

**A new species of *Saetherocryptus* Andersen et Mendes, 2007 from Brazil
(Diptera: Chironomidae, Orthocladiinae)**

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Abstract: *Saetherocryptus* Andersen et Mendes, 2007 was described as monotypic, based on *S. clavatus* Andersen et Mendes, 2007 from Mata Atlântica in south and southeast Brazil. A second species, *S. temimino* sp. n., is described and figured below based on an adult male from São Paulo State.

Keywords: *Saetherocryptus temimino*, Orthocladiinae, Mata Atlântica, new species.

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Resumo: *Saetherocryptus* Andersen et Mendes, 2007, até então monotípico, foi descrito com base em *S. clavatus* Andersen et Mendes, 2007 da Mata Atlântica do sul e sudeste do Brasil. Uma segunda espécie, *S. temimino* sp. n., é descrita e ilustrada abaixo com base em um macho adulto do Estado de São Paulo.

Palavras-chave: *Saetherocryptus temimino*, Orthocladiinae, Mata Atlântica, espécie nova.

Introduction

Andersen & Mendes (2007) described five new genera of Orthoclaadiinae from Brazil. The genus *Oleia* Andersen et Mendes, 2007 was based on seven species both from Mata Atlântica and from Amazonas. The remaining four genera, *Saetherocryptus* Andersen et Mendes, 2007, *Saetherocladius* Andersen et Mendes, 2007, *Saetherops* Andersen et Mendes, 2007 and *Saetherolabis* Andersen et Mendes, 2007 were all monotypic. Andersen et al. (2010) added four new species of *Saetherocladius* from Mata Atlântica. Below we describe and figure a second species of *Saetherocryptus*, *S. temimino* sp. n., based on an adult male from São Paulo State. However, the genera *Saetherops* and *Saetherolabis* still remain monotypic.

Material and Methods

The specimen was mounted in Euparal following the procedures outlined by Sæther (1969). The general morphology follows Sæther (1980).

The holotype will be deposited in Museu de Zoologia da Universidade de São Paulo (MZUSP).

SAETHEROCRYPTUS ANDERSEN ET MENDES

Saetherocryptus Andersen et Mendes, 2007: 33.

Type-species: *Saetherocryptus clavatus* Andersen et Mendes, 2007: 35, by original designation.

Other included species: *Saetherocryptus temimino* sp. n.

Saetherocryptus temimino shares with *S. clavatus* all the diagnostic characters proposed in the original description of the genus (see Andersen & Mendes 2007), placing it well within *Saetherocryptus*.

Description as in Andersen & Mendes (2007), with the following emendations: megaseta large, club-shaped to strongly curved; posterior margin of tergite IX subrectangular to rounded.

SAETHEROCRYPTUS TEMIMINO SP. N. (FIGURES 1-8)

Type Material: Holotype male: Brazil, São Paulo State, Salesópolis, Estação Biológica Boracéia, córrego Coruja, 18.ix.2007, light trap, C.G. Froehlich et al. (MZUSP).

Etymology: The name *temimino* is the name of an indigenous tribe that used to live in the area where the species was collected. The name is to be treated as a noun in apposition.

Diagnostic characters: The species can easily be separated from *S. clavatus* Andersen et Mendes based on the subtriangular shape of the gonostylus; the curved, pointed megaseta; the length of the costal extension (82 μ m against 104-166 μ m in *S. clavatus*); the more triangular dorsomedian projection of the gonocoxite that overreaches the base of the gonostylus; and the rounded posterior margin of tergite IX.

