

A Nes Species of the Genus *Copelatus* (Coleoptera, Dytiscidae) from the Ryukyu Islands, Japan

Matsui, Eishi

Kitayama, Akira

<https://doi.org/10.5109/2646>

出版情報 : ESAKIA. 40, pp.95-98, 2000-03-31. Entomological Laboratory, Faculty of Agriculture,
Kyushu University

バージョン :

権利関係 :



A New Species of the Genus *Copelatus* (Coleoptera, Dytiscidae) from the Ryukyu Islands, Japan

Eishi MATSUI

Entomological Laboratory, Faculty of Agriculture,
Kyushu University, Fukuoka, 812-8581 Japan

and

Akira KITAYAMA

21-5-313, Suehiro-cho, Suita City, Osaka, 564-0022 Japan

Abstract. A new species of the dytiscid genus *Copelatus* is described from the Ryukyu Islands, Japan, under the name *Copelatus imasakai* Matsui et Kitayama.

Key words: taxonomy, Coleoptera, Dytiscidae, new species, Japan.

Introduction

Up to the present, three species of the genus *Copelatus* have been recorded on the Ryukyu Islands (Satô, 1985; Nakane, 1989; Nakane, 1990; Mori & Kitayama, 1993; Satô, 1995), and the fourth species was newly found on the Ishigaki, Iriomote and Yonaguni Islands of the Ryukyus, Japan. This species is described as a new species, *Copelatus imasakai* Matsui et Kitayama in this paper.

***Copelatus imasakai* Matsui et Kitayama sp. n. (Figs.1-2)**

Male. Body elliptical, dorsal surface microreticulate and punctate, shining, about 2.1 times as long as broad.

Head reddish brown (except for interocular area dark brown); anterior margin straight, minutely and more or less closely punctate and microreticulate. Antennae and palpi yellowish brown. Pronotum dark reddish brown, microreticulate and with punctures

1) Contribution from the Entomological Laboratory, Faculty of Agriculture, Kyushu University, Fukuoka (Ser. 5, No. 40).

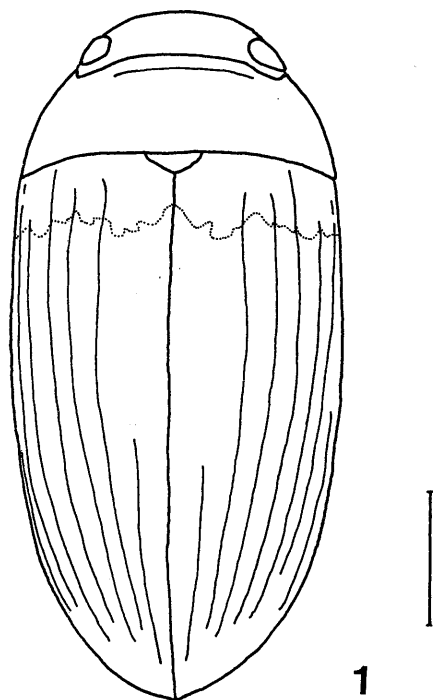


Fig.1. Dorsal view of *Copelatus imasakai* Matsui et Kitayama sp. n.(Scale: 1mm)

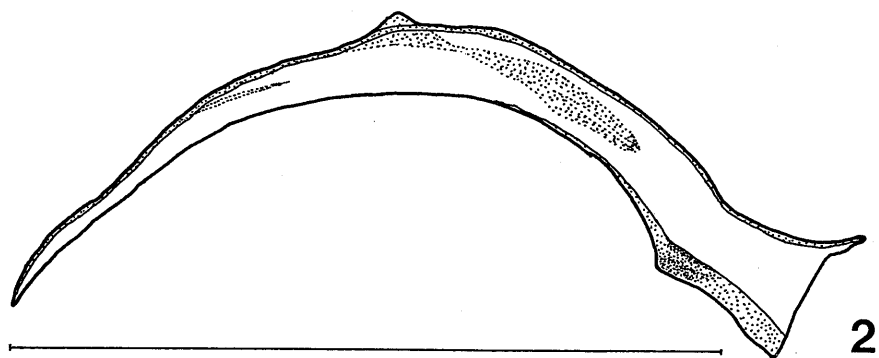


Fig.2. Lateral view of male genitalia of *Copelatus imasakai* Matsui et Kitayama sp. n.
(Scale: 1mm)

which are the same as those on head, both sides reddish brown, punctured along the anterior margin, frequently bearing short irregular scratches on each side. Scutellum reddish brown, transverse triangular, microreticulate and with punctures similar to those on head and pronotum. Elytra dark reddish brown (except for bases of elytra broadly yellow), microreticulate and punctate as on head and pronotum, provided with six longitudinal striae and one submarginal stria, dorsal stria 1(near suture) present, 0.42-0.36 times as long as the length of elytra, all the others commencing from near base (Fig.1). Epipleura yellow. Ventral surface and appendages dark brown or yellowish brown, extensively micro-reticulate and bearing short irregular scratches. Basal three segments of protarsi and mesotarsi strongly dilated, anterior tibiae curved at base and its apical portion broadened.

