

Papéis Avulsos de Zoologia

THE SOUTH AMERICAN POGONINI (COLEOPTERA, CARABIDAE)

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ABSTRACT

Ochtozetus bicolor (Brullé, 1838) and *Diplochaetus rutilus* (Chevrolat, 1863), type-species of the two genera described by Chaudoir (1871), and the two only known South American Pogonini are redescribed. *O. bicolor*, previously only known from Argentina, is recorded from Uruguay and Central Brazil.

The small tribe Pogonini is only represented by two genera in the Neotropical Region: *Ochtozetus* and *Diplochaetus*, both described by Chaudoir (1871). *Ochtozetus* is monotypic, its single species having previously been known from Argentina; in this paper *O. bicolor* is recorded from Uruguay and Brazil. *Diplochaetus* at present counts four species, two Nearctic and two Neotropical, the latter being *D. emaciatulus* from Mexico and *D. rutilus* from the Greater Antilles, Venezuela and Colombia.

As the Pogonini in general, and the Neotropical ones in special, are very poorly known, the discovery of *Ochtozetus bicolor* in the collection of the Museu de Zoologia, Universidade de São Paulo (MZSP), stimulated the study of the South American forms. Other specimens of that species were received from the Facultad de Ciencias y Humanidades, Universidad de Uruguay (FCHU), through the kindness of Professor C. S. Carbonell and Mr. M. A. Monné. The material of *Diplochaetus* was received from Museum of Comparative Zoology, Harvard University (MCZC) through my friend Dr. John F. Lawrence. It is a pleasure to acknowledge the help received from these friends, not only in this particular instance, but every time help is needed.

Very little is known on the habits of the Neotropical Pogonini. They are in general more or less halophile species, usually found in brackish or even saline habitats. This habit is described for *Diplochaetus rutilus* in the Antilles (Darlington, 1947: 209). *Ochtozetus*, a genus with some morphological peculiarities (especially the presence of a single pronotal seta), is also peculiar in being related to fresh water instead. D'Orbigny collected the type-specimens of *D. bicolor* in Argentina along the margins of the Rio Paraná; Chaudoir (1871: 36) named the genus *Ochtozetus* based on its riparian habits. The Uruguayan specimens listed below, were

collected on beaches of the Rio Uruguay, at night (M. A. Monné, personal communication), and the specimens from Barra do Tapi-rapé most probably also come from river beaches.

KEY TO THE SOUTH AMERICAN GENERA

1. Labium articulated to submentum (fig. 3). Tooth of mentum bilobed (fig. 3). Penultimate segment of maxillary palpi glabrous (fig. 4). Front margin of labrum slightly concave (fig. 5). Pronotum with two pairs of marginal setae. Humeri with oblique carina. Elytral striae erased near base. Segment I of tarsi relatively short, about as long as II and III together. Northern South America and Greater Antilles (other species in Mexico and United States)
..... *Diplochaetus* Chaudoir, 1871.

Labium fused to submentum (fig. 7). Tooth of mentum simple (fig. 7). Penultimate segment of maxillary palpi pubescent (fig. 8). Front margin of labrum straight (fig. 9). Pronotum with single (basal) pair of marginal setae. Humeri without carina. Elytral striae reaching base. Segment I of tarsi relatively long, about as long as II, III and IV together. Argentina (margins of Rio Paraná), Uruguay and Brazil (Mato Grosso) *Ochtozetus* Chaudoir, 1871.

Ochtozetus Chaudoir, 1871

Ochtozetus Chaudoir, 1871: 36-37 (Type-species, *Pogonus bicolor* Brullé, 1838, by monotypy); Csiki, 1928: 223 (Catalog); Blackwelder, 1944: 32 (Catalog).

Mouthparts (figs. 7-10). Labium fused to submentum. Tooth of mentum simple. Penultimate segment of maxillary palpi pubescent. Labrum with straight front margin. Pronotum with one pair of marginal (basal) setae only. Elytra striate from base to apex. Umeri without oblique carina. Interstice III with two setigerous punctures, both touching III stria, one in the middle, one in apical third. I segment of tarsi long, almost as long as II, III and IV together.

Discussion

Chaudoir (1871) described this genus for a single species, and characterized it mainly by "*Ligula* apice unisetosa" (*l.c.*:23). In this character *Ochtozetus* was said to differ from all other known Pogonini. Microscope preparation of the mouthparts of *O. bicolor*, however, showed that two setae are actually present (fig. 7), but the two setae are very close to each other, and only microscope preparation permits distinction of the two.

