

# Global Taxonomic Database of Gracillariidae [www.gracillariidae.net](http://www.gracillariidae.net) – a machine-human teaming taxonomic service system, updatable in real time



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Global Biodiversity Information Facility

## Working on Biodiversity data:

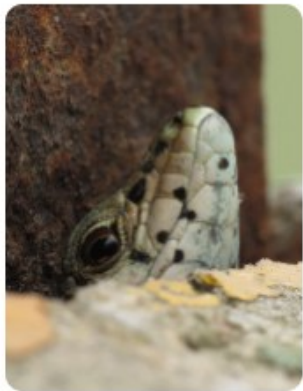
- Objectives
- Action
- Implementation
- Timeline
- Policy
- Strategy
- Documentation
- Facts and Evidences
- Translation of data
- Intelligent dissemination of data

**GTDB [www.gracillariidae.net](http://www.gracillariidae.net) – a machine-human teaming taxonomic system, updatable in real time**

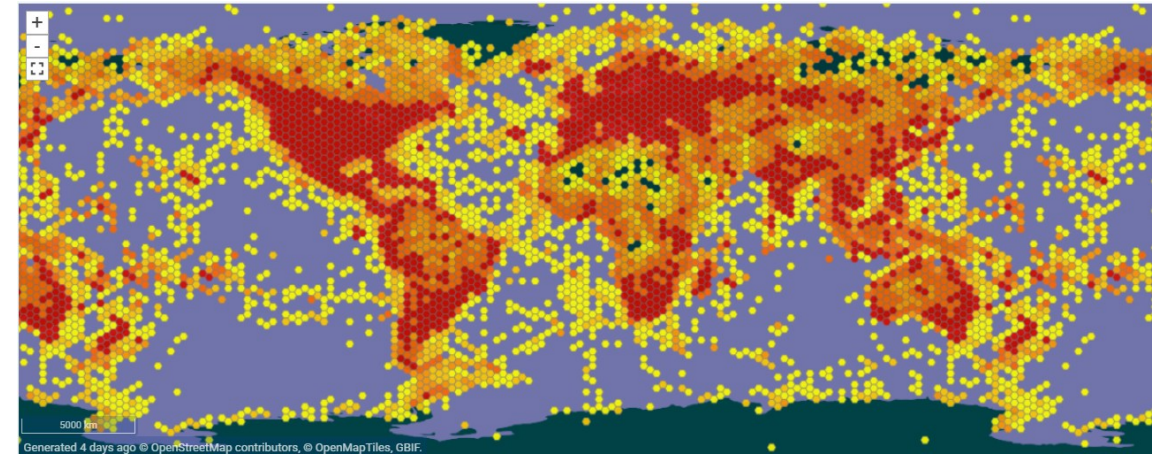
There are now around 3,500 registered herbaria in 183 countries totalling nearly 400 mln specimens

