

## An Additional New Species of the Genus *Hydrocassis* (Coleoptera, Hydrophilidae) from Amami-Ôshima, the Ryukyu Islands

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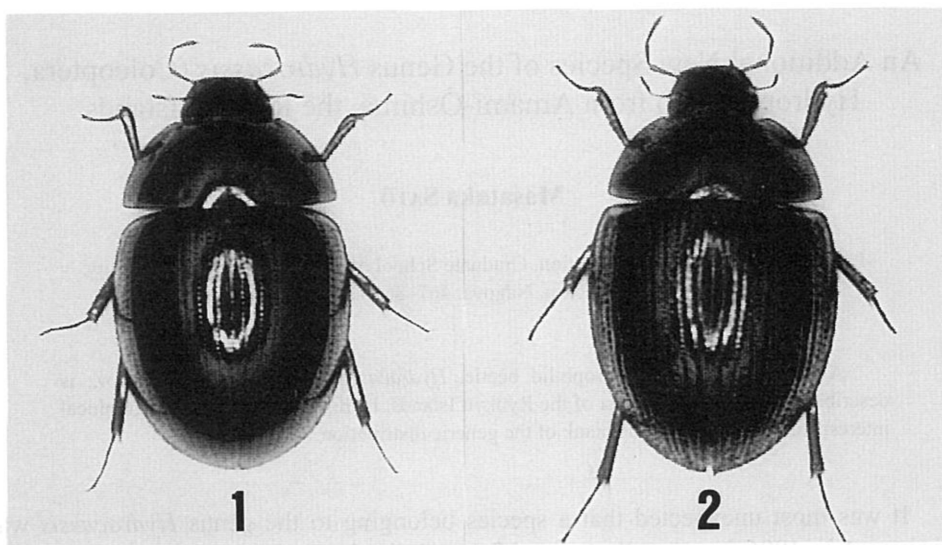
**Abstract** A new hydrophilid beetle, *Hydrocassis jengi* M. SATÔ, sp. nov., is described from Amami-Ôshima of the Ryukyu Islands. Its discovery is of zoogeographical interest, since it fills in a wide blank of the generic distribution.

It was most unexpected that a species belonging to the genus *Hydrocassis* was discovered in 1996 in a small stream of the virgin forest, Kinsakubaru, on Amami-Ôshima of the Ryukyu Islands. It has never been recorded before from the Ryukyu Islands though they occupy an intermediate area in the generic distribution. I visited the islands many times, including the locality in Amami-Ôshima, and yet I never came across any hydrophilid of this genus.

In the summer of 1996, we made a collecting trip to the Ryukyu Islands for research of aquatic Coleoptera. One of the members, Mr. M.-L. JENG, collected a specimen of *Hydrocassis* on the last day of the trip to Amami-Ôshima. On that occasion, we had not sufficient time to continue the collecting, and therefore, I visited Amami-Ôshima again in the spring of 1997 with my colleagues. This renewed trip was successful in obtaining some additional materials at the same locality. Besides, Mr. S. HORI gave me an opportunity to examine his specimens of the same species taken on the same island. The discovery of this *Hydrocassis* is important from the zoogeographical viewpoint, since it is a Himalo-Japanese element.

According to SCHÖDL and Ji (1995) who gave a synopsis of *Hydrocassis*, the genus consists of 9 species distributed along the evergreen broadleaved forest zone extending from the Himalayas to Japan. After a careful study, it was proved that the Amami species is a tenth member of the genus *Hydrocassis*. It will be described in the present paper under the name of *H. jengi*.

I would like to express my sincere gratitude to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, Mr. Ming-Luen JENG of the National Taiwan University, Mr. Hiroyuki YOSHITOMI of the Bioindicator Co. Ltd., Ms. Futaba NISHIMOTO of Nagoya Women's University, and Mr. Shigehisa HORI of the Hokkaido Institute of Environmental Science for their kind support in many ways.



Figs. 1-2. Habitus of *Hydrocassis* spp. —1, *H. jengi* M. SATÔ, sp. nov.; 2, *H. lacustris* (SHARP).

*Hydrocassis jengi* M. SATÔ, sp. nov.

(Figs. 1, 3)

Body subcircular in outline, distinctly convex, polished above and subopaque below, dark reddish brown. Dorsal surface provided with primary minute and close punctures.

Head strongly and closely punctate, the punctures separated from one another by a half to the same as their diameter on most parts and rugose in lateral areas; labrum transverse, distinctly concave at anterior margin, closely and finely punctate; eyes moderately prominent, the distance between them about 5.1 times the breadth of an eye.

Pronotum about 2.6 times as broad as long, broadest at the base which is about 2.2 times as broad as the anterior breadth, margins narrowly bordered; lateral sides gently rounded anteriorly and slightly crenulate; anterior angles rounded and posterior ones obtuse; surface distinctly and somewhat sparsely punctate, the punctures becoming rather close towards lateral sides.

