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Provisional revision of the genus *Odontocera*  
Audinet-Serville, 1834 (Coleoptera: Cerambycidae).

I: exclusions, new rank, synonymies  
and the description of two new genera

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## Provisional revision of the genus *Odontocera* Audinet-Serville, 1834 (Coleoptera: Cerambycidae). I: exclusions, new rank, synonymies and the description of two new genera

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**Abstract.** Ten South American species are removed from the genus *Odontocera* Audinet-Serville (Coleoptera: Cerambycidae) and placed in *Odontocroton* Clarke **new genus**. The new genus is further organized into two informal groups. Group A includes *Odontocroton flavicauda* (Bates, 1873) **new combination**, *Odontocroton flavirostris* (Melzer, 1930) **new combination**, *Odontocroton melzeri* (Fisher, 1952) **new combination** and *Odontocroton soror* (Gounelle, 1911) **new combination**. Group B includes *Odontocroton apicalis* (Klug, 1825) **new combination**, *Odontocroton quinquecallosus* (Zajciw, 1963) **new combination**, *Odontocroton sanguinolentus* (Bates, 1873) **new combination**, *Odontocroton septemtuberculatus* (Zajciw, 1963) **new combination**, *Odontocroton rufifrons* (Fisher, 1937) **new rank and new combination**, and provisionally *Odontocroton monnei* (Zajciw, 1968), **new combination**. A monotypic **new genus**, *Rhinobatesia* Clarke, is described for the Central American species *Rhinobatesia rugicollis* (Bates, 1880) **new combination**, which was formerly in *Odontocera*. The Central American *Odontocera nevermanni* Fisher, 1930 is placed as a **junior synonym** of *R. rugicollis*, and *Odontocera typhoeus* Fisher, 1947 is placed as a **junior synonym** of *Odontogracilis gracilis* (Klug, 1825). A key to separate *Odontocroton* and *Rhinobatesia* as well as the species of the former is provided. All species are illustrated, including the tegmen of the aedeagus when available. Host flower records for the Bolivian species are also provided.

**Key words.** Cerambycinae, identification keys, new combinations, Rhinotragini, taxonomy.

### Introduction

This is the first paper of a series which will be entirely dedicated to the removal of species inappropriately placed in the polymorphic genus *Odontocera* Audinet-Serville, 1834. Provisional results using the structure of the tegmen and median lobe as a primary diagnostic tool, as well as other primary characters used by past and present authors indicate it will receive much the same dismemberment as the author's revision of the genus *Acyphoderes* Audinet-Serville, 1834 (Clarke, 2015).

Theoretically this would be preceded by an examination of the holotype of *Odontocera vitrea* Audinet-Serville, 1834 (synonymized by Gemminger 1873), and the types of *Necydalis fasciata* Olivier, 1795 and *Odontocera chrysozone* White, 1855 (synonymized by Bates 1870). That this has not been possible is discussed below. According to Maxwell V. L. Barclay (pers. comm.), Audinet-Serville's holotype went missing from the British Museum collection a long time ago. When Audinet-Serville (1834) described the genus *Odontocera* he divided it into First and Second Divisions (the latter for two species placed by him in a new genus, *Acyphoderes*, diagnosed by "prothorax flattened and uneven above ...," does not concern us here).

First Division (split into two subdivisions, both diagnosed by their cylindrical prothorax) for three species, *Odontocera vitrea* Audinet-Serville, 1834, *Odontocera cylindrica* Audinet-Serville, 1834, and *Odontocera gracilis* (Klug, 1825). First subdivision for *O. vitrea*, diagnosed by "prothorax short, quadrate, almost globular, surface without callosities or sulcation". Second subdivision for two species, diagnosed by "prothorax distinctly longer than wide, slightly flattened, surface more or less uneven". The first of these, *O. gracilis*, was moved to a new genus by Clarke (2015). The second, *O. cylindrica*, is very similar to other species that eventually should be moved to a new genus.

The whereabouts of Olivier's specimen of *Necydalis fasciata* is not known, and it seems likely that none of the nineteenth century entomologists who referred to it had the opportunity to examine it. This might seem to be conjectural, but a reasonable one. Olivier's type locality, originally described from

“Amérique meridionale”, is probably somewhere in the area of the Guianas, and it is diagnosed by its spined metafemoral clave (see below). However, the area of Guianas is also home to two very similar species described by Peñaherrera-Leiva and Tavakilian (2003) that do not have spined claves, as illustrated by them (Figures 49b, 51b) together with that of *O. fasciata* (Figure 50b). The spine at the apex of the clave could be overlooked by one or two entomologists; but it is difficult to believe that it was overlooked by all of them. Lacordaire (1868), White (1855), Thomson (1864), Bates (1870) and others, and both Olivier (1795) and Audinet-Serville (1834) themselves, make no mention of it.

For now, the author follows the opinion of his present-day colleagues: that *O. fasciata*, *O. chrysozone* and *O. vitrea* are synonymous, widely distributed in South America, and diagnosed by spined metafemoral claves.

Fisher (1930) described *Odontocera typhoeus* followed by (quote): “this species is allied to *Odontocera flavicauda* Bates [1873] ...”, followed by a list of characters to separate the two species. Here, Fisher’s species is treated as a junior synonym of *Odontogracilis gracilis* (Klug, 1825).

## Materials and Methods

(For a complete account of these, see Clarke (2015))

Monné (2017) lists 78 species of *Odontocera*; the author’s list contains 90 species of *Odontocera* sensu auctorum, including both recently published ones and those awaiting publication.

For the preparation of the revision the author has sufficient data of both sexes for 29 of them; sufficient data of only one sex for 13, and insufficient data for 48. This undesirable situation is somewhat mitigated by the author’s almost complete collection of papers with the original descriptions for each species; photographs or illustrations of most of the holotypes (and time to replace illustrations with photographs as the revision proceeds), and all these supplemented by photographs of easily identified species. Nevertheless, some diagnostics will eventually require reevaluation, others added or rejected as the revision of the genus proceeds.

The diagnostics for the new genera described here are compromised by the evident polymorphic nature of the genus *Odontocera*; those for the whole tribe will be improved as the revision of the genus nears completion; the diagnosis based on comparisons with *Odontocera fasciata* (Olivier, 1795) should not require any radical correction, whether or not Olivier’s holotype is found.

The official abbreviations used for the political divisions for each country are as follows: ARGENTINA (provinces): Buenos Aires (BA), Chaco (CH), Corrientes (CO), Entre Ríos (ER), Misiones (MI), Salta (SA), Tucumán (TU). BOLIVIA (departments): Santa Cruz (SC), Tarija (TA). BRAZIL: North central state: Pará (PA). East central states: Goiás (GO), Bahia (BA), Espírito Santo (ES), Minas Gerais (MG), Rio de Janeiro (RJ), São Paulo (SP). Southern states: Paraná (PR), Rio Grande do sul (RS), Santa Catarina (SC).

Acronyms used in the text are as follows:

**ACMT** American Coleoptera Museum (James Wappes), San Antonio, Texas, USA

**CMNH** Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA

**BMNH** Natural History Museum, London, UK

**EMEC** Essig Museum of Entomology, Berkeley, California, USA

**MNKM** Museo Noel Kempff Mercado, Universidad Autónoma Gabriel René Moreno, Santa Cruz de la Sierra, Bolivia

**MNRJ** Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil

**MZSP** Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil

**RCSZ** Robin Clarke/Sonia Zamalloa research collection, Santa Cruz, Bolivia

**ZMHB** Museum für Naturkunde der Humboldt-Universität, Berlin, Germany

## Taxonomy

### *Odontocroton* Clarke, n. gen.

Fig. 1–34

**Type species.** *Odontocera flavicauda* Bates, 1873, here designated.

**Description.** Slender, lengths forebody/abdomen in male 0.73–0.78, in female 0.82; length body/width metasternum in male 6.45–8.30, in female 6.05 (Group A); or moderately slender, lengths forebody/abdomen in male 0.87–0.92, in female 0.93–1.00; length body/width metasternum in male 5.42–5.85, in female 5.00–5.36 (Group B).

**Structure.** Smaller species 9.0–12.7 mm (Group A), larger species 13.5–17.1 mm, but see *O. monnei* 11.0 mm (Group B species).

**Head.** Head (h) narrower or wider than prothorax (p), p/h 0.94–1.06 (Group A), 1.08–1.21 (Group B). Rostrum parallel-sided; comparatively short, width (w)/length (l) 2.30–2.50 (Group A), longer w/l 1.93–2.40 (Group B); usually shorter in males w/l 2.33–2.50 (but 2.08 in *O. septemtuberculatus*), usually longer in females, w/l 1.93–2.12 (but 2.30 in *O. flavicauda*). Labrum small, apex declivous, almost rectangular, approximately 3× wider than long (in *O. flavicauda*), or 2× wider than long (in most species). Surface of clypeus separated from frons by strong transverse ridge and adjacent declivity (Group A); surface of clypeus convex (lacking ridge), frons depressed (Group B); clypeus almost impunctate, that of frons strongly ornamented (in most species), or both similarly ornamented (in *O. quinquecallosus*). Coronal suture only traceable on interocular (in *O. flavicauda*, *O. melzeri*), or extended as narrow stria and impunctate line beyond antennal tubercles (in *O. soror*, *O. apicalis*, and males of *O. quinquecallosus*, *O. rufifrons*, and both sexes of *O. septemtuberculatus*), or frontal suture complete, from near apex of frons to beyond antennal tubercles (in females of *O. quinquecallosus*, *O. rufifrons*). Area of submentum transverse, flattened, not well delimited at sides; separated from gula by distinct declivity.

**Eyes.** Inferior lobes of eyes large (in males of Group A, most males of Group B, and female *O. septemtuberculatus*), smaller (in male *O. rufifrons*), or much smaller (in most females); contiguous to subcontiguous in male, width of one lobe/interocular 4.83–11.15, in female 0.83–1.40; strongly convex laterally (Group A, in male *O. rufifrons* and both sexes of *O. quinquecallosus*, *O. septemtuberculatus*), or moderately so (in male *O. apicalis* and female *O. rufifrons*); mesally slightly more prominent than interocular in male, in female about coplanar with interocular; distal margins placed on frons (in most males), or adjacent to genae (in most females, and male of *O. septemtuberculatus*); proximal margins weakly oblique. Superior lobes rather short and lobate, not widely separated, interocular distance/width of one lobe 1.80–3.33 in male, 2.20–2.75 in female; mesally with 10–12 rows of ommatidia (in both sexes of *O. flavicauda* and males of *O. melzeri*, *O. soror*), or 13–14 rows (in male *O. apicalis*, and both sexes of *O. quinquecallosus*, *O. septemtuberculatus*, *O. rufifrons*); laterally reduced to 4–5 rows (in *O. soror*), 6–7 rows (in males of *O. flavicauda*, *O. melzeri* and both sexes of *O. quinquecallosus*), or 8–9 rows (in female *O. flavicauda*, male *O. apicalis* and both sexes of *O. rufifrons*, *O. septemtuberculatus*).

**Antennal tubercles.** Moderately prominent, but rounded, not widely separated; distance between tubercles/width of scape 1.67–2.25 (narrowest in *O. soror*, widest in female *O. septemtuberculatus*).

**Antennae.** Filiform (Group A), subfiliform to subcrassate (Group B), moderately short, reaching apical third of urosternite II to base of III (Group A and male *O. septemtuberculatus*), reaching middle of urosternite I to middle of II (Group B most species). Antennomeres VI to X the widest (in most species), V–X (in *O. monnei*), VII–X (in *O. melzeri*); with acute, clipped serrations. Scape variable, pyriform to subpyriform (in most species), short and cylindrical (in *O. monnei*); from 2.3× longer than pedicel (in *O. apicalis*) to 3.3× longer (in *O. septemtuberculatus*); approximately 1/3 shorter than antennomere III (in most species), approximately 1/5 shorter (in *O. rufifrons*). Antennomere III: approximately 1/3 longer than any other segment (in females of *O. rufifrons*, *O. septemtuberculatus*), 1.1–1.2× longer than any other segment (in most species), equal in length to V, or V and VI (in males of *O. rufifrons*, *O. flavicauda*); almost cylindrical, narrower than pedicel at base; slightly wider than pedicel at apex (in *O. flavicauda*,

*O. apicalis*, *O. rufifrons*), not wider than apex of pedicel (in *O. melzeri*, *O. soror*, *O. quinquecallosus*, *O. septemtuberculatus*). **Male.** IV and V gradually widened to apex (Group A species and *O. apicalis*, *O. sanguinolentus*), hardly widened to apex (in remaining Group B species); V not subserrate, (in Group A species, and *O. quinquecallosus*, *O. septemtuberculatus*), V subserrate (in *O. apicalis*, *O. rufifrons*). VI–X narrower at base, moderately widened to apex; incrementally shorter (in most species), or nearly so (in male *O. flavicauda*), but not incrementally shorter, lengths VI 1.5, VII 1.6, VIII 1.4 (in *O. melzeri*). XI subcylindrical, short (but longer than X); with longer narrow cone (in Group A species and *O. septemtuberculatus*); with shorter, broad apical cone (in most Group B species); cone centered (in most Group A species and *O. apicalis*), cone slightly displaced to one side, leaving lateral margin somewhat dentate (in *O. melzeri* and most Group B species). **Female.** basal segments tend to be longer than in male, and apical ones shorter; IV–X similar structure to males (in Group A species and *O. septemtuberculatus*), but somewhat tumid compared with males (in *O. quinquecallosus*, *O. rufifrons*); XI not dentate as apical cone not displaced (Group A), or also dentate, if only weakly so (Group B).

