

The species of *Damarus* Péringuey (Ptinidae: Coleoptera)

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The status of the previously misidentified *Damarus singularis* Péringuey was clarified by examination of the syntypes. A second *Damarus* species is described, and a key to the species is provided. The rudimentary distribution records hitherto available are supplemented by additional material, and are illustrated in two maps.

Key words: Gibbiinae, Ptinidae, Namibia.

INTRODUCTION

Péringuey (1899) described the Namibian genus and species *Damarus singularis* (Coleoptera: Ptinidae). It was subsequently recorded by Pic (1908), and redescribed by Bellés (1984, 1985) on the basis of identified material from Pic's collection in Musée Royal de l'Afrique Centrale, Tervuren. Examination of the syntypes of *D. singularis*, and comparison with both Bellés' redescription and other material identified by Pic, indicate two distinct taxa.

Both species are restricted to coastal Namibia, where adults are present throughout the year. They are frequently found associated with hummock vegetation on gravel plains or with consolidated sand, and feed on the accumulated detritus under such hummocks. Despite their small size, the striking black and white coloration renders them conspicuous.

Material examined is in the following institutions, and abbreviations follow Arnett & Samuelson (1986): National Museum, Bloemfontein (BMSA); Desert Ecological Research Unit, Gobabeb, Namibia (GRSW); Museo Civico de Storia Naturale 'Giacomo Doria', Genoa (MCSN); South African Museum, Cape Town (SAMC); National Collection of Insects, Pretoria (SANC); State Museum of Namibia, Windhoek (SMWN); Transvaal Museum, Pretoria (TMSA); Entomology Department, University of Pretoria (UPSA); Museum für Naturkunde der Humboldt-Universität, Berlin (ZMHB).

Genus *Damarus* Péringuey

Damarus Péringuey, 1899: 244.

Type species: *Damarus singularis* Péringuey (by original monotypy).

Redescription

Head. With white waxy covering; wax on vertex smooth, with only tips of few slender black setae

showing; clypeus with many robust black setae protruding through wax; genal wax forming a horizontal, projecting ledge below eyes; labrum waxless, black. **Antennae** with short robust setae, apparently 10-segmented owing to partial secondary fusion of two apical segments; basal segment elongate, massive; apical fused segments together globose and subacute; antennal insertions proximate, basally separated by sharp waxy ridge.

Thorax. **Pronotum** covered with sculptured spongy white wax, which when removed reveals rugose black integument underneath. **Scutellum** indistinct. **Prosternum** inconspicuous, hidden under head. **Mesosternum** small, hexagonal; metasternum wide, trapezoid; both covered in white wax, through which scattered robust black setae protrude. **Metepimera** covered in white wax.

Abdomen. Globose, black. Elytra with paired median and 3+3 lateral costae, sometimes reduced to basal relicts only. Elytral costae, apical declivity and ventrolateral surfaces covered with scattered short, white flattened setae; usually effaced, only visible in well-preserved material. Basal elytral pubescent collar of 4+4 triangular wax-encrusted setal tufts arranged opposite origins of costae. Abdominal sternites I–III covered with thick white wax, IV and V with thinner testaceous filamentous wax; subgenital plate parabolic, with dense scattered setae and white waxy rim.

Legs. **Femora** strongly clavate, upcurved. **Tibiae** moderately clavate; pro- and mesotibiae straight, metatibiae curved. Tarsi 5-segmented, with two small, slender, widely separated tarsal claws. Tarsus, tibia and femur with short dark setae, especially apically.

Remarks. The genus was redescribed by Bellés (1985). It may easily be distinguished from other

Gibbiinae by the black and white coloration, and the secondary fusion of the two apical antennal segments. The two known species are distinguished as follows:

- Elytra each with 2–3 complete lateral costae, in addition to the median costa; pronotum with both median and lateral wax callosities; legs testaceous; smaller specimens, body length 2.5–3.2 mm *D. singularis* Péringuey
- Elytra with basal costal relicts only; pronotum medially smooth, with lateral wax callosities only; legs white; larger specimens, body length 3.2–3.8 mm *D. magnus* sp. n.

***Damarus singularis* Péringuey, Fig. 1**

Damarus singularis Péringuey, 1899: 244.

