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subfam. nov (Crustacea, Decapoda, Brachyura,
Majoidea)**

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Paradasygyiinae subfam. nov. in replacement of Dasygyiinae Holmes, 1900 (Crustacea, Decapoda, Brachyura, Majoidea, Inachoididae Dana, 1851)

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Abstract

The brachyuran subfamily Dasygyiinae Holmes, 1900, recently resurrected by Guinot & Van Bakel (2020) in the family Inachoididae Dana, 1851, is not available for nomenclatural purposes. The present note serves to replace it by Paradasygyiinae subfam. nov.

Introduction

In a recent review of the family Inachoididae Dana, 1851 by Guinot & Van Bakel (2020) to establish two new subfamilies, Esopinae and Paulitinae, we have resurrected four subfamilies: Collodinae Stimpson, 1871; Dasygyiinae Holmes, 1900; Inachoidinae Dana, 1851; Salaciinae Dana, 1851, in addition to the Stenorhynchinae Dana, 1851, already recognised by Guinot (2012). But a nomenclatural problem concerning the availability of Dasygyiinae Holmes, 1900 according to the current zoological Code (ICZN, 1999), highlighted by P. K. L. Ng (Lee Kong Chian Natural History Museum, National University of Singapore) and kindly brought to our attention by him, requires us to replace it by a new name, Paradasygyiinae subfam. nov.

Here is the complicated chronology of the various nomenclatural acts. Holmes (1900: 27) based his new subfamily Dasygyiinae (sic) on “*Dasygyius* Rathbun = *Microrhynchus* Bell and *Neorhynchus* Milne-Edwards preoc.”. Previously, A. Milne-Edwards (1879: 187) showed that *Microrhynchus* Bell, 1835 was a name preoccupied by a genus of Coleoptera and substituted the new name *Neorhynchus* for it. Miers (1879: 651), by subsequent designation, fixed *M. gibbosus* Bell, 1935 (p. 88; 1836, p. 41, pl. 8, fig. 1–1c) as type species of *Microrhynchus*. Rathbun (1925: 137) showed that *Neorhynchus* A. Milne-Edwards, 1879 (p. 187) was a name preoccupied by a genus of bird and she, therefore, substituted the new name *Dasygyius* for both *Microrhynchus* and *Neorhynchus*. The type species of *Dasygyius* is thus *Microrhynchus gibbosus* Bell, 1835. But, Garth (1958: 67) synonymised *Dasygyius* to the genus *Collodes* Stimpson, 1860 (type species *Collodes*

granosus Stimpson, 1860) that has priority, which means that *D. gibbosus* must actually become *Collodes gibbosus*. Ultimately, Garth (1958: 67, 80) was led to erect a new genus, *Paradasygyius*, for the second species included in these series of substitutions for *Microrhynchus*, *M. depressus* Bell, 1835 (Bell 1835: 88; 1836: 42, pl. 8, figs. 2, 2 d–f), renamed *Neorhynchus depressus* by A. Milne-Edwards, 1879 (see also Rathbun 1894: 73) and *Dasygyius depressus* by Rathbun (1925: 12, 137, pl. 1, pl. 274, figs. 5–8). The type species of *Paradasygyius* Garth, 1958 is *P. depressus* (Bell, 1835) (Garth 1958, pl. E, fig. 5; pl. 4, fig. 2). Paraphrasing Garth (1958: 67), if Miers (1979) had chosen *M. depressus* as type species of *Dasygyius* instead of *M. gibbosus* for *Collodes*, it might have been possible to preserve the name *Dasygyius* Rathbun.

As a result of the considerations set out above, Dasygyiinae Holmes, 1900 must be replaced by a new name, here established as Paradasygyiinae subf. nov., with *P. depressus* (Bell, 1835) as type species. The same description applies to both.

It should be noted in parenthesis that *Dasygyius tuberculatus* Lemos de Castro, 1949, a supposed “Atlantic cognate” of *D. depressus* (see Garth 1958: 14), has been transferred to a new genus, *Paulita*, as *P. tuberculata* (Lemos de Castro, 1949) by Guinot (2012) and that *Paulita* became the type genus of the subfamily Paulitinae Guinot & Van Bakel, 2020.

