



## THREE NEW RECORDS OF BIVALVIA *NUCULA CONSENTANEA* MELVILL & STANDEN 1907, *CONGETIA CHESNEYI* (OLIVER & CHESNEYI, 1994) AND *PERIGLYPTA ALBOCANCELLATA* (HUBER, 2010) FROM THE WEST COAST OF INDIA

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### INTRODUCTION

Among the various classes, Bivalvia is considered as the most primitive in the phylum Mollusca and is an important element of benthic epifauna. Bivalvia restricted their distribution to aquatic habitats both in the freshwater and marine environment. A total of 646 species of marine bivalves have been reported from India under 171 genera, 11 order and 69 families (Ramakrishna and Dey, 2010). In this paper, we have described three new records of Bivalves for the first time from West Coast of India.

During the identification of unnamed collections of the National Zoological Collections of ZSI HQ, the authors come across with one no. of example of Bivalves (one valve) collected by ZSI survey team from Kathiar, Gujarat. There was no collection details tagged to the specimen. However, the specimen after thorough examination was confirmed to be *Nucula consentanea*. There are major distinctive characteristics in the shell belonging to the genus under the family Nuculidae. The shell is small, sub-ovate, trigonal or elongate, teeth taxodont, typically V shaped in section, long, sharp and pointed and with a persistent greenish periostracum. Bivalves under the genus *Nucula* inhabit offshore mud and sand sediments to considerable depths (Bosch *et al.*, 1995). A total of nine species under this family have been reported from India (Ramakrishna and Dey, 2010) and

*Nucula consentanea* is considered to be a newly added species in the list Bivalves recorded from India.

Similarly, 11 no. of examples of Bivalves from the unnamed collections of the Gujarat survey was attempted for identification and after thorough investigation into the taxonomic characters of the shells, was confirmed to be *Congetia chesneyi* under the family Neotidae. Earlier only one species was reported under this family from India. The *Congetia chesneyi* (Oliver and Chesneyi, 1994) is therefore considered new report from India totaling two species under the family Neotidae.

The four valves from the unnamed collections of the Gujarat survey and subsequently five examples of Bivalves collected by the last author from Piroton Island of Gulf of Kachchh in Gujarat and two examples from Karnataka after identification of all taxonomic characters was confirmed as *Periglypta clathrata* under the family Veneridae. The diagnostic characters in the shell were distinct i.e. having oval to triangular shape, tumid and with solid and with well developed escutcheon. In India, only four species of Bivalves are reported under the Genus *Periglypta* (Ramakrishna and Dey, 2010). The present new record of Bivalve *Periglypta albocancellata* adding to the distributional list under the genus *Periglypta* reported from India.

Class BIVALVIA  
 Subclass PROTOBRANCHIA  
 Order NUCULOIDA  
 Superfamily NUCULOIDEA  
 Family NUCULIDAE  
 Genus *Nucula* Lamarck

1. *Nucula consentanea* Melvill & Standen, 1907

(Fig. No. 1)

1907. *Nucula consentanea* Melvill & Standen, *Trans. R. Soc. Edinburg*, 46: 2.

1995. *Nucula consentanea*: Bosch *et al.*, *Seashells of Eastern Arabia*, P. 203, fig. 897.

2010. *Nucula consentanea*: Huber *Compendium of Bivalves*, Hackenheim; Conch Books, pp. 901.

*Material Examined*: 1 valve, Kathiawar, Gujarat Coast, Coll. ?, Date: ?

*Measurements* (in mm):

Length	Width
2.00	1.85

*Distribution* : India: Gujarat coast; Elsewhere: Gulf of Oman.

*Remarks* : Shell is very small, solid, ovate – trigonal, beak submedial, hinge with a series of a sharp teeth, ligament internal; escutcheon slightly domed, concentric ridges and radial lines present on dorsal surface; ventral margin crenulated.

Subclass PTERIOMORPHA  
 Superfamily ARCOIDEA  
 Family NOETIIDAE  
 Genus : *Congetia* Huber, 2010

2. *Congetia chesneyi* (Oliver & Chesney, 1994)

(Fig. No. 2)

1994. *Noetiella chesneyi* Oliver and Chesney, *Taxonomy of Arabian bivalves. Part 1p.* 210.

1995. *Noetiella chesneyi*: Bosch *et al.*, *Sea shell of Eastern Arabia*, p. 212, fig. 934.

2010. *Congetia chesneyi*: Huber, *Compendium of Bivalves*, Hackenheim; Conch Books, pp. 901.

*Material Examined*: i) 11 examples, Adatara beach near Okha, Coll. K.V. Surya Rao., 10.viii.1972.

*Measurements* : (in mm):

	Length	Width
Largest	11.80	8.15
Smallest	7.10	5.25

*Distribution* : India: Gujarat coast; Elsewhere: Arabian Sea: North West Gulf.

*Remarks* : Shell is compressed. Beaks slightly towards posterior end. Taxodont teeth arranged in subcircular fashion. Anterior area more expanded than posterior; anterior margin rounded, posterior subcute. Ligament in front of beaks. Sculptured with many narrow riblets. White in colour.

Superfamily VENEROIDEA  
 Family VENERIDAE  
 Subfamily VENERINAE  
 Genus *Periglypta* Deshayes

3. *Periglypta albocancellata* (Huber, 2010)

(Fig. No. 3)

1853. *Venus clathrata*: Deshayes, *Proc. Zool. Soc, London*, 1853: 2.

1972. *Periglypta clathrata*: Cernohorsky, *Marine shells of the Pacific*, 2: 233, pl.5, fig. 5.

1986. *Periglypta clathrata* : Abbott and Dance, *Compendium of Sea Shell*, p. 353, fig. 11.

2010. *Antigona albocancellata* Huber *Compendium of Bivalves*, pp. 901.

*Material Examined*:

i) 4 valves, Adatara beach near Okha, Gujarat, Coll. K.V. Surya Rao, 10. viii. 1972.

ii) 5 exs., Piroton Island, Gulf of Kachchh, Gujarat, Coll. A. K. Mukherjee, 23.iv.2005.

iii) 2 exs., Gangolli fishing harbour, Karnataka, Coll. A.K. Mukherjee 14.vi.2006.

*Measurements* (in mm):

Length	Width
55.85	46.85
47.85	37.40

*Distribution* : India: Gujarat, Karnataka; Elsewhere: North West Gulf, South Eastern Gulf, Gulf of Oman, Southern Oman.

*Remarks* : Shell cordately ovate, rather oblique, thick, ventricose, cream coloured, faintly blotched and rayed with reddish –fawn, concentrically densely ridged, ridges irregular and thin near the umbo, then callous and flattened, latticed throughout with radiating



**Fig. : 1.** *Nucula consentanea* Melvill & Standen; **Fig. 2.** *Congetia chesneyi* (Oliver & Chesney); **Fig. 3.** *Periglypta albocancellata* (Huber).

linear grooves, ridges on the posterior area, serrately laminated. Commonly known as Venus Clams.

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#### REFERENCES

- Donald T Bosch, S Peter Dance, Robert G Moolenbeek , P Graham Oliver , 1995. *Sea shell of Eastern Arabia*.  
 Ramakrishna and Dey, A. 2010. *Annotated Checklist of Indian Marine Molluscs (Cephalopoda, Bivalvia and Scaphopoda): Part-I. Rec. zool. Soc. India, Occ. Paper No., 320: 1-357.*