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HYDROSCAPHIDAE

(Coleoptera)

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Abstract

The Hydroscaphidae of China and neighbouring countries are listed.

Key words: Coleoptera, Hydroscaphidae, Hydroscapha, China

Introduction

The family Hydroscaphidae belongs to the suborder Myxophagidae. Superficially, Hydroscaphidae resemble the genus *Limnebius* LEACH (Hydraenidae). However, they are easily distinguished from *Limnebius* by their shorter palpi and the filiform antennae. Adults of Hydroscaphidae can be recognized by the combination of the following characters: small size (0.6 - 1.9 mm long); antennae inserted ventrally, consisting of 5 or 8 segments; maxillary palpi short; elytra apically truncate, thus abdomen partly exposed; tarsi 3-segmented. The morphology of Hydroscaphidae was described in detail by REICHARDT & HINTON (1976), RICHOUX & DOLÉDEC (1987) and LAWRENCE & REICHARDT (1991). The plastron respiration of the adults of *Hydroscapha granulum* MOTSCHULSKY was described by MESSNER & JOOST (1984).

Hydroscaphidae are normally found in streams or in seepage water on rocks (hygropetric habitats), where they feed on algae, but they have also been collected in pools and hot springs.

The family Hydroscaphidae contains 3 genera. Yara REICHARDT & HINTON and Scaphydra REICHARDT are restricted to the New World, whereas Hydroscapha LECONTE occurs in the Nearctic, Palearctic and Oriental Realms.

Twelve species of the genus *Hydroscapha* are recorded from the Palearctic and Oriental Realms. They were recently revised by LÖBL (1994). Only two species, *H. humanensis* PU and *H. takahashii* MIWA are known from China. *Hydroscapha coomani* LÖBL was described from North Vietnam (Hoa Binh). Two species, *H. nepalensis* LÖBL and *H. satoi* LÖBL, were described from Nepal and two species are known from northern India (Uttar Pradesh): *H. turbinata* CHAMPION and *H. substrigosa* CHAMPION.

Hydroscapha hunanensis Pu

Hydroscapha hunanensis Pu 1948; 75. - Löbl 1994; 30.

TYPE LOCALITY: "Hungshan", Hunan, China.

TYPE MATERIAL: 3 paratypes (2 & d + 1 g) are deposited in the Department of Entomology, University of Minnesota, St. Paul, U.S.A. These specimens were examined and illustrated by LÖBL (1994). The depository of the holotype is unknown.

DIAGNOSIS: This species was sufficiently described and illustrated by LÖBL (1994).

DISTRIBUTION: Known only from Hunan.

Hydroscapha takahashii MIWA

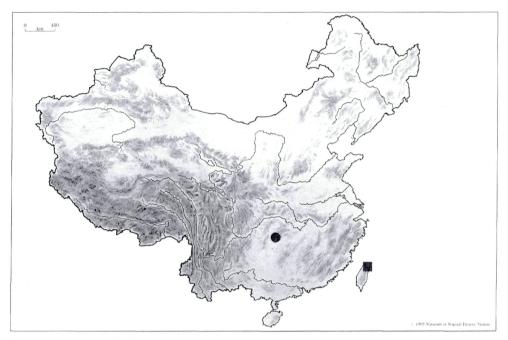


Fig. 1: Geographical distribution of *Hydroscapha hunanensis* (circle) and *H. takahashii* (square).

TYPE LOCALITY: "Shinten [= Hsintien] near Taihoku [= Taipei]", Taiwan, China.

TYPE MATERIAL: A holotype was not designated. The depository of the 5 syntypes which were collected by Dr. R. Takahashi in 1935 is not mentioned in the original description. According to HORN & al. (1990) the collection of R. Takahashi is deposited in the "Agric. Dept. Governm. Research Inst. Taihoku" [= Department of Applied Zoology, Taiwan Agricultural Research Institute (TARI), Taichung County]. The whereabouts of the Miwa collection are unknown according to HORN & al. (1990).

DIAGNOSIS: This species was not examined by LÖBL (1994). According to the original description it is characterized by a median groove on the pronotum.

DISTRIBUTION: So far known only from Taiwan.

References

HORN, W., KAHLE, I., FRIESE, G. & GAEDIKE, R. 1990: Collectiones entomologicae. Berlin: Akademie der Landwirtschaftswissenschaften, Vol.1, pp. 1-220, Vol. 2, pp. 1-573.

LAWRENCE, J.F. & REICHARDT, M. 1991: Hydroscaphidae (Myxophaga). - In F.R. Stehr (ed): Immature Insects 2. Dubuque: Kendall/Hunt.

LÖBL, I. 1994: Les espèces asiatiques du genre *Hydroscapha* LeConte (Coleoptera, Hydroscaphidae). - Archs Sci. Genève 47 (1): 15-34.

MESSNER, B. & JOOST, W. 1984: Die Plastronatmung von *Hydroscapha granulum*-Imagines (Coleoptera, Hydroscaphidae). - Zoologisches Jahrbuch der Anatomie 112: 269-278.

MIWA, Y. 1935: Description of a new species of Hydroscaphidae from Formosa. - Transactions of the Natural History Society of Formosa XXV: 352-353.

Pu, C.-L. [Zhelong] 1948: A new species of Hydroscaphidae from China (Coleoptera). - Lingnan Science Journal 22: 75-77.

REICHARDT, H. & HINTON, H.E. 1976: On the New World beetles of the family Hydroscaphidae. - Papéis Avulsos Zool. 30: 1-14.

RICHOUX, P. & DOLÉDEC, S. 1987: *Hydroscapha granulum* (Motschulsky, 1855). Description of the larva and ecological notes. - Aquatic Insects 9: 137-144.

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