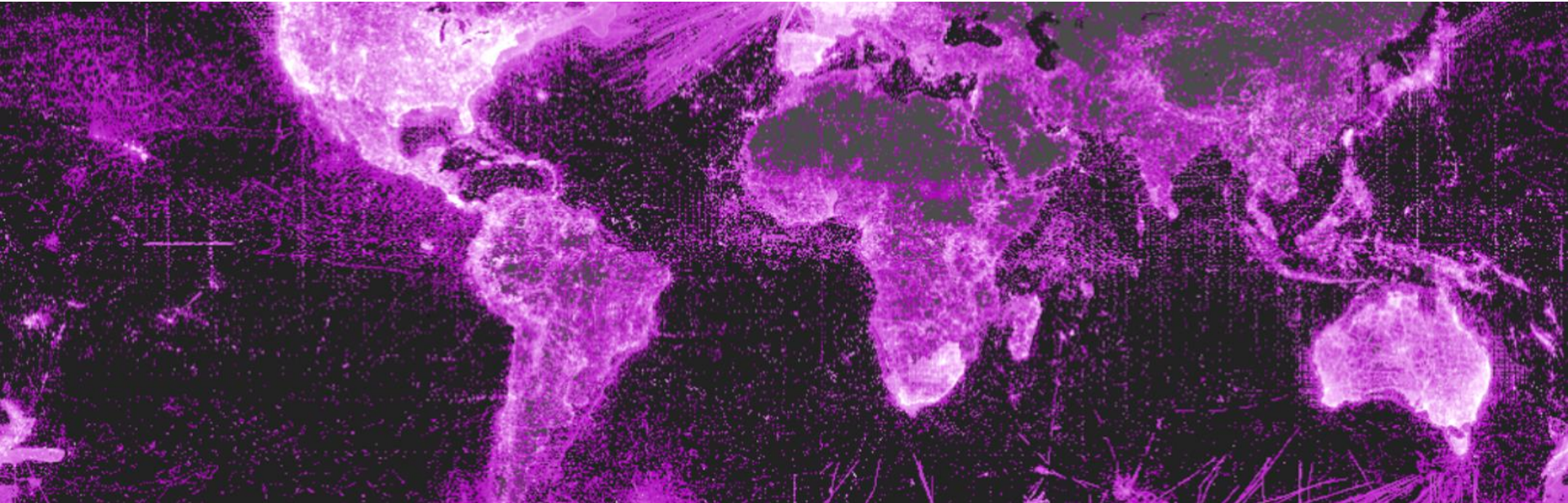




GBIF

Global Biodiversity
Information Facility



GBIF IN ASIA: DATA STATUS, MOBILIZATION, GAPS AND USE

Maofang Luo, GBIF Secretariat

13 June 2017

OUTLINE

- GBIF mediated data in Asia
- Data mobilization from Asia
- Data gaps in Asia
- Data use in Asia

Types of data shared through GBIF



Specimen



Material sample



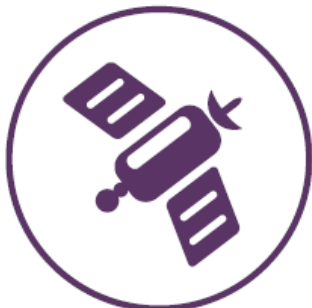
Fossil



Literature occurrence



Observation
Human observation
Living specimen



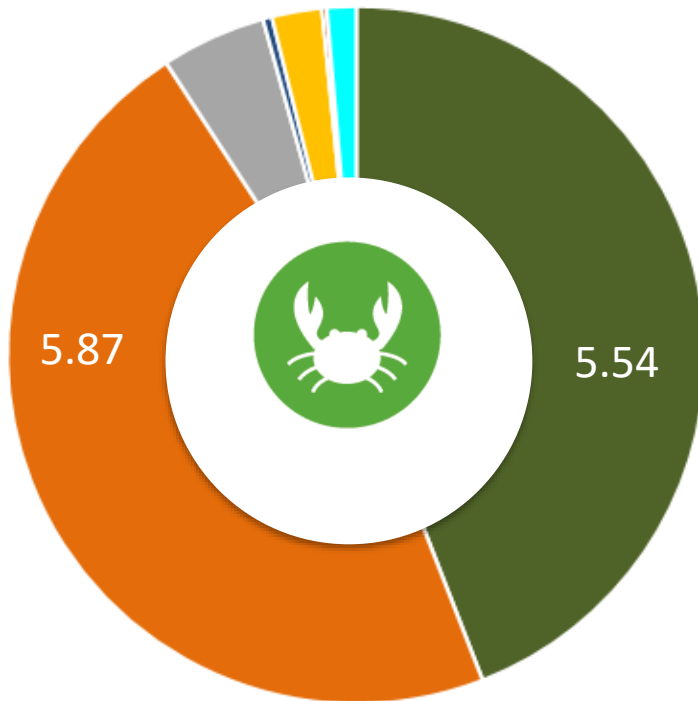
Machine observation

sampling-event data

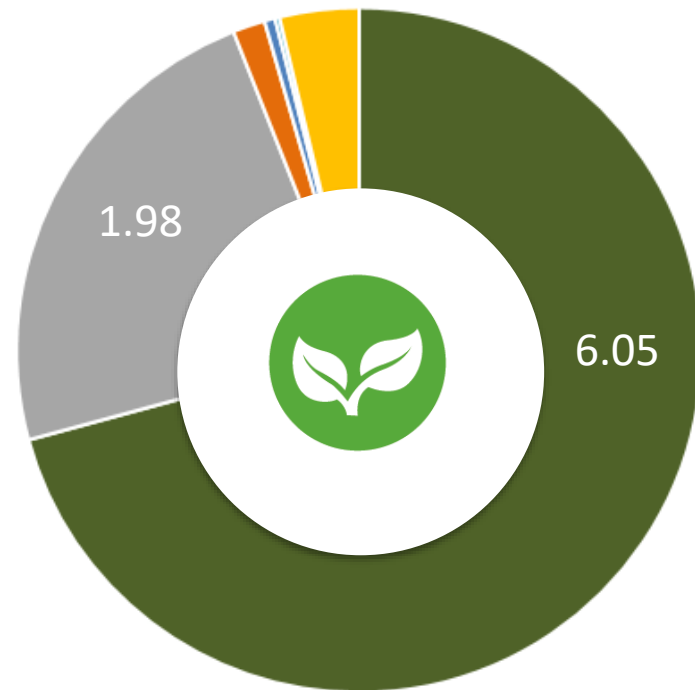
Data derived from environmental, ecological and natural resource investigations that follow standardized protocols for measuring and observing biodiversity.

• GBIF MEDIATED DATA IN ASIA

12.56 millions
(7.95 georeferenced)



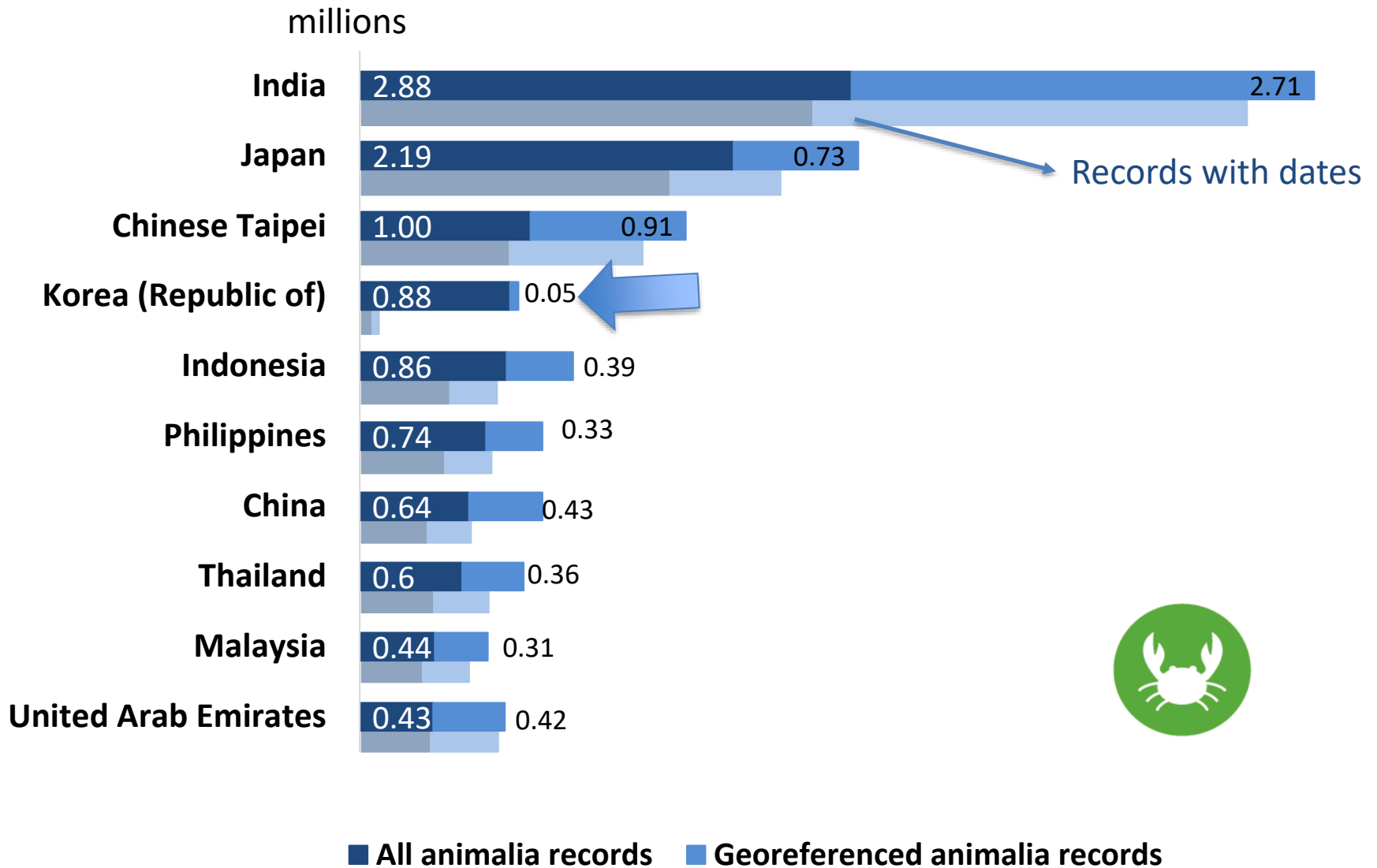
8.52 millions
(3.89 georeferenced)



