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Annotated Checklist of **Indian Marine Molluscs**

(Cephalopoda, Bivalvia and Scaphopoda) Part-1

RAMAKRISHNA and A. DEY



ZOOLOGICAL SURVEY OF INDIA

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**RECORDS OF THE
ZOOLOGICAL SURVEY OF INDIA**

**Annotated Checklist of Indian Marine Molluscs
(Cephalopoda, Bivalvia and Scaphopoda)
(Part-1)**

RAMAKRISHNA and A. DEY

Zoological Survey of India, M-Block, New Alipore, Kolkata 700 053

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**Zoological Survey of India
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PREFACE

Molluscs are the largest group of animal kingdom after insect, highly adaptive and occupy all possible habitats except aerial. Originally marine, they have spread into freshwater and from there to the land, where they now almost equal the marine forms in species number. They are most definitely characterised group of animal kingdom, having at least two features, mantle and radula not found elsewhere. Marine molluscs are most part benthonic, but many have pelagic also. Primarily inhabitants of the intertidal and littoral zones of the ocean, molluscs descend to great depths. Molluscs constitute an important component of marine biodiversity of India on the East and West coasts and the islands of Lakshadweep and Andaman and Nicobar Islands. Five major classes namely Polyplacophora, Gastropoda, Bivalvia, Scaphopoda and Cephalopoda are represented in India. Against a total of about 586 families in the world, 279 families occurs in Indian region, which includes 3600 species in all of which 2300 are marine, 1129 are land and 199 are freshwater.

As there was no proper estimation of the number of Indian species, the authors initiated the assessment of molluscan diversity in India, so that an account of molluscan diversity from India can be known. Form the perusal of the assessment carried out on marine molluscs, it is not possible to prepare the checklist in a single volume. It was therefore decided to prepare this checklist in two volumes. This volume will include the three classes viz. Cephalopoda, Bivalvia and Scaphopoda, whereas the second volume will be the Polyplacophora and Gastropoda.

The present catalogue includes all the known species of marine molluscs from India of the Classes Cephalopoda, Bivalvia and Scaphopoda; systematically placing them under appropriate genera and family. Due to lack of recent revisionary work on taxonomy of many of these groups, the placement of many species under different genera in some of the families is rather provisional. This work was mainly based on the literature records of the Indian marine molluscs, specimens present in the National Zoological Collections of Zoological Survey of India and the materials received in Mollusca section for identification from different part of the country. Classification in this work followed the classification of Vaught (1989). All the genera are placed as per the arrangement made by the author *i.e.* the type genus first and then all other genera by alphabetical order. The synonyms, the first reference followed by almost all the Indian references as much as possible along with the distribution and remarks of each species.

It is earnestly believed that this annotated check list will stimulate interest in understanding the diversity of Indian marine molluscs, and hope that the future workers will be benefited in enriching the knowledge of marine molluscan diversity.

Ramakrishna
A. Dey

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INTRODUCTION

Molluscs are soft bodies animals constitute a large and most important group of invertebrates which occupies all the possible habitats except aerial. Originally marine, spread into freshwater and from there on to the land. They are the most definite characterised group in the animal kingdom, having at least two features, mantle and radula not found elsewhere. Most part of the life is benthonic, may have pelagic also. Primarily inhabitant of the intertidal and littoral zones of the ocean molluscs, descend into the great depth. They are found 10190 meter deep in the ocean to 5000 meter of elevation. It is a highly diversified group, differs in size, shape, number as well as its habit and habitat. Winckworth (1949) estimates 31643 (marine), 8765 (freshwater) and 24503 land forms making a total of 64,911 (approx. 65,000). Abbott (1954) estimates a total of 100,000 of extant species comprising 80,000 snails and 10000 bivalves and rest 10,000 for the other groups, monoplacophors, polyplacophors cephalopods and scaphopods. Subba Rao (1998) made a conservative estimate 66535 species of which the Indian share is 5070 species (3400 marine, 183 freshwater and 1487 land).

The oldest molluscs are monoplacophorans and helcionellacean gastropods from Lower Cambrian deposits; dates back to more than 500 million years. The gastropods genera are *Helcionella*, *Coreospira*; and monoplacophorans genera are *Scenella*, *Cambridium* and *Stenothecoides*. The upper Cambrian strata recorded three genera of monoplacophorans (*Palaeacmaea*, *Proplina*, *Hypseloconus*). This led some Malacologists to reconstruction of molluscan evolution and phylogeny and to conceptualise artificial and ancestral molluscan model or archetype. The spiral cleavage and the trochophore larvae resemble the molluscan affinity towards the annelids. Discovery of *Neopilina* (living monoplacophora) supports the relationship of mollusca and annelida. Stasek (1972) is of opinion that annelida and molluscs arose from free living flatworm nemertine stock. The molluscs show pseudometamerism in primitive forms but abandoned this tendency to metamerism as in annelids. These two groups derived from a common ancestor, prior to the pronouncement of either molluscan or annelidian characters. The theory proposed by Lang (1896) and developed by Stasek (1972) unfolds the molluscan framework in four stages; ancestral form, transitional tubellariform stage, transitional molluscan stage and advanced molluscan stage.

Molluscs constitute an important component of marine biodiversity of India on the east coast and west coast and the islands of Lakshadweep and Andaman and Nicobar Islands. In India the marine molluscs are recorded from the diverse habitats. They occur in different habitats such as mangroves, coral reef, rocky coasts, sandy beaches, sea grass beds and also at greater depths in the sea. They are recorded from 3000 meters depth in the sea of Andaman and Nicobar Islands. They are more diverse

and abundant in the rocky intertidal zone along the coast and in the coral reef areas of Gulf of Mannar, Lakshadweep, Gulf of Kutch and Andaman and Nicobar Islands. Sandy stones, inter tidal flats, mangrove areas also have very diversified marine molluscs.

Global size records of shelled moluscs are available in Wagner and Abbott's Standards Catalogue of Shells. As far as the size of Indian molluscs are concerned there is no authentic record. The size of Indian molluscs given mainly based on the collection present in National Zoological Collections of the Zoological Survey of India. Excluding the meiofauna, smallest specimens is from the marine genus *Cyclostrema*, measures 0.75 mm and the largest gastropod is *Charonia tritonis*, measuring 350 mm, while the largest size recorded of the same species is 480.60 mm. Among the bivalves the smallest size found in the freshwater genus *Pisidium* in which *Pisidium annandalei* measures 3 mm and the largest bivalve is *Tridacna maxima* measuring 370 mm, while the largest clamshell are *Tridacna gigas* measuring 1368.70 mm and weighing of 230 kg collected from Sumatra. The largest molluscs is the giant squid (*Architeuthis*), believed to be largest animal among the invertebrates grows to a length upto 24 meters.

Not only the size, molluscs exhibit of significant diversity in shell shape, sculpture and colouration. The marine molluscs display flamboyance in colour and form within and between the species in comparison to the land and freshwater molluscs. Diversity is also evident in molluscs in their feeding habits. They are herbivores, carnivores, scavengers and deposit feeders, suspension feeders, commensals and parasites. The only carnivores land snail in India is *Gullela (Huttonella) bicolor* and the freshwater molluscs are either herbivores or suspension feeders. It is the marine molluscs which occupy diverse habits and exhibit diverse feeding habits.

The present work includes three classes of molluscs, namely i) Cephalopoda; ii) Bivalvia and iii) Scaphopoda. Among the three classes the classes Bivalvia having the representatives from freshwater and marine, but the other two classes are exclusively marine.

The first collection of Indian molluscan shells probably made by J. Wood mason in 1872 and later during the Investigator-I (1881-1905) and Investigator-II (1908-1911 & 1921-1926) dredged several interesting molluscs were studied by Smith. There after many workers worked on the molluscs, mainly region wise and many publications were brought out, either in the form of list or descriptive narration and it is not practically possible to give a comprehensive account. However an account of the work includes the classes Cephalopoda, Bivalvia and Scaphopoda are mentioned here. The workers contributed to the taxonomy in these groups in pre independence era are mainly Smith (1878, 1906), Melvill (1893), Melvill and Sykes (1897, 1898), Comber (1906), Eliot (1906), Preston (1908, 1910, 1916), Annandale and Kemp (1916), Hornell (1916), Massy (1916), Annandale (1924), Crichton (1940).

After independence, many systematic workers worked on the Indian Cephalopoda, Bivalvia and Scaphopoda mainly by Subrahmanyam *et al.* (1949), Satyamurti (1952), Nair (1954, 1955, 1962, 1965, 1966), Patil (1954), Daniel and Srinivasan (1955),

Nagabhushanam (1955, 1960, 1962), Ganapati and Rao (1959), Gideon *et al.* (1961), Rajagopal (1964), Saraswathy (1964), Kundu (1965), Roonwal (1966), Santhakumaran (1966, 1971, 1973, 1975, 1976, 1983); Cheriyan (1968), Silas (1968), Subba Rao (1968), Nagabhushanam and Rao (1972), Satyanarayana Rao and Sundaram (1972), Saraswathy and Nair (1974), Starmuehlner (1974), Durve (1975), Das and DevRoy (1980), Kuriakose (1980), Das *et al.* (1981), Subba Rao *et al.* (1983, 1987, 1990, 1992, 1995), Kasinathan and Shanmugam (1985), Subba Rao and Dey (1986, 2000), Tikader *et al.* (1986). Jothinayagam (1987), Rambabu *et al.* (1987), Satyanarayana Rao (1987), Purkait and Manna (1988), Apte (1998), Subba Rao and Surya Rao (1991), Subba Rao and Mookherjee (2000), Dey (2006), Lutaenko (2006), Mahapatra (2008). Most of these works were in the isolated forms, either the list of species, or description of new species or description of these fauna from a particular region.

There are some consolidated work on the Indian marine fauna, but most of them dealt on several group or from region or partly dealt species. These includes work from Subba Rao and Dey (1984, 1986) on the families Mitridae and Donacidae. Tikader *et al.* (1986) lists species of molluscs in their book *Sea Shore Animals of Andaman and Nicobar Islands*; Jothinayagam (1987) on the Cephalopoda of the Madras coast; Pinn (1990) dealt the sea shells of Puducherry; Subba Rao and Surya Rao (1993) gave an account of the family Muricidae; Nair and Salim (1994) Marine timber destroying organisms of the Andaman-Nicobar Islands and Lakshadweep included the borer bivalves; Apte (1998) on *Handbook of Indian Shells* included 265 species of Gastropods and 48 species of bivalves, but many of these identification having confusion and doubtful; Subba Rao and Dey (2000) in their *Catalogue of Marine Molluscs of Andaman and Nicobar Islands*, include more than 1282 marine species; Ramakrishna and Dey (2003) in the *Manual on identification of schedule molluscs* included 3 species of *Tridacna*; Subba Rao (2003) made the systematic account of 530 species of Polyplacophora and Gastropoda only; Dey (2006) *handbook on Mangrove associated Molluscs of Sundarbans* gave the account of 56 species of marine molluscs associated with mangroves included 25 species of bivalves and also an account of the Indian Tellinids.

The present book on annotated bibliography of marine molluscs of the classes Cephalopoda, Bivalvia and Scaphopoda catalogues all the species known from India, systematically placing them under appropriate genera and families, as far as possible. Since undeniably lack of more revisionary works on the taxonomy of Indian cephalopods, bivalves and scaphopods are needed, the placement of species under different genera in major families is rather provisional. This work mainly based on the i) all the available literatures of Indian cephalopoda, bivalvia and scaphopoda; ii) the collection present in the National Zoological Collection of Zoological Survey of India iii) the materials received in Mollusca Section of Zoological Survey of India for identification from different parts of the country. Species described by many workers are synonymies, but in few cases it was not possible to determine the exact status, as most of these workers published only the list. The distribution of the each species given as per the published literatures and the collection present in the National Zoological Collection of Zoological Survey of India.

The classification followed in this work is that of Vaught (1989). All the genera placed as per the arrangement made by the author, i.e. the type genus first and then all genera in alphabetical manner. The species are arranged in alphabetical order. Synonyms the 1st. reference followed by almost all Indian references as much as possible along with the distribution of the each species.

ABBREVIATIONS USED

NZC = National Zoological Collection

ZSI = Zoological Survey of India

CEPHALOPODA

Cephalopods are agile, bilaterally symmetrical, predacious carnivores having structural complexity and metabolic efficiency among unsegmented invertebrates. Commonly squids, cuttlefishes, octopuses, argonauts and nautilus are collectively known as cephalopodas (head-footed ones). This class represented by 650 species of marine molluscs belongs to octopuses, squids, cuttlefishes, argonauts and Nautilus, the only living animal with an external shell. This class also includes more than 10,000 fossil species (nautiloids, bactritids, ammonoides and coleoids). Cephalopods recorded from strata of late Cambrian age, and the fossil records indicate that they were more abundant in Paleozoic and Mesozoic era. Except for such recent flourishing coleoid orders such as Teuthidida, Sepiida and Octopodida, the class has declined both in number and diversity since the Triassic and especially since the Cretaceous. Invertebrates associated with the fossil cephalopods indicate that the class has been exclusively marine in habitat, as is true of all living representatives. Although some of the latter adapted to intermediate and abyssal depths of the oceans, the majority of them are most abundant in shallow sea. The fossil records indicates that this group has always been most abundant in shallow seas on continental shelves.

Cephalopods are the most highly organised molluscs and are the most accomplished swimmers other than fishes. Some are minute, but the class also includes the giant squid (*Architeuthis*) body including the tentacles measures as much as 24 meters in length, the largest among the invertebrates. The shells of some Ordovician nautiloids (e.g. *Cameroceeras*) attained the length of 10 meters and those of immense Cretaceous ammonoides (e.g. *Pachydiscus*) having diameter of 2.5 meters.

The body of the animal is elongate, with a distinct anterior head, bears large eyes and a mouth, surrounded by a crown of mobile prehensile arms, the tentacles. Behind the head is the sac like visceral mass and ventrally are the hyponome and a large brachial cavity. The branchial cavity completely covered by the mantle, which is undivided and also encloses the remainder of the body. The ten arms in coleoids, lateral fins are developed from the mantle and in *Nautilus*, the mantle is prolonged posteriorly as the siphuncular cord. Head built around an internal cartilaginous skeleton, encloses the central nervous system and balance organs, provided attachment for hyponome and many other muscles. Mouth is situated at the anterior

end, surrounded by one or several series of arms or tentacles and equipped by buccal mass that includes a parrot like beak with upper and lower jaws or mandibles.

