

A new species of *Stilobezzia* (Diptera: Ceratopogonidae) from northern Argentina

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Abstract. A new Neotropical species, *Stilobezzia* (*Stilobezzia*) *biscutata* sp. nov. (Diptera: Ceratopogonidae), is described and illustrated based on adult specimens collected in the Argentinian provinces of Chaco, Formosa and Corrientes. The species is compared with *Stilobezzia transversa* Lane & Forattini, 1958, from which it differs mainly in the pigmentation pattern of abdomen and the parameres S-shaped.

Key words. Diptera, Ceratopogonidae, *Stilobezzia biscutata*, new species, adult, Argentina, Neotropical Region

Introduction

The predaceous midges of the genus *Stilobezzia* Kieffer, 1911 are common inhabitants of aquatic environments but are often overlooked because of their small size (1–3 mm). Adult females are predaceous on other small soft-bodied insects, especially midges of the family Chironomidae (WIRTH & SPINELLI 1992). Until BORKENT (2012), the genus *Stilobezzia*, that is worldwide in distribution, was represented in the Neotropical Region by 62 species distributed in three subgenera: *Acanthohelea* Kieffer, 1917, *Stilobezzia* s. str., and *Eukraiohelea* Ingram & Macfie, 1921. Seven new species were described in the last year in the subgenera *Acanthohelea* and *Stilobezzia* s. str. (CAZORLA & SPINELLI 2012a,b; CAZORLA et al. 2012; RONDEROS et al. 2012).

During the last years, several collecting trips were performed to the provinces of Chaco, Formosa and Corrientes in northern Argentina that yielded specimens of *Stilobezzia* deposited in the Museo of La Plata, Argentina. Study of this material revealed the presence of one unknown species of *Stilobezzia* s. str., which is herein described, photographed and illustrated.

Material and methods

The specimens were collected with Malaise and light traps, preserved in 70% ethanol and subsequently slide mounted. They were examined, measured and drawn with a binocular compound microscope with an attached camera lucida.

The photomicrographs were taken with a digital camera Micrometrics SE Premiun, through Nikon Eclipse E200 microscope. The drawings and photographs were edited in CorelDRAW X3 and CorelPHOTO-PAINT X3 graphic software.

The measurements are arranged as follows: minimum–maximum (median; n = number of measured specimens). For adult terminology see the Manual of Central America Diptera (BROWN et al. 2009). The type material is deposited in the collection of the Division Entomología of the Museo de La Plata, Argentina (MLP).

Taxonomy

Stilobezzia (Stilobezzia) biscutata sp. nov.

(Figs 1–11)

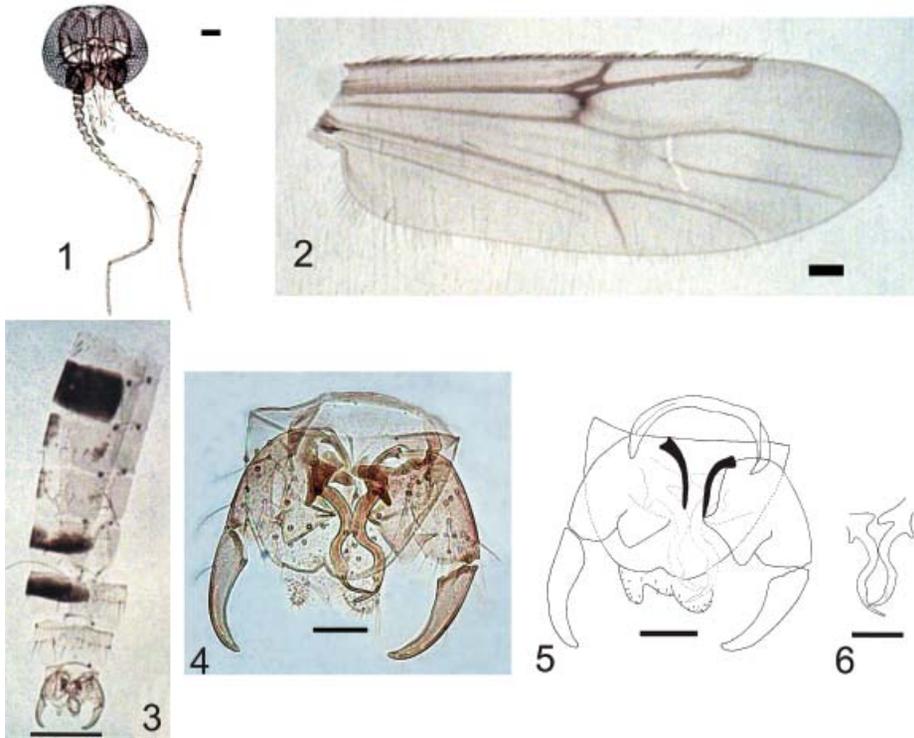
Type material. HOLOTYPE (♂), ALLOTYPE (♀): ARGENTINA: FORMOSA: Estancia La Marcela, 5 km E El Colorado, v.2005, F. Brusa, at light (MLP). PARATYPES: (3 ♂♂ 2 ♀♀): same data as holotype, 1 ♂ 2 ♀♀ (MLP). ARGENTINA: CORRIENTES: Colonia Pellegrini, 21/27.ix.2002, 1 ♂, M. C. Coscarón, Malaise trap (MLP). CHACO: 26°48'32.38"S 59°36'26.13"E, next to Río Negro, 30.x.2010, 1 ♂, M. C. Melo, at light (MLP).

