

A new species of *Claudiotendipes* Andersen, Mendes & Pinho, 2017 from Bolivia (Diptera, Chironomidae)

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Claudiotendipes bolivianus sp. n. is described and figured based on a male from La Paz Department, Bolivia. The species is small, with a wing length of about 1.3 mm and an antennal ratio (AR) of about 0.3. It can easily be separated from its congeners by having a superior volsella that is sharply bent medially. A key to the males of *Claudiotendipes* is provided.

Key words: Diptera, Chironomidae, Chironominae, *Claudiotendipes*, new species, Bolivia, Neotropical region.

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Introduction

The genus *Claudiotendipes* Andersen, Mendes & Pinho, 2017 was recently described based on *C. froehlichii* Andersen, Mendes & Pinho, 2017 from Brazil and *C. epleri* Andersen, Mendes & Pinho, 2017 from Costa Rica (Andersen *et al.* 2017). The genus belongs in the tribe Chironomini of the subfamily Chironominae and groups with the genera *Beardius* Reiss & Sublette, 1985, *Endotribelos* Grodhaus, 1987, *Oukuriella* Epler, 1986, and *Sigmoidotendipes* Andersen, Mendes & Pinho, 2017. The males of *Claudiotendipes* can be separated from all other Chironomini by the combination of an antenna with 13 segments; antennal ratio 0.3–1.1; squama bare; wings lacking markings; fore tibia with weakly developed, shallow scale without spur; mid- and hind tibiae with short, fused combs, with single spur; anal tergite bands separate; setae on tergite IX restricted to posterior margin; anal point

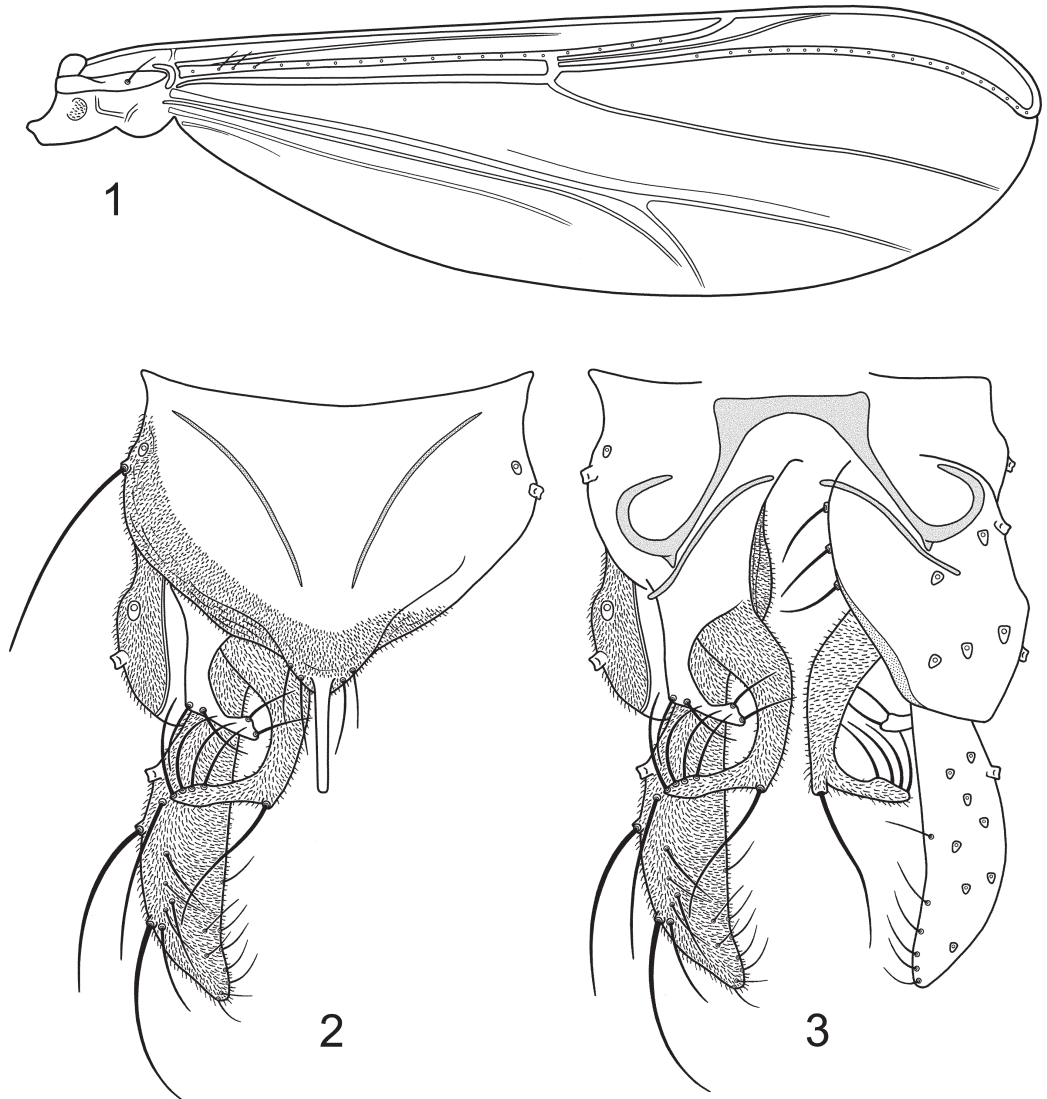
long, parallel-sided to weakly spatulate; superior volsella digitiform without basomedial group of setae; median volsella reduced to single setae or absent (?); and inferior volsella apically forked.

