Odontelytron uniclavatum, new genus and species of Trachelizinae from Madagascar (Coleoptera Brentidae)

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Received 15 December 2005, accepted 31 August 2006

The new genus Odontelytron from Madagascar, with the type species O. uniclavatum n. sp. (Coleoptera Brentidae Trachelizinae), is described and illustrated. Odontelytron is distinguished from other genera of Trachelizinae by the very strong humeri, pointed and directed forward, and by the club of antenna consisting of a single antennomere.

Key Words: Coleoptera, Brentidae, taxonomy, new genus, new species, Madagascar.

INTRODUCTION

Brentidae s. str., as restricted by Sforzi & Bartolozzi (2004), is a family of Coleoptera with about 1700 species worldwide. Most of them are tropical. The senior author is currently preparing a revision of the Brentidae from Madagascar. During this research, two specimens of a new genus and new species were found in the Natural History Museum of Florence and in the collection of the junior author.

The Brentidae from Madagascar and the surrounding islands of the Western Indian Ocean have been studied by various authors. Klug (1833) was the first to publish a short note on the Brentidae from Madagascar in which he described four species; later Chevrolat (1839) described 21 new species. With Kolbe’s papers on Madagascar and Seychelles Islands (1883a, 1883b, 1883c, 1910), the number of species from Madagascar rose to 29. Other entomologists, such as Lacordaire (1866), Fairmaire (1889), Senna (1895), Klein (1920, 1921, 1922a, 1922b, 1923, 1925,
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Odontelytron uniclavatum n. g., n. sp., described below, is only known from two male specimens. Despite the large numbers of Brentidae specimens from Madagascar in many European and North American collections, no other specimens have been found.

Our study revealed a unique character that merits the status of new genus.

**TAXONOMY**

*Odontelytron* n. gen. (Figs 1-2)

*Type species. Odontelytron uniclavatum* n. sp., by present designation.

*Diagnosis.* This genus can easily be distinguished from other genera of Trachelizinae by having the antenna with a club consisting of a single antennomere, and pronotum with its lateral margins bordered by two narrow carinae. Near the base, each carina becomes thicker, directed downwards and originating a small, rounded vertical crest overhanging a short narrow fovea lined with a short golden pubescence. In addition, the humeri are well developed, pointed and directed forward.

*Description.* The following generic characters refer only to the male, as the female remains unknown.

*Head.* Well separated from neck, with a broad, deep longitudinal medial groove, broader and deeper basally; eyes large, temples very short, 1/5 of ocular diameter.

*Rostrum.* Metarostrum shaped like an elongate, truncate pyramid, about as long as head, with longitudinal medial groove which continues on mesorostrum. Mesorostrum short, laterally expanded on scrobes, deeply grooved. Prorostrum as long as metarostrum and mesorostrum together, narrower at base than at apex, curved downwards.

*Antennae.* 11-articulated. Scape cylindrical, slightly longer than segments 1 and 2 together, with an acute tooth on the underside; 4-10 pearl-shaped, 11 slightly longer than 9 and 10 together, ovoid, acute apically.

*Pronotum.* Subcylindrical, narrowed anteriorly; disc flat with narrow longitudinal medial groove not reaching the anterior and posterior margins, bordered by two thin longitudinal lateral carinae. Near the base each carina becomes wider, directed downwards, originating a small rounded vertical crest overhanging a short narrow hollow containing a short golden pubescence.

*Elytra.* About 2.5 times longer than prothorax, parallel-sided, apex rounded. Humeri well-developed, pointed, directed forward, base deeply concave. First stria a deep, narrow groove as far as the declivity. Remaining striae visible only from rows of vanishing points. First interstria broad, flat, shiny, the others not elevated except interstria 5 which is carinate at declivity, and interstria 7 carinate for entire length.

*Legs.* Long and slender, surface of femora, tibiae and tarsi with scattered fine setae. Femora unarmed, not clavate, onychium longer than the two preceding articles together, claws long.
Etymology. This genus is named *Odontelytron* (gender neutral) in reference to the tooth-shaped base of the elytra.

Remarks. The antennal club formed by a single antennomere is a very unusual character (Fig. 1B). Most Brentidae have an 11-articulated antenna with the club

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Fig. 1. — *Odontelytron uniclavatum* n. gen., n. sp., male holotype. A, habitus; B, antennae; C, scape and antennomere II, lateral view. D, metathorax. E, hind wing.
consisting of three antennomeres. In some species of the genus *Ceocephalus* Guérin-Méneville 1833 the club is formed by a single antennomere but the antenna has 9 articles, the last three being fused together.

*Odontelytron* also has an acute tooth on the underside of the first antennal article (Fig. 1C). A tubercle under the first antennal article is also present in the Madagascar species *Paraceocephalus pauliani* Kleine 1944, *P. colasi* Damoiseau 1966 and *Proephebocerus populeus* (Boheman 1840). The genus *Paraceocephalus* Kleine 1944 differs from *Odontelytron* by an elongate pronotum, with a deep groove, and the temples being longer than an eye diameter; *P. populeus* differs by an elongate pronotum, with a deep groove, and by the presence, in the male, of two elytral appendages. Besides the presence of strong, pointed and forward directed humeri (Fig. 1A), this character is unique to the family Brentidae. These characters show once again the uniqueness of the Madagascar brentid fauna.

