

A New Hymenolepidid Tapeworm from the Fox Sparrow

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A revision of the North American forms of the cestode genus *Aploparaksis* Clerc is in progress; the present paper represents the first step in that work. Actually, the genus has been recorded only twice from North America in the literature (Jones, 4, and Schiller, 7), but there must be a good many manuscript records. At hand are about 400 mounted specimens of eleven species.

I want to thank Dr. Robert Rausch for the loan of the specimens herein reported, and Mr. Joseph L. Hyatt and Mr. John Patchell for assistance in making the drawings.

Aploparaksis passerellae new species

Diagnosis: Characters of the genus. Strobila 24 mm. long, with a maximum width of .8 mm. Longitudinal muscles in two distinct layers, the inner consisting of 24 to 40 large bundles (half dorsal and half ventral), the outer of numerous small bundles. Scolex (Fig. 1, b) 140 to 160 μ wide, including suckers. Prominent rostellum 109 μ in diameter, bearing a single circlet of 25 hooks (Fig. 1, a) 13 μ long. Unarmed suckers 65 to 69 μ in longitudinal diameter. Ventral longitudinal excretory vessels 28 μ in diameter; dorsal longitudinal excretory vessels 5 μ in diameter. Genital pores unilateral on right side; genital ducts passing laterally dorsal to both longitudinal excretory vessels.

Testis aporal, 100 to 120 μ in breadth (Fig. 1, d); a slender vas deferens leading from testis to a large, ovoid, medially-placed external seminal vesicle; tapering cirrus pouch 190 to 220 μ long by 30 μ in maximum diameter in mature segments, reaching almost to mid-line of segment; cirrus stout, not spined.

Slender vagina (Fig. 1, c) anterior to cirrus pouch; small, ovoid seminal receptacle antero-poral to midpoint of segment, 30 to 40 μ in breadth, leading by a short duct to the Mehlis gland; trianguloid Mehlis gland immediately posterior to midpoint of segment, 50 μ in breadth; ovoid vitelline gland, 60 μ in breadth, immediately ventral to Mehlis gland. Early uterus not seen; later uterus saccate, finally filling most of segment; ellipsoid eggs without polar thicknesses, 24 to 26 by 26 to 30 μ ; ellipsoid oncospheres 17 to 21 by 19 to 24 μ .

Host: Fox Sparrow, *Passerella iliaca iliaca*.

Location: Intestine.

Locality: Madison, Wisconsin.

Type: Whole mount, U. S. Nat. Mus. Helm. Coll. No. 37365.

Material: This description is based upon two specimens collected, stained, and mounted by Robert Rausch. One specimen was stained with

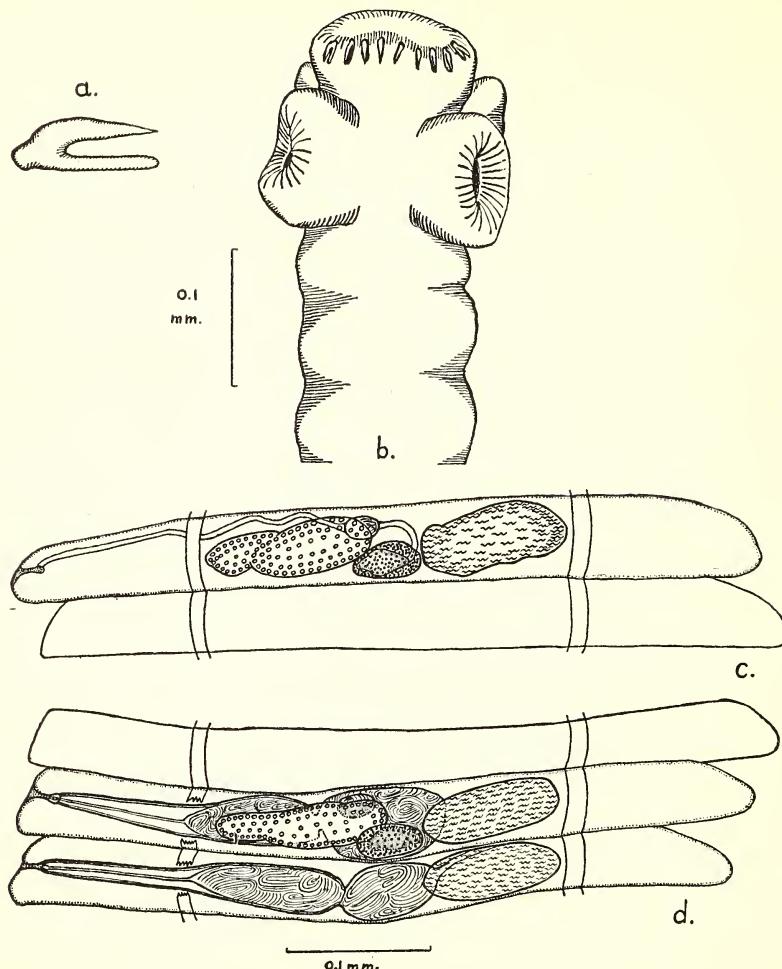


Fig. 1. All drawings are of *Aploparaksis passerellae*, new species. All except a were drawn with the aid of a micro-projector.

- Rostellar hook, free hand drawing.
- Scolex
- Mature segment, ventral view; includes female genital system plus testis only. Note that the Mehlis gland is dorsal to the vitelline gland. Reconstructed from serial sections.
- Two mature segments, ventral view. In the upper segment all genital structures except some small ducts are included; the lower segment includes the male genital system, only. Reconstructed from serial sections.

carmine and mounted whole in balsam; the other was sectioned. Most of the genital organs were studied in a series of horizontal sections.

Discussion: The only species of *Aploparaksis* previously well described from passeriform birds is *A. dujardinii* (Krabbe 6) (Clerc, 1), from thrushes and starlings in Europe (Fuhrmann, 2, 3). *A. dujardinii* differs from *A. passerellae* in possessing more and larger hooks and a more slender cirrus pouch. The present species may easily be differentiated from all other members of the genus except *dujardinii* by means of its larger number of hooks and larger rostellum. (See key in Schiller, 7). Kintner (5) pointed out that *A. fringillarum* of von Linstrow, (8) (*nec Hymenolepis f. Rudolphi*) was probably a species of *Aploparaksis*, which he named *A. linstowi*. The form described by von Linstrow (8), however, had only ten hooks of a shape very different from those of *A. passerellae* and *A. dujardinii*.

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