

# Gastropoda, Neogastropoda, Buccinidae, *Cantharus tranquebaricus* (Gmelin, 1791): First record from Pondicherry mangroves, southeast coast of India

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**ABSTRACT:** *Cantharus tranquebaricus* (Gmelin, 1791) is reported for the first time in Pondicherry mangroves, southeast coast of India. Three adult specimens have been found in the Thengaithittu lagoon during post monsoon season of 2009. It is a characteristic species of molluscan fauna of the Bay of Bengal and the descriptions of the shell are provided.

Indian mangroves have a rich diversity of soil dwelling organisms which include micro, meio and macro forms. Mangrove ecosystem provides an ideal nursery and breeding ground to most of the marine and brackish water fish and shellfish (Ananthan *et al.* 2004). Pondicherry mangrove occurs as fringing vegetation over 168 ha distributed along the sides of Ariankuppam estuary, which is seasonally bar-built and semi diurnal type that flows eastwards and empties into the Bay of Bengal at Veerampatinam on the south east coast of India. From the Mozambique and East Indian Ocean, some information is available on these groups (Trew 1987; Mienis 2003).

Three adult specimens of *Cantharus tranquebaricus* were collected by hand in Thengaithittu region of Pondicherry mangroves, in post monsoon season of 2009, preserved in 10% neutral formalin and stained with Rose Bengal solution for easy spotting. Specimens were identified to the lowest practical taxonomic level using standard references (Mienis 2003; Golani and Ben Eliahu 2004) and deposited in the Pondicherry University, University Grants Commission Major Research Project -01.

***Cantharus tranquebaricus* (Gmelin, 1791)** (Figure 1)  
*Buccinum tranquebaricum* Gmelin, 1791: 1-12; 1-500; fig. 15.

*Cantharus tranquebaricus* Roding, 1798: 20, pl. 1 fig. 7-8.

**Material:** The three specimens found in India, Thengaithittu lagoon, Pondicherry mangrove. Coll. P. Satheeshkumar, 15. Feb. 2009 dated 15.02.2009 (PUUGCMP-01).

**Distribution:** Tropical Indo - West Pacific, Thailand, Mediterranean coast of Israel, Mauritius Island, Central and East Indian Ocean, Tranquebar, Australia (Trew 1987; Russell and Hewitt 2000).

**Habitat:** Mangroves, from mud samples, under rocks.

**Feeding:** They feed on small crustaceans and marine worms.



**FIGURE 1.** *Cantharus tranquebaricus* from Pondicherry mangroves, India (PUUGCMP-01).

**Brief description of the shell:** Height about 1.5X of the width; teleoconch consists of 5-6 convex whorls, which are tabulated at the sutures. Sculpture of the body whorl consists of 10-11 broad axial ribs, which are disappearing towards the base, between the main ribs. Aperture large, more than half the height of the shell, lip sharp with about 19 lirae running deep into aperture, these lirae correspond with the intervals between the spiral ribs on the outside, lower part of the columella with a few wrinkles. Umbilicus is small but open. Colour of first 2.5 teleoconch whorls brownish with paler axial main ribs and remaining teleoconch whorls yellowish with pale white spiral band just below the middle of the body whorl, aperture encircled with a thin orange-brown band. Two former lips on the last quarter of the body whorl are indicated with a similar orange brown axial line.

**Colour:** Brownish yellow

*Cantharus tranquebaricus* (Gmelin, 1791), which is

originated from the Indian Ocean, was first reported in Mozambique coast and subsequently reported in the Eastern Indian Ocean. In the Late report *C. tranquebaricus* is clearly attested in different parts of Tropical Indo – West Pacific, Thailand and Mediterranean coast of Israel (Trew 1987; Mienis 2003). It is also recorded in the Northern Territory port in Australia (Russell and Hewitt 2000). According to Wilson *et al.* (1994) *C. tranquebaricus* is very similar to young specimens of *C. fumosus* (Dillwyn 1817) from Australia, a probable sister species.