The cephalic processes surrounds the mouths vary considerable in number, structure and in size in case of living cephalopods. In *Nautilus* the tentacles are cirrate, sheathed and 94 in numbers, arranged on ocular, labial and digital lobes; in few other living cephalopods the number of arms is less. Many living coleoids (e.g. squids) have 10 arms arranged in five pairs of which four pairs are short, stout and bear suckers and the one pair are long, retractile and have suckers only at their expanded distal end. Suckers of many ten armed coeloids have horny or toothed rims; tentacles of some of these develop into large formidable hooks. Octopus, as the name suggests, have eight circumoral arms provided with the suckers; in some the arms are joined by a web and are used for swimming.

Eyes are well developed in the coleoids, but are primitive in *Nautilus* and a pin hole structure on lateral side of the head. In *Nautilus* they are open water filled pits at the end of short stalks, have retina but lack cornea, iris, lens or eyelid. In other cephalopods eyes are complex structure of ectodermal origin capable of forming images and structurally similar to vertebrates. The dorsal surface of head is protected by a warty hood in *Nautilus*, which helps to close the aperture of external shell when the animal retracts into it.

Foot represented by a muscular hyponome in cephalopods through which the water is ejected from the mantle cavity. The tip of the structure is highly mobile, arises as a pair of flaps, the margins overlap in *Nautilus*, but fused in other living cephalopods. In many cases a supplementary flap in the hyponome present which acts as valve and allow to flow the water only in forward direction. The hyponome is the peculiar structure in case of cephalopods, help in rapid swimming of animals when the water forcefully ejected from it either by pulsations of muscular hyponome (as in *Nautilus*) or by powerful contraction of muscular mantle as in all other living cephalopods.

Visceral mass is elongated and developed by the mantle contains thick layers of circular and longitudinal muscles in all living cephalopods, except *Nautilus* where it is weak. Besides secreting a shell, the mantle has a forward projection undivided fold that forms the outer wall of a ventral pallial or branchial cavity, within the posterior portion of which gills are suspended. The gills are paired plum like structures (except Vitreledonellidae), of which one pair occurs in all living cephalopods, but two pairs in the case of *Nautilus*. In *Nautilus* the gills are attached only at the base, whereas in all other living cephalopods they are attached along the afferent sides of the axis. Ctenidial filaments are alternately arranged on either sides of the central axis and their respiratory surface increases by lateral and secondary folds. In some living ten armed coleoids have 40 filaments on either side of the axis, in octopods the number is less and they are further reduced in length and number in abyssal forms. Supporting rods occur on the afferent side of the filaments; these arise in a membrane that extends from the afferent surface of the membrane. The ctenidia of the cephalopods are not ciliated like the other molluscs.

Due to the contraction of longitudinal muscles the mantle cavity enlarges and the sea water drawn into lateral and ventral side between the anterior margin of the mantle and head. Subsequently contraction of circular muscles (and relaxation of longitudinal muscles) reduces the capacity of the cavity and lock the mantle firmly around the head so that the water forced out of hyponome under great pressure. In *Nautilus* the mantle is slightly muscular, hence the water enters and leaves the pallial cavity by way of the hyponome and inhalant and exhalant current are weaker than the coleoids. In *Nautilus* the mantle cavity contains an osphradium the chemoreceptor, situated below the gill and directly in the path of the respiratory current. According to some worker the osphradium act as tactile organ, which estimate the amount of sediment entering the pallial cavity.

The mantle of coleoids (except *Nautilus*) liberally supplied with chromatophores of various types like black, pink, brown, blue, or purple pigments. Contraction of muscle fibres attached to these structures can simulate the colour of their surroundings with astonishing rapidity. This change is highly noticed in *Octopus* that the animal literally blushes when frightened. In some living ten armed cephalopods and one species of *Octopus* found in deep seas the phosphorescent organs are developed in various parts of the mantle, arms and head.

Alimentary canal forms a loop as the mouth and anus situated in anterior position. The buccal cavity contains a toothed radula, two pairs of salivary glands, open in posterior to muscular esophagus which is expanded to form a crop in *Nautilus* and *Octopus*, but not in other cephalopods. Due to the peristaltic contraction of the esophagus the food reaches to muscular stomach, in which a large caecum is attached, which is straight inn squids, but spirally constructed in *Sepia*, *Octopus* and *Nautilus*. Digestion entirely extra cellular as the enzymes are discharged into the caecum by a small pancreases and a large liver. When food reaches the stomach the digestive enzymes secreted in the caecum and the digestion begins. The process completed within the caecum and the absorption of digestive food takes place through the wall of the caecum. Indigestible food matters are returned to the second portion of the stomach from which it passes to the straight or coiled intestine and is ultimately discharged through the anus, which opens into the pallial cavity near the posterior end of the hyponome.

The nephridia are two compact saclike, enclose the renopericardial canal in Squids and Octopuses, but four and without connected with pericardial cavity in the case of *Nautilus*. Waste excreted through the renal pores, which opens into the mantle cavity near the anus.

The ink sac containing ink gland and reservoir open into the rectum of all cephalopods but in *Nautilus* a duct situated behind the anus. The black or brown alkaloid ink rich in melaninni-ferous pigment, when discharged forms a murky cloud that apparently anesthetizes the chemoreceptor of some predators and provides a screen behind which the cephalopods can escape.

The circulatory systems fundamentally the molluscan type with several modifications. The heart enclosed in a pericardium has a median ventricle and as

many auricles as there are gills. Ventricles pump blood to the body through anterior and posterior aorta branches to form several arterial systems. In *Nautilus* the blood trickle back to haemocoel through sinuses, then passes to the vena cava to the gills. In coleoids the system is entirely closed and veins replace the sinuses as in *Nautilus*. In these the blood returns from the head via vena cava, which is bifurcated into the left and right branches. The right branch receive blood from the veins that drain the ink sac, gonads and passes through nephridial sac and muscular branchial heart before entering the ctenidia. The anterior and posterior veins pairs return blood from the mantle and visceral mass. Supplementary branchial hearts provide in coleoids with additional pressure necessary to propel the blood through the gill capillaries, from which it is sucked into the auricles of the heart and passes to the median ventricle.

The nervous system of cephalopods is complex. The typical molluscan ganglion blend to form a circumoesophageal brain. In coeloids the cerebral ganglion is large situated above the esophagus, supply the optic nerves and a pair of buccal nerves extending anteriorly to an upper pair of buccal ganglia and then by way of commissure around the oesophagus to a lower pair of buccal ganglia. The pedal ganglia supply nerves to hyponome, arms. Visceral ganglia gives rise three pairs of posteriorly directed nerves:- i) one pair to various internal organs and gill; ii) one pair joins in gastric ganglion between stomach and caecum and supply the nerves to them; iii) one pair giant motor neurons to mantle and respiratory muscles.

Sexes are separate, oviparous and in some (e.g. *Argonauta*) sexually dimorphic. The gonad is single, sac like in the large genital coelom discharges one or two genital ducts into the mantle cavity. Spermatophores are capped, club shaped, with spring like ejaculatory organ and mass of sperm and cement is formed in the male seminal vesicle. Spermatophores transferred to the mantle cavity or to suboral seminal receptacles of female by a special copulatory structure. In *Nautilus*, four modified arms form a permanent erectile intermittent organ (spadix), but in other living cephalopods the male copulatory organ is seasonal and modified hectocotylus arms. Eggs protected by individual capsules secreted by oviductal glands and aggregate in masses, embedded in a gelatinous material secreted by nidamental glands.

Eggs of cephalopods are large and contain large quantity of yolk than any other molluscs. Nothing is known about the early development in the case of *Nautilus*. In other cephalopods cleavage is meroblastic and results the formation of a germinal cap of cells at the animal pole. The margins overlap the yolk and formed yolk sac, which is absorbed during the process of development. Development is direct and the embryo developed into the adult without any larval stage.

The shell is external and univalve in the case of *Nautilus*, but in other living coleoids the shell is internal and overgrown by the muscular mantle. The typical coleoid shell is considerably reduced and modified in teuthidoids and sepioids. Only the proostracum well developed in teuthidoids, the majority of which lack any trace of phragmocone and guard of their presumably *Phragmoteuthis* like ancestors. In most of sepiids, it is highly modified, dorsal part of the phragmocone remains; its ventral and lateral parts, as well as the siphuncle are represented by small nearly vestiges.

The shell of the sepiid *Spirula* a bathypelagic drifter, normally coiled chambered phragmocone that includes the siphuncle. In octopods the shell is reduced to paired and unpaired cartilaginous stylets.

Most of living cephalopods are denser than the sea water in which they live. *Sepia*, *Spirula* and *Nautilus* have a density near that of sea water due to the presence of gas in the chambers of their rigid shells. *Sepia* can adjust its buoyancy in submarine like fashion by pumping liquid into and out of shell chambers. The salt content of this liquid is lower than the body fluid, hence osmotic pressure aids in counteracting the hydrostatic pressure at least at moderate depth. Bidder noticed the presence of liquid in the chambers of *Nautilus*, which accommodate itself effectively to greatly different depths during the lifetime. Presumably gas pressure can also be increased to prevent liquid from flowing into chambers and to prevent implosion of the shell.

CLASSIFICATION

According to the Vaught (1989) the class cephalopoda divided into two subclasses Nautiloidea and Coleoidea, the former having one order and one family and the *Nautilus* is the only representatives of this group, has an external shell, bilobed hyponome, 94 tentacles, a weak muscular mantle, two pairs of gill and a primitive circulatory system. The latter coleoidea having all the other living cephalopods which have 8 to 10 arms, a highly muscular mantle, a fused hyponome, a circulatory system that included well developed capillaries, supplementary branchial hearts, a pair of ctenidia and an internal shell, reduced as vestigial. The details classification as follows :

Subclass	NAUTILOIDEA	
Order	NAUTILIDA	: 1 family
Subclass	COLEOIDEA	
Order	SEPIIDA	: 5 families
Order	TEUTHIDA	
Suborder	MYOPSIDA	: 2 families
Suborder	OEGOPSIDA	: 24 families
Order	VAMPYROMORPHA	: 1 family
Order	OCTOPODA	
Suborder	CIRRATA	: 2 families
Suborder	INCIRRATA	
Superfamily	BOLITAENOIDEA	: 3 families
Superfamily	OCTOPODOIDEA	: 3 families
Superfamily	ARGONAUTOIDEA	: 4 families

The recent years the study of Cephalopods taxonomy has been reviewed giving impetus with increased attention being paid for the exploitation of cephalopods for human consumption. The important publications paving way for complete understanding of cephalopod taxonomy were Sasaki (1929), Robson (1929, 1932), Adam (1938, 1939, 1942, 1952, 1954, 1959, 1960, 1973), Voss (1956, 1963, 1977), Roper and Young (1968), Young and Roper (1969), Young (1972) and Roper *et. al.* (1969).

A perusal of literature reveals that the proper attention has not been paid to the study of the cephalopod fauna of India and there are only a few reports on this subject. The important Indian works are Goodrich (1896) on the collection of Calcutta Museum; Massy (1916) on collection of Indian Museum; Robson (1926, 1929, 1932) monographs of cephalopods; Winckworth (1936) fauna of South India and Ceylon, with a new species of *Sepia* ; Adam (1939) collection of Indian Museum; Gravely (1941) molluscan fauna of Madras beach; Rao (1954) biology and fisheries of a squid of Palk Bay; Adam and Rees (1955) review the cephalopods families; Silas (1968) catalogue of known species of cephalopods from the Indian Ocean; Ooman (1968, 1976, 1977) studied some cephalopods from the west coast of India; Silas *et al.* (1982) reported the squid and cuttlefish resources of the Indian Sea; Jothinayagam (1987) monograph on cephalopods of the Madras coast. The state fauna series deals some species of cephalopods from the Indian water along with the other molluscs. These were Subba Rao *et al.* (1990, 1992) marine and estuarine fauna of Orissa and West Bengal, Surya Rao and Subba Rao (1991) marine molluscs of Lakshadweep; Subba Rao and Dey (2000) marine molluscs of Andaman and Nicobar Islands; Dey and Ramakrishna (2007) marine molluscs of Andhra Pradesh.

Class CEPHALOPODA

Subclass NAUTILOIDEA

Order NAUTILIDA

Family NAUTILIDAE

Genus *Nautilus* Linnaeus, 1758

1758. *Nautilus* Linnaeus, *Syst. Nat.*, ed. 10 : 709.

1. *Nautilus pompilius* Linnaeus

1758. *Nautilus pompilius* Linnaeus, *Syst. Nat.*, ed., 10 : 709. Type locality : Habitat in India.

1906. *Nautilus pompilius*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 207.

1940. *Nautilus pompilius*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 327.

1968. *Nautilus pompilius*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 293.

1986. *Nautilus pompilius*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

2000. *Nautilus pompilius*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 190.

2003. *Nautilus pompilius*: Ramakrishna and Dey, *Manual on identification of Schedule Molluscs from India*, Zool. Surv. India, p. 22, pl. 6, figs. 17 & 18.

2007. *Nautilus pompilius*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 162. Zool. Surv. India.

2008. *Nautilus pompilius*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 141. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Maharashtra, Tamil Nadu.

Elsewhere : Indian Ocean, Western and Central pacific.

Remarks : Shell large, smooth apart from numerous crowded and curved growth striae; aperture large and open; umbilicus imperforate; white or cream colour ornamented with broad brown or reddish brown streaks, narrow towards umbilical area, absent on back of the aperture; umbilical patch dark brown or black.

Abbott and Dance (1983) reported the living colonies from Philippines and Palau Islands, floating dead shell elsewhere. The ecology and economic importance of this species studied by Dean (1901).

Subclass COLEOIDEA

Order SEPIIDA

Suborder SPIRULINA

Family SPIRULIDAE

Genus *Spirula* Lamarck, 1799

1799. *Spirula* Lamarck, *Syst. Nat.* ed. 10 : 658.