Damarus bellesi Borowski, 1995: 112. **Syn. n.**

Redescription

Body. Length 2.5–3.2 mm. *Antennae* testaceous. Pronotal wax forms a raised anterior collar; with 1+1 lateral ridges leading from anterior collar to humeral angles, and including 1+1 raised pre-humeral callosities; also 1+1 submedian callosities on pronotal disc; anterior collar and all four callosities with small black spots representing tips of setae protruding through wax. *Elytra* with paired median sutural costae, and 3+3 raised lateral costae; costae range from sharply raised and distinct to low and apically indistinct, but are always longer than two thirds elytral length; lateral costae may occasionally divide or anastomose, especially where they converge on apical declivity, but then usually asymmetrically so; costae smooth, edentate; intercostae finely rugose. Tufts of basal elytral pubescent collar small, narrow, yellowish.

Abdominal sternites I–IV each with one transverse row of robust clavate black setae, protruding through wax. *Legs:* coxae covered in white wax, rest of legs black to dark-testaceous.

Type material examined. 1♂, 1♀, syntypes, card-mounted on the same pin: 'Walfish B., 1886; *Damarus singularis*, type, Py; Type [red]; Type, SAM/Ent 4839 [red]' (SAMC). The female is here designated as lectotype and the male as paralectotype.

Additional material examined. 188 specimens (males and females are almost indistinguishable



Fig. 1. *Damarus singularis* Péringuey. Scale bar = 1 mm.

externally, and were not recorded separately). Recorded from the following localities, in all months of the year: NAMIBIA: Kunene River, W Hartmanberge, at 17.12S 12.10E; Cape Fria Radio Station, 18.14S 12.01E; Okau, 18.18S 12.05E; Sarusas, 18.46S 12.24E; Khumib River, 15 km from mouth, 18.47S 12.33E; Sarusas West, 18.49S 12.30E; Rocky Point, 18.59S 12.29E; Hoarusib River Mouth and vicinity, 19.04S 12.34E; Mōwebaai, 19.22S 12.42E; Hoanib River Mouth/Delta, 19.28S 12.46E; coastal area betwn. Unjab-Hoanib Rivers [ca. SE1912Dd]; Uniab River Mouth/Delta and vicinity, 20.11S 13.11E; unnamed locality, 21.47S 14.26E; Hentiesbaai; Rössing Mt., 22.32S 14.49E; Walfish Bay, 22.57S 14.31E. 110 (SMWN); 36 (TMSA); 32 (UPSA); 6 (SANC); 3 (GRSW); 1 (SAMC).

Distribution. Northern Namib coast, Walvis Bay to the Kunene River, up to 50 km inland. Uncommon south of Unjab River (Fig. 4).

Remarks. The excellent description and illustrations of *D. bellesi* by Borowski (1995) leave no doubt that this species is the same as *D. singularis* and it is accordingly synonymized here.



Fig. 2. *Damarus magnus*, northern form. Scale bar = 1 mm.

***Damarus magnus* sp. n.**, Figs 2–3

Damarus singularis Péringuey: *sensu* Pic 1908: 139; Bellés 1984: 452, 1985: 58.

Description

Body. Length 3.2–3.8 mm. **Antennae** bicoloured, proximally white owing to thin waxy covering, black distally. Specimens from northern Namibia have individual antennal segments longer than wide (Fig. 2), specimens from southern Namibia have segments as wide as long (Fig. 3), with a continuous range of clinal variation between the two populations. Pronotal wax forms a raised anterior collar and 1+1 low posterolateral pre-humeral projections; disc smoothly rounded, with low posteromedial depression, with scattered small black spots representing tips of setae protruding through wax. **Elytra** finely rugose; paired median and 3+3 lateral costae developed basally, apically obliterated, not extending further posterior than one third elytral length; basal costal



Fig. 3. *Damarus magnus*, southern form. Scale bar = 1 mm.

relicts wide, smooth, edentate. Tufts of basal elytral pubescent collar large, wide, white.

Abdominal sternites I–IV each with one transverse row of slender, unmodified setae, protruding through wax, with additional single median setae. Entire leg, excepting tarsi, thinly covered in white wax (in well-preserved specimens).

Etymology. The name refers to the larger size of this species in relation to *D. singularis*, and is based on a similar unpublished label name given by the late Dr H. Andreae of SAMC.