As described in this paper, *Ochtozetus* is very well characterized by details of mouthparts, the presence of a single pronotal seta

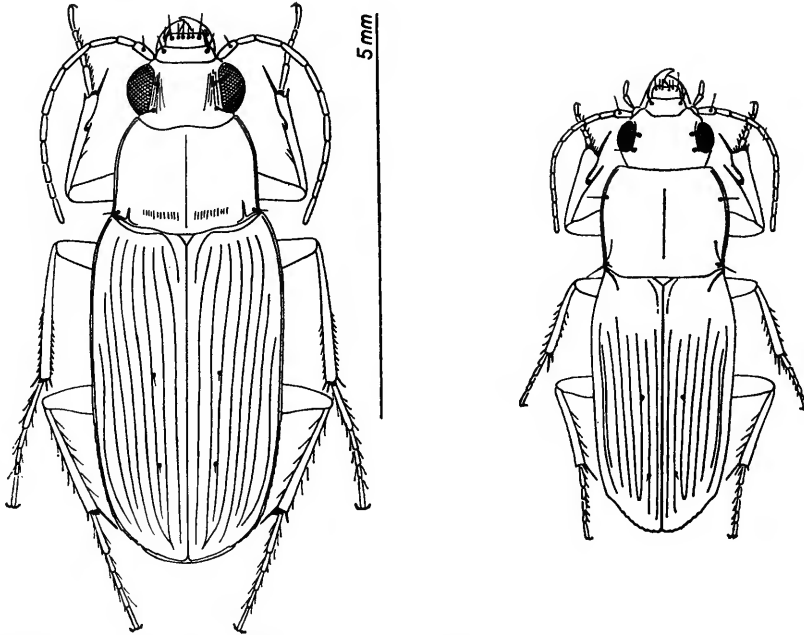


FIG. 1 (left), *Ochozetus bicolor* (Brullé, 1838), male from Barra do Tapirapé. FIG. 2 (right), *Diplochaetus rutilus* (Chevrolat, 1863), male from Barahona.

(apparently the only Pogonine with single pronotal seta), and the position of the two discal setiferous punctures of elytra.

***Ochozetus bicolor* (Brullé, 1838)**

(Figs. 1, 7-13, 16)

Pogonus bicolor Brullé, 1838: 23, pl. 3, fig. 1 (Types, males and females, "bords du Parana, entre Bueno-Ayres et Corrientes"; MNHN, not seen); Lacordaire, 1854: 368; Gemminger & Harold, 1868: 387 (Catalog).

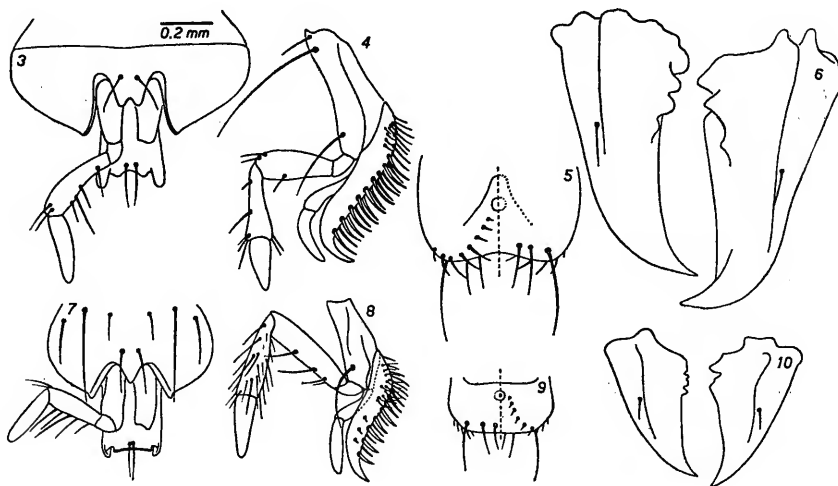
Ochozetus bicolor; Chaudoir, 1871: 37-38 (Argentina, "Pampas"); Bruch, 1910: 171 (Catalog; Buenos Aires, Pampas, Parana); Csiki, 1928: 223 (Catalog; "Brasilien, Argentinien"); Blackwelder, 1944: 32 (Catalog).