2. *Spirula spirula* (Linnaeus)

1758. *Nautilus spirula* Linnaeus, *Syst. Nat.*, ed. 10 : 710.

1921. *Spirula peronii*: Hornell, *Madras Fish. Mus.*, 14 : 208.

1940. *Spirula spirula*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 327, pl. 2, fig. 2.

1941. *Spirula prototypes*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(2) : 68.

1956. *Spirula spirula*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 177, pl. 26, figs. 1a and 1b.

Distribution : India : Nicobar Islands, Tamil Nadu.

Elsewhere : Indian Ocean, Pacific Ocean, Atlantic Ocean.

Remarks : For details on morphology, anatomy and biology of this species studied by Chun (1914), Kerr (1931) and Bruun (1943).

Suborder SEPIINA

Family SEPIIDAE

Genus *Sepia* Linnaeus, 1758

1758. *Sepia* Linnaeus, *Syst. Nat.* ed. 10 : 658.

3. *Sepia aculeata* Ferussac and d'Orbigny

1848. *Sepia aculeata* Ferrussac and d' Orbigny, *Hist. nat. gen. Part Paris*, p. 287, pl. 5, fig. 25.
1896. *Sepia aculeata*: Goodrich, *Trans. Linn. Soc. London*, (2)7 : 3.
1916. *Polypus aculeatus*: Massy, *Rec. Indian Mus.*, 12(5) : 191.
1939. *Sepia aculeata*: Adam, *Rec. Indian Mus.*, 41 : 64.
1941. *Sepia aculeata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 69.
1956. *Sepia aculeata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 179, pl. 26, fig. 4.
1987. *Sepia aculeata*: Jothinayagam, *Tech. Mon.*, 15 : 14, fig. 5, *Zool. Surv. India*.
1991. *Sepia aculeata*: Rao, Rao and Maitra, *Fauna of Orissa State Fauna series*, 1(3) : 166. *Zool. Surv. India*.
1992. *Sepia aculeata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 256, pl. 29, figs. 3 & 4. *Zool. Surv. India*.
1995. *Sepia aculeata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, 2 : 66. *Zool. Surv. India*
2000. *Sepia aculeata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 191.
2001. *Sepia aculeata*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 80. *Zool. Surv. India*.
2007. *Sepia aculeata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 163. *Zool. Surv. India*.
2008. *Sepia aculeata* : Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 15.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Tentacles suckers small, sub equal, arranged in 12 longitudinal rows ; proximal part of the left ventral arm hectocotylised and 3 series of normal suckers, with 5-6 series of minute suckers; cuttle bone long and broad with striated zone in the ventral surface; last locus short, concave in the middle.

For description of this species see Adam (1939), Adam and Ree (1966).

4. *Sepia arabica* Massy

1916. *Sepia arabica* Massy, *Rec. Indian Mus.*, 12 : 128, pl.23, figs. 1-5, pl. 24, fig. 10. Type locality : Laccadive sea, 68-148 fathoms.
1968. *Sepia arabica*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 295.
1987. *Aurosepina arabica*: Jothinayagam, *Tech. Mon.*, 15 : 33, fig. 11. *Zool. Surv. India*.
2004. *Sepia arabica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 92.

Distribution : India : Arabian Sea, Laccadive sea.

Elsewhere : Red sea, Persian Gulf, Gulf of Aden.

Remarks : Head with distinct ear shaped fold above the posterior end of each; cuttlebone unusually narrow to the width of the mantle, rounded anteriorly and attenuate behind, striae on the ventral surface v shaped and no spine at the posterior end.

5. *Sepia brevimana* Steenstrup

1875. *Sepia brevimana* Steenstrup, *K. danske Selsk. Skr. Nat. Afd.*, series, 5, 10(7) : 475.
Type locality : Indian ocean.

1968. *Sepia brevimana*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 295.

1987. *Sepia brevimana*: Jothinayagam, *Tech. Mon.*, 15 : 23, fig. 8. Zool. Surv. India.

1986. *Sepia brevimana*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

Distribution : India : Arabian sea, Bay of Bengal.

Elsewhere : Indo-Pacific.

Remarks : Mantle broad with well marked mid dorsal projection; tentacular club short with well developed protective and swim membranes and small subequal suckers arranged in 6-8 transverse rows; spines at the posterior end of cuttlebone long.

For taxonomic discussion and description of this species see Adam (1939), Adam and Ree (1966).

6. *Sepia elliptica* Hoyle

1885. *Sepia elliptica* Hoyle, *Ann. Mag. Nat. Hist.*, (5)16 : 195.

1886. *Sepia elliptica* Hoyle, *Rept. Sci. Res. Voy. Challenger*, Zool., 16 : 131.

1916. *Sepia elliptica*: Massy, *Rec. Indian Mus.*, 12(5) : 226.

1968. *Sepia elliptica*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 296.

Distribution : India : Arabian sea, Bay of Bengal.

Elsewhere : Western Pacific.

Remarks : For taxonomic discussion and description of this species see Adam (1939), Adam and Ree (1966).

7. *Sepia kobiensis* Hoyle

1831. *Sepia kobiensis* Hoyle, *Ann. Mag. Nat. Hist.*, (5)16 : 195.

1916. *Sepia kobiensis*: Massy, *Rec. Indian Mus.*, 12(5) : 230.

1940. *Sepia andreanoides*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 327.

1941. *Sepia andreanoides*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 5(1) : 67.

1968. *Sepia kobiensis*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 298.

1987. *Sepia kobiensis*: Jothinayagam, *Tech. Mon.*, 15 : 20, fig. 7. Zool. Surv. India.

Distribution : India : Arabian sea (Lakshadweep), Bay of Bengal (Tamil Nadu).

Elsewhere : Indo-Pacific.

Remarks : Head narrow; mantle slender; arms tapering to fine point, tentacular club small and narrow with small suckers; cuttlebone small, narrow and attenuate behind, with narrow chitinous margin.

For taxonomic discussion see Adam and Ree (1966).

8. *Sepia pharaonis* Ehrenberg

1831. *Sepia pharaonis* Ehrenberg, *Symbolae Physical animalia evertebrata Mollusca, Berlin*, : unpag.

1896. *Sepia singalensis*: Goodrich, *Trans. Linn. Soc. London*, (2)7 : 3, pl. 1, figs. 4-8.

1916. *Sepia singalensis*: Massy, *Rec. Indian Mus.*, 12(5) : 227.

1956. *Sepia rouxii*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 179, pl. 26, fig. 3.

1972. *Sepia rouxii*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 288.

1987. *Sepia pharaonis*: Jothinayagam, *Tech. Mon.*, 15 : 17, fig. 6. Zool. Surv. India.

1991. *Sepia pharaonis*: Rao, Rao and Maitra, *Fauna of orissa, State Fauna series*, 1(3) : 166. Zool. Surv. India.

2000. *Sepia pharaonis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 87 : 191.

Distribution : India : Andhra Pradesh, Andaman Islands, Lakshadweep, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Dorsal side of the head, mantle and arms with conspicuous transverse stripes; tentacular club with 8 suckers in transverse rows with the enlarged median; hectocotylised left arm IV has 12 rows of normal suckers, next 10 rows with minute suckers in dorsal two rows and normal suckers in the two ventral rows, the dorsal and ventral rows separated by a fleshy transverse ridge. The inner cone of the cuttlebone is wide and flattened with an oval prominence in the centre.

For taxonomic discussion and description of this species see Adam (1939), Adam and Rees (1966).

9. *Sepia prashadi* Winckworth

1936. *Sepia prashadi* Winckworth, *Proc. malac. Soc. London*, 22 : 17, pl.4. Type locality : Madras coast, South India.

1940. *Sepia prashadi*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 327.

1941. *Sepia prashadi*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 69.

1987. *Sepia prashadi*: Jothinayagam, *Tech. Mon.*, 15 : 26, fig. 9. Zool. Surv. India.

2004. *Sepia prashadi*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 92.

Distribution : India : Arabian Sea, Bay of Bengal.

Elsewhere : Red Sea, Malagasy, Gulf of Aden, Sri Lanka.

Remarks : Mantle wide anteriorly; fins narrow; tentacular club broad and short with 2 to 3 enormously developed suckers in the middle of the club; hectocotylised arm has 2 rows of normal suckers at the base followed by 12 to 14 transverse rows of minute suckers with transverse folds and the distal tip of the arm with normal suckers; dorsal surface of the cuttlebone rose colour.

For revised description of this species see Adam and Ree (1966) and for earlier account Adam (1939),

10. *Sepia thurstoni* Adam and Reeves

1966. *Sepia thurstoni* Adam and Reeves, *John Murray Exped. Sci. Rept.*, 11(1) : 2. Type locality : Rameswaram.

1968. *Sepia thurstoni*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 301.

Distribution : India : Bay of Bengal (Tamil Nadu).

Elsewhere : Sri Lanka.

11. *Sepia trygonina* (Rochebrune)

1884. *Sepia trygonina* Rochebrune, *Bull. Soc. Philom. Paris*, 8(7) : 97, pl. 15, fig. 1.

1968. *Sepia trygonina*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 302.

Distribution : India : Bay of Bengal (Tamil Nadu).

Elsewhere : Red Sea, Gulf of Aden.

Remarks : For detailed description of this species see Adam and Ree (1966).

Genus *Sepiella* Gray, 1849

1849. *Sepiella* Gray, *Cat. Moll. Coll. Brit. Mus.*, 1 : 106.

12. *Sepiella inermis* Ferussac and d'Orbigny

1848. *Sepiella inermis* Ferussac & d'Orbigny, *Hist. nat. gen. Part. Paris*, p. 286, pl. 20, figs., 1-9. Type locality : Batavia, Bombay, Pondicherry, Tamil Nadu.

1916. *Sepiella inermis*: Massy, *Rec. Indian Mus.*, 12(5) : 231.

1939. *Sepiella inermis*: Adam, *Rec. Indian Mus.*, 41 : 65.

1941. *Sepiella inermis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 69, fig. 25c.

1956. *Sepiella inermis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 178, pl.26, figs. 2a and 2b.
1972. *Sepiella inermis*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 288.
1987. *Sepiella inermis*: Jothinayagam, *Tech Mon. Zool. Surv. India*, 15 : 29, fig. 10.
1986. *Sepiella inermis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1991. *Sepiella inermis*: Rao, Rao and Maitra, *Fauna of orissa, State Fauna series*, 1(3) : 167. *Zool. Surv. India*.
1992. *Sepiella imermis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 257, pl. 30, figs. 19 & 20. *Zool. Surv. India*.
1995. *Sepiella inermis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, 2 : 66. *Zool. Surv. India*
2000. *Sepiella inermis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 191.
2001. *Sepiella inermis*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 81. *Zool. Surv. India*.
2007. *Sepiella inermis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 163. *Zool. Surv. India*.
2008. *Sepiella inermis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 15.
2008. *Sepiella inermis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 142. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Lakshadweep, Maharashtra, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Body oblong, width $2/3^{\text{rd}}$ of length, arm short, mantle broad, widest anteriorly; distinct glandular pore at the anterior end of the mantle; tentacular suckers minute and not any particular order; cuttle bone flat, posterior end laminate and devoid of spines.

For detailed localities records consult Adam (1939) and for description Adam and Ree (1966).

Family SEPIOLIDAE

Subfamily SEPIOLINAE

Genus *Euprymna* Steenstrup, 1887

1887. *Euprymna* Steenstrup, *Oversigt. Danske vid. Selsk. Forh.*, 1887 : 13.

13. *Euprymna berryi* Sasaki

1896. *Iniotheuthis morsei* Goodrich, *Trans. Linn. Soc. London*, (2)7 : 3.
1916. *Iniotheuthis morsei*: Massy, *Rec. Indian Mus.*, 12(5) : 216.

1929. *Euprymna berryi* Sasaki, *J. Coll. Agri. Hokk.*, **20** : 143, pl. 15, figs., 12-13.
 1968. *Euprymna berryi*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 305.
 1987. *Euprymna berryi*: Jothinayagam, *Tech Mon.*, **15** : 36, fig. 12. Zool. Surv. India
 1986. *Euprymna berryi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 2000. *Euprymna berryi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 192.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Lakshadweep, Maharashtra, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species has close affinity with *E. morsei* (Verrill), but differs from it by the arrangement of enlarged suckers in the arms. In *E. berryi*, suckers on lateral rows of arms II and IV enlarged in size, but in *E. morsei* suckers uniformly small in females and enlarged in the ventral row of arms II, III and IV in males.

Sasaki (1929) mentioned that this species is the commonest sepiolid occurring in Japan and having commercial value.

Genus *Inioteuthis* Verrill, 1881

1881. *Inioteuthis* Verrill, *Trans. Conn. Acad. Art. Sci.*, **5** : 417.

14. *Inioteuthis japonica* Verrill

1881. *Inioteuthis japonica* Verrill, *Trans. Conn. Acad. Art. Sci.*, **5** : 418.
 1916. *Inioteuthis japonica*: Massy, *Rec. Indian Mus.*, **12**(5) : 215.
 1968. *Inioteuthis japonica*: Silas, *Proc. Symp. Moll.*, pt. 1(3) : 306.
 1987. *Inioteuthis japonica*: Jothinayagam, *Tech Mon.*, **15** : 41, fig. 14. Zool. Surv. India.
 1986. *Inioteuthis japonica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 2000. *Inioteuthis japonica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 192.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Lakshadweep, Maharashtra, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species differs from *I. maculosa* Goodrich in having a shorter and broader mantle, broad head and large fins.

15. *Inioteuthis maculosa* Goodrich

1896. *Inioteuthis maculosa* Goodrich, *Trans. Linn. Soc.*, (2)**7** : 2-3, pl. 1, figs., 1-3. Type locality : Andaman Islands.

1916. *Inioteuthis maculosa*: Massy, *Rec. Indian Mus.*, **12**(5) : 216.
 1968. *Inioteuthis maculosa*: Silas, *Proc. Symp. Moll.*, pt. **1**(3) : 306.
 1986. *Inioteuthis maculosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 1987. *Inioteuthis maculosa*: Jothinayagam, *Tech Mon.*, **15** : 39, fig. 13. Zool. Surv. India.
 2000. *Inioteuthis maculosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 192.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Lakshadweep, Maharashtra, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species differs from *I. japonica* Verrill by the uniformly narrower body, shorter rounder fins and larger funnel.