The systematic position of this new genus is still uncertain, because of some most unusual morphological characters not present in other brentid genera. It probably belongs to the subfamily Trachelizinae Lacordaire 1866, and to the tribe Trachelizini Lacordaire 1866 on account of the absence of femoral spurs and apophyses on the sides of metarostrum and the presence of small mandibles.

In Madagascar the tribe Trachelizini is present with the genus *Anchisteus* Kolbe 1833 which is totally different from the genus *Odontelytron* by having very large eyes, antennal club consisting of three articles, long antennal articles (in the male) and elytra deeply reticulated. In the general shape of the body, this new genus resembles some species from South America belonging to the genus *Paratrachelizus* Kleine 1921.

*Odontelytron uniclavatum* n. sp. (Figs 1-2)

**Type locality.** Holotypus ♂, central Madagascar, Lac Mantasoa, XII.1972, A. Peyrieras! (Museo di Storia Naturale dell’Università di Firenze, Sezione di Zoologia “La Specola”).


**Description.** Male (Fig. 1A). Total length: 8.1-9.7 mm; maximum width (at humeri): 1.4-1.5 mm. Body reddish, head antennae and pronotum reddish-brown.

**Head.** Length: 0.5-0.6 mm, maximum width (including eyes): 0.7-0.8 mm. Trapezoidal, well separated from neck; large, deep longitudinal medial groove, wider and deeper basally and continuing on mesorostrum; eyes large, temples very short, 1/5 of ocular diameter.

**Rostrum.** Length (from the anterior margin of the eyes to the apex of prorostrum): 1.9-2.6 mm. Metarostrum shaped as an elongate truncate pyramid, about as long as head, with a longitudinal medial groove which continues on mesorostrum, surface with sparse, short setae. Mesostrum short, laterally expanded on scrobes, deeply grooved. Prorostrum as long as metarostrum and mesorostrum together; narrower at base than at apex, curved downwards.

**Antennae (Fig. 1B).** Length: 2.0-2.5 mm. 11-articulated. Scape cylindrical, slightly longer than articles 1 and 2 together, with an acute tubercle on the underside (Fig. 1C); articles 2 and 3 slightly longer than wide, 4-10 pearl-shaped, 11 slightly longer than 9 and 10 together, ovoid, pointed apically; articles 1-10 shiny
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Fig. 2. — Odontelytron uniclavatum n. gen., n. sp., male holotype. A, abdomen; a, ventral view; b, lateral view. B, tergite VII; a, dorsal view; b, lateral view. C, tegmen; a, lateral view; b, dorsal view. D, spiculum gastrale. E, penis; a, lateral view; b, dorsal view.

Fig. 2. — Odontelytron uniclavatum n. gen., n. sp., male holotype. A, abdomen; a, ventral view; b, lateral view. B, tergite VII; a, dorsal view; b, lateral view. C, tegmen; a, lateral view; b, dorsal view. D, spiculum gastrale. E, penis; a, lateral view; b, dorsal view.
with sparse setae, 11 large, shiny, with fine, short, sparse setae on the basal half and completely covered with a short golden pubescence on the distal half.

**Pronotum.** Length: 1.6-1.9 mm. Subcylindrical, narrowed anteriorly; disc flat with narrow longitudinal medial groove not reaching the anterior and posterior margins, bordered by two narrow lateral carinae. Near the base each carina becomes stronger, directed downwards, originating a small rounded vertical crest overhanging a short narrow fovea containing a short golden pubescence.

**Elytra.** Length: 4.4-4.8 mm. About 2.5 times longer than prothorax, parallelsided, apex rounded. Humeri well developed, pointed, directed forward, base deeply concave. First stria is a deep, narrow groove as far as the declivity. Remaining striae indicated by rows of vanishing points. First interstria broad, flat, shiny, the others not elevated except interstria 5 which is carinate at the declivity, and interstria 7 carinate throughout.

**Wings.** The parts of the hind wings are named following Zherikhin & Gratshev (1995). Anal lobe absent. Mediocubital cell well developed, one single isolated 1A branch. Anal cell closed (Fig. 1E).

**Legs.** Long and slender, surface of femora, tibiae and tarsi with scattered fine setae. Femora not clavate, unarmed; onychium longer than the two preceding articles together, claws long.

**Underside.** Head with a large, deep gular fovea and two thin grooves beginning near the middle of the inferior ocular margin and continuing on metarostrum, mesorostrum and half of prorostrum. Metasternum with a large, round fovea near the posterior margin (Fig. 1D). Abdominal plate slightly concave in the middle, finely punctate, ventrites 3 and 4 smooth, ventrite 5 punctate with a deeply punctate distal subrectangular raised area; posterior margin emarginate (Fig. 2A). Tergite 7 as illustrated in Fig. 2B.

**Male genitalia.** As illustrated in Fig. 2C-E.

**Etymology.** This species is named *uniclavatum* in reference to the club of antenna consisting in only one antennomere.

**ACKNOWLEDGEMENTS**

We wish to thank Dr Luca Bartolozzi (Museo di Storia Naturale dell’Università di Firenze, Sezione di Zoologia “La Specola”) for his useful comments and Christina Coster-Longman for the revision of the English text.

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