Type material examined. Holotype ♀, NAMIBIA: Conception Bay, 24.01S 14.33E, Diamond Area 2, 18 May 1984, J.Irish, H.Liessner, H60887 (SMWN). Paratypes: 233 specimens. Paratype data in chronological sequence according to date: 3 (on 2 pins). NAMIBIA: Swakopmund (22.40 S 14.33E), 2.vi.(18)99 (SAMC); 2, D.S.W.-Afrika, Cap Cross (21.46S 13.57E), Swakopmund, viii.03, L.Schultze S., No. 312 (ZMHB); 4, Swakopmund, ix.1931, R.D.Bradfield (TMSA); 1, Swakopmund, S.W. Africa, G.Hobohm, xii.1950 (SAMC); 3, Swakopmund, S.W.A., xii.1950, E.R.Scherz (TMSA); 1, Rocky Point (18.59S 12.29E), Kaokoveld Coast, vi.1951, C.Koch, det. H. Andreae as 'major m.' (TMSA); 30, Cape Cross, vii.1954, Vernay - Tvl. Mus. Expedition (TMSA); 7, Cape Cross, W. Damaraland, x.1957, C. Koch (TMSA); 1, Sandwich Bay (23.21S 14.30E), S.W.Africa, v.1959, R.Paulian

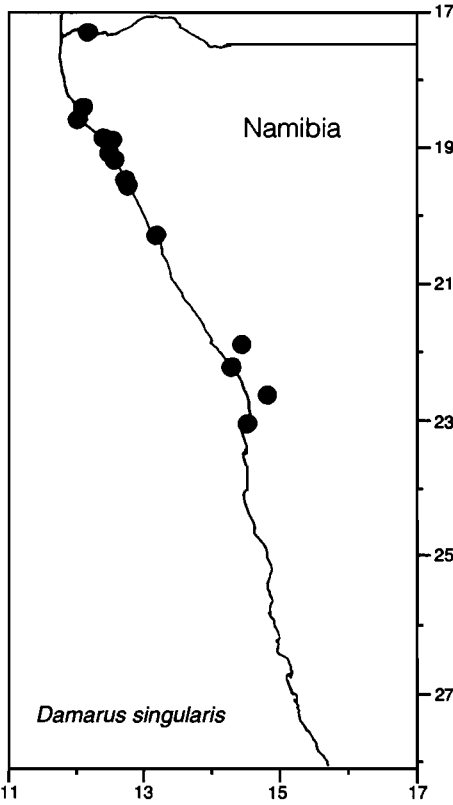


Fig. 4. Distribution of *Damarus singularis*.

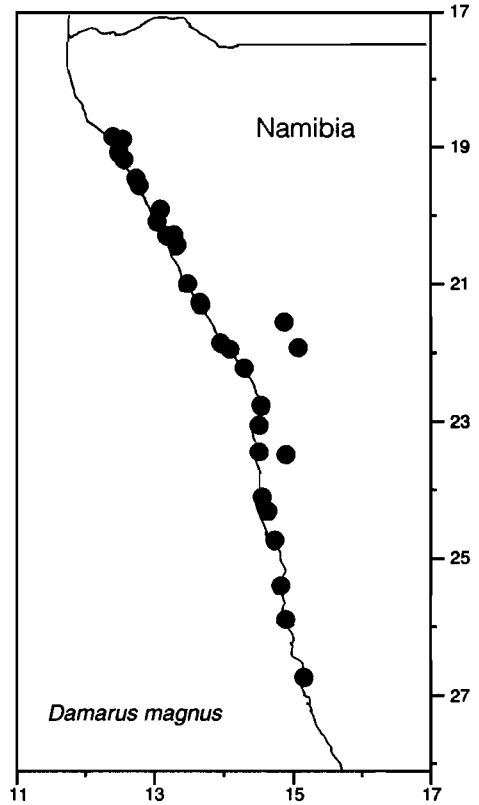


Fig. 5. Distribution of *Damarus magnus*.

(TMSA); 1, Rocky Point, 7.x.1968 (SMWN); 1, Hoanib River, SE1912Bd (ca. 19.27S 12.47E), 5-7.vi.1969 (SMWN); 1, Rocky Point, Northern Namib, S.W.Afr., 3.v.1970, H.D.Brown (SANC); 1, Swakopmund, S.W.A., i.1971, L.Schulze (TMSA); 8, Swakopmund, 21.vii.1971 (SMWN); 3, Mōwebaai / Lower Hoanib R., SE1912Bc/d (ca. 19.27S 12.47E), 11-15.viii.1973 (SMWN); 12, S.W. Afr., Namib, Spencer Bay Water, 25.47S 14.54E, 15.i.1974, E-Y:290, faeces trap, leg. Endrödy-Younga (TMSA); 6, Swakopmund, 2.iii.1974 (SMWN); 1, Sandwich Harbour, 5-14.ix.1974 (SMWN); 5, Walvisbaai, SE 2214 Dc3 (22.57S 14.31E), 8.vii.(19)75, Dept. of Entomology, University of Pretoria (UPSA); 2, South West Africa, Swakopmund, 22.40S 14.33E, ii.1978, S.J.v.Tonder (SANC); 3, South West Africa, Hentiesbaai, 22.05S 14.17E, ii.1978, S.J.v.Tonder (SANC); 65, Swakopmund, 29.iv-2.v.1980, S.Louw, M.-L.Penrith (SMWN); 2, Huab R. Mouth dunes, 20.53S 13.29E, 22.i.1982, J.Irish (SMWN); 4, Hoanib River Mouth, 23.i.1982, J.Irish (SMWN); 1, Ugab R.

