



generated January 2025

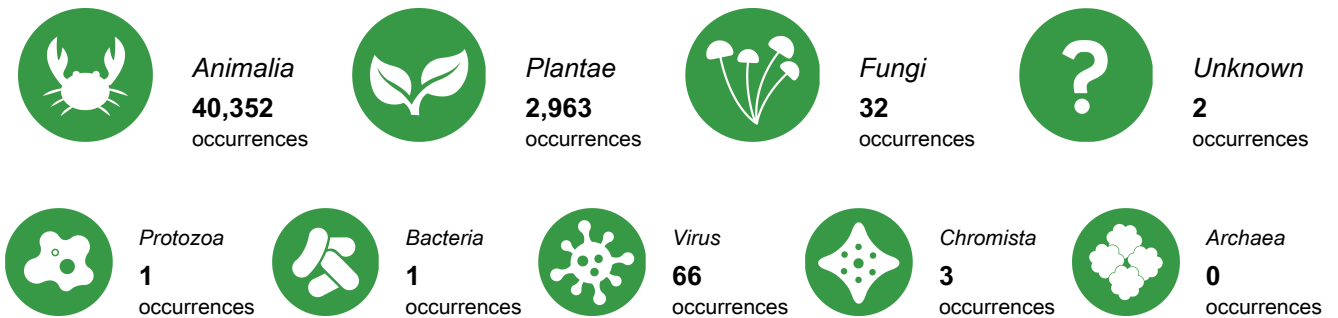
## Macao

This report provides a series of summary charts, statistics and other details about the mobilization and use of open-access species data through the GBIF network, relating to users and participating institutions in Macao. These metrics show status at the time of report generation, unless otherwise noted. Taken together, the elements of this report can help guide and measure progress toward the information needs for biodiversity research, as well as for national commitments on biodiversity and sustainable development.

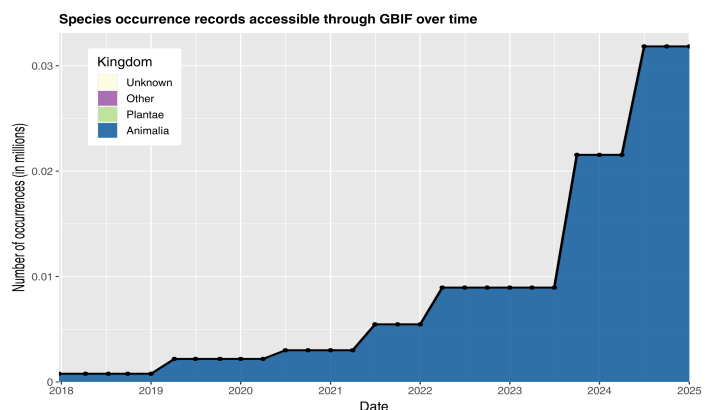
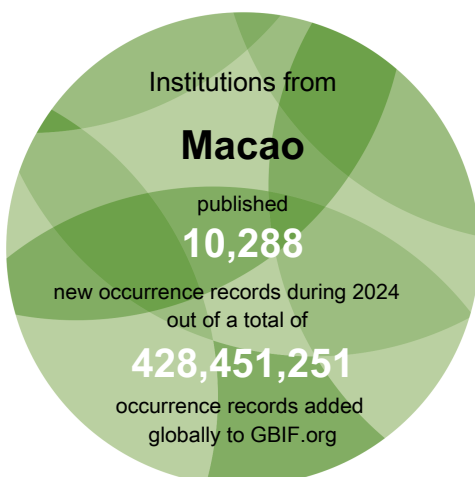
### ► Access and usage



### ► Data availability in Macao



### ► Data mobilization

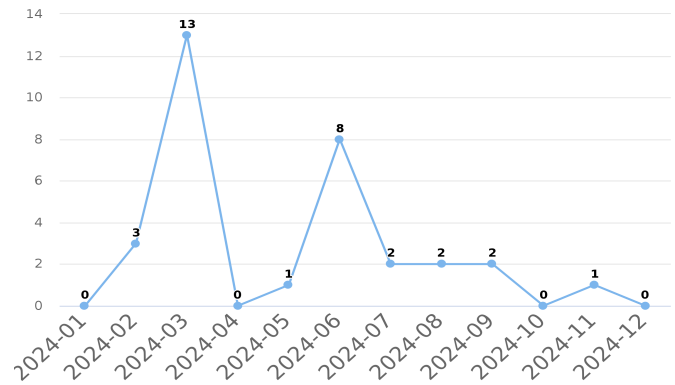
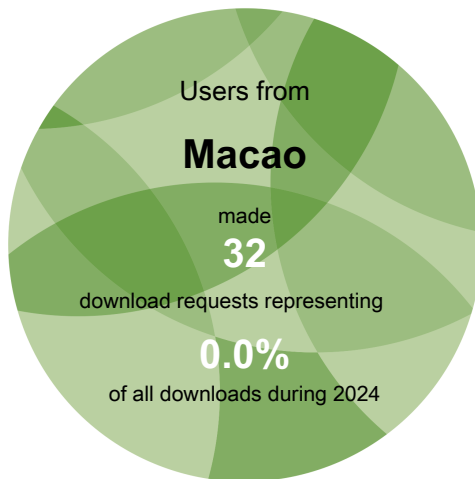