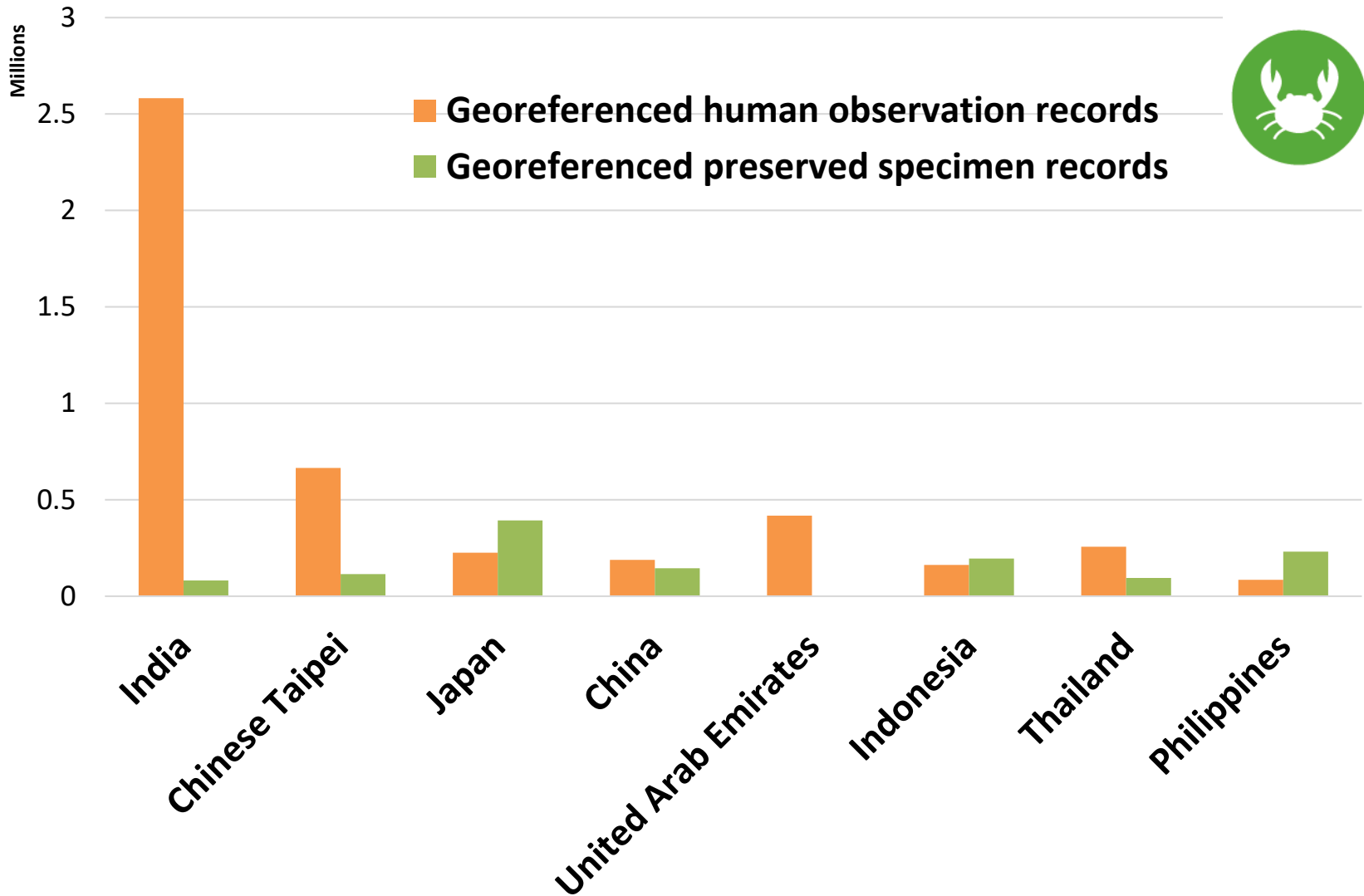
■ Preserved specimen
■ Human observation
■ Fossil specimen
■ Machine observation

