrocercops achnodes	Meyrick, 19					
☐	Acrocercops aeglophanes	(Turner, 1913)	species	Accepted	✓	ACROAEG	
☐	Acrocercops aeolella	Turner, 1940	species	Misapplied	✓	01ACRAEO	
☐	Acrocercops aeolellum	(Meyrick, 1880)	species	Accepted	✓	ACROAEOL	
☐	Acrocercops affinis	Braun, 1918	species	Accepted	✓	ACROAFFI	
☐	Acrocercops albanotella	(Chambers, 1877)	species	Misapplied	✓	01ACRALB	
☐	Acrocercops albida	Turner, 1947	species	Accepted	✓	ACROALBD	
☐	Acrocercops albidorsella	Bradley, 1957	species	Accepted	✓	ACROALDO	
☐	Acrocercops albimaculella	(Turner, 1896)	species	Synonym	✓	01ACRLBM	
☐	Acrocercops albinatella	(Chambers, 1872)	species	Accepted	✓	ACROALBI	
☐	Acrocercops albinotella	Meyrick, 1912	species	Synonym	✓	02ACRALB	
☐	Acrocercops albofasciella	Yazaki, 1926	species	Accepted	✓	ACROALBF	
☐	Acrocercops albomaculella	(Turner, 1894)	species	Accepted	✓	ACROALBM	
☐	Acrocercops albomarginata	Forbes, 1930	species	Misapplied	✓	01ACRALM	
☐	Acrocercops albomarginatum	(Walsingham, 1897)	species	Accepted	✓	ACROALBO	
☐	Acrocercops allactopa	Meyrick, 1916	species	Accepted	✓	ACROALLA	
☐	Acrocercops amethystina	Meyrick, 1916	species	Accepted	✓	ACROAMET	

MoTH SPECIES +

Yes

No

By status

All

Accepted

Misapplied

Synonym

By family

All

Gracillariidae

Unassigned

-

Phyllocnistis citrella Stainton, 1856

Phyllocnistis: changeable

citrella: constant

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Change moth species

Phyllocnistis citrella

HISTORY

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Distribution

Types

Photos

Links & Names

DNAs & Genbank

Plants

Parasitoids

Taxonid: S170010160

Unique identifier starts with U for Superfamily, F for family, m for SubFamily, T for Tribe, r for SubTribe, G for Genus, n for SubGenus, S for Species, p for SubSpecies

Code: PHYLCITR

Scientific name: Phyllocnistis citrella

Epithet: citrella

Authoryear: Stainton, 1856

Rank: species

Status: Accepted

Citation: Phyllocnistis Citrella, Atkinson in litt.

Originalgenus: Phyllocnistis

Taxonremarks:

Taxon ID: S170010160 **intelligently changeable**

Code: PHYLCITR **constant**



GBIF

Global Biodiversity
Information Facility



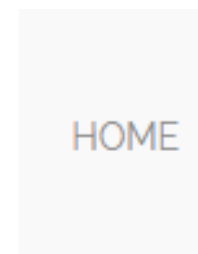
PHECEA



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Catalogue of Life



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Fit for Purpose in Real-time

	Global Dataset	• Taxonomy • Biology • Distribution • DNA
	Regional Dataset	• Taxonomy • Biology • Distribution • Invasions
	Country Dataset	• History • Occurrence • Biology • Changes in time

www.gracillariidae.net

www.afromoths.net

<https://projects.biodiversity.be/lepidoptera/>

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