**Prothorax.** Cylindrical; but sides wider at middle, before and after middle, and thereby multi-sinuate (in Group A, and *O. quinquecallosus*, *O. septemtuberculatus*), or with sides straight for apical half, sinuate for basal half (in *O. apicalis*), or sides of prothorax regularly rounded from apex to basal constriction (in *O. monnei*, *O. sanguinolentus*, *O. rufifrons*); in male: length (l)/width (w) 1.23–1.27 (Group A, and *O. apicalis*), l/w 1.09–1.14 (Group B); in female: l/w 1.00–1.14; in male: widest from middle to before middle, prothoracic quotient 2.00–2.20; in female: widest at middle to well in front of middle, quotient approximately 2.00–2.46 (Group A), or near middle, quotient 1.92–2.19 (in Group B species). Surface of pronotum not callose (in Group B (i) species), or callose (in Group A and Group B (ii) species, weakly so in *O. melzeri*, *O. quinquecallosus*), with narrow callus at midline, to either side with paired, somewhat fused, protuberant calli, and lateral profile with four indentations produced by three carina overhanging sides (in Group A species), or callosities similar to above, but lateral carina absent and profile bisinuate (in Group B (ii) species). Apical constriction evident (Group A, and in *O. septemtuberculatus*), evanescent or absent (in most Group B species). Basal constriction declivous laterally, medially sloping to pronotal disc (in Group A and *O. septemtuberculatus*), or hardly declivous (in *O. quinquecallosus*), or basal constriction semi-evanescent (in *O. apicalis*, *O. rufifrons*); towards sides with deep, rounded fossa (Group B), or not fossate (Group A). Apical border narrow and prominent; front margin slightly narrower than basal margin (in most species), or slightly wider than basal margin (in female *O. quinquecallosus*).

**Prosternum.** Declivous across apical third, weakly inclined to base of prosternal process (in *O. flavicauda*, *O. melzeri*, *O. septemtuberculatus*), or moderately strongly inclined (in *O. soror*, *O. apicalis*, *O. quinquecallosus*, *O. rufifrons*). Base of prosternal process: short, arced (in nearly all species), or flat (in female *O. flavicauda*); moderately broad, approximately 5–7× narrower than width of procoxal cavity (in both sexes of *O. quinquecallosus*, in females of *O. rufifrons* and *O. septemtuberculatus*); moderately narrow, approximately 9–12× narrower than procoxal cavity (in both sexes of *O. flavicauda*, and males of *O. soror*, *O. apicalis*, *O. rufifrons*, and *O. septemtuberculatus*); narrow, approximately 16× narrower than procoxal cavity (in male *O. melzeri*). Apex of prosternal process a large equilateral triangle, with or without slightly rounded sides; postcoxal process narrow (in female *O. flavicauda*, *O. melzeri*), or moderately narrow (in male *O. flavicauda*, *O. soror*, and all Group B species). Procoxal cavities plugged at sides, firmly closed behind.

**Mesothorax.** Mesosternum deep and abruptly declivous. Base of mesosternal process with weakly raised sides; comparatively narrow, 3–6× narrower than width of coxal cavity (Group A), or broader, approximately 2× narrower than width of coxal cavity (Group B); apex of process (best illustrated in Figure 28 of male *O. quinquecallosus*) short, broad and Y-shaped, moderately and regularly widening from apex of base into two short, truncate lobes (these separated by a short V-shaped excavation), the apical margin of each lobe oblique. Mesocoxal cavities narrowly open to mesoepimeron, the latter narrow and irregularly widened at apex. Mesothorax shorter than metathorax, lengths meso-/metathorax 0.67–0.84 in male, 0.63–0.73 in female. **Scutellum.** Small; oval or scutate.

**Elytra.** Strongly subulate, narrow, and nearly flat; humeri weakly prominent, not projecting, broad (hiding mesepimeron when viewed from directly overhead), with narrow, slightly raised, smooth line

running towards apex of elytra (which might represent the remains of a humero-apical costa); elongate, apex reaching from apex of urosternite III to apex of IV (Group A); apex reaching from middle of IV to middle of V (Group B); in male, 3.76–4.12× longer than width of humeri, in female: 3.69× longer (Group A); in male, 3.56–3.84× longer than width of humeri, in female, 3.45–3.84× longer (Group B); variably dehiscent or narrowly fissate (in most species) or not dehiscent nor fissate (in *O. flavirostris*). Each elytron variable, but narrowed for, at least basal half (usually more) and almost parallel-sided towards apex; sides arced from behind humerus to apex (in *O. flavicauda*, male *O. rufifrons*), or weakly recurved for pre apex (in female *O. rufifrons*, and all other species); apical margin obliquely truncate (in most species), weakly armed at sutural apex (in male *O. flavicauda*, *O. soror*), or weakly armed at both sutural and lateral apex (in most Group B species), or unarmed (in female *O. flavicauda*, *O. melzeri*, *O. rufifrons*).

**Metathorax.** Sides moderately rounded and weakly oblique to middle of apex (in males of *O. flavicauda*, *O. soror*, *O. rufifrons*), or sides rounded and sinuate to middle of apex (in female *O. flavicauda* and both sexes of *O. quinquecallosus* and *O. septemtuberculatus*), or sides subparallel and rounded behind to middle of apex (in *O. melzeri*, *O. apicalis*), or sides subparallel, but oblique to apex (in female *O. rufifrons*). Metasternum in male: tumid (in most males), mod tumid (in *O. soror*, *O. apicalis*); in female: tumid, not flattened (Group A and *O. septemtuberculatus*), tumid, moderately flattened (in most Group B species); more or less coplanar with mesocoxae; metepisternum cuneate, not broad at base, acuminate at apex in both sexes of most species, more parallel-sided in *O. soror*.

**Abdomen. Group A male** (Fig. 4). Cylindrical, hardly annulate (in *O. melzeri*), or subcylindrical, distinctly annulate (in *O. flavicauda*, *O. soror*); narrow, at its widest distinctly narrower than width across mesocoxal cavities, widest at apex of urosternite II (in *O. flavicauda*, *O. melzeri*), or III (in *O. soror*); urosternite I longest, II–IV subequal, lengths urosternites I/IV 1.89–1.94. Urosternite V: trapezoidal, transverse (in *O. flavicauda*), quadrate (in *O. melzeri*, *O. soror*); soleate depression represented by wide, flattened area, with strongly raised sides (in *O. flavicauda*, *O. melzeri*), or weakly raised sides (in *O. soror*). Abdominal process triangular, with 45–60° slope (in *O. flavicauda*, *O. melzeri*), or vertical (in *O. soror*).

**Group B male** (Fig. 18, 22, 28, 32). Cylindrical, distinctly annulate; broad, at its widest about as wide as width across mesocoxal cavities, widest at apex of urosternite III; urosternite I longest, II–IV sequentially shorter, lengths urosternite I/IV 2.11–2.44. Urosternite V: trapezoidal, transverse; soleate depression represented by wide, flattened area, with strongly raised sides towards apex (in *O. apicalis*, *O. quinquecallosus*), or moderately raised, rounded sides (in *O. rufifrons*), or weakly raised sides (in *O. septemtuberculatus*). Abdominal process triangular, with 45–60° slope (in most species), or almost vertical (in *O. rufifrons*).

**Group A female** (Fig. 6, 8). Fusiform; hardly annulate; at its widest (middle of urosternite II) about as wide as width across mesocoxal cavities (in *O. flavicauda*), or at its widest (apex of urosternite II) wider than width across mesocoxal cavities (in *O. flavirostris*); uniformly tapering from near apex of II to apex of V; V conical and subacuminate at apex (in *O. flavicauda*), or trapezoidal and truncate at apex (in *O. flavirostris*). Abdominal process triangular with 30° slope (in *O. flavicauda*).

**Group B female** (Fig 24, 30, 34). Fusiform; distinctly annulate; at its widest (middle, or apex of urosternite III) distinctly wider than width across mesocoxal cavities, irregularly and abruptly narrowed to apex of V; V trapezoidal, broadly rounded at apex. Abdominal process triangular with 20–30° slope (in *O. quinquecallosus*, *O. septemtuberculatus*), or approximately 45° slope (in *O. rufifrons*).

**Legs. Front leg.** Femoral peduncles short, approximately 1/10 length femora; clava fusiform, tumid mesally (hardly so laterally) and abrupt; tibia narrow at base, regularly, but weakly widening to apex; apex hardly excavate laterally, mesally without tooth. **Middle leg.** Femur relatively long, 1.20–1.40× longer than tibia; peduncle flattened; clava fusiform, distinctly longer than peduncle, lengths clava/peduncle in male 1.56–1.59, in female 1.35 (Group A), or clava/peduncle in male 1.52–1.78, in female 1.50–1.72 (Group B); clava tumid mesally (when viewed from above), moderately wide dorso-ventrally, length of femur/width of clava 3.24–3.95. Tibia cylindrical, straight, narrow, gradually widening from base to apex. **Hind leg.** Apex of femur reaching from near apex of urosternite III to basal quarter of IV; femoral peduncle cylindrical, narrow. Tibia cylindrical; straight when viewed from directly behind (in *O. flavicauda*, *O. flavirostris*, *O. melzeri*, *O. quinquecallosus*), or sinuate (in *O. soror*, *O. apicalis*, *O. rufifrons*, *O. septemtuberculatus*); straight when viewed from the side (in *O. flavirostris*, *O. soror*, *O.*

*apicalis*, *O. septemtuberculatus*), or sinuate (in *O. flavicauda*, *O. melzeri*, *O. quinquecallosus*, *O. rufifrons*); shorter than femora, lengths femora/tibia 1.00–1.08 (in most species), 1.14–1.16 (in *O. melzeri*, *O. soror*); usually weakly, or not at all thickened from base to apex; moderately densely setose for apical half (the setae too short to be called a brush). **Tarsi.** Protarsus shorter than mesotarsus, but similar in structure; moderately slender (Group A), or more robust (Group B), widening to apex; tarsomere I subcylindrical, II trapezoidal, transverse, III wide and strongly bilobed (and larger than those of metatarsus). Metatarsus differs from pro- and mesotarsi by much longer first tarsomere, and slightly longer second tarsomere; metatarsomere I cylindrical, long, 1.40–1.55× longer than II+III; II trapezoidal, or cylindrical (in *O. septemtuberculatus*), weakly pediculate; III smaller than those of front and middle legs; onychium long and slender (Group A and in *O. septemtuberculatus*), or more robust (in rest of Group B).

**Group A.** Slender and, given the smaller size of the species (approximately 12 mm), relatively long (especially hind leg), ratio of length from front to hind leg 1.0:1.3:2.5–2.6. Metafemoral clavae subabrupt, fusiform, shorter than peduncle, lengths clavae/peduncle 0.75–0.91.

**Group B.** Less slender and, given the larger size of the species (13–17 mm), relatively short (especially hind leg), ratio of length from front to hind leg 1.0:1.3–1.4:2.1–2.3. Metafemoral clavae not abrupt, cylindrical, longer than peduncle, lengths clavae/peduncle 1.20–1.40.

**Male genitalia** (Fig. 44–50). Median lobe (length approximately 1.7 mm) moderately broad and arched, acuminate to apex (when viewed laterally); internal sack seems to lack dark bodies. **Tegmen.** *Group A.* Less chitinized; with paired, parallel, finger-like lobes. Each lobe moderately long (approximately 1.3 mm) and narrow, 3–4× longer than basal piece; parallel-sided, apex blunt; apex (and mesal side in *O. melzeri*) clothed with sparse, straight setae. Basal piece short, transverse. Y-piece moderately long, not much shorter than lateral lobes; fork not much longer than stem. *Group B.* More chitinized, with paired, divergent, thumb-shaped lobes. Each lobe long (approximately 1.7 mm) and broad, 2–3× longer than basal piece; widest at middle, mesal side arched from base to apex, lateral side nearly straight; apex sub-acuminate (or blunt in *O. septemtuberculatus*); apex and sides liberally clothed with long setae (those at apex slightly longer and curved). Basal piece moderately long, weakly transverse; Y-piece moderately short, fork distinctly longer than stem.

**General pubescence.** Reduced in males (of *O. flavicauda*, *O. quinquecallosus*, *O. septemtuberculatus*), or less so (in *O. melzeri*, *O. soror*, *O. apicalis*, *O. rufifrons*); in female almost glabrous (in *O. flavicauda*), or as in male (in *O. quinquecallosus*, *O. rufifrons*, *O. septemtuberculatus*). Dorsad: fimbriate below inferior lobes of eyes. Sides of pronotum with isolated groups of setae laterally. Scutellum clothed with short, recumbent, white or silvery hairs; elytra usually with few short setae basally, or absent (in *O. apicalis*, *O. rufifrons*). Underside: prosternum moderately densely clothed with short, untidy, semierect setae; sides of metasternum, and metepisternum with similar setae, but less dense and not untidy (in most species), or hardly setose (in *O. rufifrons*, *O. septemtuberculatus*). Short, moderately dense, recumbent, white pubescence, or ochreous (in *O. soror*) covering metepisternum and sides of metasternum; in female recumbent pubescence much reduced (in *O. flavicauda*, *O. quinquecallosus*). Abdomen in male glabrous at base, towards apex incrementally setose (Group A males); or almost entirely glabrous (in Group B species and female *O. flavicauda*). Antennae (Group A) micropubescent towards apex; basal segments fimbriate below, from scape to antennomere VI (in *O. flavicauda*), or from scape to antennomere V (in *O. melzeri*, *O. soror*). Antennae (Group B) entirely micropubescent (in *O. apicalis*, *O. rufifrons*), or only towards apex (in *O. quinquecallosus*, *O. septemtuberculatus*); densely clothed with thick setae from scape to antennomere IV (in female *O. rufifrons*), or scape to V (in male *O. rufifrons* and female *O. quinquecallosus*), or scape to VI (in males of *O. apicalis*, *O. quinquecallosus*); or scape to VI densely clothed with narrower setae (in both sexes of *O. septemtuberculatus*). Legs generally clothed with semierect setae, densest on femoral clavae and tibia, or rather weakly setose (in *O. apicalis*, *O. septemtuberculatus*).