Family SEPIADARIIDAE

Genus *Sepiadarium* Steenstrup, 1881

1881. *Sepiadarium* Steenstrup, *K. Danske Vidensk. Selsk.*, (6)**1** : 214.

16. *Sepiadarium kochii* Steenstrup

1881. *Sepiadarium kochii* Steenstrup, *K. Danske Selsk. Skr. Nat. Afd.*, Ser 5, **10**(7) : 214, pl. 11, figs. 1-10.
 1968. *Sepiadarium kochii*: Silas, *Proc. Symp. Moll.*, pt. **1**(3) : 304.
 2000. *Sepiadarium kochii*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 193.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For taxonomic discussion and description of this species see Voss (1963).

Order TEUTHIDA

Suborder MYOPSIDA

Family LOLIGINIDAE

Genus *Loligo* Schneider, 1784

1784. *Loligo* Schneider, *Bull. Sci. Soc. Philom. Paris*, **17** : 130.

17. *Loligo duvauceli* Ferussac and d'Orbigny

1848. *Loligo duvauceli* Ferussac and d'Orbigny, *Hist. nat. gen. Part. Paris*, p. 318, pl. 14, figs. 6-16.
 1896. *Loligo duvauceli*: Goodrich, *Trans. Linn. Soc. London*, (2)**7** : 7, pl. 2, figs. 20-28.
 1916. *Loligo indica*: Massy, *Rec. Indian Mus.*, **12**(5) : 218.

1939. *Loligo duvauceli*: Adam, *Rec. Indian Mus.*, **41** : 67.
1956. *Loligo indica*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 181, pl. 27.
1968. *Loligo duvauceli*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 308.
1968. *Loligo indica*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 308.
1986. *Loligo duvauceli*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1987. *Loligo duvauceli*: Jothinayagam, *Tech Mon.*, **15** : 43, fig. 15. *Zool. Surv. India*.
1991. *Loligo duvauceli*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 168. *Zool. Surv. India*.
1992. *Loligo duvauceli*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna Series*, **3**(9) : 258. *Zool. Surv. India*.
2000. *Loligo duvauceli*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 193.
2007. *Loligo duvauceli*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 164. *Zool. Surv. India*.
2008. *Loligo duvauceli*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 15.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks: Mantle slender, long, tubular and tapering gradually from the middle to a blunt posterior end; rhomboidal fins, widest above the mid point; funnel well developed, set in deep groove, opening on level with the eyes; left ventral arm hectocotylised by the modification of the distal half of the arm possessing pedicles flattened into conical papillae.

The most common species of this genus from the Indo-Malayan region. For taxonomic details and description of this species see Adam (1954), Voss (1963).

18. *Loligo uvii* Wakiya and Ishikawa

1921. *Loligo uvii* Wakiya and Ishikawa, *Zool. Mag. Tokyo*, **33** : 286.
1987. *Loligo uvii*: Jothinayagam, *Tech Mon.*, **15** : 46, fig. 16. *Zool. Surv. India*.

Distribution : India : Andaman Islands, Andhra Pradesh, Kerala, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : This species is easily distinguished from the other species of the genus occurring in the area by distinct hectocotylised arm and the smooth rings in the enlarged suckers of the tentacular club.

19. *Loligo bengalensis* Jothinayagam

1987. *Loligo bengalensis* Jothinayagam, *Tech Mon.*, **15** : 48, pl. 3, fig. 17. Type locality : Bay of Bengal. Zool. Surv. India.

Distribution : India : Bay of Bengal.

Remarks : Jothinayagam (1987) described this species from Madras coast. This species resembles with *Doryteuthis singhalensis*, may be synonym of this species.

Subgenus *Doryteuthis* Neaf, 1912

1912. *Doryteuthis* Neaf, *Zool. Anz.*, **39** : 742.

20. *Loligo (Doryteuthis) singhalensis* Ortmann

1891. *Doryteuthis singhalensis* Ortmann, *Zool. Jb. Syst.*, **5** : 676, pl. 46, fig. 3. Type locality : Ceylon.

1916. *Loligo spectrum*: Massy, *Rec. Indian Mus.*, **12**(5) : 221.

1939. *Doryteuthis singhalensis*: Adam, *Rec. Indian Mus.*, **41** : 70.

1987. *Doryteuthis singhalensis*: Jothinayagam, *Tech Mon.*, **15** : 51, fig. 18. Zool. Surv. India.

1992. *Doryteuthis singhalensis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 258. Zool. Surv. India.

2008. *Loligo (Doryteuthis) singhalensis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 15.

Distribution : India : Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : According to Adam (1939) the three species *D. spectrum*, *D. arabica* and *D. singhalensis* may represent geographical race of one species. For detailed see Adam (1939, 1954) and Voss (1963).

Genus *Sepioteuthis* Blainville, 1824

1824. *Sepioteuthis* Blainville, *Dict. Sci. Nat.*, **32** : 175.

21. *Sepioteuthis lessoniana* Lesson

1830. *Sepioteuthis lessoniana* Lesson, *Voy. autour de monde execute sur la corvette de S.M., Paris*, **2**(1) : 244, pl. 2.

1896. *Sepioteuthis indica*: Goodrich, *Trans. Linn. Soc.*, (2)**7** : 5.

1956. *Sepioteuthis arctipinnis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **1**(2), pt. 7 : 182, pl. 28.

1968. *Sepioteuthis lessoniana*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 308.

1986. *Sepioteuthis lessoniana*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

1987. *Sepioteuthis lessoniana*: Jothinayagam, *Tech. Mon.*, **15** : 54, fig. 19. Zool. Surv. India.
 2000. *Sepioteuthis lessoniana*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 193.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : One the most commonest and widely distributed loliginids in the Indo-Pacific region and one of the commercially important speices.

Genus *Loliolus* Steenstrup, 1856

1856. *Loliolus* Steenstrup, *Danske Vidensk. Selsk. Skrift.*, (5)**4** : 190.

22. *Loliolus investigatoris* Goodrich

1896. *Loliolus investigatoris* Goodrich, *Tran. Linn. Soc. London*, **7** : 8, pl. 2, figs. 29-37. Type locality: Bay of Bengal.
 1881. *Loliolus affinis* Steenstrup, *K. danske. Selsk. Skr. Nat. Afd.*, Ser. 5, **10**(7) : 214. Type locality : Tranquebar, India.
 1916. *Loliolus investigatoris*: Massy, *Rec. Indian Mus.*, **12**(5) : 222.
 1939. *Loliolus investigatoris*: Adam, *Rec. Indian Mus.*, **41** : 66.
 1987. *Loliolus investigatoris*: Jothinayagam, *Tech Mon.*, **15** : 57, fig. 20. Zool. Surv. India.
 1991. *Loliolus investigatoris*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 168. Zool. Surv. India.
 1992. *Loliolus investigatoris*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 258, pl. 30, fig. 3. Zool. Surv. India.
 1995. *Loliolus investigatoris*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 66. Zool. Surv. India
 2007. *Loliolus investigatoris*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 165. Zool. Surv. India.
 2008. *Loliolus investigatoris*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 15.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Width $2/3^{\text{rd}}$. of body length; head 30.5% of mantle length; funnel wide posterior and thin walls; mantle short and stout, fins broad, 70% of the length of mantle; left arm entirely hectocotylised due to modifications of suckers.

For detailed taxonomy and description see Adam (1939, 1954).

Suborder OEGOPSIDA
Family ENDOPLUTEUTHIDAE
Genus *Abralia* Gray, 1849

1849. *Abralia* Gray, *Cat. Moll. Coll. Brit. Mus.*, (1) : 50.

23. *Abralia andamanica* Goodrich

1896. *Abralia andamanica* Goodrich, *Tran. Linn. Soc. London*, (2) 7(1) : 9-10, pl. 2, figs. 38-45. Type locality : Andaman Sea.

1916. *Abralia andamanica*: Massy, *Rec. Indian Mus.*, 12(5) : 239.

1968. *Abralia andamanica*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 311.

1986. *Abralia andamanica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.

2000. *Abralia andamanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 194.

Distribution : India : Andaman and Nicobar Islands, Arabian sea, Lakshadweep.

Elsewhere : Indo-Pacific.

Remarks : The most specialised character of this species is the presence of light organs. They are nine or ten rows of light organs present on the ventral side of the head. On the ventral periphery of the eye there are five light organs, three smaller in the centre and one large in each side of anterior and posterior region.

Genus *Abraliopsis* Joubin, 1896

1896. *Abraliopsis* Joubin, *Bull. Soc. Sci. med. Quest (Rennes)*, 5 : 19.

24. *Abraliopsis lineata* (Goodrich)

1896. *Abralia lineata* Goodrich, *Tran. Linn. Soc. London*, (2) 7(1) : 10, pl. 3, figs. 46-50. Type locality : Bay of Bengal.

1968. *Abraliopsis lineata*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 313.

2000. *Abraliopsis lineata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 194.

Distribution : India : Bay of Bengal (Andaman Islands, Orissa), Arabian sea, Lakshadweep.

Elsewhere : Indian Ocean.

Family HISTOTEUTHIDAE
Genus *Histioteuthis* d' Orbigny, 1840

1840. *Histoteuthis* d' Orbigny, *Pal Franc. (Cret.) Ceph.*, p. 30.

25. *Histioteuthis hoylei* (Goodrich)

1896. *Histiopsis hoylei* Goodrich, *Tran. Linn. Soc. London*, 7 : 15, pl. 4, figs. 62-71. Type locality : Andaman Islands.

1968. *Calliteuthis hoylei*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 318.

2000. *Histioteuthis hoylei*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 195.

Distribution : India : Andaman Islands, Arabian sea, Lakshadweep.

Elsewhere : Indian Ocean.

26. *Histioteuthis reversa* (Verrill)

1880. *Calliteuthis reversa* Verrill, *Trans. Conn. Acad. Sci.*, **5** : 393.

1896. *Calliteuthis reversa* : Goodrich, *Tran. Linn. Soc. London*, **7** : 16.

1968. *Calliteuthis reversa*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 319.

2000. *Histioteuthis reversa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 195.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean.

Remarks : According to Voss (1956) this speics is restricted to Northern and Western North Atlantic and the Gulf of Maxico. Therefore the occurence of this species from Andaman Islands, needs confirmation.

Family CHIROTEUTHIDAE

Genus *Chiroteuthis* d' Orbigny, 1839

1839. *Chiroteuthis* d' Orbigny, *Pal Franc. (Cret.) Ceph.*, p. 30.

27. *Chiroteuthis macrosoma* Goodrich

1896. *Chiroteuthis macrosoma* Goodrich, *Trans. Linn. Soc. London*, (2) **7**(1) : 12, pl. 3, figs. 51-57. Type locality : Bay of Bengal. Types in NZC, ZSI.

2004. *Chiroteuthis macrosoma*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 90.

Distribution : India : Bay of Bengal.

Elsewhere : No records.

28. *Chiroteuthis pellucida* Goodrich

1896. *Chiroteuthis pellucida* Goodrich, *Trans. Linn. Soc. London*, (2) **7**(1) : 14, pl. 4, figs. 58-61. Type locality : Bay of Bengal. Types in NZC, ZSI.

2004. *Chiroteuthis pellucida*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 90.

Distribution : India : Bay of Bengal.

Elsewhere : No records.

Family CRANCHIIDAE

Genus *Megalocranchia* Pfeiffer, 1884

1884. *Megalocranchia* Pfeiffer, *Abh. Naturw. Ver. Hamburg.*, 8(2) : 84.

29. *Megalocranchia abyssicola* (Goodrich)

1896. *Taonius abyssicola* Goodrich, *Trans. Linn. Soc. London*, (2) 7(1) : 17, pl. 5, figs. 72-80. Type locality : Laccadive sea, 902 fathoms. Types in NZC, ZSI.

1968. *Megalocranchia abyssicola*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 331.

2004. *Megalocranchia abyssicola*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 93.

Distribution : India : Lakshadweep.

Elsewhere : No subsequent records.

Remarks : The type specimens of this present in National Zoological Collection, Zoological Survey of India is almost in damaged condition and it is not possible to further study this material. According to Voss (1960) the record of this species from the Azores by Joubin (1924) is doubtful.

Order OCTOPODA

Suborder CIRRATA

Family CIRROTEUTHIDAE

Genus *Grimpoteuthis* Robson, 1932

1932. *Grimpoteuthis* Robson, *Monogr. Rec. Ceph.*, (The Octopoda) 2 : 67.

30. *Grimpoteuthis grimaldii* (Joubin)

1896. *Cirrotheuthis grimaldii* Joubin, *Result Scientif. Camp. Caudan*, p. 247, text figs. 7.

1916. *Cirrotheuthis grimaldii*: Massy, *Rec. Indian Mus.*, 12(5) : 188.

1968. *Grimpoteuthis grimaldii*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 333.

2000. *Grimpoteuthis grimaldii*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 195.

Distribution : India : Bay of Bengal (Andaman Sea), Arabian Sea.

Elsewhere : Indian Ocean, Atlantic Ocean.

Remarks : According to Robson (1932) that this species found in Atlantic and the specimen identified by Massy from Indian Museum may not be correctly identified and it may be specifically different from the *G. grimaldii*.

31. *Grimpoteuthis pacifica* (Steenstrup)

1880. *Tadarodes pacificus* Steenstrup, *K.danske Selsk. Skr. Nat. Afd.*, (5)10 : 83, fig. 1.

2000. *Grimpoteuthis pacifica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 195.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean, Australia, Japan.

Suborder INCIRRATA
Superfamily BOLITAENOIDEA
Family BOLITAENIDAE
Genus *Eledonella* Verrill, 1884

1884. *Eledonella* Verrill, *Trans. Conn. Acad. Art. & Sci.*, **6**(2) : pt. i.

32. *Eledonella diaphana* (Hoyle)

1896. *Japetella diaphana* Hoyle, *Ann. Mag. Nat. Hist.*, (5)**15** : 232.

1916. *Eledonella diaphana*: Massy, *Rec. Indian Mus.*, **12**(5) : 213

1968. *Japetella diaphana*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 334.

2000. *Eledonella diaphana*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 195.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean, Pacific Ocean, Atlantic Ocean.

