

## A new species of the genus *Taeniolobus* Chaudoir, 1855 from Ecuador (Coleoptera: Carabidae: Scaritini). Part 2

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**Taxonomy, new species, Coleoptera, Carabidae, Scaritini, *Taeniolobus*, Ecuador**

**Abstract.** *Taeniolobus moreti* sp. nov. from Ecuador is described, illustrated (including its aedeagus) and compared with the most similar South American species of the genus.

### INTRODUCTION

The genus *Taeniolobus* Chaudoir, 1855 can be divided to two subgenera: the nominotypical one occurs in the northern part of the South American Region and one species in the Caribbean Region (Cuba). Forty species and one subspecies of this subgenus have still been described. Most species known to date were revised and keyed by Bänninger (1941); according to Lorenz (2005) and the author's database, only next two species were described by Bulirsch (2019) since 1941. Ten taxa of the subgenus *Orientalobus* Dostal, 1996 are known from the Afrotropical and Oriental Regions.

### MATERIAL AND METHODS

The study of dry-mounted specimens, including measurements and examination of the microsculpture, was done at a magnification up to 56 $\times$ . All specimens were measured. Length of body (including closed mandibles) is given with accuracy 0.1 mm, ratios and means are rounded to two decimal places. Label data of all specimens are quoted verbatim except standardized data. Aedeagi were fixed with water-soluble glue on a small card and placed on the same pin below the beetle.

For comparison most known taxa from both subgenera mentioned were studied: several specimens from diverse museums, very extensive material from the author's collection, and finally, next material from several other collections including the complete type series of *T. onorei* Bulirsch, 2019 (PMGT, PBPC).

The following abbreviations are used to indicate the depository of specimens:

PBPC Petr Bulirsch, private collection, Praha, Czech Republic;

PMGT Pier Mauro Giachino, private collection, Torino, Italy;

QCAZ Entomological collection of the Pontificia Universidad Católica, Quito, Ecuador.

Other abbreviations:

SP: setiferous puncture(s); DSP: dorsal setiferous puncture(s); HT: holotype(s); PT: paratype(s); /, // by locality labels: end of line, label.

## RESULTS

### *Taeniolobus moreti* sp. nov.

(Figs. 1-3)

**Type material.** Holotype (♂): ECUADOR 27.vii.1985 / Prov. Azuay, km 50 / Cuenca→Molleturo / Cajas ouest, 3400 m [2.806509°S, 79.313301°W] / Pierre Moret legit, (QCAZ). Paratype (1 ♂): same data as holotype, (PBPC).

**Description.** Habitus as in Fig. 1. Surface black, legs dark fuliginous, meso- and metatibiae, tarsi, mouth-parts and antennae dark ferruginous. Measurement: total length 19.7 mm in HT, 17.2 mm in PT; width 5.6 mm in HT, 5.0 mm in PT. Head in HT 1.03, in PT 1.09 times as broad as pronotum; pronotum in HT 1.47, in PT 1.41 times as broad as long; elytra in HT 1.61, in PT 1.62 times as long as broad, in HT 2.45, in PT 2.40 times as long as pronotum; length of aedeagus in HT 2.85 mm; aedeagus 0.32 times as long as elytra.

Head. Mandibles rather strongly abraded (moreover in PT, apical half of left mandible missing); inner keel moderately sharp, moderately elevated basally, vanishing in anterior third, surface between outline and keel moderately broad, concave, rather shiny, without longitudinal wrinkles; inner margin of inner tooth of left mandible with large, irregular tooth in basal half and another, very small and almost indistinct tooth in anterior third; right inner tooth with complementary teeth and excisions; both inner teeth not wrinkled. Eyes small and moderately vaulted, in both specimens totally covered by “standard” cuticle; genae moderately developed, shorter than eyes; its apical margin moderately steep to neck, just broader than eyes, in lateral view without wrinkles, with indistinct furrow below eyes; facial furrows oblique, deep and very broad, posteriorly diminishing above mid-eye level, posteriorly broadly divided eyes with genae (both indistinctly divided) from neck. Frontal furrows short, moderately deep, irregularly multiplied by very short, more or less parallel wrinkles, diminishing at about to slightly below level of anterior margin of eyes. Supraantennal plates in posterior half subparallel, anteriorly barely concavely narrowed to anterior clypeal margin with indistinct, very broadly rounded pair of sublateral teeth; anterior margin between teeth with two small and moderately sharp submedian teeth. Surface moderately shiny, antero-laterally with very few fine, subparallel wrinkles. Antennae moderately long, antennomeres 4-6 barely longer than broad, 7-8 just longer than broad, 9-10 about as long as broad; antennomere 2 longer than 3. One clypeal and one facial SP.

Pronotum. Moderately broad, rather flat in lateral view, outline shortly broadened just below anterior angles, then almost directly and rather slightly narrowed posteriorly, lateral margin in lateral view irregularly, sparsely and very finely dotted with small excisions; anterior angles rather sharp. In HT distinctly, in PT moderately prolonged anteriorly, posterior angles formed by small and blunt tooth; lateral parts of base moderately steeply, concavely narrowed to narrow, rather strongly protruding median part, latter continuously connected with basal margin, not forming any angle. Anterior furrow narrow and very superficial, very laterally slightly broadened and deepened, medially (especially in PT) almost diminishing; median line fine; one anterior and one posterior SP in regular and moderately broad lateral channel, latter shortly interrupted around lateral tooth, broadened and deepened below basal foveae. Surface moderately shiny, disc with indistinct reticulation, with fine and very dense



Fig. 1. *Taeniolobus moreti* sp. nov., habitus (HT). Actual length 19.7 mm.

