

Synonymic Notes on Two Species of the Families
Hydrophilidae and Leiodidae (Coleoptera) from Japan

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Abstract *Megasternum japonicum* SHATROVSKIY, 1989 (Hydrophilidae) and *Agathidium* (*Neoceble*) *fujiyamaense* HOSHINA, 1997 (Leiodidae) are newly treated as junior synonyms of *M. gibbulum* MOTSCHULSKY, 1866 and *A. (N.) funereum* ANGELINI et De MARZO, 1990, respectively.

After the examinations of many specimens of the genera *Megasternum* MULSANT, 1844 of Hydrophilidae and *Agathidium* PANZER, 1797 of Leiodidae upon our recent collections, and the paratypes of *Megasternum japonicum* SHATROVSKIY, 1989 and the holotype of *Agathidium* (*Neoceble*) *funereum* ANGELINI et De MARZO, 1990 through the courtesies of Drs. M. ÔHARA and I. LÖBL, two synonymies are newly recognized as noted in the followings.

Before going further, we owe thanks to Drs. Ivan LÖBL (Muséum d'histoire naturelle, Genève) and Masahiro ÔHARA (The Hokkaido University Museum, Hokkaido University, Sapporo) who kindly provided us with the opportunity to examine the type specimens.

Family Hydrophilidae

Megasternum gibbulum MOTSHULSKY, 1866

(Figs. 1-3)

Megasternum gibbulum MOTSCHULSKY, 1866: 169; SHARP, 1884: 464; HANSEN, 1999: 305.

Megasternum japonicum SHATROVSKIY, 1989: 286; SHATROVSKIY, 1992: 368; HANSEN, 1999: 305. **Syn. nov.**

Distribution. Japan and Korea.

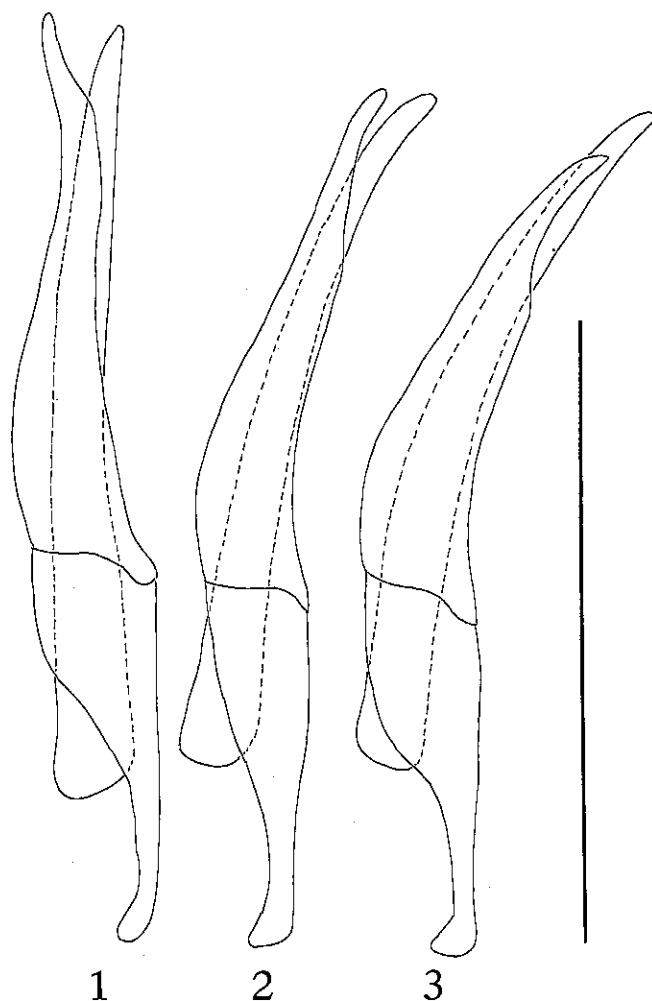
Specimens examined. Paratypes of *M. japonicum*, 1 ex., Mt. Kasuga, Nara Pref., Honshu, 26. V. 1954, K. SAWADA leg.; 4 exs., Naga Town, Wakayama Pref., Honshu, 29. III. 1952, K. ISHIKAWA leg. (Those paratypes are preserved in the collection of Systematic Entomology, Faculty of Agriculture, Hokkaido University.); 1 ex., Mt. Eniwadake, Hokkaido, 20. VII. 1997, H. HOSHINA leg.; 7 exs., Shinrin-

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Figs. 1-3, *Megasternum gibbulum* MOTSCHULSKY. Median lobe of male genitalia in lateral view.
Scale: 0.5 mm.