**Puncturation.** Generally dense, small and alveolate, on forebody rarely beveled. Dorsal head almost impunctate on labrum and clypeus (in both sexes of Group A, *O. apicalis*, *O. rufifrons*), or sparsely punctured (in *O. quinquecallosus*, *O. septemtuberculatus*); adjacent area of frons and vertex, densely punctured, these deep, small and simple or alveolate on frons, on vertex contiguous and alveolate (in Group A males, *O. apicalis*, *O. quinquecallosus*, *O. sanguinolentus* and both sexes of *O. rufifrons*, *O. septemtuberculatus*); in other females, frons and vertex with sparser, shallower, larger, alveolate



punctures (in *O. flavicauda*, *O. quinquecallosus*); mentum-submentum with simple punctures scattered between arced carinae (in nearly all species), but lacking carinae (in female *O. flavicauda*). Pronotum with punctures of mixed size, shallow, alveolate or subalveolate (in most species); usually denser in males, in females usually sparser. In species with well-developed tubercles, punctures generally scattered, others in clusters (in *O. flavicauda*, *O. soror*, *O. septemtuberculatus*), in species with more even surface, punctures much denser on disc, towards sides scattered (in *O. melzeri*), or almost uniformly and densely punctured (in males of *O. apicalis*, *O. quinquecallosus*, *O. sanguinolentus* and both sexes of *O. rufifrons*). Mesosternum entirely micropunctate (in *O. melzeri*), or at sides impunctate or nearly so (in all other species); mesepimera micropunctate. Punctures at base of elytra alveolate, confluent and concentrated on humeri. Lateral and sutural elytral margins densely punctured, sometimes as far as apex, puncturations small, alveolate, contiguous and moderately deep. In Group A, basal half of elytra with double row of larger punctures along lateral margins, apical half with single row of very small punctures. In Group B, basal half of elytra with various rows of punctures along lateral margins, apical half with single row of very small punctures (in *O. apicalis*), or double or triple row of larger punctures (in the remaining species); translucent panels with weak, sparse, shallow, simple punctures (in most species of this group), or densely punctured (in *O. sanguinolentus*). Abdomen incrementally punctate from base to apex, punctures small, shallow, simple or beveled. In male, urosternites I–III almost impunctate towards midline, sparsely punctured towards sides, IV entirely sparsely punctate, V densely punctate in some areas (in most species), or generally more punctate with V entirely densely punctate (in *O. melzeri*, *O. quinquecallosus*). In female, abdomen entirely sparsely punctate.

**Color.** Generally black, or black and rufous/chestnut, or mostly rufous; lacking bright colors, but characteristic yellow tips of elytra serve as a primary diagnostic for most species. Males are dichromatic in *O. flavicauda*.

**Host plant.** Some species of *Odontocroton* have been observed as adults on an unidentified species of *Croton* Linnaeus (Euphorbiaceae). This plant is referred to elsewhere (e.g., Clarke 2011) as *Croton* sp. A; its common name is “Tinajero”. Known host records are provided in Table 1.

**Diagnosis.** Separation of *Odontocroton* from *Rhinobatesia* is provided under the description of the latter.

*Odontocroton* may be separated from most species of *Odontocera* by the following character combination: Group A and B species usually with contrasting yellow spot on apex of elytra. Group A species with lateral profile of prothorax interrupted by overhanging carinae. Group B species with characteristic tegmen of aedeagus, possessing divergent, broader lobes in contrast to the parallel, narrower lobes seen in most *Odontocera*.

Species of *Odontocroton* may be separated from *Odontocera fasciata* by the following character combination: in *Odontocroton* antennae longer, in male apex reaching base of urosternite II–III, in female reaching apical third of I to apex of III (in *Odontocera fasciata* antennae shorter, in male apex reaching middle of urosternite I, in female not passing metacoxae); in *Odontocroton* antennomere III 1.2–1.6× longer than scape, and not longer, or not much longer than V and VI (in *Odontocera fasciata* antennomere III 0.95–1.1× length of scape, and distinctly longer than V and VI); in *Odontocroton* prothorax not globular, surface most often with callosities and/or sulcation (in *Odontocera fasciata* prothorax globular, surface almost without callosities or sulcation); in *Odontocroton* prosternal process from approximately 5–16× narrower than width of coxal cavity (in *Odontocera fasciata* process at least 30× narrower than width of coxal cavity); in *Odontocroton* elytra narrow for apical half, except in *O. flavirostris* (in *Odontocera fasciata* elytra not much narrower for apical half); in *Odontocroton* abdomen cylindrical in males, fusiform in females, abdominal process with marked sexual differences of structure and slope (in males approximately 45–80°, to vertical in *O. soror*), in females wider, blunter and about half as steep (in *Odontocera fasciata* abdomen vespiform in both sexes, structure and slope (approximately 80°) of abdominal process the same in both sexes); in male *Odontocroton* mesofemur 1.3–1.4× longer than tibia (in male *O. fasciata* mesofemur 1.1× longer than tibia); in *Odontocroton* metafemur moderately slender, clava not more than 1.4× longer than peduncle (in *Odontocera fasciata* metafemur robust, clava more than 2× length of peduncle); in *Odontocroton* metatarsomere I not less than 1.4× longer than length of II+III (in *O. fasciata* metatarsomere I not more than 1.2× longer than length of II+III); in *Odontocroton* general color orange/rufous and black, pronotum without transverse bands of

different color (in *Odontocera fasciata* general color yellow, pronotum with transverse bands of different color); in *Odontocroton* lateral lobes of tegmen either divergent and narrowed to apex, or parallel, straight and hardly longer than Y-piece (in *Odontocera fasciata* lateral lobes of tegmen parallel, straight and much longer than Y-piece).

Species included in this genus are: Group A: *Odontocroton flavicauda* (Bates, 1873), *O. flavirostris* (Melzer, 1930), *O. melzeri* (Fisher, 1952) and *O. soror* (Gounelle, 1911). Group B (i): *Odontocroton apicalis* (Klug, 1825), *O. rufifrons* (Fisher, 1937), *O. sanguinolenta* (Bates, 1873) and provisionally *O. monnei* (Zajciw, 1968). Group B (ii): *Odontocroton quinquecallosa* (Zajciw, 1963) and *O. septemtuberculata* (Zajciw, 1963).

**Etymology.** The name of this genus is derived from *Odontocera* and *Croton*, the genus of the known host flower for some Group A and Group B species included in the new genus. The genus is masculine.

**Table 1.** List of *Odontocroton* species arranged by species group, and confirmed host associations with flowers of *Croton* sp. A (Euphorbiaceae).

| Group | Subgroup | Species   | Found on <i>Croton</i> ? |
|-------|----------|---|--------------------------|
| A     |          | <i>O. flavicauda</i> (Bates, 1873)              | Yes                      |
|       |          | <i>O. flavirostris</i> (Melzer, 1930)           |                          |
|       |          | <i>O. melzeri</i> (Fisher, 1952)                |                          |
|       |          | <i>O. soror</i> (Gounelle, 1911)                |                          |
| B     | B (i)    | <i>O. apicalis</i> (Klug, 1825)                 |                          |
|       |          | <i>O. rufifrons</i> (Fisher, 1937)              |                          |
|       |          | <i>O. sanguinolentus</i> (Bates, 1873)          |                          |
|       |          | <i>O. monnei</i> (Zajciw, 1968) [provisionally] |                          |
|       | B (ii)   | <i>O. quinquecallosus</i> (Zajciw, 1963)        | Yes                      |
|       |          | <i>O. septemtuberculatus</i> (Zajciw, 1963)     | Yes                      |

### Key to the genera and species of *Odontocroton* and *Rhinobatesia*

[Users of the key should bear in mind that the author did not have specimens of *O. flavirostris*, *O. monnei* and *O. sanguinolentus* to study, nor females of *O. melzeri*, *O. soror* and *O. apicalis*.]

1. Antennomere XI not dentate or weakly dentate; not robust, length body/width metasternum in male 5.42–8.30, in female 5.24–6.05; pronotum tuberculate or apex of elytra yellow or ochreous; lengths of elytra/forebody 1.36–1.50; width/length of rostrum 2.07–2.50; width of one inferior lobe of eyes/interocular distance in male 4.50–11.15, in female 0.83–1.40; length of elytra/width across humeri 3.45–4.13; lengths metatarsomere I/II+III 1.40–1.55 (Fig. 1–34); South America ..... [*Odontocroton* Clarke n. gen.] **2**
- Antennomere XI strongly dentate; robust, length body/width metasternum in male 5.16, in female 4.58; pronotum not tuberculate and apex of elytra dusky; lengths of elytra/forebody; 1.13–1.21; width/length of rostrum 1.61–1.68; width of one inferior lobe of eyes/interocular distance in male 3.40, in female 2.00; length of elytra/width across humeri 2.67–2.76; lengths metatarsomere I/II+III 0.74–0.94 (Fig. 35–39); Mexico, Central America ..... *Rhinobatesia rugicollis* (Bates, 1880)
- 2(1). Smaller, 9.3–12.7 mm, slender species, length body/width metasternum in male 6.45–8.30, in female 6.05; basal constriction of prothorax not fossate; antennae filiform, basal segments fimbriate below; metafemoral clava fusiform, shorter than peduncle; base of mesosternal process 3–6× narrower than coxal cavity; genitalia: lateral lobes of tegmen narrow, parallel and not narrowed to apex (Fig. 1–13) ..... [**Group A**] **3**

- Larger, 13.1–17.1 mm (but see *O. monnei*), less slender species, length body/width metasternum in male 5.42–5.85, in female 5.24–5.36; basal constriction of prothorax fossate; antennae subfiliform to subcrassate, basal segments with dense, thick setae (but see *O. septemtuberculatus*); metafemoral clava cylindrical, distinctly longer than peduncle; base of mesosternal process approximately 2× narrower than coxal cavity; genitalia: lateral lobes of tegmen broad, divergent and narrowed to apex (Fig. 14–34). . . . . [Group B] 6
- 3(2). Antennae shorter, reaching apical third of urosternite II; elytra narrowly fissate . . . . . 4
- Antennae longer, reaching apex of urosternite III; elytra dehiscent or fissate . . . . . 5
- 4(3). Antennae shorter, reaching apical third of urosternite II; pronotum uneven but not tuberculate; apex of elytra ochreous, reaching apex of urosternite III; male abdomen cylindrical and hardly annulate, soleate depression on urosternite V with strongly raised sides, abdominal process with approximately 45° slope (Fig. 9–10); Brazil (SC) . . . . . *O. melzeri* (Fisher, 1952)
- Antennae longer, reaching base of urosternite III; pronotum tuberculate; apex of elytra yellow, reaching basal quarter of urosternite IV; male abdomen subcylindrical and distinctly annulate, soleate depression on urosternite V with weakly raised sides, abdominal process vertical (Fig. 11–13); Brazil (GO, MG, ES, SP) . . . . . *O. soror* (Gounelle, 1911)
- 5(3). Antennae shorter, reaching apical third of urosternite II; prothorax comparatively short, length/width 1.09; elytra dehiscent or fissate, apex reaching middle of urosternite IV; abdominal process not coplanar with abdomen, with approximately 30° slope (Fig. 1–6); Brazil (GO, BA, MG, ES, RJ, SP, PR, SC, RS), Bolivia (SC, TA), Paraguay, Argentina (MI, BA), Uruguay . . . . . *O. flavicauda* (Bates, 1873)
- Antennae longer, reaching apex of urosternite III; prothorax elongate, length/width 1.45; elytra not dehiscent nor fissate, apex reaching apex of urosternite IV; abdominal process almost coplanar with abdomen, with approximately 10° slope (Fig. 7–8); Brazil (BA, ES) . . . . . *O. flavirostris* (Melzer, 1930)
- 6(2). Length body/width metasternum in male 5.42–5.85, in female 5.24; pronotum without distinct callosities, with or without median callus, the pronotal surface almost lacking impunctate areas; antennae subcrassate; apex of elytra reach urosternite V; width of one inferior lobe of eyes/interocular distance in male 8.00–9.00; abdominal process with approximately 60–80° of slope in male, approximately 45° in female; lengths mesofemoral clava/peduncle 1.72–1.78; length mesofemur/lateral width of clava 3.24–3.56; lengths metafemur/metatibia 1.04–1.08 . . . . . [Group B (i)] 7
- Length body/width metasternum in male 5.42–5.54, in female 5.36–5.43; pronotum with distinct paired lateral callosities or tubercles and median callus, the surface of these partly impunctate; antennae subfiliform; apex of elytra reach urosternite IV; width of one inferior lobe of eyes/interocular distance in male 4.50–6.40; abdominal process with approximately 45° of slope in male, approximately 30° in female; lengths mesofemoral clava/peduncle 1.52–1.67; length mesofemur/lateral width of clava 3.78–3.95; lengths metafemur/metatibia 1.00–1.02 . . . . . [Group B (ii)] 10
- 7(6). Female: larger, 14 mm; antennomere III 1.3× longer than scape and IV approximately 1/2 length of III . . . . . 8
- Female: smaller, 11 mm; antennomere III 1.5× longer than scape and IV 2/3 length of III (Fig. 14); Uruguay . . . . . *O. monnei* (Zajciw, 1968)
- 8(7). Both sexes: legs bicolored (reddish and black); sides of prothorax more rounded. Female: pronotum orange, humeri yellow or black, pronotal midline occupied by black fascia; elytra weakly fissate, 3.4x longer than width across humeri, apical yellow fascia elongate, ill-defined and not contrasting in color with rest of elytra; metafemora red and black. In male: antennae reach middle of urosternite I, antennomere III 1.4× longer than scape and equal in length to V and VI; prosternal process 10x narrower than width of coxal cavity; abdomen orange in color, lengths of urosternites III and IV subequal, soleate depression on urosternite V ill-defined,

