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

Authors : Muhammad Naeem, Amina Zubari, Abdus Salam, Summera Yasmeen, Syed Ali Ayub Bukhari, Abir Ishtiaq **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=aLb), 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 : Oreochromis aureus, weight-length relationship, condition factor, predictive equations

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