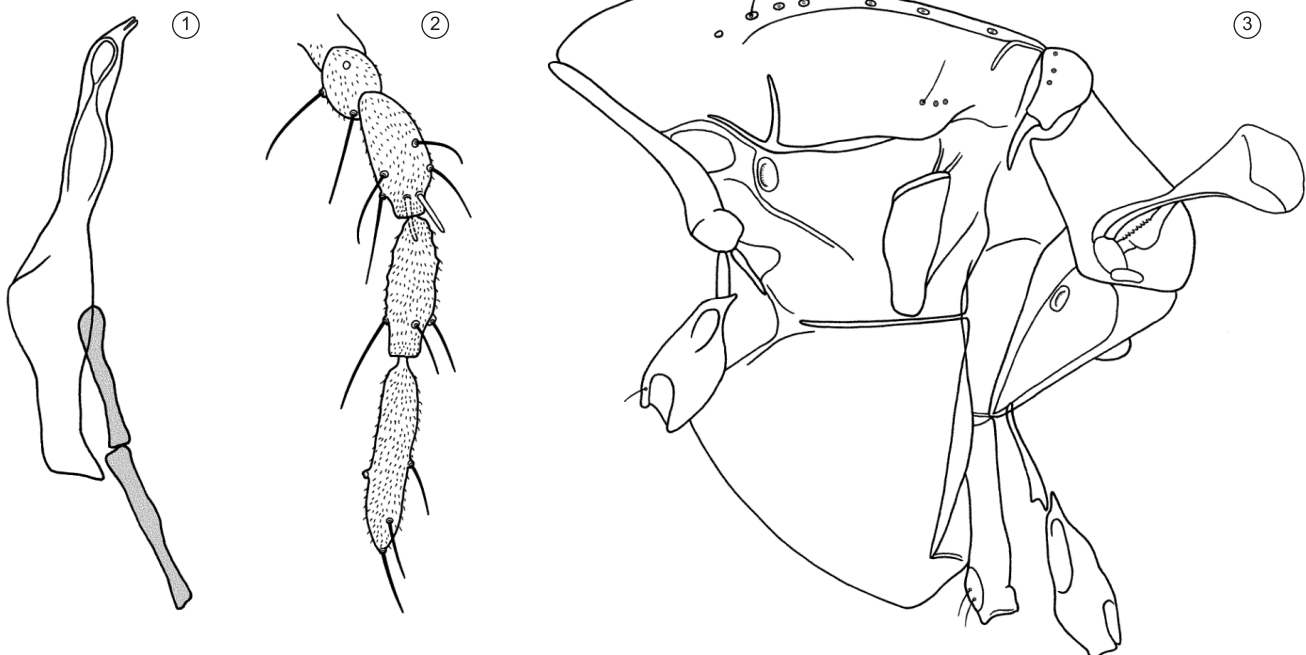
1. Description

Male (n = 1) Total length 1.52 mm. Wing length 1.01 mm. Total length/wing length 1.50. Wing length/length of profemur 2.82.

