

**A New Cestode, *Raillietina (Paroniella) oitaensis*
from a crow, *Corvus leuillanti***

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(Accepted for publication; November 14, 1989)

Abstract

Six cestode specimens were obtained from a crow, *Corvus leuillanti* at Beppu City on May 19, 1989. The present new species belongs to the subgenus *Raillietina (Paroniella)* Fuhrmann, 1920, which contains 7 species from the crow: *R. (P.) compacta*, *R. (P.) corvina*, *R. (P.) reynoldsae*, *R. (P.) coronea*, *R. (P.) barmerensis*, *R. (P.) japonica*, *R. (P.) beppuensis*.

The present new species closely resembles *R. (P.) coronea*. However, it differs from *R. (P.) coronea* in the number of rostellar hook, the size of testis, the vitelline gland form and size, the size of cirrus pouch, and egg with polar filament.

Key words: avian cestode, *Raillietina (Paroniella) oitaensis* n.sp., crow, morphology

Introduction

Subgenus *Raillietina (Paroniella)* Fuhrmann, 1920 contains 7 species from crows (Schmidt, 1986). Two of these species have been reported in Kyushu: *R. (P.) japonica* Kugi et Sawada, 1972 at Kitsuki City, Oita Prefecture and *R. (P.) beppuensis* Sawada et Kugi, 1976 at Beppu City, Oita Prefecture. The present paper deals with the morphology of *Raillietina (Paroniella) oitaensis* n.sp.

Materials and Methods

Six cestode specimens were obtained from the small intestine of a crow, *Corvus leuillanti* at Beppu City, Kyushu on May 19, 1989. The specimens were fixed in 70% alcohol after being pressed between two glass slides, stained with Heidenhain's hematoxylin, dehydrated in alcohol, cleared in xylene, and mounted in Canada balsam. All measurements are given in millimeters.

Description

Raillietina (Paroniella) oitaensis n.sp.
(Fig. 1–5)

Strobila 147–150 in length and 2.0–2.7 in maximum width. Scolex 0.18–0.2 long and 0.21–0.22 wide, with retractile elliptic rostellum 0.075–0.08 long and 0.100–0.105 wide, armed with 260–270 hooks, 0.0175 long, arranged in 2 rows. Suckers oval, 0.120–0.125 long and 0.08–0.1 wide, armed with 5 rows of hooklets, 0.0057–0.0125 long. Neck slender, 1.3–1.5 long and 0.11–0.14 wide. Genital pores unilateral, situated in anterior one third of proglottid lateral margin. Testes follicular, 0.03–0.0375 by 0.025–0.0275 in size, 42–49 in number, of which 11–12 arranged in poral and 31–37 in aporal sides, surrounding female genital organs. Cirrus pouch pyriform, 0.0875–0.0925 long and 0.0375 wide. Cirrus unarmed. Vas deferens uniform in width, with several short coils, running from lateral margin to near median line, almost parallel and anterior to female duct. Ovary lobed, 0.3–0.4 wide, lying in median part of proglottids. Vitelline gland folded in form of double, 0.06–0.07 long and 0.11–0.12 wide, situated just behind ovary. Vaginal opening posterior to male genital orifice. In senile proglottids, uterus divided into many capsules containing one egg each. Egg rounded, with polar filament, 0.03–0.0325 in diameter. Onchosphere, 0.0225–0.025 in diameter; embryonic hook 0.0057–0.006 long.

