BUKTI KORESPONDENSI ARTIKEL JURNAL_SILVER RASBORA

Philippine Journal of Science 150 (6B): 1735-1749, December 2021 ISSN 0031 - 7683 Date Received: 23 Jun 2020

Length-Weight Relationship and Condition Factor of the Silver Rasbora (*Rasbora argyrotaenia*) from Sungai Batang River, South Kalimantan, Indonesia

Ahmadi*

Faculty of Marine and Fisheries, Lambung Mangkurat University Banjarbaru, South Kalimantan, Indonesia

This study describes the growth pattern, condition factor, length at first capture, length at first maturity, and selection factor (SF) of silver rasbora (Rasbora argyrotaenia) in Sungai Batang River, Indonesia. This species is commercially exploited and highly vulnerable to overfishing. The fish samples were purchased periodically once every 2 wk from the gillnet fishermen. A total of 255 specimens consisting of 121 males and 134 females [79.43-85.56 mm total length (TL) and 4.22-5.21 g body weight (W)] were investigated procedurally. Males showed a negative allometric growth (b = 2.71), while females exhibited isometric growth (b = 3.02). Males had TL, W, BD (body depth), and the mean ratio of W/TL that are significantly higher than those of females. The highest catch fell between 80-89 mm TL (39.67-43.28%) and weighted between 4-6 g (57.02-65.67%). The condition factor values of males and females were 0.80 ± 0.23 and 0.82 ± 0.20 , thus indicating that the fish were in good condition. The estimated length at first capture and SF were 80-76 mm TL and 3.99-4.20, thus indicating that the used 0.75-in mesh size of gill net was acceptable for fishing practices. However, empirically, the length at first capture was smaller than the length at first maturity (male = 87.53 mm; female = 84.57 mm), leading to growth overfishing. The output of this study could be useful for baseline information in formulating a sustainable fisheries management strategy since many aspects related to Rasbora fishery have not been fully studied.

Keywords: condition factor, growth pattern, gillnet, Rasbora argyrotaenia, selection factor, Sungai Batang River









































