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## Zooplankton of the low-oxygen waters of Bahia Callao, central Peru - with special reference to the reproductive activity of the copepod *Acartia* nsp

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The near-coastal zone bordering the Humboldt Current System is highly productive and has a high economic value for artisanal fisheries. However, it is under constant threat from low oxygen due to local decomposition processes, high plankton productivity and the already low oxygen content of the upwelling water mass. Zooplankton distribution in the Bahia Callao, a low oxygen bay in Central Peru, was studied during two cruises. Environmental conditions had changed dramatically between cruises: in March oxygen concentrations were lower, especially near the sea floor, while in September oxygen concentrations were higher in the whole water column. Zooplankton abundance and community composition changed drastically. We assume that the Bahia Callao is typical for many bays along the Peruvian coast and represents a novel type of so-called dead zones, with changes of favourable and non-favourable living conditions at high frequency depending on the advection of low oxygen waters.

The reproductive activity of *Acartia* nsp, the dominant copepod in the nearshore zone, was studied from November 2005 to December 2006 at a fixed station with 2 or 3 samplings per month. Oceanographic data (temperature, salinity, oxygen) were collected simultaneously. The effect of environmental conditions on egg production and egg viability is discussed.

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