

## HELMINTH PARASITES OF SHEEP AND GOATS FROM MARATHWADA REGION

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**ABSTRACT :** In most sheep and goat raising areas, internal helminth parasites are usually the primary disease affecting sheep and goats with their lambs and cubs, these animals are very susceptible to internal helminth parasites rather than other types of farm livestock. Their small fecal pellets disperse easily thus releasing the different worms larvae on the respective patterns of sheep and goats, where these grazing very close to the soil substance and to their faces. As we know they are slow to acquire to immunity. Mean while it takes to 9-11 months to most lambs and cubs to develop their immunity to parasites. Sheep and goats even suffer a loss of immunity during lambing and cubing which does not compensate itself until 25-30<sup>th</sup> days after their lambing and cubing, so as to percept the causes of infection and their diseases of various helminth form have been noticed specially in *Capra hircus* (L.) and *Ovis bharal* (L.) from Aurangabad region however some of these even infect to human beings the common prevalence of cestode parasites such as *Moniezia benedini*, *Moniezia capari*, *Stilesia globipunctata*, *Stilesia govindae*, *Avitellina nagabhushamii*, *Avitellina goughi*, *Aliezia aurangabadensis*, *Aliezia indica*, Trematodes *Fasciola hepatica*, *Cotylophoron cotylophorum*, *Paramphistomum bothriophoron*, Nematode *Oesophagostomum columbianum*, *Oesophagostomum asperum*, *Bunostomum trigenocephalum*.

**Key words :** Sheep, Goats, Gastro-intestinal tract, Helminth parasites.

### INTRODUCTION

Apart from bacteria and viruses there is not another sources to disperse disease and like morbidity, suffering, deterioration highly economic loss as well as remarkable death in concern to the health and our wealth of the domestic animals instead helminth found. As we know host-parasite relationship reveals their existence according to the climate, seasonal fluctuation and optimum sources. Living and non-living factors which brings drastic influence upon the population of hosts and parasites. The Aurangabad city which already considered as a faster growing city in India due to the several reason such as education, industrialization, employment sources, historical background where visitors visits which indirectly leading to the dense population of the region, as its faster growing city where different socialism to came in existence. Even though thousands of peoples who living under the poverty. These poor find their economical sources from various domestic animals such as *Capra hircus* and *Ovis bharal* as being a high commercial value but unawareness causes of diseases throughout these domestic animals and human beings. So as to understand the core sources of infection in order to eradicate an existence of roundworms, tapeworms and flukes for the control and prevention of disease caused by them. An essential to know the identification of helminth parasites so as to reduce impact factor and degradation.

### MATERIAL AND METHODS

The domestic sheep and goats were examined for observation of intestinal helminth such as *Capra hircus* (L.) and *Ovis bharal* from various slaughter houses. The intestine were brought to laboratory and exposed. The collected parasites were preserved by using standard methods. With the help of Yamaguti's keys (1959, 1961, 1971) the identification has been made.

### RESULTS AND DISCUSSION

The occurrence of helminth parasites were emerged in their respective harbor (host) at various scale from Aurangabad region. Collection consist of varied helminth Cestodes *Moniezia benedini* (Moneiz, 1879; Skrjibib *et al.* Schulz, 1937), *Moniezia capari* (Pokale *et al.*, 2004), *Moniezia capari* (Pokale *et al.*, 2004), *Stilesia govindae* (Padwal and Jadhav, 2006), *Avitellina nagabhushamii*, *Avitellina goughi* (Woodland, 1927) and *Aliezia aurangabadensis* (Shinde *et al.*, 1979), *Aliezia indica* (Shinde, 1969), Trematodes *Fasciola hepatica* (Krull, 1933), *Cotylophoron cotylophorum* (Fischoeder, 1901 and Goldberger, 1910) (Fischoeder, 1901), *Paramphistomum bothriophoron* (Braun, 1892) and Nematodes *Oesophagostomum columbianum* (Curtice, 1890), *Oesophagostomum asperum* (Ralliet *et al.* Henry, 1913), *Bunostomum trigenocephalum* (Rudolphi, 1808). These and many more which affect the parts of ecosystem. As animals are very important from ecological and economical point of view, man uses many animals as a delicious and nutritious food. Similarly animals also produce several important products like meat,



leather, milk etc. They are not only providing immense and valuable products for the human beings but also enhance the beauty of the nature. Out of these three nematode parasites viz. *Oesophagostomum columbianum* (Curtice, 1890), *Oesophagostomum asperum* (Railliet *et* Henry, 1913) are generally known as nodular worms of sheep and goats, which occur in the colon and nearby regions. In case of *Oesophagostomum columbianum* (Curtice, 1890), lambs and even adult sheep have been found to show no resistance to these parasitic infection (Table. 1).