Number of records published by institutions in Macao, categorized by kingdom



## Access and usage

### Data downloads on GBIF.org from users in Macao



Monthly downloads requested by users in Macao

### Recent peer-reviewed articles using GBIF-mediated data by co-authors based in Macao

The GBIF Secretariat maintains and reports on an ongoing literature tracking programme, giving priority to substantive uses of GBIF-mediated data in peer-reviewed literature while identifying the countries or areas of the authors' institutional affiliations. The citations below represent the five most recent journal articles with at least one co-author from Macao.

Those interested in assisting the Secretariat in identifying additional peer-reviewed uses of GBIF-mediated data may forward relevant citations to [comms@gbif.org](mailto:comms@gbif.org).

He, Kang, Zhang *et al.* (2023) Glycyrrhizae Radix et Rhizoma: The popular occurrence of herbal medicine applied in classical prescriptions. *Phytotherapy Research*.  
<https://doi.org/10.1002/ptr.7869>

Ramirez-Villegas, Khoury, Achicanoy *et al.* (2020) A gap analysis modelling framework to prioritize collecting for ex situ conservation of crop landraces. *Diversity and Distributions*.  
<https://doi.org/10.1111/ddi.13046>

Vincent, Amri, Castañeda-Álvarez *et al.* (2019) Modeling of crop wild relative species identifies areas globally for in situ conservation. *Communications Biology*.  
<https://doi.org/10.1038/s42003-019-0372-z>

See all research from this country or area  
[gbif.org/country/MO/publications/from](https://gbif.org/country/MO/publications/from)



## Data availability

### Total data available for selected taxonomic groups in Macao



**Mammals**  
77  
occurrences



**Birds**  
34,344  
occurrences



**Bony fish**  
131  
occurrences



**Amphibians**  
212  
occurrences



**Insects**  
4,771  
occurrences



**Reptiles**  
311  
occurrences



**Molluscs**  
239  
occurrences



**Arachnids**  
146  
occurrences



**Flowering plants**  
2,793  
occurrences



**Ferns**  
129  
occurrences



**Gymnosperms**  
33  
occurrences



**Mosses**  
5  
occurrences



**Sac fungi**  
9  
occurrences



**Basidiomycota**  
23  
occurrences

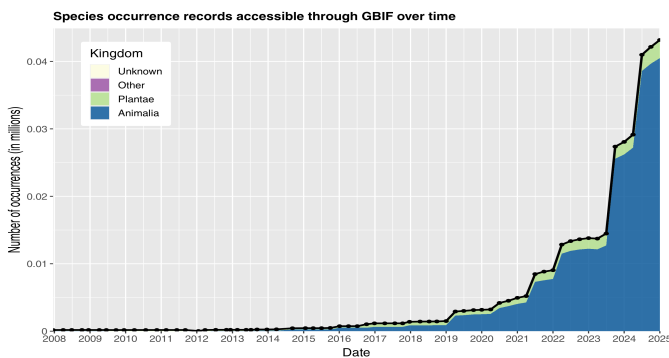
Mammals = Class *Mammalia*  
Birds = Class *Aves*  
Bony fish = Superclass  
*Osteichthyes* p.p.  
Amphibians = Class *Amphibia*

Insects = Class *Insecta*  
Reptiles = Class *Testudines*,  
*Sphenodontia*, *Squamata* &  
*Crocodylia*  
Molluscs = Phylum *Mollusca*

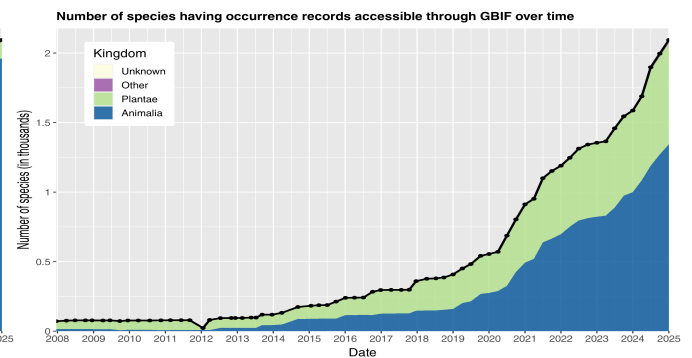
Arachnids = Class *Arachnida*  
Flowering plants = Phylum  
*Magnoliophyta*  
Gymnosperms = Superclass  
*Gymnospermae*

Ferns = Phylum *Pteridophyta*  
Mosses = Phylum *Bryophyta*  
Sac fungi = Phylum *Ascomycota*  
Basidiomycota = Phylum  
*Basidiomycota*

## Change over time in records about biodiversity in Macao



Occurrence records available about species occurring in Macao



Species for which at least one occurrence record is available in Macao

### WHY MIGHT THE AMOUNT OF MOBILIZED DATA DECREASE?

Datasets are sometimes removed by publishers, but more often decreases in the number of records are due to the removal of duplicate records and datasets.

