

## **Activity report**



generated January 2025

## Malaysia

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 Malaysia. 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 Malaysia



Animalia 3,167,864 occurrences



Plantae 651,480 occurrences



Fungi 53,039 occurrences



Unknown 7,387 occurrences



Protozoa
495
occurrences



9,872 occurrences



Virus
1,863
occurrences



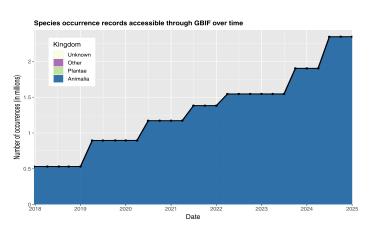
**7,772** occurrences



Archaea
26
occurrences

#### ► Data mobilization



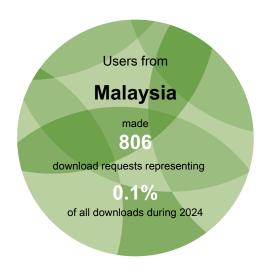


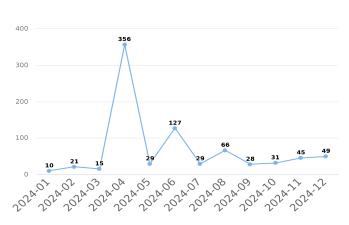
Number of records published by institutions in Malaysia, categorized by kingdom



#### Access and usage

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





Monthly downloads requested by users in Malaysia

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

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 Malaysia.

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

Arshaad, Yusof, Nor. (2024) Hidden in Plain Sight: freshwater whiprays of Southeast Asia and their ecological significance. *Fish for the People*.

Xu, Wu, Wang *et al.* (2024) Predicting the potential distribution of Arisaema heterophyllum in China under current and future climate change based on ArcGIS and MaxEnt model. *Plant Biosystems - An International Journal Dealing with all Aspects of Plant Biology.* https://doi.org/10.1080/11263504.2024.2407813

Shan, Lu, Yan *et al.* (2024) Prediction of Platycodon grandiflorus distribution in China using MaxEnt model concerning current and future climate change. *Nordic Journal of Botany.* https://doi.org/10.1111/njb.04502

Luo, Lapuz, Wee. (2024) Large-scale changes in the distribution of suitable habitat of the endangered subtropical canopy tree species Vatica guangxiensis under climate change. *Biodiversity and Conservation*.

https://doi.org/10.1007/s10531-024-02908-8

Hordijk, Bialic-Murphy, Lauber *et al.* (2024) Dominance and rarity in tree communities across the globe: Patterns, predictors and threats. *Global Ecology and Biogeography.* 

See all research from this country or area gbif.org/country/MY/publications/from



#### **Data availability**

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



Mammals 53,302 occurrences



Birds 2,477,842 occurrences



Bony fish 44,837 occurrences



Amphibians
44,700
occurrences



Insects
419,257
occurrences



Reptiles
36,815
occurrences



Molluscs 41,377 occurrences



Arachnids 19,461 occurrences



Flowering plants 566,966 occurrences



Ferns 53,906 occurrences



Gymnosperms 4,525 occurrences



Mosses 12,918 occurrences



Sac fungi 30,171 occurrences



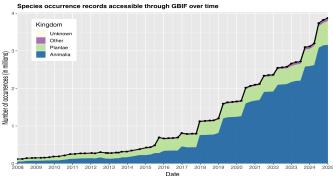
Basidiomycota 16,717 occurrences

Mammals = Class Mammalia Birds = Class Aves Bony fish = Superclass Osteichthyes p.p. Amphibians = Class Amphibia Insects = Class Insecta Reptiles = Class Testudines, Sphenodontia, Squamata & Crocodylia

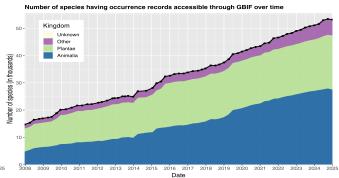
Molluscs = Phylum *Mollusca* 

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 Malaysia



Occurrence records available about species occurring in Malaysia



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

### 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



#### Most recent datasets from publishers in Malaysia

Fish Collection (2021-2023) (Setiu Wetlands) from the South China Sea Repository and Reference Centre (RRC), Institute of Oceanography and Environment (INOS), Universiti Malaysia Terengganu (UMT). Published by Institute of Oceanography and Environment (INOS) https://doi.org/10.15468/5s3jvy

