

Catalogue of species in Mexico

National Biodiversity Information System

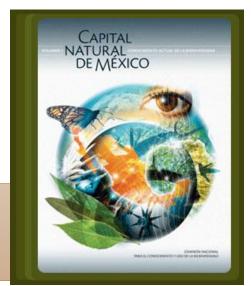
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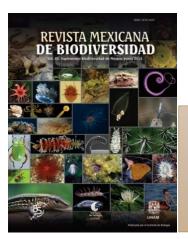
GTI Forum 2020December, 2020
Online meeting

How many species are there in Mexico?

Sarukhán et al., 2009: Mexico has **10 – 12%** of world biodiversity (180,000 - 216,000 species)

Llorente-Bousquets & Ocegueda (2008)
Reported more than **109,000** species
in Mexico





Martínez-Meyer and more than 80 authors reported **94,412** species in Mexico (considering 56 biological groups) 8.6% of world diversity of species

Hernández-Robles et al, 2016 reported **102,847** species in Mexico (excluding algae, cyanobacteria and some invertebrates)





Mission of CONABIO

- ✓ Promote
- ✓ Coordinate
- ✓ Support
- ✓ Carry out activities aimed at increasing the knowledge on Mexico's biological diversity in Mexico, its conservation and sustainable use

Among the main activities of CONABIO is Instrumenting and operating the National System on Biodiversity Information (SNIB)



National System on Biodiversity Information

- Specimen occurrence databases
- Catalogues of species
- Species data

- Satellite images
- Digital cartography
 - -Environmental
 - -Socioeconomic

SNIB

• Statistical, analytical and modeling tools, bioinformatic developments

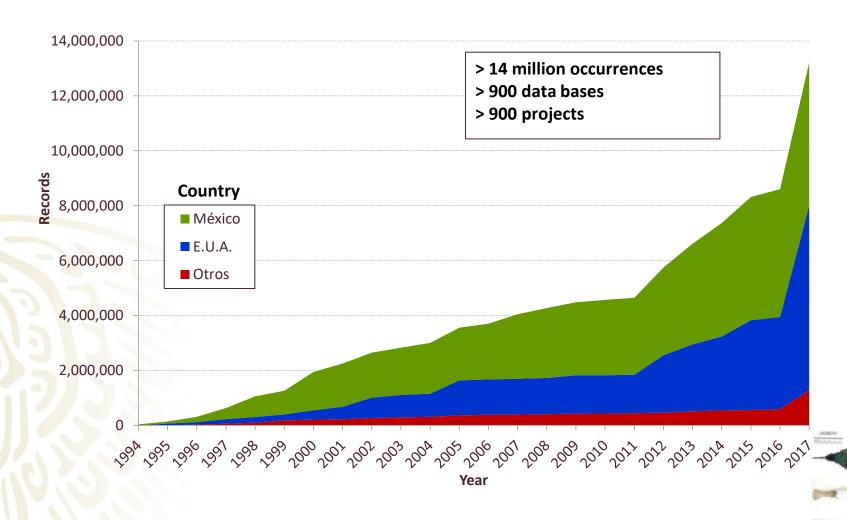
Information from projects supported by CONABIO, data repatriation and experts' collaboration

National and international expert networks

Constantly updated



Trends in SNIB growth



- √ 43% from national collections
 - 48% from US collections
- √ 3% from other countries



Numbers in SNIB



	Occurrences	Valid species	Synonym species
Bacteria and protoctists	297,102	4,703	882
Fungi	141,569	5,607	885
Plants	3,349,434	30,748	14,120
Invertebrates	2,300,803	37,447	4,251
Fishes	37,085	3,505	1,138
Amphibians	216,751	425	303
Reptiles	431,661	986	346
Birds	6,826,747	1,264	272
Mammals	707,286	614	205
Total	14,108,604	85,299	22,402



