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## **A bloom of *Prorocentrum triestinum* in the Hossegor Marine Lake (France)**

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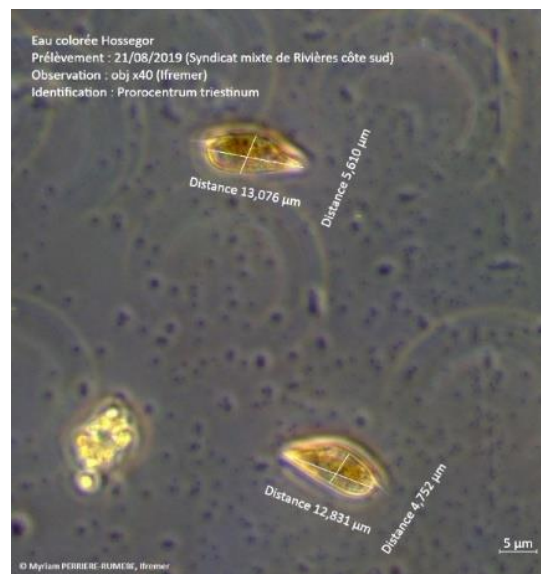
Phytoplankton communities in the Hossegor marine lake (Southern French Atlantic coast, Fig. 1) are monthly monitored since 1997, both for health (REPHY network: detection of toxic species which may contaminate cultivated oysters) and environmental (WFD network) purposes.



**Figure 1** : Study area - Hossegor marine lake

This shallow, eutrophic marine lake (subject to opportunistic green algae blooms) is fed by a narrow canal that receives waters from ocean and two small rivers. Water temperature and salinity range respectively between 10 and 25 ° C and between 20 and 35. In this lake, phytoplanktonic communities are usually dominated by marine species (*i.e. Leptocylindrus minimus, Dactyliosolen fragilisimus, Cylindrotheca closterium*) whilst blooms of freshwater species (Cyanobacteria: *Planktothrix agardhii*) may occur during high river discharge periods.

In August 2019, following the observation of a brown coloured water phenomenon, water samples were taken and their analysis revealed high abundances (about 6 million cells per liter) of *Prorocentrum triestinum* (class *Dinophyceae*, order *Prorocentrales*, Fig. 2). This was the first observation of this species in this site. Its presence has been quite sporadic due to the high tide-induced renewal of waters within the lake.



**Figure 2:** *Prorocentrum triestinum* (fixed with neutral Lugol's solution, optical microscope) in a lake water sample during August 2019.