ca. 400 mln specimens of insects in the collections

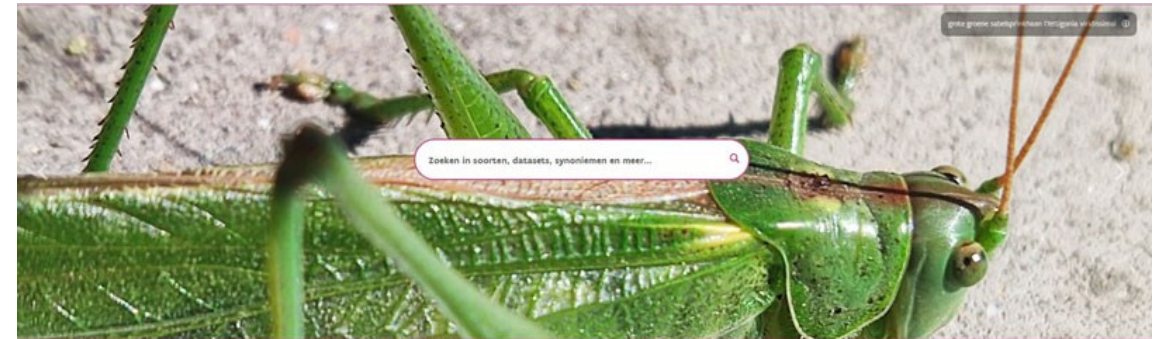
>43 mln records on insects in GenBank



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



**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.

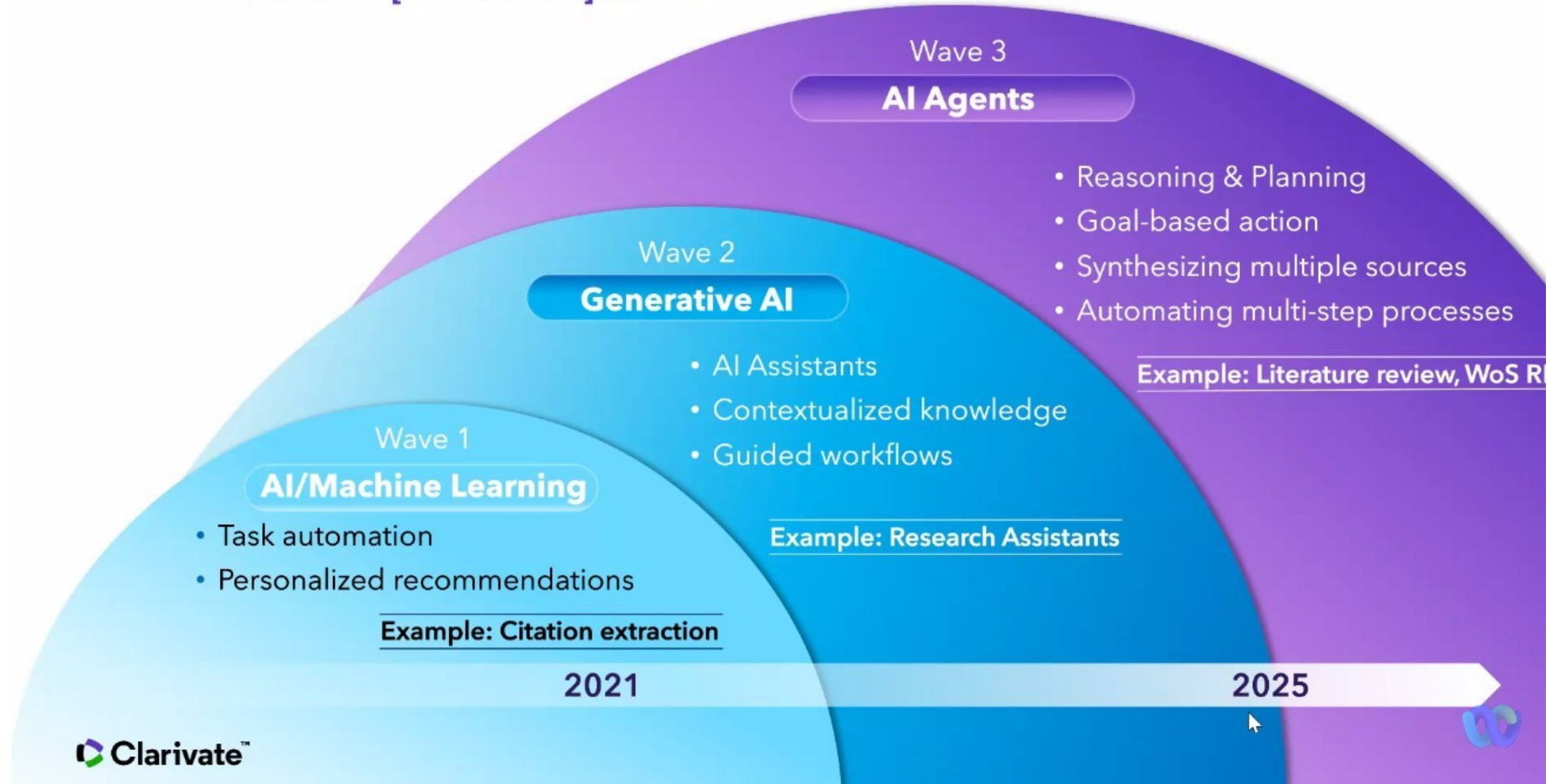
Het portaal werkt samen met de Global Biodiversity Information Facility (GBIF), een wereldwijd netwerk dat vrije toegang biedt tot biodiversiteitsgegevens van over de hele wereld. Door gegevens uit Vlaanderen te delen met GBIF, draagt het Vlaams Biodiversiteitsportaal bij aan een groter, mondiaal begrip 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.

