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Biological Notes on *Haliplus sharpi* Wehncke, 1880 (Coleoptera: Haliplidae)

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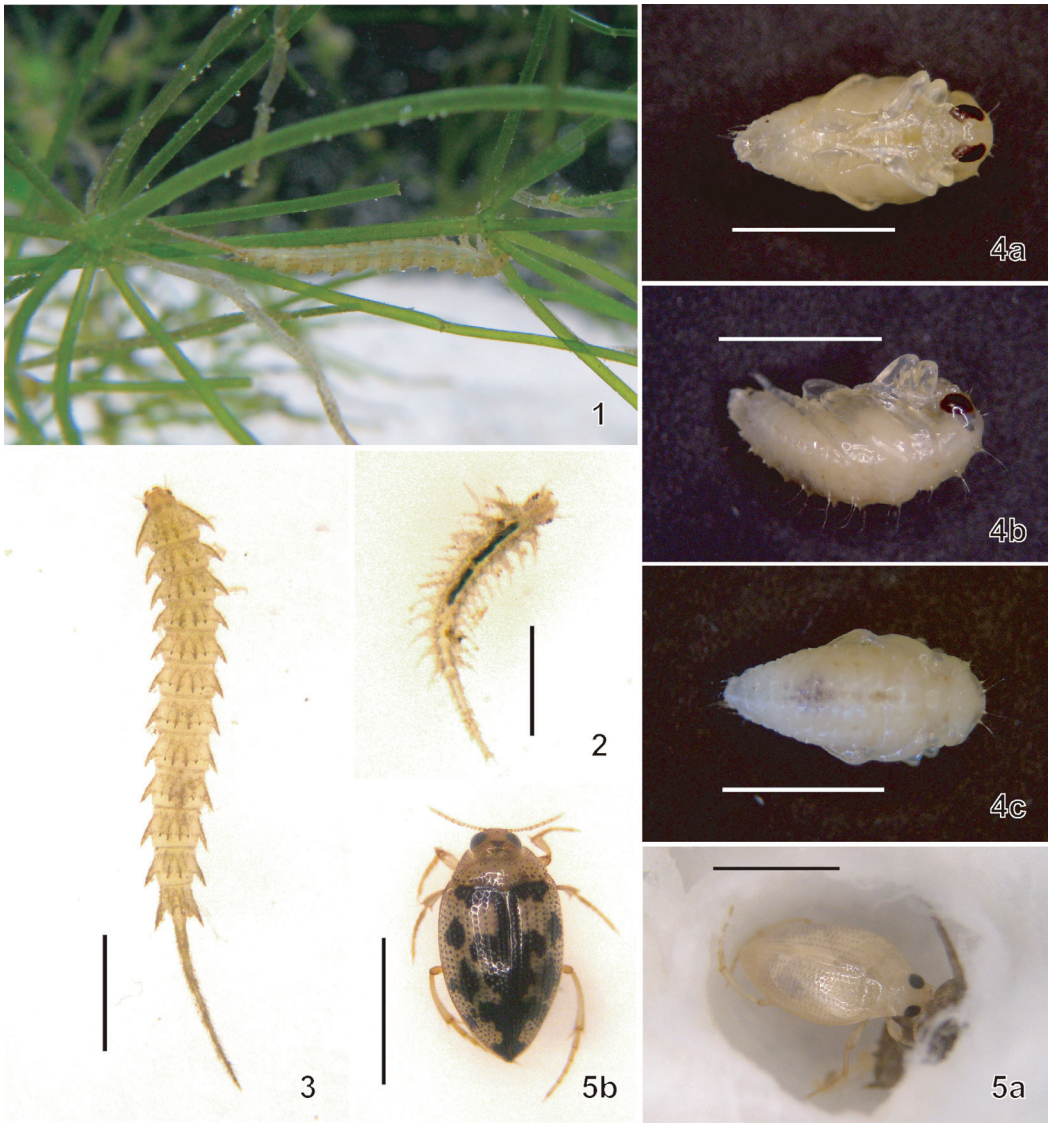

Figs. 1−5. *Haliplus sharpi*. —— 1, Third instar larva on *Chara braunii;* 2, 2nd instar larva; 3, 3rd instar larva; 4, pupa (a, ventral; b, lateral; c, dorsal view); 5, adult (a, teneral in the pupal chamber; b, mature). Scale bar: 2.0 mm.

Haliplus sharpi WEHNCKE, 1880 inhabits stagnant waters and is found in China, Japan, and Korea (VONDEL, 1991). Its population has decreased in recent years (SATÔ, 2006) and it is included on Red Lists throughout Japan. However, little is known about its life history, particularly during the larval stage. Here, I report host plant records and biological notes on *H. sharpi*.

I collected larvae of *H. sharpi* from the branches of two species of algae (Characeae), *Nitella tenuissima* var. *japonica* and *Chara braunii*, from July to August in Shiga, Japan (Figs. 1−3). Adult *H. sharpi* were collected at the same location by KAWASE *et al.* (2011). Several 2nd and 3rd (last) instar larvae were kept in the laboratory at room temperature with *N. tenuissima* var. *japonica* and *C. braunii*. All of the larvae on both types of algae grew to the 3rd instar stage by late August. Mature individuals left their host algae and moved to an artificial shore made of tissue paper in early September. After digging in the soil, the specimens constructed round chambers in which they pupated (Fig. 4). Emerged adults remained in their chambers until March of the following year (Fig. 5).

S*pecimens examined.* 1 ex. (3rd instar larva), rice paddy, Mukugawa, Imazu-chô, Takashima, Shiga, Honshu, Japan, 1−IX−2010, K. NAKANISHI leg., on N. *tenuissima v*ar. *japonica;* 1 ex. (adult), same locality, collector, and host plant, 21−XI−2010, collected as 3rd instar larva; 1 ex. (3rd instar larva), same locality, collector, and host plant, 5−VIII−2011; 2 exs. (2nd and 3rd instar larvae), same locality, date, and collector, on C. *braunii* (Figs. 1−3); 1 ex. (3rd instar larva), rice paddy, Hassaka-chô, Hikone, Shiga, Honshu, Japan, 12−VIII−2011, K. NAKANISHI leg., on C. *braunii;* 1 ex. (adult), same locality, collector, and host plant, 9−II−2012, collected as 3rd instar larva (Fig. 5). All of the specimens are deposited in the Laboratory of Environmental Zoology, The University of Shiga Prefecture, Shiga.

References

KAWASE, N., K. NAKANISHI & Y. MUKAI, 2011. The aquatic beetle fauna of Shiga Prefecture I. (Coleoptera: Haliplidae, Noteridae, Dytiscidae, Gyrinidae, Torridincolidae, Hydrochidae, Hydraenidae and Hydrophilidae). *Biology of Inland Waters*, **26**: 21−46. (In Japanese, with English summary.)

SATÔ, M., 2006. *Haliplus sharpi.* p. 180. *In* Ministry of the Environment (ed.), *Threatened Wildlife of Japan — Red Data Book 2nd ed.* — **5**, *Insecta.* 246 pp. Japan Wildlife Research Center, Tokyo. (In Japanese.)

VONDEL, B. J. VAN, 1991. Revision of the palaearctic species of *Haliplus* subgenus *Liaphlus* GUIGNOT (Coleoptera: Haliplidae). *Tijdschrift v. Ent*., **134**: 75−144.

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