

## Mangal, a global ecological interactions database

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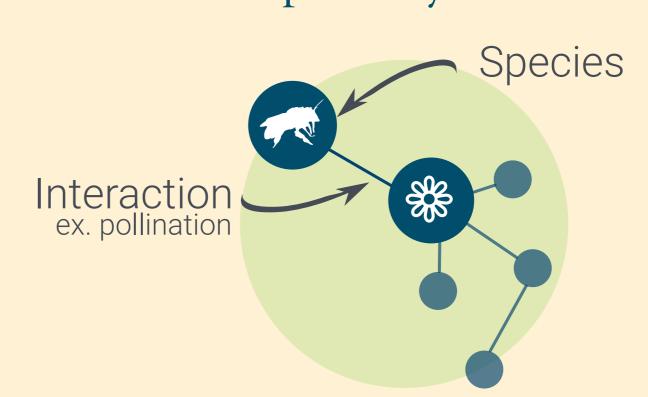
## Contains

over 1 300 ecological networks with 128 000 documented interactions across 172 publications

## 1. How can I use it?

## @Ecological interactions

shape ecosystem functioning



Click

on location

Visit and explore https://mangal.io/#/network

Analyze with R and Julia

Mangal - Ecological interactions database Food web of pelagic communities of small lakes and ponds of the (D) mapbox © Mapbox © OpenStreetMap Improve this map

Number of nodes **Connectance** Ankistrodesmus falcatus Leptodiaptomus minutus

Eucyclops agilis

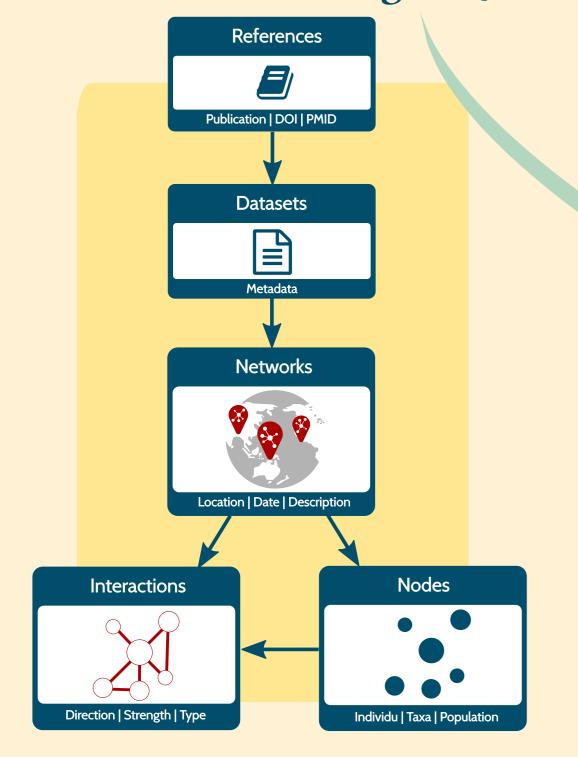
Network metadata

List network interactions

Explore network properties

2. How does it works?

Data stored in PostgreSQL



Data exposed via **RESTFul API** 



**Developer documentation** 

https://mangal.io/doc/api

• others clients

Website https://mangal.io





R> library(rmangal)

R> lagoons ← search\_datasets("lagoon") Found 2 datasets

R> lagoon\_nets ← get\_collection(lagoons)

R> class(lagoon\_nets)

[1] "mgNetworksCollection"

R> lagoon\_nets

A collection of 3 networks

\* Network #86 from dataset #22

\* Description: Dietary matrix of the Huizache-Caimanero lagoon

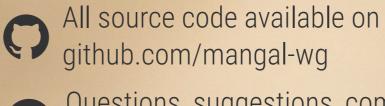
\* Includes 189 edges and 26 nodes

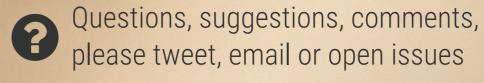
\* Current taxonomic IDs coverage for nodes of this network:

→ ITIS: 81%, BOLD: 81%, EOL: 85%, COL: 81%, GBIF: 0%, NCBI: 85%

\* Published in ref # DOI:10.1016/s0272-7714







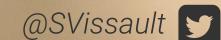






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project