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ECOLOGICAL AND POPULATION DYNAMIC STUDIES ON SOME CRAB SPECIES IN BARDAWIL LAGOON, EGYPT

By

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List of Abbreviations

· A	Annual mortality rate.
· a	Constant.
· Al.	Allometric level.
· a.m.	Ante Meridiem = "before midday".
· AW.	Abdomen width.
· b	Constant of CL-CW and CW-TBW relationship.
· b	Number of crab stomachs with food.
· B'/R	Relative biomass per recruit.
· BF	Batch fecundity.
· BSC	Blue swimmer crab.
· CI	Confidence interval.
· CL	Carapace length.
· cm	Centimeter.
· CO₂	Carbon dioxide.
· CPUE	Catch per unit effort.
· CW	Carapace width.
· CW_∞	Asymptotic carapace width.
· CW_c	Carapace width at first capture.
· CW_c/CW_∞	Mean length at first capture/asymptotic length.
· CW_{max}	Maximum carapace width.
· CW_r	Carapace width at recruitment.
· CW_t	Carapace width at age (t).
· CW_{t+1}	Carapace width at age (t+1).
· d.f.	Degree of freedom.
· DO	Dissolved oxygen.
· °C	Degree Celsius.
· E	Exploitation rate.
· E_{opt.}	Optimal value of E.
· E_{max.}	Exploitation rate giving max relative yield per recruit.
· E_{0.1}	Exploitation rate at which the marginal increase in relative yield per recruit was 1/10 th its value at E=0.
· E_{0.5}	Exploitation rate which will result in a reduction of the unexploited biomass by 50%.
· EBW	Egg batch weight.
· ELEFAN I	Electronic length frequency analysis.
· F	Fishing mortality coefficient.
· FiSAT II	FAO-ICLARM Stock Assessment Tool II
· f.s.	Femtosecond = 10 ⁻¹⁵ of a second.
· %F	Frequency of occurrence.
· g.	Gram.

· GAFRD	General Authority for Fish Resources Development.
· GSI	Gonadosomatic index.
· HI	Hanna instrument.
· hp.	Horsepower.
· K	Condition factor.
· K	Growth coefficient.
· Km	Kilometer.
· Km²	Square kilometer.
· Kn	Relative condition factor.
· L	Cut off length.
· Ĺ	Mean carapace width.
· LCD	Liquid crystal display.
· LWR	Length weight relationship.
· M	Natural mortality coefficient.
· M₅₀	Size at which 50% of females reach sexual maturity.
· M/K	Ratio of natural mortality to growth rate.
· m	Meter.
· mg l⁻¹	Milligram per liter.
· mm	Millimeter.
· MPA	Model Progression Analysis.
· N	Total number of crabs in sample.
· n	Average number of eggs in a sample.
· Ø	Phi prime "growth performance index in length".
· Ø	Phi "growth performance index in weight".
· P	Probability.
· pH	Power of Hydrogen (Hydrogen ion concentration).
· p.m.	Post Meridiem = "after midday".
· R²	Coefficient of determination.
· r	Correlation coefficient.
· S	Survival rate.
· SE	Standard error.
· S1	Stage 1.
· SL	Starting length.
· SS	Starting sample.
· T	Temperature.
· t	Age in year.
· t_c	Age at first capture.
· t_{max}	Maximum age.
· t_o	Age at which length is nil.
· t_r	Age at recruitment.

· TBW	Total body weight.
· TBŴ	Calculated weight.
· TDS	Total dissolved solids.
· VBGF	Von Bertalanffy Growth Function.
· w	Average weight of samples.
· W̄	Mean weight.
· W_∞	Asymptotic weight.
· W_t	Weight at age (t).
· WHO	World Health organization.
· Ȳ/R	Relative yield per recruit.
· Z	Instantaneous mortality rate.
· Z/K	Ratio of total mortality to growth rate.
· ≈	Approximately.
· χ²	Chi square test.
· ‰	Part per thousand.

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