Two new species of Microvelia Westwood, 1834 (Hemiptera: Heteroptera: Veliidae) from Colombia, with a key to Colombian species

DORA N. PADILLA-GIL & FELIPE FERRAZ FIGUEIREDO MOREIRA

1Universidad de Nariño, Ciudad Universitaria Torobajo, Facultad de Ciencias Exactas y Naturales. Departamento de Biología, Bloque 3, piso 4, San Juan de Pasto, Nariño, Colombia. E-mail: dnpadilla@udenar.edu.co
2Instituto Oswaldo Cruz, Laboratório Nacional e Internacional de Referência em Taxonomia de Triatomíneos. Avenida Brasil, 4365, Pavilhão Rocha Lima, Quinto Andar. Manguinhos, Rio de Janeiro, RJ, Brasil. CEP 21045-900. E-mail: felipe.moreira@ioc.fiocruz.br
3Universidade Federal do Rio de Janeiro, Instituto de Biologia, Departamento de Zoodologia, Laboratório de Entomologia. Avenida Carlos Chagas Filho 373, CCS, Bloco A, Sala 107. Cidade Universitária, Rio de Janeiro, RJ, Brasil. CEP 21941-971, Caixa Postal 68044. E-mail: felipento@hotmail.com

Abstract

Only six species of Microvelia have been recorded from Colombia up to the present, namely M. ancona, M. hinei, M. leucothea, M. longipes, M. panamensis, and M. pulchella. Microvelia inguapi sp. n. and M. piedrancha sp. n. are herein described and compared with similar species. An identification key to the Colombian species of Microvelia is presented.

Key words: Aquatic insects, Neotropics, South America, water striders

Introduction

The fauna of Veliidae from Colombia has been extensively studied on the last decade in relation to the species of the genera Rhagovelia Mayr, 1865 and Paravelia Breddin, 1898 (Padilla-Gil & Moreira, 2011, 2013; Padilla-Gil, 2013a). Much less attention has been given to the genus Microvelia Westwood, 1834, and few studies include descriptions or references to species from the country.


In order to contribute to the knowledge of the Colombian fauna of Microvelia, two new species are herein described. Both have been collected in the department of Nariño and are included in an identification key to the species of the genus known from the country, accompanied by a map showing their geographical distribution.

Materials and methods

Specimens have been deposited on the following institutions: Colección de Entomología del Instituto de Ciencias Naturales, Universidad Nacional de Colombia, Bogotá (ICN) and Colección de Entomología de la Universidad de Nariño, San Juan de Pasto, Colombia (PSO-CZ).

The following abbreviations have been used in the descriptions: apterous (apt), micropterous (micr), macropterous (macr), body length (BL), head length (HL), head width through eyes (HW), length of antennomeres I–IV (ANT I, ANT II, ANT III, ANT IV), minimum interocular distance (INT), maximum eye width (EYE), pronotum length on midline (PL), pronotum width (PW), length of foreleg segments (FORELEG), length of middle leg segments (MIDLEG), length of hind leg segments (HINDLEG), femoral length (FEM), tibial length (TIB), length of tarsomeres I–II (TAR I, TAR II). All measurements are given in millimeters.
- Male hind femur shorter than body; females hind femur not reaching apex of abdomen .................................................. 2

- Male fore tibia and paramere not as above; female genital segment I without shining black macula on anterior margin .................................................. Microvelia piedranche n. sp.

- Male fore tibia and paramere not as above; female genital segment I without shining black macula on anterior margin ........... 3

- Forewing not as above; apterous form with or without silvery pubescence on abdominal tergites contrasting with the velvet black ground color; inhabiting bromeliads. ...................... Microvelia anconae

- Forewing not as above; apterous form with or without silvery pubescence on abdominal tergites; non-bromeliadicolous species .......................... 4

- Mesonotum of the apterous form covered by pronotum; pronotum not reaching sublateral pits ........................................ 5

- Mesonotum of apterous form not covered by pronotum; pronotum reaching sublateral pits or beyond ................................. 7

- Body, legs, and antennae clothed with dense appressed silvery pubescence; male abdominal sternite VII medially excavate, forming a deep semicircular depression .................. Microvelia leucothea

- Body, legs, and antennae not clothed with dense appressed silvery pubescence; male abdominal sternite VII not medially excavate .......................... 6

- Body length usually less than 2.00 mm (1.25-2.25 mm); male hind tibia bent ........................................................ Microvelia pulchella

- Body length 2.50 mm; male hind tibia not bent ........................ Microvelia panamensis

- Pronotum of apterous form covering almost all of thorax, leaving only lateral triangles of metathorax exposed; male hind trochanter angled upward and bearing a small tubercle projecting beyond posterior margin (Fig. 7); female abdominal sternite VII bearing two pits on anterolateral margin (Fig. 9); collected in estuaries, probably an inhabitant of crab holes. .................. Microvelia inguapi

- Pronotum of apterous form shorter, leaving metanotum exposed; male hind trochanter and female abdominal sternite VII unmodified; habitat preferences not as above ........................................ Microvelia hinei

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References


