Description of the nymphs of Ectemnostega (Ectemnostegella) stridulata (Hungerford 1948) (Hemiptera: Heteroptera: Corixidae)

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Abstract

The egg and the five nymphal instars of Ectemnostega (Ectemnostegella) stridulata are described and illustrated for the first time, with emphasis on the morphometry and chaetotaxy of selected structures. Comparison with the eggs of E. (Ectemnostegella) montana and E. (Ectemnostegella) peruana, and the nymphs of E. montana and E. peruana, and the three species differ in the chorionic structure. The nymphs of Ectemnostega share the presence of one dorsal abdominal scent gland on each of the segments IV–V. The number of spines on the profemur on the ventral and posteroventral surfaces distinguishes the nymphs of the subgenus Ectemnostega from the those of the subgenus Ectemnostegella. The nymphal characters most useful in identifying instars I–V of Ectemnostega are: the body length, the number of spines on the posteroventral surface of the mesofemur, setae on the posterodorsal surface and spines on the posteroventral surface of the mesotibia, setae on the posterodorsal surface of the mesotarsus, and the grade of development of the wing pads. The nymphal characters most useful in identifying species of Ectemnostega are: the number of spines on the posteroventral surface of the mesofemur, spines on the anterodorsal surface of the metatibia, and spines and swimming hairs on the anteroventral and posterodorsal surfaces of the metatarsus.

Key words: Nepomorpha, Corixinae, immature stages, taxonomy, morphometry, chaetotaxy, Neotropical Region

Introduction

The Neotropical genus Ectemnostega Enderlein comprises 12 species of medium-sized corixids and is currently divided into two subgenera (Hungerford 1948b; Bachmann 1960, 1979, 1981; Roback & Nieser 1980; Štys & Jansson 1988): Ectemnostega (1 species) and Ectemnostegella Lundblad (11 species). This genus is mostly found in the mountainous areas of South America, and it is distributed from Perú to southern Argentina in Tierra del Fuego province (Morrone et al. 2004); the record of E. (Ectemnostegella) venturii (Hungerford 1948b) from a lower altitude near Buenos Aires city (Argentina) presented by Hungerford (1948b) needs confirmation. According to Bachmann (1981), five species in two subgenera are present in Argentina, of which E. (Ectemnostegella) stridulata (Hungerford 1948b) is studied in the present contribution. This species is distributed from Perú to Chile and Argentina (Jujuy province) (Morrone et al. 2004).

Hungerford (1948b) revised the adults of Ectemnostega (under genera Ectemnostega and Ectemnostegella) and presented a key to the species. The species from Argentina were redescribed, illustrated, and keyed by Bachmann (1981). Although the systematics of the adults of Ectemnostega is comparatively well known, very few descriptions of the eggs and nymphs are available in the literature. Hungerford (1948a) described and illustrated the egg of E. (Ectemnostegella) peruana (Jaczewski); and later Konopko & Melo (2009) described the egg of E. (Ectemnostegella) montana (Lundblad). Konopko & Melo (2009) described in