

## A taxonomic revision of *Stibasoma* Schiner, 1867 (Diptera: Tabanidae)

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### Table of contents

|  |    |
|--|----|
| Abstract .....   | 2  |
| Introduction .....   | 2  |
| Material and methods .....   | 2  |
| Taxonomy .....   | 3  |
| <i>Stibasoma</i> Schiner, 1867 .....                                       | 3  |
| Key to females of <i>Stibasoma</i> .....                                   | 3  |
| <i>Stibasoma apicimacula</i> Fairchild .....                               | 4  |
| <i>Stibasoma aureoguttatum</i> Kröber .....                                | 6  |
| <i>Stibasoma bicolor</i> Bigot .....                                       | 9  |
| <i>Stibasoma bifenestratum</i> Philip reval. ....                          | 11 |
| <i>Stibasoma chionostigma</i> (Osten Sacken) .....                         | 13 |
| <i>Stibasoma currani</i> Philip .....                                      | 15 |
| <i>Stibasoma festivum</i> (Wiedemann) .....                                | 17 |
| <i>Stibasoma flaviventre</i> (Macquart) .....                              | 20 |
| <i>Stibasoma fulvohirtum</i> (Wiedemann) .....                             | 23 |
| <i>Stibasoma giganteum</i> (Lutz) .....                                    | 26 |
| <i>Stibasoma leucopleurale</i> Barretto .....                              | 28 |
| <i>Stibasoma lutzi</i> Barretto .....                                      | 29 |
| <i>Stibasoma manauensis</i> Turcatel, Rafael & Carvalho, new species ..... | 30 |
| <i>Stibasoma panamensis</i> Curran .....                                   | 31 |
| <i>Stibasoma ruthae</i> Turcatel, Rafael & Carvalho, new species .....     | 33 |
| <i>Stibasoma theotaenia</i> (Wiedemann) .....                              | 35 |
| <i>Stibasoma willistoni</i> Lutz .....                                     | 36 |
| Conclusions .....  | 38 |
| Acknowledgements .....   | 38 |
| References .....   | 38 |

## Abstract

Here we revise description of the Neotropical genus *Stibasoma* Schiner (Diachlorini – Tabaninae), including redescription of 15 species that range from Mexico to northern Argentina: *S. apicimacula* Fairchild, *S. aureoguttatum* Kröber, *S. bella* Limeira de Oliveira & Rafael, *S. bicolor* Bigot, *S. chionostigma* (Osten Sacken), *S. currani* Philip, *S. festivum* (Wiedemann), *S. flaviventre* (Macquart), *S. fulvohirtum* (Wiedemann), *S. giganteum* (Lutz), *S. leucopleurale* Barretto, *S. lutzi* Barretto, *S. panamensis* Curran, *S. theotaenia* (Wiedemann) and *S. willistoni* Lutz. The taxon *S. bifenestratum* Philip is revalidated. Two new species are described from the Amazon: *S. manauensis* sp. nov. and *S. ruthae* sp. nov. Previously unknown males are described in *S. bifenestratum*, *S. currani*, *S. festivum* and *S. fulvohirtum*. Two subspecies are not recognised: *S. festivum dyridophorum* and *S. flaviventre pulla*. A dichotomous identification key based on external morphological characters is provided.

**Key words:** Horse fly, identification key, Tabanidae, *Stibasoma*, taxonomy

## Introduction

*Stibasoma* Schiner (Tabaninae: Diachlorini) is a Neotropical genus, described in 1867 based on *Tabanus theotaenia* Wiedemann, 1828. Members of this genus are similar to bees in appearance, with robust bodies, variable colors and very pilose legs. All species are usually found high in the canopy, except for *S. currani*, found only in the understory of the forest. Larvae are usually found in water in the axils of bromeliad (Bromeliaceae) leaves. *Stibasoma* are poorly represented in scientific collections because they are generally not aggressive and they live in the upper strata of forests.

The previous classification of *Stibasoma*, by Fairchild & Burger (1994), with a total of 17 species and two subspecies, included 14 species and two subspecies in the nominal subgenus: *S. apicimacula* Fairchild, 1940; *S. aureoguttatum* Kröber, 1931; *S. bicolor* Bigot, 1892; *S. chionostigma* (Osten Sacken, 1886); *S. currani* Philip, 1943; *S. festivum festivum* (Wiedemann, 1828); *S. festivum dyridophorum* Knab, 1913; *S. flaviventre flaviventre* (Macquart, 1848); *S. flaviventre pulla* Fairchild & Aitken, 1960; *S. fulvohirtum* (Wiedemann, 1828); *S. giganteum* (Lutz, 1913); *S. leucopleurale* Barretto, 1947; *S. lutzi* Barretto, 1947; *S. panamensis* Curran, 1934; *S. theotaenia* (Wiedeman, 1828); *S. willistoni* Lutz, 1907; another three species in the subgenus *Rhabdotylus* Lutz, 1913: *S. planiventre* (Wiedemann, 1828), *S. venenata* (Osten Sacken, 1886) and *S. viridiventre* (Macquart, 1838). With the description of *S. bella* Limeira-de-Oliveira & Rafael, 2005, the total is now 18 species..

*Rhabdotylus* was based on *Tabanus planiventre* Wiedemann, 1828. Fairchild (1961) stated that Enderlein (1925) considered *Rhabdotylus* and *Dicladocera* Lutz, 1913, as synonymous and that *T. planiventre* was the type-species of his new genus *Gymnochela* (Enderlein, 1925). Kröber (1934) affirmed that both were synonymous with *Amphichlorops* Lutz, 1913. Fairchild (1942), in noting the similarities in the head morphology of *Rhabdotylus* and *Stibasoma*, proposed *Rhabdotylus* as a subgenus of *Stibasoma*. Later, Trojan (1998) revalidated *Rhabdotylus* as a genus, based on the differences in body pilosity and leg structure.

Because of this continued discussion, we revise the genus *Stibasoma* and we redescribe *Stibasoma* species. We include descriptions of two new Amazonian species, two new synonyms and one revalidated taxon.

## Material and methods

We examined material from the following institutions: The Natural History Museum, London (BMNH); California Academy of Sciences, San Francisco (CAS); Coleção Entomológica Padre Jesus Santiago Moure, Curitiba (DZUP); Instituto Nacional de Pesquisas da Amazônia, Manaus (INPA); Fundação Instituto Oswaldo Cruz, Rio de Janeiro (IOC); Museum National d'Histoire Naturelle, Paris (MNHN); Museu Nacional, Rio de