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## A new species of the genus *Stilobezzia* from the Nahuel Huapi National Park, Argentina (Diptera: Ceratopogonidae)

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### Una nueva especie del género *Stilobezzia* del Parque Nacional Nahuel Huapi, Argentina (Diptera: Ceratopogonidae)

■ **RESUMEN.** Una nueva especie, *Stilobezzia (Acanthohelea) longisternalis*, colectada en los bosques de *Nothofagus* del Parque Nacional Nahuel Huapi (Argentina), se describe, fotografía e ilustra en base al estudio de machos y hembras adultos. La nueva especie se reconoce fácilmente por presentar una proyección posteromediana alargada y delgada en el esternito 9 de los machos. Se compara con *S. (A.) hirsuta* Ingram & Macfie.

**PALABRAS CLAVE.** *Stilobezzia (Acanthohelea)*. Nueva especie. Bosques de *Nothofagus*. Argentina.

■ **ABSTRACT.** A new species, *Stilobezzia (Acanthohelea) longisternalis*, collected in the *Nothofagus* forest of the Nahuel Huapi National Park (Argentina) is described, photographed and illustrated based on the examination of male and female adults. The new species can be easily recognized by the elongate and narrow posteromedian projection of the male sternite 9; it is compared with *S. (A.) hirsuta* Ingram & Macfie.

**KEY WORDS.** *Stilobezzia (Acanthohelea)*. New species. *Nothofagus* forest. Argentina.

### INTRODUCTION

The predaceous midge genus *Stilobezzia* Kieffer is a large and diverse genus of Ceratopogonidae, worldwide in distribution. The adult females are important predators on other small insects, and the immature stages are found in a wide variety of aquatic and semiaquatic habitats, including streams, lakes and ponds margins, puddles, swamps, rice fields, rock pools, and tree holes (De Meillon & Wirth, 1991; Cazorla et al., 2006).

Ingram & Macfie (1931) described 10 new species of *Stilobezzia* from Argentinean and Chilean northern Patagonia that are placed in the subgenus *Acanthohelea* Kieffer (Wirth & Grogan, 1988), which is represented in the Neotropical region by 27 species (Cazorla & Spinelli, 2012). The purpose of this paper is to describe a new species of *Stilobezzia (Acanthohelea)* recently collected in the *Nothofagus* forest of the Nahuel Huapi National Park.

## MATERIAL AND METHODS

Specimens were collected with Malaise traps, preserved in 70° ethanol and subsequently slide mounted in Canada balsam, then examined, measured and drawn with a binocular compound microscope with an attached camera lucida. Terminology follows the Manual of Central American Diptera (Brown et al., 2009). Photomicrographs were taken with a digital camera Micrometrics SE Premiun, through Nikon Eclipse E200 microscope. Types of the new species are deposited in the collection of the División Entomología, Museo de La Plata, Argentina (MLP).