- weakly delimited by slightly raised, rounded sides; abdominal process with approximately 60° slope . . . . . 9
- Both sexes: legs unicolored (black in male, yellowish in female); sides of prothorax less rounded. Female: pronotum and humeri entirely dark red; elytra dehiscent, 3.6× longer than width across humeri, apical yellow fascia short, quadrate and contrasting in color with rest of elytra; metafemora unicolored. In male: antennae reach base of urosternite II, antennomere III 1.2× longer than scape and distinctly longer than all other segments; prosternal process 8.5× narrower than width of coxal cavity; abdomen dark brown in color, urosternite III distinctly longer than IV, soleate depression on urosternite V U-shaped, but hardly depressed, sharply raised sides towards apex of segment; abdominal process with approximately 80° slope (Fig. 15–18); Brazil (MG, ES, RJ, RS), Argentina, Uruguay . . . . . ***O. apicalis* (Klug, 1825)**
- 9(8). Female: head black; antennae short, approximately 1/2 length of body, antennomeres III–V short and strongly widened; sides of prothorax regularly rounded; pronotum without calli, surface densely and coarsely punctured, midline occupied by broad black fascia; sides of elytra (including humeri) broadly blackish, translucent panels densely punctured, apices of elytra with both lateral and sutural margins dentate; femora entirely blackish (Fig. 19); Brazil (BA, MG, ES, RJ, SP, PR, SC, RS), Argentina (MI, CO, ER), Uruguay . . . . . ***O. sanguinolentus* (Bates, 1873)**
- Female: head mostly rufous; antennae longer, more than 1/2 length of body; antennomeres III–V longer and hardly widened; sides of prothorax irregularly rounded; pronotum with indistinct calli, surface densely but not coarsely punctured, midline with narrow black fascia; sides of elytra narrowly blackish, humeri entirely yellowish, translucent panels sparsely punctured, apices of elytra with only sutural margin weakly dentate; femora red and black (Fig. 20–24); Brazil (SC) . . . . . ***O. rufifrons* (Fisher, 1937)**
- 10(6). Black; elytra yellow at apex; metasternum with dense white pubescence; rostrum shorter, width/length 2.40 in male, 1.93 in female; width of one inferior lobe of eye/interocular distance 6.40 in male, 1.40 in female; antennae shorter, reaching basal third of urosternite II in male, apical third of I in female; in male antennomere III 1.05x longer than any other segment, in female 1.15× longer; pronotal surface only partly impunctate on callosities, these weaker and not tuberculate; elytra shorter in male, length/width across humeri 3.56; soleate depression on urosternite V with strongly raised sides, almost tuberculate (Fig. 25, 27–30); Argentina (CO, TU), Bolivia (SC, TA) . . . . . ***O. quinquecallosus* (Zajciw, 1963)**
- Rufescent; elytra not yellow at apex; metasternum with dense golden pubescence; rostrum longer, width/length 2.08 in male, 2.07 in female; width of one inferior lobe of eye/interocular distance 4.50 in male, 1.25 in female; pronotal surface with many impunctate areas (not only on callosities), largest callosities tuberculate; elytra longer in male, length/width across humeri 3.84; soleate depression on urosternite V with weakly raised sides (Fig. 26, 31–34); Argentina (SA, TU), Bolivia (SC, TA) ***O. septemtuberculatus* (Zajciw, 1963)**

### Genus *Odontocroton* species sample data

#### ***Odontocroton flavicauda* (Bates, 1873), n. comb.**

(Fig. 1–5)

*Odontocera flavicauda* Bates 1873: 40; Monné 2017: 443 (cat.).

*Odontocera flavicauda* var. *notatisternis* Gounelle 1911: 40.

**Species concept.** Based on Bates (1873) original description and photograph of the male holotype (Fig. 1) made available on Bezark (2017), which compares well with those taken by the author (Fig. 2-6).

**Comment.** Having studied Gounelle (1911) description and photographs of his *Odontocera flavicauda* var. *notatisternis*, the author does not believe it to be a variety of Bates' *O. flavicauda* for the following

reasons: they don't look like each other and they come from disjunct geographical areas, Gounelle's from the humid Mata Atlântica of east-central Brazil (MG), Bates's from the wet forests of southern Brazil (PR). However, as the author has not had access to the type material, nor a topotype to extract the genitalia, the true status of Gounelle's subspecies will remain in doubt.

**Measurements (mm).** 9 males/2 females: total length, 11.85–13.50/12.70–14.25; length of prothorax, 1.75–1.95/1.85–2.05; width of prothorax, 1.40–1.60/1.70–1.85; length of elytra, 6.30–7.50/7.20–8.25; width at humeri, 1.70–2.00/1.95–2.30.

**Specimens analyzed.** BOLIVIA, *Tarija*, 21°18'S/63°30'W, 7 km W Villamontes, 600–700m, 3–4 km San Antonio Road, Foothill Chaco Forest, flying to/on flowers of *Croton* sp. A, male 5.I.2008, female, 16.XII.2007, Clarke and Zamalloa col. (RCSZ).

**Specimens examined.** (all collected by Clarke and Zamalloa). BOLIVIA, *Santa Cruz*, 10 km S Abapo, 19°00'S/63°14'W, 762m, Santa Cruz-Yacuiba Hwy, Foothill Chaco Forest, on flowers of *Croton* sp. A, male, 2.I.2008, (RCSZ). *Tarija*, 21°18'S/63°30'W, 7 km W Villamontes, 600–700m, 3–4 km San Antonio Road, Foothill Chaco Forest, on flowers of *Croton* sp. A, 2 males, 14–16.XII.2007 (RCSZ), same data: male (CMNH), male (EMEC).

**Distribution.** Bates stated that his specimen came from Paraná, Brazil. The author considers the distribution of this species to be centered on the forests of southern Brazil (PR, SC), Bolivia (TA), Paraguay and Argentina (MI, CH, CO, ER) as recorded by Di Iorio (2005); and records from east central Brazil and Uruguay require verification.

***Odontocroton flavirostris* (Melzer, 1930), n. comb.**

(Fig. 7–8)

*Odontocera flavirostris* Melzer 1933: 195; Monné 2017: 443 (cat.).

**Species concept.** Based on Melzer (1933) original description, and data and photographs of the female holotype kindly provided by Antonio Santos-Silva (MZSP).

**Measurements (mm).** 1 female: total length, 9.30; length of prothorax, 1.60; width of prothorax, 1.10; length of elytra, 6.20; width at humeri, 1.50.

**Specimen examined.** Female holotype, Brazil (ES), Santa Tereza, O. Conde leg. (MZSP).

**Distribution.** This species is recorded for the east central Brazilian departments of Espírito Santo and Bahia.

***Odontocroton melzeri* (Fisher, 1952), n. comb.**

(Fig. 9–10)

*Odontocera melzeri* Fisher 1952: 8; Monné 2017: 444 (cat.).

**Species concept.** Based on Fisher (1952) original description and a photograph of the male holotype (Fig. 9) available on Bezark (2017), which compares well with that of a male topotype (Fig. 10) kindly loaned to the author by MZSP.

**Measurements (mm).** 1 male: total length, 12.25; length of prothorax, 1.65; width of prothorax, 1.45; length of elytra, 6.65; width at humeri, 1.60.

**Specimen analyzed.** BRAZIL, *Santa Catarina*, Nova Teutônia, male, X.1940, B. Pohl col. (MZSP).

**Distribution.** This species has only been recorded for the southern Brazilian state of Santa Catarina.

***Odontocroton soror* (Gounelle, 1911), n. comb.**

(Fig. 11–13)

*Odontocera soror* Gounelle 1911: 41; Monné 2017: 446 (cat.).

**Species concept.** Based on Gounelle (1911) original description and photograph of the female holotype (Fig. 13) available on Bezark (2017), and a male syntype (Fig. 11-12) donated by Gounelle to MZSP and subsequently kindly loaned to the author.

**Measurements (mm).** 1 male: total length, 12.00; length of prothorax, 1.85; width of prothorax, 1.50; length of elytra, 7.05; width at humeri, 1.80.

**Specimen analyzed.** BRAZIL, *Goiás*, syntype, male, Gounelle leg., 19.543 (MZSP).

**Distribution.** This species seems to be correctly recorded for Brazil (GO, MG, ES, SP).

***Odontocroton apicalis* (Klug, 1825), n. comb.**

(Fig. 15–18)

*Stenopterus apicalis* Klug 1825: 472.

*Odontocera apicalis* White 1855: 188; Monné 2017: 440 (cat.).

**Species concept.** Based on Klug (1825) original description and figure, and photograph (Fig. 15-16) of the female holotype kindly sent to the author by Joachim Willers of the Humboldt Museum, which compares reasonably well, given the variation in color of this species, with the male specimen (Fig. 17-18) identified by J. Melzer, kindly lent to the author by the MZSP.

**Measurements (mm).** 1 male: total length, 16.10; length of prothorax, 2.60; width of prothorax, 2.10; length of elytra, 9.75; width at humeri, 2.60.

**Specimen analyzed.** BRAZIL, *Minas Gerais*, Passa Quatro, Faz. dos Campos, male, 28.I.1920, J.F. Zikán leg. (MZSP).

**Distribution.** Klug stated that his specimen came from Brazil. The author believes the distribution of this species to be centered on Brazil (MG), where Zikán collected his specimen; and records from southern Brazil, Argentina and Uruguay require verification.

***Odontocroton monnei* (Zajciw, 1968), n. comb.**

(Fig. 14)

*Odontocera monnei* Zajciw 1968: 48; Monné 2017: 444 (cat.).

**Species concept.** Based on Zajciw (1968) original description and a photograph of the holotype available on Bezark (2017).

**Specimen examined.** URUGUAY, *Soriano*, Arroyo Cololo, female holotype, 15.I.1962, C. S. Carbonelli, C. S. Morey and M. A. Monné leg. (MNRJ)

**Comment.** Described from a single female from Uruguay. Zajciw (1968) stated that this species “is very like *O. apicalis*”, and on that basis is placed by the author in Group B (i). However, its proportions (small, rather short body, quadrate prothorax, etc) suggest it might be better placed in its own genus, a proposal which will have to await the examination of a male and its genitalia.

**Distribution.** This species is only known from the type specimen.

***Odontocroton quinquecallosus* (Zajciw, 1963), n. comb.**

(Fig. 25, 27–30)

*Odontocera quinquecallosa* Zajciw 1963: 248. Monné 2017: 446 (cat.).

**Species concept.** Based on Zajciw (1963) original description and photograph of the male holotype (Fig. 25) available on Bezark (2017), which compares well with those taken by the author (Fig. 27-30).

**Measurements (mm).** 3 males/4 females: total length, 13.05–15.3/15.70–16.70; length of prothorax, 2.10–2.35/2.30–2.40; width of prothorax, 1.90–2.10/1.90–2.20; length of elytra, 8.00–8.35/8.90–9.90; width at humeri, 2.25–2.40/2.35–2.50.

**Specimens analyzed.** BOLIVIA, *Tarija*, 21°01'S/63°18'W, 30 km N of Villa Montes, 4 km E of Camatindi, c. 700m, Semi-dry Chaco Forest, on flowers of *Croton* sp. A, male and female (in cop), 13.I.2008, Clarke & Zamalloa col. (RCSZ).

**Specimens examined.** BOLIVIA, *Santa Cruz*, 20 km N Camiri, 19°52'S/63°29'W, 1250 m, 5–8 km Road to Eyti, female, 10.XII.2012, Wappes, Bonaso & Skillman col (ACMT). BOLIVIA, *Tarija*, 21°01'S/63°18'W, 30 km N of Villa Montes, 4 km E of Camatindi c. 700m, Semi-dry Chaco Forest, on flowers of *Croton* sp. A, female, 10.I.2010 (RCSZ); same data: female, and male and female (in cop), 13.I.2008 (RCSZ); 48 km N Yacuiba, 21°42'S/63°36'W, 762m, 3–5 km Sanandita Road, Foothill Chaco Forest, on flowers of *Croton* sp. A, male, 8.I.2010 (RCSZ). The Tarija records all collected by Clarke and Zamalloa.

**Distribution.** The author believes the distribution of this species to be in the Chaco forests between the type locality Argentina (CO) and Bolivia (SC, TA).

***Odontocroton rufifrons* (Fisher, 1937) new rank, n. comb.**

(Fig. 21–24)

*Odontocera sanguinolenta* var. *rufifrons* Fisher 1937: 151; Monné 2017: 446 (cat.).

**Species concept.** Based on Fisher's (1937) original description and a photograph of the holotype (Fig. 20) available on Bezark (2017), which compares well with male and female topotypes (Fig. 21–24) kindly loaned to the author by EMEC.

**Comment.** Fisher states that his variety very closely resembles Bates' *O. sanguinolenta*; but he may be referring to Bates' description, rather than having access to one of the syntypes. This because the surface ornamentation, especially the vitreous translucent panels and the stout antennae (as mentioned by Bates), could hardly be more different. Fisher stated that his holotype is a male; but the photograph (Fig. 22) of his holotype is clearly a female.

**Measurements (mm).** 2 males/1 female: total length, 13.10–15.85/14.15; length of prothorax, 2.10–2.35/2.30; width of prothorax, 1.85–1.90/1.95; length of elytra, 7.70–8.50/8.60; width at humeri, 2.10–2.40/2.50.

**Specimens analyzed.** BRAZIL, Santa Catarina, Nova Teutônia, 27°11'S/52°23'W, male, I.1965, (EMEC 202,874); same data, female, 31.X.1941, F. Plaumann col. (EMEC 202,864).

