

A New Avian Cestode, *Schillerius clypeata* n.sp. from a  
Common Shoveller, *Anas clypeata*

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**Key words:** avian cestode, *Schillerius clypeata* n.sp., common shoveller, morphology

A new cestode belonging to genus *Schillerius* Yamaguti, 1959 isolated from a common shoveller is described.

Seven cestode specimens were obtained from the small intestine of a common shoveller, *Anas clypeata* Linnaeus, at Oita City, Kyushu on November 28, 1981. The specimens were fixed in 70% alcohol after being pressed between two glass slides, stained with Heidenhain's hematoxylin for 10 hours, destained with 1% hydrochloric acid in 70% alcohol, dehydrated in alcoholic series and mounted in Canada balsam. All measurements are given in mm.

The morphological features of this cestode are as follows. Strobila 70–100 in length and 0.8–1.0 in maximum width. All proglottids broader than long. Scolex 0.13 long and 0.15 wide. Retractile rostellum, 0.75 long and 0.0175 wide at middle and 0.025 wide at anterior portion and armed with a single row of 10 hooks measuring 0.03 long. Rostellar sac, 0.138 long and 0.038 wide, extends far beyond posterior margin of sucker. Suckers oval, 0.13 long and 0.09 wide armed with 7–8 marginal circles of minute spines, 0.004–0.006 long. Neck 0.8–1.0 long and 0.08 wide. Genital pores unilateral, situated at the middle of each proglottid margin. Testes 2 in number, one on each side of female gonad, measuring 0.018–0.020 long and 0.025–0.028 wide. Cirrus pouch 0.02 long and 0.01 wide. Cirrus 0.018 long and 0.005 wide, covered by minute

spines.

Internal seminal vesicle elongated, 0.163–0.175 long and 0.018–0.020 wide. External seminal vesicle, rounded, 0.025 in diameter. Vagina opening posterior to male genital opening. Seminal receptacle oval, 0.063–0.075 long and 0.018–0.020. Ovary somewhat elongate, 0.03 long and 0.018 wide located in the middle of proglottid. Vitelline gland rounded or oval, 0.018 in diameter, situated posterior to ovary. In gravid proglottids, uterus occupying whole available space in proglottid. Eggs spindle-shaped, 0.10 by 0.023 in outer shell and 0.075 by 0.018 in inner shell. Onchosphere elongate 0.015 long and 0.04 wide; embryonic hooks 0.0075–0.01 long.

