

Contributions to the taxonomy of the genera *Pachysternum* and *Cyrtonion* (Coleoptera, Hydrophilidae, Sphaeridiinae)

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Abstract: *Pachysternum loxodonta* sp. n. from the Republic of the Congo and *Pachysternum sulawesicum* sp.n. from Sulawesi Island, Indonesia are described. The generic status of *Pachysternum sculpticolle* (Régimbart, 1907) is revised, the species is transferred to the genus *Cyrtonion* and its differences from *C. ghanense* Hansen, 1989 are discussed. Taxonomy of *Pachysternum* is discussed, dividing the genus prelusively into three species groups, one comprising all known Oriental and Eastern Palearctic species, and two comprising the Afrotropical species. Species with unclear positions within the genus *Pachysternum* or with questionable generic status are left as “Species incertae sedis”.

Key words: Taxonomy, Coleoptera, Hydrophilidae, *Pachysternum*, *Cyrtonion*, Afrotropical region, Oriental region.

Introduction

The genus *Pachysternum* Motschulsky, 1863 belongs to the tribe Megasternini of the subfamily Sphaeridiinae. Twenty-one species have been described (HANSEN, 1999; HEBAUER, 2002), but the genus has never been revised and some species are undescribed (e.g., HANSEN, 1990). During the preparation of a previous paper concerning this genus (FIKÁČEK & BOUKAL, 2004), I examined the material from both Afrotropical and Oriental regions deposited in the institutions listed below under Acronyms. This material contained two undescribed species. The genus was found to include species of rather variable morphology, as well as some species with unclear generic position and one species belonging to the genus *Cyrtonion* Hansen, 1989. In this contribution, two new species are described and the generic status of *Pachysternum sculpticolle* (Régimbart, 1907) is revised. In addition, some preliminary conclusions are drawn considering the higher taxonomy of *Pachysternum*.

Material and methods

This study is based on the examination of the specimens mentioned under “Material examined” in all species mentioned in the systematic part. Precise transcriptions of labels attached to type specimens are mentioned, using a slash (/) for dividing the rows on one label, and double-slash (//) for dividing of data on different labels. Material was examined using binocular microscope Olympus SD 30, figures were traced from photographs using the digital camera Olympus C-5060 attached to a binocular microscope Olympus SZX9. Drawings of aedeagophores were prepared from glycerine

preparations using a drawing tube attached to an Olympus BX40 microscope.

The morphological nomenclature follows FIKÁČEK & BOUKAL (2004) (see there for explanation of terms “preepisternal elevation of mesothorax”, “mesoventrite” and “metaventrite”). In the descriptions, elytral intervals are counted without the sutural one, whereas elytral series are counted including the sutural stria.

Distributional data mentioned in the list of the species assigned to *Pachysternum* are adopted from HANSEN (1999, 2004), HEBAUER (2002), HEBAUER & RYNDEVICH (2005) and FIKÁČEK & BOUKAL (2004).

Acronyms: ANIC – Australian National Insect Collection, Canberra (A. Slipinski); IRSN – Institut Royal des Sciences naturelles de Belgique, Bruxelles (A. Drumont, P. Limbourg); MFOC – coll. Martin Fikáček (Department of Zoology, Faculty of Science, Charles University, Prague); NHMW – Naturhistorisches Museum, Wien (M. A. Jäch, H. Schönmann, A. Komarek); TTMB – Magyar Természettudományi Múzeum, Budapest (Gy. Szél).

Pachysternum loxodonta sp. n. (Figs 1–7)

Description. Body broadly oval, highly convex. Length: 4.5–5.8 mm; width: 3.1–3.8 mm.

Coloration. Head, pronotum and elytra brown to piceous. Head only with very narrow paler stripe on the transverse ridge between eyes (“false frontal suture”). Apical part of elytra with large rather strongly delimited pale (reddish) spot, its margin going from c. apical 3/5 on interval 1, and to c. apical 1/3 on interval 9, forming a pale stripe on the deflexed lateral part of elytra (i.e. interval 10) reaching to half of elytral length. Mouthparts and antennae pale, reddish to testaceous,