Fish Collection (2009, 2018 & 2019) (Kemaman & LKIM Kuantan) from the South China Sea Repository and Reference Centre (RRC), Institute of Oceanography and Environment (INOS), Universiti Malaysia Terengganu (UMT). *Published by Institute of Oceanography and Environment (INOS)* 

https://doi.org/10.15468/h9f8r6

Taxonomic Checklist of the mosses from Mt Trusmadi of Sabah, Malaysian Borneo. *Published by Sabah Forestry Department* https://doi.org/10.15468/nz2c3e

Herbarium Collection (2003) (Part 2) from the South China Sea Repository and Reference Centre (RRC), Institute of Oceanography and Environment (INOS), Universiti Malaysia Terengganu (UMT). Published by Institute of Oceanography and Environment (INOS) https://doi.org/10.15468/udww85

Herbarium Collection (2003) (Part 1) from the South China Sea Repository and Reference Centre (RRC), Institute of Oceanography and Environment (INOS), Universiti Malaysia Terengganu (UMT). Published by Institute of Oceanography and Environment (INOS) https://doi.org/10.15468/pwazv4

See all datasets from this country or area: gbif.org/dataset/search?publishing\_country=MY

#### **Newest publishers from Malaysia**

Sabah Forestry Department

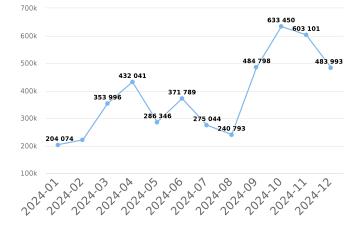
Universiti Kebangsaan Malaysia

Tropical Infectious Diseases Research and Education Centre (TIDREC), Universiti Malaya

Institute of Oceanography and Environment (INOS)

Bioinformatics Research Group, Biological Science Department, Faculty of Bioscience & Bioengineering

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



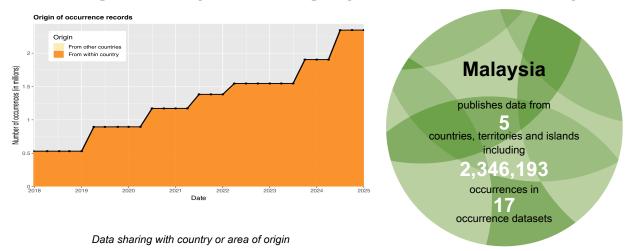
Number of occurrence records downloaded via GBIF.org published by institutions in Malaysia

See all publishers from this country or area gbif.org/publisher/search?country=MY



#### **Data mobilization**

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



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

# Top data contributors about biodiversity in Malaysia

Rank	Country or area	No. of occurrences
1	Malaysia	2,345,889
2	United States of America	495,417
3	Netherlands	317,158
4	United Kingdom	286,939
5	International organization or unknown country	169,185
6	Japan	60,557
7	Estonia	30,935
8	Singapore	30,126
9	Australia	27,318
10	Germany	21,068

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

# Top datasets contributing data about Malaysia

EOD – eBird Observation Dataset. 2,342,170 occurrences in Malaysia. (Last updated 27 Sep 2024)

iNaturalist Research-grade Observations. 225,034 occurrences in Malaysia. (Last updated 30 Dec 2024)

Naturalis Biodiversity Center (NL) - Botany. 216,557 occurrences in Malaysia. (Last updated 1 Nov 2024)

International Barcode of Life project (iBOL). 156,325 occurrences in Malaysia. (Last updated 7 Aug 2024)

Royal Botanic Gardens, Kew - Herbarium Specimens. 151,569 occurrences in Malaysia. (Last updated 2 Jan 2025)



#### Malaysia participates in the following projects coordinated by GBIF

DNA barcoding and taxonomic classification of black flies in Southeast Asia BIFA: Biodiversity Information Fund for Asia, 2021–2023 https://www.gbif.org/project/BIFA6\_017

Deploying acoustic data to fill gaps in bat biodiversity information for Southeast Asia

BIFA: Biodiversity Information Fund for Asia, 2019–2020 https://www.gbif.org/project/3PMwZjKycuPnEo5FUDY99S See all GBIF projects gbif.org/resource/search?contentType=project