

## **Multiannual Trends of Toxic and Potentially Toxic Microalgae (*Ostreopsis cf. ovata*, *Prorocentrum lima*, and *Coolia monotis*) in Sfax Coasts (North of Gabes Gulf, Tunisia)**

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**Abstract :** During the last decades, microalgae communities have presented significant changes in their structure and taxa composition along the Mediterranean littoral shallow waters. The main purpose of this work was to evaluate possible changes, over a 17-year scale (1997-2013), in the diversity and abundance of three toxic and potentially toxic microalgae related to changes in environmental parameters on Sfax coasts, a pole of shellfish production in Tunisia. In this 17-year span, a chronological series of data showed that a clear disparity from one year to another was observed in the abundance of studied species. The distribution of these species has been subjected to a seasonal cycle. The studied microalgae, especially *Prorocentrum lima*, seem to have significant relationships with many physicochemical and meteorological parameters.

**Keywords :** long-term monitoring HABs, physico-chemical parameters, meteorological parameters, *Prorocentrum lima*, *Ostreopsis cf. ovata*, *Coolia monotis*

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