■ Unknown
■ Living specimen
■ Observation
■ Literature

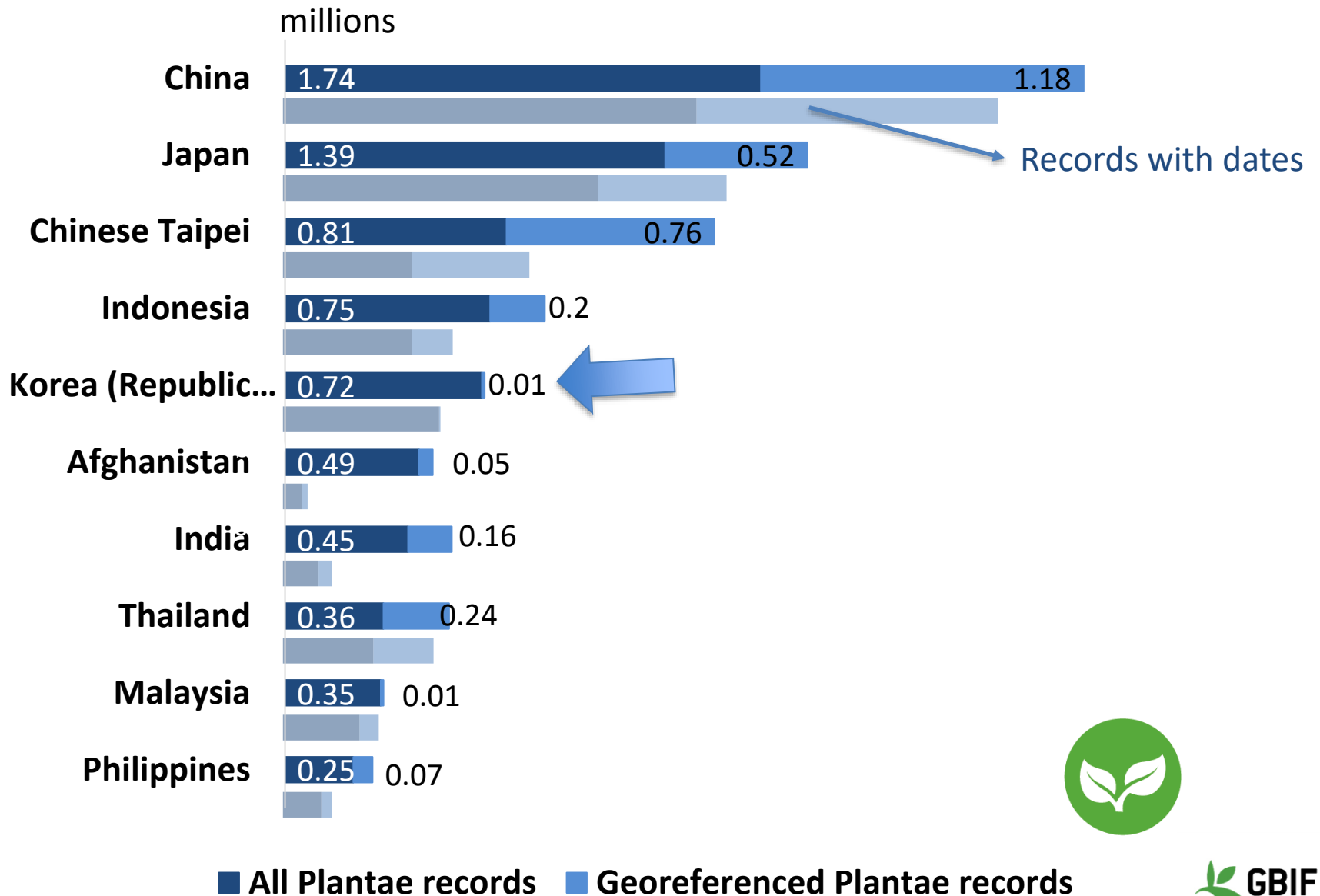
Animal occurrence records in Asia



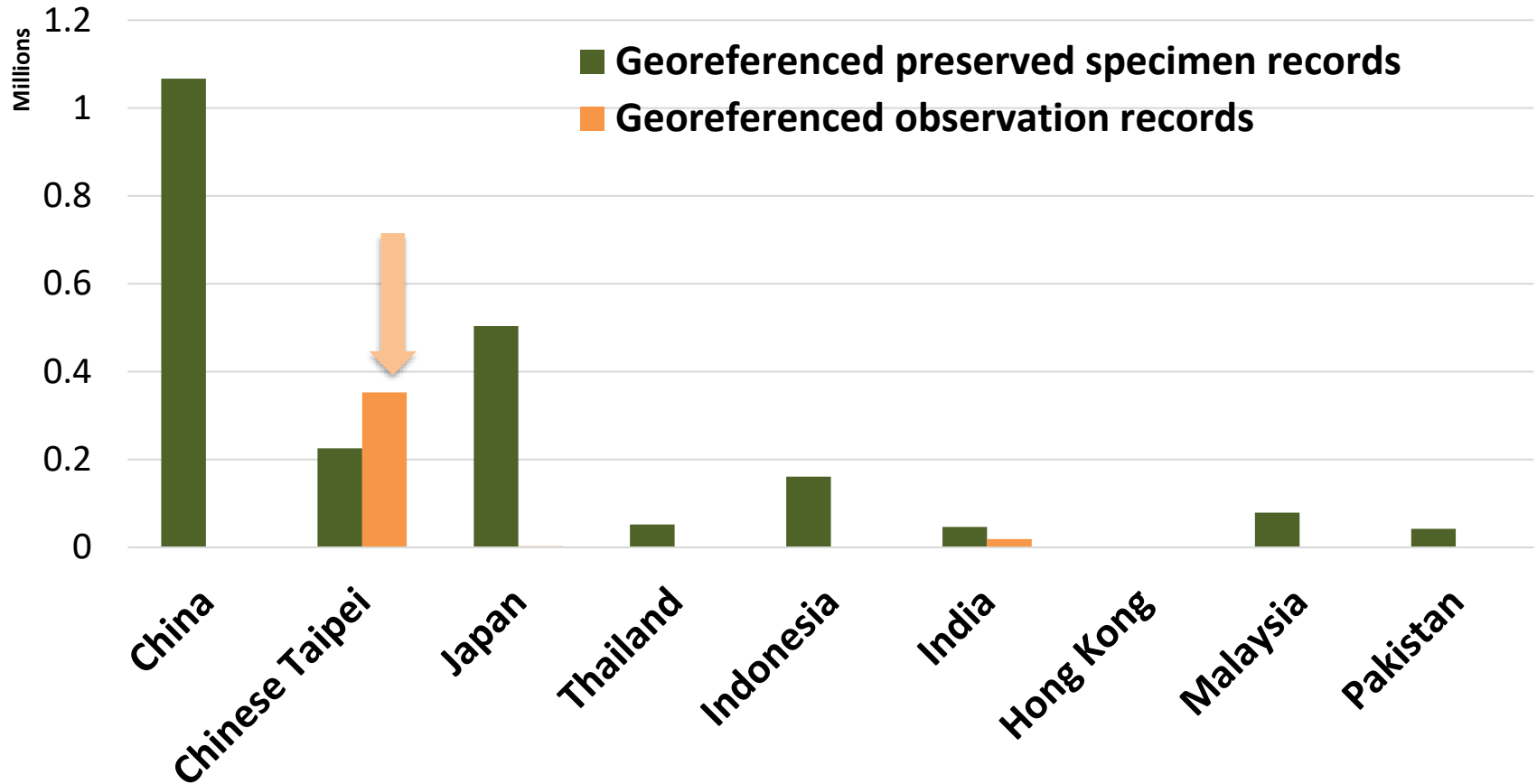
Top 10 georeferenced animal records in Asia