Diagnosis. A small, yellowish species of *Stilobezzia* s. str. with the following combination of characters: proximal half portion of the scutum blackish brown except the pale yellowish humeral pits and a mesal anterodorsal narrow line, and the distal half portion bright yellowish; males have stout, S-shaped parameres and gonocoxites with a mesoventral lobe; females have the tarsomere 5 of all legs with two basal, stout, divergent spines and the abdomen is pale brown except dark brown segments 3, 4 and 7, segment 3 has a laterodistal pale spot and segments 4–5 are slightly darker dorsally.

Description. *Male* (Figs 1–6). *Head* (Fig. 1) brown. Antenna with flagellomeres brown, flagellomeres 1–5, 11–13 darker; plume brown, poorly developed; antennal ratio 0.90–0.95 (0.92, n = 2). Palpus brown except darker fifth segment; third segment slender with subapical sensory pit; palpal ratio 4.20–4.40 (4.35, n = 4).

Thorax. Proximal half portion of scutum blackish brown, humeral pits, mesal anterodorsal narrow line pale yellowish, distal half portion bright yellowish; scutellum pale yellowish with 4 stout setae; postscutellum dark brown; proximal half portion of pleura brown, distal portion pale yellowish. Legs brown; coxa pale brown; hind femur, tibia slightly darker, distal apex of tibia dark brown; tarsomere 1 of hind leg with three ventral rows of spines, tarsomere 1 of mid leg with basal spine; hind tibial comb with 9 spines; prothoracic tarsal ratio 2.00–2.30 (2.14, n = 4); mesothoracic tarsal ratio 2.38–2.75 (2.53, n = 4); metathoracic tarsal ratio 2.08–2.36 (2.24, n = 4). Wing (Fig. 2) length 1.51–1.60 (1.55, n = 4) mm; width 0.51–0.57 (0.53, n = 2) mm; membrane slightly infuscated with diffuse brown spot on r-m crossvein; second radial cell 4.00–5.00 (5.65, n = 3) times longer than first; cubital fork distal of level of base of r-m crossvein. Halter pale.

Abdomen. Pale brown except dark brown segments 3, 6, 7 with dorsomedial pale spot, segments 4–5 slightly darker dorsally (Fig. 3). Genitalia (Figs 4–6): tergite 9 reaching apex of gonocoxite, distal margin rounded with mesal notch; sternite 9 not clearly distinguished, flattened; cerci stout. Gonocoxite stout, 2.00 times as long as greatest breadth; mesoventral lobe reaching mesal pointed tubercle; gonostylus slender, as long as gonocoxite. Parameres



