

PROTEIN CONTENTS OF TREMATODE, *ORIENTOCREADIUM BATRACHOIDES*⁹ AND ITS HOST *CHANNA GACHUA****DHANRAJ BALBHIM BHURE AND SANJAY SHAMRAO NANWARE**

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Received : 02.09.16; **Accepted** : 30.10.16**ABSTRACT**

Present study deals with protein content in *Orientocreadium batrachoides*¹ and its host tissue i.e. normal and infected intestinal tissue of *Channa gachua*. The result obtained an amount of protein present in *Orientocreadium batrachoides*¹ is lower (2.42 mg/g wet weight) as compared to protein present in infected intestine (3.33 mg/g wet weight) as well as in host normal intestine of *Channa gachua* (4.24 mg/g wet weight).

Figure : 01

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Table : 01

KEY WORDS : *Channa gachua*, *Orientocreadium batrachoides*¹, Protein content.**Introduction**

Fish is healthy component of the diet; it is an excellent source of protein and is low in saturated fats. Proteins serve a physiological system in many ways with their ubiquitous nature. They build up new tissue and maintain the structure of every cell/ tissue including its content of protein-containing enzyme systems.

Material and Methods

Trematode parasite viz. *Orientocreadium batrachoides*⁹ were collected from intestine of *Channa gachua* from Nanded. Protein content was determined⁷.

Results

The result obtained an amount of protein content in present study indicates that the amount of proteins present in *Orientocreadium batrachoides*⁹ is lower as compared to protein present in infected intestinal tissue and in normal intestinal tissue of host *Channa gachua*. This is summarized (Table-1).

Discussion

Proteins are the most abundant organic molecules in cells. Main significance of proteins is their role in structural make up of the body rather than in the yield of the energy. The result obtained an amount of protein content in the present study indicates that the amount of proteins present in trematode parasites is lower as compared to protein present in infected intestine as well as in host normal and infected intestine.

Similar result was also reported⁶ as an amount of protein present in *Davainea shindei* is 13.20 mg/g wt. of tissue where as in host intestine is 15.42 mg/g of tissue. Workers⁴ studied amount of proteins present in nematode parasites is lower (15.88 mg/g) as compared to protein present in infected intestine (19.33 mg/g) as well as in host normal intestine (19.77 mg/g). Proteins present in Cestode, *Cotugnia* sp. parasites is lower (5.77mg/g) as compared to protein present in infected intestine (6.66 mg/g) and in host normal intestine⁸ (16.22 mg/g). Amount of proteins present