<b>Waarnemingen</b> 46,823,610	<b>Soorten</b> 66,294	<b>Datasets</b> 262	<b>Soortenlijsten</b> 35
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[doe mee](#) [partners](#)

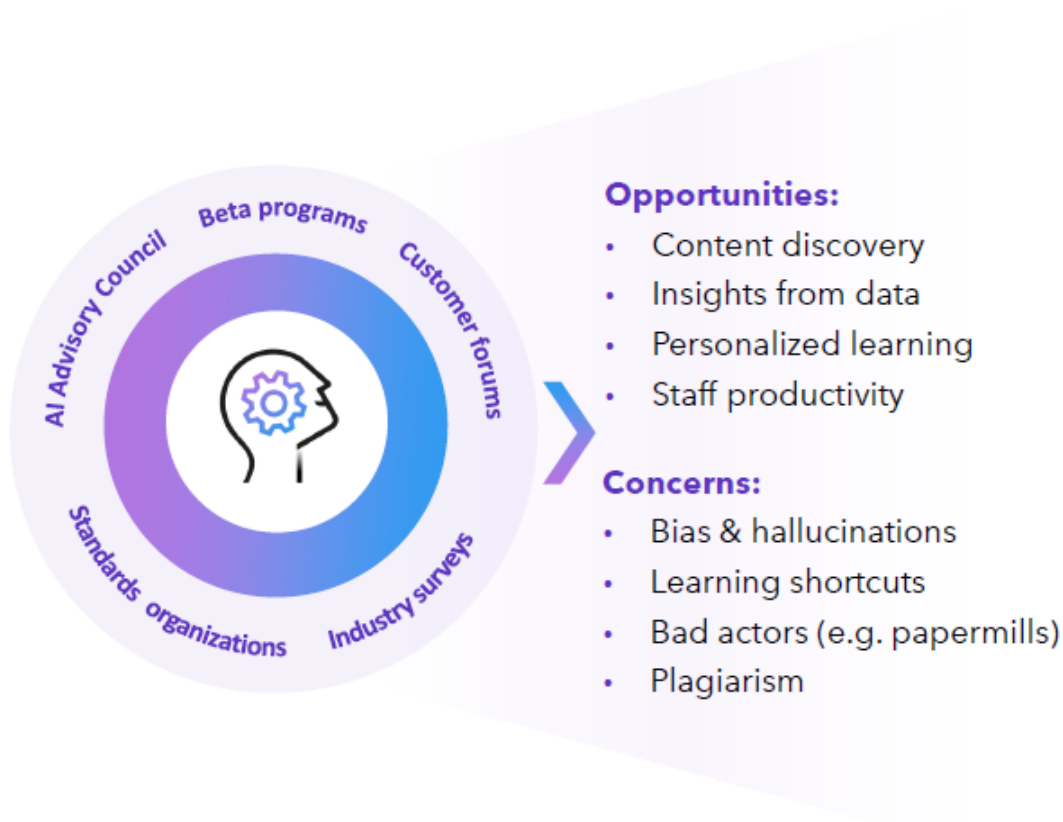
GTDB [www.gracillariidae.net](http://www.gracillariidae.net) – a machine-human teaming taxonomic system, updatable in real time

### The next wave of [Academic] AI is here



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## Responsible AI principles, informed by the academic community



AI Framework	
<p><b>Transparent</b></p>	<ul style="list-style-type: none"> <li>• Clear information about the content sources used</li> <li>• Proper attribution and easy access to cited works</li> </ul>
<p><b>Ethical</b></p>	<ul style="list-style-type: none"> <li>• Measures to reduce bad information</li> <li>• Collaboration with publishers to ensure clear usage rights</li> <li>• Collaboration with industry org. for responsible AI implementations</li> </ul>
<p><b>Safe</b></p>	<ul style="list-style-type: none"> <li>• Human-in-the-loop</li> <li>• Uphold privacy &amp; security standards</li> <li>• Adherence to evolving global regulations</li> </ul>

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# Gracillariidae.net



## Global Taxonomic Database of Gracillariidae (Lepidoptera)

[Home](#) [Species](#) [Museums](#) [Photos](#) [Publications](#) [About](#) Looking for names:   [Welcome jdp](#) [Admin](#) [Logout](#)