Paradasygyiinae subf. nov.

Dasygyiinae Holmes 1900: 27.

Dasygyiinae Guinot & Van Bakel 1920: 114.

Type genus. *Paradasygyius* Garth, 1958 (type species by original designation: *Microrhynchus depressus* Bell, 1835, now *Paradasygyius depressus*).

Description. Body markedly flattened. Carapace rounded, longer as wide, distinctly narrowing anteriorly (Garth 1958: pl. 4, fig. 2). Carapace resting on setting gutter (Drach & Guinot 1982: pl. 1, fig. 5). Carapace dorsal surface covered with fine granulations and some occasional larger ones, with shallow grooves (Santana 2008: figs. 49A, 50A). Rostrum simple, short, as narrow triangle. Preorbital tooth absent. Postorbital tooth large, curving around eye, forming postocular cup (supraocular eave) accommodating eyestalk in resting position (Santana 2008: fig. 49A, B). Eyes large, flattened. Antenna: basal article adjacent to urinary article, long: with two teeth on inner margin, outer angle conspicuously projecting dorsally by long, narrow tooth; antennal movable portion entirely visible in dorsal view at side of rostrum (Santana 2008: figs. 49A, 50A). Proepistome laterally compressed, forming slightly recessed septum not joining rudimentary epistome. Branchiostegite very reduced; branchial chamber reduced to narrow space due to flattening of body, probably not functional posteriorly, without gills at level of last pereopods.

Mxp3: ischium narrow, crista dentata formed by triangular teeth; merus narrow at base, then strongly cordiform; coxa short, prolonged by distal lobe to embayment (Rathbun 1925: fig. 50, as *Dasygyius depressus*; Guinot & Richer de Forges 1997: fig. 14A). Thoracic sternum flat, except the first three inflated sternites (Santana 2008:fig. 49B; Guinot 2012: fig. 3C; Guinot *et al.* 2019: fig. 16B). Absence of sternum/pterygostome junction, sternite 4 not laterally extended; suture 3/4 short, only lateral, forming deep pocket (Guinot 2012: fig. 3C, D); Milne-Edwards openings not separated from chelipeds. Presence of very wide sternal extensions joining exposed pleurites (sternum/pleurites connections) between P1/P2, P2/P3, P3/P4, P4/P5. Pleurites regularly connecting medially and fused to carapace by pillars (Drach & Guinot 1982). Pleurites 5–8 exposed, rather wide, each sclerite pointed at each end and covered with small granules (Drach & Guinot 1982: pl. 1, fig. 5; Hendrickx 1999: fig. 2A, B; Santana 2008:figs. 49A, 50A). Male chelipeds stout; palm inflated, subglobular; fingers narrowly gaping at base, crenulate on prehensile margins (Rathbun 1925: fig. 51, as *Dasygyius depressus*; Garth 1958: pl. 4, fig. 2; Hendrickx 1999: fig. 40B). Female chelipeds weaker than legs, palm not swollen (Rathbun 1925: pl. 274, figs. 7–8, as *Dasygyius depressus*). Ambulatory legs very long, granulate and hairy (Hendrickx 1999: fig. 40A; Santana 2008: fig. 47B). Pleon: first somite dorsal, granular, produced into long, conical, acute spine in both sexes (Drach & Guinot 1982: pl. 1, fig. 4; Santana 2008: fig. 50B). Male pleon with somites 1–5 free, somites 6 being fused to telson (pleotelson); female pleon (Rathbun 1925: pl. 274, fig. 5, as *Dasygyius depressus*) with somites 1–4 free, somites 5, 6 being fused to telson (pleotelson). Male gonopore partially condylar, partially coxal (Guinot *et al.* 2013: 127). G1 straight, without developed lobe, aperture subapical (Garth 1958: pl. E, fig. 5). Vulvae located on anteriorly displaced sternite 6, as expansions projecting on sternites 5 and even 4. Pleonal-locking mechanism: marked, often pointed button on sternite 5, near suture 5/6; socket on pleotelson (Guinot & Richer de Forges 1997: fig. 14B, C).

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