Abstract
Shrimp trawling fishery in the Gulf of California captures a wide variety of non-target species of fish, crustaceans, and mollusks that are relatively unknown. The Pacific flagfin mojarra Eucinostomus currani is a frequently found species in these catches, nevertheless, nothing is currently known about its population dynamics. To contribute to the knowledge on this fish species, we studied the size structure, growth, mortality, and the recruitment pattern during the 2004-2005 seasons. A total of 6 078 mojarra were captured from 350 samples, with minimum and maximum lengths of 4.5cm and a maximum of 21.0cm. The average total length of the four major cohorts was 11.4, 13.7, 15.6 and 18.0cm, corresponding to ages 0.9, 1.2, 1.6 and 2.2 years, respectively, being the most abundant the 1.2 year-old group. The instant growth coefficient indicated moderate growth rates (KS=0.81/year, KE=0.85/year), corresponding to individuals living between 3.5 to 3.7 years. The estimated asymptotic lengths was L¿=21.8cm. In general, the population could be considered healthy: natural mortality (M=1.53/year); total mortality (Z=2.73 /year); condition factor (K=0.01072); fishery mortality (F=1.2/ year) and exploitation rate (E=0.43/year). The maximum reproduction period almost coincided with the closed season for shrimp fishing (March to August), thus we concluded that survival of the species is ensured because reproduction is indirectly protected.

Keywords
Pacific flagfin mojarra, Eucinostomus currani, Gulf of California, shrimp bycath.