**Specimen examined.** Same data, male, 31.X.1941, F. Plaumann col. (EMEC 202,863).

**Distribution.** Fisher stated that his specimen came from Brazil (SC). The author considers the distribution of this species to be centered on the wet pine forests of southern Brazil, Paraguay and Argentina (ER, MI). It was recorded as *O. sanguinolenta* by Di Iorio (2005), but looking at his illustration it has clearly got a rufous frons [and cannot be *O. sanguinolentus* as it has an entirely black head]; and records from east central Brazil and Uruguay require verification.

***Odontocroton sanguinolentus* (Bates, 1873), n. comb.**

(Fig. 19)

*Odontocera sanguinolenta* Bates 1873: 39; Monné 2017: 446 (cat.).

**Species concept.** Based on Bates (1873) original description of a male and female from Brazil (RJ), and a photograph available on Bezark (2017) of a syntype (Fig. 19).

**Distribution.** Bates' species is recorded for east central Brazil (BA, MG, ES, RJ, SP) and, probably erroneously so, for Brazil (PR, SC, RS), Argentina (MI, CO, ER) and Uruguay as these records probably refer only to Fisher's *O. sanguinolenta rufifrons*.

***Odontocroton septemtuberculatus* (Zajciw, 1963), n. comb.**

(Fig. 26, 31–34)

*Odontocera septemtuberculata* Zajciw 1963: 250; Monné 2017: 446 (cat.).

**Species concept.** Based on Zajciw (1963) original description and a photograph of the male holotype (Fig. 26) available on Bezark (2017), which compares well with those taken by the author (Fig. 31-34).

**Measurements (mm).** 18 males/9 females: total length, 11.20–16.85/14.10–19.65; length of prothorax, 1.85–2.60/2.00–2.75; width of prothorax, 1.75–2.50/1.80–2.85; length of elytra, 6.35–10.30/7.60–11.75; width at humeri, 1.85–2.85/2.10–3.35.

**Specimens analyzed.** BOLIVIA, *Tarija*, 21°18'S/63°30'W, 7 km W Villamontes, 700m, 4 km San Antonio Road, Foothill Chaco Forest, flying to/on flowers of *Croton* sp. A, male, 9.I.2008, female, 6.I.2008 (RCSZ).

**Specimen examined.** (All Clarke and Zamalloa col.). BOLIVIA, *Santa Cruz*, 10 km S Abapo, 18°59'S/63°14'W, 600m, Santa Cruz-Yacuiba Hwy, Foothill Chaco Forest, on flowers of *Croton* sp. A, male and female, 2.I.2008, (RCSZ). *Tarija*, 21°18'S/63°30'W, 7 km W Villamontes, 700m, 3–4 km San Antonio Road, Foothill Chaco Forest, flying to/on flowers of *Croton* sp. A, 11 males, 2 females 14–16.XII.2007 (RCSZ); same data: male and female, 2.I.2008 (ACMT); male, female and 2 mating pairs, 5–6.I.2008 (RCSZ); male, female, and mating pair, 8-9.I.2008 (RCSZ).

**Distribution.** The author believes the distribution of this species to be in the semi-dry Chaco forests between the type localities in Argentina (TU, SA) and Bolivia (SC, TA).

**Comment.** Wappes et. al. (2013: figure 65) illustrated a female of *O. flavicauda*, incorrectly identified as *O. septemtuberculata*.

### ***Rhinobatesia* Clarke, n. gen.**

Fig. 35–36

**Type species.** *Odontocera rugicollis* Bates, 1880, here designated.

**Description of the genus.** Robust species, length body/width metasternum in male 5.16, in female 4.58. Lengths forebody/abdomen 1.01 in male, 1.30 in female.

**Head.** Head (h) narrower than prothorax (p), p/h 1.21 in male, 1.13 in female. Rostrum almost parallel-sided (but widest at apex) long, width/length 1.61 in male, 1.68 in female. Labrum moderately large, almost rectangular; approximately 2× wider than long, apical margin truncate and not declivous. Surface of clypeus hardly differentiated from frons, both with similar surface ornamentation. Frons depressed, separated from clypeus by ill-defined declivity; coronal suture only traceable on interocular. Area of submentum depressed; separated from gula by distinct declivity in male, less declivous in female.

**Eyes.** Inferior lobes of eyes not contiguous, width of one lobe/interocular 3.40 in male, 2.00 in female; strongly convex laterally; mesally slightly more prominent than interocular; distal margins adjacent to genae, proximal margins almost transverse. Superior lobes not widely separated, interocular distance/width of one lobe 2.33 in male, 2.50 in female; with approximately 13 transverse rows of ommatidia, reduced to approximately 7 rows laterally in male, 8 in female.

**Antennal tubercles.** Prominent, but rounded, comparatively widely separated, in male 0.7 mm, in female 0.85 mm; tubercular space/width of scape 1.56 in male, 1.70 in female.

**Antennae.** Crassate, short, reaching metacoxae in male, middle of urosternite I in female; antennomeres widest from V to IX; VI–X with acute, clipped serrations, and XI subserrate. Scape robust and wide, pyriform, nearly 3× longer than pedicel in male, more than 3× longer in female; approximately 1/3 shorter than antennomere III; antennomere III at least 1.4× longer than any other segment, almost cylindrical, slightly narrower than pedicel at base, wider than pedicel at apex. In males: IV and V gradually widened to apex; V almost subserrate; VI–X narrow at base, strongly widened to apex, incrementally shorter; XI in male basically short and subcylindrical, but with apical cone displaced laterally, the mesal side appears abruptly dentate. In female: basal segments tend to be longer than in male, and apical ones shorter; IV–X similar in structure, but somewhat tumid compared with males; and XI hardly dentate as apical cone not displaced. Lengths (mm) antennal segments, male and female, as follows: scape, 0.85, 1.00; pedicel, 0.30; III, 1.25, 1.45; IV, 0.75, 0.85; V, 0.90, 1.00; VI, 0.85, VII, 0.80, 0.75; VIII, 0.70, 0.65; IX, 0.65, 0.60; X, 0.50; XI, 0.70.



**Prothorax.** Subcylindrical, length/width 1.28 in male, 1.24 in female; in male sides regularly and weakly rounded to basal constriction, in female straight and parallel-sided for apical half, rounded for basal half; in male widest slightly in front of middle (prothoracic quotient 2.14), in female widest slightly behind middle (prothoracic quotient 1.85); surface almost regular (but vestigial calli and depressions overlaid by rugose puncturation); apical constriction evanescent, basal constriction not abrupt (sloping from basal margin to pronotal disk); towards sides with large, deep, rounded fossa; front margin slightly narrower than basal margin in male, of equal width in female. Prosternum declivous across apical third, strongly inclined to base of prosternal process; base of prosternal process arced, short and broad, in male 4.0× narrower than width of coxal cavity, in female 3.8× narrower; apex an equilateral trapeze, large and strongly rugose, with irregular tubercle occupying center; postcoxal process moderately narrow (approximately 0.25 mm), firmly closing coxal cavities.

**Mesothorax.** Mesosternum deep and abruptly declivous; base of mesosternal process V-shaped, 2.5× narrower than width of coxal cavity in male, 1.5× narrower in female; in male apex weakly bilobed, each lobe small, short and rounded at apex, in female lobes larger, longer and slightly divergent; coxal cavities narrowly open to moderately narrow mesepimeron. Mesothorax shorter than metathorax (the latter unusually long), lengths meso/meta 0.58 in male, 0.60 in female. **Scutellum.** Moderately large; trapezoidal, truncate at apex (in female bifid at apex).

**Elytra.** Strongly subulate, weakly, but widely fissate for apical two-thirds; flat (except for humeri and narrow, vertical epipleura); elongate (apex reaching from base to middle of urosternite IV); in male 2.76 longer than width of humeri, in female, 2.67 longer; humeri unusually broad (yet failing to hide sides of mesosternum when viewed from directly overhead), not projecting, moderately prominent; humero-apical costa absent. Each elytron strongly narrowed for basal half, narrow and almost parallel-sided for apical half. In male, sides of each elytron arced and narrowed from humerus to middle, weakly recurved for apical half, in female, arced to apex (but weakly so for apical half); apical margin obliquely truncate (sutural margin the longest) and unarmed.

**Metathorax.** Sides weakly rounded to apex, apex truncate, in female sides slightly more rounded and apex weakly oblique to midline; metasternum tumid, not flattened in male, broadly flattened in female; coplanar with mesocoxae in female, slightly lower than mesocoxae in male. Metepisternum: cuneate, in male moderately broad at base, strongly narrowed to acuminate apex, in female base broader.

**Abdomen. Male.** cylindrical (weakly apiform), moderately elongate and broad, convex, weakly annulate. Urosternites I–IV: cylindrical, sides weakly converging to apex; I with sides weakly rounded, II–IV with sides straight; broadest (1.8 mm) at base of I, narrowest (1.5 mm) at apex of IV. Urosternite I distinctly longer than the others, quadrate, II slightly transverse and weakly trapezoidal; III quadrate; IV transverse. Length (mm) urosternites: I, 1.85; II, 1.50; III, 1.55; IV, 1.30. Urosternite V (0.90 mm), when viewed from below: trapezoidal, quadrate, with weakly rounded sides; soleate depression represented by large, oval shallow area demarcated by broad, rounded weakly raised sides; apical margin bisinuate; hind angles (when viewed laterally) subacute, wide wings, not projecting beyond apical margin. Abdominal process an equilateral triangle, with 10° slope, intimately inserted between metacoxae (with short, straight extension at apex).

**Female.** fusiform, moderately broad, hardly flattened; not annulate. Urosternites I–V: I–III cylindrical, IV–V trapezoidal; sides weakly rounded; I–II with sides weakly widening to apex, III–V converging to apex; broadest (2.5 mm) at middle of II, narrowest (0.8 mm) at apex of V. Urosternite I much longer than the others, slightly transverse; II–V transverse; V not down-turned. Length (mm) urosternites: I, 2.15; II, 1.35; III, 1.30; IV, 1.05; V, 0.90. Abdominal process large and coplanar with abdomen.

**Apical tergite.** Moderately long (approximately 1.5 mm) in both sexes; in male, cylindrical, convex, apex excavate; in female, trapezoidal, flat; apex rounded.

**Legs.** Moderately long and robust, ratio of length from front to hind leg 1.0:1.2:1.8–2.1. **Front leg.** Femoral peduncles unusually long; clave fusiform, strongly tumid mesally (hardly so laterally) and abrupt; tibia narrow at base, regularly widening to apex; apex obtusely excised laterally, mesally without tooth. **Middle leg.** Femora relatively long, 1.42–1.45× longer than tibiae; clave fusiform, slightly longer

than peduncle, lengths clave/peduncle 1.10–1.15, tumid, more so mesally (when viewed from above), moderately wide dorso-ventrally, length of femur/width of clave 3.39 in male, 3.94 in female; peduncle flattened; tibia weakly sinuate near apex, hardly flattened, gradually widening from middle to apex; pro- and mesotarsi similar; moderately robust, short, widening to apex, tarsomere I trapezoidal, hardly elongate, II trapezoidal, transverse, III wide and strongly bilobed. **Hind leg.** Femoral clave subabrupt, fusiform; apex reaching basal third of urosternite IV in male, in female apex of IV; clave distinctly shorter than peduncle, lengths clave/peduncle 0.91 in male, 0.87 in female; peduncle cylindrical, moderately narrow; tibia cylindrical, in male weakly sinuate when viewed from directly behind, straight when viewed from the side, in female straight viewed from behind, bisinuate when viewed from the side; shorter than femora, lengths femur/tibia 1.07–1.10; gradually thickened from middle to apex, rather densely setose for apical half (the setae rather too short to be called a brush); metatarsus similar to pro- and mesotarsi, but differs by longer first and second tarsomeres; metatarsomere I subcylindrical, short in male, 0.94 length of II+III, very short in female, 0.74 length of II+III; II trapezoidal, weakly pediculate; III broad and deeply bilobed; onychium long, but not slender.

**Male genitalia** (Fig. 51). Median lobe (length approximately 1.7 mm) moderately broad and arced, acuminate to apex (when viewed laterally); internal sack seems to lack dark bodies. **Tegmen.** chitinized, with paired, weakly divergent, finger-like lateral lobes. Each lobe: moderately long, approximately 3× longer than basal piece; mesal side almost straight, lateral side widening to middle, somewhat abruptly narrowed for apical half (this parallel-sided and weakly acuminate at extreme apex); apex and mesal side clothed with moderately dense setae (those at apex longer and curved). Basal piece slightly transverse, laterally with narrow chitinized band extending towards apex of lateral lobe. Y-piece moderately long, stem longer than arms.

**General pubescence.** Reduced in male, more so in female. **Dorsad.** Fimbriate below inferior lobes of eyes, the setae encroaching on genae. Prothorax almost uniformly clothed with short, erect setae; midline of pronotum, and narrow parallel stripe to each side glabrous. Scutellum clothed with short, recumbent, dark setae; elytra glabrous. **Ventrad.** Prosternum almost glabrous, some punctures with very short seta; sides of metasternum, and metepisternum with suberect setae. In male with short, moderately dense, recumbent, grey pubescence across basal half of metasternum, becoming sparser on apical half, in female metasternum almost glabrous; in both sexes, metepisternum along sides of apex with narrow fascia of similar pubescence, but dense and pale ochreous in color. Abdomen: sides of urosternites I–IV (II–IV in female) with incrementally smaller narrow, white fascia; rest of abdomen with sparse, suberect, grey pubescence, becoming somewhat denser towards apex; in female surface almost glabrous. **Antennae.** Micropubescent from segment IV to apex; densely clothed with thick setae from scape to antennomere VI, in both sexes. **Legs.** Generally rather weakly clothed with semierect setae, denser on femoral claves and tibia of middle and hind legs, front leg lacking these setae. In both sexes, metatibia with dense setae on apical half, just long enough to be called a brush.