Male genitalia as shown in Fig. 2.

Female. Elytra sometimes with short longitudinal striae in the interstrial spaces from the base to five-sevenths of length. Pronotum sometimes with short longitudinal striae broadly.

Length of body: 4.8-5.8mm. Width of body: 2.2-2.6mm.

Type material. Holotype: Male, Nakamagawa-Rindo, Iriomote Is., Ryukyus, 30.XII.1997, I. Matoba leg., Paratypes: 3 males and 4 females, Taisho-ike, Iriomote Is., Ryukyus, 1.III.1998, I. Matoba leg.; 1 female, Sonai, Yonaguni Is., Ryukyus, 7.VI.1983, S. Imasaka leg.; 1 female, Ishigaki Is., Ryukyus, 15-20.XII.1987, Y. & T. Abe leg.; 1 female, Urauchi, Iriomote Is., Ryukyus, 28.III.1989, Shimohata leg.; 1 female, Komi, Iriomote Is., Ryukyus, 9.VIII.1990, E. Matsui leg.; 1 female, Hikawa, Yonaguni Is., Ryukyus, 18.IX.1997, M. Mori leg.; 1 male and 1 female, Nakamagawa-Rindo, Iriomote Is., Ryukyus, 30.XII.1997, I. Matoba leg.; 1 female, Nakamagawa-Rindo, Iriomote Is., Ryukyus, 3.III.1998, K. Otsuka leg.; 2 males and 1 female, Taharagawa, Yonaguni Is., Ryukyus, 15.III.1998, A. Kitayama leg.; 6 males and 8 females, Nakamagawa-Rindo, Iriomote Is., Ryukyus, 26.XII.1999, M. Ishiguro leg.; 1 female, Heitoku, Yonaguni Is., Ryukyus, 29. XII.1999, M. Ishiguro leg.; 1 male, Sonai, Yonaguni Is., Ryukyus, 13.IX.1997, T. Kitano leg.

The Holotype and two female paratypes are preserved in the collection of the Entomological Laboratory, Kyushu University, Fukuoka. The other paratypes are deposited in authors's, Dr. M. Sato's and collector's collections.

This species can be recognized at first sight on its much abbreviated innermost striae on the elytra.

Distribution. Japan (Ryukyus: Ishigaki Is., Iriomote Is., Yonaguni Is.).

Remarks. This species is closely allied to *C. latipes* Sharp, 1882, but can be distinguished from the latter by the rather oblong body, the abbreviated innermost stria of elytron and the smaller body size. This specific epithet is dedicated Mr. S. Imasaka, who noticed at first this remarkable species and gave kind support to our study.

Acknowledgments

We thank Prof. Emeritus K. Morimoto of Kyushu University for proofreading the original manuscript. We also wish to thank Dr. M. Satô of Nagoya Women's University, Mr. I. Matoba of Wakayama Prefectural Museum of Natural History, Mr. M. Mori of

Kankyo-kagaku Co.Ltd., Mr. T. Kitano, Mr. M. Ishiguro and Mr. T. Abe for kindness in lending us the specimens used in the present paper.

References

- Balfour-Brown, M. A., 1946. The aquatic Coleoptera of Manchuria (Weymarn Collection). *Ann. Mag. nat. Hist.*, **103** (11): 433-460.
- Gueorguiev, V. B., 1970. Dytiscidae (Coleoptera) nouveaux ou peu connus de l'Asie. *Bull. Inst. zool. Mus., Sofia*, **32**: 253-260.
- Kamiya, K., 1938. A systematic study of the Japanese Dytiscidae. *J. Tokyo Nogyo Daigaku*, **5**: 1-68. pls. 1-7.
- Mori, M., & A., Kitayama, 1993. *Dytiscoidea of Japan*. 217pp. Kankyo Kagaku, Toyonaka. (In Japanese)
- Nakane, T., 1989. The beetles of Japan (new series) 86. *Nat. & Ins., Tokyo*, **24**(4): 22-26. (In Japanese)
- Nakane, T., 1990. The beetles of Japan (new series) 91. *Ibid.*, **25**(10): 22-28. (In Japanese)
- Régimbart, M., 1899. Revision des Dytiscidae de la région Indo-Sino-Malaise. *Annls. Soc. ent. France*, **68**: 193-367.
- Satô, M., 1985. The genus *Copelatus* of Japan (Coleoptera, Dytiscidae). *Trans. Shikoku ent. Soc.*, **17**: 57-67.
- Satô, M., 1995. New record of *Copelatus minutissimus* (Coleoptera, Dytiscidae) from the Ryukyu Islands. *Elytra, Tokyo*, **23**(1): 24.
- Sharp, D., 1882. On aquatic carnivorous Coleoptera or Dytiscidae. *Sci. Trans. Roy. Dub. Soc., n. s.*, **2**: 179-1003.
- Vazirani, T.G., 1970. Contributions to the study of aquatic beetles (Coleoptera). 7. A revision of Indian Colymbetinae (Dytiscidae). *Orient. Ins.*, **4**: 303-362.