

Histopathological Changes in the Intestine of *Aetomylaeusnichoffii* (Bloch & Schnaider, 1801) with Special Reference to Helminthic Infection

Vasant Dongare

Department of Zoology

Sundarrao More College of Arts, Commerce and Science, Poladpur-Raigad, Maharashtra, India

Abstract: Studies of histopathological changes on gastrointestinal tract of infected cestode parasite of *Gymnorhynchus* in the intestines of fish *Aetomylaeusnichoffii* (Bloch & Schnaider, 1801) from At Shriwardhan, Dist. Raigad (M.S.) India, Dist. This parasite caused significant histological changes in the fish intestine, such as weakened villi, villi shortening, inflammation, hyperplasia, normal structural degradation, intestinal lumen widening, and an increase in the number of mucous cells. Damage occurs to both the mucosal and submucosal layers in case of severe infection. There was also obvious compression and absence of intestinal villi. The present paper deals with the histopathological changes showed the intestine of marine water fish *Aetomylaeusnichoffii* infected with cestode Parasite *Gymnorhynchus*

Keywords: Marine Fish, *Aetomylaeusnichoffii*, Infected Intestine, Cestode Parasite

REFERENCES

- [1]. Chincholikar, L. N. & Shinde, G. B. (1977a): A new species of cestode *Gymnorhynchus cybiumi* (*Gymnorhynchidae* Dollfus, 1935) from a marine fish at Ratngiri, India. *Rivista di parasitologia*. XXXVIII (2/3): 161- 164.
- [2]. Cuvier, G. (1817): *Le Regne animal distribute d'Apres son organization*. 4 Vols Paris Fairweather, J. Peptides., (1997): An emerging force in host response to parasitism, in pathogens: effects on host hormones and behavior. *Beckage N.e.9ED0*, Chapman & Hall, New York, 113-139.
- [3]. Hoste H. (2001): Adaptive physiological processes in the host during gastrointestinal parasitism. *International Journal for Parasitology*, 31, 231-244.
- [4]. Houtert, M. F. J. and Van Sykes, A. R. (1996): Implications of nutrition for the ability of ruminants to withstand gastrointestinal nematode infections. *International Journal for Parasitology*, 26, 1151-1168.
- [5]. Hiscox, J. I. and Brocksen, R. W. (1973): Effects of a parasitic gut nematode on consumption and growth in juvenile Rainbow trout (*Salmo gairdneri*). *Journal of the Fisheries Research Board of Canada*, 30: 443-450.
- [6]. Linton, E. (1924): Notes on cestode parasites of sharks and rays. *Proceeding of the United States National Museum* 64: 1-114.
- [7]. Palmer, J. M. & Greenwood – van Meerveld, B. (2001): Integrative immunomodulation of gastrointestinal function during enteric parasitism. *Journal of Parasitology*, 87, 483-504.
- [8]. Pramanik and Manna (2007): New species *Gymnorhynchus barsains*. *National journal of life science* pp 15-18
- [9]. Robinson, E. S. (1959): Some new cestode from New Zealand marine fishes. *Transactions of the Royal Society of New Zealand* 86:381-392.
- [10]. Southwell, T. (1929): A monograph of cestodes of the order Trypanorhyncha from Ceylon and India pt. I. *Ceylon J. sci.* 15, pt. III 169-312.
- [11]. Yamaguti, (1952): Studies on the Helminth fauna of Japan part 49 cestodes of fishes II *Acta medicine*. Okayama, 8 (1): 1-76.
- [12]. Yamaguti, S. (1959): *Systema Helminthum* Vol. II. The cestode of vertebrates.
- [13]. *Interscience publ.* New York & London: 1-860.

- [14]. Yamaguti, S. (1960): Studies on the helminth fauna of Japan, part 56, cestode of Fishes III. Publ.Seto Mar. Biol. Lab. 8(1):41-50.
- [15]. Yamaguti, S. (1934): Studies on the Helminth fauna of Japan part 49 Cestode of fishes.Japan, J. Zool. 6: 1-112.