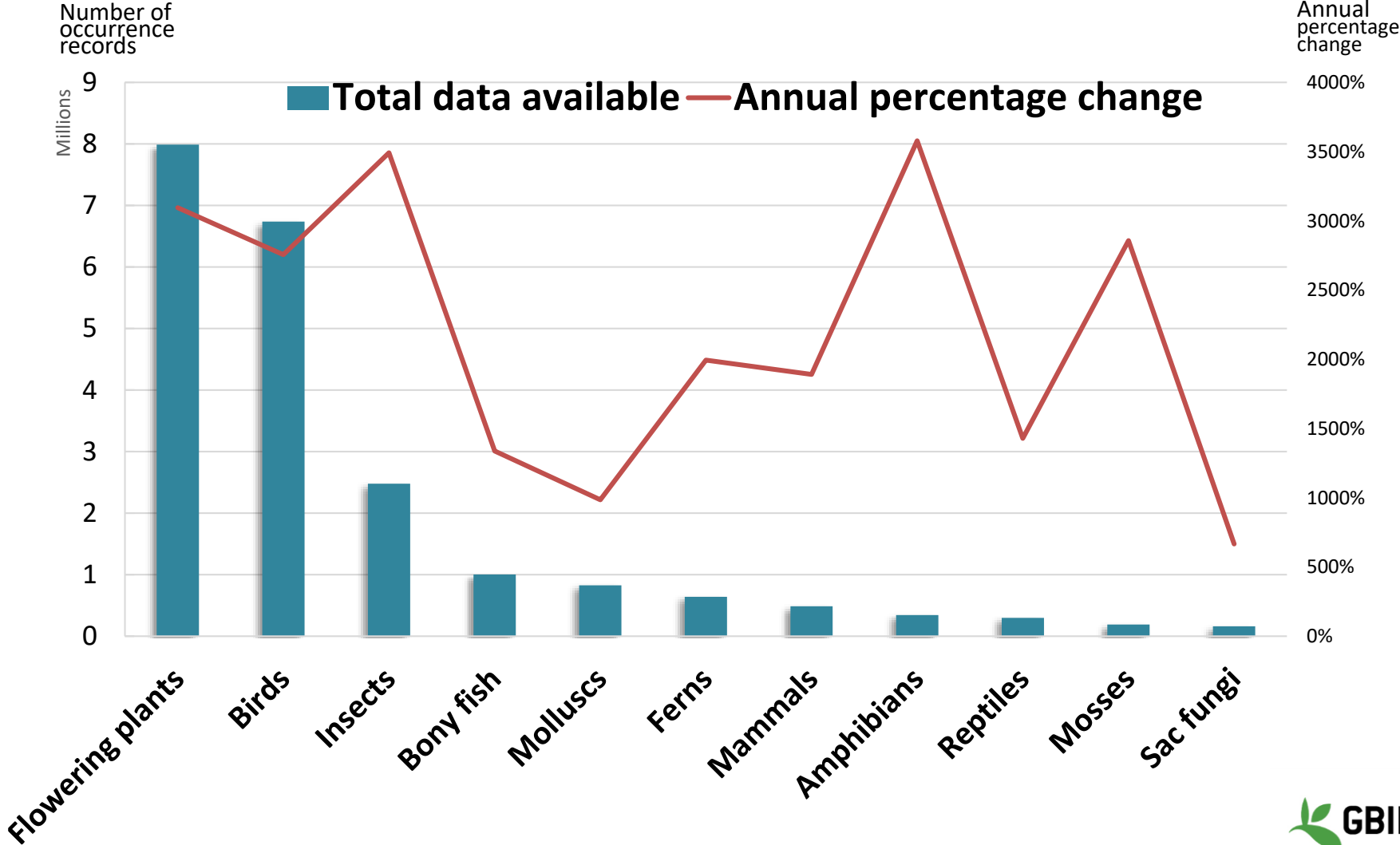
Plant occurrence records in Asia



Top 10 georeferenced plant records in Asia



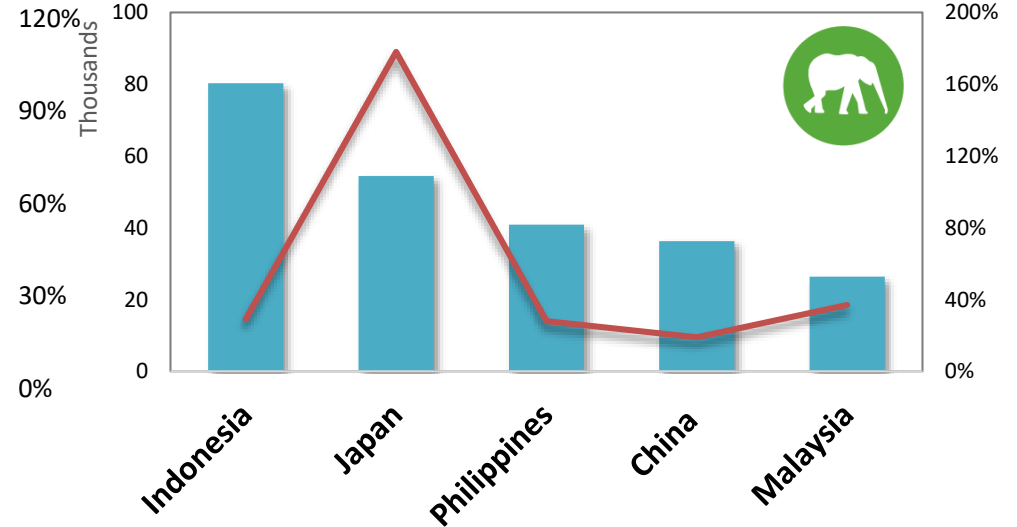
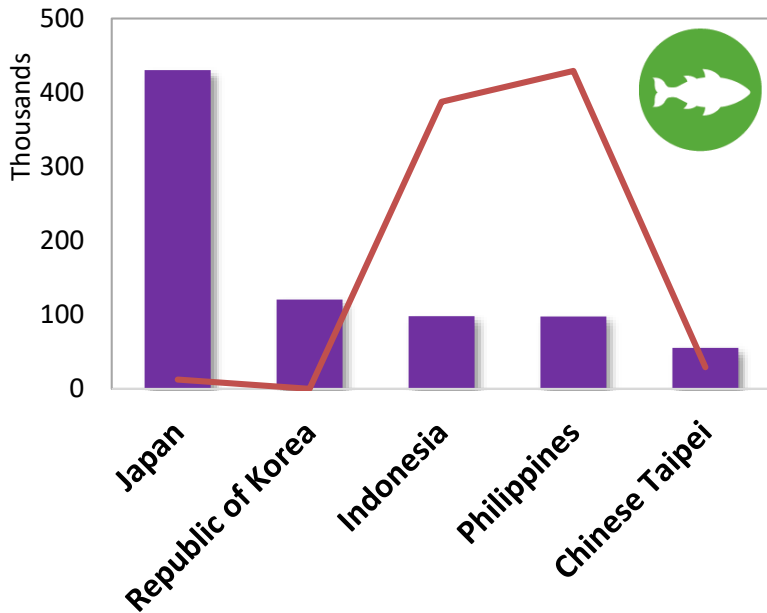
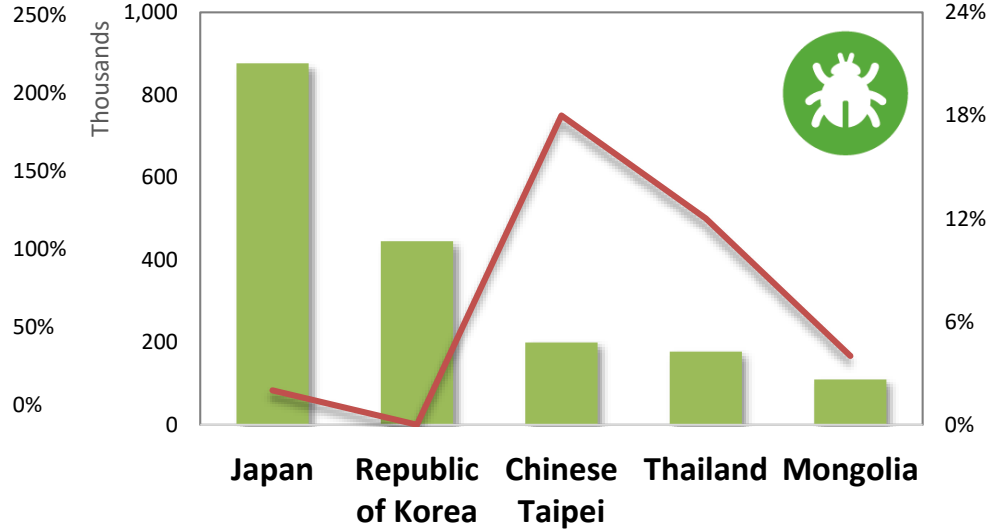
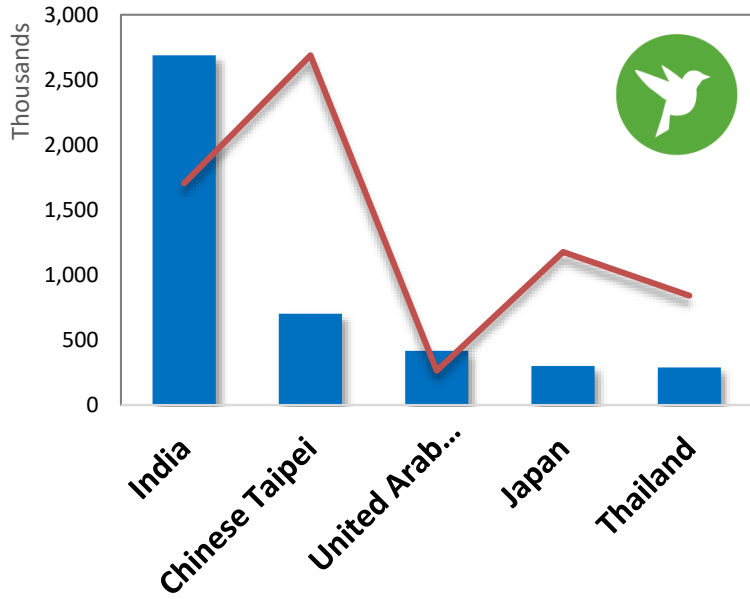
Total data available and annual percentage change for selected taxonomic groups in Asia during 2016



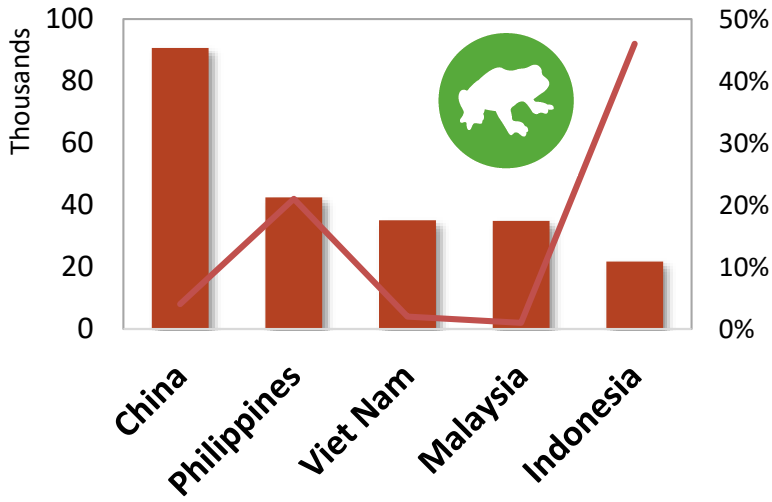
Number of occurrence records

— Annual percentage change

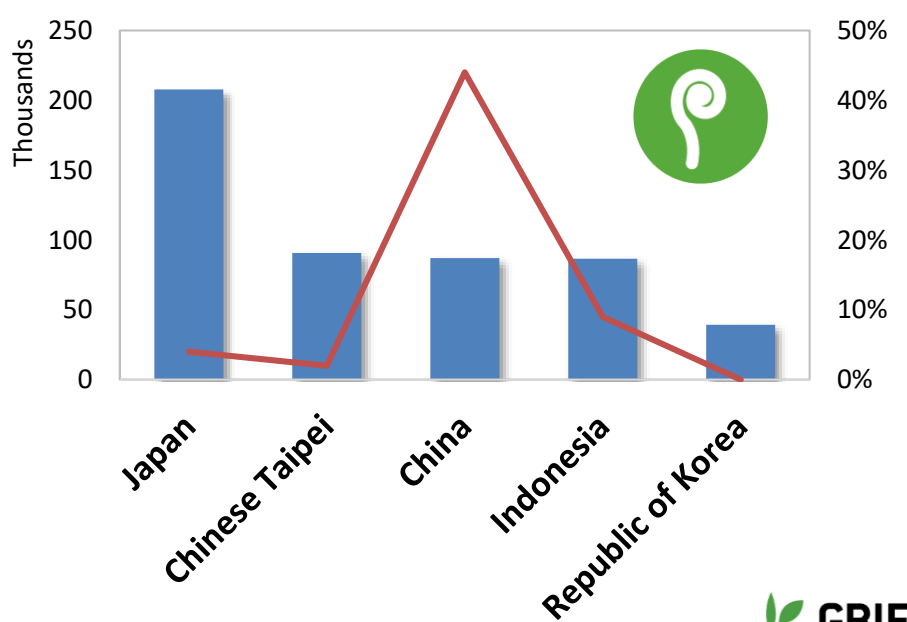
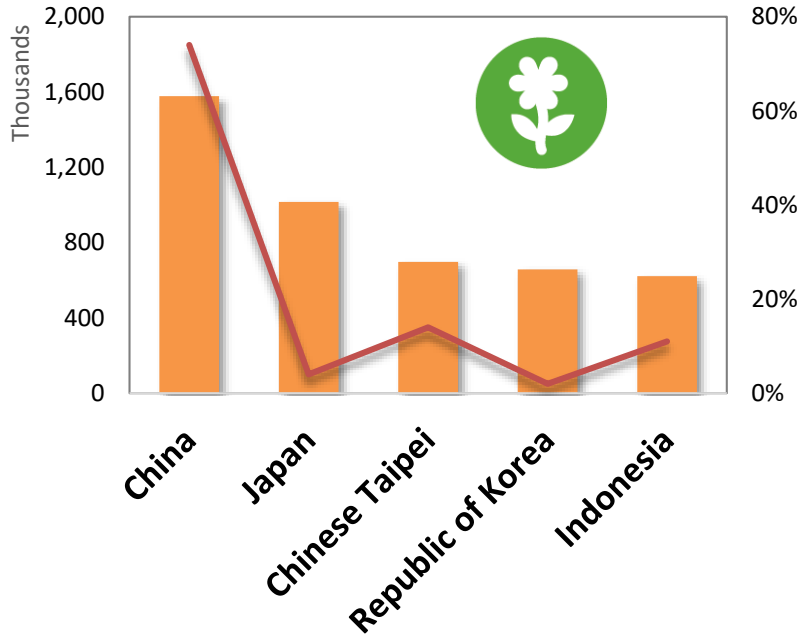
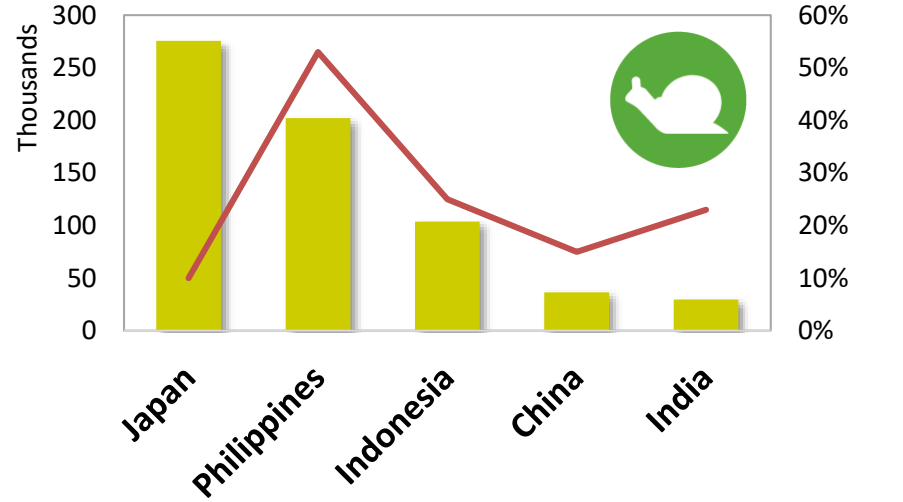
Annual percentage change



Number of occurrence records



Annual percentage change



Viet Nam

Names of countries, territories and islands are based on the [ISO 3166-1](#) standard.

