



Conference Abstract

Ichthyological diversity in a tropical nature reserve (Etang de Saint-Paul, Réunion Island) from environmental DNA (eDNA) metabarcoding

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Abstract

The aim of this study was to test whether the ichthyological diversity of one natural reserve in Reunion Island (Réserve de l'Etang de Saint-Paul) could be established with a molecular tool, environmental DNA (eDNA). We hence filtrated the water (2L) at 10 different areas around the reserve. For each sampling area, 12 PCR replicas were performed and the identification of fish species was carried out by metabarcoding through a primer over a mitochondrial region (12S). This study showed the importance of reference sequencing databases as well as improvements through phylogenetic analyses. This first fish study by eDNA in La Réunion also revealed the coherence of the distribution of species and their habitat.

See the Poster in Suppl. material 1.

Collection : **1st DNAQUA International Conference** - poster session.

Keywords

Fish, tropical, eDNA, metabarcoding, diversity, protected area

Presenting author

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Author contributions

NN and NJ design the project. NN and NJ made the sampling. Spygen made the DNA extraction, DNA amplification and obitools biofiltration. NN and EC made the genetic analysis. NN, EC, and NJ interpreted the results. NN, EC, and NJ wrote the abstract and poster.

Conflicts of interest

None conflicts of interest.

Supplementary material

Suppl. material 1: Poster - Ichthyological diversity in a tropical nature reserve (Etang de Saint-Paul, Réunion Island) from environmental DNA (eDNA) metabarcoding [doi](#)

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