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Clivina demarzi spec. nov., a new flightless Clivina from the Northern Territory of Australia

(Insecta, Coleoptera, Carabidae, Scaritinae)

By Martin Baehr

Abstract

Clivina demarzi spec. nov. from the Northern Territory of Australia is newly described. The flightless species is distinguished from the next related species *Clivina nyctosyloides* Putzeys, *C. brevisterna* Sloane, and *C. hackeri* Sloane.

In the course of determination of the unidentified Australian *Clivina* of the Museum G. Frey, Tutzing, a new species from the Northern Territory was discovered, peculiar because of its short and stout body shape and its total loss of wings.

Acknowledgement

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Clivina demarzi spec. nov.

(Figs 1–3)

Holotype: ♂, Austral. North. T., Katherine, XII. 57, leg. H. Demarz (Museum G. Frey, Tutzing). Paratype: ♀, Austral. North. T., Berry Springs, XII. 57, leg. H. Demarz (Coll. Baehr, München).

Type locality: Katherine, Northern Territory of Australia.

Diagnosis: A medium-sized, compact, flightless species with short metasternum, oval-shaped, very convex elytra, and wide, trapezoidal pronotum.

Description

Measurements. Holotype: Length: 9.2 mm, width: 3.15 mm, ratio width/length of pronotum: 1.16, ratio width of base/width of apex of pronotum: 1.68. — Paratype: Length: 10.3 mm, width: 3.65 mm, ratio width/length of pronotum: 1.17, ratio width of base/width of apex of pronotum: 1.69.

Colour: Black, also legs and antennae black. Mouthparts and tarsi piceous. Lower surface black.

Head: Slightly narrower than apex of pronotum. Eyes rather large, laterally protruding. Orbits short, but distinct, oblique. Supraantennal plates convex, gently rounded outside. Clypeus truncate-emarginate, lateral wings advanced, surpassing median part. Median part anteriorly nearly straight, just slightly convex. Frons smooth, just laterally with some inconspicuous wrinkles. Clypeus separated from frons by a distinct suture, clypeus slightly convex, with some slight wrinkles. Frontal furrows rather straight, surpassing eye. Area between frontal furrow and supraorbital setae strongly convex,

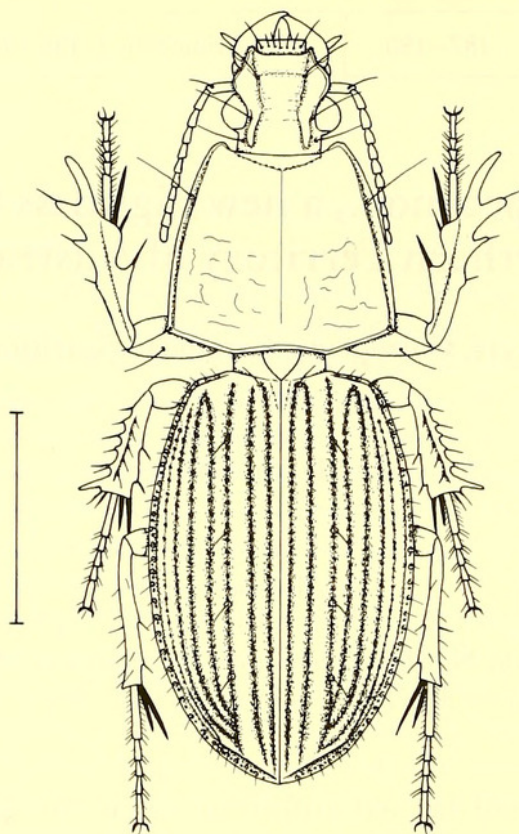


Fig. 1. *Clivina demarzi* spec. nov., ♂ holotype. Scale: 2.5 mm.

very conspicuous. Labrum short and wide, nearly as wide as apex of clypeus, apex straight, 7-setose. Mandibles short and stout. Palpi medium-sized. Antennae short, attaining about end of second third of pronotum. Median segments as wide as long or yet slightly wider, 3rd segment perceptibly shorter than 2nd segment.

Pronotum: Wider than long, trapezoidal, for measurements see above. Base much wider than apex, lateral borders nearly straight. Apex excised, apical angles advanced, though completely rounded. Pronotum widest at posterior angles. Angles obtuse (paratype), or with a minute obtuse knob (holotype). Pronotum behind posterior angles convexly narrowed to base. Anterior transverse suture deep, punctate, median suture complete, though superficial. Lateral channel deep, incurved around anterior angles. Surface smooth, microreticulation extremely fine, some irregular, superficial wrinkles present. Sternum and episternum smooth, only posteriorly with some transverse wrinkles. Intercoxal part of prosternum rather wide, slightly (holotype) or deeply (paratype) sulcate, in paratype sulcus reaching to base. Lateral cavities of peduncle shallow, absolutely smooth.