Country Report

1/1/16 - 31/12/16

[Download](#)

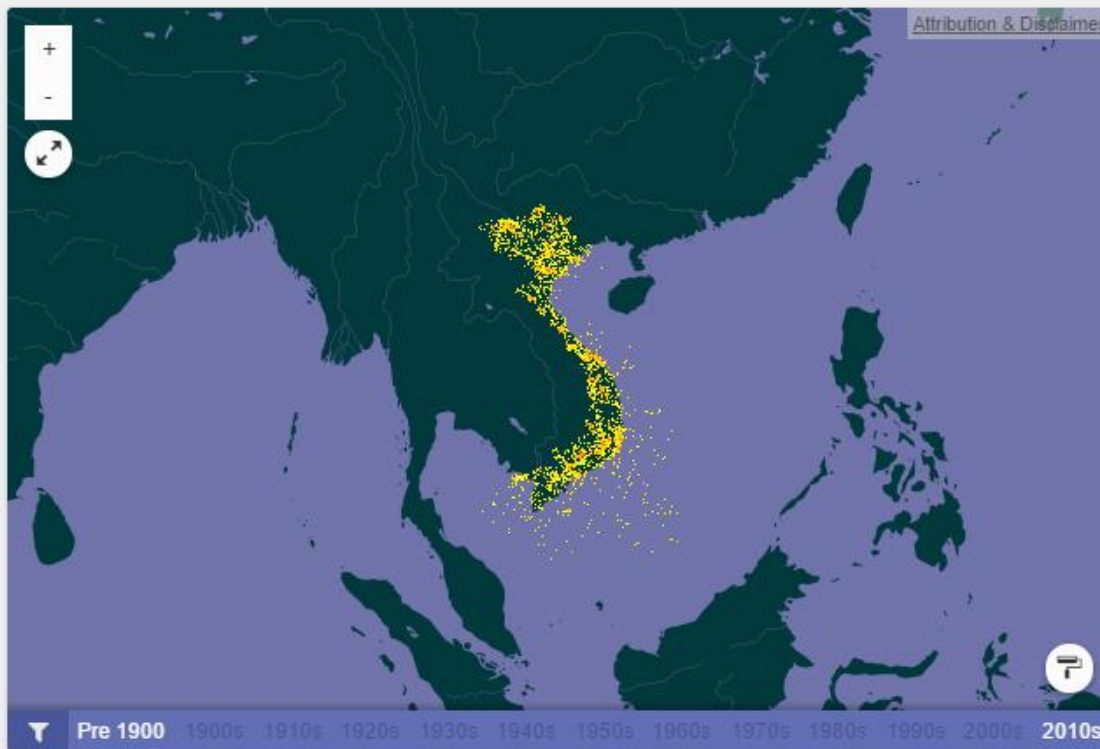
Summary

[Data About](#)

[Data Publishing](#)

[News and Events](#)

[Publications](#)



[Attribution & Disclaimer](#)

Data about Viet Nam

- 580 occurrence datasets with 300,851 records.
- No checklist datasets.
- No metadata-only datasets relevant to Viet Nam.
- 32 countries contribute data about Viet Nam.

[View records shown on the map](#)

Countries, territories or islands publishing data about Viet Nam

- [United States](#) 140,646 occurrences, 78.55% geo-referenced.
- [France](#) 46,057 occurrences, 11.11% geo-referenced.
- [Canada](#) 31,532 occurrences, 86.98% geo-referenced.
- [Netherlands](#) 20,302 occurrences, 20.42% geo-referenced.
- [United Kingdom](#) 17,616 occurrences, 42.88% geo-referenced.
- [Germany](#) 16,426 occurrences, 80.24% geo-referenced.

[View all 32 results...](#)

Report

1/12/16

Load

Occurrence located in Viet Nam

	Specimen		Observation		Fossil		Living		All (incl. "unknown")	
	Records	Georef.	Records	Georef.	Records	Georef.	Records	Georef.	Records	Georef.
Animalia	104541	50908	126540	126048	232	179	14	13	175353	120102
Archaea	0	0	0	0	0	0	0	0	0	0
Bacteria	90	8	0	0	0	0	23	0	222	117
Chromista	180	36	19978	19978	0	0	10	6	10179	10031
Fungi	481	158	48	0	0	0	101	18	636	177
Plantae	96803	41152	76	70	133	15	1001	615	112123	47385
Protozoa	8	2	0	0	0	0	0	0	17	9
Viruses	0	0	0	0	0	0	1	0	1	0
Unknown	371	31	0	0	2	0	17	13	407	59
Total	202795	92370	149494	148948	374	199	1199	694	300851	179453

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nan

Country:

- United State
- France 46,04
- Canada 31,5
- Netherlands
- United Kingd
- Germany 16

View all 32 re:

Summ

Occurrer

Animalia

Archaea

Bacteria

Chromista

Fungi

Plantae

Protozoa

Viruses

Unknown

Total

Viet Nam

12-month report
ending 31 December 2016

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 at global and national scales. These metrics represent change over the past 12 months, unless otherwise noted. Taken together, the elements of this report can help guide and measure progress toward the information needs for national and international commitments on biodiversity and sustainable development.

> Access and usage

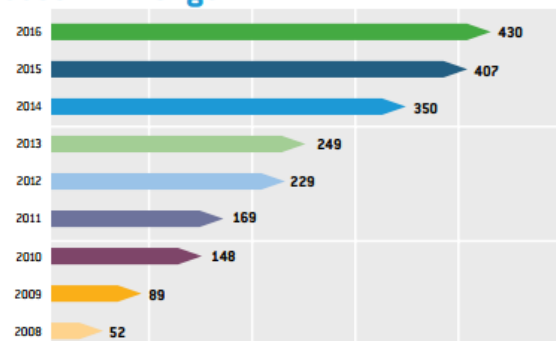
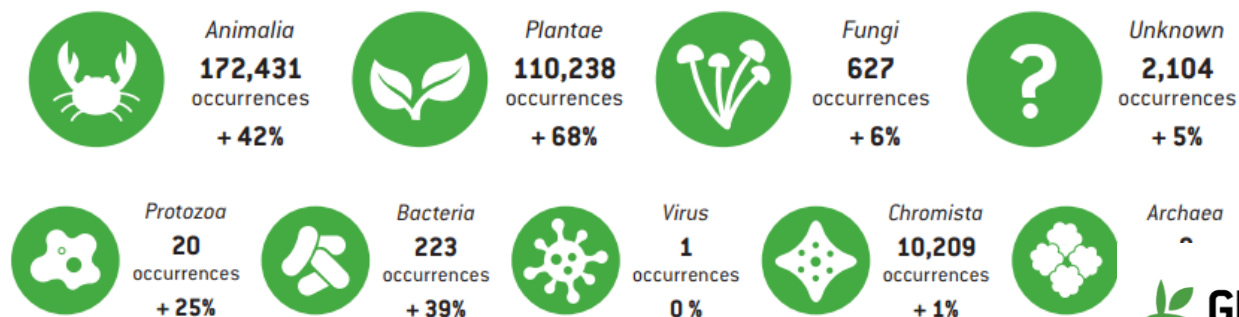


Figure 1. Number of peer-reviewed publications citing use of global GBIF-mediated data

