

## LIMNOLOGY AROUND THE WORLD: FRANCE

## Thirty years admiring beauty through a microscope



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Bi-Eau is a small firm, specialized in Phycology (<a href="https://www.bieau.fr">www.bieau.fr</a>). The founder, Maria Leitao, was a student of the famous French phycologist Pierre Bourrelly at the Muséum National d'Histoire Naturelle, Paris. She created Bi-Eau in 1988, when she moved to a small French town (Angers) where there was no micro-algological research. She started alone, but soon she was joined by young people, creating a small team of 3-4 persons.

Starting without any customers, Bi-Eau has progressively worked with many entities, from water companies, to state environmental agencies to universities. Aiming to keep abreast of the rapidly changing phycological taxonomy and knowledge, the team has participated through the years and all over the world in congresses, workshops and informal meetings, regarding taxonomy as well as ecology. This effort has allowed Bi-Eau to create a scientific network that provides a high level of expertise in algology, and acts as a scientific guarantee of its work (Fig 1). Through the years, Bi-Eau has also hosted many students from universities across Europe doing their thesis work regarding algae. Our studies mainly concern France and French territories, but sometimes we also work on other freshwaters (Belgium, England, Italy, Spain...). More than analysing samples, Bi-Eau also tries to offer additional considerations about the limnological situation of the studied site, therefore optimizing its analytical work with the added value of ecological interpretations.

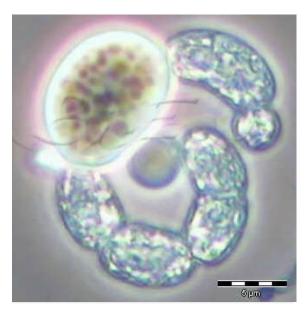
In some particular cases, new situations or interesting phenomenon arise that warrant publishing the results (with customer agreement), and to share these experiences with other limnologists and readers of scientific journals such as Hydrobiologia, Journal of Plankton Research, Freshwater Biology, Ecological Indicators, Phycological Studies, PloSone... For example, Bi-Eau was the first to document the presence of the cyanobacterium Cylindrospermopsis in France. Thanks to this work, always done in collaboration



Fig. 1 Preparing a phytoplankton sample.

with international experts, the staff of Bi-Eau constantly improve their general knowledge (and make a lot of good friends!).

In a world that is progressively using more genetic tools and biochemical methods, Bi-Eau still believes that recognizing a whole organism or observing a natural population through a microscope, remains an ecological advantage and a personal privilege. Therefore, for more than 30 years, Bi-Eau has worked seriously, with passion, hoping that these small/micro observations, will lead to a better understanding of the world



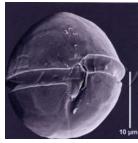








Fig. 2 Some photographs: a) Anabaenopsis elenkenii; clockwise Durinskia balticum, Christmas cookies, Epithemia adnata, Stephanodiscus.

## **Publications**

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