



Zooplankton community studies

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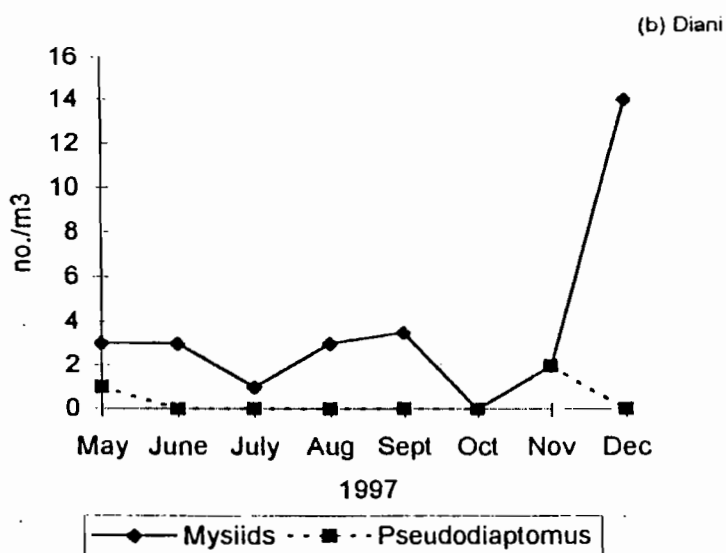
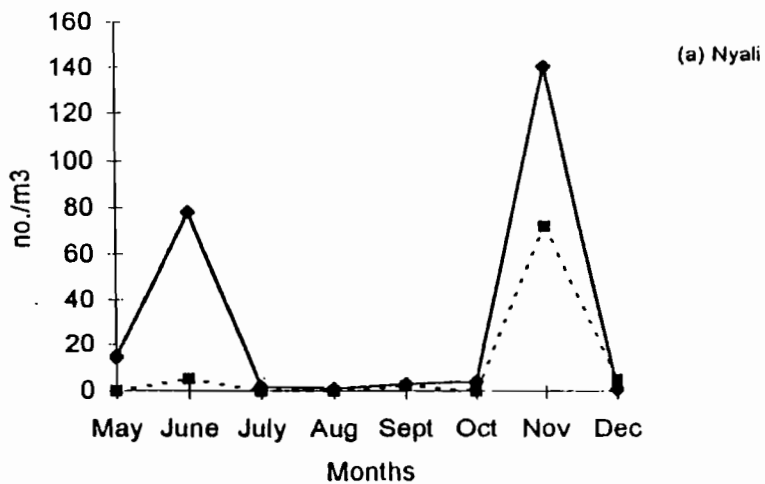
The studies were aimed at investigating the influence of groundwater discharge on the community structure of zooplankton

Results

The effects of groundwater discharge saw the emergence of two species of zooplankton which are associated with fresh water influx. These were Mysids sp and a Calanoid copepod *Pseudodiaptomus* spp. They were used as “indicator species”.

These species were found in greater abundance in areas of Groundwater discharge (i.e the Beach stations as compared to the Middle and Reef stations . They were found in lesser abundance in Diani due to comparatively higher salinities as compared to Nyali. Abundance of these “indicator species” showed two peaks corresponding to the two rainy periods in May – June and the prolonged “El nino” rains in November – December (figure Z1). This may have implied an increase in volume of groundwater discharge in the area.

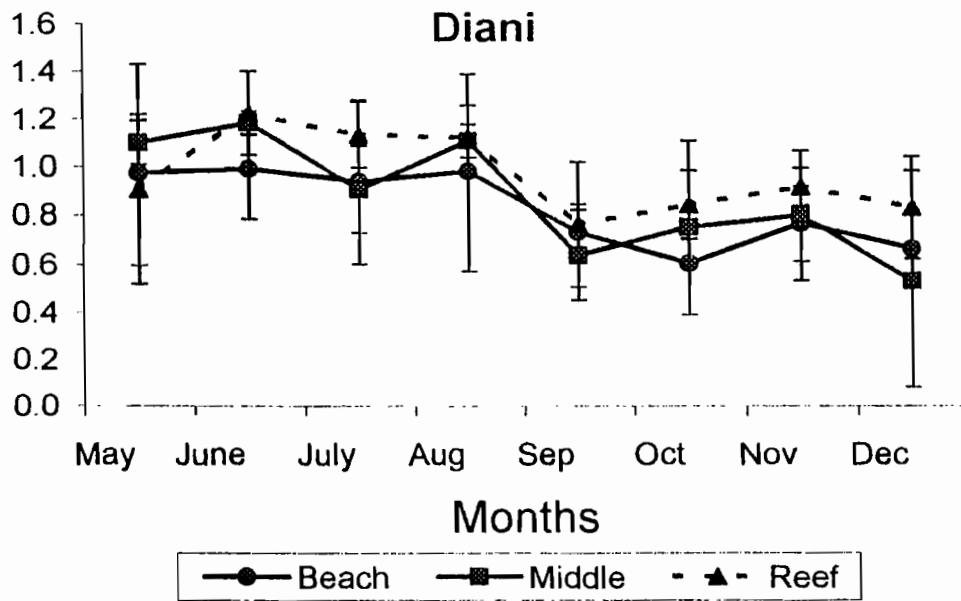
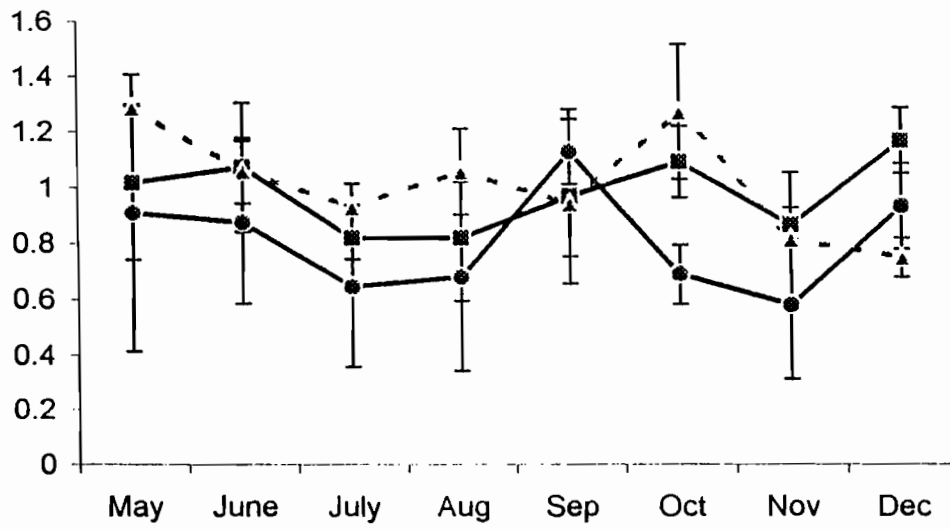
Diversity of zooplankton was generally lower during the wet season with beach stations located nearest to areas of discharge having lower diversities as compared to mid and reef stations located away from the influence in discharge (figure Z2).



Abundance of Mysids and Pseudodiaptomus species in Nyali (fig. a) and Diani (fig. b), May - December 1997.

Figure: Z 1

Nyali



Diversity (H) of zooplankton May - December 1997

Figure: Z 2.