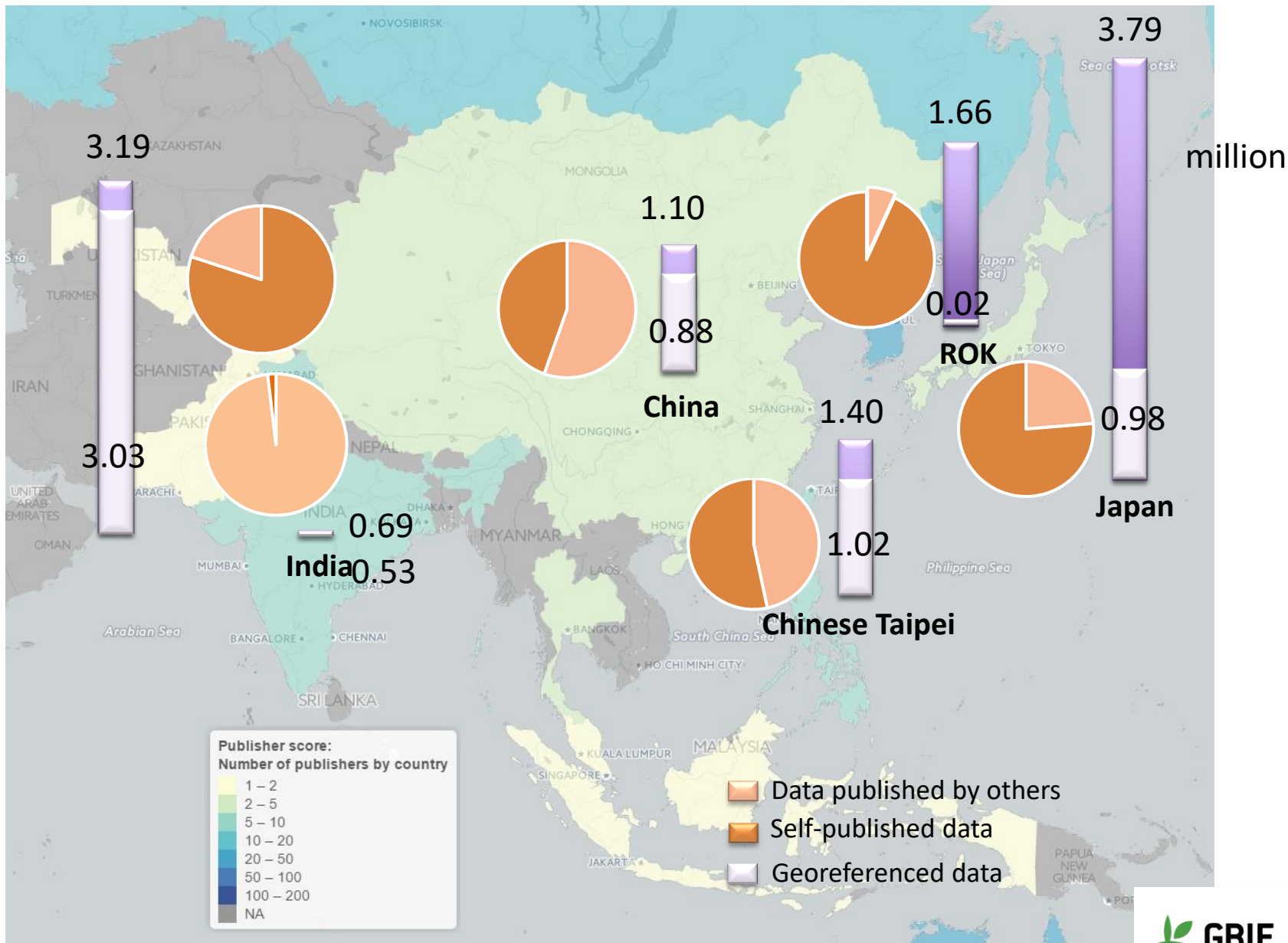


> Data availability in Viet Nam

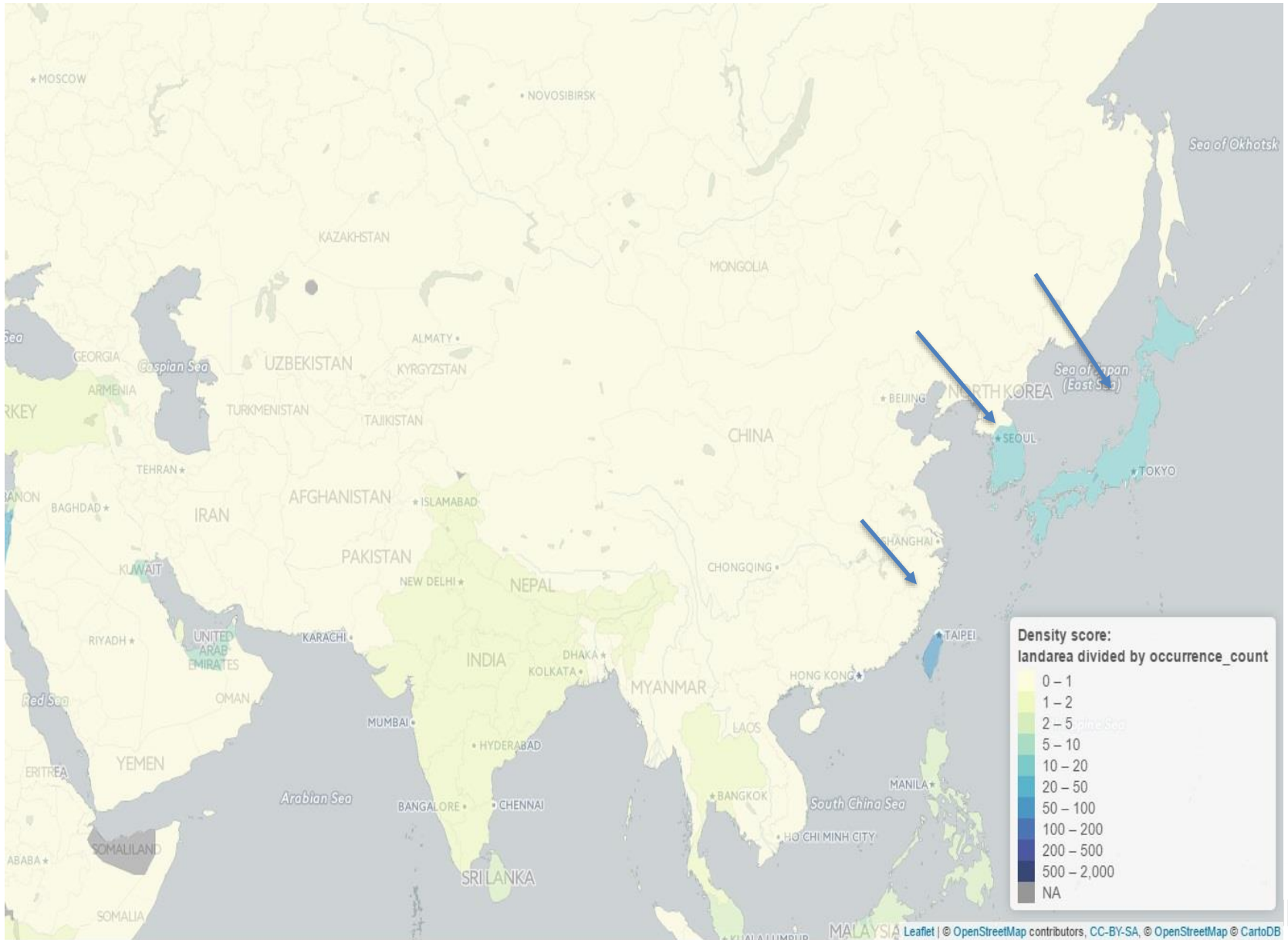


• DATA MOBILIZATION FROM ASIA

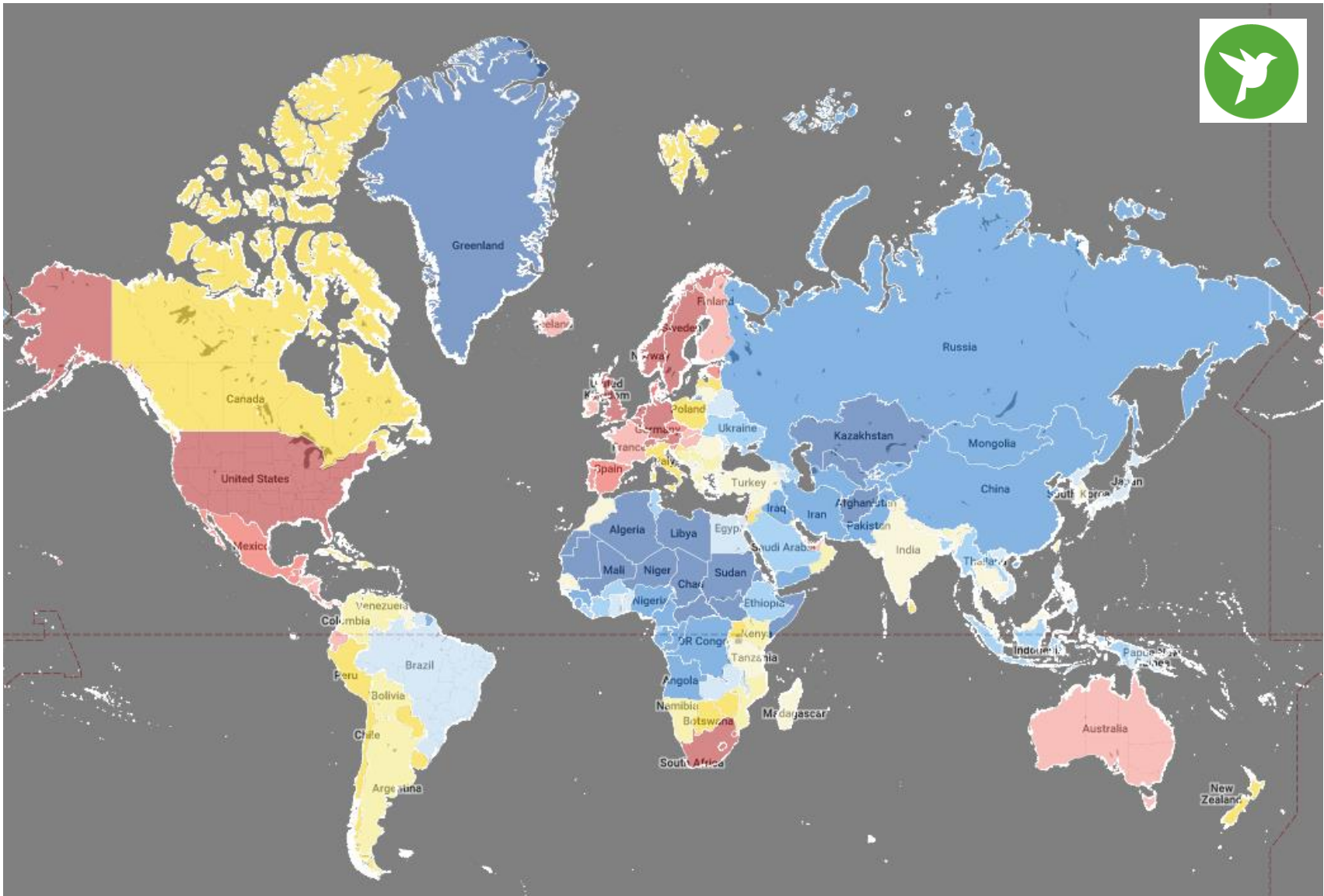
Top 10 of data available		eBird Observation Dataset: 2.5 million records TOP One contributor: IND		
Japan				
India	USA	GBR	COL	
China	CHN	USA	GBR	
Chinese Taipei	TWN	USA	DEU	
Indonesia	NLD	USA	AUS	
Republic of Korea	KOR	USA	COL	
Philippines	USA	NLD	GBR	
Thailand	USA	GBR	JPN	
Malaysia	USA	NLD	GBR	
Viet Nam	USA	FRA	CAN	



