Community composition of phytoplankton and zooplankton in Bardestan creek (Persian Gulf, Dayyer)

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Abstract:

The nutrient concentration, phytoplankton and zooplankton community composition were monitored during March 2014 (winter) and August 2014 (summer) throughout the Bardestan creek and offshore water of creek mouth using fishing boat. 9 stations along the Bardestan creek and 9 stations in offshore water of the creek mouth were selected. The environmental parameters such as temperature, salinity, turbidity and dissolved oxygen were measured at the sampling stations.

The results study showed that Bardestan creek is creek-Flood way and only in the event of floods and later connected with the drainage of the land. Evaluation of nitrate/phosphate ratio in winter and summer seasons shown this ratio is significantly higher in summer. Results revealed no significant difference between winter and summer phytoplankton abundance. Among phytoplankton, *Oscillatoria* sp. was the dominant species. Between zooplankton, Copepods in the energy transfer and zooplankton community composition in Persian Gulf and Bardestan creek played significant role. Among copepods, *Oithona* sp.

was the dominant species in winter and summer seasons (Persian Gulf and Bardestan creek).

Keywords:

phytoplankton, zooplankton, Bardestan creek, Persian Gulf