

Model of growth and mortality of otek fish (*Netuma thalassina* (Rüppell, 1837)) in Tarakan waters, North Kalimantan

ABSTRACT

Tarakan is rich in marine biological resources, including otek fish (*Netuma thalassina*), in the Juata waters and Mamburungan waters. Despite its abundance, this species is rarely used for consumption, primarily being processed into salted fish. Therefore, this study aimed to analyze the growth and mortality model of otek fish in Tarakan waters, North Kalimantan. Employing field surveys and quantitative descriptive methods, the investigation was conducted in Juata waters and Mamburungan waters. A sampling of otek fish was performed 12 times over 4 months from April to July 2023, with intervals of 2 weeks, in the sea and Mamburungan waters. Data collection comprised parameters such as sex, length, and weight of otek fish. The results showed that both male and female otek fish exhibited negative allometric growth, predominantly characterized by a thin body shape. While males demonstrated faster maximum length growth, females had swifter growth. The natural mortality value was higher among male fish, but total mortality, catch mortality, and exploitation rate were more pronounced in females. Additionally, mortality and exploitation rates were indicative of optimum exploitation.