**General puncturation.** Similar in both sexes; exceptionally rugose, dense, alveolate, and sometimes beveled. **Dorsad.** Head with labrum and clypeus sparsely punctured in both sexes; adjacent area of frons with moderately large, deep, confluent, alveolate punctures lodged in a carinate matrix; vertex rugosely punctured, these small, alveolate, lodged in a matrix of micropunctures; mentum-submentum with small alveolate punctures scattered between six rows of weakly arced, transverse carinae. Pronotum not tuberculate; entirely rugosely punctate, these alveolate and mostly confluent in both sexes; in male pronotal disc occupied by a weakly raised, trident-shaped area of shallower, contiguous punctures lodged in a matrix of short transverse carinae; between prongs of trident, and towards sides of disc, carinae absent, punctures deeper and confluent; in female pronotal surface less differentiated, the trident-shaped area not raised and ill demarcated. Elytral puncturation similar in both sexes; generally alveolate; at base concentrated on humeri. On basal half of elytra lateral margins with various rows of mainly large punctures, towards apex reduced to double row of small ones; sutural margins at base of elytra with four rows of small, beveled punctures, diminishing to single row near middle of elytra, impunctate from middle to apex. Translucent panels squeezed into narrow area between punctures of lateral and sutural margins; panels almost impunctate, surface of basal third opaque yellow due to dense microsculpture. **Ventrad.** Middle of mesosternum with some large and small punctures lodged

in matrix of rugose microsculpture; at sides smooth and sparsely punctate; mesepimera moderately densely punctate. Abdomen incrementally punctate from base to apex, punctures small to very small, shallow, simple or beveled; male with urosternites I—IV sparsely punctate towards midline, more densely towards sides, and urosternite V densely punctate in soleate depression, sparsely towards sides; female with urosternites I—V almost entirely sparsely punctate, hardly more so at sides.

**Color.** Not sexually dichromatic; body and appendages (including metatarsi) generally black; rostrum, pronotum, sides of pro- and mesothorax, antennal scape and femora may be suffused with rufous. Elytral apex not yellow. Metafemoral peduncles mostly yellow, base of metatibia yellow.

**Diagnosis.** The shortest diagnosis for this genus (with its long subulate elytra) could be the male's strongly dentate antennomere XI, shared by both sexes of the genus *Phygopoides* (with its short cuneate elytra) and some species of *Odontocroton* (in which XI is weakly dentate); but there may be other Rhinotragini genera that share this character as it is easily overlooked.

*Rhinobatesia* may be separated from other genera of Rhinotragini by the following combination of characters. Inferior lobes of eyes well separated in both sexes. Pronotum without tubercles, surface rugose, with trident shaped callus occupying disc (poorly defined in female). Prothorax subcylindrical (male l/w 1.28), sides weakly rounded, widest near middle (male quotient 2.14); procoxal cavities plugged at sides, closed behind. Elytra subulate, widely fissate, 2.67–2.76× longer than wide. Antennae crassate, in male antennomere XI toothed (subserrate). In male hind margin of metasternum truncate (almost so in female). Legs robust. Abdominal process almost coplanar with abdomen in both sexes. Metafemoral clave shorter than peduncle. Metatarsomere I shorter than II+III.

*Rhinobatesia* may be separated from all species of *Odontocera* by the following character combination: width of one inferior lobe of eyes/interocular distance similar in both sexes, in male width lobe/interocular 3.4, in female 2.0; elytra subulate, widely fissate, 2.67–2.76 longer than wide; antennae crassate, in male antennomere XI toothed (subserrate); antennal apex reaching metacoxae in male, middle of urosternite I in female; in male, hind margin of metasternum truncate (almost so in female); legs robust; abdominal process almost coplanar with abdomen in both sexes; metafemoral clave shorter than peduncle; metatarsomere I shorter than II+III.

*Rhinobatesia* may be separated from *O. fasciata* by the following character combination: in *Rhinobatesia* rostrum elongate, width/length 1.6–1.7 (in *O. fasciata* short, width/length 2.5–2.7); in *Rhinobatesia* width of one inferior lobe of eyes/interocular distance in male 3.4, in female 2.0 (in *O. fasciata* width of lobe/interocular in male 4.3–4.5, in female 0.88); in *Rhinobatesia* superior lobes of eyes widely separated (in *O. fasciata* narrowly separated); in *Rhinobatesia* antennomere III 1.4–1.5 longer than scape, basal antennomeres with dense, thick setae on underside, XI dentate (in *O. fasciata* antennomere III 1.0–1.1× length of scape, basal antennomeres with sparser, thinner setae on underside, XI not dentate); in *Rhinobatesia* prosternum strongly declivous, prosternal process not laminate (in *O. fasciata* prosternum hardly declivous, prosternal process laminate); in *Rhinobatesia* elytra fissate and narrow for apical half, 2.7–2.8× longer than width across humeri, the latter not hiding mesepimerum (in *O. fasciata* elytra dehiscent and hardly narrowed for apical half, 3.1–3.3× longer than width across humeri, the latter hiding mesepimerum); in *Rhinobatesia* abdomen apiform in male, fusiform in female, abdominal process nearly flat in both sexes (in *O. fasciata* abdomen in both sexes vespiform and abdominal process near vertical); in *Rhinobatesia* mesofemur much longer than tibia, mesofemoral clave slightly longer than peduncle (in *O. fasciata* mesofemur slightly longer than tibia, mesofemoral clave much longer than peduncle); in *Rhinobatesia* metafemur strongly pedunculate-clavate, clave shorter than peduncle, metatarsomere I shorter than length of II+III (in *O. fasciata* metafemur subcylindrical, clave much longer than peduncle, metatarsomere I longer than length of II+III); general color black, pronotum without characteristic surface ornamentation (in *O. fasciata* general color yellow, pronotum with recumbent golden pubescence and transverse bands of different colors); tegmen strongly chitinized, lateral lobes slightly divergent and twisted (in *O. fasciata* tegmen weakly chitinized, lateral lobes parallel and straight).

*Rhinobatesia* is readily separated from *Odontocroton* by the following: *Rhinobatesia rugicollis* is a robust species, length body/width metasternum in male 5.2, in female 4.6 (species of *Odontocroton* are less robust, length body/width metasternum in male 5.4–8.3, in female 5.2–6.1); in *Rhinobatesia* rostrum long, width/length 1.6–1.7 (in *Odontocroton* rostrum shorter, width/length 2.1–2.5); in *Rhinobatesia*

metatarsomere I short, lengths I/II+II = 0.7–0.9 (in *Odontocroton* I/II+III = 1.4–1.6). *Rhinobatesia* is a Mexican/Central American species (all species of *Odontocroton* are from South America).

**Species included.** *Rhinobatesia* is a monotypic genus established for *Odontocera rugicollis* Bates, 1880, with *O. nevermanni* Fisher, 1930 as a new synonym.

**Etymology.** This Rhinotragini genus is named for Henry Walter Bates (1825–92), arguably the best of the nineteenth century's cerambycid taxonomists. The genus is male.

### Genus *Rhinobatesia* species sample data

#### *Rhinobatesia rugicollis* (Bates, 1880) n. comb.

(Fig. 35–40)

*Odontocera rugicollis* Bates 1880: 43; Monné 2017: 446 (cat.).

*Odontocera nevermanni* Fisher 1930: 8; Monné 2017: 445 (cat.). n. syn.

**Species concept.** Based on Bates (1880) original description and photographs of the male holotype (Fig. 35), and Fisher (1930) description of his holotype of *O. nevermanni* (Fig. 36), both available on Bezark (2017), and examination of a male and female identified as *O. nevermanni* (Fig. 37–40) kindly loaned to the author by EMEC.

**Comment.** Fisher stated that his species was described from a single male in which (quote), “Eyes separated from each other on the front by about the width of the labrum.” The author's male specimen has the eyes separated by about half the width of the labrum, and in his female the space between the eyes is 1/5 narrower than the labrum. Fisher also stated that the length of his specimen was 15 mm, and its width 3.2 mm, the quotient length/width = 4.69; close to the author's female quotient of 4.58; the quotient for the author's male is 5.16. These data (and other minor ones described by Fisher) indicate that his holotype is a female.

**Measurements (mm).** 1 male/1 female: total length, 15.75/16.95; length of prothorax, 3.00/3.15; width of prothorax, 2.35/2.55; length of elytra, 7.60/8.80; width at humeri, 2.75/3.30.

**Specimens analyzed.** MEXICO, *Veracruz*, Est. Biol. Los Tuxtlas, 480 m, male, 13.IV.1986, E. Ramirez col. (EMEC 202,862). COSTA RICA, *Puntarenas*, Monteverde, 1300 m, female, 18.V.1986 (EMEC 202,861).

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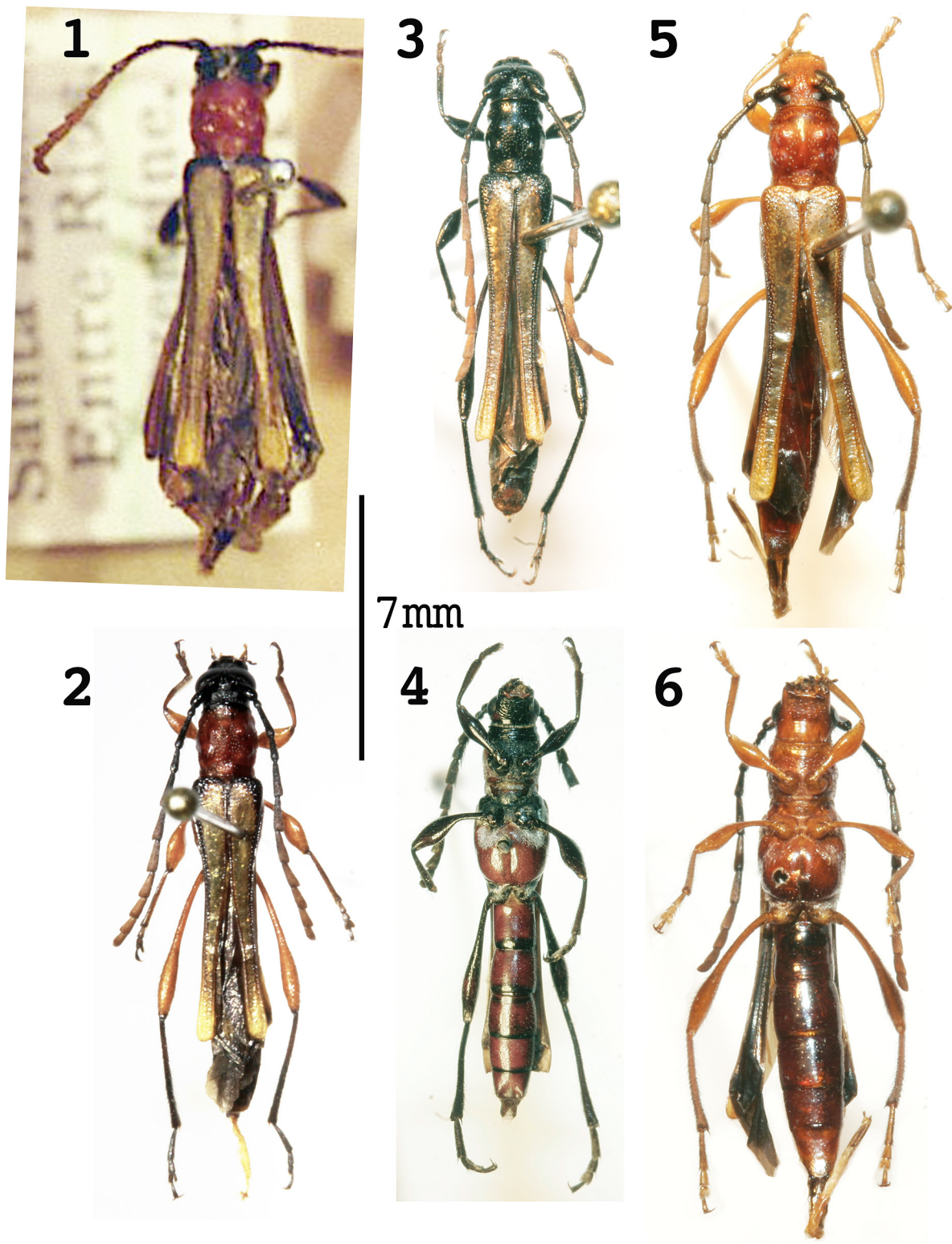
Sincere gratitude for converting my original manuscript from one full of errors to one free of them, to Insecta Mundi editors, David Plotkin and Michael Thomas, and my reviewers Antonio Santos-Silva, São Paulo, Brazil and James Wappes, San Antonio, Texas. Many thanks to Miguel A. Monné (MNRJ) for a copy of his updated cerambycid catalogue. Esteban Abadie for a copy of Di Iorio (2005). The following for photocopies of papers and/or PDFs cited below: Dione Seripierri and her library staff (MZSP), Antonio Santos-Silva, James Wappes (ACMT) and Ronald Clarke (Rutgers University). Lastly, special thanks to my wife, Sonia Zamalloa, for the many hours of help I have received from her in the field.

