

ON THE OCCURRENCE OF THE BAT FLUKE, *PROSTHODENDRIUM*
OVIMAGNOSUM (BHALERAO, 1926) IN A DOG.¹

By G. D. BHALERAO, D.Sc., Ph.D. (Lond.), F.Z.S., F.R.M.S., F.A.Sc.,
Helminthologist,

Imperial Veterinary Research Institute, Mukteswar-Kumaun, U. P.,
India.

Through the courtesy of Dr. P. A. Maplestone the writer had the opportunity of examining a few trematodes obtained by Mr. N. V. Bhaduri, B.Sc., M.B., from the intestine of a dog in Calcutta. On examination the flukes proved to be the species *Prosthodendrium ovimagnosum*, which the writer had described in 1926 from the bat, *Nyctinomus plicatus*, in Rangoon. In addition to the writer's original record of this parasite, it had been recorded by Northup (1928) from *Rhinopoma microphyllum* in Rangoon. The writer (Bhalerao, 1936) recorded it from *Nycticejus pallidus* in the Punjab. Dr. B. P. Pande, D.Sc., informed the writer that this species is also found in Allahabad. Outside India, Tubangu (1928) recorded it from *Scutophilus temminckii* in the Philippine Islands and Joyeux *et alia* (1937) from *S. borbonicus* in Northern Somaliland. It is thus evident that this parasite enjoys a very wide distribution in the orient and that it is normally a parasite of bats. The occurrence of this parasite in a dog is of considerable interest. It is quite possible that the dog may have acquired the infection by feeding upon an infected bat and acted only as a facultative host. Instances of this type are not uncommon. A few years ago the writer (Bhalerao, 1932) reported *Isoparorchis hypselobagri* from a man and a crocodile, although this is a normal parasite of the gas-bladder of the fish, *Wallago attu*, in India. Similarly the writer (Bhalerao, 1937) recorded *Paramphistomum cuonum* from the wild dog *Cuon dukhunensis*, although he suspected, from the degenerate nature of the material, that these amphistomes were not the normal parasites of dogs. Of similar nature is the infection of a wild cat by *Paramphistomum* sp. recorded by the writer (Bhalerao, 1937). A few observations on the anatomy of *Prosthodendrium ovimagnosum* from the dog in Calcutta are recorded below:—

The worms measure 0.435-0.6 mm. in length and 0.36-0.6 mm. in width. The cuticle is smooth. The following measurements refer to a specimen measuring 0.6×0.6 mm. The oral sucker is 0.106 mm. and the pharynx 0.048 mm. in diameter. The intestinal caeca terminate immediately in front of the testes. The ventral sucker is situated at 0.296 mm. from the anterior end and measures 0.083 mm. in diameter. The genital pore lies centrally, at 0.193 mm. behind the anterior end. The testes measure 0.155-0.168 mm. in diameter. The pseudo-cirrus sac measures 0.15 mm. in diameter. The ovary extends from one testis

¹ Paper read before the 28th session of the Indian Science Congress, Benares, held in January 1941.

to the other but occasionally it is slightly less extensive. There are 15-20 follicles of vitelline glands on each side. The uterine coils fill up the posterior half of the body. The largest egg measures 0.018 × 0.0135 mm.

The material referred to in this paper has been deposited in the Zoological collection of the Indian Museum, Calcutta, as no. W3447/1.

REFERENCES.

- BHALERAO, G. D., 1926.—The intestinal parasites of the bat (*Nyctinomus plicatus*) with a list of the Trematodes hitherto recorded from Burma. *Journ. Burma Res. Soc.* XV, pp. 181-195.
- BHALERAO, G. D., 1932.—A note on the probability of infection of man and domestic carnivores by *Isoparorchis hypselobagri* (Billet, 1898). *Ind. Journ. Vet. Sci. & Anim. Husb.* II, pp. 406, 407.
- BHALERAO, G. D., 1936.—Studies on the Helminths of India. Trematoda III. *Journ. Helm.* XIV, pp. 207-228.
- BHALERAO, G. D., 1937.—Studies on the Helminths of India. Trematoda IV. *Journ. Helm.* XV, pp. 97-124.
- JOYEUX, C., BAER, J. G. AND MARTIN, R., 1937.—Sur quelques helminthes de la Somalie-Nord. (Deuxieme note.) *Bull. Soc. Path. Exot.* XXX, pp. 416-422.
- NORTHUP, F. E., 1928.—Notes on some Trematodes from Bats. *Journ. Burma Res. Soc.* XVIII, pp. 80-97.
- TUBANGUI, M. A., 1928.—Trematode parasites of Philippine vertebrates. *Phil. Journ. Sci.* XXXVI, pp. 351-371.