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



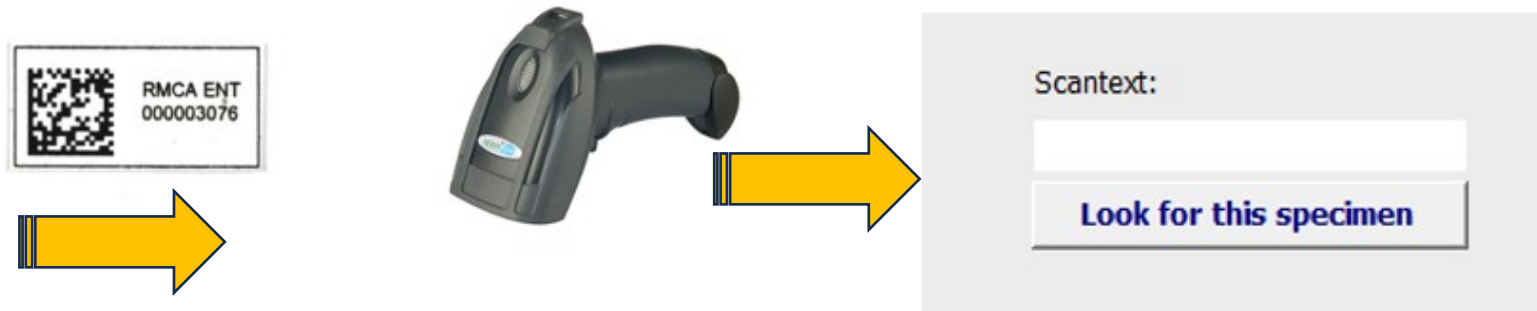
Welcome 

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

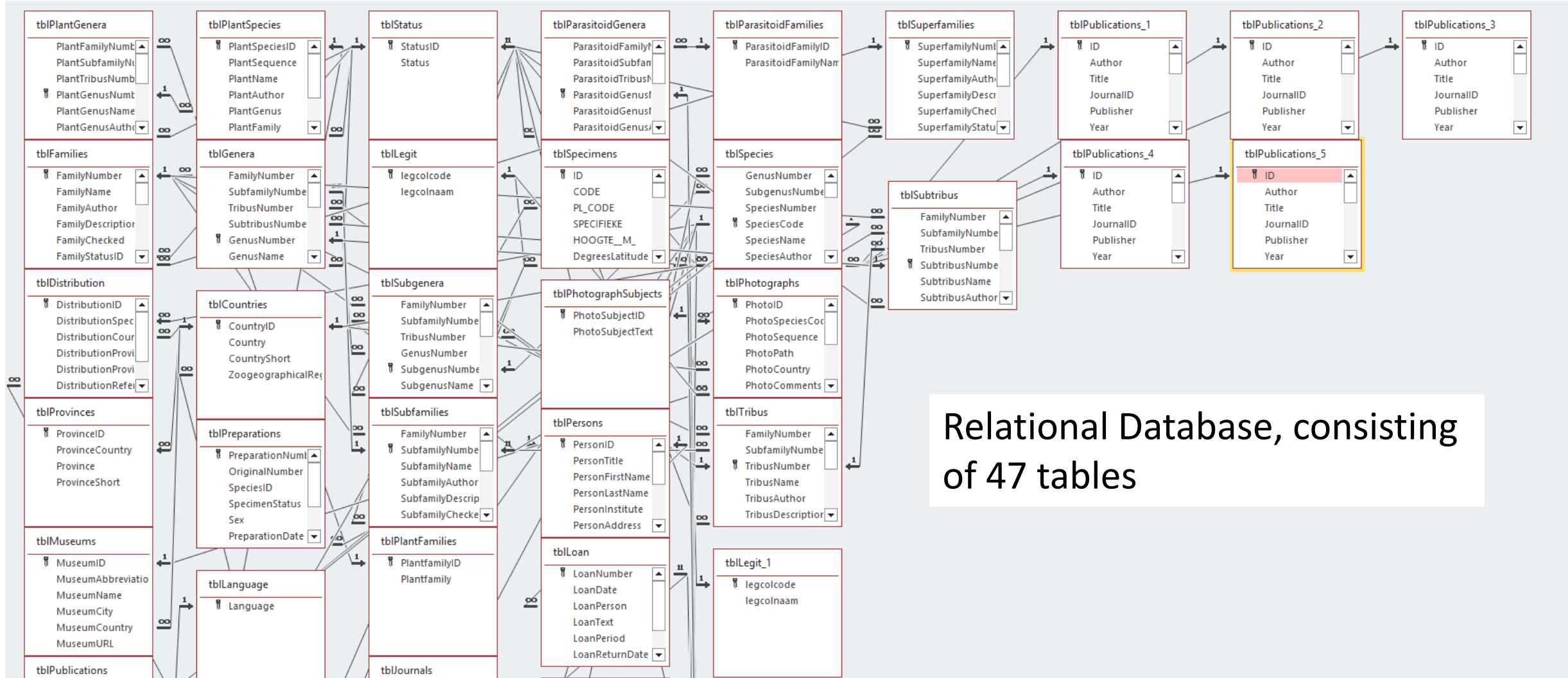


A unique digital code read by a hand scanner and searched in the databank.





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Relational Database, consisting of 47 tables

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# COMPLEX ARCHITECTURE – SIMPLE USE

website

The screenshot displays four main modules of the Gracillariidae database interface:

- Gracillariidae Literature Module – Main form:** A form for adding literature records, including fields for code number, author, year, title, journal, and publisher. It also features a taxonomic keyword list and a 'My keywords' section.
- Gracillariidae Taxonomy module – Species group data:** A form for adding species data, including fields for genus, species name, author, and date. It includes a 'List of moths' section and a 'Type locality' field.
- Gracillariidae Faunistic module – Main form:** A form for adding faunistic data, including fields for locality, date, number of specimens, and sex. It also features a 'Photograph' field and a 'Remarks' section.
- Genitalia preparations - Microlepidoptera:** A form for adding genitalia preparations, including fields for preparation number, original number, species, and sex.

