

## A New Record of Sea Snail *Cochlespira Travancorica Travancorica* (E. A. Smith, 1896) (Family: Cochlespiridae) (Mollusca: Gastropoda: Turridae) off Thoothukudi Coast of Gulf of Mannar, Southeast Coast of India (08° 53.6'N 78° 16'E and 08° 53.8'N 78° 32'E) (310 M)

Vaitheeswaran T.<sup>1</sup>, Jayakumar N.<sup>2</sup> Venkataramani V.K.<sup>3</sup>

1. Assistant General Manager, Research and Development, Quality Control, Marine Invertebrate Division, Cancer Drugs, Department of New Drug Discovery, Rarbio Energies Private Limited, #311/2, Vellalar Street, Mel Ayanambakkam, Chennai- 600 095, Tamil Nadu, India

2. Department of Fisheries Biology and Resource Management, Fisheries College and Research Institute, Tamil Nadu Fisheries University, Thoothukudi – 628 008, Tamil Nadu, India

3. Former Dean, Fisheries College and Research Institute, Tamil Nadu Fisheries University, Thoothukudi - 628 008, Tamil Nadu, India

✉ Corresponding author email: [frs69@rediffmail.com](mailto:frs69@rediffmail.com)

International Journal of Marine Science, 2015, Vol.5, No.44 doi: [10.5376/ijms.2015.05.0044](https://doi.org/10.5376/ijms.2015.05.0044)

Received: 20 Jun., 2015

Accepted: 18 Jul., 2015

Published: 22 Jul., 2015

Copyright © 2015 Vaitheeswaran et al., This is an open access article published under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Preferred citation for this article:** Vaitheeswaran T., Jayakumar N. and Venkataramani V.K., 2015, A New Record of Sea Snail *Cochlespira Travancorica Travancorica* (E. A. Smith, 1896) (Family: Cochlespiridae) (Mollusca: Gastropoda: Turridae) off Thoothukudi Coast of Gulf of Mannar, Southeast Coast of India (08° 53.6'N 78° 16'E and 08° 53.8'N 78° 32'E) (310 M), International Journal of Marine Science, 5(44): 1-3

**Abstract** A new record of sea snail off Thoothukudi coast of Gulf of Mannar, southeast coast of India and reported. *Cochlespira travancorica travancorica* (E. A. Smith, 1896) (Family: Turridae) were newly recorded from Thoothukudi coast of Gulf of Mannar, Southeast coast of India. Only one specimen were reported in depth of 310 mts as an incidental by-catch in the fisheries. They are found in tropical waters from about 08° 53.6'N 78° and 08° 53.8'N 78° 32'E/310 mts from Thoothukudi fishing harbour, southeast coast of India.

**Keywords** Turridae; *Cochlespira travancorica travancorica*; First Record; Thoothukudi - coast of Gulf of Mannar; new record

### 1 Introduction

Turridae Swainson, 1840 is one of the most significant families of marine gastropods in number of species, with over 670 genera (Bouchet, 1990). According to the traditional classification of gastropods, Turridae constitutes the superfamily Conoidea Rafinesque, 1815, together with the families Conidae and Terebridae. The family Turridae was first divided into three subfamilies (Turritinae, Clavatulinae and Defranciinae) by H. and A. Adams (1858). Since then this subdi-vision has been revised and discussed repeatedly, and many other subfamilies have been proposed. Rosen-berg (2005) mentioned 12 subfamilies within Turridae, Powell (1966) recognized only 9, and Bouchet and Warén (1980) disregarded this separation altogether. Although the classification of the Turridae at the sub-family level is still very much debated and some of the taxa may be artificial, we agree with Kilburn (1983) that “in a family as large and complex as Turridae, virtually any practical subdivision is better than none”.

Taxonomical studies on the sea snails of India are dealt with by Alcock and Anderson (1898), Powell, (1969) and Schepman, (1913). While examining the

by-catches landed by larger trawlers, which operated in deeper waters off Thoothukudi, one species of sea snail were noticed. On closer examination, they were identified as *Cochlespira travancorica travancorica* (E. A. Smith, 1896) were new to Thoothukudi coast of Gulf of Mannar. The present specimen *Cochlespira travancorica travancorica* is recorded from Gulf of Mannar for the first time, though it has been reported earlier from southwest coast of India by Powell (1969).

Superfamily: Cochlespirinae Powell, 1942

Family: Cochlespiridae (Powell, 1942)

Genus: *Cochlespira* Conrad, 1865

Species: *Cochlespira travancorica travancorica* (E. A. Smith, 1896)

Type species: *Pleurotoma cristata* Conrad, 1847 (monotypy)

*Cochlespira travancorica* (E. A. Smith, 1896) Fig. 25  
*Pleurotoma (Ancistrostyrinx) travancorica* E. A. Smith, 1896, p.368; 1906, p. 163;

Alcock & Anderson, 1898, pi. 7, figs 1,1a.

*Pleurotoma (Ancistrostyrinx) travancorica* var. *granulate* E. A. Smith, 1904, p. 459.

*Ancistrosyrinx travancorica* var. *granulata* (E. A. Smith, 1904) - Schepman, 1913, p. 420.

*Cochlespira travancorica travancorica* (E. A. Smith) & *C. travancorica travancorica* forma *granulata* (E. A. Smith) - Powell, 1969, p. 396-397, pi. 307.

1 Material: 1 shell measuring 3.9 cm total length (Figure 1).

2 Locality: 08° 53.6'N 78° 16'E and 08° 53.8'N 78° 32'E off Thoothukudi coast of Gulf of Mannar, Southeast coast of India; depth at trawling 310 m.