Below a third species of *Claudiotendipes* is described and figured, based on a single male collected in a drift net in a stream at 1.525 m altitude in La Paz Department, Bolivia.

Material and methods

Slide mounted male with wings, head and antennae, thorax and anterior part of abdomen, posterior part of abdomen and hypopygium, fore legs, and mid- and hind legs under separate cover slips. The general morphology terminology follows Sæther (1980).

The holotype is kept in the Zoologische Staatssammlung, Munich, Germany (ZSM).



FIGURES 1–3. *Claudiotendipes bolivianus* sp. n., male. 1. Wing. 2. Hypopygium, dorsal view. 3. Hypopygium with anal point and tergite IX removed, dorsal aspect to the left and ventral aspect to the right.

***Claudiotendipes bolivianus* sp. n.** (Figures 1–3)

Type material: *Holotype*: ♂, BOLIVIA, La Paz Department, stream on road between Coroico (Nor Yungas Province) and Caranavi (Caranavi Province), 1.525 m a.s.l., 18 July 1976, drift net (Brundin net), leg. E.J. Fittkau, ZSM.

Etymology: Named after the country of origin.

Diagnostic characters: The new species can

easily be separated from its congeners by having a superior volsella that is sharply bent medially and a parallel-sided anal point. The species is small, with a wing length of about 1.3 mm and an antennal ration (AR) of about 0.3.

Description: Male (n = 1). Total length 2.10 mm. Wing length 1.26 mm. Total length / wing length 1.67. Wing length / length of profemur 2.10.

Coloration. Brown, wings hyaline without markings.

Antenna. Antennal ratio (AR) 0.31. Ultimate flagellomere 120 µm long.

Head. Temporal setae 12; including 4 inner verticals, 4 outer verticals, and 4 postorbitals. Clypeus with 10 setae. Tentorium 104 µm long, 22 µm wide. Stipes 77 µm long, 8 µm wide. Palp segment lengths (in µm): 19, 28, 84, 87, 135. Third palpomere with 3 sensilla, longest 12 µm long.

Thorax. Anteprenotum without seta. Dorsocentrals 7; acrostichals 9, starting close to anteprenotum; prealars 2. Scutellum with 5 setae, uniserial.

Wing (Figure 1). Venarum ratio (VR) 1.26. Brachiolum with 1 setae, R with 16, R₁ with 4, R₄₊₅ with 20 setae, other veins and cells bare. Squama bare.

Legs. Scale of fore tibia 7 µm long, spur of mid tibia 46 µm long, spur of hind tibia 48 µm long. Comb on mid tibia 12 µm long, comb on hind tibia 15 µm long. Width at apex of fore tibia 41 µm, of mid tibia 40 µm, of hind tibia 48 µm.

Lengths and proportions of legs as in Table 1.

Hypopygium (Figures 2–3). Tergite IX covered with microtrichia, with 2 setae to each side of base of anal point; anal tergite bands ending above base of anal point. Laterosternite IX with 2 setae. Anal point parallel-sided, 30 µm long, 4 µm wide. Transverse sternapodeme 39 µm long, nearly straight. Phallapodeme 50 µm long. Gonocoxite 76 µm long. Superior volsella strongly bent, with 25 µm long basal part and 22 µm long apical part, 15 µm wide at base, 6 µm wide at apex, with 2 lateral setae medially, 1 seta subapically and 1 seta apically. Median volsella not discernable. Inferior volsella pediform, 44 µm long, 15 µm wide at base, 4 µm wide at apex, with single, stout 41 µm long, simple setae apically; side-branch slightly club-shaped, 6 µm wide at base, 7 µm wide subapically, with 4 simple seta subapically. Gonostylus 77 µm long. Hypopygium ratio (HR) 0.99. Hypopygium value (HV) 2.73.

Female and immatures: Unknown.

Distribution and biology: Only known from a stream at 1.500 m altitude in La Paz Department, Bolivia.

TABLE 1. Lengths (in µm) and proportions of legs of *Claudiotendipes bolivianus* sp. n., male (n = 1). LR = Leg ratio, BV = “Bein-Verhältnisse”, SV = “Schenkel-Schiene-Verhältnis”, BR = Bristle ratio.

	fe	ti	ta ₁	ta ₂	ta ₃	ta ₄
p ₁	608	464	604	312	–	–
p ₂	680	520	312	140	108	64
p ₃	732	604	424	212	196	104
	ta ₅	LR	BV	SV	BR	
p ₁	–	1.30	–	1.77	–	
p ₂	36	0.60	4.34	3.85	3.9	
p ₃	44	0.70	3.17	3.15	4.9	

TABLE 2. Key to the males of *Claudiotendipes* Andersen, Mendes & Pinho, 2017

1. Anal point weakly spatulate, wing length about 1.7 mm, AR = 1.0. Brazil <i>C. froehlich</i> Andersen, Mendes & Pinho, 2017
– Anal point parallel-sided, wing length <1.3 mm, AR <0.35 2
2. Superior volsella strongly bent medially, wing length 1.27 mm, AR = 0.31. Bolivia <i>C. bolivianus</i> sp. n.
– Superior volsella gently curved, wing length about 1.0 mm, AR = 0.28. Costa Rica <i>C. epleri</i> Andersen, Mendes & Pinho, 2017

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