Literature

Taxonomy

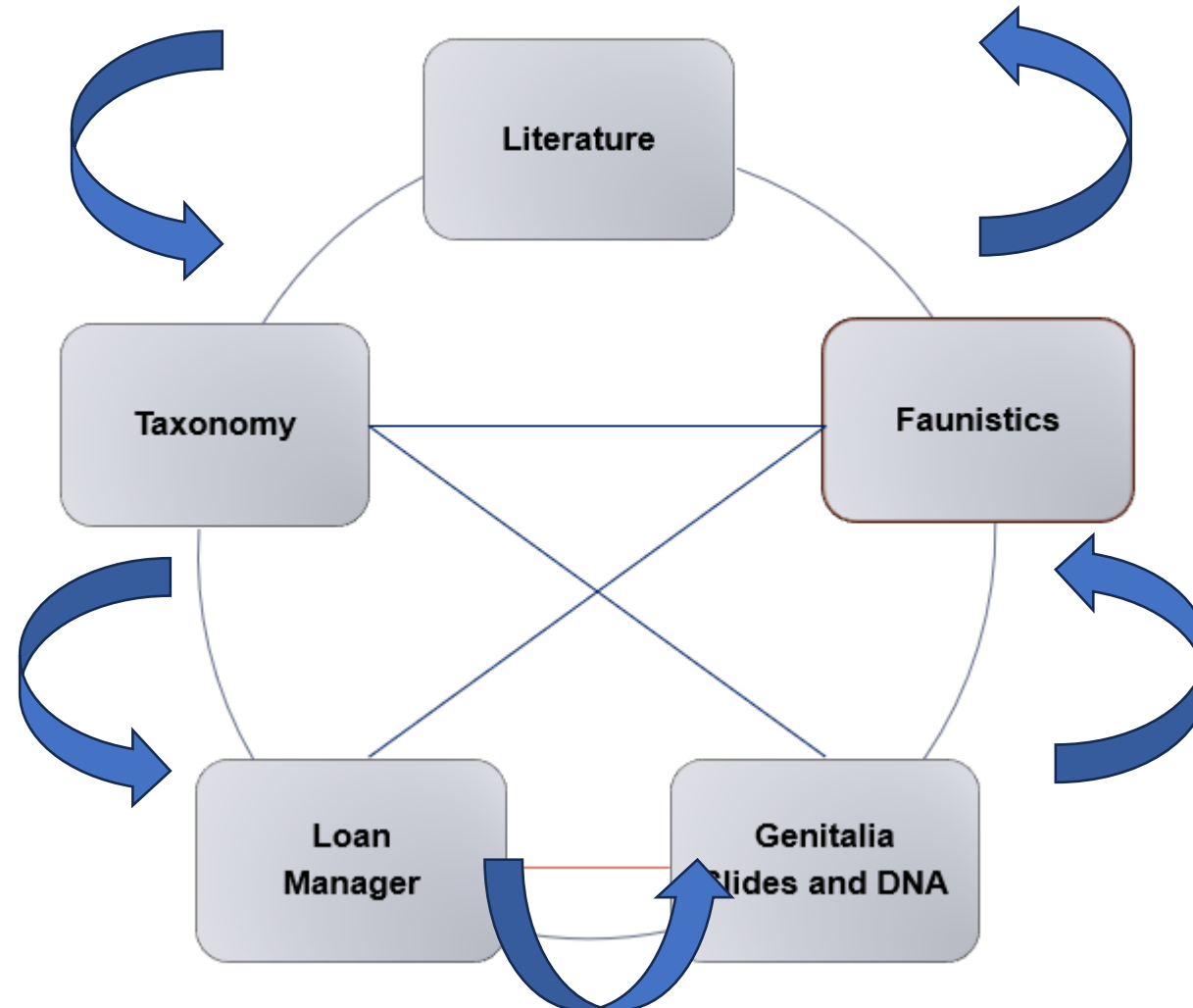
Faunistics – label data

Genitalia slides

Internal use

GTDB [www.gracillariidae.net](http://www.gracillariidae.net) – a machine-human teaming taxonomic system, updatable in real time

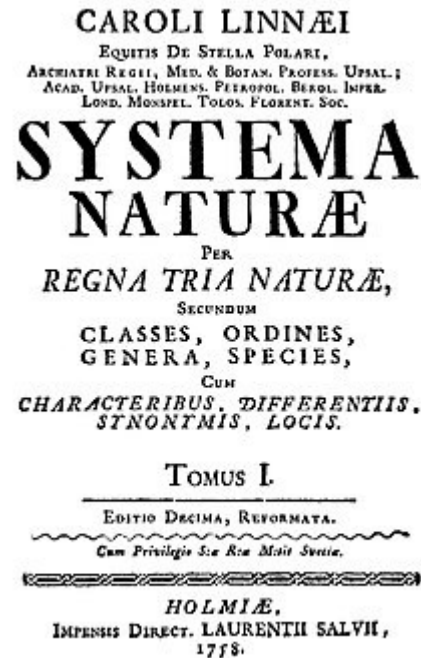
## DATA STRUCTURE AND ARCHITECTURE





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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 WELCOME, JURATE | [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Home > Lite > MothSpecies

Start typing to filter...

**AUTHENTICATION AND AUTHORIZATION**

Groups + Add

Users + Add

---

**LITE**

Countries + Add

HigherTaxa + Add

Journals + Add

Languages + Add

Localities + Add

**MothSpecies** + Add

Moths + Add

Museums + Add

Pages + Add

Parasitoids + Add

Photographers + Add

Plants + Add

Provinces + Add

Publications + Add

Sections + Add

Select moth species to change

Action:  0 of 100 selected

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

*Phyllocnistis citrella* Stainton, 1856

*Phyllocnistis*: changeable

*citrella*: constant

Yes

No

---

By status

All

Accepted

Misapplied

Synonym

---

By family

All

Gracillariidae

Unassigned

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Moths Back Office WELCOME, JURATE. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

Home · Lite · MothSpecies · Phyllocnistis citrella

Start typing to filter...