## RESULTS

### *Stilobezzia (Acanthohelea) longisternalis* Cazorla & Spinelli sp. nov (Figs. 1-9)

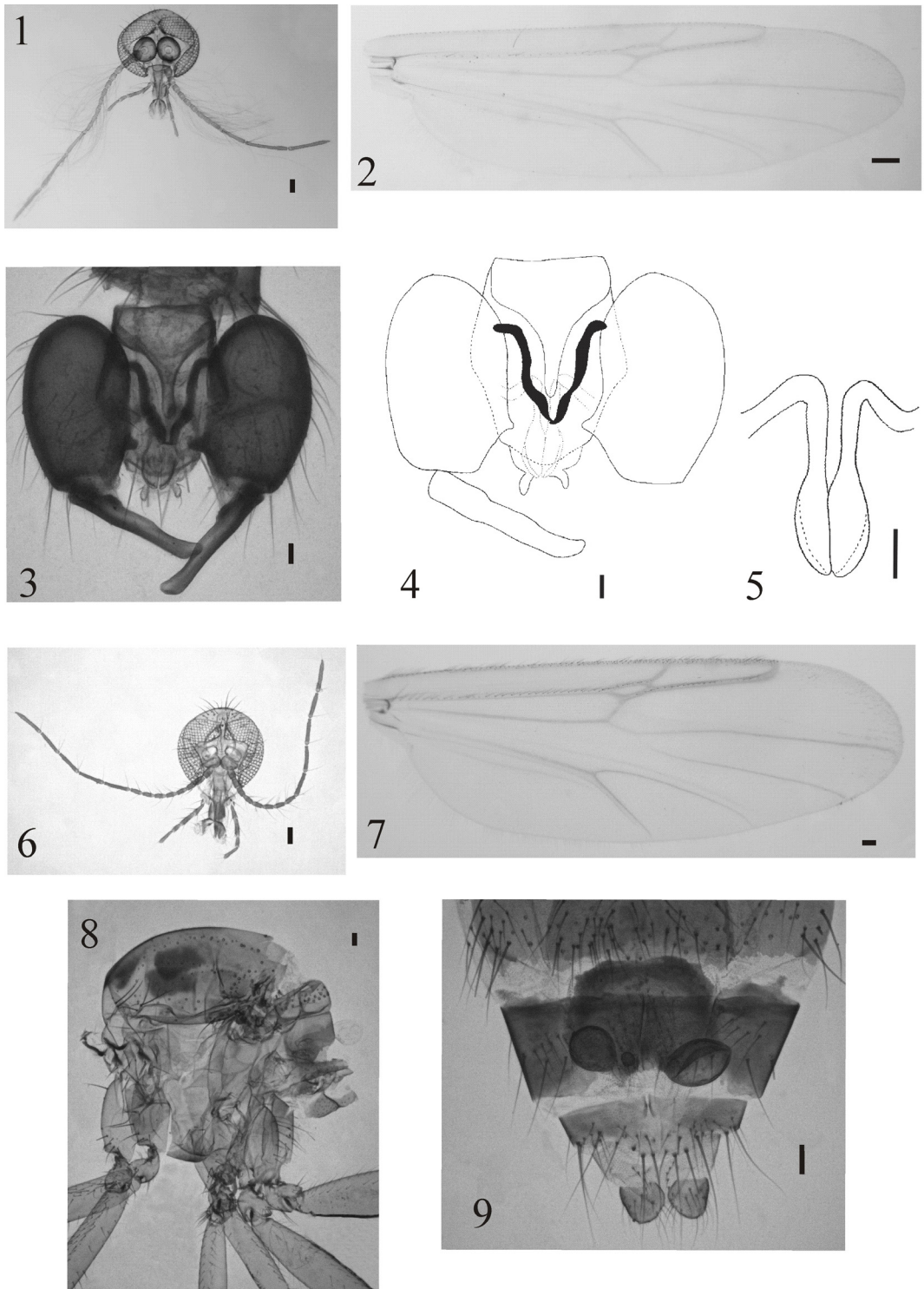
**Diagnosis.** Only species of *Stilobezzia (Acanthohelea)* from Patagonia with the male sternite 9 bearing an elongate and narrow posteromedian projection. Females with 14 strong and 13 thinner scutellar setae and abdominal segment 8 heavily sclerotized.

**Description.** Male adult. Head (Fig. 1) dark brown. Antennal flagellomeres brown; plume dark brown, dense; antennal ratio 0.98-1.18 (1.08, n= 8). Palpus dark brown; third segment cylindrical with subapical sensory pit; fifth segment as long as third; palpal ratio 3.71-4.29 (4.18, n= 8). Thorax: scutum yellowish brown except anterior, posterior margins, sublateral anterior areas dark brown; scutellum yellowish with 17-18 stout setae, 12 thinner ones; pleura yellowish brown; postscutellum dark brown. Legs yellowish brown, hairy; hind coxa brown; first tarsomere of hind leg with basal stout spine; prothoracic TR 1.72-2.00 (1.88, n= 8); mesothoracic TR 1.94-2.11 (2.00, n= 7); metathoracic TR 1.67-1.81 (1.73, n= 8). Wing (Fig. 2) length 2.58-2.83 (2.70, n= 8) mm; width 0.80-0.88 (0.83, n= 8) mm; membrane slightly infuscated; second radial cell 3.50-4.62 (3.81, n= 8)

