

NEW RECORD OF *CLITHON FABA* (SOWERBY, 1836) (MOLLUSCA: GASTROPODA: NERITIDAE) FROM INDIA

Neritidae Rafinesque, 1815, under the order Cycloneritida, is a highly diverse family of gastropods represented by approximately 14 genera and 200 species¹. Neritids are often polymorphic and show highly variable colouration². They are generally herbivores and found in marine, brackish and freshwater habitats. These snails have cosmopolitan distribution with the majority of taxa occurring in the Indo-Pacific region. In the Indian subcontinent, however, approximately 44 species are reported from the marine habitat and

freshwater streams³. Members of this family are characterized by thick, globose shells with low spires⁴. The genus *Clithon* Montfort, 1810 (Family: Neritidae) includes small shelled species. They resemble some *Neritina* spp., however, a columellar surface with a large tooth and smaller teeth, and a horn-bordered smooth operculum are genus-specific characters⁵. Five species of this genus are reported from both mainland India and Andaman and Nicobar (A&N) Islands, three of which were found in freshwater streams

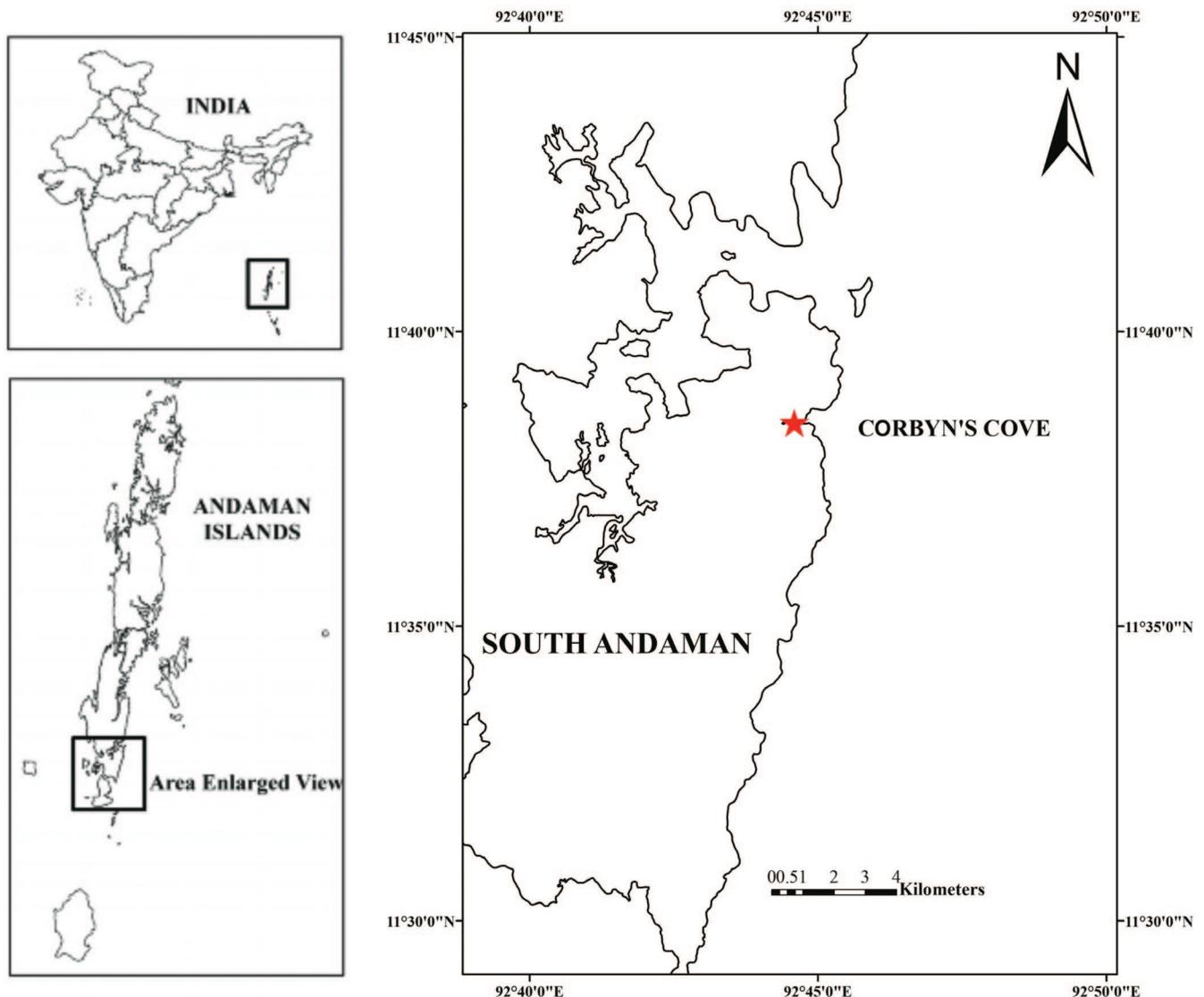


Figure 1 Study Area Map: Occurrence of *Clithon faba* in Corbyn's Cove, south Andaman Island (shown in red star)