Elytra about 1.1 times as broad as pronotum, about 1.2 times as long as broad; lateral sides slightly crenulate; surface of each elytron provided with 10 striae of punctures and with an accessory stria at the base between the 1st and 2nd; interstriae 3rd, 5th, 7th and 9th furnished with a longitudinal series of sparse and vague punctures.

Ventral surface shagreened and closely covered with aureocinereous hydrofugous pubescence; mentum closely and distinctly punctate; prosternum triangularly prominent at the anterior centre; mesosternum evidently protrudent like an arrow-head at the

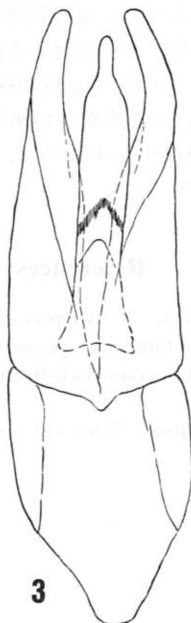


Fig. 3. Male genitalia of *Hydrocassis jengi* M. SATÔ, sp. nov.

anterior centre; terminal sternite of abdomen distinctly concave and bearing stiff hairs at the apex.

Male genitalia rather slender; median lobe somewhat slender, distinctly and narrowly constricted at terminal portion with rounded apex; lateral lobe gently curved, inwardly bent, and with rounded apex.

Length: 6.5–7.3 mm; breadth: 4.0–4.3 mm.

Holotype: 1 ♂, Kinsakubaru, Amami-Ôshima, Ryukyus, 26–III–1997, H. YOSHITOMI leg. (in coll. Natn. Sci. Mus. (Nat. Hist.), Tokyo). Paratypes: 14 exs., same data as for the holotype; 1 ex., same locality as for the holotype, 24–VII–1996, M.-L. JENG leg.; 4 exs., ditto, 23–III–1997, F. NISHIMOTO, H. YOSHITOMI & M. SATÔ leg.; 1 ex., Arangachi, Amami-Ôshima, 24–III–1997, H. YOSHITOMI leg.; 19 exs., Fukumoto Materiya, Amami-Ôshima, 22–28–IV–1996, S. HORI leg. (in coll. Natn. Taiwan Univ., Naturhist. Mus. Wien, Ent. Lab. Ehime Univ., Natn. Sci. Mus. (Nat. Hist.), Tokyo, and Nagoya Women's Univ.).

The present new species is related to *H. lacustris* (SHARP), but can be distinguished from it by the more rounded body, polished dorsal surface, sparsely punctured body surface and differently shaped male genitalia.

The specific name is given after Mr. M.-L. JENG who is the first discoverer of this interesting species.

## 要 約

佐藤 正孝：奄美大島におけるマルガムシ属の新種発見。——マルガムシ属の分布域はヒマラヤから日本にいたる照葉樹林帯で、そこを流れる溪流が生息地である。どうしたことが、分布の中間に位置する琉球列島では、かなりの頻度の採集調査が行われているにもかかわらず、これまで記録されることがなかった。ところが、1996年の夏に奄美大島で1雄が得られたのを契機として、その後、少数ながら資料が得られたので、ここに *Hydrocassis jengi* M. SATÔ リュウキュウマルガムシと命名して記載した。

## References

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*Elytra*, Tokyo, 26 (1): 84, May 15, 1998

New Records of *Elmomorphus brevicornis amamiensis* (Dryopidae)

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The dryopid beetle, *Elmomorphus brevicornis amamiensis* NOMURA, 1959, was originally described from Amami-Ōshima. After that, it was recorded by SATÔ (1965) from Tokuno-shima and Okinawa-hontô. Recently, KIMURA collected the species from Kume-jima, Iheya-jima and Tokashiki-jima. I thank Mr. M. KIMURA for his kindness.

*Elmomorphus brevicornis amamiensis* NOMURA

NOMURA, 1959, Toho-Gakuho, (9): 33. — SATÔ, 1960, Kontyû, Tokyo, 28: 252; 1965, J. Nagoya Wom. Coll., (11): 90.

*Specimens examined.* 3 exs., Shirase-gawa, Kume-jima, 2–V–1995, M. KIMURA leg.; 1 ex., Dana, Iheya-jima, 29–III–1996, M. KIMURA leg.; 1 ex., Onna-gawa, Tokashiki-jima, 16–V–1995, M. KIMURA leg.

*Distribution.* Ryukyu Islands (Amami-Ōshima, Tokuno-shima, Okinawa-hontô, Kume-jima, Iheya-jima, Tokashiki-jima).

This species is found in running waters of small streams.