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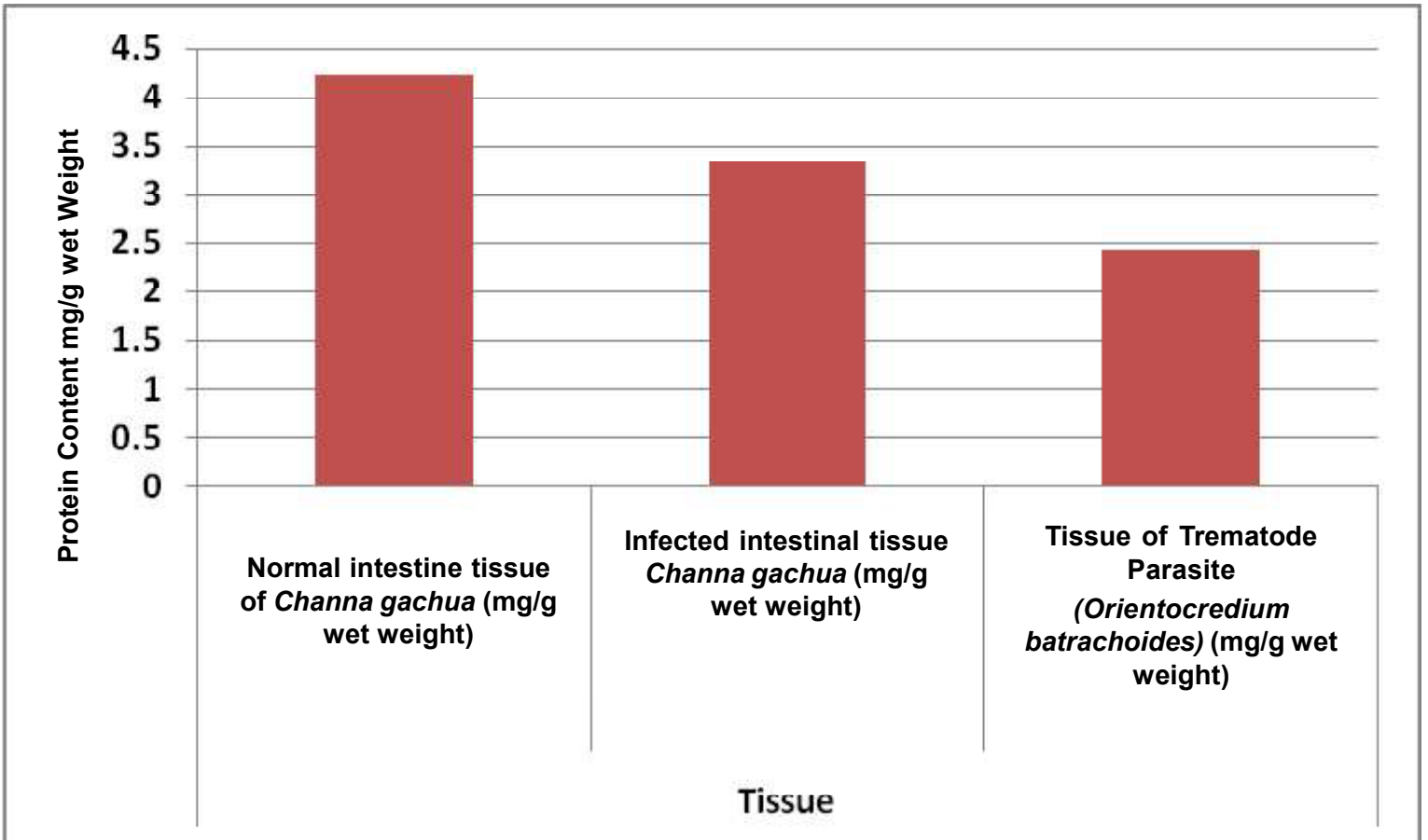


Fig. 1: Graph showing protein content in Normal host intestinal tissue, Infected Intestinal tissue and their parasite.

PROTEIN CONTENTS OF TREMATODE, ORIENTOCREADIUM BATRACHOIDES⁹ AND ITS HOST *CHANNA GACHUA*³⁰¹

TABLE- 1 : Comparative chart of protein content in Normal host intestinal tissue, Infected Intestinal tissue and their parasite.

| Protein contents | | |
|---|---|---|
| Normal intestine tissue of <i>Channa gachua</i> (mg/g wet weight) | Infected intestinal tissue <i>Channa gachua</i> (mg/g wet weight) | Tissue of Trematode Parasite (<i>Orientocreadium batrachoides</i> ¹) (mg/g wet weight) |
| 4.24 | 3.33 | 2.42 |

in *Moniezia expansa* is lower (2.72 mg/g wet weight) than protein present in infected intestine (3.63 mg/g wet weight) and in host normal intestine of *Capra hircus* (4.09 mg/g wet weight) were reported^{2,3}, determined amount of proteins present in *Gangesia sp.* (2.0 mg/g) is lower as compared to protein present in infected intestine (2.44 mg/g) as well as in normal intestine (3.66 mg/g) of host *Wallago attu* determined protein contents is high in normal intestinal tissue of *M. armatus* as compare

to infected intestinal tissue and their concern Cestode parasites⁴. Recently Parasitologists⁵ reported high protein content in normal intestinal tissue of *W.attu* is (29.28 mg/100 g) as compared to infected intestinal tissue 28.02 mg/100 g and in *Camallanus jadhavii* is 24.80 mg/100 g.

The present study concluded that, the amount of protein is low in *Orientocreadium batrachoides*⁹ than infected intestine and normal intestine of host.

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