times longer than first; cubital fork at level of beginning of r-m crossvein; macrotrichia on costa, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, distal of m<sub>1</sub>, sparse on r<sub>3</sub>. Halter pale. Abdomen dark brown. Genitalia (Figs. 3-5): dark brown; tergite 9 not produced beyond apex of gonocoxite, lateral margins of proximal 1/2 straight, slightly divergent, lateral margins of distal 1/2 convergent, posterior margin rounded; sternite 9 with conspicuous, elongate, narrow posteromedian projection extending to gonocoxite midlength; sternite 10 slightly visible, spiculate, produced beyond base of cerci; cercus slender, divergent. Gonocoxite stout, 1.72 times longer than greatest breadth, inner margin with pointed protuberance at distal 1/3. Gonostylus yellowish brown distally, slightly shorter than gonocoxite, almost straight, tip blunt. Parameres separated, subparallel, short; each with basal apodeme at level of gonocoxite midlength; proximal portion slender, distal portion broader, rounded. Aedeagus represented by 2 stout, slightly sinuose, convergent sclerites, each with basal tip curved laterad, distal tip curved, pointed.

Female adult. As for male, with following differences. Head (Fig. 6) brown. Antennal flagellomeres dark brown; antennal ratio 1.42. Palpus dark brown; palpal ratio 3.87. Mandible with 7 teeth. Thorax (Fig. 8): scutellum with 14 stout setae, 13 thinner ones; hind tibial comb with 9 spines; claws shorter than fifth tarsomere; prothoracic TR 2.06; mesothoracic TR 1.89; metathoracic TR 1.75. Wing (Fig. 7) length 2.76 mm; width 0.98 mm; membrane slightly infuscated; second radial cell 4.30 times longer than first; cubital fork slightly anterior to level of beginning of r-m crossvein; macrotrichia on costa, R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, M<sub>1</sub>, M<sub>2</sub>, abundant on r<sub>3</sub>, sparse on m<sub>1</sub>. Abdomen brown, segment 8 heavily sclerotized. Genitalia (Fig. 9): anterior margin of sternite 8 slightly concave, posteromedian excavation V-shaped; sternite 10 elongate, with 7-8 pairs of setae; cercus short; two ovoid spermathecae, measuring 14 by 7.4 and 10.3 by 8.5 ; necks minute, almost indistinguishable.

**Types.** Holotype male, allotype female: Argentina, Río Negro prov., Nahuel Huapi



**Figs. 1-9.** *Stilobezzia (Acanthohelea) longisternalis* Cazorla & Spinelli, n. sp. 1-5, male; 6-9, female; 1, 6, head; 2, 7, wing; 3, genitalia; 4, genitalia (parameres removed); 5, parameres; 8, thorax; 9, abdominal segments 8-10. (Scale bars = 0.05 mm).

National Park, A° Ñireco (Complejo Challhuaco), 41° 11' 51.9''S 71° 19' 40''W, 962 m, 20-XII-2006/ 23-I-2007, Masafarro, Garre & Montes de Oca, Malaise trap (MLP). Other paratypes, 11 males, as follows: same data as holotype, 8 males (MLP); Argentina, Río Negro prov., Nahuel Huapi National Park, Mallín de los Patos, 41° 15' 48.6''S 71° 17' 50.3'' W, 1020 m; XII-2006/ 23-I-2007, Garre & Montes de Oca, 3 males, Malaise trap (MLP).

**Distribution.** Argentina (Río Negro province).

**Derivation of specific epithet.**

A reference to the particular elongate posteromedian projection of the male sternite 9.

## DISCUSSION

*Stilobezzia (Acanthohelea) longisternalis* can be easily recognized by the conspicuous and narrow posteromedian projection of the male sternite 9. Another patagonian species, *S. (A.) hirsuta* Ingram & Macfie, also has the male sternite 9 bearing a posteromedian projection, but in this case the projection is shorter, broader and hyaline. Moreover, *S. (A.) hirsuta* lacks a basal spine in the first

tarsomere of the hind leg, and the posterior margin of the male tergite 9 is bilobed.

## ACKNOWLEDGEMENTS

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