Figs. 2-3. *Taeniolobus moreti* sp. nov., aedeagus (HT): 2- left lateral view; 3- dorso-lateral view. Actual length 2.85 mm.



micropunctures and with few almost indistinct sublongitudinal wrinkles below anterior margin. Basal foveae rather large, moderately deepened, dull, covered by very fine and dense microtubercles and rather rough reticulation, latter narrowly extended laterally along lateral and especially basal margin.

Elytra. Surface moderately shiny, disc with irregular rests of reticulation; on base, in bottom of striae and latero-apically reticulation distinct, especially on apex. Disc in lateral view basally very slightly vaulted; outline barely ovate, regularly, moderately strongly broadened from humeral tooth to anterior three fifths, moderately broadly rounded posteriorly, lateral margin almost without dotted incisions; base deeply concave medially, then convex anteriorly to distinct, moderately sloping, slightly convex humeral ridge with large and rather sharp humeral tooth; elytra broadest below midlength. Striae 1-7 impunctate, moderately deep latero-basally, strongly weakened apically; stria 8 indistinct; basally intervals 1-4 slightly, 5-8 moderately vaulted, all intervals flat on apex; lateral channel formed as narrow and deep groove, with sparse and very fine tubercles, not expanded to surface of interval 8; base medially with very few large SP in irregular line, laterally in humeral area with few very fine tubercles; 1-2 DSP, in / near apex.

Lower surface. Mentum laterally regularly, moderately convex, very finely beaded; surface with moderately rough isodiametric reticulation, few fine wrinkles and punctures; antero-lateral angles broadly rounded; median part moderately deepened, median keel narrow, barely elevated in basal third, divided here from lateral parts of mentum by narrow

longitudinal pits; paragenes narrowly, deeply excised in about anterior half, inner tooth moderately large and sharp; disc of paragenes distinctly concave, without wrinkles, rather roughly reticulated, paragenes posteriorly with long direct and narrow bead; submentum with sharp antero-lateral angles, below antero-lateral margin with pair of narrow elevations inside of lateral SP. Prosternal process with few latero-basal setae; mesosternum and metasternum without setae; metasterna more than twice shorter than hind coxae; metepisterna short, its anterior part narrower than broad episterna. Sternite 3 submedially with small group of punctures with setae, sterna 4-6 with one pair submedian SP; sternite 7 with two pairs of standard medio-apical SP; all sterna laterally with very fine and sparse wrinkles and with fine reticulation, especially in sterna 3-4 indistinctly deeper laterally. Proepisterna moderately shiny, with fine reticulation and without wrinkles; epipleura very broad to sternite 2, posteriorly strongly narrowed, with moderately fine reticulation.

Aedeagus. As in Figs. 2-3. Laterally upper outline regularly convex, lower outline slightly concave in apical two thirds; dorsally moderately broad, with apex long, moderately narrowed to almost directly cut off apex with narrowly rounded lateral angles. Parameres long, with long, narrow, almost acute apex.

Legs. Anterior tibiae with one large, one medium sized and 2-4 small lateral teeth below final tooth. Connection between terminal tooth and anterior margin of first lateral tooth just below lower margin of protibiae.

**Differential diagnosis.** The new species has the body moderately large (17.2-19.7 mm); the mandibles with moderate long tips, the pronotum with blunt tooth in the posterior angles and with one pair of antero- and postero-lateral SP; the ovate elytra with the outline visible from the dorsal view below the humeri, with the inner striae rather fine and with the lateral intervals rather slightly vaulted, not forming the outline and with the lateral channel forming a narrow, deep groove. The prosternal process has several, the mesosternum and the metasternum none setae; the submentum has a pair of small, peculiar thorns inside of the inner pair of the lateral SP and finally, the median lobe of the aedeagus has the apex nearly transversely cut. This combination of the characters distinctly differentiates the new species from all to date described taxa except recently established *T. onorei* Bulirsch, 2019; especially both latter characters, which shares the new species with *T. onorei*, are unique within the subgenus and can be used to distinguish both these species from the remaining ones.

*T. moreti* sp. nov. could be distinguished from *T. onorei* by the body being slightly smaller and less vaulted in the lateral view (especially the elytra and the pronotum); by the pronotum having the base laterally slightly concave and the median part much more protruding posteriorly; by the elytra being shorter and having medially more vaulted intervals; by having the sublateral thorn on the submentum finer; by the metasterna being without setae; and finally, by the shape of the apex of the median lobe of the aedeagus (in *T. onorei* is the apex in the dorsal view almost parallel up to the tip which is directly cut, with the rectangular lateral angles).

**Microhabitat.** Both specimens were found under stones near the road, in a deforested zone, formerly covered by an upper montane forest.

**Name derivation.** Named in honour of my friend Pierre Moret (Toulouse, France), collector of the type specimens.

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