Table. 1 Helminth parasite of domestic sheep and goats.

Host	Helminth	Parasite	Location
<i>Capra hircus</i>	Nematode	<i>Oesophagostomum columbianum</i> (Curtice, 1890)	Colon
		<i>Oesophagostomum asperum</i> (Railliet <i>et al.</i> , Henry, 1913)	Colon
<i>Ovis bharal</i>	Nematode	<i>Bunostomum trigonocephalum</i> (Rudolphi, 1808)	Intestinal mucosa
<i>Capra hircus</i>	Cestodes	<i>Moniezia benedini</i> (Moneiz, 1879; Skrjib <i>et al.</i> , Schulz, 1937)	Small intestine
		<i>Moniezia capari</i> (Pokale <i>et al.</i> , 2004)	Small intestine
		<i>Moniezia (B) govindae</i> n.sp. from <i>Capra hircus</i> (L.)	Rumen
		<i>Stilesia globipunctata</i> (Railliet, 1893)	Small intestine
		<i>Stilesia govindae</i> (Padwal and Jadhav, 2006)	Small intestine
		<i>Avitellina goughae</i> (Malhotra and Capoor, 1982)	Small intestine
		<i>Avitellina nagabhushanami</i> (Shinde <i>et al.</i> , 1983)	Small intestine
		<i>Aliezia indica</i> (Shinde, 1967)	Small intestine
		<i>Aliezia aurangabadensis</i> (Shinde <i>et al.</i> , 1979)	Small intestine
		<i>Paramphistomum bothriophoron</i> (Braun, 1892)	Rumen
		<i>Fasciola hepatica</i> (Krull, 1933)	Colon
		<i>Cotylophoron cotylophorum</i> (Fischoeder, 1901 and Goldberger, 1910)	Rumen
		<i>Ovis bharal</i>	Trematodes

The larval stages outside the mucosa have no inflammatory nodular reaction indicating either lack of immunity towards larval stages initially when they are in lumen or toxic levels in the initial stages of its infection which do not call for the host reaction. Larvae may migrate to various other organs. *Oesophagostomum asperum* also has same life cycle where pathogenesis is less severe while nodule formation is not that common primarily because of its habitat which is generally the lumen of the colon. *Bunostomum trigonocephalum* (Rudolphi, 1808) is commonly called as hook worm occurring in the posterior part of the small intestine of *Capra hircus* and *Ovis bharal* by which causes *Bunostomiasis* similar to that of *Ancylostomiasis*. These worms often attached to the intestinal mucosa and suck the blood of host.

Moreover, from Cestodes such as *Moniezia benedini* (Moneiz, 1879, Skrjib *et al.* Schulz, 1937), *Moniezia capari* (Pokale *et al.*, 2004), *Stilesia govindae* (Padwal and Jadhav, 2006), *Stilesia globipunctata* (Railliet, 1893), *Avitellina nagabhushami* (Shinde *et al.*, 1983), *Avitellina goughi* (Malhotra and Capoor, 1982) and *Aliezia aurangabadensis* (Shinde *et al.*, 1979), *Aliezia indica* (Shinde, 1969), Trematodes *Fasciola hepatica* (Krull, 1933), *Cotylophoron cotylophorum* (Fischoeder, 1901), *Paramphistomum bothriophoron* (Braun, 1892) spread and leads to the intensive diseases to the animals. Here with the goal of profound understanding of disease and diagnosis with the pathological changes in host and know the causes in relation to its infection.

Such as sheep and goats should not allowed to be graze on the ground, their water, nutrient sources should be free from contamination, even if the infection noticed in any individual they must be separated from the flock until turn into a normal condition, by using antihelmenthic. An abolish to infection of gastro-intestinal worms this comprehension can be used for control and better management of the diseases.

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