A Report on the Occurrence of the Water-boatmen *Trichocorixa verticalis* (Fieber, 1822) Hemiptera: Corixidae from Parangipettai Coastal Waters in Southeast Coast of India

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**Abstract:** A report on the occurrence of water-boatmen *Trichocorixa verticalis* (Fieber, 1822) Hemiptera: Corixidae was recorded from Parangipettai coastal waters in southeast coast of India. The common name of the species is water-boatmen. In Corixidae family, the only one species of *Trichocorixa verticalis* was recorded so far. The present paper described the taxonomic status and the description of the new record of *Trichocorixa verticalis* under the family of Corixidae.

**Key words:***Trichocorixa verticalis* · Corixidae · Parangipettai · India

**INTRODUCTION**

The species of the water-boatmen family Corixidae, *Trichocorixa verticalis* (Fieber, 1822) is described and illustrated from the Parangipettai coastal waters in southeast coast of India. This species has been cited recently in captured in Parangipettai coastal waters. Water-boatmen of the family Corixidae are reported to be typically freshwater insects. However, it is in the coastal and inland saline environments that the family becomes very conspicuous and it is found abundantly in many parts of the world. In spite of this abundance, it is only recently that the saline species have been studied in any detail. Since all known species of marine and inland saline Corixidae belong to familiar freshwater genera, much of the information on the general biology of freshwater forms probably also applies to those of saline habitats. The Corixidae are capable of utilizing virtually all aquatic habitats and seem to be ecologically adaptable to a wide range of environmental conditions. These insects have to surface periodically in order to replenish the external air stores [1], since the lifetime of a compressible gas gill is greatly reduced at depths [2]. Corixidae are unable to exist in deep water without a substratum within easy reach of the surface [3]. Rawson and Moore [4] have taken larvae at a depth of 10m, but they do not seem to occur in the open regions of large lakes [1].

*Trichocorixa verticalis* is the only species recorded from offshore waters [5]. Whether it has been carried out by ocean currents or can live and reproductive in the sea is not known. However, it should be noted that not all species of this genus occur in saline environment. *Trichocorixa verticalis* has the capacity to inhabit saline environments [6, 7] or even to survive in the open sea [5, 8]. In fact, there are twelve genera of Corixidae which can inhabit saline waters, but only the genus *Trichocorixa* has been found in the open sea and *T. verticalis* has high osmoregulatory ability [9]. The approximately 2,000 species of the predominately aquatic insect family Hydrophilidae (order Coleoptera). During a recent survey in the Parangipettai coastal waters, about 50 specimens of *Trichocorixa verticalis* were collected and the details are depicted below.

**MATERIAL AND METHODS**

The specimens were collected from Parangipettai coastal waters (Lat. 11°24'N; Long 79°46'E) during routine survey at sea surface in 5km from January, 2010. After capture, samples were preserved on board in a 70% ethanol solution specimens were sorted and identified under a stereomicroscope. In the laboratory, the samples were sorted and the adult *Trichocorixa verticalis* specimens were identified using the key presented by Herring [10].
They are oval-shaped, streamlined fully aquatic Hemiptera with short antennae hidden from above; they do not normally swim upside-down like the Notonectidae. Rostrum short, triangular and broadly attached to head. Forelegs short, armed terminally with a flattened, scoop-like pul, fringed ventrally with stiff bristles; middle legs long and slender with two tarsal claws; hind legs long and flattened and fringed with hairs.

**DISCUSSION**

The present work is a report on the occurrence of the water-boatmen *Trichocorixa verticalis* (Fieber, 1822) (Hemiptera: Corixidae) from Parangippetai coastal waters in southeast coast of India. This species has been cited recently in the province of Cadiz, Spain [11]. The genus *Trichocorixa* has been cited several times outside its distribution area, being present in Africa, the Pacific region and now Europe. Tones [12] have recently found that *Trichocorixa verticalis* is distributed along the east coast of USA from New Jersey to Florida, while *G. affinis* replaces it further westwards along the coast of the Gulf of Mexico [13].

The Iberian Peninsula, another exotic fish is also present, *Fundulus heteroclitus*, which is also sympatric with *T. v. verticalis* in North America, being distributed, in its native area, from Canada to Florida along the Atlantic coast.

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**REFERENCES**