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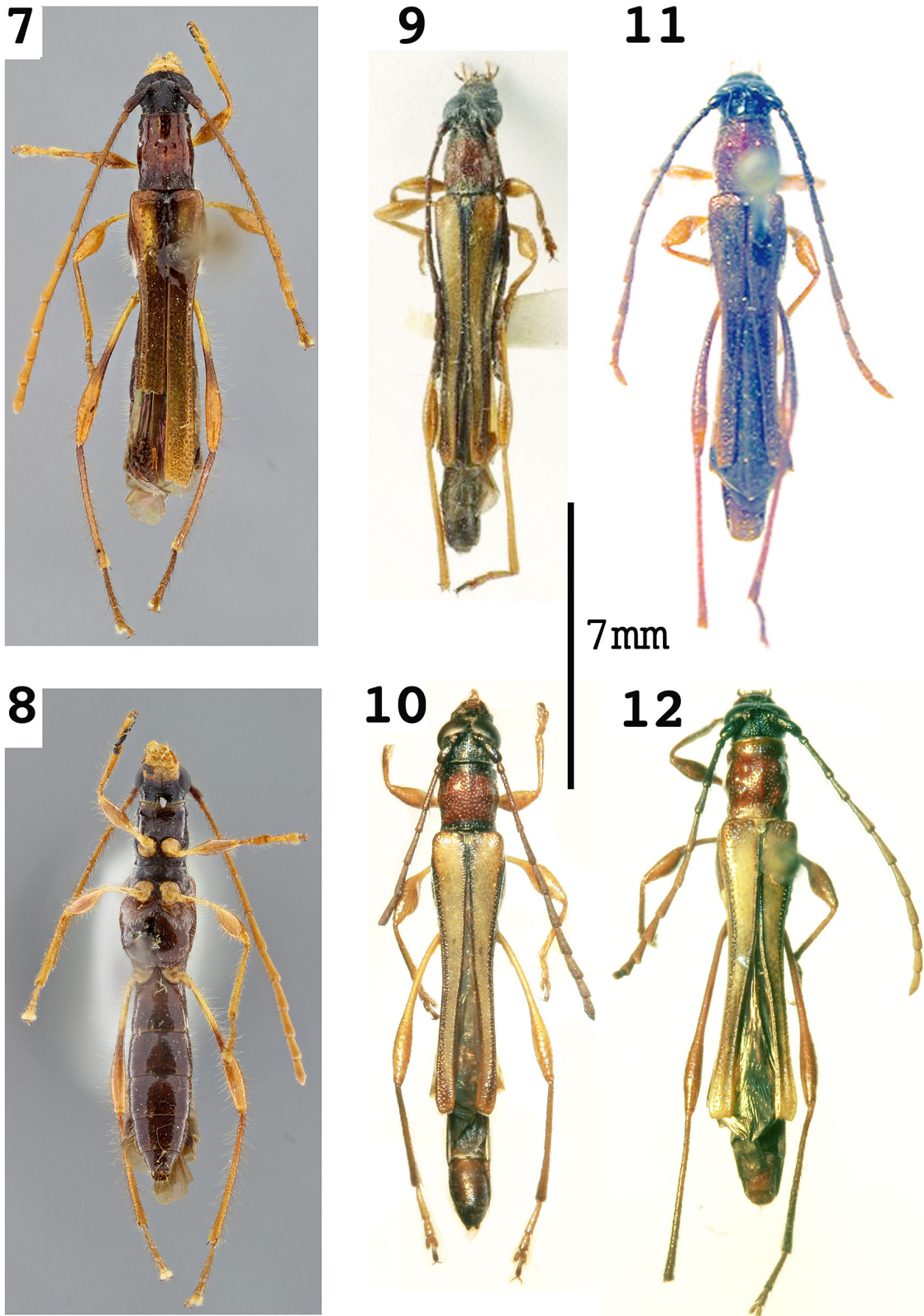
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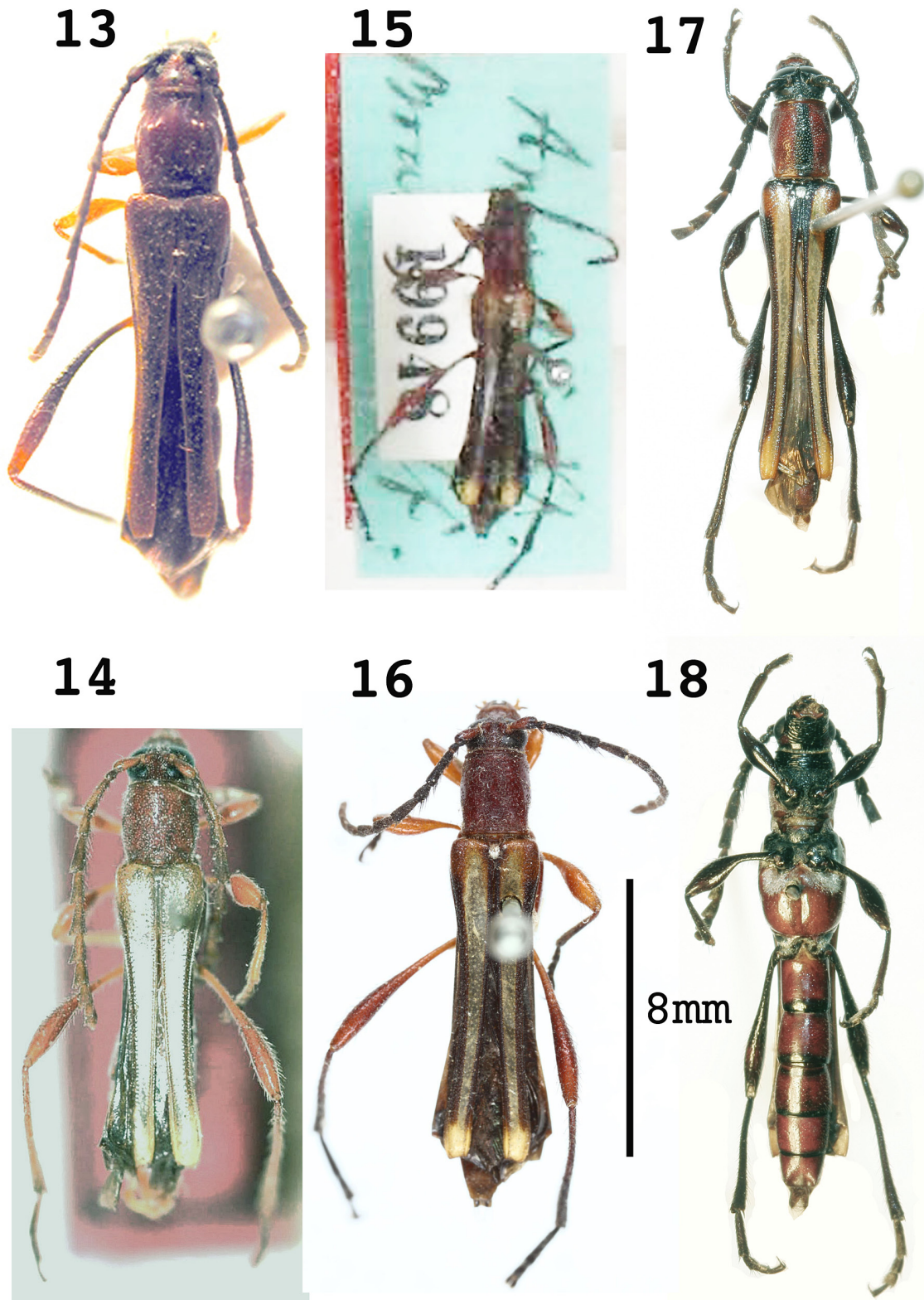
Review editor Michael Thomas.



Figures 1–6. *Odontocroton flavicauda* (Bates, 1873). 1) Holotype, male. 2) Male, pale form. 3) Male, dark form, dorsal aspect. 4) Male, dark form, ventral aspect. 5) Female, dorsal aspect. 6) Female, ventral aspect.

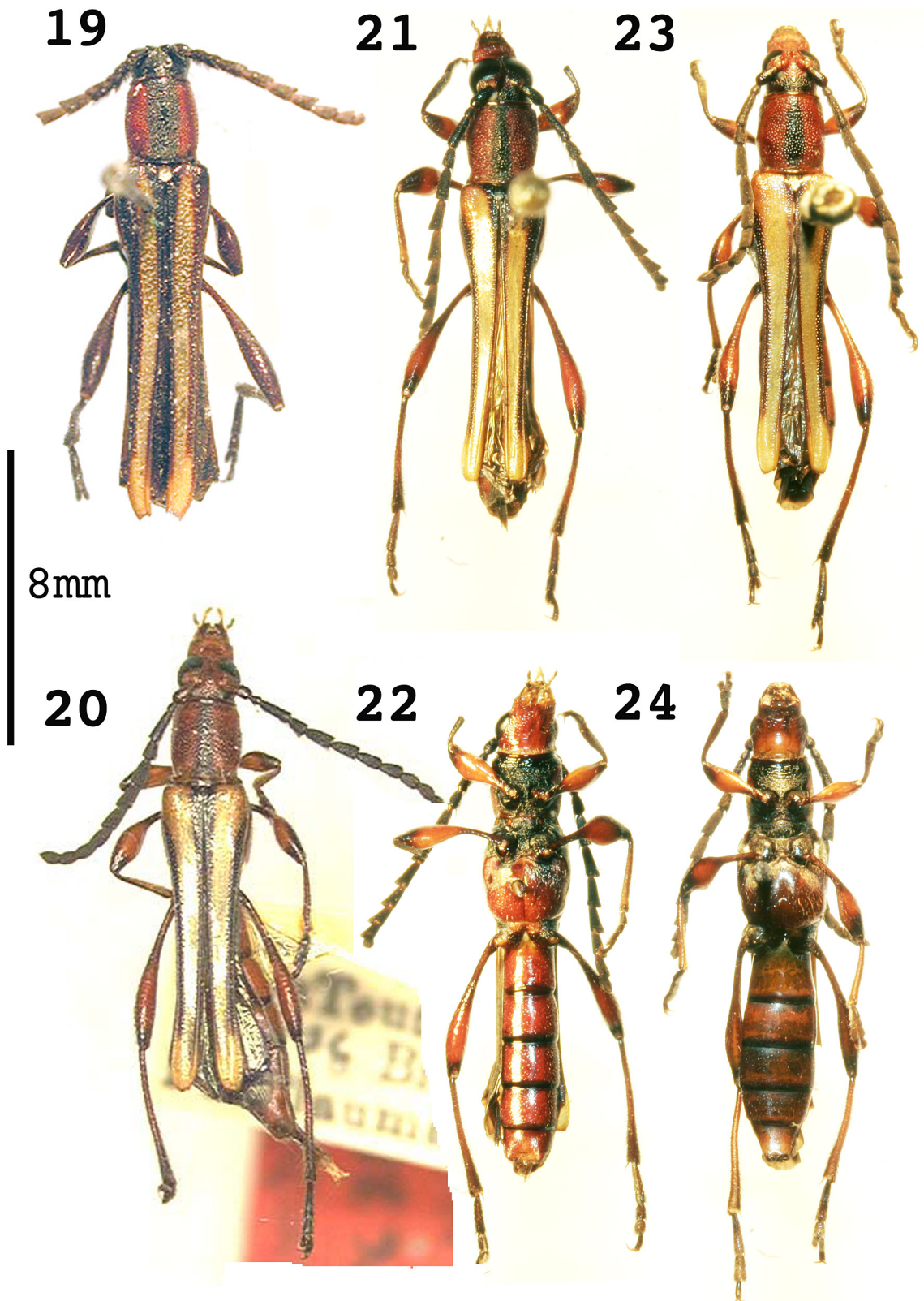


**Figures 7–12.** Species of *Odonocroton* (Group A). **7–8.** *Odonocroton flavirostris* (Melzer, 1930), holotype female. **7)** Dorsal aspect. **8)** Ventral aspect. **9–10.** *Odonocroton melzeri* (Fisher, 1952). **9)** Holotype male. **10)** Topotype, male. **11–12.** *Odonocera soror* (Gounelle, 1911), syntype male. **11)** Dorsal aspect. **12)** Ventral aspect.

