عنوان مقاله:

Research Article: Population dynamic of skinnycheek lanternfish Benthosema pterotum (Alcock, ۱۸۹۰) in the Oman Sea

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خلاصه مقاله:

Population dynamics of skinnycheek lanternfish, Benthosema pterotum (Alcock, ۱۸۹۰), were studied in the Oman Sea from January to December ۲۰۱۹. A total of ۲۸۹۳ individuals were sampled from the commercial catch of bottom trawlers in the Oman Sea. The total length (TL) ranged from ۲۱-۶۰ mm and the average length was ۳۹.۴±۴.۶۴ mm. More than ۸۴% of the samples were between ۳۳-۴۵ mm TL. The length-weight relationship was obtained TW=۰.۰۰۰۰۸ TL ۲.۳۸ and showed negative allometric growth. The asymptotic length (Loo) and growth coefficient (K) were estimated at ۶۳ mm and ۱.۶ per year, respectively. In addition, tmax and t₀ were calculated at ۱.۷۳ and -۰.۱۵ year, respectively. The von Bertalanffy growth equation was calculated as Lt=۶۳ (۱ − e -۱.۶(t+۰.۱۵)). The coefficients of total mortality (Z), instantaneous natural mortality (M), and fishing mortality (F) rates were estimated as ۶.۶۵ per year, ۲.۶۲ per year, and ۴.۰۳ per year, respectively. Size at first capture (Lc) was estimated at ۳۵.۶۷ mm (TL). The current rate of exploitation (E) was given as ۰.۶ and therefore, the values of exploitation ratio were reasonable for the current fishing effort.

کلمات کلیدی:

Benthosema pterotum, Growth parameters, Mortality rates, Lanternfish, Oman Sea

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