Avendaño Ibarra, R., **R. Funes Rodríguez**, **A.T. Hinojosa Medina**, **R. González Armas** & **G. Aceves Medina** (2004). Seasonal abundance of fish larvae insubtropical lagoon in west coast of the Baja California Peninsula. Estuarine Coastal and Shelf Science, 61: 125-135. DOI: 10.1016/j.ecss.2004.03.017

Seasonal abundance of fish larvae insubtropical lagoon in west coast of the Baja California Peninsula

Raymundo Avendaño Ibarra, René Funes Rodríguez, Alejandro Trinidad Hinojosa Medina, Rogelio González Armas & Gerardo Aceves Medina

High diversity of fish along the west coast of the Baja California Peninsula is a consequence of strong climatic contrasts between the cool California Current and the warm subtropical California Countercurrent. This favors the distribution of biotas of temperate and tropical affinities belonging to the San Diegan and Panamic Provinces. This work analyzes the specific composition and abundance of fish larvae to characterize their assemblage and seasonal changes in Bahía Magdalena, Baja California Sur, during the first 10 months of the 1997-1998 El Niño event. For 46,229 fish larvae, 105 taxa were grouped into 84 genera of 45 families. During the study period, more than a twofold increase in the number of species with respect to other studies represents the largest collection to date. Species composition suggests that at least 40% of the 260 taxa reported as adults had reproductive activity. Two temporally distinct larval fish assemblages were characterized by dominant species with massive spawning, such as Pacific sardine in winter, and mojarras and thread herring in summer. The SST annual cycle, as an indicator of environmental variability, is consistent with the taxonomic change between cool and warm periods.

Palabras clave: Fish larvae, Bahía Magdalena, Community structure, diversity, California Current, assemblages, coastal lagoons