

**On the Occurrence of *Cyclocoelum (Haematotrephus) capellae*
(Yamaguti, 1933) (Trematoda : Cyclocoelidae)
in Kyushu, Japan**

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The junior author is being engaged in a survey on census and food habits of birds of passage in the coast of Ariake Bay, Kyushu, to take a part of the entrusted studies by Environment Agency under the title of "Studies on development of systematic methods for wildlife management" (Trustee: Prof. Teruaki Uchida, Faculty of Agriculture, Kyushu University). He has been collecting the digestive organs of a few kinds of sandpipers and snipes which fly there. In the course of his studies, an interesting trematode was obtained and brought to the senior author. As the trematode has been ascertained to be new to the Japanese fauna, it is reported as follows.

Material and Methods

Only one specimen was found from the body cavity of the host of which data are as follows.

Host: *Xenus cinereus* (Güldenstädt) (Aves: Charadriiformes: Scolopacidae), female, body weight 55 g, wing span 425 mm.

Habitat: Body cavity.

Locality: Yamatomachi (reclaimed land), Yamato-gun, Fukuoka Prefecture (Kyushu).

Date: September 6, 1975.

The worm observed was creeping near the anterior portion of the ovary of the host. It was then flattened, fixed with Bouin's fluid, and stained with alum carmine.

Measurements were performed by the following two different methods. Uterine eggs were measured under a microscope by using a micrometer. Other organs were directly measured on accurate 100× images enlarged by a profile projector (Nikon No. 6CT2) except the body length and breadth which were measured on 10× images.

Results and Discussion

As the results of morphological observations and the measurements of various organs of the worm, it has been identified as follows.

Cyclocoelum (Haematotrephus) capellae (Yamaguti, 1933) [Cyclocoelidae] (Fig. 1)

Corpopyrum capellae Yamaguti, *Jap. J. Zool.*, 5: 41, fig. 16.

Cyclocoelum (Haematotrephus) tringae: Dubois, 1959 (nec Stossich, 1902). *Rev. Suisse Zool.*, 66: 97.

This species was originally described with only a single specimen obtained from the air sac of *Capella gallinago* (= *Gallinago gallinago* (Linnaeus)) in Formosa by Yamaguti (1933). The present result of the measure-

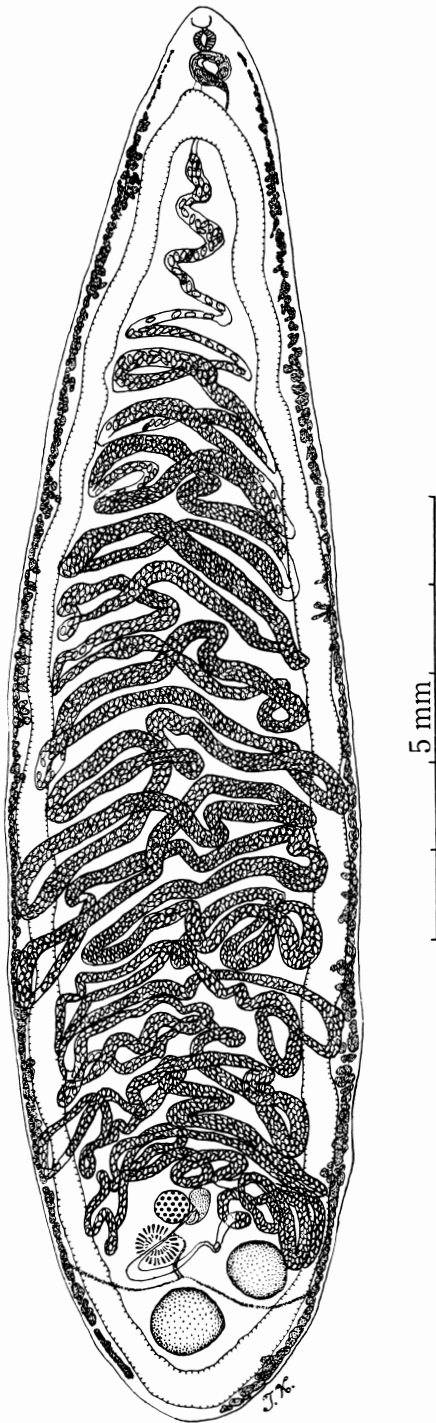


Fig. 1 *Cyclocoelum* (*Haematotrephus*) *capellae* (Yamaguti, 1933)

