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Morphometric Relationships of Length-Weight and Length-Length of Oreochromis aureus in Relation to Body Size and Condition Factor from Pakistan

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Abstract : In the present study, eighty-three wild Oreochromis aureus of different body size ranging 5.3-14.6 cm in total length were collected from the River Chenab, District Muzzafer Garh, Pakistan to investigate the parameters of length -weight, length-length relationships and condition factor in relation to size. Each fish was measured and weighed on arrival at laboratory. Log transformed regressions were used to test the allometric growth. Length-weight relationship was found highly significant (r = 0.964; P < 0.01). The values of exponent "b" in Length-weight regression ($W=aL^b$), deviated from 3, showing isometric growth (b = 2.75). Results for LLRs indicated that these are highly correlated (P < 0.001). Condition factor (K) found constant with increasing body weight, however, showed negative influence with increasing total length.

Keywords: lenght-weight, Oreochromis aureus, morphometric study

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