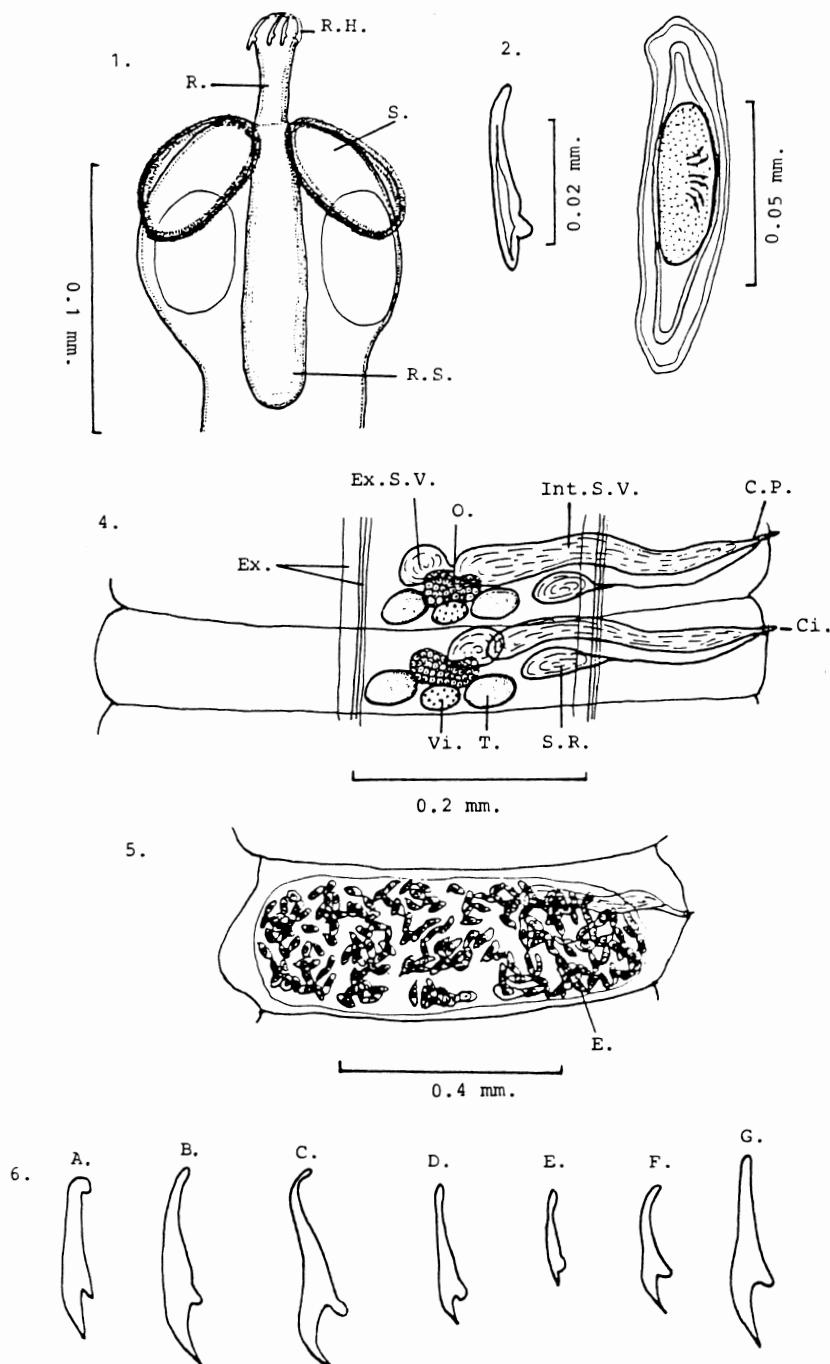
The present new species differs from all of the 7 known species belonging to the genus, *Schillerius* in the shape of rostellar hooks (Fig. 6) and measurements. *S. formosensis* 0.061 (Sugimoto, 1934., Spasskaja, 1966), *S. tringae* 0.036–0.039 (Dubinina, 1953), *S. longiovum* 0.057 (Schiller, 1953), *S. elisae* 0.027 (Spasskaja, 1966), *S. skrabini* 0.0259 (Spasskaja, 1966), *S. parvogenitalis* 0.038–0.04 (Mathevosian, 1946), *S. ransomi* 0.038 (Schultz, 1940., Dubinina, 1953).

Host: *Anas clypeata* Linnaeus.

Habitat: Small intestine.

Locality and date: Oita City, Kyushu. November 28, 1981.

Type specimen: Holotype deposited in Meguro Parasitological Museum, MPM Coll. No. 19529.



Abbreviation: C.P.; cirrus pouch, Ci.; cirrus, E., egg, Ex.; excretory canal, Ex.S.V.; external seminal vesicle, Int.S.V.; internal seminal vesicle, R.; rostellum, R.H.; rostellar hook, O.; ovary, S.; sucker, S.R.; seminal receptacle, T.; testis, Vi.; vitelline gland, R.S.; rostellar sac.

- Fig. 1. Scolex      Fig. 2. Rostellar hook      Fig. 3. Egg      Fig. 4. Mature proglottid  
 Fig. 5. Gravid proglottid  
 Fig. 6. Rostellar hooks of 7 known species of genus *Schillerus*. A., *S. formosensis*; B., *S. tringae*; C., *S. longiovum*; D., *S. elisae*; E., *S. skrjabini*; F., *S. parvogenitalis*; G., *S. ransomi*.

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### References

- 1) Dubinina, M. N. (1953): Cestodes of birds nesting in western Siberia. Parazitol. Sb. Akad. Nauk. SSSR., 15, 117–233. (in Russian)
- 2) Mathevossian, E. M. (1946): New cestodes of birds in Russia. Collect. Pap. on Helmintol. Ded. Skrjabin., 185–186. (in Russian)
- 3) Schiller, E. L. (1953): Studies on the helminth fauna of Alaska. 16. Some cestode parasites of the Aleutian teal (*Anas crecca* L.) with description of *Diorchis longiovum* n.sp., proc. Helminthol. Soc. Wash., 20, 7–10.
- 4) Schultz, R. L. (1940): The genus *Diorchis* Clerc, 1920. Am. Midl. Nat., 23, 382–389.
- 5) Spasskaja, L. P. (1966): Cestodes of birds of the USSR. Hymenolepididae. Izdatel'stvo Nauka. Moscow., 146–204. (in Russian)
- 6) Sugimoto, M. (1934): Morphological studies on the avian cestodes from Formosa. Dep. Agric. Gov. Res. Inst. Formosa, Japan. Rep. No. 64, 1–52. (in Japanese)