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Age and growth of white croaker (*Genyonemus lineatus*) off Palos Verdes and Dana Point, California

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ABSTRACT

Various studies have been conducted on the effects of contaminants on white croaker (*Genyonemus lineatus*) including reproductive impairment and damage to the liver; however, little information has been compiled about the effects of contaminants on their age and growth rates. This study describes the age and growth of white croaker from a contaminated site (Palos Verdes) and an uncontaminated site (Dana Point). White croaker were collected from both sites using a standard otter trawl from February, 1996, through May, 1998, and sagittal otoliths were analyzed to determine ages. No differences were found in the age and growth of white croaker between the two areas; however, older, larger fish were generally found at the Dana Point site and younger, smaller fish were generally found at the Palos Verdes site. Significant differences were observed in length-weight relationships between the two areas; however, these differences are most likely attributable to age differences for fish collected from each area. Recruitment, proximity to nursery grounds, fishing pressure, and body burdens of contaminants all potentially contribute to the differences in age structures of white croaker populations in the two areas.

Full Text

ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/AnnualReports/1999AnnualReport/14 ar15.pdf