

Length-weight relationships of six fishes of economic importance in Ibeshe waterside, Lagos lagoon, Lagos state Nigeria

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Abstract

This study describes the length-weight relationship (LWR) and condition factor (K) of seven (7) fish species of ecological and economic importance found in Ibeshe waterside area of Lagos lagoon, Nigeria. 154 specimens of *Chrysichthys nigrodigitatus*, *Pomadasy jubelini*, *Elops lacerta*, *Cynoglossus senegalensis*, *Polydactylus quadrifilis*, *Gobius schlegelii* and *Sphraena piscatorium* were collected from the local fisher men for a period of two months (September 2012 to October 2012) and their total lengths (TL) and weights (W) recorded. The values of constants a and b were determined from the length and weight data when transformed into the growth equation: $\log W = \log a + b \log TL$. The values of b for the fishes varied from -0.15 to 3.38. The growth pattern of *Chrysichthys nigrodigitatus* was represented by the equation $\log W = 2.24 - 0.15 \log TL$, *Pomadasy jubelini* by $\log W = -2.32 + 3.38 \log TL$, *Elops lacerta* by $\log W = 0.41 + 1.04 \log TL$, *Cynoglossus senegalensis* by $\log W = -1.37 + 2.37 \log TL$, *Polydactylus quadrifilis* by $\log W = -1.25 + 2.33 \log TL$, *Gobius schlegelii* by $\log W = -1.62 + 2.74 \log TL$ and *Sphraena piscatorium* by $\log W = -1.11 + 2.23 \log TL$. These values of " b " shows that most of the fishes collected from the Ibeshe waterside of Lagos lagoon displayed negative allometric growth pattern apart from *Pomadasy jubelini*. The condition factor (K), a reflection of the well being and degree of fatness ranged from 0.56 in *Sphraena piscatorium* to 1.62 in *Pomadasy jubelini* and all these condition factors fall outside the range recommended as suitable for matured fresh water species in the tropics. This might indicate that Ibeshe waterside may be environmentally unfavourable to fishes in the aquatic ecosystem.

Biography

Josef .B. Bolarinwa completed his B.Sc at 22 years of age from University of Ife, Nigeria. He has four Masters degree in Aquaculture & Fisheries, Business/Public Administration from Wageningen Agricultural University, Holland, Rivers State University of Science & Technology, Ladoke Akintola University of Technology, Nigeria. He has 34 years of experience of lecturing. He is currently the Chief Lecturer/Dean of School of Agriculture, Lagos State Polytechnic, Nigeria. He has published 5 textbooks, 22 papers in reputed journals, 87 technical papers. He is the Fisheries Consultant to Ekiti and Ondo State governments of Nigeria.