

NOTES ON OLIGOCHAETA

BY

M. KOWALEWSKI



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Z badań nad skąposzczetami. — Notes on Oligochaeta.

Note

de M. M. KOWALEWSKI m. c.,

présentée dans la séance du 8 Avril 1918.

(Planche 9).

(Extrait).

Several details concerning the internal anatomy of *Oligochaeta*, as described by the author in the present paper, are sufficiently evident from the accompanying figures. Hence only the more important data adduced in the four parts (of which the paper consists) are mentioned here.

I. Genital organs in *Dero limosa* Leidy 1852.

(Fig. 1, 2).

The author's observations agree with those published by Beddard, less closely with the results of Schuster. The true shape of the atrium is represented by Fig. 2. No genital setae are present; this was ascertained on eight specimens. In two specimens a little additional spermatheca was observed in the segment IV, on one side of the body of the animal.

II. *Tubifex montanus* sp. nov.

(Fig. 3—5).

This new species was found in a lake, in the Tatra mountains. Only two sexual specimens were collected, both in a state of advanced maturity.

Length of the body about 30 mm. Setae like those of *Tubifex templetoni* Southern 1909, except the dorsal bifid setae which are

distinctly spatulate. The most important characteristic of the new species is the large penial mass, consisting of a deep skin pouch surrounded by a broad muscle layer in which the penis lies. This is as long (190—220 μ) as about the half transversal diameter of the segment XI. It is of conical shape with a long thinner endpart and is enveloped by a distinct chitinous sheath of brownish colour in the distal half. The atrium in older specimens has a very much thinner epithelial wall and consequently a much larger lumen than represented in Fig. 4. In spite of the relatively advanced maturity of the animals in question, no trace of spermathecae was found in them.

III. *Tubifex templetoni* Southern 1909.

(Fig. 6—10).

On the description of the atrium of this species, as given by Southern, the author remarks that the epithelial wall of the ciliated part of this organ is glandular (similar in its appearance to the prostata) and is enveloped by the same muscle layer as the rest. While the ciliated part in living animals is separated from the nonciliated part of the atrium by a distinct constriction, in the conserved specimens both parts are quite continuous. The contracted atrium however differs essentially from the stretched one; in the first case it is several times broader and about two times shorter than the *vas deferens*, in the second case it resembles a tube of the same diameter as the *vas deferens*, but is much longer.

IV. On the tubes of *Stylodrilus hallissy* Southern 1909.

The author describes the tubes in which the representatives of this species live.

Explanation of plate.

All the figures, with the exception of fig. 9, were made from conserved animals with the aid of a camera lucida.

Lettering:

at. atrium (*at.*' ciliated, *at.*" its non ciliated part); *bm.* bulbus musculosus; *d. ej.* ductus ejaculatorius; *dis.* dissepimentum; *inf.* infundibulum seminale; *ovd.* oviductus; *p.* penis; *pr.* prostata; *spth.* spermatheca (*spth. s.* spermatheca supplementaria); *v. def.* vas deferens.

Dero limosa Leidy 1852.

Fig. 1. Longitudinal section through segments IV—VI. $\times 125$.

Fig. 2. Atrium with a little reconstructed anterior end. $\times 125$.

Tubifex montanus sp. nov.

Fig. 3. Brain. $\times 125$.

Fig. 4. Genital organs in longitudinal section (in order to show the running of the vas deferens, it is removed from its true place under the atrium and partly under the penial mass). $\times 125$.

Fig. 5. Penis sheath. $\times 99$.

Tubifex templetoni Southern 1909.

Fig. 6. Brain of two specimens (*a* and *b*). $\times 125$.

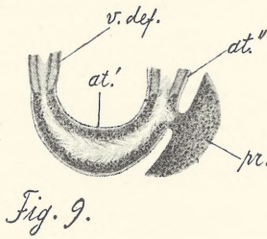
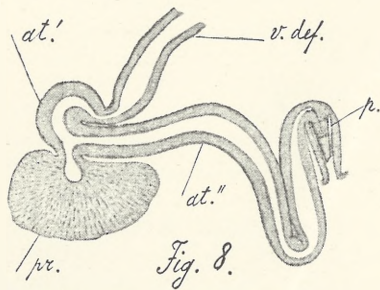
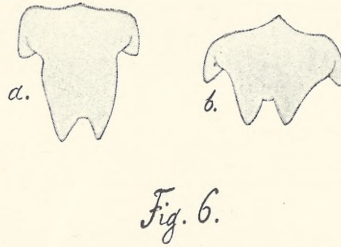
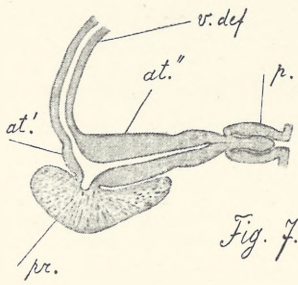
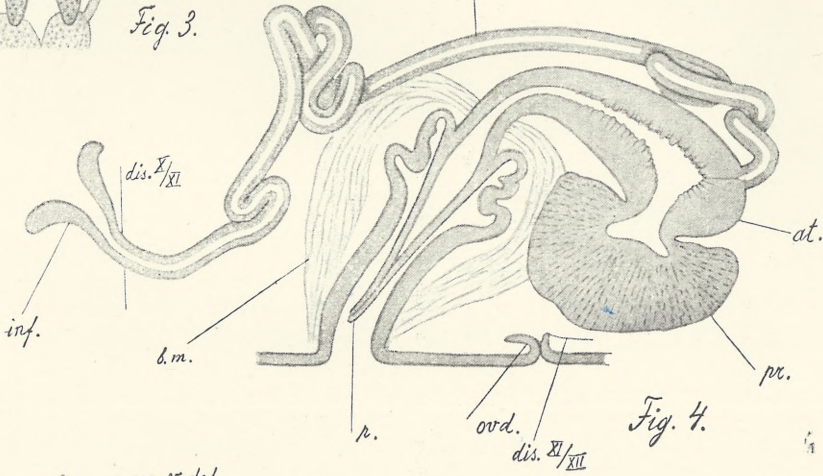
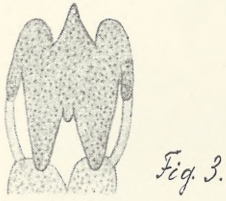
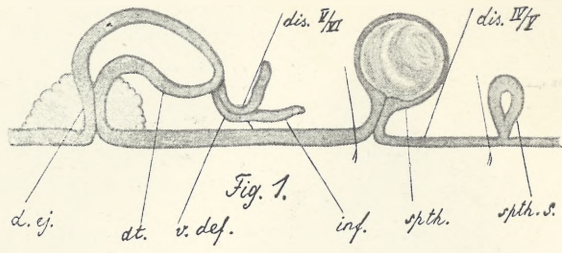
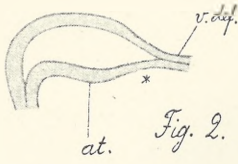
Fig. 7. Atrium of a specimen in a state of early maturity. $\times 99$.

Fig. 8. Atrium of a specimen in a state of advanced maturity. $\times 99$.

Fig. 9. Ciliated part of the atrium of a living animal.

Fig. 10. Penis sheath. $\times 232$.





M. Kowalewski.



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