

**A new Trematode *Pseudocathaemasioides cerylis*, n. g., n. sp.
from a Japanese pied kingfisher, *Ceryle lugubris*
lugubris (Temminck) (Digenea, Cathaemasiidae)**

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A Japanese pied kingfisher, *Ceryle lugubris* *lugubris* (Temminck) which was caught at Ushiroyama area, Asa-town, Hiroshima City on May 7, 1972 and kept at the Asa Zoological Park, was found dead on June 9. Upon autopsy 16 large trematodes were found in the air sac and trachea of the bird. After fixation in 70% alcohol under cover glass and staining with alum-carminé they turned out to be a new trematode related to *Cathaemasioides* Freitas, 1941 of the family *Cathaemasiidae* Fuhrmann, 1928.

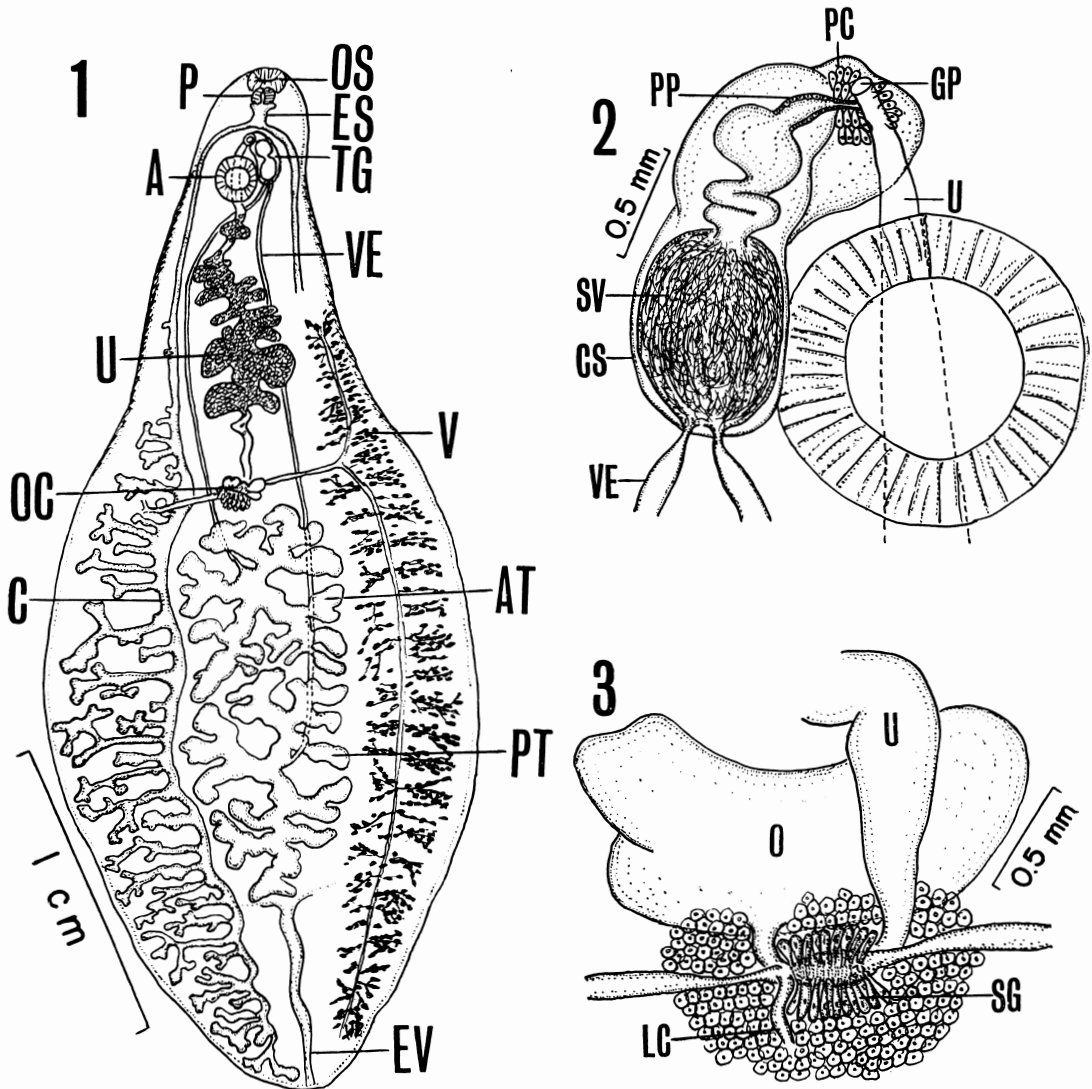
Description

Described from six fully matured mounted specimens. Body flattened, foliate, gradually tapering anteriorly, but abruptly attenuated posteriorly, fusiform to elongate oval, 29.2-33.5 mm in length, with maximum width of 12.8-14.5 mm at junction of middle and posterior third of body. Body spines scale-like, in region of acetabulum to anterior end of anterior testis. Oral sucker subterminal, 0.78-0.85 × 0.93-0.98 mm; prepharynx short; pharynx well developed, 0.53-0.58 × 0.55-0.65 mm; esophagus short, simple. Ceca long, reaching to posterior extremity, simple anteriorly, but provided for greater posterior part with simple or complex, ramified outer branches. Acetabulum globular, larger than oral sucker, 1.38-1.53 × 1.33-1.40 mm, situated close to anterior extremity. Testes profusely branched, tandem, occupying greater part of postovarian intercecal field. Cirrus

