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TOTAL PROTEIN CONTENT OF *ASCARDIA GALLI* FROM ITS HOST *GALLUS DOMESTICUS*

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ABSTRACT
Proteins are the primary substance of high molecular weight and are synthesized during growth and in general constitute the structural and functional enzyme of living matter. Each tissue of each species of animal synthesized their specific proteins thus contributing of millions of different proteins in nature. The total proteins of male and female worms of *Ascaridia galli* from naturally infected native chicken are not available. Therefore researchers have made an attempt to estimate the total proteins content in male and female worms of *Ascaridia galli*.

KEY WORDS: *Ascaridia galli*, *Gallus gallus domesticus*, total protein content.

INTRODUCTION

In helminthes were the biological potentiality of proteins is very high, female produce large number of eggs. Protein plays a significant role in the construction of egg-shell, supplying nutritive material and the formation of subsequent larval bodies. This necessitates that the parasites body should be provided enough of protein. Nematode parasites inhabit almost all parts of the body; Nematodes have a very free access for the uptake and absorption of the protein. The present study has made an attempt to investigate the content of total protein this study helps to some extent in understanding the protein requirement and their metabolism of *Ascaridia galli* and its sex based metabolic difference.

MATERIALS AND METHODS

The nematodes were collected from intestine of *Gallus domesticus*. They were fixed in hot 70% alcohol and preserved in fresh 70% alcohol containing 10% glycerine. The total proteins were determined by the Biuret Method.

RESULTS

The results are shown in Table 1 and Figure 1. The total protein content of male and female worms of *A. galli* are shown in the table. The values suggest that its contents in male and female are 19.81% and 24.78 % respectively. The female worm contain about 20.0% of more protein as its evident from the male to female ratio is 0.799%.

Table 1. Total protein content in (mg%) in male and female worms of *Ascaridia galli*

Sex	Content	Male to Female Ratio	Percentage Difference
Male	19.81		
Female	24.78	0.799	20.0

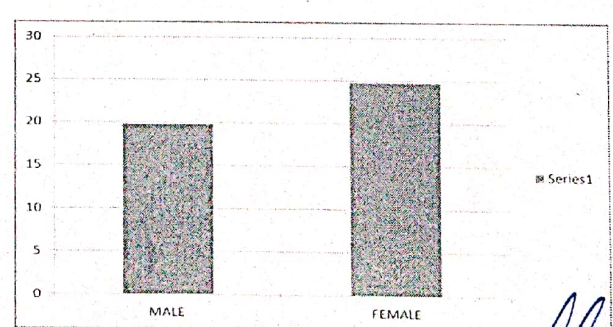


Figure 1. Total protein content in (mg%) in male and female worms of *Ascaridia galli*

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DISCUSSION

The result on the various parameters of protein metabolism in the present study are in accordance with the observation of Von Brand, 1973 who state that the parasites have a powerful protein synthesizing machinery. The protein synthesis could also be form of other sources of keto acid (Daugherty, 1955). The protein sources in these worms they seem to be provided with necessary protein content in the bodies as is obvious by the content of total proteins and different fractions. The total protein content in female worms of the present study is an agreement with the result of other worm like Tanqua (Bhonsle, 1980). The female worm has a dual metabolic role.

The higher protein content in female which includes core of all structural components. Later on Bhure *et.al.*, (2012), studies on protein profile of *Ascardia galli* concluded that the amount of protein is low in nematode parasites infected intestine and normal intestine of its host.

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