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## Four new species of *Tonnoira* Enderlein (Diptera: Psychodidae: Psychodinae) from the Brazilian Atlantic forest

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### Abstract

Four species of *Tonnoira* from the Brazilian Atlantic forest are described and illustrated: *Tonnoira brisolaii* sp. nov., *Tonnoira ferreirai* sp. nov., *Tonnoira andradei* sp. nov. and *Tonnoira galatiae* sp. nov.

**Key words:** Moth fly, taxonomy, Neotropical Region, Espírito Santo, Brazil

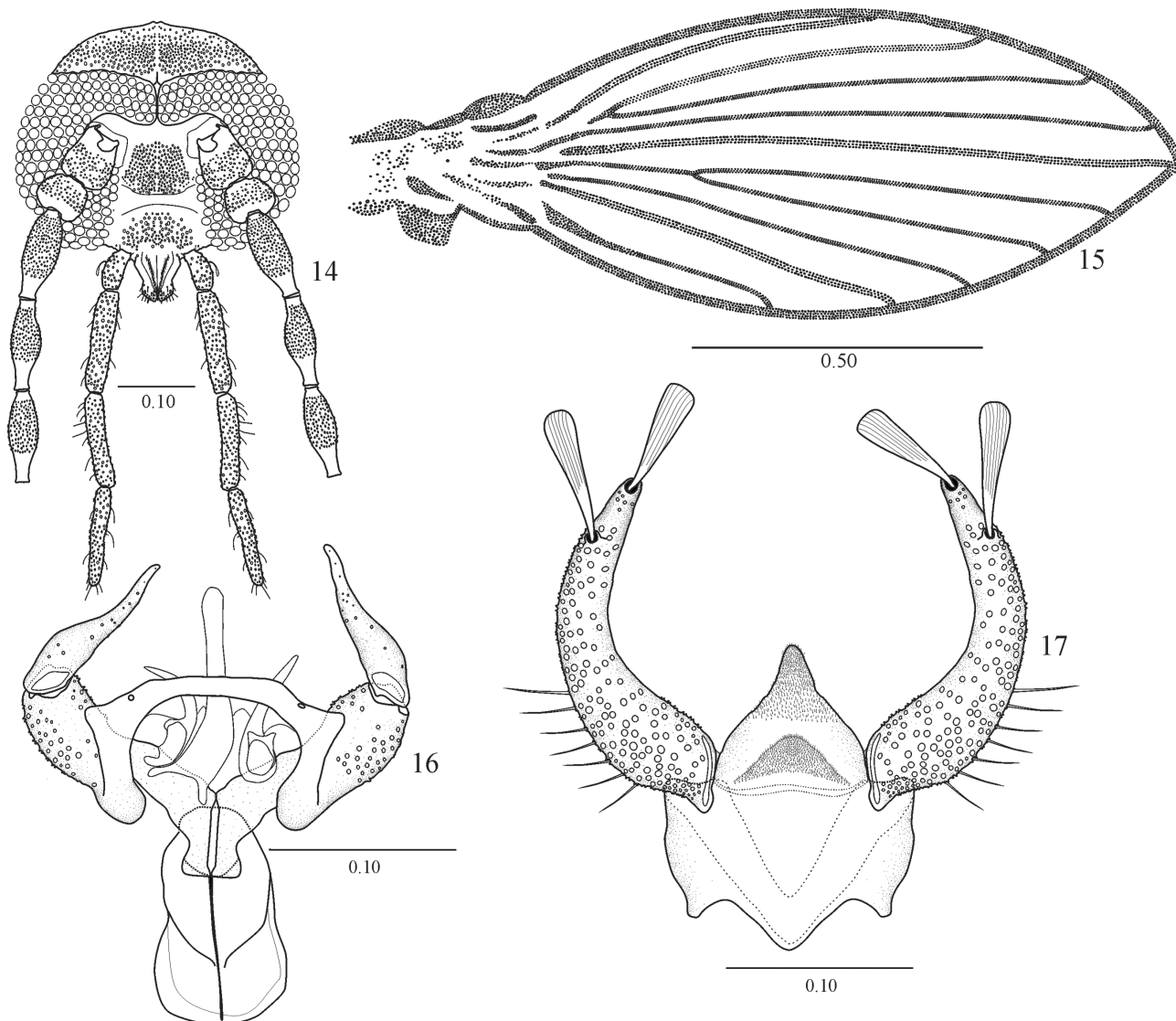
### Introduction

Psychodidae is comprised of six subfamilies (Bruchomyiinae, Phlebotominae, Psychodinae, Sycoracinae, Trichomyiinae and Horaiellinae) and has a cosmopolitan distribution. Subfamily Psychodinae currently includes the greatest number of described species. Enderlein (1937) described the genus *Tonnoira* from a female of *T. pelliticornis* collected in Callanga, Peru and included the species in subfamily Psychodinae. The genus currently includes twenty-two species (Wagner 1981, Quate 1996, 1999, Bravo & Chagas 2004, Bravo, Chagas & Alves, 2008, Quate & Brown 2004, Chagas-Vieira 2012) and is thus far only known to occur in the Neotropical Region. Thirteen species of *Tonnoira* have previously been collected in Brazil: *T. bifurcata* Quate & Brown, 2004, *T. bitalea* Quate, 1999, *T. castanea* Quate & Brown, 2004, *T. distincta* Bravo, Chagas & Alves, 2008, *T. mirabilis* Wagner, 1981, *T. rapiformis* Quate & Brown, 2004, *T. rectilata* Quate, 1999, *T. robusta* Bravo, Alves & Chagas, 2008, *T. spina*, Chagas-Vieira, 2012 and *T. tripennis*, Chagas-Vieira, 2012 from the Amazonian region; *T. bifida* Bravo & Chagas, 2004, *T. longipennis* Bravo & Chagas, 2004 and *T. magna* Bravo & Chagas, 2004 from northeastern Brazil. In this work we provide a revised diagnosis of the genus and describe four species new to the Atlantic forest central corridor of southeast Brazil.

### Materials and methods

Specimens examined in this study were collected in Centers for Disease Control (CDC) light traps during fieldwork at Reserva Biológica Augusto Ruschi, a fragment of the Atlantic Forest in southeastern Brazil.

All specimens were treated with 10% potassium hydroxide and mounted on slides in Canada balsam. Measurements are given in millimeters. General morphological terminology for Diptera follows Cumming & Wood (2009). Psychodid-specific terminology follows Wagner & Ibáñez-Bernal (2009) with the exception of “epandrial clasping lobe” which is used here in the place of cerci as true cerci are absent in Psychodinae. Specimens are deposited in the Collection of Entomology at the Institute de Research René Rachou-Fiocruz, Belo Horizonte, Minas Gerais, Brazil.



**FIGURES 14–17.** *Tonnoira galatiae* sp. nov., holotype ♂. **14.** Head, frontal view. **15.** Wing. **16.** Hypandrium, gonopods, aedeagal complex and parameres, dorsal view. **17.** Male epandrium and epandrial clasper lobes, dorsal view.

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