

UPDATING THE SOUTHEAST ASIAN *NEPTOSTERNUS* SHARP FAUNA II (COLEOPTERA: DYTISCIDAE)

Michael Balke

Evolutionsbiologie, Institut für Zoologie, Freie Universität Berlin, Königin-Luise-Straße 1-3, D-14195 Berlin, Germany (e-mail <embalke@zedat.fu-berlin.de>).

Lars Hendrich

Berlin-Forschung, Freie Universität Berlin, Gärtnerringstraße 3, 12207-Berlin, Germany
(e-mail <hendrich1@aol.com>).

ABSTRACT. - One new species of rheobiotic Dytiscidae, *Neptosternus chumphon* is described from Thailand. *Neptosternus togatus* Guignot, 1954 [described from Indonesia, Java] is suggested to be a junior subjective synonym of *N. corporaali* Zimmermann, 1924, which is now reported from Java for the first time. The median lobe of *N. taiwanensis* Hendrich & Balke, 1997 is depicted for the first time and new distributional reports for *N. hydaticoides* (Régimbart, 1877) [Taiwan, West Malaysia] and *N. jacobsoni* Zimmermann, 1927 [Java] are provided. A total of 54 *Neptosternus* species are now known from SE Asia.

KEYWORDS. - Coleoptera, Dytiscidae, *Neptosternus*, new species, new synonymy, faunistics, SE Asia

INTRODUCTION

The SE Asian representatives of the rheobiotic dytiscid genus *Neptosternus* Sharp were most recently revised by Hendrich & Balke (1997). The fauna of that region had been updated in the same year (Balke et al., 1997). In this second update, we report one new species, one new synonymy, one new homonym and some new distributional data. A total of 54 species are now known from SE Asia.

MATERIAL AND METHODS

Habitus drawings were made with a drawing tube attached to a Wild M8, the median lobes were traced from SEMs. The style of the descriptive notes follows Hendrich & Balke (1997).

The material studied here is deposited in the following institutions: CBH - Collections of the authors, Berlin, Germany; NMW - Naturhistorisches Museum Wien, Austria; NTUC - National Taiwan University, Taipei, Taiwan; ZMUA - Instituut voor taxonomische Zoologie, Zoologisch Museum, Universitaet van Amsterdam, The Netherlands; ZRC - Zoological Reference Collection, National University of Singapore, Republic of Singapore.

TAXONOMY

Neptosternus corporaali Zimmermann, 1924

Neptosternus corporaali Zimmermann, 1924: 193.

Neptosternus togatus Guignot, 1954: 41, **new synonymy**.

Neptosternus corporaali Zimmermann: Hendrich & Balke, 1997: 67.

Material examined. - Holotype male of *N. togatus* INDONESIA, Java, Jakarta; coll. C.v. Nidek, Feb.1949; Dr F. Guignot det., 1953 (ZMUA).

Remarks. - We have compared the holotype of *N. togatus* with the lectotype of *N. corporaali* (see Hendrich & Balke, 1997) and have little doubt that the former is a junior subjective synonym of the latter. This is the first report of *N. corporaali* from Java.

Neptosternus jacobsoni Zimmermann, 1927

Neptosternus jacobsoni Zimmermann: Hendrich & Balke, 1997: 68.

Material examined. - 1 ind. INDONESIA, Java, Jakarta; coll. C. v. Nidek, Jun.1949 (ZMUA).

Remarks. - This species was so far known from Sumatra only. Here, we provide the first report for Java. The specimen was originally identified as *N. jacobsoni* by Guignot in 1953, and this was verified by Lars Hendrich after type comparison.

Neptosternus taiwanensis Hendrich and Balke, 1997

(Fig. 1)

Neptosternus taiwanensis Hendrich and Balke, 1997: 65.

Material examined. - 2 males, 2 inds TAIWAN, “Ankô” [modern name not identified], “Taihoku” [= Taipei]; coll. S. Miyamoto, 16 Feb.1941 (CBH, NTUC).

Remarks. - This species was described based on a single female individual (Hendrich & Balke, 1997). Here, we depict the median lobe of the male for the first time (Fig. 1).

Neptosternus hydaticoides (Régimbart, 1877)

Neptosternus hydaticoides (Régimbart): Hendrich & Balke, 1997: 57.

Material examined. - 1 male TAIWAN, “Ankô” [modern name not identified], “Taihoku” [= Taipei]; coll. S. Miyamoto, 16 Feb.1941 (NTUC). — 1 ind. same but 2 Nov.1941 (NTUC). — 27 inds MALAYSIA, Pahang, Kuala Lipis; coll. M. Balke & L. Hendrich, 12 Apr.1997 (CBH, ZRC).

Remarks. - As currently delimited, *N. hydaticoides* is the most widespread species of the genus in SE Asia. These are the first reports for Taiwan and West Malaysia.

Neptosternus kolakaensis, new name

Neptosternus speciosus Régimbart, 1892: 983.

Neptosternus speciosus Hendrich & Balke, 1997: 84, nom. praecocc.