3 Colour: Dull White under a thin greyish periostracum.

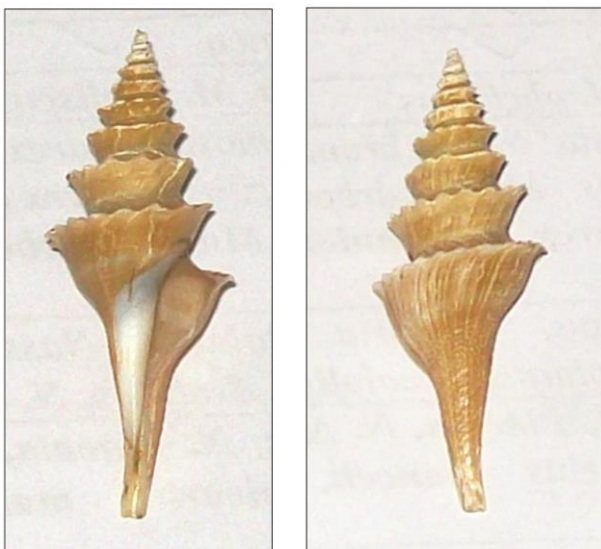


Figure 1 *Cochlespira travancorica travancorica*

#### 4 Description

The shell is small, light-brown, with glossy surface, rather solid, fusiform, consisting of 6.5 preserved whorls. The whorls are angled below the periphery and concave upper and below the angulation; the position of the angulation on the spire whorls shifts upward towards the body whorl. The sutures are straight and very shallowly impressed. The sculpture consists only of a strong median keel with rounded, pointed tubercles (16 on the body and penultimate whorls) and a low ridge on the upper part of the shell base. The ridge is hard to trace above the suture on last spire whorls. The growth lines are very thin. The shell base is angled in its upper part, where the ridge is situated, and slightly and evenly concave below the angulation; it smoothly passes into the canal. The aperture is narrow, with the inner lip weakly and evenly curved.

#### 5 Distribution

This species has been recorded earlier from off Travancore sea, South-West of India, 460 fathoms (Powell, 1969). The present record from Thoothukudi coast in Gulf of Mannar extends its distribution to the southeast coast of India. This characteristic species has a wide distribution in the Indo-West Pacific region extending from the southeast coast of India to East Africa, Indonesia, and Zanzibar region.

#### 6 Remarks

The description given by described by Powell (1969) as *Cochlespira travancorica travancorica* forma *granulata*, agree with the present specimen. *C. t. travancoria* which are distinguished by shell narrowly fusiform, of moderate size 1 5/8 inches in height, with a tall pagodaform spire and long straight anterior whorl height, are sharply angulated and coronated by a thin lamella which is produced into somewhat irregular upward concave but from the carina to the lower suture the outlines are straight but inclined inward below. The body-whorl tapers gradually to a long straight anterior canal. The shell surface is smooth except for weak spiral cords over the lower base and rostrum. The sinus is broad and rather deep, extending from the suture almost to the peripheral carina. (Figure 1). The present specimen of *Cochlespira travancoria travancoria* (E. A. Smith, 1896) were recorded from the Thoothukudi coast of Gulf of Mannar, Southeast coast of India.

#### Author's Contribution

Vaitheeswaran Thiruvengadam have been collected and identification of specimen and took photograph of specimen and reference collection. V. K. Venkataramani, Former Dean and Principal Investigator of the Scheme, FC&RI, and N. Jayakumar, Co-Principal Investigator of the scheme, DFB&FB., TNFU, conceived of the study, help and support and encouragements.

#### References

- Alcock A., and Anderson A.R.S., 1898, Natural history notes from H.M. Royal Indian Marine Survey Steamer "Investigator", commander C.F. Oldham, R.N., commanding. - Series II, No. 14. An account of a recent collection of deepsea Crustacea from the Bay of Bengal and Laccadive Sea. *J. Asiatic Soc. Bengal* (2) (Natural History). 63: 165
- Adams H., and Adams A., 1858, *The genera of recent Mollusca. Vol. I.* Woodfall and Kinder, London.
- Bouchet P., and Warén A., 1980, Revision of the Northeast Atlantic bathyal and abyssal Turridae (Mollusca, Gastropoda). *J. Molluscan Stud.*, Suppl. 8: 1-119  
[http://dx.doi.org/10.1093/mollus/46.Supplement\\_8.1](http://dx.doi.org/10.1093/mollus/46.Supplement_8.1)
- Bouchet, P., 1990, Turrid genera and mode of development: the use and abuse of protoconch morphology. *Malacologia*, 32(1): 69-77

- Kilburn, R.N., 1983, Turridae (Mollusca: Gastropoda) of southern Africa and Mozambique. Part 1. Subfamily Turrinae. *Ann. Natal Mus.*, 25(2): 549-585
- Powell, A. W. B., 1966, The molluscan families Speightiidae and Turridae. An evaluation of the valid taxa, both recent and fossil, with lists of characteristic species. *Bull. Auckl. Inst. Mus.*, 5: 1-184
- Powell, A.W.B., 1969, The family Turridae in the Indo-Pacific. Part 2. The subfamily Turriculinae. *Indo-Pacific Mollusca*, 2(10): 207-415
- Rosenberg, G., 2005, Malacolog 4.1.0: A Database of Western Atlantic Marine Mollusca. [WWW database (version 4.1.0)] URL <http://www-malacolog.org/>.
- Schepman, M.M., 1913, The Prosobranchia of the Siboga-Expedition. Part 5, Toxoglossa. *Siboga. Exped.* 32(64): 365-452, pls., 25-30, 1 text fig