ments are compared with those in the original description in Table 1. Though there are seen some differences between them in the sizes of the body, mouth, esophagus, and ovary, these seem to be individual variations depending on difference of the maturity. In the present specimen, some uterine loops overlap the intestinal caeca in the posterior half of the body. This seems to be affected by the flattening procedure.

Dubois (1959) revised the family Cyclocoelidae and arranged it into two subfamilies containing four genera one of which was composed of three subgenera. According to his opinion, the present species is synonymous to *Cyclocoelum* (*Haematotrephus*) *tringae* Stossich, 1902, but the authors cannot agree with his specific synonymization because of some remarkable differences in morphology such as the size of pharynx, the geographical distance of the localities, etc. between the two species, though the generic synonymization is adopted here after him.

The present specimen is preserved in the collection of Department of Parasitology, School of Medicine, Fukuoka University.

This is the first record of *Cyclocoelum* (*Haematotrephus*) *capellae* from Japan and its host. The present host is also a bird of passage and it is possible that the parasites of such birds may be able to be collected in any places where the hosts fly and live along their passing routes.

Summary

A cyclocoelid trematode, *Cyclocoelum* (*Haematotrephus*) *capellae* (Yamaguti, 1933), was obtained from the body cavity of *Xenus cinereus* (Güldenstädt) collected in Ariake Bay, Kyushu, Japan. This is the first record of the trematode from Japan and of its host. The data of measurements are compared with those of the original description.

Acknowledgements

The authors express their cordial gratitude to

Table 1 Comparison of measurements and other data of *Cyclocoelum*
(*Haematotrephus*) *capellae*
(mm)

| Authority | Kifune and Shiraishi | Yamaguti (1933) |
|----------------------|----------------------------------|------------------------------|
| Host | <i>Xenus cinereus</i> | <i>Gallinago gallinago</i> |
| Habitat | Body cavity | Air sac |
| Locality | Kyushu, Japan | Formosa |
| Body | (L 15.9 W 4.0) | 9.5 2.7 |
| Mouth | (L 0.16 W 0.22) | 0.13 0.075 |
| Pharynx | (L 0.25 W 0.24) | 0.2 0.24 |
| Esophagus | L 0.45 | 0.25 |
| Ovary | 0.36×0.39 | D 0.28 |
| Anterior testis | 0.68×0.64 | 0.75×0.63 |
| Posterior testis | 0.76×0.84 | 0.62×0.75 |
| Cirrus pouch | 0.45×0.15 | 0.5 ×0.15 |
| Receptaculum seminis | D 0.22 | 0.2 |
| Uterine eggs | (L 0.120-0.130 W 0.060-0.070) | 0.125 -0.131 0.0688-0.075 |

D: diameter L: length W: width

Prof. Teruaki Uchida, Kyushu University, who gave them his permission to publish the present report. They also thank to Mr. Noritomo Kawaji, Kyushu University, who collected the material from the host.

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タシギカンチヨウキュウチュウ（新称）の九州からの発見

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1975年9月6日、福岡県山門郡大和町の大和干拓地（有明海沿岸）で採集されたソリハシシギ *Xenus cinereus* (Güldenstädt) の体腔から見出された吸虫1隻を調査した結果、台湾産タシギより記録された *Cyclocoelum* (*Haematotrephus*) *capellae* (Yamaguti, 1933)

であることが判明した。まだ本邦からの記録はないように思われたので、主要計測値について原記載との比較を行った。なお和名として、科の Cyclocoelidae には環腸吸虫（新称）を、本種にはタシギカンチヨウキュウチュウ（新称）を与えたい。