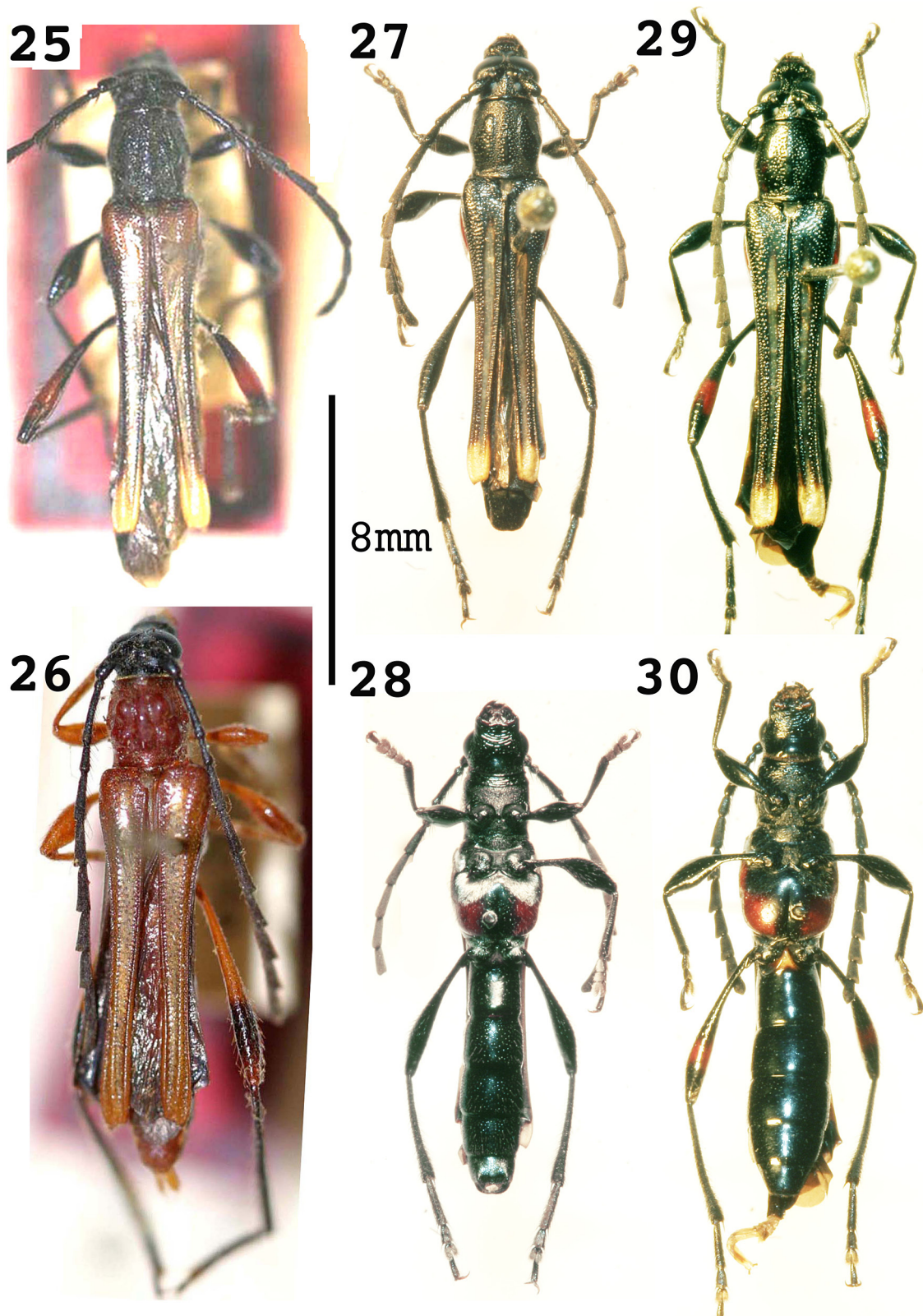


**Figures 13–18.** Species of *Odontocroton* (Group A and Group B (i)). 13) *Odontocroton soror* (Fisher, 1952), syntype female. 14) *Odontocroton monnei* (Zajciw, 1968), holotype male. 15–18. *Odontocroton apicalis* (Klug, 1825). 15) Holotype female. 16) Detail, holotype. 17) Dorsal aspect, male. 18) Ventral aspect, male.

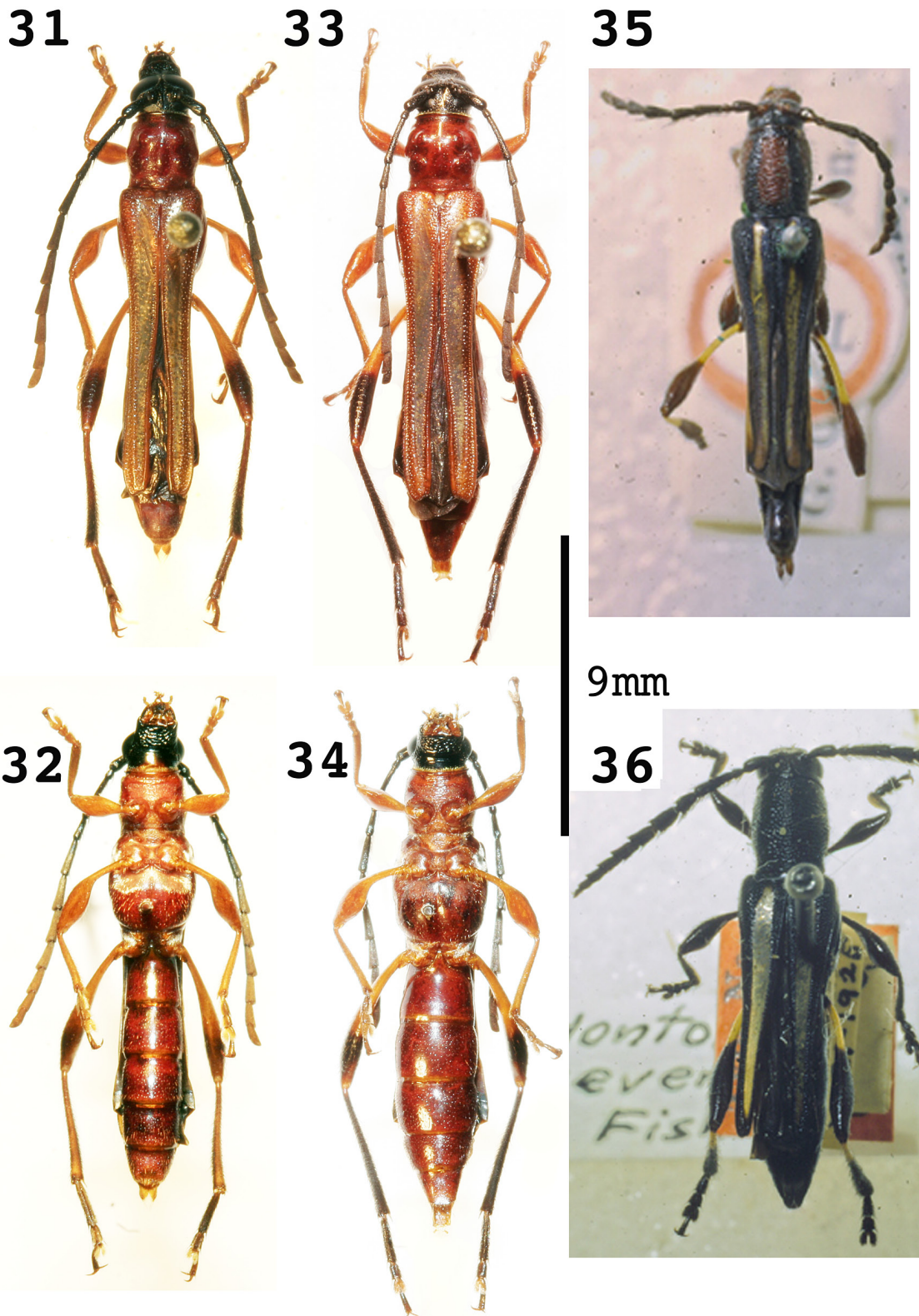




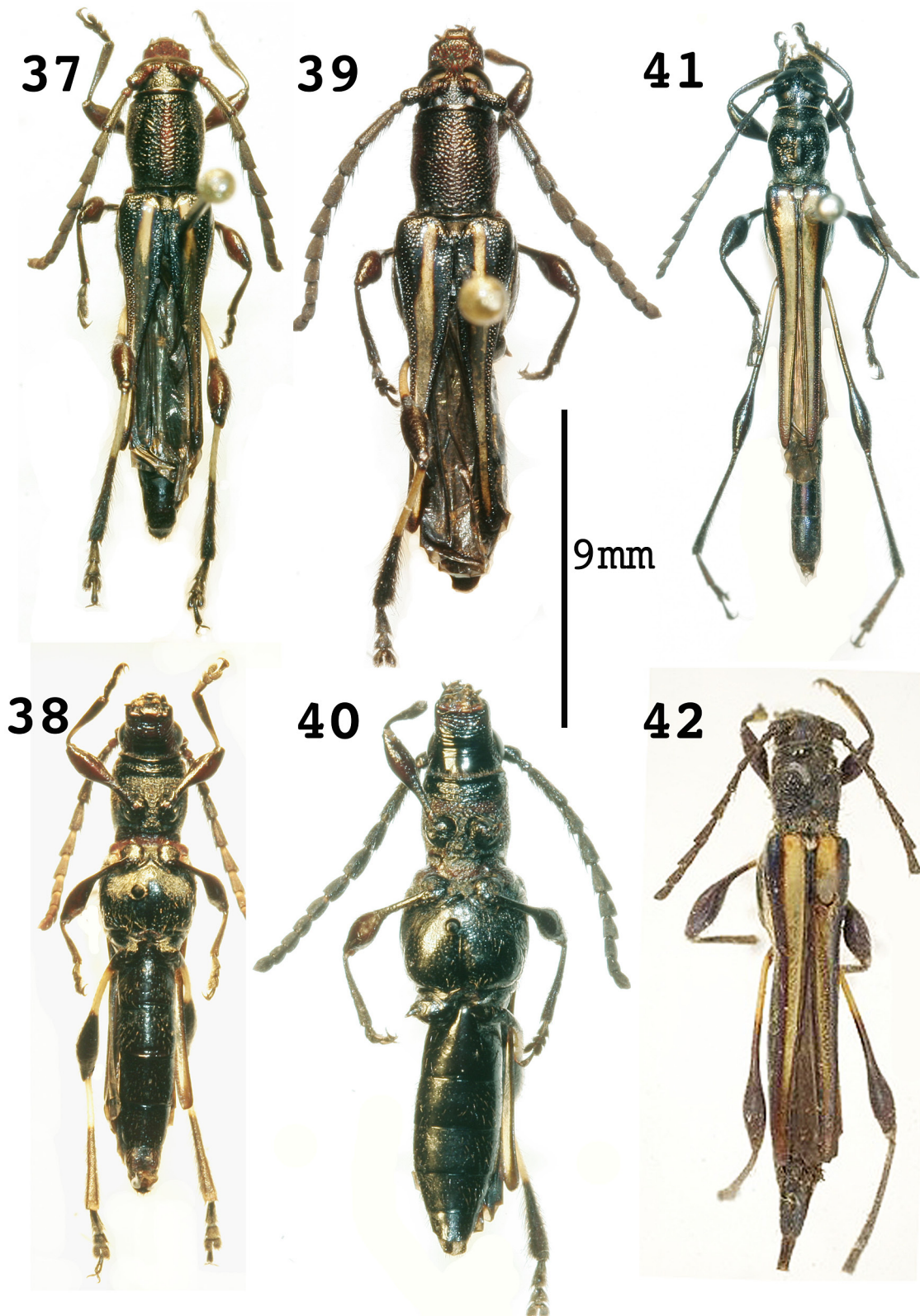
**Figures 19–24.** Species of *Odontocroton* (Group B (i)). **19** *Odontocroton sanguinolentus* (Bates, 1873), syntype female. **20–24.** *Odontocroton rufifrons* (Fisher, 1937). **20** Holotype female. **21** Male, dorsal aspect. **22** Male, ventral aspect. **23** Female, dorsal aspect. **24** Female, ventral aspect.



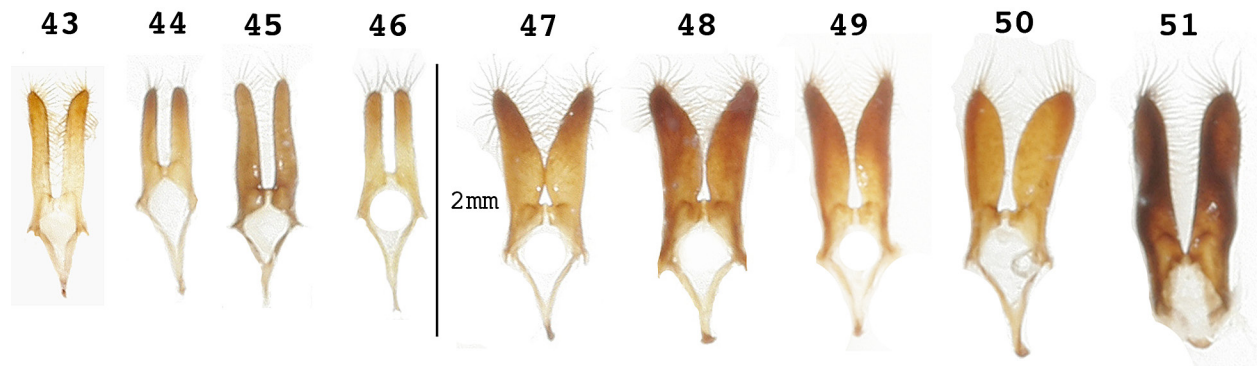
**Figures 25–30.** Species of *Odontocroton* (Group B (ii)). **25** *Odontocroton quinquecallosus* (Zajciw, 1963), holotype, male. **26** *Odontocroton septemtuberculatus* (Zajciw, 1963), holotype male. **27–30.** *Odontocroton quinquecallosus*. **27**) Male, dorsal aspect. **28**) Male, ventral aspect. **29**) Female, dorsal aspect. **30**) Female, ventral aspect.



Figures 31–36. Species of *Odontocroton* (Group B (ii)) and *Rhinobatesia* n. gen. 31–34. *Odontocroton septemtuberculatus* (Zajciw, 1963). 31) Male, dorsal aspect. 32) Male, ventral aspect. 33) Female, dorsal aspect. 34) Female, ventral aspect. 35–36. *Rhinobatesia rugicollis* (Bates, 1880). 35) Holotype male. 36) Female, holotype of junior synonym *Odontocera nevermanni* Fisher, 1930.



Figures 37–42. Species of *Rhinobatesia* n. gen. and *Odontogracilis* Clarke, 2015. 37–40. *Rhinobatesia rugicollis* (Bates, 1880). 37) Male, dorsal aspect. 38) Male, ventral aspect. 39) Female, dorsal aspect. 40) Female, ventral aspect. 41–42. *Odontogracilis gracilis* (Klug, 1825). 41) Male. 42) Female.



**Figures 43–51.** Genitalia (tegmen) of the genera *Odontocera*, *Odontocroton* and *Rhinobatesia*. **43)** *Odontocera fasciata*. **44–46.** *Odontocroton* (Group A). **44)** *Odontocroton flavicauda*. **45)** *Odontocroton melzeri*. **46)** *Odontocroton soror*. **47–50.** *Odontocroton* (Group B). **47)** *Odontocroton apicalis*. **48)** *Odontocroton rufifrons*. **49)** *Odontocroton quinquecallosus*. **50)** *Odontocroton septemtuberculatus*. **51)** *Rhinobatesia rugicollis*.