Remarks : For details consult Thore (1949).

Superfamily OCTOPODOIDEA
Family OCTOPODIDAE
Subfamily OCTOPODINAE
Genus *Octopus* Lamarck, 1798

1798. *Octopus* Lamarck, *Bull. Sci. Soc. Philam. Paris*, **2** : 129.

33. *Octopus aegina* Gray

1849. *Octopus aegina* Gray, *Cat. Moll. Brit. Mus.*, **1** : 7.

1968. *Octopus aegina*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 337.

1987. *Octopus aegina*: Jothinayagam, *Tech. Mon.*, **15** : 60, fig. 21. *Zool. Surv. India*

Distribution : India : Arabian sea, Bay of Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species is characterised by the enormous development of penis; skin granulous; dorsal side of body being covered with small rounded dense tubercles; a multifid cirrus present above each eye. For details refer Robson (1928) and Adam (1954).

34. *Octopus arborescens* (Hoyle)

1904. *Polypus arborescens* Hoyle, *Rep. Ceylo Pearl Oyster Fish.*, **2**, Suppl., **14** : 189, pl. 2, figs. 8, 9 and 12. (Type locality : Cheval Pearl Bank and Periya Paar Gulf of Mannar).

1916. *Polypus arborescens*: Massy, *Rec. Indian Mus.*, **12**(5) : 207.
 1939. *Octopus (Octopus) arborescens*: Adam, *Rec. Indian Mus.*, **41** : 96.
 1968. *Octopus (Octopus) arborescens*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 337.
 1972. *Octopus arborescens*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 288.
 1986. *Octopus arborescens*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 2000. *Octopus arborescens*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 196.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Gulf of Mannar (Tamil Nadu).

Elsewhere : Indian Ocean.

35. *Octopus areolatus* d' Orbigny

1848. *Octopus areolatus* d' Orbigny, *Hist, nat. gen. et part.*, p. 65.
 1916. *Polypus areolatus*: Massy, *Rec. Indian Mus.*, **12**(5) : 193.
 1939. *Octopus (Octopus) areolatus*: Adam, *Rec. Indian Mus.*, **41** : 83.
 1968. *Octopus areolatus*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 337.
 1987. *Octopus areolatus*: Jothinayagam, *Tech Mon.*, **15** : 68, fig. 25. Zool. Surv. India.

Distribution : India : Bay of Bengal.

Elsewhere : Indo-Pacific.

Remarks : Arms 2 ½ to 3 times of mantle length; ocellus present between the base of 2nd and 3rd. arms; cirrus present above the eyes; mantle wider posterior with a ventral furrow; web shorter between the dorsal pair of arms.

This species can easily distinguished due to presence of ocellus and cirri.

36. *Octopus elegans* Brook

1887. *Octopus elegans* Brook, *Zool. Jb. Syst.*, **2** : 597.
 1968. *Octopus (Macrotritopus) elegans*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 345.
 1986. *Octopus elegans*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

Distribution : India : Bay of Bengal (Andaman and Nicobar Islands).

Elsewhere : Indo-Pacific.

37. *Octopus fusiformis* (Brock)

1887. *Polypus fusiformis* Brock, *Zool. Jb. Syst.*, **2** : 601.
 1916. *Polypus fusiformis*: Massy, *Rec. Indian Mus.*, **12**(5) : 203.
 1939. *Octopus (Octopus) fusiformis*: Adam, *Rec. Indian Mus.*, **41** : 86.
 1968. *Octopus (Octopus) fusiformis*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 340.

1987. *Octopus fusiformis*: Jothinayagam, *Tech Mon.*, **15** : 66, fig. 24. Zool. Surv. India.

Distribution : India : Bay of Bengal (Palk Strait).

Elsewhere : Indo-Pacific.

Remarks : Head short and narrow; arms 4 to 5 times of body length and tapering to very fine point; mantle long and narrow; smooth body with brown colour above and pale colour below; arm suckers sunken.

This species have some confusion in nomenclature. Generally this species is similar to *Loligo* like without fins which led Massy (1916) to doubt whether this species may not be identical with *Cistopus indicus* (d'Orbigny).

38. *Octopus globosus* Apelloef

1889. *Octopus globosus* Apelloef, *Berg. Mus. Aarsbr.*, **3** : 7, pl.1, figs. 4-5.

1916. *Polypus globosus*: Massy, *Rec. Indian Mus.*, **12**(5) : 202.

1939. *Octopus (Octopus) globosus*: Adam, *Rec. Indian Mus.*, **41** : 75.

1968. *Octopus (Octopus) globosus*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 340.

1986. *Octopus globosus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

1991. *Octopus (Octopus) globosus*: Rao, Rao and Maitra, *Fauna of orissa, State Fauna series*, **1**(3) : 168. Zool. Surv. India.

2000. *Octopus globosus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 196.

Distribution : India : Andaman and Nicobar Islands, Maharashtra, Orissa, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : For further details refer Robson (1929) and Adam (1938).

39. *Octopus horridus* Ferrussac

1826. *Octopus horridus* Ferrussac in d' Orbigny, *Ann. Sci. Hist. Nat.*, Paris, **7**(26) : 144.

1972. *Octopus horridus*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 288.

1986. *Octopus horridus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

1968. *Octopus (Octopus) horridus*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 341.

Distribution : India : Bay of Bengal (Andaman and Nicobar Islands), Lakshadweep.

Elsewhere : Indo-Pacific.

Remarks : For taxonomic discussion see Robson (1929) and Voss (1963).

40. *Octopus macropus* Risso

1826. *Octopus macropus* Risso, *Hist. nat. Europe Meridium*, **4** : 3, pl. 4.

1896. *Octopus macropus*: Goodrich, *Trans. Linn. Soc. London*, (2)**7** : 64.

1916. *Polypus macropus*: Massy, *Rec. Indian Mus.*, **12**(5) : 192.
 1939. *Octopus (Octopus) macropus*: Adam, *Rec. Indian Mus.*, **41** : 81.
 1987. *Octopus macropus*: Jothinayagam, *Tech Mon.*, **15** : 64, fig. 23. Zool. Surv. India.
 1992. *Octopus macropus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 259, pl. 30, fig. 4. Zool. Surv. India.
 2007. *Octopus macropus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 165. Zool. Surv. India.
 2008. *Octopus macropus*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 15.

Distribution : India : Andhra Pradesh, Puducherry, Tamil Nadu, West Bengal;
Elsewhere : Cosmopolitan.

Remarks : Animal with long and stout dorsal pair of arm; the ligula of the hectocotylised right arm III stout and folded inwards; outer demibranch of each gill with 12 lamellae; body buff colour with minute chromatophores on the dorsal side and pale on the ventral side.

This species distributed in tropical and warm temperate seas throughout the world. For details see Robson (1929), Adam (1954) and Voss (1963).

41. *Octopus microphthalmus* Goodrich

1896. *Octopus microphthalmus* Goodrich, *Trans. Linn. Soc. London*, (2) **7**(1) : 20, pl. 5, figs. 83-84. Type locality : Port Blair, Andamans.
 1916. *Polypus microphthalmus*: Massy, *Rec. Indian Mus.*, **12**(5) : 205.
 1968. *Octopus (Octopus) microphthalmus*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 342.
 1986. *Octopus microphthalmus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 2000. *Octopus microphthalmus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 196.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indian Ocean.

Remarks : For details see Massy (1916) and Robson (1929).

42. *Octopus nierstrazi* Adam

1887. *Octopus nierstrazi* Adam, *Bull. Mus. Hist. Nat. Belgique*, **14**(7) : 14, figs 6A, 7A-B, 8 and 9. Type locality : Aves Islands, Andamans.
 1968. *Octopus (Octopus) nierstrazi*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 342.
 1986. *Octopus nierstrazi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

Distribution : India : Bay of Bengal (Andaman and Nicobar Islands).

Elsewhere : Indian Ocean.

43. *Octopus niveus* Lesson

1830. *Octopus niveus* Lesson, *Voy. Coquille Zool.*, **2**(1) : 239.
1939. *Octopus (Octopus) niveus*: Adam, *Rec. Indian Mus.*, **41** : 88, pl. fig.1.
1968. *Octopus (Octopus) niveus*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 342.
1986. *Octopus niveus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
2000. *Octopus niveus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 196.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : This species may be conspecific with *O. horridus* Ferrussac

44. *Octopus prashadi* Adam

1939. *Octopus prashadi* Adams, *Rec. Indian Mus.*, **41** : 103, pl. 2, figs. 1-3. Type locality : Port Blair, Andamans.
1916. *Polypus levis*: Massy, *Rec. Indian Mus.*, **12**(5) : 198.
1968. *Octopus (Octopus) prashadi*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 343.
1987. *Octopus prashadi*: Jothinayagam, *Tech Mon.*, **15** : 70, fig. 26. Zool. Surv. India.
2000. *Octopus prashadi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 197.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Indian Ocean.

Remarks : Head short and less prominent; arms twice of dorsal mantle length; web between the arms very deep; funnel organ W shaped.

According to Massy (1916) and Adam (1939) this species shows strong resemblances to *O. levis* Hoyle.

45. *Octopus rugosus* (Bosc)

1792. *Sepia rugosus* Bosc, *Act. Soc. H. N. Paris*, **1** : 24, pl. 5, figs. 1 & 2.
1896. *Octopus granulatus*: Goodrich, *Trans. Linn. Soc. London*, (2)**7** : 19.
1916. *Polypus rugosus*: Massy, *Rec. Indian Mus.*, **12**(5) : 189.
1939. *Octopus (Octopus) rugosus*: Adam, *Rec. Indian Mus.*, **41** : 71.
1956. *Octopus rugosus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 184, pl. 29, figs. 2.
1968. *Octopus (Octopus) rugosus*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 343.
1986. *Octopus rugosus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

1987. *Octopus rugosus*: Jothinayagam, *Tech Mon.*, **15** : 62, fig. 22. Zool. Surv. India.
1992. *Octopus rugosus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 259. Zool. Surv. India.
2000. *Octopus rugosus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 197.
2008. *Octopus rugosus*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 15.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu, West Bengal.

Elsewhere : Cosmopolitan in tropical to warm temperate region.

Remarks : Head with prominent multifid cirrus above each eyes; mantle round with a ventral furrow; eyes prominent; arms 2 ^{1/2} to 3 times length of mantle; mantle skin grey with tubercles, reticulated on the dorsal side and paler on the ventral side.

This species has very much similar with *O. vulgaris* Lamarck. For further details see Robson (1929) and Adam (1939).

46. *Octopus taprobanensis* Robson

1926. *Octopus taprobanensis* Robson, *Ann. Mag. nat. Hist.*, (9)**17** : 165, fig. 7. Type locality : Periya Paar, Gulf of Mannar)
1968. *Octopus (Octopus) taprobanensis*: Silas, *Proc. Symp Moll.*, pt. **1(3)** : 344.

Distribution : India : Bay of Bengal (Andaman Islands, Tamil Nadu).

Elsewhere : Indian Ocean.

Remarks : For further details refer Robson (1929) and Adam (1938).

47. *Octopus vulgaris* Lamarck

1799. *Octopus vulgaris* Lamarck, *Mem. Soc. Hist. nat. Paris*, **1** : 130.
1968. *Octopus (Octopus) vulgaris*: Silas, *Proc. Symp Moll.*, pt. **1(3)** : 344.
1986. *Octopus vulgaris*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
2000. *Octopus vulgaris*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 197.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Cosmopolitan in tropical worm sea.

Remarks : This species has very much similar with *O. rugosus* (Bosc). There has been confusion in the identity of these two species. For further details see Godrich (1896) and Adam (1959).

Subgenus *Callistoctopus* Taki, 1964

1798. *Callistoctopus* Taki, *J. Fac. Fish Hiroshima Univ.*, **3** : 297.

48. *Octopus (Callistoctopus) cyaneus* (Gray)

1849. *Octopus cyanea* Gray, *Cat. Moll. Brit. Mus. Cephalopoda*, 1 : 15.
 1916. *Polypus cyanea*: Massy, *Rec. Indian Mus.*, 12(5) : 195.
 1968. *Octopus (Octopus) cyaneus*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 338.
 1972. *Octopus marmoratus*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 288.
 1986. *Octopus cyanea*: Tikader, Daniel and SubbaRao, *Seashore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 2000. *Octopus cyanea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 197.

Distribution : India : Bay of Bengal (Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu).

Elsewhere : Indo-Pacific.

Remarks : For further details see Robson (1929) and Adam (1938, 1954).

Subgenus *Paroctopus* Naef, 1923

1923. *Paractopus* Naef, *Fauna Flora Galfo Napoli*, 35 :

49. *Octopus (Paractopus) hongkongensis* Hoyle

1885. *Octopus hongkongensis* Hoyle, *Ann. Mag. nat. Hist.*, (5) 16 : 224.
 1916. *Polypus hongkongensis*: Massy, *Rec. Indian Mus.*, 12(5) : 197.
 1939. *Paroctopus hongkongensis*: Adam, *Rec. Indian Mus.*, 41 : 97.
 1956. *Octopus hongkongensis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 183, pl. 29, fig. 1.
 1968. *Paroctopus hongkongensis*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 346.

Distribution : India : Bay of Bengal (Andaman Islands, Tamil Nadu).

Elsewhere : Indo-Pacific.

Remarks : For other details see Masey (1916), Winckworth (1926) and Robson (1929).

Genus *Cistopus* Gray, 1849

1849. *Cistopus* Gray, *Cat. Moll. Coll. Brit. Mus.*, 1 : 20.

50. *Cistopus indicus* (d' Orbigny)

1840. *Octopus indicus* d' Orbigny, *Hist, nat. gen. et part.*, p. 24.
 1956. *Cistopus indicus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 185, pl. 30.
 1968. *Cistopus indicus*: Silas, *Proc. Symp Moll.*, pt. 1(3) : 345.
 1987. *Cistopus indicus*: Jothinayagam, *Tech Mon.*, 15 : 72, fig. 27. Zool. Surv. India.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Velar interspaces on the oral side contains elongate avoid pouches opening on the oral surface of each interspaced; ligula of the hectocotylised arm very short and smooth, calimus ending bluntly.

Genus *Danoctopus* Joubin, 1933

1798. *Danoctopus* Joubin, *Ann. Inst. Oceanogr., N.S.* **13**(1) : 4.

