

**PSILORCHIS ATKINSONI SP. NOV.—A  
NEW TREMATODE FROM AN AQUATIC  
BIRD, ANAS PENELOPE (LIN.)**

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*PSILORCHIS ATKINSONI* sp. nov.

Host: *Anas penelope* (Lin.);

Host examined: 15; Host infected: 2;

Specimens collected: 9; Location: Intestine;

Locality: Meerut.

The body (figure 1) was elongated, tapering towards both extremities and measuring 7.62–5.13 × 1.53–0.90 mm. The oral sucker was small and measured 0.18 × 0.15–0.13 mm. The ventral sucker located anteriorly was large and measured 0.62–0.58 mm in diameter. The prepharynx was absent while the pharynx was well developed measuring 0.13–0.10 × 0.13 mm. The oesophagus was quite long and measured 0.13–0.10 mm. The intestinal caeca extended upto the hind end of the body.

The testes were elongated, tandem and median, a short distance posterior to mid body, measuring 0.65–0.49 × 0.21–0.18 mm. The cirrus sac was post bifurcal and measuring 0.29–0.26 mm in length. It had a vasicula seminalis, parsprostatica and ejaculatory duct. The ovary was oval pretesticular and situated near the mid body. It measured 0.46–0.44 × 0.32–0.30 mm. There was no receptaculum seminis. The uterus was long, winding between ovary and ventral sucker. The uterus contained eggs which were yellow in colour, oval, nonoperculated measuring 0.01–0.03 × 0.03–0.05 mm. The vitellaria extended chiefly in extracaecal fields from short distance behind ventral sucker to the caecal ends. The excretory bladder was "Y" shaped.

Thapar and Lal<sup>1</sup> created the genus *Psilorchis* with *P. indicus* as the type species. Subsequently the following six more species were added to this genus until now viz.—*P. ajgainis*<sup>2</sup>, *P. halcyoni*<sup>3</sup>, *P. thapari*<sup>4</sup>, *P. mehrai*<sup>5</sup>, *P. seekhpari*<sup>6</sup> and *P. udaipurensis*<sup>7</sup>. The present species can clearly be differentiated from the above listed species in the extension of cirrus sac up to the mid of ventral sucker, ratio of oral sucker and pharynx and by a long oesophagus. It is therefore, regarded as a new species. The present parasite has been assigned the name *P. atkinsoni* in honour of Prof. H. J. Atkinson of a renowned parasite physiologist.

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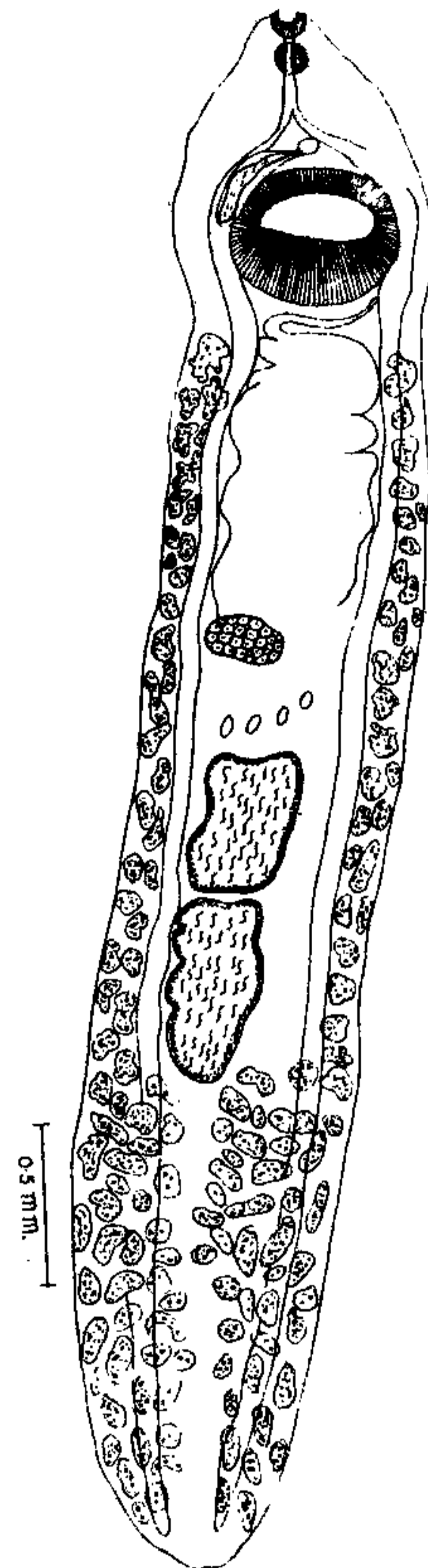


Figure 1. *Psilorchis atkinsoni* sp. nov., Ventral view.

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1. Thapar, G. S. and Lal, M. B., *Proc. Indian Acad. Sci.*, 1945, 132, 88.
2. Lal, M. B., *Liv. Jub. L. Travassos*, 1938, Rio de Jan. 259.
3. Chatterji, P. N., *Proc. Natl. Acad. Sci. India*, 1948, 18, 1.
4. Baugh, S. C., *Indian J. Helminthol.*, 1949, 1, 79.
5. Gupta, P. D., *Proc. Natl. Acad. Sci. India*, 1956, 26, 1.
6. Jain, S. P., *Indian J. Helminthol.*, 1967, 19, 145.
7. Sharma, P. N., *Riv. di Parassi.*, 1977, XXXVIII, 7.
8. Yamaguti, S., *Synopsis of digenetic trematodes of vertebrates*, Vol. I & II, 1971, Keigoku Publishing Co., Tokyo.