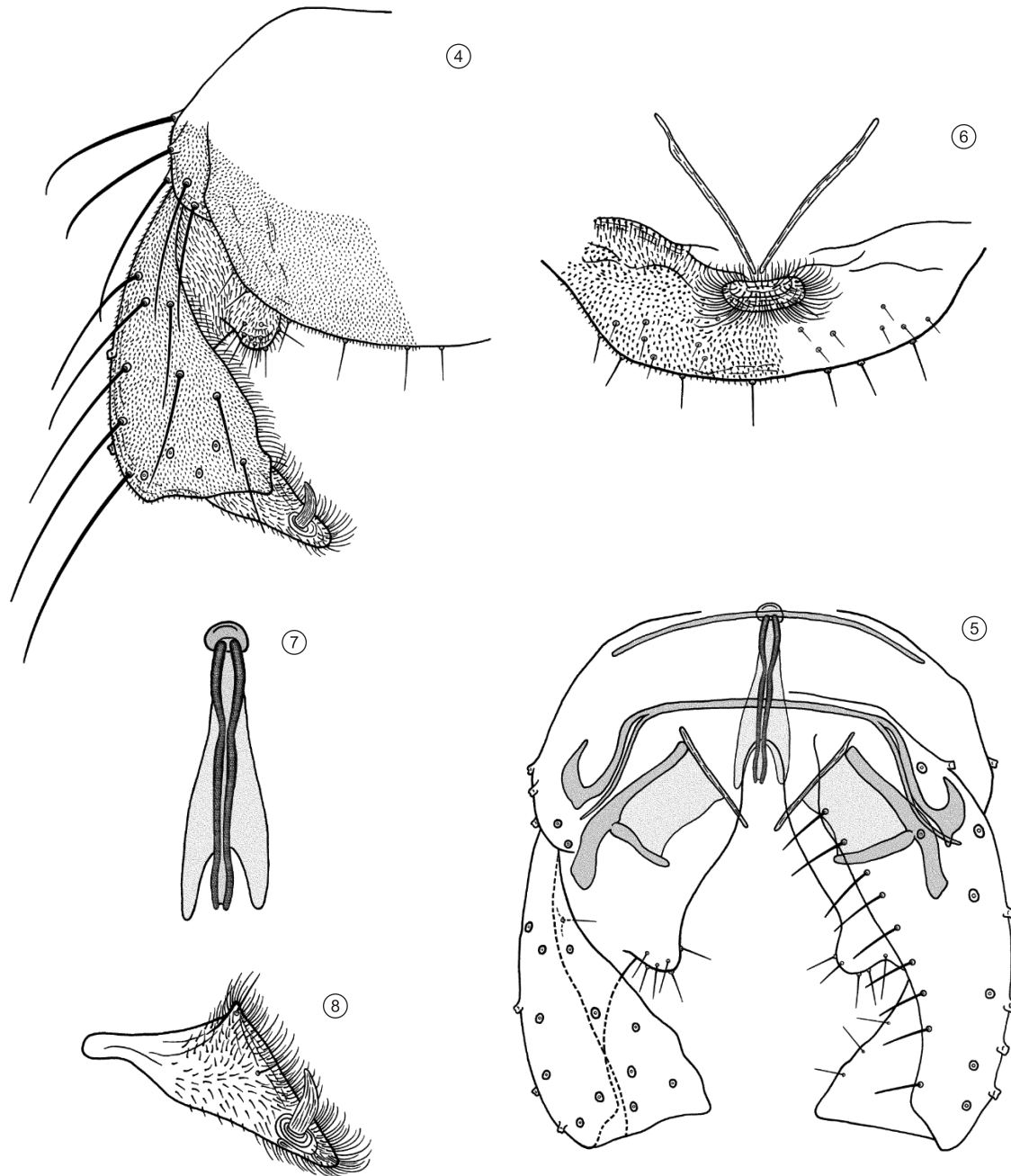
Coloration. Light brown, without darker markings; legs and antennae slightly lighter than body; wing translucent.

Head. AR 0.48. Ultimate flagellomere 175 μ m long. Temporal setae 7, including 3 inner verticals, 3 outer verticals, and 1 postorbital. Clypeus with 6 setae, labrum with 16 setae. Tentorium and stipes as in Figure 1. Tentorium 75 μ m long, 14 μ m wide; stipes 61 μ m long, width not measurable. Palp as in Figure 2. Palp segment lengths/widths (in μ m): 11/11, 16/14, 32/14, 34/10, 45/9. Third palpomere with 2 sensilla clavata subapically, 9 μ m long.

Thorax (Figure 3). Antepronotum bare. Dorsocentrals 7; acrostichals 8, weak, decumbent, biserial, in midscutum; prealars 3. Scutellum with 6 setae.



Figures 1-3. *Saetherocryptus temimino* sp. n., male. 1) Tentorium and stipes; 2) Palp; 3) Thorax.