51. *Danoctopus hoylei* (Berry)

1909. *Polypus hoylei* Berry, *Proc. U.S. nat. Mus.*, **37** : 407, fig. 1.

1916. *Polypus hoylei*: Massy, *Rec. Indian Mus.*, **12**(5) : 207.

1939. *Berrya hoylei*: Adam, *Rec. Indian Mus.*, **41** : 101, pl, 1, figs 2 & 3.

1968. *Berrya hoylei*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 347.

1987. *Berrya hoylei*: Jothinayagam, *Tech Mon.*, **15** : 76, fig. 29. Zool. Surv. India.

2000. *Danoctopus hoylei*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 197.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : Robson (1929) observed that the specimens of Massy's *Polypus hoylei* sufficiently differ from the description of Berry's specimens. Adam (1939) remarked that it is not necessary to give new name for the Indian Ocean materials. However Robson is of the opinion that Massy's specimens may belong to a distinct genus and has found agreement with Adam, who placed it under *Berrya*, seems to closely related to Bathypolypodinae. Vaught (1989) synonymies the genus *Berrya* under *Danoctopus*, hence the species *hoylei* kept under *Danoctopus*.

Genus *Hapalochlaena* Robson, 1929

1929. *Hapalochlaena* Robson, *Ann. Mag. nat. Hist.*, **10**(3) : 608.

52. *Hapalochlaena fasciata* (Hoyle)

1886. *Octopus pictus* var. *fasciata* Hoyle, *Rep. Sci. Res. Voy. Challenger (Zool.)*, **6**(44) : 94, pl. 8, fig. 3.

1896. *Octopus pictus* var. *fasciata*: Goodrich, *Trans. Linn. Soc. London*, (2)**7** : 19, pl. 5, fig. 82.

1939. *Hapalochlaena fasciata*: Adam, *Rec. Indian Mus.*, **41** : 98.

1987. *Hapalochlaena fasciata*: Jothinayagam, *Tech Mon.*, **15** : 74, fig. 28. Zool. Surv. India.

Distribution : India : Bay of Bengal (Tamil Nadu).

Elsewhere : Indo-Pacific.

Remarks : Ligula of the hectocotylised arm with a median groove, calimus well developed; arms with 5 to 6 buccal suckers placed in one longitudinal series; blackish streaks with rings with pale blue centre present on the mantle head and arms.

This species differs from all other species of octopuses by the typical streaks and rings found on the mantle and arms.

Subfamily BATHYPOLYPODINAE

Genus *Benthoctopus* Grimpe, 1921

1921. *Benthoctopus* Grimpe, *Zool. Annx.*, **52** : 299.

53. *Benthoctopus profundorum* Robson

1932. *Benthoctopus profundorum* Robson, *Mem, Recent Cephalopoda*, pt. **2** : 237, pl. 4, fig. 1, text figs. 33 and 42.

1968. *Benthoctopus profundorum*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 348.

2000. *Benthoctopus profundorum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 198.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : For further details see Robson (1932).

Genus *Teretectopus* Robson, 1929

1929. *Teretectopus* Robson, *Ann. Mag. Nat. Hist.*, (10)**3** : 608.

54. *Teretectopus alcocki* Robson

1932. *Teretectopus alcocki* Robson, *Mem, Recent Cephalopoda*, pt. **2** : 252, pl.3, fig. 3, text fig. 47. Type locality: Andaman sea.

1939. *Teretectopus alcocki*: Adam, *Rec. Indian Mus.*, **41** : 105.

1968. *Teretectopus alcocki*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 348.

1986. *Teretectopus alcocki*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 179.

2000. *Teretectopus alcocki*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 198.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indian Ocean.

Remarks : For details see Robson (1932).

Superfamily ARGONAUTOIDEA

Family ARGONAUTIDAE

Genus *Argonauta* Linnaeus, 1758

1758. *Argonauta* Linnaeus, *Syst. Nat.*, ed. **10** : 708.

55. *Argonauta boettgeri* Maltzan

1758. *Argonauta boettgeri* Maltzan, *J. de Conch. Paris*, **29** : 163.
 1916. *Argonauta boettgeri* : Massy, *Rec. Indian Mus.*, **12**(5) : 188.
 1968. *Argonauta bottgeri*: Silas, *Proc. Symp Moll.*, pt. **1**(3) : 349.
 1986. *Argonauta boettgeri*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 179.
 2000. *Argonauta boettgeri*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 198.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For details see Robson (1932).

56. *Argonauta hians* Lightfoot

1786. *Argonauta hians* Lightfoot, *Cat. Portland Mus.*, p. 44.
 1906. *Argonauta hians*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 208.
 1940. *Argonauta hians*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 327, pl. 2, fig. 1.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Cosmopolitan species distributed in warm and temperate seas. For synonyms see Robson (1932).

SUMMARY AND GENERAL DISCUSSION

In all 56 species of Cephalopoda falling under 24 genera, 14 families, 4 orders and 2 subclasses were recorded from India of which only one species *Loligo bengalensis* is endemic to Bay of Bengal.

Order Nautilida is represented by single family Nautilidae and genus *Nautilus* represented by one species *Nautilus pompilus* recorded from Andaman and Nicobar Islands and from east coast of India.

Order Sepiida, represented by four families, six genera and 15 species. Out of 15 species four species are represented from east and west coast, Andaman and Nicobar Islands and Lakshadweep; three from east and west coast; two from east coast; one from Andaman and Nicobar Islands; one from east coast and Andaman and Nicobar Islands; one from east coast and Lakshadweep; one from east coast, Andaman and Nicobar Islands and Lakshadweep; one from west coast and Lakshadweep. The Sepiadariidae an Indo-Pacific family represented by a single species from the Islands of Andaman and Nicobar.

Order Teuthida, represented by five families, eight genera and 13 species, represented by four species from east coast; three from east, west coast and Andaman and Nicobar Islands; two species from Andaman and Nicobar Islands; two species

from west coast, Andaman and Nicobar Islands and Lakshadweep; one from Lakshadweep and one from east and west coast, Andaman and Nicobar Islands and Lakshadweep. The family Cranchiidae is represented by single species *Megalocranchia* from Lakshadweep only.

Order Octopoda, represented by four families, nine genera and 27 species having 11 species from Andaman and Nicobar Islands, four from east and west coast; four species from east coast and Andaman and Nicobar Islands; three from east coast; two from west coast and Andaman and Nicobar Islands; One from Andaman and Nicobar Islands and Lakshadweep; one from east and west coast and Andaman and Nicobar Islands and one from east coast, Andaman and Nicobar Islands and Lakshadweep.

Out of these 56 recorded species of Cephalopoda, type locality of 19 species are from India and 10 from Bay of Bengal (east coast); seven Andaman and Nicobar Islands; and two from Lakshadweep.

BIVALVIA

Used by various earlier workers from the time of Buonanni (1681) onwards, the name of Bivalvia adapted by Linnaeus (1758) in the *Systema Nature* 10th edition for a subdivision of the group Testacea of class Vermes. Prior to Linnaeus the 13 different names were used for the taxon Bivalvia. No diagnosis was given for this subdivision, but listed the genera included in it. All these genera listed by Linnaeus still stood in the Bivalvia except the genus *Teredo* which was grouped under Intestina. Among the Linnaeus species a few of *Anomia* were now placed under Brachiopoda; other wise the Linnaeus's Bivalvia does not include any non molluscan elements.

The Bivalvia are aquatic molluscs with bilateral symmetry and laterally compressed with antero-posterior elongated animals invariably provided with shell with two wholly or partly calcified valves lying on the left and right side of the body. The shell is external except in few forms, typically with equal convexity; but in some forms bilateral symmetry has been lost. The valves commonly connected dorsally by partially calcified, elastic structure the ligament, and open and close by hinging along an axis which passes through or close to this. Typically the hinge axis is anterior posterior in direction, thus the two valves open along their anterior, posterior and ventral margins. The valves are closed by the action of adductor muscles, two or one in number attached to the inner face of each. These muscles by drawing the valves together, oppose the action of the ligament, which act as a spring tending to open them.

The mantle consists of two lobes, one lining each valve jointed dorsally but elsewhere their edges are free. The body of the molluscs is enclosed within the shell and mantle in dorsal position. Ventrally the mantle encloses a large space known as mantle cavity. The animal lacks head, radula, jaws, and cephalic sensory organs like eyes, tentacles etc. In some bivalves the cephalic sensory organs are replaced by organs with similar functions located along the periphery of the mantle. The mouth and anus are usually at opposite ends of the body. The mouth lies between two paired of ciliated flap like structures known as labial palps. The stomach contains a peculiar structure the crystalline style, which aids the digestion of carbohydrates.

The foot is an extensile structure in bivalves commonly used for burrowing. The most of them have a pairs of gills or ctenidia, which are suspended within the mantle cavity from the body and are arranged symmetrically with regards to the median plane of the molluscs. The nervous system includes visceral and pedal ganglia, together with cerebral and pleural ganglia which are fused in most forms but separate in few cases. A pedovisceral commissure is lacking. Reproduction is without copulation. Most of marine bivalves pass through a pelagic larval life.

External Features of shell

Bivalves shell consists of two calcareous convex structures known as valve, of various shape, open and close by a hinge along the hinge axis or cardinal axis concoides with or close to one hinge margin. The structures becoming the part of the shell are ligament, teeth, hinge plate etc., which help in opening and closing of the valve, are collectively known as hinge. In a typical homomyarian bivalve, hinge occupies dorsal position related to the soft part; opposite is ventral, one end is anterior, closed to mouth and the other is posterior, closed to anus. The various parts of the margin of the shell thus termed as dorsal, anterior, ventral and posterior margins. The dorsal margin further subdivided as anterior dorsal and posterior dorsal margin. In most of the cases the valves are equal in size; but in a few cases they are unequal. Starting from the larval shell (prodissoconch), growth of the bivalve shell proceeds by increments along the margins of the two valves. The increments are broadest in a direction determined by the shape of the adult shell and are narrow close to dorsal margin, where they converge from either end toward the prodissoconch. Later each valve of adult shell forming a small nose like angle known as beak, which adjoins the dorsal margin lacking a cardinal area. When the beak close to the middle of the length the valve termed as equilateral and while close to one end then termed as inequilateral. The beak is terminal if it situated in the most anterior or posterior point of the valve (e.g. *Mystiques* and *Isognomon*).

The umbo (umbones) is the point of the valve most distant from the sagittal plane, often known as beak. The umbonal cavity is the part of the interior of the valve that lies within the umbo. The umbones are prosogyrate, opisthogyrate and orthogyrate. Prosogyrate when the beaks point directed anterior; opisthogyrate, beaks point directed posterior and orthogyrate, if it directed to the other valve. In addition to these, the umbones described as coiled, when it incurved in such a manner that their transverse outline forms a spiral or a complete whorl. Coiled umbones are generally prosogyrate (except *Gryphaea* and *Exogyra* where they opisthogyrate). They may be coiled outwardly from the sagittal plane, termed as spirogyrate (e.g. *Glossus*, *Diceras*).

In many bivalves (Lucinidae, Veneridae), heart shaped differentiated area occurs anterior to umbones, termed as lunule. An analogous structurally differentiated area behind the umbones, termed as escutcheon. Sometimes the escutcheon bounded by a ridge, known as escutcheon ridge.

Ligament

The ligament, the elastic structure joining the two valves dorsally. It causes the valves to open when the adductor muscles relax and also serves to unite the dorsal

margins of the valves. The form and composition of the ligament are related to both of these functions. The ligament which with reasonable probability represents the primary condition is termed primary ligament. Such ligament consists of superficial periostracum and the lamellar and fibrous layers, secreted by the inner surface of the outer mantle fold. The primary ligament represents the basis of the ligament throughout the Bivalvia except where it is almost or completely lost (as in Pholadacea). The primary layer consists of parallel layer of protein, lies parallel to growth surface; dark brown in colour and undergoes hardening by aromatic tanning. The fibrous layer shows growth lines, which corresponds with the laminations of lamellar layer, secreted by the mantle epithelium. The fibrous layer of the long axis of each fiber is normal to the growth surface at the point of its secretion. The horny organic matter of the ligament known as conchiolin, consists of protein material. The periostracum and outer layer of conchiolin is hardened by quinine tanning and not calcified, whereas the inner layer is calcified, though to a less extent than the inner layer of the valves.

The primary ligament is unmodified in some genera (e.g. *Monia*, *Lima*, Anomidae), but provided with a secondary extension at either end of ligament or both the ends. The secondary ligament consists of either periostracum (e.g. *Entodesma*, *Mytilimeria*, *Mytilus*) or of a fourth layer of ligament known as fusion layer (e.g. *Pinna*, *Glossus*, *Tellina*). The fusion layer secreted by outer surface of outer folds of mantle edge after they fused in post larval life.

The alivincular ligament is flattened structure situated between the cardinal areas of the valves with the lamellar layer both anterior and posterior to the fibrous layer (e.g. *Ostrea*). The parivincular ligament is usually conspicuous along the posterior margins of the valves and cylindrical in shape (e.g. *Tellina*). It has evolved from an opisthodetic ligament situated between the valve margins (e.g. *Mytilus*, *Pinna*). The alivincular ligament oriented symmetrically about the umbones as in *Ostrea*, *Spondylus*, *Limopsis*, but in some cases inclined from umbones into a condition which appears somewhat intermediate between amphidetic and opsithodetic as in *Pteria*. The ligaments are also classified as multivincular (*Isognomon*) and duplivincular (*Arca*). The multivincular ligament developed from alivincular ligament by addition of fibrous layer (resilia). The duplivincular ligament has bands of lamellar layer on the cardinal area of the valves, giving the appearance of a series of chevron. The duplivincular ligament provides a flexible attachment between the valves acting more as hinge than an opening mechanism, and the foot is probably used to push the valve open. The alivincular ligament although fractured dorsally, maintains an opening moment throughout the life of individual bivalves.

In some bivalves like, Pectinacea, Pteriacea and some extent of Limacea, the straight hinge margin lying either side of the beak forms the margin of triangular, relatively compressed part of the valve known as auricle or wing. In most Pteriacea the beaks lie close to anterior end of the hinge margins that the anterior auricle small or obsolete; posterior wing elongate and acutely pointed at tip in some species.

