

## PSEUDOPHYLLIDEAN TAPEWORM INFECTION IN COMMON INDIAN MONITOR LIZARD (*VARANUS BENGALENSIS*)

A.B. Shrivastav<sup>1</sup>, R.K. Chaudhry<sup>2</sup>, S.K. Mittal<sup>3</sup>,  
R.K. Sharma<sup>2</sup> and P.K. Malik<sup>4</sup>

<sup>1</sup> Professor of Pathology and Wildlife Health Coordinator,

<sup>2</sup> Professor of Parasitology, Department of Wildlife Health and Management, College of Veterinary Science and Animal Husbandry, JNKVV, Jablpur, Madhya Pradesh 482001, India.

<sup>3</sup> Zoo Veterinarian, Gandhi Zoological Park, Gwalior, Madhya Pradesh, India.

<sup>4</sup> Head, Faculty of Wildlife Health, Wildlife Institute of India, Dehra Dun, Uttaranchal, India.

Common Indian Monitor Lizard (*Varanus benghalensis*) commonly known as 'Ghoh' or *Ghor Ped* in Hindi, is medium-sized, dark brown in colour and occurs throughout the Indian subcontinent. The population of this lizard has alarmingly dwindled throughout the country, due to excessive exploitation of adults for their valuable skin (Tikader, 1983), loss of habitat and also due to the ignorance of their diseases, control and treatment.

One adult Indian Monitor Lizard at Gwalior Zoo was restless and off feed for three days. In spite of oral symptomatic treatment, it died on the fourth day. A detailed postmortem of the lizard revealed emaciated carcass, severe gastroenteritis, presence of tapeworms and occluding lumen of the small intestine. One of the tapeworms measured about 20cm in length. The anterior end, scolex, was embedded in the lining of mucosa of the small intestine. The tapeworms were collected during postmortem examination. The scolex and segments were flattened, fixed and stained with Borax Carmine for identification. The examination of the scolex under stereoscopic microscope revealed longitudinal dorsal and ventral slits on the scolex - the bothria. The scolex was broadly fan-shaped with semicircular marginal outlines. The observations suggested that the tapeworm belonged to Class Cotyloda (old classification: order Pseudophyllidea of the class Cestoda). The morphology of mature segment resembled with *Duthierssia expansa*, which have been reported from Varanid lizard from southeastern Asia and Africa (Wardle & McLeod, 1952).

Tapeworms infect the alimentary tracts of domestic and wild mammals including human beings, fishes and birds. The adult tapeworms of the class Eucestoda do not cause much pathogenic effects in human beings except for some digestive upset, whereas in animals these worms cause considerable amount of damage (Soulsby, 1982). But *Diphyllobothrium latum* the tapeworm of class Cotyloda that infects man and dog absorbs nutrients, especially Vitamin B12 from the mucosa of the intestine of the host and results in pernicious anaemia and weakness (Dunn, 1978). In the present case, the lizard might have died due to heavy infection of this tapeworm, as the postmortem changes also suggested emaciation and acute anaemia.

However, identification of the species of this tapeworm is in progress. The authors are unaware of any previous report of this tapeworm from the Common Indian Monitor Lizard.

### References

- Dunn, A.M. (1978). *Veterinary Helminthology*. 2<sup>nd</sup> edition. William Heinmann Medical Text Books Ltd., London.
- Soulsby, E.J.L. (1982). *Helminthes, Arthropods and Protozoa of Domesticated Animals*. 7<sup>th</sup> edition. The English Language Book Society and Billiere Tindal, London.
- Tikader, B.K. (1983). *Threatened Animals of India*, pp.244-245. Zoological Survey of India, Calcutta.
- Wardle, R.A. and J.A. McLeod (1952). *The Zoology of Tapeworms*. University of Manitoba by the University of Minnesota Press, Minneapolis.