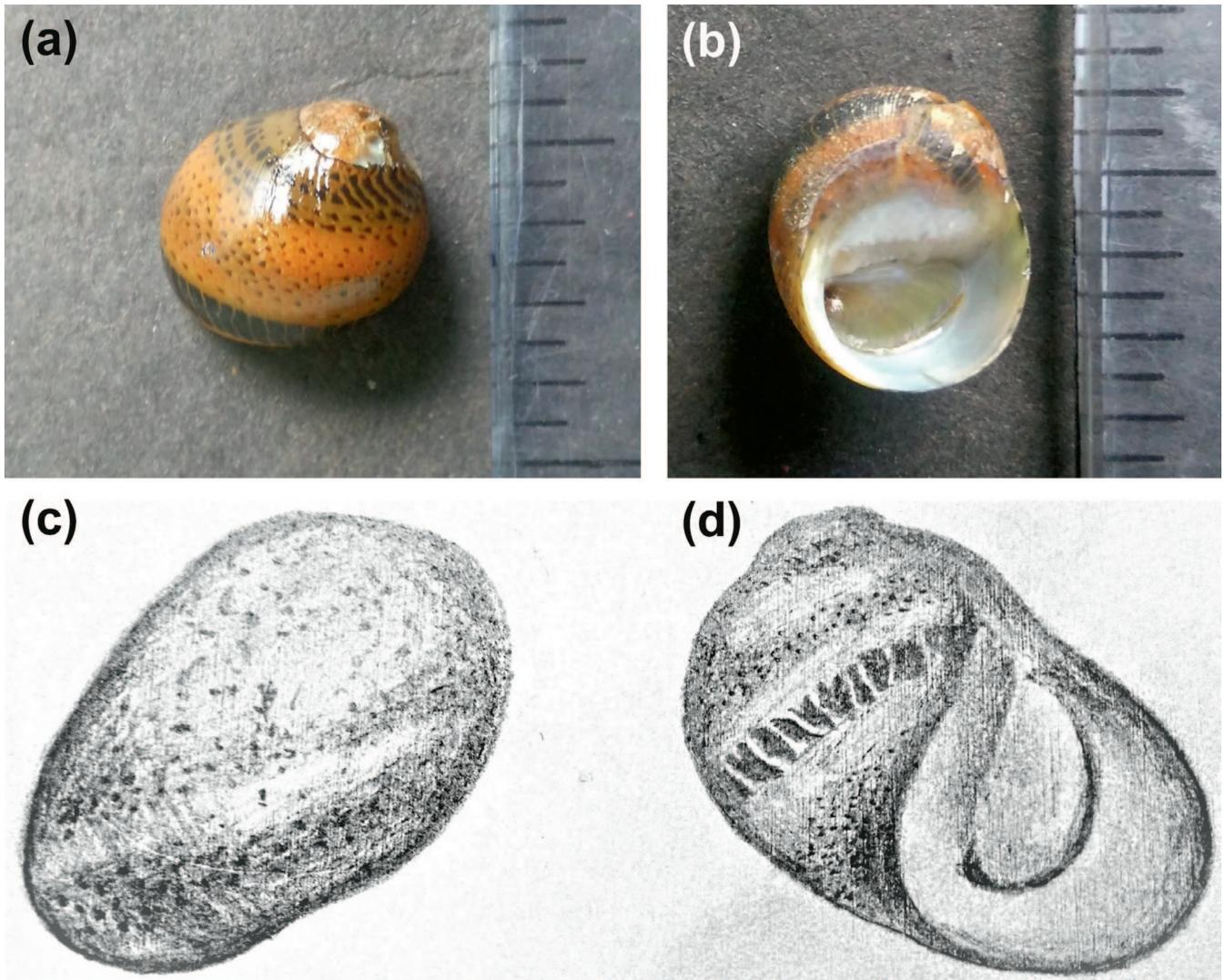


Figure 2 Pictures of *Clithon faba*. (a) and (c) are dorsal views whereas (b) and (d) represent their respective aperture view. (c) and (d) is the sketch of *C. faba* (Sowerby, 1836).

(*Clithon reticulare*, *C. bicolor* and *C. corona*)⁶, and the other two, *C. oualaniense* and *C. peguense* from brackish water.