Reddish-testaceous, with green-metallic sheen on some parts, especially punctures of elytral striae; ventrally black, except gula and mentum, sides of prothorax and sides of abdominal sternites; appendages testaceous; antennae darkened from V segment.

Head with large, globose eyes; surface finely microrugose; between eyes with relatively regular, longitudinal ridges, less evident in the middle. Fronto-clypeal suture obsolete, but visible. Pronotum slightly transverse, barely wider than head; widest in about the middle, narrowed towards the sharp front angles; very little narrowed towards base; basal angles about square; base sinuate; surface impunctate, with short, longitudinal rugosity near base; median line fine; lateral margins striate, the stria reaching into base and ending at a short longitudinal keel near lateral margin; only basal pair of setae present. Scutellum small, triangular, impunctate. Elytra as wide as pronotum at base, widened in basal fifth, and then regularly narrowed towards apex; without clear outer-apical angle; sutural angle sharp; lateral margin serrate from middle to apex; inner plica very poorly developed. Striae clearly impressed from base to apex, sulcate, but with indication of irregularly placed punctures. III interstice with two setiferous punctures, close to III stria, one in the middle, one in apical third; setae very short and inconspicuous. Membranous wings developed (fig. 16). Abdominal sternites III to VI with two setiferous punctures each; female with four on last sternite. Front tarsi of males with adhesive hairs on segments I and II. Aedeagus (Fig. 11-13). Measurements: total length, 5.3 — 7.2 mm; maximum width, 2.2 — 2.7 mm.

Material examined

URUGUAY. *Artigas*: Isla Zapallo, Rio Uruguay (♀, FCHU); San Gregorio (3♂, 8♀, FCHU, MZSP).



Mouthparts. *Diplochaetus rutilus* (Chevrolat, 1863), male from Baitiquiri. 3, labium; 4, maxilla; 5, labrum; 6, mandibles. *Ochozetus bicolor* (Brullé, 1838), male from Barra do Tapirapé. 7, labium; 8, maxilla; 9, labrum; 10, mandibles.

BRAZIL. *Mato Grosso*: Barra do Tapirapé (3♂*, MZSP).

Ochtozetus bicolor was previously only known from Argentina. Csiki (1928) cited the species also from Brazil, but I was unable to trace the source of this information. The present record in Central Brazil extends the distribution of the species very much to the north, suggesting a much wider area.

The Barra do Tapirapé specimens differ from the Uruguayan specimens by the ventrally black head (see description above) and somewhat smaller size. Otherwise all specimens share the same characters. Brullé (1838: 24) mentions that the specimens he studied are "vert bronzé" ventrally, including head.

Diplochaetus Chaudoir, 1871

Diplochaetus Chaudoir, 1871: 36 (Type-species, *Pogonus rutilus* Chevrolat, 1863, by monotypy); Csiki, 1928: 223 (Catalog); Blackwelder, 1944: 32 (Catalog); Ball, 1960: 76, 120.

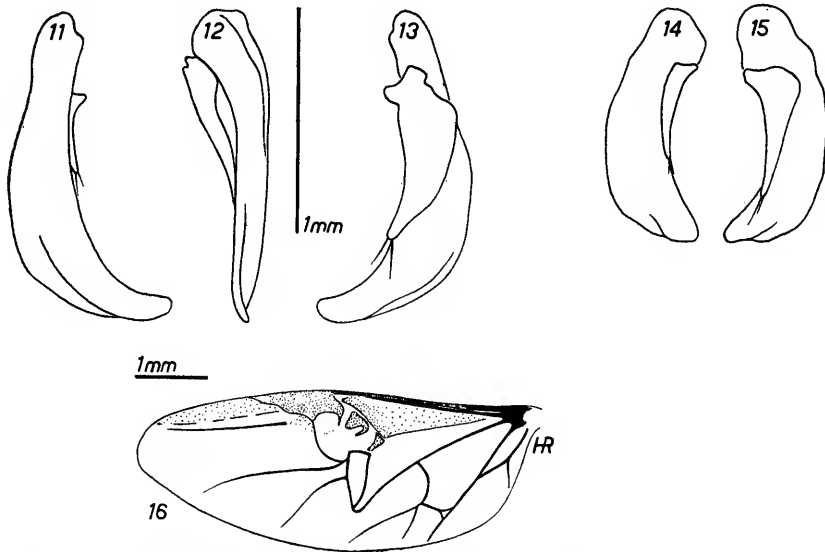
Mouthparts (figs. 3-6). Labium articulated to submentum. Tooth of mentum double. Penultimate segment of maxillary palpi glabrous, except for a few scattered, erect setae. Labrum slightly concave on front margin. Pronotum with two pairs of marginal setae. Elytra striate, striae erased near base. Umeri with short, oblique carina. Interstice III with two setiferous punctures, the anterior puncture in the middle, touching III stria, the posterior puncture in apical third, touching II stria. Segment I of tarsi short, only as long as II and III together.