Geographically, the study area lies within the boundaries of 11°46'03" – 11°53'40" N, 79°49'45" – 79°48'00" E (Figure 2). The present record of *C. tranquebaricus* is the first report from Pondicherry mangroves, southeast coast

of India. Pondicherry coastal area is polluted due to the discharge of industrial, domestic and agricultural wastes through small tributaries and channels into the Bay of Bengal (Ananthan *et al.* 2004). In addition, the study area of Pondicherry coast has natural environmental handicaps as a result from its isolated position, and several manmade stresses are considered to be mainly responsible for a decline of molluscs. Since coastal ecosystems are responsible for a large amount of fish and shellfish yields, Saravanakumar *et al.* (2009) had reported the baseline information of fin and shellfish resources and abundance, that would form a useful tool for further ecological assessment and monitoring of this coastal mangrove ecosystem.

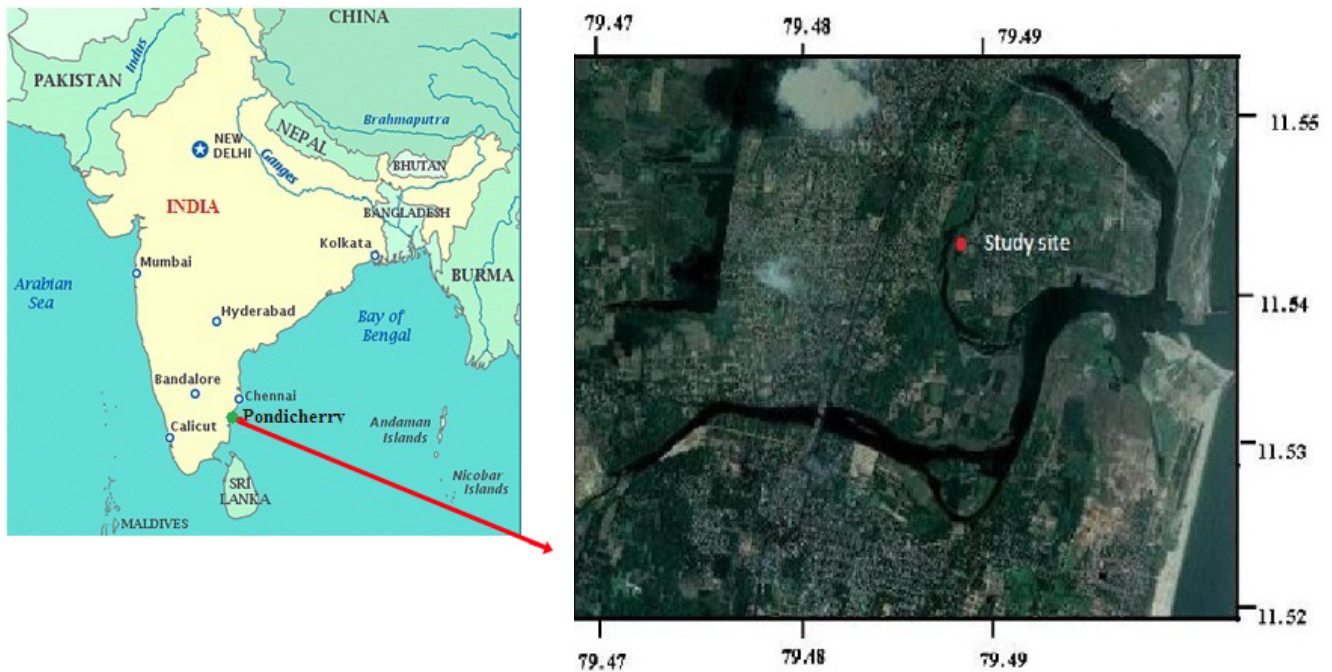


FIGURE 2. Map of the study site of Pondicherry mangroves, India.

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