

# "EL NINO" INFLUENCES FISH CAPTURE IN LA PAZ BAY, GULF OF CALIFORNIA: EIGHT YEARS OF MONITORING.

Maldonado-García, M.C.; Vázquez-Hurtado, M.; Lechuga-Devéze, C.H.

Centro de Investigaciones Biológicas del Noroeste.  
 Mar Bermejo No. 195, Col. Playa Palo de Santa Rita Apdo. Postal 128; La Paz, BCS 23090, México.  
[minervam04@cibnor.mx](mailto:minervam04@cibnor.mx), [clechuga@cibnor.mx](mailto:clechuga@cibnor.mx)

From 1998 to 2005, artisanal fish captures were analyzed from records provided by official sources. Monthly surface temperature of La Paz bay was obtained from satellite data. The fishing effort was estimated for 552 fishing boats of 20-foot length in the whole bay and the surrounding Gulf of California. From 1998 to 2000 the small annual variability of temperature showed "El Nino" influence (Fig.1). Starting 2001 this condition disappears and larger temperature variability was evident. During "El Nino" influence captures of Spotted rose snapper (*Lutjanus guttatus*), ocean whitefish (*Caulolatilus princeps*), flathead mullet (*Mugil cephalus*), and the yellow fin mojarra (*Eucinostomus* sp), were lower. After 2001 without "El Nino" influence, the captures of these species increased. The opposite trend was observed for tuna (*Thunnus albacares*), and no influence was evident for Pacific red snapper (*Lutjanus peru*), Leopard grouper (*Mycteroperca* sp.), and Crevalle Jack (*Caranx* sp.). (Fig. 2).

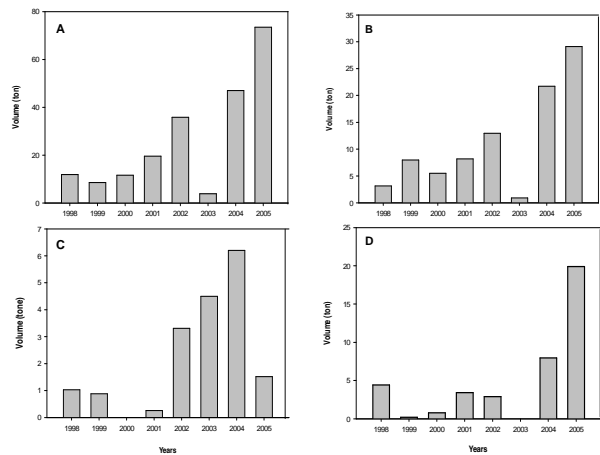


Figure 2. Lower captures during "El Niño". A) Spotted rose snapper *Lutjanus guttatus*. B) The ocean whitefish *Caulolatilus princeps*. C) Flathead mullet *Mugil cephalus* L. D) Yellow fin mojarra *Eucinostomus* sp

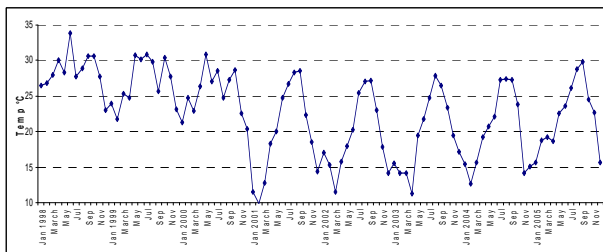


Figure 1. Surface temperature variability showing influence of "El Niño" from 1998 to 2000.