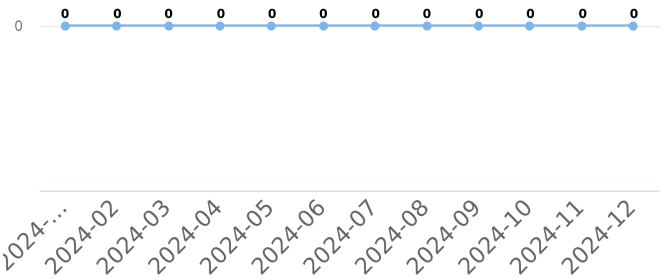
**SPECIES COUNTS** represent the number of binomial scientific names for which GBIF has received data records, organized as far as possible using synonyms recorded in key databases like the Catalogue of Life



### Newest publishers from Macao

No data available

### Occurrence records downloaded from GBIF.org, published by institutions in Macao



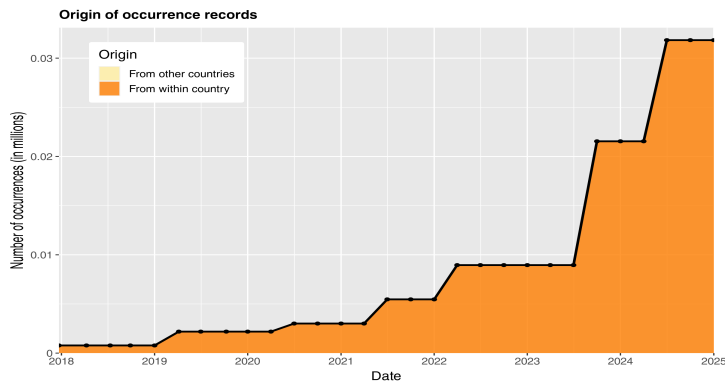
See all publishers from this country or area  
[gbif.org/publisher/search?country=MO](https://gbif.org/publisher/search?country=MO)

Number of occurrence records downloaded via GBIF.org published by institutions in Macao

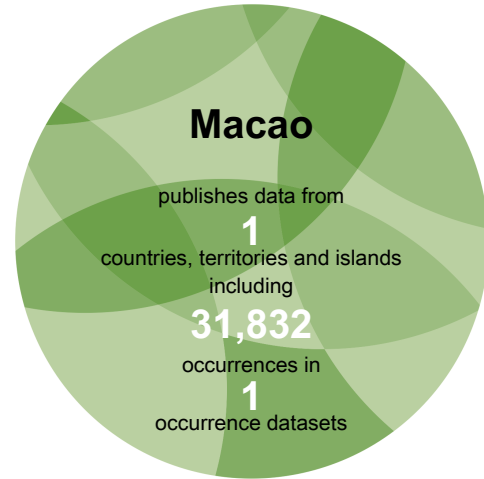


## Data mobilization

### Data sharing with country or area of origin by national institutions in Macao



Data sharing with country or area of origin



The chart above shows the number of records shared over time by publishers within Macao, with separate colours for records about species occurring within undefined and those occurring elsewhere.

### Top data contributors about biodiversity in Macao

Rank	Country or area	No. of occurrences
1	Macao	31,832
2	United States of America	9,212
3	Colombia	667
4	Netherlands	457
5	United Kingdom	334
6	France	202
7	Canada	186
8	Taiwan	84
9	New Zealand	81
10	Portugal	76

Table 1. Ranking of countries or areas contributing data about Macao

### Top datasets contributing data about Macao

EOD – eBird Observation Dataset. *31,832 occurrences in Macao.* (Last updated 27 Sep 2024)

iNaturalist Research-grade Observations. *9,571 occurrences in Macao.* (Last updated 30 Dec 2024)

A global database for the distributions of crop wild relatives. *667 occurrences in Macao.* (Last updated 9 Feb 2024)

Observation.org, Nature data from around the World. *418 occurrences in Macao.* (Last updated 3 Jan 2025)

Royal Botanic Gardens, Kew - Herbarium Specimens. *185 occurrences in Macao.* (Last updated 2 Jan 2025)

See all contributing countries and areas or datasets: [gbif.org/country/MO/about](https://gbif.org/country/MO/about)