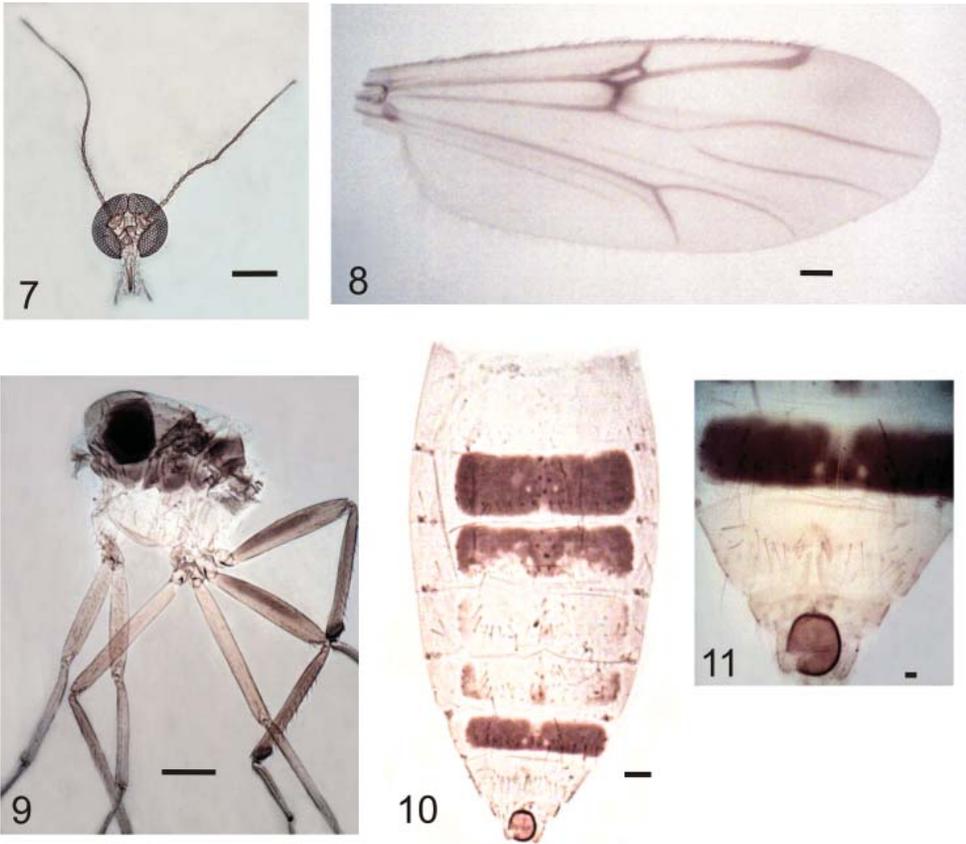
Figs 1–6. *Stilobezzia (S.) biscutata* sp. nov., holotype male: 1 – head (dorsal view); 2 – wing; 3 – abdomen (laterodorsal view); 4 – genitalia; 5 – detail of genitalia (ventral view); 6 – parameres removed. Scale bars: 0.05 mm.

separate, subparallel, S-shaped; distal 1/3 slender, hook shaped; basal apodemes stout, sclerotized, bilobate. Aedeagus represented by 2 slender, subparallel sclerites, each slightly sclerotized with proximal portion curved, distal portion pointed.

Female (Figs 7–11). Similar to male, except for the following differences: *Head* (Fig. 7). Antenna with flagellomeres brown; antennal ratio 1.29–1.43 (1.37, $n = 3$). Palpal ratio 3.50–4.40 (3.97, $n = 3$). Mandible with 8 teeth.

Thorax (Fig. 9). Tarsomere 5 of all legs with two basal, stout, divergent spines; prothoracic tarsal ratio 2.30–2.50 (2.40, $n = 3$); mesothoracic TR 2.54–2.80 (2.68, $n = 3$); metathoracic TR 2.27–2.44 (2.36, $n = 3$); claws as long as tarsomere 5, with conspicuous basal tooth. Wing (Fig. 8) length 1.49–1.77 (1.66, $n = 3$) mm; width 0.58–0.67 (0.64, $n = 3$) mm; second radial cell 5.33–6.60 (5.91, $n = 3$) times longer than first.

Abdomen. Pale brown except dark brown segments 3, 4, 7, segment 3 with laterodistal pale spot, segments 4–5 slightly darker dorsally (Fig. 10). Pigmentation as in Fig. 10. Genitalia (Fig. 11): sternite 8 pale, not clearly distinguishable, apparently rounded with posteromedian excavation U-shaped; sternite 10 pale, with 4 pairs of setae; cercus rounded, short. One globose spermatheca without neck, measuring 8.2 by 7.3 μm .



Figs 7–11. *Stilobezzia* (*S.*) *biscutata* sp. nov., allotype female: 7 – head (dorsal view); 8 – wing; 9 – thorax (lateral view); 10 – abdomen (dorsal view); 11 – genitalia (ventral view). Scale bars: 0.05 mm.

Differential diagnosis. *Stilobezzia* (*S.*) *biscutata* sp. nov. strongly resembles *S.* (*S.*) *transversa* Lane & Forattini, 1958 in the pigmentation pattern of the scutum and legs, but the latter species can be distinguished by uniformly brown abdomen, elongated parameres and wing membrane without a dark spot.

Etymology. The species name *biscutata* (-us, -um; = ‘having two scuta’) refers to the contrasting pigmentation of the scutum of this species, having the proximal half portion dark brown and the distal portion bright yellowish.

Distribution. Argentina (Formosa, Chaco and Corrientes provinces) (this paper).

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