• DATA GAPS IN ASIA

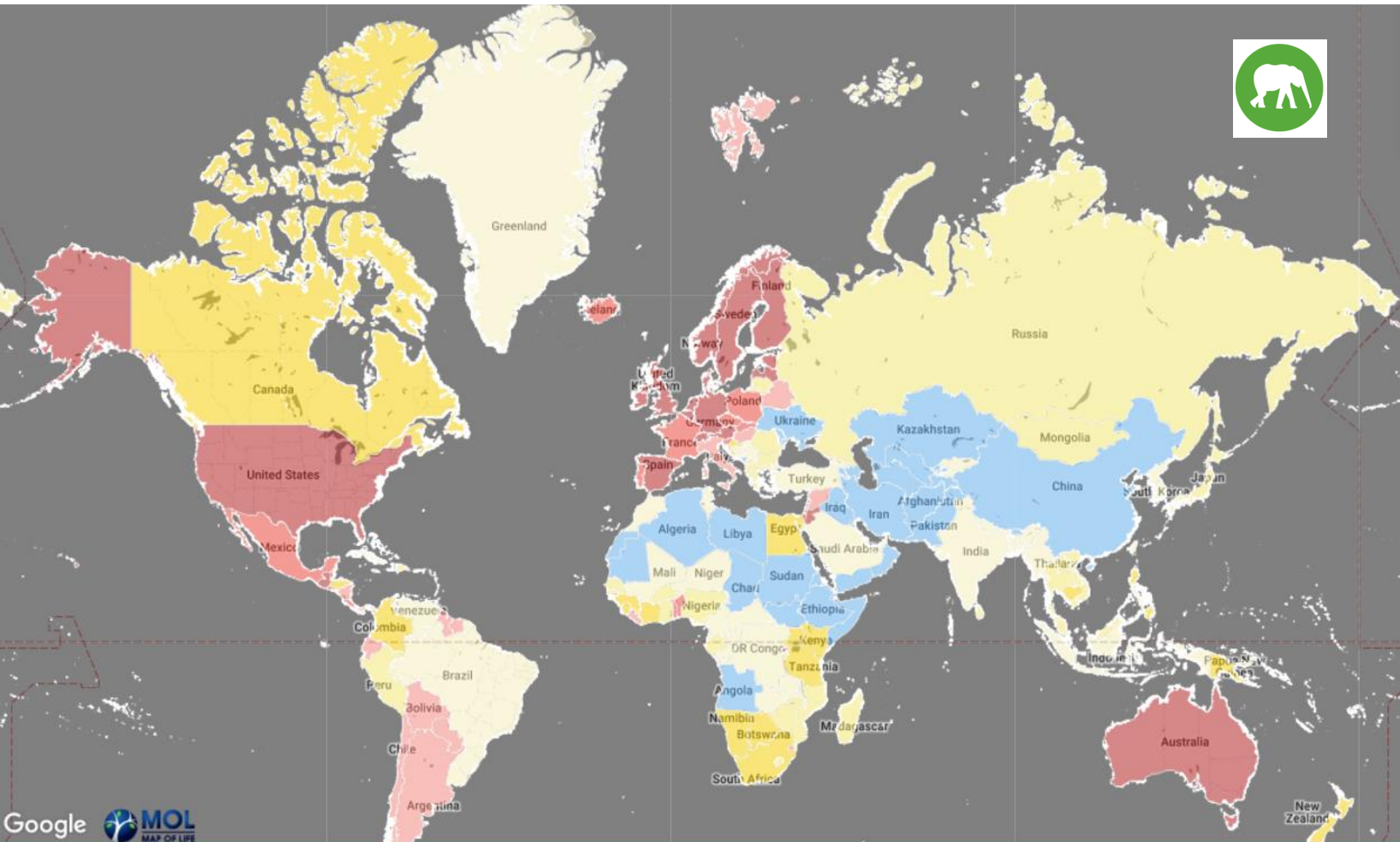


Worldwide data coverage



Data from GBIF, picture available from Map of Life <https://mol.org/indicators/coverage>

Worldwide data coverage



Data from GBIF, picture available from Map of Life <https://mol.org/indicators/coverage>



68,247,402



**Number of
plant specimen
in Herbaria of
Asia**

6,035,877



**Number of
plant specimen
occurrence
records in GBIF**

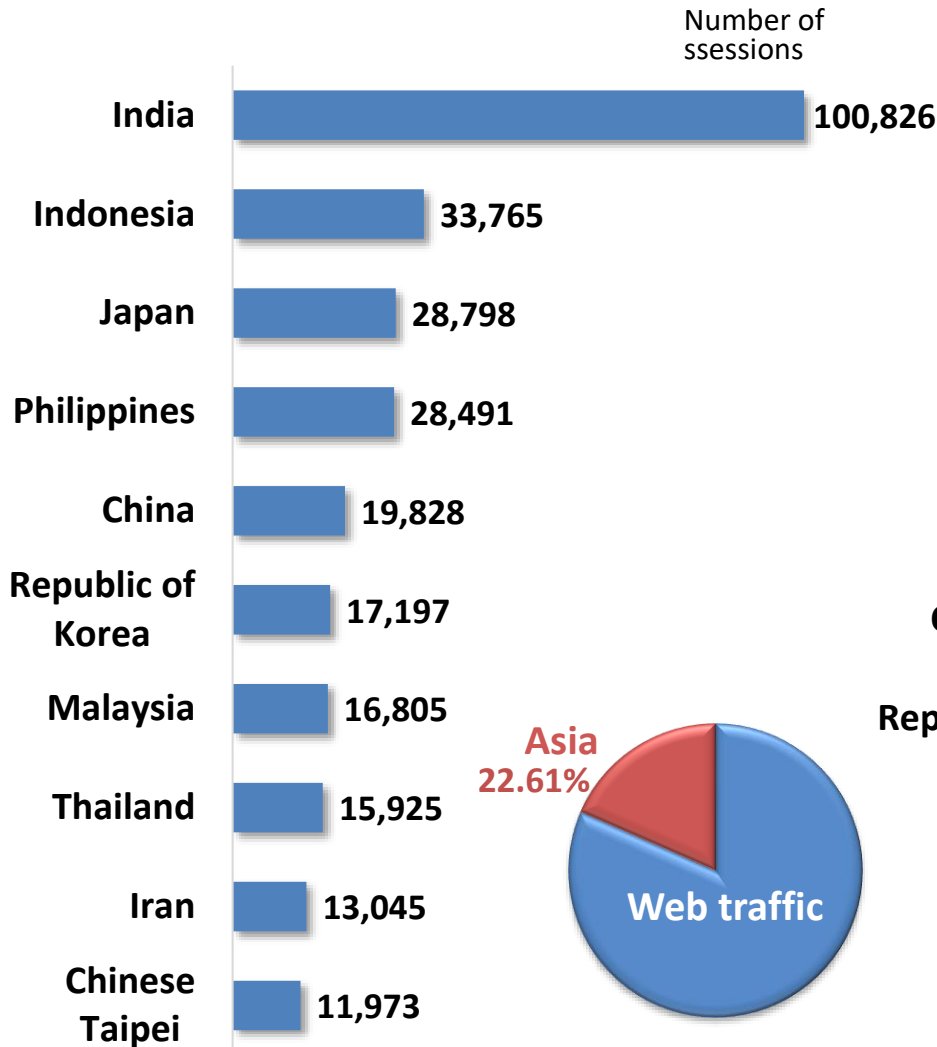
2,428,311



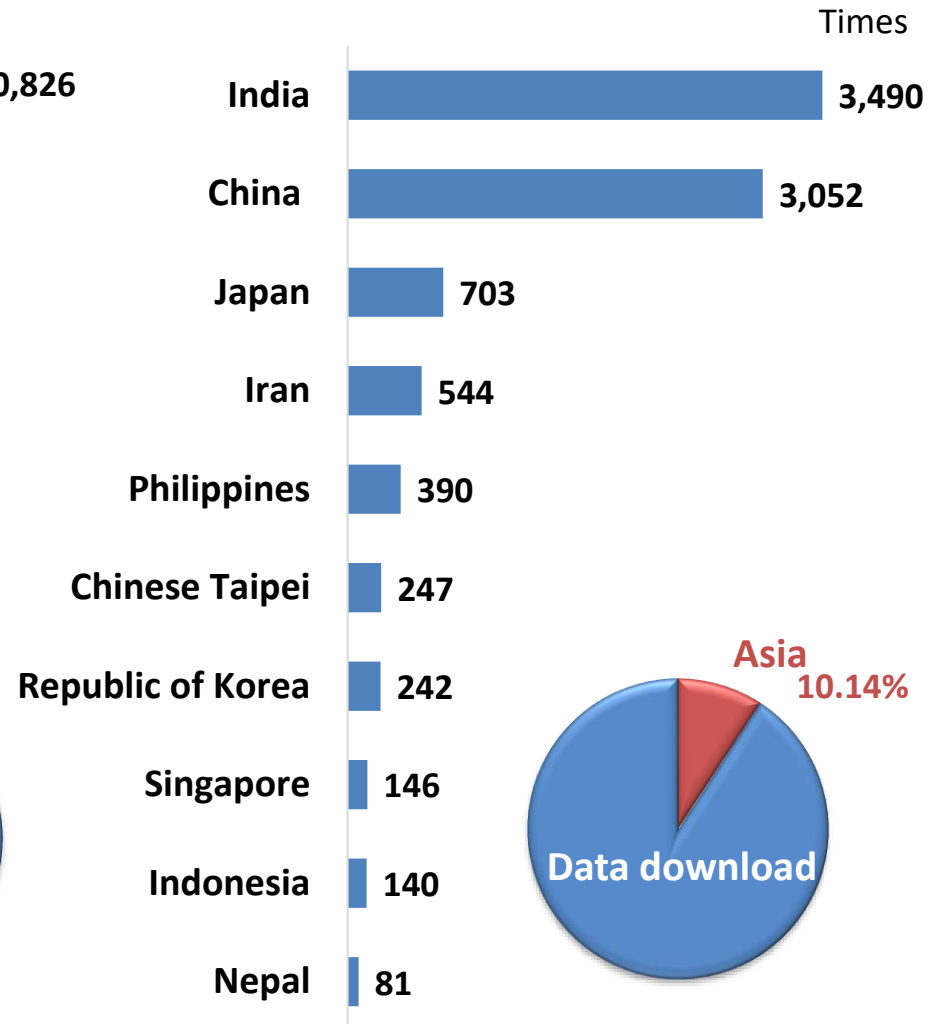
**Number of
georeferenced
plant specimen
records in GBIF**

