Age, growth and age structure of amarillo snapper off the coast of Mazatlán, Sinaloa, México

Oscar Enrique García-Contreras, Casimiro Quiñonez Velazquez, Ramón Enrique Morán-Angulo & Maria Candelaria Valdez-Pineda

To estimate age, describe individual growth, and determine the catch age structure of amarillo snapper *Lutjanus argentiventris* off the coast of Mazatlán, Sinaloa, artisanal fishery catches were sampled from December 2002 to November 2003. A total of 483 specimens were sampled that measured between 160 and 660 mm total length (TL) and had a total weight (TW) of between 60 and 4,685 g. The TL–TW relationship (TW = 0.0135TL^3.03) showed isometric growth (slope b = 3.0; t-test: P > 0.05). From growth mark readings in 265 sagittal otoliths, 12 age-groups between ages 1 and 17 were identified, and the predominant ages were 1–3 years. Monthly change in the otolith edge width allowed us to determine that growth marks had an annual periodicity; the formation of each growth mark ended in June, which coincided with the species' main spawning peak. Von Bertalanffy growth equation parameters estimated from age–TL data were 735 mm for asymptotic length (L).