sac subcylindrical, somewhat constricted anterior to its middle, anterodorsolateral to acetabulum, not reaching back of acetabulum, containing winding seminal vesicle, well developed prostatic complex and short unarmed cirrus. Genital pore postbifurcal, close to anteromedial margin of cirrus sac. Ovary pretesticular, irregularly trilobate, 0.28-0.63 × 0.85-1.35 mm, median or slightly submedian, with shell gland complex immediately behind. No seminal receptacle; Laurer's canal opening dorsal to shell gland. Vitellaria extending in cecal region from level of uterine coils to posterior extremity. Uterus winding in intercecal field between ovary and acetabulum; eggs elliptical or oval, pale yellowish brown, with small operculum, nonembryonated, 104-130 × 66-82 μ . Excretory vesicle Y-shaped; stem long, with lateral diverticula, bifurcating behind posterior testis.

Discussion

This species bears a superficial resemblance to fasciolids in general anatomy, but there have not been recorded any members of this family from birds. In the peculiarly ramified ceca and the characters of the testes, ovary and vitellaria, especially the structure of the terminal genitalia the present worm is related to *Cathaemasioides callis* Freitas, 1941 from *Eu.xenura galeata* of Brazil, although differing in the posterior extent of the vitellaria. The most outstanding difference is



1. Entire worm *Pseudocathaemasioides cerylis*, n. g., n. sp., dorsal view, holotype.
2. Terminal genitalia, ventral view, paratype.
3. Ovarian complex, dorsal view, paratype.

A: Acetabulum, AT: Anterior testis, C: Cecum, CS: Cirrus sac, ES: Esophagus, EV: Excretory vesicle, GP: Genital pore, LC: Laurer's canal, O: Ovary, OC: Ovarian complex, OS: Oral sucker, P: Pharynx, PC: Prostatic cells, PP: Pars prostatica, PT: Posterior testis, SG: Shell gland, SV: Seminal vesicle, TG: Terminal genitalia, U: Uterus, V: Vitellaria, VE: Vas efferens

that the eggs of the present species are not embryonated in the uterus. For these reasons I would like to separate the trematode in question from *Cathaemasioides* as representing a new genus, for which *Pseudocathaemasioides* is proposed with the following

diagnosis. Except for the nonembryonation of the uterine eggs this worm is most closely related to *Cathaemasioides* Freitas, 1941, so that it is provisionally assigned to *Cathaemasiinae* Dollfus, 1950 to which *Cathaemasioides* belongs.

Pseudocathaemasioides n. g.

Generic diagnosis: Cathaemasiidae, Cathaemasiinae. Body very large, flattened oval to fusiform, spined. Oral sucker subterminal; prepharynx very short; pharynx well developed; esophagus very short, simple; ceca simple anteriorly, but provided on outer side with numerous simple or ramified branches. Acetabulum larger than oral sucker, close to anterior extremity. Testes profusely branched, tandem, occupying greater postovarian intercecal field. Cirrus sac subcylindrical, containing winding seminal vesicle, well developed prostatic complex and unarmed cirrus. Genital pore postbifurcal. Ovary irregularly lobate, pretesticular, median or submedian. No seminal receptacle; Laurer's canal present. Vitellaria extending in lateral cecal region from level of uterine coils to posterior extremity. Uterus winding between ovary and acetabulum; eggs moderately large, not embryonated. Excretory vesicle Y-shaped; stem with lateral branches. Parasitic in respiratory tract of birds.

Type species: *P. cerylis* n. sp. in air sac and trachea of *Ceryle lugubris lugubris*, Hiroshima, Japan.

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References

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ヤマセミ *Ceryle lugubris lugubris* (Temminck) から検出された *Cathaemasiidae* の新属新種 *Pseudocathaemasioides cerylis*, n. g., n. sp. について

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1972年5月7日、広島市安佐町後山でヤマセミ *Ceryle lugubris lugubris* (Temminck) 1羽を保護し、安佐動物公園で飼育していたが、6月9日死亡したので剖検したところ、気囊と気管から合計16匹の非常に大きな吸虫が検出された。本吸虫は70%アルコールで圧平固定し、alum-carmines で染色して詳細な形態観察を行った結果、外観は Fasciolidae に非常に良く似ていたが、鳥類寄生の吸虫類には本科の記録がないことや腸管、辜丸、卵巢、

卵黄巢および特に terminal genitalia の特徴から、本吸虫は *Cathaemasiidae* の *Cathaemasioides callis* Freitas, 1941 に近似の種類とするのが妥当と思われた。しかし *C. callis* の子宮内虫卵はミラシジウムを蔵しているが、本種のそれは卵細胞と卵黄細胞から成っている点に著しい差を認めて新属新種と判断し、その学名を *Pseudocathaemasioides cerylis*, n. g., n. sp. と提称した。