Elytra: Short, oval, very convex, strongly narrowed to base, base not truncate, shoulders strongly rounded. Lateral border convex throughout, convexly rounded to apex. Elytra widest in middle. Fully striate, 7th stria nearly as well impressed as others. Striae deeply (holotype) or less deeply (paratype)

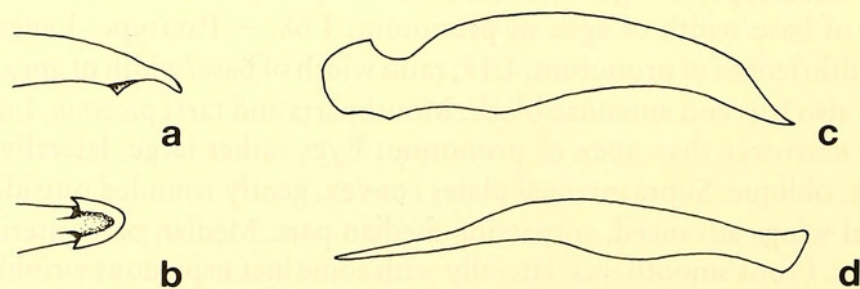


Fig. 2. *Clivina demarzi* spec. nov., ♂ genitalia: a. Apex of aedeagus, lateral view; b. Apex of aedeagus, ventral view; c. Left paramere; d. Right paramere.



Fig. 3. *Clivina demarzi* spec. nov., distribution.

impressed, distinctly punctate to about last third. Intervals convex, especially at base and at apex, in holotype strongly convex throughout. A short scutellar stria present within 1st interval. Odd intervals near apex wider and more elevated than even intervals. 7th interval carinate, 8th interval extremely narrow near apex. In holotype three internal striae free at base, 4th stria meeting 5th; in paratype also 4th stria free. No subhumeral carina recognizable. Punctures on 3rd stria foveate. Structure of lateral channel slightly catenulate, because punctures are somewhat tuberculate. Microsculpture on elytra isodiametric, more distinct than on head and pronotum. Metasternum between intermediate and posterior leg shorter than metacoxa, in paratype much shorter. Metepisternum slightly (holotype) or considerably (paratype) wider than long, in paratype posteriorly rather wide. Last abdominal sternum 4-setose in both sexes. Posterior wings reduced to a small membrane. Elytra tightly fused together.

Legs: Anterior femur wide, lower surface straight. Anterior tibia dorsally not explanate, but convex and rather distinctly angulate, triangular in profile. Suture on dorsal surface conspicuous. Anterior tibia externally tridentate with an additional small projection above 3rd tooth. Terminal tooth in ♂ slightly truncate, in ♀ acutely rounded at tip. Allteeth rather stout, not far projecting. Inner apical spur originating slightly above base of 2nd tooth, shorter than external apical tooth. Intermediate tibia stout, with acute external tooth very close to apex. Posterior tibia near apex curved upwards. Anterior tarsus short, but intermediate and posterior tarsi elongate, especially 1st segment very elongate, about as long as three following segments together.

Aedeagus: Apex of aedeagus laterally with a small denticle on each side (Fig. 2 a, b). Parameres, especially right paramere, elongate and with acute tip (Fig. 2 c, d).

Variation: There are some obvious differences between both specimens examined. In the ♀ paratype pronotum is larger, though ratio of width/length and ratio of base/apex is similar. 4th stria is free at base, intervals are less convex, and metasternum and metepisternum are shorter. In other respects, both specimens are very similar. It must be stressed, however, that the Australian *Clivina* with short, convex elytra are noted for their rather strong variation.

Distribution (Fig. 3): So far known from northern parts of Northern Territory, from near Darwin to Katherine.

Habits: Unknown, types collected in December.

Discussion

Clivina demarzi spec. nov. is one of the peculiar, short-bodied Australian *Clivina* species, placed in the *procera*-group of Sloane by himself (SLOANE 1896). Without doubt this *procera*-group is an assemblage of rather heterogenous species and should be further divided. Certainly, the elongate species with decussate mandibles are better placed within genus *Scolyptus* Putzeys. Within the group of short, convex species *C. demarzi* spec. nov. is apparently next related to *C. nyctosyloides* Putzeys, *C. brevisterna* Sloane, and *C. hackeri* Sloane. *C. demarzi* may be distinguished from these species by the following characters: From *C. nyctosyloides*: By narrower base of elytra, shorter metasternum and metepisternum, and dark colour of legs and antennae. — From *C. brevisterna*: By smaller size, wider and shorter prothorax which is considerably wider than long, and dark colour of legs and antennae. — From *C. hackeri*: By less narrow elytral base and very narrow 8th elytral interval at apex.

As a flightless species, *C. demarzi* is at once separated from *C. nyctosyloides* and *C. hackeri* by distribution, as both species are thus far known only from northern Queensland. However, *C. demarzi* occurs sympatrically with *C. brevisterna* which was described from Pine Creek in northern part of Northern Territory (SLOANE 1916). Although both species exhibit some striking similarities, as for example very short metasternum, similar structure of odd intervals at apex of elytra, and the narrow base of the elytra, the characters mentioned above separate *C. demarzi* sufficiently from the latter species.

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