



## **The occurrence of potentially harmful algal blooms (HAB's) in the Gulf of Oman in relation to environmental changes.**

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The diversity of harmful algal blooms (HABs) and their impacts present a significant challenge to those responsible for the management of the coastal waters resources. The abundance and distribution of HAB's in coastal water of Oman is poorly investigated.

The occurrence of potentially HAB's species was examined over a 2-year (2004-2005) period in the coastal water of the Gulf of Oman that has been subject to ecologically significant events which have been related to HAB's. The results of our study reveal a significant presence of more than three species of phytoplankton that have been shown to be toxic in other regions of the world. In addition the abundance of these species appears to have been associated with the changes in environmental conditions for the last 2 years. It may be hypothesized that changes in environmental conditions driven by big scales events such as mesoscale eddies contributed to these biological changes. The significance of these results is discussed within the context of the ecological changes of the coastal water of Oman.