at 21.13S 13.40E, ii.1982, S.Braine (SMWN); 8, Lagunenbergr, 21.49S 14.05E, 11-15.iii.1982, M.J. & M.-L.Penrith (SMWN); 1, Huab R. dunes at 20.51S 13.28E, 6.viii.1982, S.Braine, M.-L.Penrith (SMWN); 7, Huab R. delta at 20.53S 13.27E, 6.viii.1982, S.Braine, M.L.Penrith (SMWN); 24, Unjab R. delta at 20.11S 13.12E, 6.VIII.1982, M.-L.Penrith, S.Braine (SMWN); 5, S.W.Afr, N.Namib, Unjab dunes, W 20.10S 13.13E, 26.viii.1982, E-Y:1929, dunes & humm. night, leg. Endrödy-Younga (TMSA); 5, S.W.Afr, N.Namib, Unjab riv. delta, 20.12S 13.11E, 4.iv.1984, E-Y:2082, pond & hummocks, leg. Endrödy-Younga (TMSA); 1, Charlottenfelder, 24.12S 14.38E, 19.v.1984, J.Irish, H.Liessner (SMWN); 1, Uniab River, 20.09S 13.18E, 19-27.ii.1985, E.Griffin (SMWN); 6, South West Africa, Namibia, Swakop River nr Swakopmund, 22.40S 14.31E, 26.iii.1985, S. Chadwick, collected from *Acanthosicyos horrida* flowers (Cucurbitaceae) (SANC); 2, S.W.A./Namibia, Terrace Bay, Swakopmund (District), 20.00S 13.02E, 15-16.vii.1985,

A.v.Nensburg, NMBH 15114 (BMSA); 1, Meob Bay Camp, 24.39S 14.43E, 4–6.iv.1986, E.Griffin (SMWN); 4, Uniab Delta Area, 9–12.iv.1987, J.Irish, E.Marais (SMWN).

Additional material examined. Excluded from type series because latter is already sufficiently large: 672 specimens from the following localities: NAMIBIA: Sarusas, 18.46S 12.24E; Sarusas West, 18.49S 12.30E; Khumib River 15 km from mouth, 18.47S 12.33E; Hoarusib River Mouth, 19.04S 12.34E; 4 km E Mōwe Bay, 19.21S 12.47E; Hunkab River endpoint, 19.48S 13.04E; Unjab River 10 km E coast, 20.11S 13.17E; unnamed locality, 20.20S 13.20E; Ugab River Mouth and vicinity, 21.11S 13.38E; Uis, 21.13S 14.52E; 2 m.(iles) N. of Kl. Spitzkopje, 21.50S 15.03E; 5 m.(iles) S. Swartbank, 23.25S 14.55E; unnamed locality, 25.18S 14.49E; Angra Pequena/Lüderitz, 26.39S 15.09E. 404 (TMSA); 192 (SMWN); 31 (UPSA); 24 (SAMC); 13 (SANC); 7 (GRSW); 1 (MCSN); 1 (ZMHB).

Single specimens from the following localities

may be incorrectly labelled as they are outside the species' established range: NAMIBIA: Abachaus, ca. 19.45S 16.45E (SAMC); Kalkfeld, 20.54S 16.12E (SAMC); Windhoek, 22.35S 17.05E (SANC); Kuibis (see Bellés 1985), 26.40S 16.51E; BOTSWANA: Drotsky's Cave, 20.01S 21.21E (TMSA). Similarly, the inland localities of Uis and Klein Spitzkoppe listed above require confirmation.

Distribution. Namib Desert coast, Lüderitz to Sarusas, usually only up to 10 km inland (Fig. 5).

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