**AUTHENTICATION AND AUTHORIZATION**

Groups + Add

Users + Add

**LITE**

Countries + Add

HigherTaxa + Add

Journals + Add

Languages + Add

Localities + Add

**MothSpecies + Add**

Moths + Add

Museums + Add

Pages + Add

Parasitoids + Add

Photographers + Add

Plants + Add

Provinces + Add

Publications + Add

Sections + Add

### Change moth species

**Phyllocnistis citrella** HISTORY VIEW ON SITE

Species Distribution Types Photos Links & Names DNAs & Genbank Plants Parasitoids

Taxonid:	<input type="text" value="S170010160"/>
	<small>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</small>
Code:	<input type="text" value="PHYLCITR"/>
Scientific name:	Phyllocnistis citrella
Epithet:	<input type="text" value="citrella"/>
Authority:	<input type="text" value="Stainton, 1856"/>
Rank:	<input type="text" value="species"/>
Status:	<input type="text" value="Accepted"/>
Citation:	<input type="text" value="Phyllocnistis Citrella, Atkinson in litt."/>
Originalgenus:	<input type="text" value="Phyllocnistis"/>
Taxonremarks:	<input type="text"/>

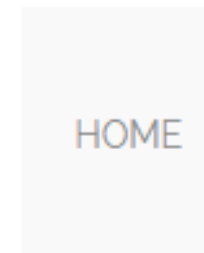
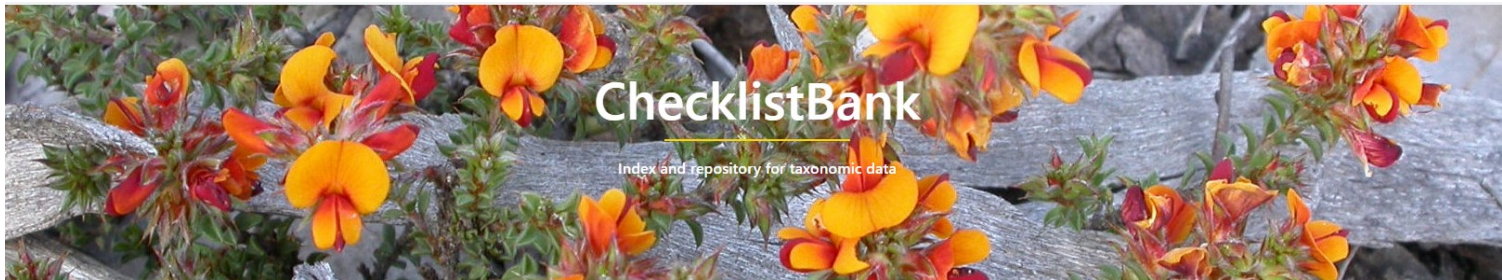
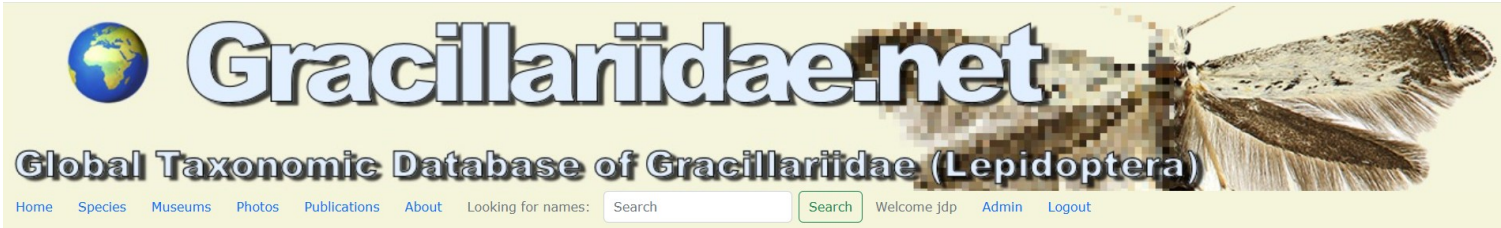
Taxon ID: S170010160 **intelligently changeable**  
Code: PHYLCITR **constant**



PHEGEA




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Fit for Purpose in Real-time

	<b>Global Dataset</b>	<ul style="list-style-type: none"> <li>• Taxonomy</li> <li>• Biology</li> <li>• Distribution</li> <li>• DNA</li> </ul>
	<b>Regional Dataset</b>	<ul style="list-style-type: none"> <li>• Taxonomy</li> <li>• Biology</li> <li>• Distribution</li> <li>• Invasions</li> </ul>
	<b>Country Dataset</b>	<ul style="list-style-type: none"> <li>• History</li> <li>• Occurrence</li> <li>• Biology</li> <li>• Changes in time</li> </ul>

[www.gracillariidae.net](http://www.gracillariidae.net)

[www.afromoths.net](http://www.afromoths.net)

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

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