Owing to the island ecosystem, the main focus is given to marine taxa and therefore a paucity of studies on brackish and freshwater gastropods of the family Neritidae in A&N islands. But, despite the abundance of fresh and brackish water ecosystems in mainland India, there has not been a single report on this particular species, which highlights that this family is understudied in the Indian subcontinent. Recently, a few live specimens of *Clithon faba* have been collected for the first time from the mangrove creek of south Andaman island. The distribution of this species was hitherto restricted to Hong Kong, Indonesia, Japan (Nansei-shoto), Singapore,

Taiwan province of China, and Thailand (www.iucnredlist.org accessed February, 2017). We report here a new distribution record of brackish water Neritid from the Andaman Islands which is also new to Indian waters — *Clithon faba* (Sowerby, 1836).

Clithon faba (Sowerby, 1836)

Specimens of this species were collected in the month of January 2017, during low tide from a mangrove creek in south Andaman. They were handpicked and collected in 50 ml vials. Live specimens were identified in the laboratory according to the taxonomic keys in Tan & Clements, 2008⁵. They were then preserved in 5% formalin for three days and later transferred to 70% ethanol for long time preservation. Specimens were

deposited at the Zoological Survey of India, Andaman Nicobar Regional Centre, Port Blair.

Material examined live specimens (four numbers), 11 January 2017, on small stones on a muddy shore bordered by mangroves, similar to habitats described in earlier reports⁵ Corbyn's Cove, Andaman, India (11°38'27.0" N, 092°44'34.3" E). One specimen was preserved at National Repository (Zoological Survey of India, Andaman & Nicobar Regional Centre) with accession number ZSI/ANRC-16782 dated 06 February 2017 for reference. ZSI/ANRC Specimen Total height: 1.49cm; width 1.19cm. Aperture: length: 0.58cm; width 0.88cm. Operculum: length 0.38cm. Collected on 11 January 2017, from Corbyn's Cove, south Andaman (Fig. 1).

Clithon faba has a smooth shell with horizontal lines, thin yellow to green with bands of black vertical stripes, alternating with yellowish bands bearing black spots (Fig. 2 a–b). Body whorl round. Spire low and not prominent. Operculum smooth, green to dark grey, with red horn border. Periostracum shiny, smooth, pale brown to grey. Single large tooth and 5–6 smaller teeth on central part of columellar edge, smooth above and below. Outer lip thin with sharp edge (Fig. 2 a–b).

Three distinct colour patterns were seen in the four individuals collected from Corbyn's Cove mangrove creek. *Clithon faba* has never been found with spines⁷ and this corresponds to observed Indian specimens. Our record adds one more species to the overall neritid list in the country and thereby extends the geographical distribution of this species to the Indian subcontinent, particularly from the Andaman Islands.

The authors are grateful to Pondicherry University, Port Blair Campus for providing

the necessary facilities. The authors are also thankful to Mr. Gulam Rasool and Mr. Vabesh Tripura, Department of Disaster Management, Pondicherry University for plotting the study area map for the sketches.

- ¹ EICHHORST T 2016 *Neritidae of the World, Vol. 1, Conch Books*, Hackenheim, Germany, 694 pp.
- ² PANDEY V, GANESH T & SATYAM K 2019 A new record of *Nerita nigrita* Röding, 1798 (Mollusca: Gastropoda: Neritidae) from India *Current Science* **116**(05): 828–831.
- ³ SUBBA RAO NV 2003 *Indian Sea Shells, Polyplacophora and Gastropoda* Records of zoological survey of India, Occasional Paper no. 192, pp 104–113.
- ⁴ BRUSCA RC & BRUSCA GJ 2003 *Invertebrates Second Edition*, Sinauer Associates, Inc., Publishers, pp 703–707.
- ⁵ TAN SK & CLEMENTS R 2008 Taxonomy and Distribution of the Neritidae (Mollusca: Gastropoda) in Singapore *Zoological Studies* **47**(4): 481–494.
- ⁶ SUBBA RAO NV 1989 *Handbook: Freshwater Molluscs of India*, Zool. Surv. India, pp. 33–40.
- ⁷ VAN BENTHEM JUTTING WSS 1956 Systematic studies on the non marine Mollusca of the Indo-Australian Archipelago. V. Critical revision of the Javanese freshwater gastropods *Treubia* **23**: 259–477.

Ajay Gaikwad¹

Vikas Pandey^{1,2}

Rukmini Shekar^{1,3}

Bikramaditya Sahu¹

Ganesh Thiruchitrabalam^{1*}

¹Department of Ocean Studies and Marine Biology, Pondicherry University, Brookshabad Campus, Port Blair – 744112, Andaman and Nicobar Islands, India.

*ganesh.tomb@pondiuni.edu.in

²Ocean Science and Technology for Islands, National Institute of Ocean Technology, Chennai 600100, India.

³National Centre for Coastal Research, Ministry of Earth Sciences, Chennai 600100, India.