Catalogue of species

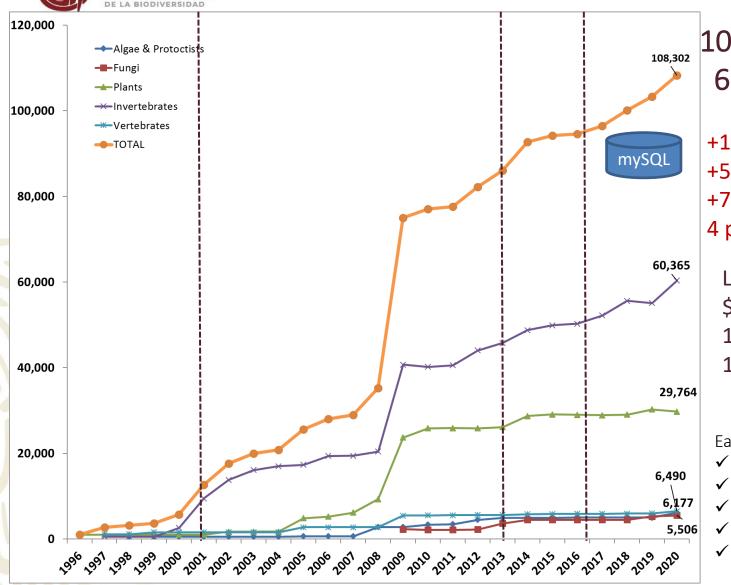
Constitute the most complete and reliable system of taxonomic information of species with distribution in Mexico

- •Include valid names of species and their main synonyms
- Structure based on recognized and widely used systems of classification
- Associate species names with their distribution at national scale (by state or regions)
- •Use them as standards for quality control in nomenclature
- Coordinate and consolidate national, regional and global interoperability of taxonomic and nomenclatural information
- •Strengthen our link with national and foreign taxonomists and promote their active participation



CONABIO COMISIÓN NACIONAL PARA EL CONOCIMIENTO Y USO DE LA BIODIVERSIDAD

Current content of Catalogue



108,302 valid sp 62,813 synonym sp

- +160 taxonomists
- +50 institutions
- +70 projects
- 4 postdoc

Last 8 years: \$420,000 USD 13,748 valid species 10,506 synonym spp.

Each valid species has:

- ✓ Distribution by state
- ✓ Type of distribution
- ✓ Fnvironment
- ✓ Common names
- ✓ Red list categories

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Assessing species in Mexico

"by 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained."

In Mexico the National Red List (NOM-059) was compiled in response to the CBD,. The first list was published in 1994 and it is still the only instrument that has legal standing in the country

In 2001 the Risk Assessment Method (MER) was incorporated to the Norm 059 in order to objectively assess species to be listed.

In 2010 a specific MER for plants was added to the Norm

https://www.biodiversidad.gob.mx/especies/catRiesMexico





System of information on Invasive

species







Annotated checklist of Alien Invasive Species for Mexico:

habitat, risk assessment, uses, common names, pathways of introduction.

Identify mayor risk species for the country
Participate in national and regional iniciatives



2,000 species
>600,000 occurrences
>800 risk assesments
5,000 references
250 maps

>80 projects

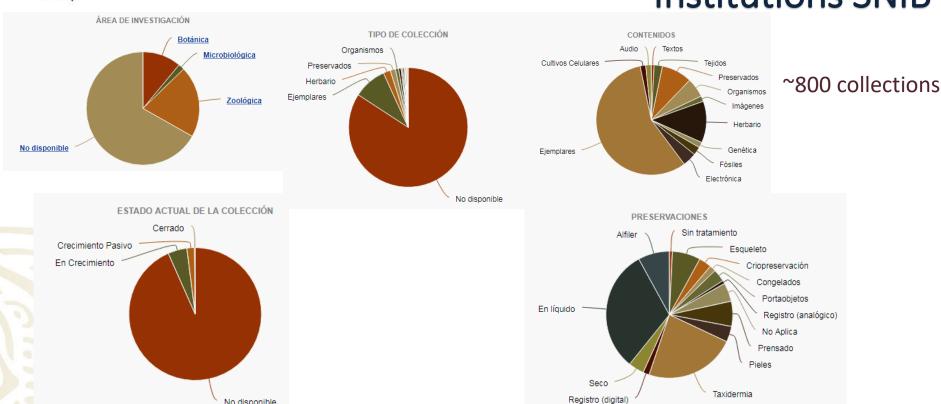
https://www.biodiversidad.gob.mx/especies/Invasoras





No disponible

Catalog of collections and **Institutions SNIB**



https://www.biodiversidad.gob.mx/especies/colecciones/







GRACIAS!

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