Title: Age and Growth Dynamics of 'Bar Fish)*Pseudotolithus elongatus* (Bowdich, 1982), (Pieces: Scienidae) from the Atlantic Coast of Cameroon

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ABSTRACTS

Age and growth dynamics of *Pseudotolithus elongatus* (Bowdich, 1825) was carried out along the Cameroon Coastline. The main objective of the study was to determine the age and growth of *P. elongatus* so as to provide information that will ensure its sustainability and proper management thus making it constantly available to both the fishermen and consumers. From September 2016 to June 2017 a total of 469 (245 males and 224 females) samples of *P. elongatus* were procured from artisanal fishermen and middlemen from Down beach, Limbe which was the collection point for this study. The specimens ranged from 17.4 cm to 38 cm total length and 38 g to 554 g weight. Age and growth determination was by means of length frequency distribution method, multi-model inference, scales and otoliths methods. Predictive modelling was also made on the data obtained using polynomial fit representation. The mean condition factor (K-values) for males and females were 1.680±0.401 and 1.548±1.714 respectively greater than 1 indicating that both were in good condition. The highest K value was observed in October for both males and females while the least K value was observed in March for the males and in November for the females. The Length frequency method of age and growth estimation indicated five age groups whose peaks were represented at 18.0 cm, 24.0 cm, 27.0 cm, 32.0 cm and 37.0 cm TL for group 0, I, II, III and IV respectively. The length-weight relationship showed positive correlation implying that as the length increases so does the weight and the regression coefficient 'b' revealed that *P. elongatus* exhibits allometric growth pattern (2.8273 and 2.988 for males and females, respectively). Growth rings on the otoliths and scales were irregular hence could not be used to estimate the age of the fish. The average age at first sexual maturity was 1.05 years and that age fell in group I. The Von Bertalanffy growth model and the predictive polynomial model best fit the data and indicated fast growth rate at its early ages. *P. elongatus* from the Atlantic Coast of Cameroon has a fast growth rate but it is being over exploited hence measures such as regulation of mesh sizes and closed seasons will go a long way to ensure its sustainability.



Biography

Manla Isabella has completed her Masters at the age of 28 years from the Faculty of Agriculture and Veterinary Medicine, University of Buea. She has a BSc in Agricultural Economics and an MSc in Fisheries and Animal Production.She was a research assistant at IRAD Ekona. She is an upcoming powerful researcher though not hving any published work yet. She has four articles that will be published soon. Coming from a developing country (Cameroon), she is a promising researcher who is willing to contribute to the research sector in her country.

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