DATA USE IN ASIA

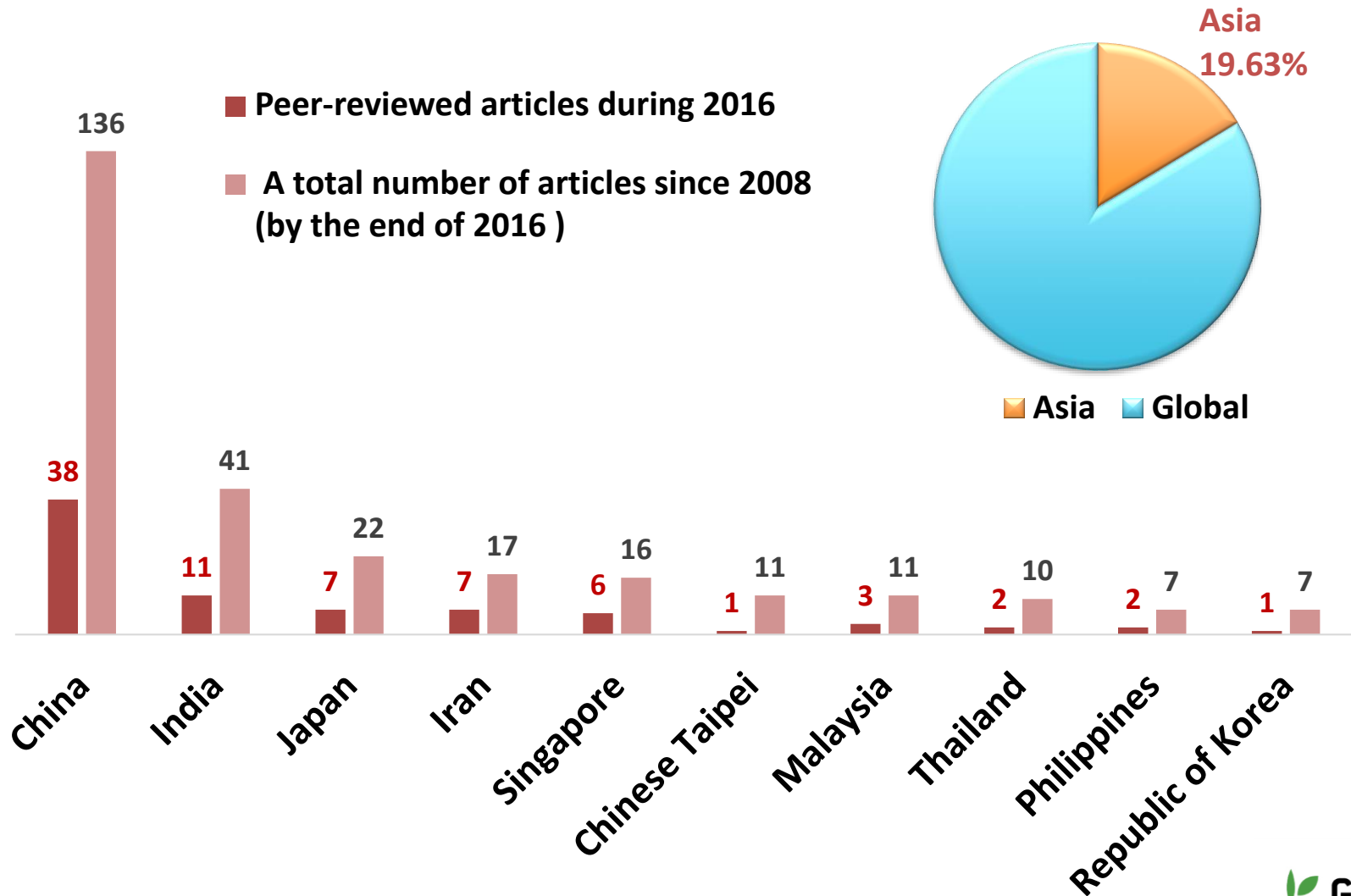
Web traffic from Asia in 2016



Data downloads from Asia in 2016



Number of papers published in Asia that used GBIF data





Understanding the acquaintance level with primary biodiversity data and knowledge about GBIF in Asia

Purpose of Survey

The Global Biodiversity Information Facility (GBIF), an inter governmental organization, facilitates a discovery and publishing mechanism for free and open exchange/sharing of existing biodiversity data, and is the predominant international, publically funded resource for species occurrence data.

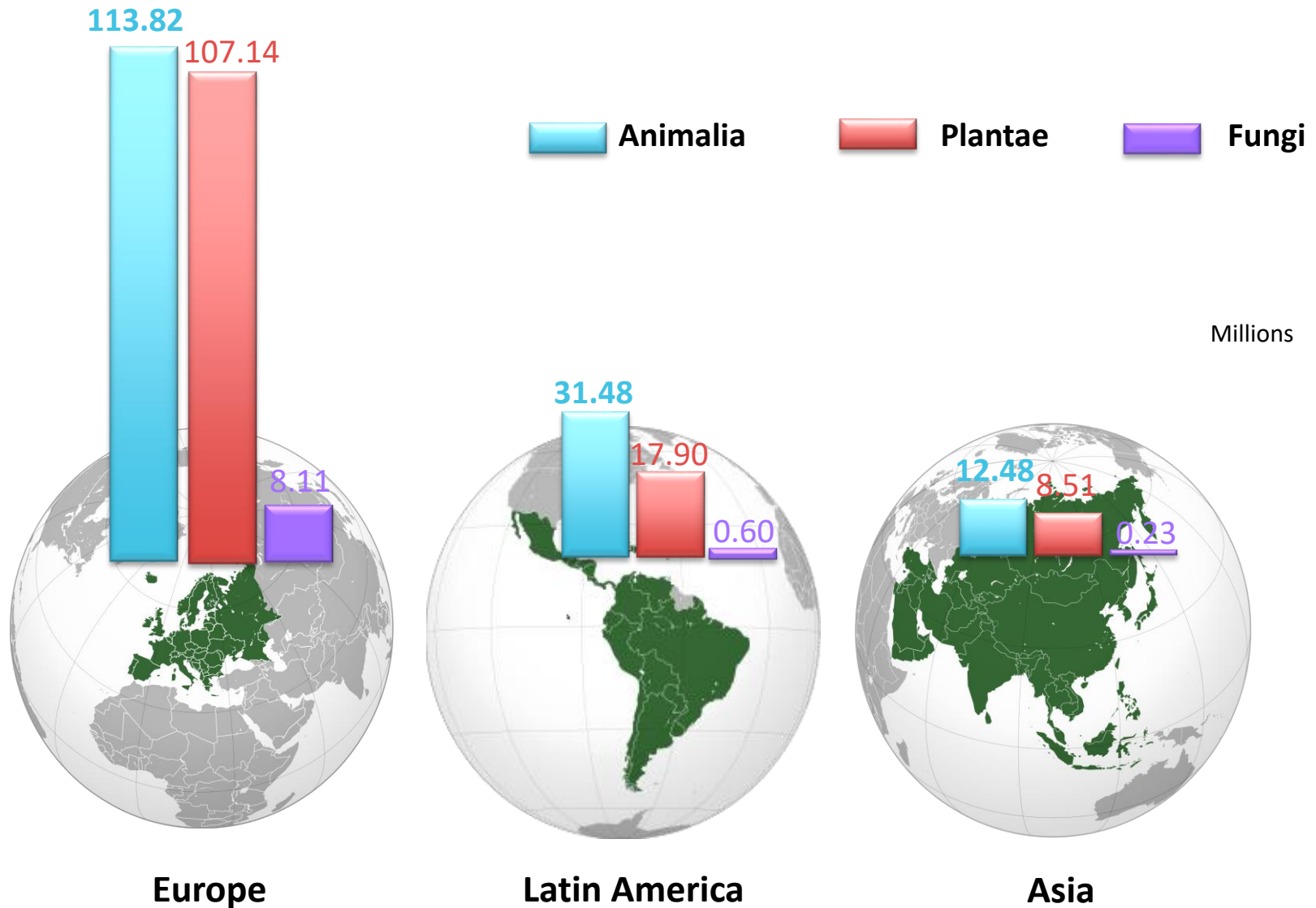
The objective of this survey is to understand the acquaintance level with primary biodiversity data and knowledge about GBIF in a wide biodiversity research and conservation field, as well as the needs across Asia user communities, and to identify the gaps in biodiversity data presently accessible through GBIF (www.gbif.org), and make recommendations on data mobilisation strategies to bridge the gap between data needs and data access. The ultimate goal is to provide guidance to GBIF and its data publishers network, in order to improve fitness for use and utility of GBIF mediated data.

There are 33 questions (some are optional), taking most people under 20 minutes. Obligatory questions are marked with "*". If you have any questions about the survey, please contact with us (mluo@gbif.org).

Usage of biodiversity data

Online survey:
Understanding the
acquaintance level
with primary
biodiversity data
and knowledge
about GBIF in Asia

Compare Asia data with other regions



(Images from Wikipedia)

• THE NEXT...

Fill the data gap

Digitized specimen

Citizen science

Data Fitness for Use

Georeferenced records

Date tagged records

The 2017 Ebbe Nielsen Challenge

Award €14,000 in prizes to developers and hackers who create tools capable of liberating species records from open data repositories for scientific discovery and reuse



Thank you!