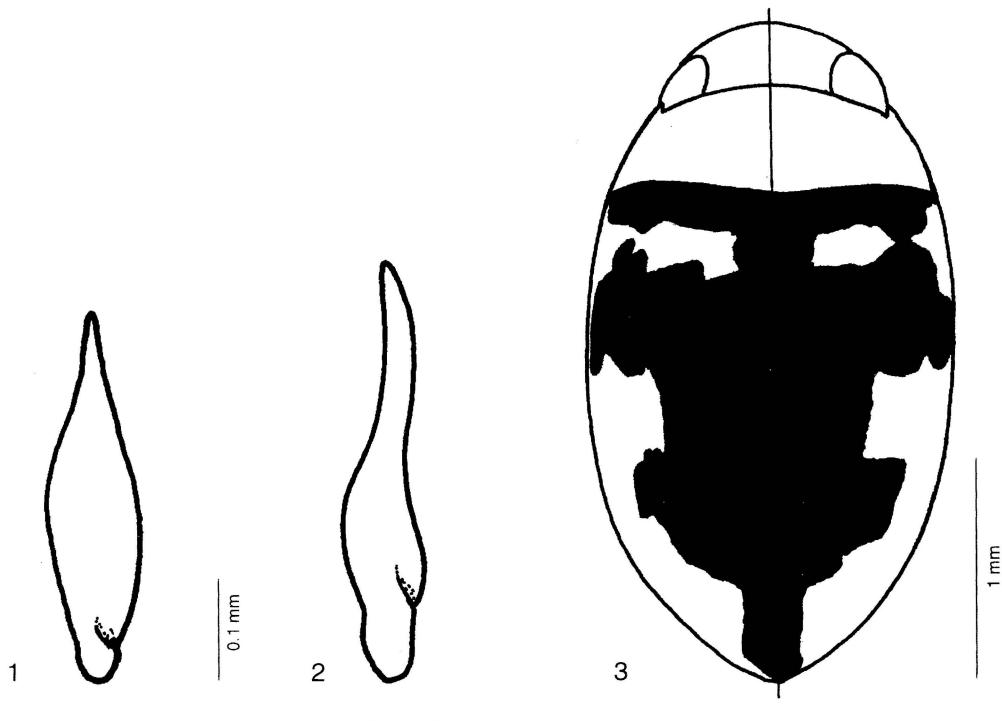
Remarks. - Our colleague Fernando Pederzani (Ravenna, Italy) kindly informed us that what we named *N. speciosus* is a homonym of *N. speciosus* Régimbart, currently standing in the genus *Philaccolus* Guignot, 1937. We replace the preoccupied name by the replacement name *N. kolakaensis*, after the region from which our types have been collected, i.e. Kolaka (Indonesia, SE Sulawesi).

Neptosternus chumphon, new species

(Figs. 2, 3)

Material examined. - Holotype - male (NMW), THAILAND, Chumphon Prov., environs of Pha Tho (9°48'S 98°47'E), at light; coll. P. Prudek, 27 Mar.- 14 Apr. 1996.

Paratypes - 2 females, same data as holotype (CBH).



N. taiwanensis

N. chumphon

N. chumphon

Figs. 1-2. Median lobe of aedeagus in ventral view. 1. *Neptosternus taiwanensis* Hendrich & Balke. 2. *Neptosternus chumphon*, new species. Fig. 3. Habitus and coloration of *Neptosternus chumphon*, new species. Left, paler and right, darker specimen.

Diagnosis. - Small, elongate species: TL 2.6-2.7 mm, TL-h 2.4-2.5 mm, TW 1.4-1.5 mm; body only slightly arched in lateral view. Upper side comparatively light; head and pronotum yellowish; elytra blackish with yellow pattern (Fig. 3). Venter yellowish, epipleura yellow anteriorly; appendages yellowish to reddish.

Head covered with polygonal meshes but on posterior portion which is densely punctate, few larger punctures visible. Pronotum with microreticulation of polygonal meshes; moderately densely punctate, some larger punctures visible. Elytra with microreticulation consisting of slightly transverse orientated polygonal meshes; fine and densely punctate, few larger punctures visible; the discal row of serial punctures dense and well defined, 1st and 2nd lateral rows less distinct, sutural row not visible.

Median lobe of aedeagus as in Fig. 2.

Affinities. - *Neptosternus chumphon*, new species, is well characterized by the combination of its size, coloration, surface sculpture and median lobe. It cannot be confused with any of the species known so far (see Hendrich & Balke, 1997; Balke et al., 1997).

Etymology. - Named after the province of Thailand from which this species was collected.

Habitat. - Unknown, the types were attracted to light. Other *Neptosternus* species present in the same sample are: *N. bellus* Hendrich & Balke, 1997, *N. hydaticoides*, *N. riedeli* Hendrich & Balke, 1997 and *N. vietnamensis* Hendrich & Balke, 1997.

ACKNOWLEDGEMENTS

We thank Dr Ben Brugge (Amsterdam, The Netherlands) and Mr. Liang-Jong Wang (Taipei, Taiwan) for loan of specimens. Michael Balke thanks the "Studienstiftung des deutschen Volkes", and Lars Hendrich is obliged to the "Berlin-Forschung" for financial support. Thanks are also due to Dr D. Bilton (Plymouth, UK) for reading an earlier draft of the MS.

LITERATURE CITED

Balke, M., L. Hendrich & C. M. Yang, 1997. Updating the SE Asian *Neptosternus* Sharp fauna (Coleoptera: Dytiscidae). *Raffles Bull. Zool.*, **45** (2): 369-374.

Guignot, F., 1954. Quarantième note sur les Hydrocanthares. *Bull. Annls Soc. ent. Belg.*, **90**: 40-45.

Hendrich, L. & M. Balke, 1997. Taxonomische Revision der südostasiatischen Arten der Gattung *Neptosternus* Sharp, 1882 (Coleoptera: Dytiscidae: Laccophilinae). *Koleopt. Rundsch.*, **67**: 53-97.

Régimbart, M., 1892. Viaggio di Lamberto Loria nella Papuasia orientale. IV. Halaplidae, Dytiscidae et Gyrinidae. *Ann. Mus. Civ. Stor. Nat. Genova*, **10** (2): 978-997.

Zimmermann, A., 1924. Neue Dytisciden aus dem malayischen Archipel. *Ent. Mitt.*, **12** (2/3): 193-195.