

PARAQUA

ParAquaSeq

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ParAquaSeq Database

What is it?

A database of molecular ribosomal sequences available in NCBI belonging to parasites of microalgae, cyanobacteria, macroalgae and aquatic plants.

What is it for?

This tool allows an easy detection and identification of algal parasites in molecular datasets.

Where is it?

All material produced is available in GitHub

https://github.com/ParAqua-COST/ParAquaSeq_Repository/tree/main





ParAquaSeq Database

What does it contain?

- An R Script developed to download desired sequences from NCBI and their metadata.
- Fasta files in different formats to run different bioinformatic analyses.
- Files containing all metadata collected for each sequence, including the taxonomy of the parasite, the associated host and its taxonomy, parasite strain, location, date and habitat of parasite collection, publication details and sequence information like length, gene, accession number.

Publication

Van den Wyngaert S., Cerbin S., Garzoli L., Grossart HP., Gsell AS., Kraberg A., Lepère C., Neuhauser S., Stupar M., Tarallo A., Cunliffe M., Gachon C., Gavrilović A., Masigol H., Rasconi S., Selmeczy GB., Schmeller DS., Scholz B., Timoneda N., Trbojević I., Wilk-Woźniak E., Reñé A. ParAquaSeq, a database of ecologically annotated rRNA sequences covering zoosporic parasites infecting aquatic primary producers in natural and industrial systems.

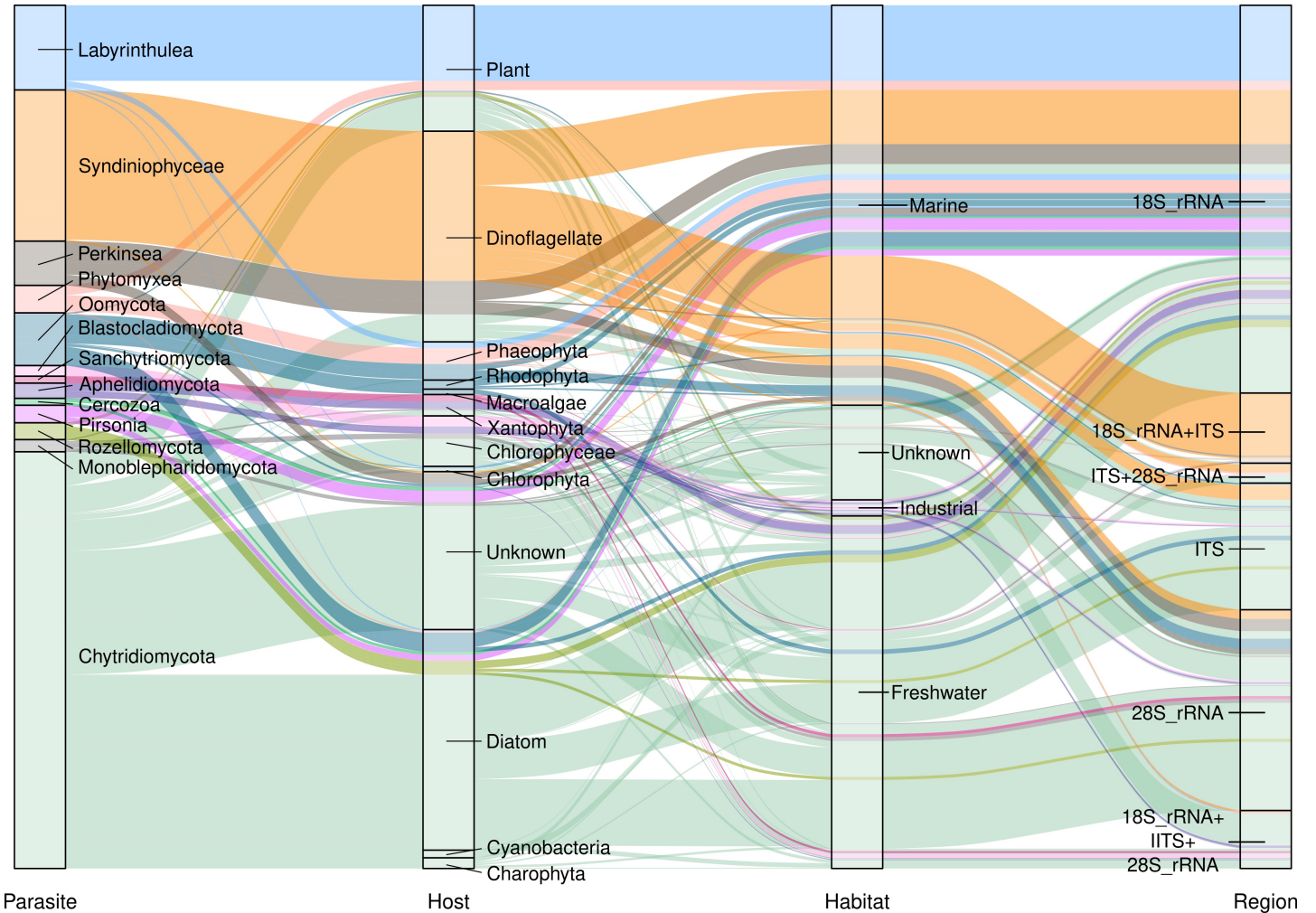


ParAquaSeq Database

What sequences did we collect?

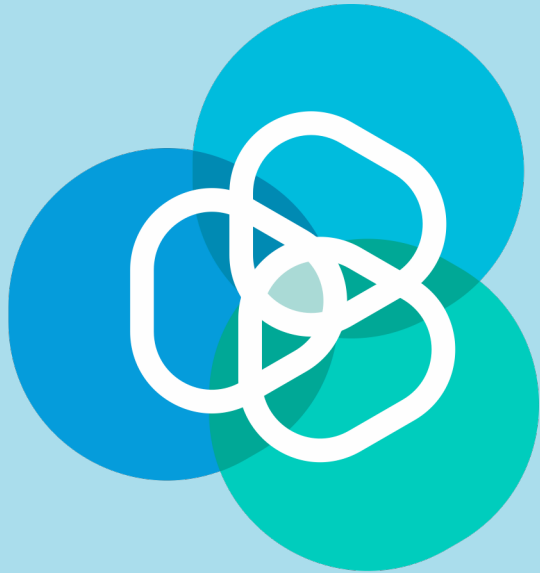
1,131 sequences, including confirmed and putative cases.

The sequences represented 13 taxonomic groups, comprising Chytridiomycota, Monoblepharidomycota, Blastocladiomycota, Sanchytriomycota, Rozellomycota, Aphelidiomycota (Fungi), Syndiniophyceae, Perkinsea (Alveolata), Phytomyxea, the Cercozoa genera Cryothecomonas and Pseudopirsonia (Rhizaria), Oomycota, Labyrinthulomycota, and Pirsonia (Stramenopiles).



CA20125

Applications for zoonotic parasites in aquatic systems



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