Host: Crow, *Corvus leuillanti*

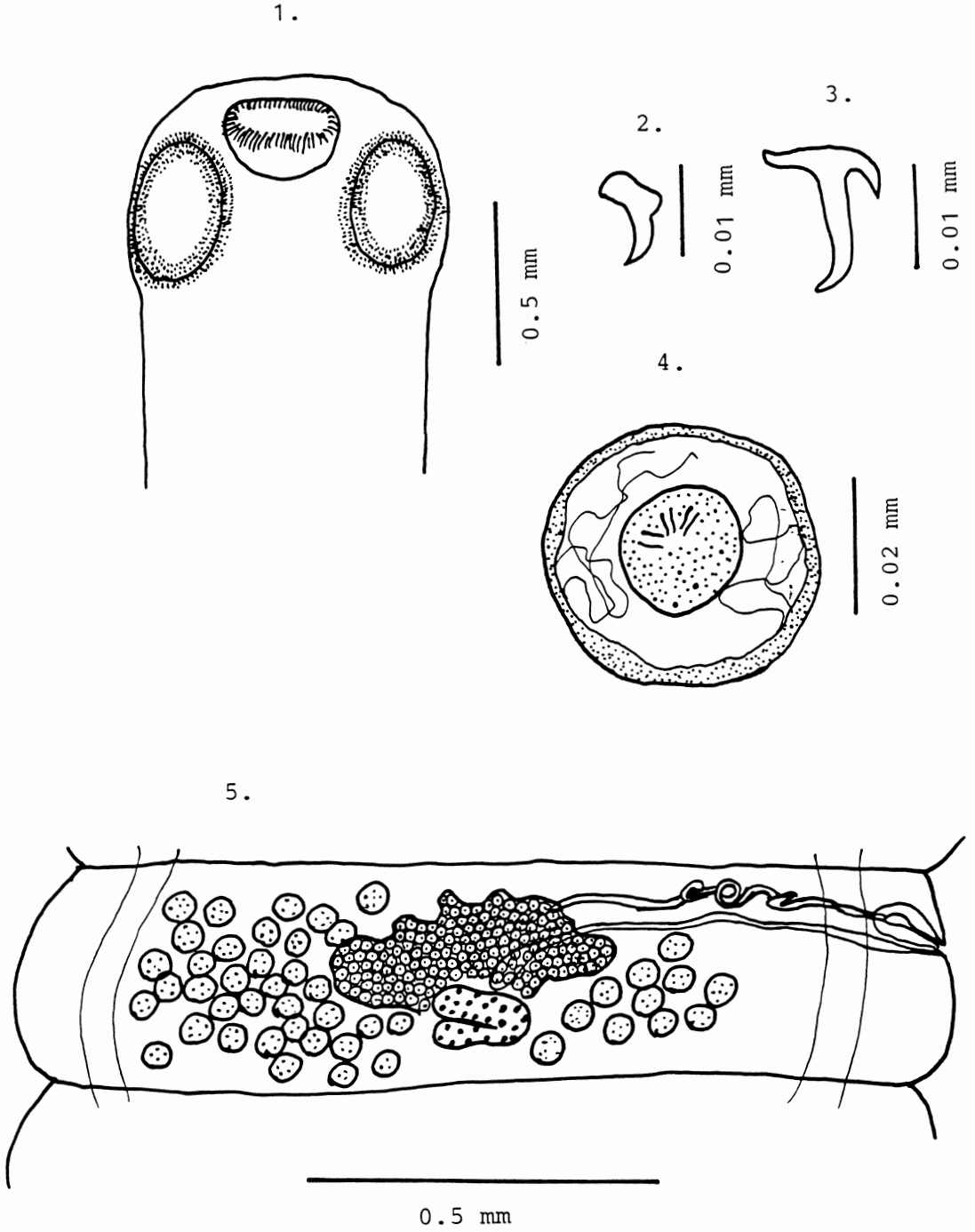


Fig. 1. Scolex
Fig. 2. Scybal hook
Fig. 3. Rostellar hook

Fig. 4. Egg
Fig. 5. Mature proglottid

Habitat: Small intestine

Locality and date: Beppu City; May 19, 1989

Type specimen: Holotype deposited in the
Meguro Parasitological
Museum, MPM Coll. No.
19538

Discussion

Six species of subgenus *Raillietina* (*Paroniella*) Fuhrmann, 1920 have been recorded from the crow (Schmidt, 1986): *R. (P.) corvina* (Fuhrmann, 1905), *R. (P.) compacta* (Clerc, 1906), *R. (P.) reynoldsae* Meggitt, 1926, *R. (P.) coronea* Tubangui et Masilungan, 1937, *R. (P.) barmerensis* Mukherjee, 1970, *R. (P.) japonica* Kugi et Sawada, 1972, *R. (P.) beppuensis* Sawada et Kugi, 1976. The present new species most closely resembles *R. (P.) coronea* in the number of testes and the size of eggs; however, it differs from the species in the following characteristics; (1) the smaller scolex (0.18–0.2 by 0.21–0.22 vs. 0.45 wide); (2) the greater numbers of rostellar hooks (260–270 vs. 200); (3) the smaller rostellum (0.075–0.08 by 0.100–0.105 vs. 0.15–0.17 by 0.11–0.13); (4) the smaller cirrus pouch (0.0875–0.0925 by 0.0375 vs. 0.13–0.14 long); (5) the vitelline glang folded in form of

double, 0.11–0.12 wide vs. lobulated, 0.3 wide; and (6) the egg with polar filament.

Acknowledgements

The author wishes to thank Dr. Hirosh Itagaki for his valuable advice.

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