

Note on the Species of the *Agabus congener* Complex  
(Coleoptera, Dytiscidae) from Japan  
and the Kurile Islands

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**Abstract** Previous records of *Agabus congener* (THUNBERG) from Japan and the Kurile Islands are revised. Two different species have been confused under that name. One of them is described as a new species, *A. matsumotoi*, and the other is *A. thomsoni* (J. SAHLBERG).

According to our recent study, we have concluded that some records from Japan and the Kurile Islands of *Agabus congener* (THUNBERG), which is distributed over the Palearctic Region, result from mis-identifications. We therefore propose herewith a new name, *A. matsumotoi*, for the Japanese species. The Kurile species is identified with *A. thomsoni* (J. SAHLBERG).

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*Agabus matsumotoi* M. SATÔ et NILSSON, sp. nov.

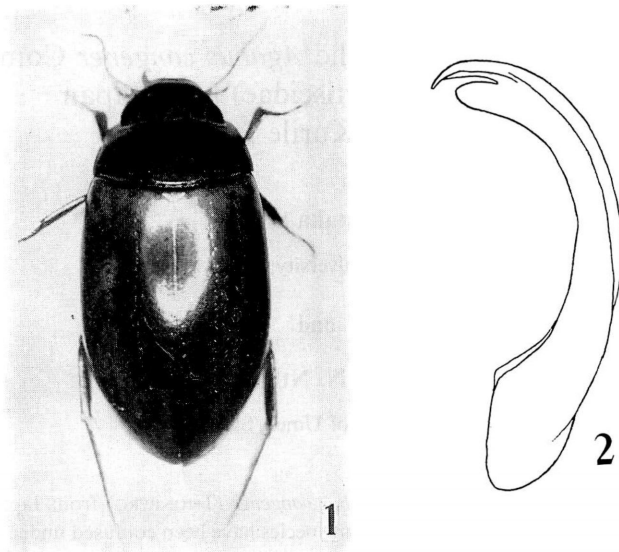
(Figs. 1–2)

*Gaurodytes congener*: NAKANE, 1959, *Akitu*, Kyoto, **8**: 98, fig. 8; 1964, *Fragm. coleopt. japon.*, (2): 5.  
*Agabus congener*: SATÔ, 1985, *Coleopt. Japan Col.*, Osaka, **2**: 194, pl. 35, fig. 3. — NAKANE, 1989, *Nat. & Ins.*, Tokyo, **24**(9): 14, **24**(11): 27.

Body oblong-oval, ratio of total length to maximum width 1.86–1.93, and polished; head, pronotum, scutellum and ventral surface black with brownish tinge; elytra brown to dark brown with light peripheries; legs and mouth appendages reddish brown.

Head micro-reticulate; clypeus slightly emarginate in front. Pronotum about 2.5 times as broad as long, broadest at the base which is about 1.5 times as broad as anterior breadth; surface micro-reticulate almost as on head.

Elytra about 1.2 times as broad as pronotum, about 1.5 times as long as broad, broadest at apical third, thence slightly narrowed anteriorly and distinctly rounded



Figs. 1-2. *Agabus matsumotoi* M. SATÔ et NILSSON, sp. nov. — 1, Habitus; 2, median lobe of male genitalia in lateral aspect.

posteriad; surface finely micro-reticulate; each elytron furnished with two irregular rows of punctures; interstices from 1st row to lateral side scattered with punctures in posterior two-thirds.

Ventral surface finely striolate and finely micro-reticulate in part. Prosternal process broad, lanceolate, slightly convex and minutely punctate; metasternal wings rather slender, ratio of the width of metacoxa to the width of metasternum 2.7-2.9.

Male genitalia slender; subapical ventral spine more or less stout and rounded at apex.

Length: 8.0-8.7 mm; breadth: 4.3-4.5 mm.

Holotype: ♂, Nisshô-tôge, Hokkaido, 8-VIII-1985, M. SATÔ leg. Allotype: ♀, same data as for the holotype. Paratypes: 26 exs., same data as for the holotype; 17 exs., Tôun, Kamikawa, Hokkaido, 17-VIII-1986, 4-X-1986, H. MATSUMOTO leg.; 18 exs., Tenmaku, Kamikawa, Hokkaido, 4-X-1987, H. MATSUMOTO leg.; 4 exs., Shikotsu-maruyama, Hokkaido, 19-X-1986, M. MORI leg.; 7 exs., Tennyogahara, Daisetsu-zan Mts., Hokkaido, 29-VIII-1977, M. SATÔ leg.; 15 exs., Sekihoku-tôge, Hokkaido, 5-VIII-1985, 20-VIII-1990, M. SATÔ leg.; 12 exs., 30-VIII-1988, Y. & T. ABE leg.; 7 exs., Ranru, Hippu, Hokkaido, 28-IX-1986, 25-X-1986, H. MATSUMOTO leg.; 9 exs., Tanne-mura Marsh, Nemuro, Hokkaido, 31-VIII-1988, Y. & T. ABE leg.; 2 exs., Atosanupuri, Kushiro, Hokkaido, 24-V-1967, I. HIURA leg.; 2 exs., Horoman, Hokkaido, 3-VIII-1985, M. SATÔ leg.; 4 exs., Abeshinai-gawa Keikoku, Hokkaido, 16-VIII-1990, M. SATÔ leg.; 4 exs., Sakkuru, Hokkaido, 16-VIII-1990, M. SATÔ leg.

