

## A new Cestode, *Raillietina (Paroniella) japonica*, from a Crow, *Corvus levaillantii*, in Japan

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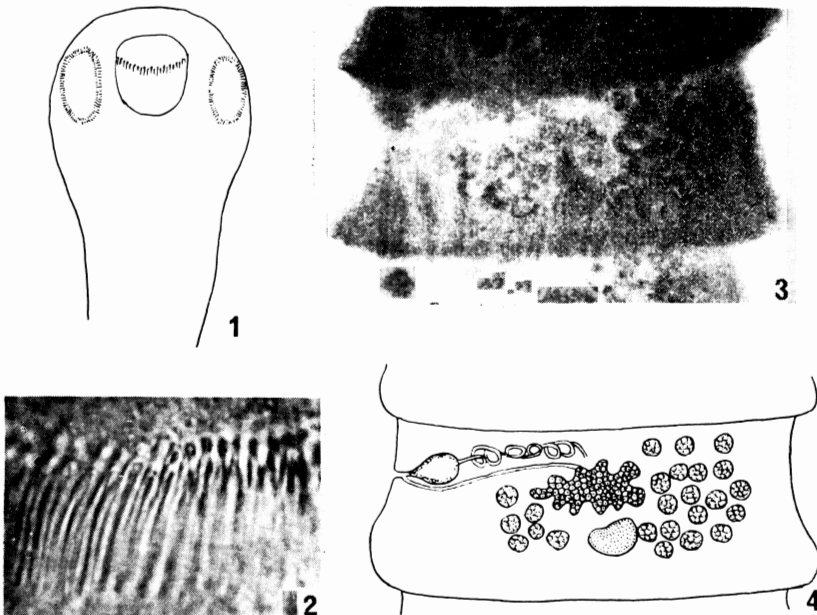
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The species described in this paper was collected by Kugi from the small intestine of a common Japanese crow, *Corvus levaillantii*. On investigation, the specimen was found to represent a new species being referable to the genus *Raillietina* and to the subgenus *Paroniella* in which the genital pores are unilateral and each egg-pouch contains one egg. The author believes the present paper is the first description made on cestodes from

the crow, *Corvus levaillantii*, in Japan.

External anatomy. Strobila length 220 to 250 mm, maximum width 2.8 to 3.4 mm in region of young gravid proglottides. Proglottides much wider than long except most posterior ones. Scolex 0.235 to 0.263 mm wide and 0.290 to 0.331 mm long, neck 0.138 to 0.152 mm wide and 2.3 to 2.6 mm long. Rostellum 0.074 mm by 0.105 mm, carrying about 280 to 320 hooks arranged in two rows



Figs. 1-4 *Raillietina (Paroniella) japonica*

Fig. 1. Scolex ( $\times 140$ )

Fig. 2. Rostellar hooks ( $\times 1100$ )

Fig. 3. Mature segment ( $\times 35$ )

Fig. 4. Outline tracing of Fig. 3.

and measuring 0.018 mm in length. Suckers 0.125 to 0.138 mm in diameter, armed with hooks arranged in three to five rows and measuring 0.077 to 0.011 mm in length, their size diminishing towards center of suckers. Genital pores unilateral, at anterior third of proglottid margins.

Male genitalia. Testes 25 to 29 in number, 0.035 to 0.042 mm across, arranged in two unequal groups on each side of ovary, 6 to 8 being poral and 19 to 21 aporal. Cirrus sac pyriform, measuring 0.07 mm in length. Cirrus short and unarmend. Vas deferens uniform in diameter, with numerous but short coils, running almost parallel to and in front of vagina to near median line.

Femal genitalia. Ovary median, lobulated; it attains a maximum transverse diameter of 0.105 to 0.126 mm. Vitelline gland, slightly oval, immediately behind ovary, 0.042 to 0.049 mm by 0.070 mm. Vagina opens posteriorly to cirrus. Uterus breaks up into many egg capsules, each containing a single egg and extending laterally beyond excretory canal. Egg 0.035 mm in diameter, onchosphere spherical 0.011 to 0.014 mm in diameter.

Discussion: The cestodes belonging to the *Raillietina* (*Paroniella*) from the crow amount to four species, -*R. (P.) comacta* (Cleac, 1906), *R. (P.) cornea* Tubangui et Masilungan 1937, *R. (P.) corvina* (Fuhrmann, 1905) and *R. (P.) reynoldsae* Meggitt, 1826. In comparing the present specimen with the above-mentioned species, it closely resembles *R. (P.) cornea*,

it, however, distinctly differs from *R. (P.) cornea* in the number of rostellar hooks, the number of testes, the size of cirrus pouch and in the situation of genital pores at the segment margins.

Specific diagnosis-*Raillietina* (*Paroniella*): Strobila length 220 to 250 mm, maximum width 2.8 to 3.4 mm. Rostellum with about 280 to 320 hooks 0.018 mm long. Sucker 0.124 mm in diameter and acetabular hooks 0.007 to 0.011 mm. Genital pore on anterior third of segment margin. Testes 25 to 29, 6 to 8 poral and 19 to 21 aporal. Ovary lobulated. Eggs 0.035 mm, onchospheres 0.011 to 0.014 mm.

Host: *Corvus leuicollis*

Location: Small intestine

Locality and Date: Kitsuki, Oita Prefecture, Japan: October 16, 1970

Type Specimen: Biological Laboratory, Nara University of Education, Nara, Japan

#### References

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- 2) Sawada, I. (1964): On the genus *Raillietina* Fuhrmann 1920 (1). *J. Nara Gakugei Uni.*, 12, 19-36.
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日本産ハシブトガラスに寄生していた新条虫 *Raillietina*  
(*Paroniella*) *japonica* について

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著者の1人である久木は1970年10月16日、大分県杵築市で採集したハシブトガラス (*Corvus leuillantii*) を解剖したところ、小腸内に中型の条虫が寄生していることを発見した。染色標本をつくって成熟ならびに老熟片節および頭節の形態を調べた結果、頭節の額嘴鉤がT字型をなし、生殖孔が1側線にのみ開孔し、卵囊内に1卵のみが入っていることから *Raillietina* 属、*Paroniella* 亜属に属する種であることが判明した。現在、カラスか

ら報告されている *Raillietina* (*Paroniella*) に属する条虫は4種であるが、それらの中で *R. (P.) cornea* が本種に最もよく類似している。しかし、額嘴鉤の数、辜丸の数、陰茎囊の大きさ、および各片節の側線における生殖孔の開孔位置などが本種とは著しく異っている。そこで、本種を新種と認め、*Raillietina* (*Paroniella*) *japonica* と命名した。