

**STUDY OF LENGTH WEIGHT RELATIONSHIP AND RELATIVE
CONDITION FACTOR OF A FRESH WATER FISH *NOEMACHEILUS
DENISONII* (DAY) FROM RIVER MANDAL IN GARHWAL HIMALAYA,
INDIA.**

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ABSTRACT

The paper deals with the study of length weight relationship and analysis of Relative condition factor of a hillstream loach *Noemacheilus denisonii* (Day). During the period of investigation, 149 specimens were collected for this study out of which 66 were male and 83 were females. Summer season was adjudged as the best for growth of this loach.

Key words: Length-weight relationship, Relative condition factor, *Noemacheilus denisonii*, Mandal River.

REFERENCE

- Abdollah, M.(2002). Length-weight relationship of fishes caught by trawl off Alexandria, Egypt. *Naga ICLARMQ.* 25 : 19-20.
- Abowei, J.F.N. (2010). The condition factor, length-weight relationship and abundance of *Ilisha africana* from Nkoro river, Niger Delta, Nigeria. *Adv., J. Fd. Sci. Tec.*, 2:6-11.
- Ali, M., Salam, A. and Iqbal, F. (2000). Weight-length and condition factor relationship of wild *Channa punctata* from Multan. *Punjab Univ. J. Zool.*,15: 183-189.
- Angelescu, V., Gneri, V. and Nani, A . (1958). La merluza del mar argentino (biologia e taxonomia). *Secr. Mar. Serv. Hidrog. Nav. Publico*, H1004: 1-224.
- Ayoade, A.A. and Ikulala, A.O.O. (2007): Length-Weight relationship, Condition factor and stomach content of *Hemichromis bimaculatus*, *Sarotherodon melanotheron* and *Chromidotilapia guentheri* (Perciformes: Cichlidae) in Eleiyele Lake, Southwestern Nigeria. *International Journal of Tropical Biology* 55 (3-4): 969-977.
- Bahuguna, P., Kumar, R., Verma, R. and Bhatia, D.K., Verma, R., Joshi,H.K., Balodi, V.P. and Kotnala, C.B. (2010).Body Mass-Length Relationship and Relative condition factor of a fresh water sucker head Gadale, *Garra lamta* (Ham.-Buch.) from Kumaun hills, Uttarakhand, India. *The Ecologia.* Vol. 10 (1-2): 41-48.
- Bahuguna, P., Shah, K.K. and Kumar, R. (2009). Observation on the length - weight relationship and relative condition factor of *Barilius Bendelisis* (Ham.) inhabiting a spring fed tributary of river Alaknanda (Garhwal Himalaya), India. *J. Natcon.* 21(2): 215-220.

- Begenal, T.B. and Tesch, A.T.(1978). Conditions and Growth Patterns in fresh water Habitats. Blackwell Scientific Publications, Oxford,pp.:75-89.
- Braga, F.M.S. (1986). Estudo entre o fator de condicao e relação peso/comprimento para alguns peixes marinhos. *Rev. Brasil. Biol.*, 46(2): 339-346.
- Chatterji, A., Siddique, A. Q. and Khan, M. A.(1977). Length-weight relationship of a carp, *Labeo bata* (Ham.). *Proc. Indian Acad. Sci. (Sec. B)*, 86: 189-194.
- Laleye, P.A. (2006). Length-Weight and Length-Length relationship of fishes from the Queme River in Benin (West Africa). *Journal of Applied Ichthyology* 22:330-333.
- Le Cren, E. D. (1951): The length-weight relationships and seasonal cycle in gonad weight and condition in the perch (*Perca fluviatilis*). *J. Anim. Ecol.* 20: 201–219.
- Lowe-McConnell, R.H. (1987). *Ecological studies in tropical fish communities*. Cambridge University Press, London, pp: 159-173.
- Mahmood, K., Ayub, Z., Moazzam, M. and Siddiqui, G.(2012). Length-weight relationship and condition factor in *Ilisha melastoma* (Clupeiformes: Pristigasteridae) Off Pakistan. *Pak.J. Zool.* Vol. 44(1):71-77.
- Mizuno, N. and Furtado, J. I. (1982). Ecological notes on fishes. In: Tasek Bera. *The Ecology of a freshwater swamp*. Furtado, J.I., and Mori, S. (eds.). Monographiae Biologicae, no. 47. The Hague: Dr W. Junk, pp: 321-354.
- Mortuza, M.G. and Mokarrama, T. (2000). Length-weight relationship and condition factor of mud loach *Botia lohachata* (Chaudhuri) (Cypriniformes: Cobitidae). *Univ. J. Zool. Rajshahi Univ.* 19: 113-114.
- Narejo, N.T., Rahmatullah, S.M. and Rashid, M. M. (2002). Length-weight relationship and relative condition factor (Kn) of *Monopterus cuchia* (Hamilton). *Indian J. Fish.*, 49: 329-333.
- Pervin, M.R. and Mortuza, M. G. (2008). Notes on length-weight relationship and condition factor of freshwater fish, *Labeo boga* (Hamilton) (Cypriniformes: Cyprinidae). *Univ. j. zool.Rajshahi Univ.*, 27: 97-98.
- Quddus, M. M. A. (1993). Observation on some aspects of biology of *Gudusia chapra* (Hamilton-Buchanan, 1822) in a lake. *Bangladesh J. Sci. Res.*, 11: 83-88.
- Thomas, J., Venu, S. and Kurup, B.M. (2003). Length- weight relationship of some deep-sea fish inhabiting the continental slope beyond 250m depth along the West Coast of India. *NAGA, WorldFish Center Quaterly*, 26(2): 17-21.