Figures 4-8. *Saetherocryptus temimino* sp. n., male. 4) Hypopygium, dorsal aspect; 5) Hypopygium with anal point and tergite IX removed, dorsal aspect to the left and ventral aspect to the right; 6) Anal point and ventral view of posterior margin of tergite IX; 7) Virga; 8) Gonostylus, dorsal view.

Wing. Folded during slide preparation; some measurements like VR or Sc could not be taken. Costal extension 82 μm long. Brachiolum with 1 seta.

Legs. Spur of fore tibia 23 μm long, spurs of mid tibia 15 μm and 9 μm long, spurs of hind tibia 25 μm and 11 μm long. Width at apex of fore- and mid tibia not measurable, of hind tibia 27 μm . Comb with 9 setae, longest 25 μm long, shortest 16 μm long. Lengths and proportions of legs as in Table 1.

Hypopygium (Figures 4-8). Tergite IX 111 μm wide; with broadly rounded posterior margin, dorsal surface with microtrichia but no setae except along margin, with coarse microtrichia on ventral surface. Anal point on ventral side, 8 μm long, 18 μm wide, with long, curved

microtrichia. Laterosternite IX with 5 setae. Phallapodeme 59 μm long; transverse sternapodeme nearly straight, 73 μm long. Virga with 2 median spines, 54 μm long, and lateral lamellae. Gonocoxite 137 μm long; with triangular dorsomedian projection overreaching the base of the gonostylus, 54 μm long, 27 μm wide, with long microtrichia along inner margin. Inferior volsella rounded, 11 μm long, 11 μm wide, with 9 setae, apparently without sensilla trichoidea; ending 75 μm from apex of gonocoxite. Gonostylus wedge shaped, 58 μm long, covered with long microtrichia; megaseta situated subapically, widest at base and strongly curved, 14 μm long, 4 μm wide at base. HR 2.37, HV 2.62.

2. Distribution and ecology

This species is known only from the type locality in Estação Biológica Boracéia, São Paulo State, where it is sympatric with

Table 1. Lengths (in μm) and proportions of legs of *Saetherocryptus temimino* sp. n., male (n = 1).

| | fe | ti | ta ₁ | ta ₂ | ta ₃ | ta ₄ | ta ₅ | LR | BV | SV | BR |
|----------------|-----|-----|-----------------|-----------------|-----------------|-----------------|-----------------|------|------|------|-----|
| p ₁ | 371 | 443 | 212 | 151 | 88 | 47 | 32 | 0.48 | 3.22 | 3.83 | – |
| p ₂ | 403 | 436 | 164 | 86 | 68 | 30 | 25 | 0.38 | 4.76 | 5.12 | – |
| p ₃ | 443 | 482 | 256 | 130 | 104 | 43 | 31 | 0.53 | 3.81 | 3.62 | 3.3 |

S. clavatus Andersen et Mendes. *Saetherocryptus clavatus* however is also recorded from several other localities in São Paulo and Santa Catarina States.

Discussion

During the last decade the number of Chironomidae species and genera described or recorded from Brazil has increased strongly. Today more than 380 species in 73 genera are known to occur in Brazil (Mendes & Pinho 2011). Between 1999 and 2010 the number of species recorded from São Paulo State increased by nearly 500%, from 31 species in 1999 to 149 species in 2010; the number of known Orthoclaadiinae species increased from 1 species in 1999 to 44 species in 2010 (Trivinho-Strixino 2011). This increase is partially due to the BIOTA project financed by the agency FAPESP that aimed to increase the knowledge and state of the art of the biodiversity of São Paulo State. However, as pointed out by Trivinho-Strixino (2011) at present the immature stages are known for only 24% of the Orthoclaadiinae species, while the corresponding figures are 70 and 77% for the subfamilies Chironominae and Tanypodinae, respectively. Although the larvae of

many Orthoclaadiinae species might be terrestrial or semiterrestrial and difficult to locate, more effort should thus be placed on rearing and describing Orthoclaadiinae larvae and pupae during the coming decade.

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