

A Record of *Leptelmis torikawai* Larva from Amami-Ôshima, Ryukyu, Japan (Coleoptera, Elmidae) *

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Abstract One larval specimen of *Leptelmis torikawai* Kamite, Yoshitomi et Hayashi, 2017 was obtained by rearing that the adults were collected from Amami-Ôshima Island, Kagoshima Prefecture, Japan. The larva resembles *Leptelmis gracilis* Sharp, 1888 but the morphology of the lateral projections on abdominal segments I to VIII are useful for their identification.

Key words : aquatic beetles, identification, Nansei Islands, riffle beetles

A riffle beetle, *Leptelmis torikawai* Kamite, Yoshitomi et Hayashi, 2017 is distributed in Amami-Ôshima, Ryukyu (Nansei Islands), Japan, is 2.2-2.6 mm long, and inhabits streams (Kamite *et al.*, 2017). The body color of the adult is black, with reddish brown on the ventral side and legs (Kamite *et al.*, 2017). However, the larvae have not yet been discovered. The genus *Leptelmis* include 17 species from South Asia to East Asia (Jäch *et al.*, 2016). The larva of this genus is characterized by a flat body but it known only a subspecies, *Leptelmis gracilis gracilis* Sharp (Hayashi and Yoshitomi, 2014; Kamite *et al.*, 2017) that is distributed in the main islands of Japan (Honshu, Shikoku, and Kyushu) and Korea.

The larva was obtained by laboratory rearing of adults collected on August 21, 2017, from Tatsugo-chô, Amami-Ôshima Island, Kagoshima Prefecture, Japan, by the second author (T. Morii). The adults were placed in a transparent plastic container (H 47 × W 112 × L 158 mm). At the laboratory in Ichinomiya-shi, Aichi Prefecture, Japan, the container was filled to a depth of 25 mm with water, sand, and Java moss. Room temperature was not controlled. Larva was found in the container on March 28, 2019, and fixed with ethanol on April 11, 2019.

The specimen is a mature larva, and its morphological features (Figs. 1 and 2) are as follows: Body right brown, head and abdominal segment IX partly black; body flat in prothorax to abdominal segment VIII; abdominal segment IX slender, with longitudinal ridge and small spines in apex; prothorax longer than width, meso- and meta-thorax wider than length, each abdominal segment I to VIII wider than length; outer basal angle of each segment (abdominal segments I to VIII) slightly extending behind.

In describing larvae, it is necessary to examine the mouth parts and the microstructure of the body surface. Since only one specimen is available at this time, a detailed study is needed in the

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Fig. 1. Larva of *Leptelmis torikai*. A-D. dorsal view; E-G. ventral view. Scale bar = 1.0 mm.

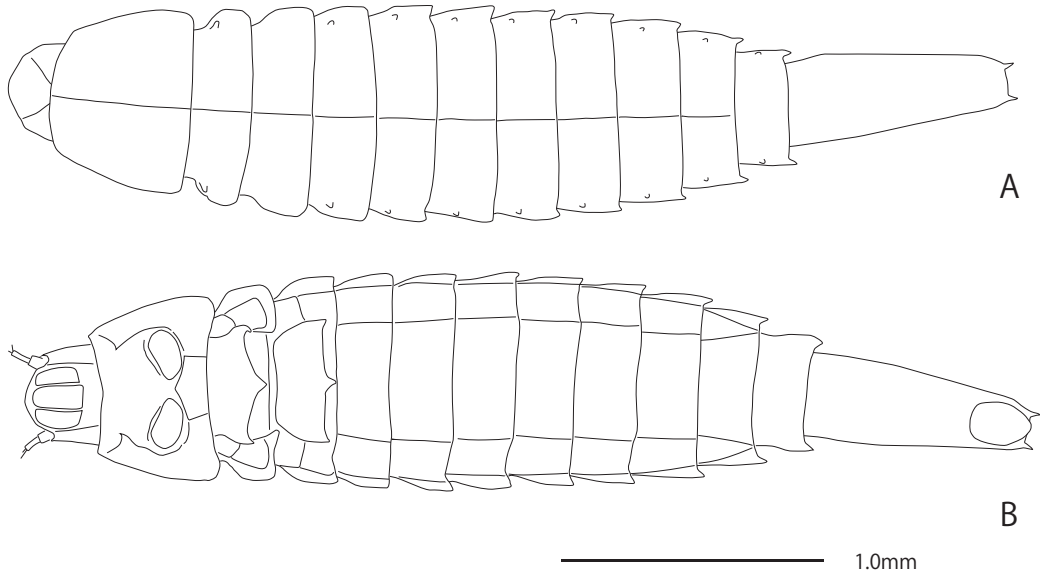


Fig. 2. Larva of *Leptelmis torikaii*. A. dorsal view; B. ventral view.

future. We hope that additional larvae will be discovered.

Key to species of Japanese *Leptelmis* larvae

1. Outer basal angle of each segment (abdominal segments I to VIII) slightly extending behind
..... *Leptelmis torikaii* Kamite, Yoshitomi et Hayashi
2. Outer basal angle of each segment (abdominal segments I to VIII) strongly extending laterally
..... *Leptelmis gracilis* Sharp

References

- Kamite, Y., H. Yoshitomi and M. Hayashi (2017) A remarkable new species of the genus *Leptelmis* Sharp from Amami-Ōshima, with redescription of the larva of *Leptelmis gracilis* Sharp (Coleoptera, Elmidae, Elminae). *Elytra, Tokyo, New Series*, **7**(2): 395–408.
- Hayashi, M. and H. Yoshitomi (2014) Taxonomic treatments of two Japanese elmid beetles, *Stenelmis vulgaris* Nomura and *Leptelmis gracilis* Sharp (Coleoptera: Elmidae), with descriptions of their larvae. *Japanese Journal of Systematic Entomology*, **20**(2): 235–244.
- Jäch, M. A., J. Kodada, M. Brojer, W. D. Shepard and F. Čiampor (2016) *Coleoptera: Elmidae and Protelmidae. World Catalogue of Insects*, 14. XXI + 318 pp. Leiden, Brill.

アマミヨコミゾドロムシ幼虫の初確認 (コウチュウ目ヒメドロムシ科)

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アマミヨコミゾドロムシ *Leptelmis torikaii* Kamite, Yoshitomi et Hayashi, 2017 は、奄美大島に分布するヨコミゾドロムシ属の一種である。本種の幼虫は未確認であったが、著者の一人である森井が成虫を飼育したところ、飼育容器内で繁殖したと考えられる老熟幼虫を1頭得ることができた。本種の幼虫は、本土側に分布するヨコミゾドロムシ *Leptelmis gracilis* (Sharp, 1888) と同様に平坦な体型をしており、この体型はヨコミゾドロムシ属の特徴と考えられる。観察可能な標本が少ないため、口器等の解剖を伴う詳細な観察はしていないが、ヨコミゾドロムシとは形態に違いが見られた。具体的には、腹部腹節（第1節から第8節）の後角がヨコミゾドロムシでは側方（後ろ斜め）へ強く突出するのに対し、アマミヨコミゾドロムシでは後方に弱く尖る程度である。

キーワード：水生甲虫，同定，南西諸島，ヒメドロムシ