Holo-, allo- and most paratypes are deposited in the collection of the Biological

Laboratory, Nagoya Women's University. The remaining paratypes are distributed to the collections of the following institutions and entomologists: Natn. Sci. Mus. (Nat. Hist.), Tokyo, Ehime Univ., Umeå Univ., Naturhist. Mus., Basel, Smithsonian Inst., Mr. T. ABE and Mr. H. MATSUMOTO.

The present new species is very closely allied to *Agabus congener* (THUNBERG, 1794), but it is distinguished from the latter by the larger body, rounded subapical ventral spine of male genitalia, broad prosternal process, slender metasternal wings, and so on.

*Agabus thomsoni* (J. SAHLBERG)

*Gaurodytes thomsoni* J. SAHLBERG, 1871, Not. Sällsk. Fauna Flora Fennica, 11: 409.

*Gaurodytes congener*: KÔNO, 1944, Chishima Gakujutsu-chôsa-kenkyû-tai Hôkokusho, 1: 81.

*Agabus congener*: KAMIYA, 1935, Zool. Mag., Tokyo, 47: 506.

*Agabus (Gaurodytes) congener*: KAMIYA, 1938, J. Tokyo Nogyo Daigaku, 5: 33; 1938, Fauna Nipponica, Tokyo, 10(8-11): 77.

*Agabus* sp.: KANO, 1933, Bull. biogeogr. Soc. Japan, 4: 98.

Though recorded by KÔNO (1944) from Paramusir Island, we have concluded that his *A. congener* does not belong to that species but to *A. thomsoni* according to our re-examination of the specimen used in his report. Besides, the species recorded by KAMIYA (1935, 1938 a, b) and KANO (1933) under the same name also belongs to *A. thomsoni* according to their short Japanese descriptions.

*Specimen examined.* 1 ♀, Kashiwabara, Paramusir, Kuriles, 20-VII-1941, H. KÔNO & S. SUMIMIYA leg. (Preserved in the collection of Natn. Sci. Mus., Tokyo).

要 約

佐藤正孝・A. N. NILSSON: 日本と千島の *Agabus congener* 複合種に関する覚え書き。—— 従来、日本と千島から、*Agabus congener* (THUNBERG) として記録されていたマメゲンゴロウの 1 種について再検討した結果、それらは非常に近似した別の 2 種であることがわかったのでここに報告した。日本から記録されていた種は新種であることから、*A. matsumotoi* M. SATÔ et NILSSON マツモトマメゲンゴロウと命名した。千島から記録されていた種は、*A. thomsoni* (J. SAHLBERG) であることが、河野 (1944) の記録に使われた標本を再検討した結果わかった。

References

- KAMIYA, K., 1935. The water beetles from the northern Kuriles. *Zool. Mag., Tokyo*, 47: 503-508. (In Japanese.)
- 1938 a. A systematic study of the Japanese Dytiscidae. *J. Tokyo Nogyo Daigaku*, 5: 1-68, 7 pls.
- 1938 b. Family Dytiscidae. In OKADA, Y., et al. (eds.), *Fauna Nipponica*, 10(8-11): i+1-8+1-137. Sanseido, Tokyo. (In Japanese.)
- KANO, T., 1933. Coleopterous insects from the northern Kuriles with some considerations on the insects-fauna of the Kurile Islands. *Bull. biogeogr. Soc. Japan*, 4: 91-121. (In Japanese.)

- KÔNO, H., 1944. Die Käfer-Fauna der Nord-Kurilen (XI. Beitrag zur Kenntnis der Käferfauna der Kurilen). *Chishima gakujiutsu-chôsa-kenkyû-tai Hôkokusho*, 1: 74–92. Sôgô-hoppôbunka-kenkyû-kai, Tokyo. (In Japanese.)
- LARSON, D. J., & A. N. NILSSON, 1985. The Holarctic species of *Agabus* (sensu lato) LEACH (Coleoptera: Dytiscidae). *Canad. Ent.*, 117: 119–130.
- NAKANE, T., 1959. On the genus *Gaurodytes* of Japan (Coleoptera, Dytiscidae). *Akitu, Kyoto*, 8: 95–98. (In Japanese.)
- 1964–'65. The Coleoptera of Japan (48), Family Dytiscidae (continued). *Fragm. coleopt. japon.*, Tokyo, (1–4): 1–16. (In Japanese.)
- 1989. The beetles of Japan (new series), 87. *Nat. & Ins.*, Tokyo, 24(9): 18–24. (In Japanese.)
- NILSSON, A. N., 1981. Notes on some northern species of *Agabus* (Coleoptera, Dytiscidae). *Notul. ent.*, 61: 191–196.
- 1984. Nomenclatural and distributional notes on some northern species of *Agabus* (Coleoptera, Dytiscidae). *Ibid.*, 64: 185–188.
- 1987. A morphometric study of the two cryptic species *Agabus congener* (THUNBERG) and *A. lapponicus* (THOMSON) (Coleoptera). *Ent. scand.*, 18: 67–77.
- SATÔ, M., 1985. Family Dytiscidae. In UÉNO, S.-I., et al. (eds.), *The Coleoptera of Japan in Color*, 2: 183–201. Hoikusha, Osaka. (In Japanese.)