When the two valves are closed by the adductor muscles, many bivalve shells completely closed along all margins. However in some cases these still remain open

in one or more places; most effectively in the posterior margins. This condition found with the animals having long siphons, but in some cases with short siphons. A pedal gape present in the anterior or anteriorventral margins for extrusion of foot; and a byssal gape for the byssal threads, in species found attached by this structure. In *Arca* the byssal gape generally broad while in *Mytilus* it is a narrow cleft. In Pectinacea, Limacea and Pteriacea the byssal opening when present is close to the anterior auricle. In *Chlamys* and some Pectinacea it is present in the right valve only and lies at the base of a deep notch known as byssal notch below the auricle. In *Tridacna* a broad byssal gape present in the hinge margin immediately in front of the beaks.

Muscle scars

Most of the bivalve's exhibit scars on the interior of the valve which results from the attachment of the muscles. The valves are closed by the adductor muscles, typically two in number, situated medially close to the anterior and posterior margins.

The adductor scars are circular to oval, rarely elongate to crescentic in outline. Where both the muscles present then it is known as dimyarian and when equal in size then homomyarian. In groups which become sessile and attached by a byssus the anterior portion of the shell is often reduced, result in diminution of anterior adductor muscle. When these muscles are unequal in size, known as heteromyarian and if only one muscle present then termed as monomyarian.

Most of the bivalves possess a foot which is used for burrowing or crawling and from which the byssus is extruded. It is attached to the shell by a number of pedal protractor and retractor muscles. In burrowing homomyarian forms the pedal muscle scars are small but in byssally attached heteromyarian forms the posterior pedal retractor scar is large and significant; situated close to posterior adductor scar. In many groups (e.g. *Arca*, *Pteria* and *Pinna*) it is also employed as byssus retractor but in mytilida and *Anomia* a separate byssus retractor is present. The relative size and position of pedal and byssal muscle scar is useful in separating the closed related species of mytilids, giant clam and anomiiids.

The other important muscles are pallial muscles. The mantle which secretes the shell attached by a series of muscles close to the margins of shell. These typically leave a linear scar known as pallial line, sometimes interrupted by a series of accessory scars. When the pallial line follows the margins it is said to be entire but it is frequently indented posteriorly. This indentation or pallial sinus reflects the development of siphons and may be shallow or extend right up to the anterior adductor scar. The pallial sinus has dorsal, ventral and anterior sections; if the ventral section fused with the pallial line then it is confluent if not, it is free. The dorsal section may ascending, towards umbo or descending towards ventral margin. The anterior section may be rounded (sinus will be oval); straight (sinus will be rectangular) or meet the ventral section (sinus will be acute).

Cruciform muscles are present only in tellinids and are situated close and ventral to the end of pallial line. These scars not always well impressed but if so, form two small subcircular depressions.

Hinge

The articulating dorsal margin of each valve is usually thickened by a hinge plate and bear assorted teeth or ridges collectively known as hinge teeth. If none is developed then it termed as edentulous, when present, their form, number and deposition are frequently of systematic significance. There are four basic type of hinge:

i) *Heterodont* : This type of teeth found in majority of bivalves. The teeth are few in numbers but differentiated into two types: cardinal teeth whose number 1 to 3 in each valve radiate from the beak; and lateral teeth which number varies 1-2 either side of cardinal teeth, situated in the same distant from the beak and subparallel to the shell margin.

ii) *Taxodont* : The teeth are numerous, simple projected and situated in a row along the dorsal margins. This type of teeth found in *Nucula*, *Nuculana*, *Yoldia*, *Arca*, *Glycymeris*, *Limposis* etc

iii) *Dysodont* : True teeth absent but only a few ill defined denticles situated either side of the ligament. They resemble the marginal denticles of many bivalves and this type of teeth found in Mytiloidea.

iv) *Isodont* : Hinge with few teeth placed symmetrically on either side of the ligament; ridge like or rectangular teeth are called cura. They are interlocked in the wall of the valves. This type of teeth found in a few groups of bivalves (e.g. *Spondylus*, *Plicatula* etc). In Anomiacea the cura become elongated into long divergent ridges.

Orientation of the valves

For the identification of any bivalve, it is essential to know the right and left valves, anterior and posteriors of the valves. It is stated that the hinge line is dorsal and the most ligaments and certainly all transverse and parivincular ligaments lie posterior to the umbo. If such a bivalve is held dorsal side up and the ligament lies between the beaks and the observer then the left valve will be in the left hand and the right valve in the right hand. Pallial sinus if present it is always posterior. In species with a byssal notch, this is always in an anterior or anterioventral position, so in scallops, wing and hammer oysters this will give the correct orientation. In some arcoid bivalves there are neither byssal notch nor pallial sinus and the orientation of these is difficult to deduce from the shell alone. With living animal the anatomy is straight forward, the toe of the foot is anterior, so are the labial palps and mouth, the anus is posterior.

Shell shape

Shells are three dimensional objects and their verbal description is complex. Three main dimensions are employed length, height and breadth. Length is the maximum dimension along the longitudinal axis i.e. from anterior to posterior margin, height is the maximum dimension along the vertical axis, i.e. from dorsal to ventral margin and to breadth is the maximum inflation of the valves when joined.

Different terms are used to describe the shell shape. They are circular or orbicular, e.g. *Glycymeris*, *Scutarcopagia*, *Dosinia*; subcircular or suborbicular e.g. *Macoma*;

subquadrate e.g. *Nemocardia*, *Ctenocardia*, *Pinctada*, *Lucinia*; trigonal/triangular e.g. *Cardita*, *Pinna*; trigonally oval e.g. *Astarte*; subtrigonal e.g. *Nucula*; subelliptical e.g. *Yoldia*; oval e.g. *Acila*, *Meropesta*, *Abra*; subovate e.g. *Cardites*, *Tellina*; subrectangular e.g. *Arca ventricosa*, *Barbatia*; elongate e.g. *Lithophaga*, *Solen*; elongate elliptical e.g. *Gari*; elliptical e.g. *Scrobicularia*; lanceolate e.g. *Tellina lanceolata*; alata or pteriiform e.g. *Ptyeropera*; rostrate e.g. *Ceromya*; mytiliform e.g. *Perna*, *Septeria*.

The interpretation of outline is essential to species discrimination especially where other shell features are not critical. The position of beak in bivalves does act as a fixed point.

Shell sculpture

The shell sculpture is highly valuable taxonomic character especially for the identification of the species. It is however only so if it is fully and accurately described. Most descriptions give only a general outline and often refer to number of ribs or concentric ridges. Shell sculpture broadly divided into two elements; radial and concentric. The radial sculpture radiates from the umbos towards the margin and concentric sculpture follows the margins. Other patterns also observed the most common of these being what were initially concentric elements becoming oblique to the comarginal line, termed as oblique or acentric sculpture, and if particularly dense then it is known as scissulate (as in some tellins). The other type found in radial sculpture where the primary elements divided and the divisions are not truly radial in orientation termed as divergent. In some group oblique sculpture is not derived from concentric elements but it angled oppositely on the anterior and posterior halves of the valves. The change of angle occurs in any part of the valve, but typically along a median or posteriormedian axis.

Radial sculpture

Radial sculpture varies from surface line through a variety of increasingly raised forms to ribs and occasionally to a much lesser degree of incised forms to grooves. Lines are not raised, threads are raised lines and they follow the riblets and ribs. Incised sculpture described as striations or grooves. The costellae and costae are interchangeable with riblets and ribs.

The simple type of radial ribs consists of equal size elements, but this is seldom found. It is common to have a sequence of primary ribs with riblets and raised threads in each primary interspaced; in which it is essential to determine its pattern and terms as primary, secondary and tertiary elements.

Other than number and size of radial elements, their cross sectional shape and size of interspace are important. It is always essential to quote the size of each shell when the rib numbers are given as diagnostics character.

Concentric sculpture

Most of shell exhibit some trace of concentric sculpture at least in the form of the growth lines; which indicate the periodic changes in the rate of growth of shell. They

are evenly spaced, closed together towards the margin. Usually they take the form of incised lines but occasionally become strong.

Concentric sculpture is variable. Elements that increase the width are termed lines, lirations, ridges and undulations. This element typically thin, increases vertically and when moderately developed known as lamellae, but it is developed into leaf like projections the foliaceous. Concentric elements not always project vertically from the shell, either recurred towards the umbos or extended towards the margins.

Combined sculpture

Although the simple concentric and vertical sculptures are encountered in shell surface, in many bivalves both these elements combine to produce wide varieties of sculpture. In some species the interspace is reduced due to the development of rib structure. If the concentric elements are stronger varieties of tubercles, pustules or bars may develop where the concentric and radial elements crosses. Similar pattern are also found where a dominant concentric sculpture crossed by weaker radial elements. When the concentric and radial sculpture intersecting each other and forms a network known as reticulate sculpture. When the concentric elements form flattened interrupted lamellae which project ventrally, is termed as imbricate; but often the projections are erect and forms scales. If both elements are equally developed and interrupted each other to form small blocks of various shapes and patterns termed as decussate or cancellate.

Periostracum

It is the outer non calcified layer of the shell and is often projected into hairs, bristles or flattened into lamellae. It is very useful characters for Arcoidea and Mytilidea and to a less or extent across the whole of the bivalves.

Marginal structures

The inner margin of the shell although smooth, also with a series of interlocking projections which usually reflect the surface of radial sculpture. If the margin is simply undulating, then termed as fluted but with a series of wide projections and corresponding sockets then termed as crenulated. Marginal crenulations are not uniform and variations in their forms can be of systematic value. In the other valve the inner margin may be serrated or denticulate with either a series of shape line of with fine blunt projections, may be visible when the valves are closed or lie in little distance, visible only when the valves is open. In inequivalve shells co-marginal ridges present in the larger valve.

Colour

The colouration can be certain extent correlated with the taxonomic arrangement of the bivalves. Certain type of colour patterns or even the absence of colouration can be characteristic of particular families and genera. Colour is considered not to be functional in most bivalves, especially those which are burrowing forms. The pigments are produced of metabolic activity and deposited in the shell for disposal. These

pigments are probably dependant on diet and the environment and consequently it is possible to find colours dominating in one population but not in other population.

The colouration not superficial may penetrate well into the calcareous test. The pigments are though the waste products of metabolism, secreted in the shell for disposal. Some bottom living forms, notably the pectinids, appear remarkable camouflaged. In some genera (like *Pinna*, *Pteria*, *Pinctada*, *Malleus*), the pigment is porphyrins and soluble in acid; whereas in others the pigment is associated with the conchiolin that forms the organic matrix of the shell and cannot be separated from it.

Biology

Habits and Food : Bivalves are essentially aquatic animals; hence no members of this class can respire, feed or remain active except in aqueous medium. The period for any species to survive, inactive, when removed from such an environment depends largely on its capacity to close the valves, so that the loss of moisture is reduced to a minimum. In marine forms and those accustomed to life attached to rocks and other objects of the intertidal zone, which are exposed for several hours daily, exhibit tenacious life. *Crassostra* sp. found living as long as ten weeks out of water; *Mytilus* can survive for a month or more under such conditions. However most of the marine forms remain alive only for few days out of water. Some freshwater forms lives in pool which are seasonally dried up, particularly in hot climates, are most retentive life of all bivalves. Most of them aestivate, burrow deeply into the muddy bottom before it is dry, but at times they merely loose on the floor of the former pool. Some Unionidae and Sphaeriidae are known to be dormant as much as six months every year and capable to survive even more.

The laterally compressed body renders the bivalves to well adapt for burrowing in sandy and muddy substrates, a process accomplished with the aid of their extensile foot. Many burrowers ascend toward the sea floor in order to feed, withdrawing to a greater depth when the activity ceases, as and when the bottom is uncovered between the tides. Many shallow burrower (i.e. *Cardium*), emerge to surface of sea floor from time to time and can migrate, with aid of their foot. They move with a series of jerks or even leaps resulting from the sudden straightening of its bent foot. Some of the deeper burrowers lead more or less sedentary life, as have continuous or frequent intervals, with relatively clear bottom water. Most of them accomplish with the aid of their two siphons, inhalant and exhalant, as these structures constitute posterior extensions of the mantle. The deepest burrowers are thus having longest siphon (such as *Mya* and *Lutraria*), found buried as much 30cms depth in bottom sediments. The normal position of life of all burrowers is with plane of valve margins vertical. Some Tellinids lie below the surface with the commissure horizontal and right valve, uppermost. The Lucinids are without inhalant siphons but draw the water current through a inhalant tube which is driven thorough the sediment by an up and down motion of the end of the extensile vermiform foot and is lined with harden mucous. This tube projects from the shell at its anterior end, which point obliquely upwards, buried upto the depth of 6 to 8 cms.

Nucula is without siphons buried in shallow environment due to the inhalant current in anterior margins and maintained a passage due to exhalant current, which passes between more deeply, buried posterior margins by repeated extrusion of water expelled from the mantle cavity due to certain contraction of adductor muscles.

A few bivalves are borers on solid rocks. *Hiatella* bore relatively in soft rocks, while *Pholas* can bore in hard type of rocks. The soft rock borers, bores by the mechanical action of the two valves of the shell, which are forced apart repeatedly by sudden pressure of water expelled from the siphons, after their partial withdrawal into the bore holes. The hard rock borers shell surface bears rows of tooth like protrusions, rasps its way forward by a rocking motion of its valves produced by the two adductor muscle acting alternately. The foot forms a sucker which grips the end of the burrow, changing position frequently, as a result a circular hole is made. *Lithophagus* bores into the calcareous formations, including the coral rocks with the help of its acid secretions from which its own shell is protected by a thick periostracum. The animal is held in its position by byssal threads attached to the sides of the burrow. In all these cases the cavity widens inwards, the shell growing in the bores; therefore the molluscs never emerge from its cavity. The siphons however in most cases are capable of becoming extended as far the opening. Some smaller species of *Tridacna* can bore mechanically obliquely downwards into the coral rocks. During this process the molluscs orient with the hinge margins facing downwards. The byssus, which projects through a gap between these margins pull the shell against the rock and facilitates its penetration, which stops when the opposites margin of the valves, which must remain capable of opening, are almost flush with the surface of the rocks.