Discussion

Diplochaetus was described by Chaudoir for a single species, *D. rutilus*. Posteriorly Horn (1876) described *D. lecontei* from the sea coast of southeastern United States to Texas; Bates (1891), considering *Diplochaetus* as a subgenus of *Pogonus*, added *D. emaciatus* from Mazatlán, Mexico; and Van Dyke (1935) described *D. desertus* from California.

The above characterizations of *Diplochaetus* is based on the type-species, *D. rutilus*, and complemented with the study of *D. lecontei*.

Diplochaetus is best characterized by the mouthparts (see key), the presence of the humeral carina on elytra, as well as the basally erased elytral striae (*D. emaciatus* has complete striae, according to the original description, and may not belong into this genus). Ball (1960: 76) distinguished *Diplochaetus* from *Pogonus* and *Pogonistes*, among other characters, by the absence of a scutellar striae. The specimens of *D. rutilus* and *D. lecontei* I have seen, clearly show vestiges of the scutellar striae.



FIGS. 11-15, aedeagus. *Ochtozetus bicolor* (Brullé, 1838), male from Barra do Tapirapé. 11, lateral view with right paramere; 12, dorsal view; 13, lateral view with left paramere. *Diplochaetus rutilus* (Chevrolat, 1863), male from Baitiquiri. 14, lateral view with right paramere; 15, lateral view with left paramere. FIG. 16, membranous wing of same specimen of *O. bicolor*.

Diplochaetus rutilus (Chevrolat, 1863)

(Figs. 2-6, 14-15)

Pogonus? rutilus Chevrolat, 1863: 197-198 (Type, "Cuba": Chevrolat collection, probably in MNHN, not seen); Gemminger & Harold, 1868: 388 (Catalog).

Diplochaetus rutilus; Chaudoir, 1871: 36 (Records from Venezuela and Colombia; Cuban record considered doubtful); Csiki, 1928: 223 (Catalog); Darlington, 1934: 86 (Record from Cuba); 1947: 210 (Records from Cayman Islands and Hispaniola); Blackwelder, 1944: 32 (Catalog).

Completely reddish-brown; antennae testaceous.

Head wide, with relatively small and widely separated eyes; surface finely microrugose. Fronto-clypeal suture well marked. Pronotum more or less quadrangular, widest in the middle, more narrowed towards front than base; front angles not sharp, more or less rounded; basal angles more or less square; base oblique near basal angle, and straight in the rest; surface impunctate, median line fine; lateral margin striate; with short, oblique carina near

basal angle; with two pairs of marginal setae. Scutellum triangular, impunctate. Elytra as wide as pronotum at base, widened in basal fifth and narrowed towards apex; outer-apical angle coinciding with inner plica, and more or less indicated; lateral margin serrate from outer angle to sutural angle. Humeri sharp, with short oblique carina. Striae sulcate, erased near base (except scutellar striole, which is indicated by faint stria). III interstice with two setiferous punctures, one in the middle near III stria, one in apical third, near II stria; setae small, inconspicuous. Membranous wings developed, normal. Abdominal sternites III to VI with two setiferous punctures each; female with four on last. Front tarsi of males with adhesive hairs on segments I and II. Aedeagus (figs. 14-15). Measurements: total length, 6.5 — 7.4 mm; maximum width, 2.2 — 2.4 mm.

Material examined

DOMINICAN REPUBLIC. Barahona (3♂, MCZC, MZSP).

CUBA. *Oriente*: Baitiquiri (1♂*, 1♀, MCZC, MZSP).

Discussion

The presence of *D. rutilus* in the Antilles, doubted by Chaudoir, was confirmed by Darlington (1934; 1947). The records from northern South America, however, have not been confirmed after Chaudoir (1871).

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