Kagakuen, Takao, Tokyo Pref., Honshu, 22. XI. 2000, H. HOSHINA leg.; 8 exs., Tendaki, Oya Town, Hyōgo Pref., Honshu, 8. VI. 1996, H. HOSHINA leg.; 1 ex., Matsuyama Castle, Matsuyama City, Ehime Pref., Shikoku, 14. VIII. 1996, H. HOSHINA leg.; 1 ex., Shirataki, Nagahama Town, Ehime Pref., Shikoku, 15. VI. 1997, H. HOSHINA leg.; 2 exs., Chikuzen-Okinoshima Is., Fukuoka Pref., Kyushu, 21. V. 1998, H. HOSHINA leg.; 2 exs., Shiroyama, Kagoshima City, Kagoshima Pref., Kyushu, 7. III. 1997, H. HOSHINA leg.

Notes. SHATROVSKIY (1989; 1992) described *Megasternum japonicum* on specimens from some type specimens of *Megasternum gibbulum* MOTSCHULSKY in the LEWIS Collection of the Natural History Museum in London, and distinguished by the reddish brown dorsal color from the blackish *M. gibbulum* MOTSCHULSKY, 1866. However, *M. gibbulum* are variable among specimens upon such characters as the dorsal coloration, clearness of punctures in the striae,

density of the discal punctures, strength of curvature of median lobe of aedeagus in lateral view (Figs. 1-3), girth of median lobe in ventral view, and so on, and the character defining *M. japonicum* fall evidently in the range of variation. Moreover, the specimens of both reddish brown and black dorsal color and the two types of median lobe (Figs. 2 and 3) were collected at the same time from one locality, Tendaki in Hyôgo, and no correlation between the dorsal coloration and the shape of aedeagus has not been demonstrated. Consequently, it can be given as the conclusion that *M. japonicum* is a junior synonym of *M. gibbulum*, neither independent species nor the local variation.

Family Leiodidae

Agathidium (Neocele) funereum ANGELINI et De MARZO, 1990

Agathidium (Neocele) funereum ANGELINI et De MARZO, 1990: 92; ANGELINI, 1995: 140; HOSHINA, 2000: 67.
Agathidium (Neocele) fujiyamaense HOSHINA, 1997: 164. **Syn. nov.**

Distribution. Japan (Honshu).

Specimens examined. Holotype of *A. (N.) funereum*, ♂, Yaseyuen, Kyoto Pref., Honshu, 4. VIII. 1980, C. BESUCHET leg. (preserved in Muséum d'histoire naturelle, Genève); holotype of *A. (N.) fujiyamaense*, ♂, Aokigahara, Mt. Fujisan, Yamanashi Pref., Honshu, 23. VIII. 1982, S. NAOMI leg. (preserved in Kyushu University). Not type specimens, 5 exs., Tendaki, Ôya Town, Hyôgo Pref., 28. V. 1998, H. HOSHINA leg.; 16 exs., Mt. Maya, Kobe City, Hyôgo Pref., 30. V. 1998, H. HOSHINA leg.

Notes. *Agathidium (Neocele) fujiyamaense* was described on a male from Aokigahara, Mt. Fujisan, and *A. (N.) funereum* on the specimens from Kyoto. The median lobe of aedeagus in *A. (N.) funereum* is a little slenderer than that in *A. (N.) fujiyamaense* in ventral view (cf. figs in ANGELINI and De MARZO, 1990, and HOSHINA, 1997), but these differences seem to be not enough for separating both populations as the independent species nor subspecies after examination of some additional specimens.

要 約

保科 英人・佐藤 正孝：日本産ガムシ科とタマキノコムシ科2種のシノニム処置。——
Megasternum japonicum は SHATROVSKIY (1989) によって、日本産同属種の *M. gibbulum* MOTSCHULSKY, 1866 (和名：セマルマグソガムシ) のタイプシリーズの一部や、他の標本を基に記載された種である。しかし、*M. gibbulum* MOTSCHULSKY, 1866 は雄交尾器や体色など、地理的なものではない個体変異が激しく、*M. japonicum* は明らかに *M. gibbulum* のシノニムである。また、*Agathidium (Neocele) fujiyamaense* HOSHINA, 1997 (和名：フジサンマルタマキノコムシ) は、雄交尾器が *A. (N.) funereum* ANGELINI et De MARZO, 1990 (和名：ギオンマルタマキノコムシ) のそれと比べてやや太く、この形質差は地理的変異であるものの、亜種・種レベルの変異ではないと考えられ、後者のシノニムとした。

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