



## Description of the immature stages of *Trichocorixa mendozana* Jaczewski (Hemiptera: Heteroptera: Corixidae)

SUSANA AMANDA KONOPKO<sup>1,2</sup>, SILVIA ANA MAZZUCCONI<sup>1</sup> & AXEL OSCAR BACHMANN<sup>1</sup>

<sup>1</sup>Laboratorio de Entomología, Departamento de Biodiversidad y Biología Experimental, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires. Av. Int. Güiraldes s/n, Ciudad Universitaria, C1428EHA, Buenos Aires, Argentina.

E-mails: konopko@bg.fcen.uba.ar; mazzucco@bg.fcen.uba.ar; bachmann@bg.fcen.uba.ar

<sup>2</sup>CONICET

### Abstract

The egg and the instars I, IV, and V of *Trichocorixa mendozana* are described and illustrated for the first time. The eggs of *Trichocorixa* have a very short basal stalk; those of *T. mendozana* are bigger than those of *T. kanza* and *T. sexcincta*. The main characters separating the instars I, IV, and V of *T. mendozana* are: the head width; the number of transverse sulcations of the rostrum; the number of spines on the anterior surface of the metafemur; and the grade of development of the wing pads. The nymphs of *T. mendozana* and *T. verticalis sellaris* can be separated on the basis of the head (instar V) and body (instars I, IV–V) widths. In nymphs V of *T. mendozana*, *T. orinocoensis*, *T. reticulata reticulata*, *T. verticalis sellaris*, and *T. verticalis verticalis*, the following measurements and ratios distinguish species or group of species of *Trichocorixa*: the body length; the ocular index; the ratio between the body length and the head width; the ratio between the distance and the diameter of the apertures of the second and third scent glands; and the number of spines on the anterior surface of metafemur.

**Key words:** Nepomorpha, Neotropical Region, immature stages, taxonomy, saline waters, aquarium rearing

### Introduction

The American genus *Trichocorixa* Kirkaldy comprises almost 20 species of rather small and somewhat elongate corixids adapted to saline waters (Sailer, 1948; Bachmann, 1979; Polhemus *et al.*, 1988). This genus, best represented in North America, is distributed from Canada to southern Argentina, including Hawaii and Galápagos Islands (Nieser, 1969; Morrone *et al.*, 2004). According to Bachmann (1981), two species of *Trichocorixa* are present in Argentina; *T. mendozana* Jaczewski is studied in here. This species is distributed in Paraguay (Concepción Department), Argentina (from Formosa and Catamarca to Rio Negro provinces), and southern Brazil (Rio Grande do Sul State) (Bachmann, 1962, 1981; Morrone *et al.*, 2004). In Argentina, *T. mendozana* is apparently abundant in saline ponds and swamps (2.5–76 g/l NaCl), but the numbers are reduced in frequency in fresh waters (Bachmann, 1962, 1981).

Although the systematics of the adults of *Trichocorixa* are comparatively well known (Sailer, 1948; Nieser, 1969, 1975; Bachmann, 1981), very few studies on the egg and nymphs are available in the literature. Sailer (1948) described the egg of *T. kanza* Sailer including some measurements (diameter and height) and information on the shape, color, and chorionic structure. Hungerford (1948a) figured and described the egg of *T. sexcincta* (Champion) [under *T. naias* (Kirkaldy & Torre-Bueno)]. He presented measurements (total length and diameter, and lengths of the micropyle and stalk), and described the shape and color of the egg. In addition, Griffith (1945) gave some measurements (length and width of the body, and width of the head) of the fourth and fifth instars of *Trichocorixa* sp. from Douglas County, Kansas. He presented a key to identify larger instars of the genera *Arctocorisa* Wallengren, *Corisella* Lundblad, *Rhamphocorixa* Abbott, and *Trichocorixa*, based on the size and color pattern of the body and appearance of the dorsal glandular patches on the abdomen. Subsequently, Nieser (1969) described the fifth instar of *T. orinocoensis* Sailer, *T. reticulata reticulata* (Guérin-Méneville), and *T. verticalis verticalis* (Fieber). He