The highly specialized boring bivalves are the terenids, the shipworms. The anterior end of the valves of the shell has rap like surface and penetration is mechanical. The wood particles ingested by the animal, and thus they are not dependent on outside food. The valves are much reduced in size and cover only a small part of the animal, which is worm like and extended along the whole length of the bore. Later the hole is lined with calcium carbonate, there fore the molluscs have a very considerable length (upto 1.2 meter in case of *Bankia*). Its opening can be closed by two paddle like structures known as pallets, so that the animal can seal itself from the exterior.

Bivalves are an important element for benthic epifauna. Some rely on the weight or shape of their shell to maintain their position on the sea floor. Others live on rocky or coarse bottoms, attached by their byssus threads or cementation of one of the valves of shell. The byssus well developed in the case of *Perna*, *Arca*, *Pinctada*, is typical bunch of threads secreted by glands at the posterior end of the foot and projecting through a gape between the valve margins. In *Anomia* it consists of a rigid calcareous plug which passes through a foramen in one of the valves. In families like Chamidae, Spondylidae and Ostreidae, the attachment of one valve to some solid object by calcareous cement secreted by the equivalent of the byssal gland. In genus *Pinna* combines byssal attachment with a burrowing mode of life. The shell is conical

or fan shaped and lives buried in the mud with its anterior end lowermost and broad posterior end projecting into the relatively clear water above. The byssus by which *Pinna* is attached to buried stones or other objects emerges from between the valve margins close to the anterior end of the shell. Some species of genus *Musculus* (Mytilidae) and Limidae construct quite elaborate nests from the byssus threads.

Locomotion in active living bivalves of the family Pectinidae, many species can swim near the sea bottom, propelled by sudden expulsions of water from the mantle cavity, produced by clapping their valves together. When not active these molluscs rest on one valve on the sea floor. The limids can also swim like the pectens but the valve vertical during the process whereas horizontal in the case of pecten.

No living bivalves are pelagic except the larval stage. Most of them are abundant in sub littoral zone, but some are dredged from very deep sea floors. The deepest record for the members of genus *Axinulus* (Thyasiridae) from 10415-10687 meter in the Tonga.

Some marine forms (e.g. *Perna*, *Cardium*, *Macoma*) are notably tolerant of brackish water conditions. Bivalves confined to freshwater include the Unionacea and the family Etheriidae, in which one valve of oyster like shell is cemented to stone.

Bivalves are suspension and deposit feeders according to their feeding habits. The suspension feeders feed on phytoplankton, relying for their supply on the inhalant current in which large numbers of microscopic protists (chiefly diatoms and dinoflagellate) are suspended. These are strained off by the ctenidia and conveyed to the mouth. The deposit feeders lives on organic debris and bottom living diatoms contained in the mud or sand of the sea floor into which they burrow. Usually the inhalant siphon collects the food. In most such cases the inhalant siphon is long and slender and not attached to exhalant siphon, and its tip ranges over the surface of sediment in search of food. In Nuculacea, the collection of food bearing sediment is the function of the two palp proboscides appendages of the labial palps.

CLASSIFICATION

According to Vaught (1989) the class Bivalvia include five Subclasses, 12 Orders, four Suborders, 45 Superfamilies and 116 families; of which 69 families are present in India. The details as follows :

Subclass	PROTOBRANCHIA		
Order	SOLEMYOIDA		
Superfamily	SOLEMYOIDEA	:	1 family
Superfamily	NUCINELLOIDEA	:	1 family
Order	NUCULOIDA		
Superfamily	NUCULOIDEA	:	2 families
Superfamily	NUCULANOIDEA	:	8 families

Subclass	PTERIOMORPHIA	
Order	ARCOIDA	
Superfamily	ARCOIDEA	: 4 families
Superfamily	LIMOPSOIDEA	: 3 families
Order	MYTILOIDA	
Superfamily	MYTILOIDEA	: 1 family
Order	PTERIOIDA	
Suborder	PTERIINA	
Superfamily	PTERIOIDEA	: 4 families
Suborder	PINNINA	
Superfamily	PINNOIDEA	: 1 family
Order	LIMOIDA	
Superfamily	LIMOIDEA	: 1 family
Order	OSTREOIDA	
Suborder	OSTREINA	
Superfamily	OSTREOIDEA	: 2 families
Superfamily	PLICATULOIDEA	: 2 families
Suborder	PECTININA	
Superfamily	PECTINOIDEA	: 4 families
Superfamily	ANOMIOIDEA	: 2 families
Subclass	PALEOHETERODONTA	
Order	TRIGOINOIDA	
Superfamily	TRIGOINOIDEA	: 1 family
Order	UNIONOIDA	
Superfamily	UNIONOIDEA	: 3 families
Superfamily	MUTELOIDEA	: 3 families
Subclass	HETERODONTA	
Order	VENEROIDA	
Superfamily	LUCINOIDEA	: 6 families
Superfamily	GALEOMMATOIDEA	: 5 families
Superfamily	CYAMIOIDEA	: 6 families

Superfamily	CHLAMYDOCONCHOIDEA	: 1 family
Superfamily	CARDITOIDEA	: 2 families
Superfamily	CHAMOIDEA	: 1 family
Superfamily	CRASSATELLOIDEA	: 1 family
Superfamily	ASTARTOIDEA	: 2 families
Superfamily	CARDIOIDEA	: 3 families
Superfamily	TRIDACNOIDEA	: 1 family
Superfamily	MACTROIDEA	: 4 families
Superfamily	SOLENOIDEA	: 2 families
Superfamily	TELLINOIDEA	: 4 families
Superfamily	DREISSENOIDEA	: 1 family
Superfamily	GAIMARDIOIDEA	: 1 family
Superfamily	ARCTICOIDEA	: 3 families
Superfamily	GLOSSOIDEA	: 2 families
Superfamily	CORBICULOIDEA	: 2 families
Superfamily	VENEROIDEA	: 5 families
Order	MYOIDA	
Suborder	MYINA	
Superfamily	MYOIDEA	: 4 families
Superfamily	GASTROCHAENOIDEA	: 1 family
Superfamily	HIATELLOIDEA	: 1 family
Superfamily	PHOLADOIDEA	: 3 families
Subclass	ANOMALODESMATA	
Order	PHOLADOMYOIDA	
Superfamily	PHOLADOMYOIDEA	: 2 families
Superfamily	PANDOROIDEA	: 7 families
Superfamily	CLAVAGELLOIDEA	: 1 family
Superfamily	POROMYOIDEA	: 3 families

Class BIVALVIA
Subclass PROTOBRANCHIA

This subclass represented by the four superfamilies namely Solemyoidea, Nucinelloidea, Nuculoidea and Nuculanoidea. The structure of gills, palps and foot suggests that this group is most primitive among the living bivalves. The shell is not uniform i.e. Solemyoidea lack of hinge teeth, whereas the Nuculoidea have many. This group of animals live by extracting the food from the sediment particles, so they are to found in muddy environment and common in deep water than the intertidal habits.

Superfamily Nucinelloidea not recorded from Indian waters.

Order SOLEMYOIDA
Superfamily SOLEMYOIDEA

The superfamily Solemyoidea represented by single family Solemyidae also present in Indian waters.

Shells oblong and distinct with the broad fringe of shiny periostracum overlapping the margins. Most of the shells are oblong with almost cylindrical outline resembles with the razor clam, but the beaks are close to the posterior margin not in anterior. Lacks of hinge teeth; ligament prominent.

Family SOLEMYIDAE
Genus *Solemya* Lamarck, 1818

1818. *Soelmya* Lamarck, *Anim. Sans. Vert.*, **5** : 488. Type species : *Soelmya mediterranea*=
Tellina togata Poli, 1795

Subgenus *Acharax* Dall, 1908

1908. *Acharax* Dall, *Nautilus*, **22** : 2. Type species: *Soelmya johnsoni* Dall, 1891

57. *Solemya (Acharax) grandis* Prashad

1932. *Solemya (Acharax) grandis* Prashad, *Proc. malac. Soc. London*, **20** : 179, pl.14, figs.6 and 7. Type locality Laccadive sea, 478 fathoms. Types : NCZ, ZSI

2004. *Solemya (Acharax) grandis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 68.

Distribution : India : Lakshadweep.

Elsewhere : No subsequent records.

58. *Solemya (Acharax) winckworthi* Prashad

1932. *Solemya (Acharax) winckworthi* Prashad, *Proc. malac. Soc. London*, **20** : 179, pl. 14, fig. 5. Type locality Gulf of Mannar, 3 fathoms. Types : NCZ, ZSI

2004. *Solemya (Acharax) winckworthi*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 68.

Distribution : India : Tamil Nadu.

Elsewhere : No subsequent records.

Order NUCULOIDA

Superfamily NUCULOIDEA

Shell small, subovate trigonal or elongate; teeth taxodont, typically v-shaped in section, long, sharp and pointed, with a persistent greenish periostracum; ligament internal, set in shallow resilifer. The inner margin smooth or serrated. This superfamily represented by two families of which only the family Nuculidae is recorded from India.

Family NUCULIDAE

Genus *Nucula* Lamarck, 1799

1799. *Nucula* Lamarck, *Mem. Soc. Hist. Nat. Paris*, 87. Type species: *Arca nucleus* Linnaeus, 1758

Subgenus *Nucula* s.st.

59. *Nucula (Nucula) bengalensis* Smith

1895. *Nucula bengalensis* Smith, *Ann. Mag. nat. Hist.*, (6)16 : 15, pl. 2, fig. 9. Type locality Bay of Bengal, 145 -250 fathoms. Types : NCZ, ZSI.

2004. *Nucula bengalensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 49.

Distribution : India : Bay of Bengal.

Elsewhere : No subsequent records.

60. *Nucula (Nucula) donaciformis* Smith

1895. *Nucula donaciformis* Smith, *Ann. Mag. nat. Hist.*, (6)16 : 15, pl. 2, fig. 8. Type locality Bay of Bengal, 145 -250 fathoms. Types : NCZ, ZSI.

2004. *Nucula donaciformis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 50.

Distribution : India : Bay of Bengal.

Elsewhere : No subsequent records.

61. *Nucula (Nucula) marmorea* Hinds

1843. *Nucula marmorea* Hinds, *Proc. zool. Soc. London*, 1843 : 98.

1941. *Nucula marmorea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 32, fig. 14a.

1986. *Nucula (Nucula) marmorea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 174.

2000. *Nucula (Nucula) marmorea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 199.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Moluccas.

62. *Nucula (Nucula) mitralis* Hinds

1843. *Nucula mitralis* Hinds, *Proc. zool. Soc. London*, **1843** : 97.
 1871. *Nucula arbaniana* Nevill, *J. Asiat. Soc. Beng.*, **40**(2) : 9, pl. 1, figs. 11 a-c. Type locality: Puri, Orissa.
 1895. *Nucula mitralis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
 1904. *Nucula mitralis*: Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 12.
 1941. *Nucula mitralis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(2) : 32, fig. 14a.
 1986 *Nucula (Nucula) mitralis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 174.
 1991. *Nucula mitralis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 100. *Zool. Surv. India*.
 1992. *Nucula (Nucula) mitralis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 216, pl. 14, figs. 8 & 10. *Zool. Surv. India*.
 2000. *Nucula (Nucula) mitralis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 199.
 2008. *Nucula mitralis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 16.

Distribution : India : Andaman and Nicobar Islands, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Moluccas, Australia.

Subgenus *Acila* H. and A. Adams, 1858

1858. *Acila* H. and A. Adams, *Gen. Rec. Moll.*, **2** : 545. Type species : *Nucula divaricata* Hinds, 1843.

63. *Nucula (Acila) fultoni* Smith

1892. *Nucula (Acila) fultoni* Smith, *J. Conch. London*, **7** : 111. Type locality : Off mouth river Hooghly, Bay of Bengal. Types : NCZ, ZSI.
 1904. *Nucula (Acila) fultoni*: Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 12.
 2004. *Nucula (Acila) fultoni*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 50.

Distribution : India : Kerala, West Bengal.

Elsewhere : No records.

64. *Nucula (Acila) prestoni* Ray

1951. *Nucula (Acila) prestoni* Ray, *Rec. Indian Mus.*, **49**(2) : 185, pl. 4, figs. 1-3. Type locality : Indian ocean. Types : NCZ, ZSI

2004. *Nucula (Acila) prestoni*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 51.

Distribution : India : Indian ocean.

Elsewhere : No subsequent records.

Subgenus *Leionucula* Quenstedt, 1930

1930. *Leionucula* Quenstedt, *Geol. Pal, Abh.*, **18**(1) : 110 & 112. Type species : *Nucula albensis* d'Orbigny, 1844.

65. *Nucula (Leionucula) convexa* Sowerby

1841. *Nucula convexa* Sowerby, *Conch. Illustr.* **5** : fig. 22.
1968. *Nucula (Nucula) convexa* Ray, *Indian Mus. Bull.*, **3**(1 & 2) : 30, Text fig. 31.
1991. *Nucula (Leionucula) convexa*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 100. *Zool. Surv. India*.
1992. *Nucula (Leionucula) convexa*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 215, pl. 14, figs. 3 & 5. *Zool. Surv. India*.
2008. *Nucula convexa*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 16.

Distribution : India : Orissa, West Bengal.

Elsewhere : Sri Lanka, Myanmar, Malaysia, Moluccas, China.

66. *Nucula (Leionucula) cumingi* Hinds

1843. *Nucula cumingi* Hinds, *Proc. zool. Soc. London*, **1843** : 97.
1916. *Nucula semiramisensis* Preston, *Rec. Indian Mus.*, **12** : 93, figs. 9-9a. Type locality : Semiramis Bay, Andaman Islands, 2-4 fathoms. Types : NZC, ZSI.
1986 *Nucula (Leionucula) cumingi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 174.
2000. *Nucula (Leionucula) cumingi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 200.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Moluccas, Singapore, Gulf of Siam, New Guinea, Philippines and Australia.

67. *Nucula (Leionucula) layardi* A. Adams

1856. *Nucula layardi* A. Adams, *Proc. zool. Soc. London*, **1856** : 51.
1906. *Nucula layardi*: Smith, *Ann. Mag. nat. Hist. London*, (7)**18** : 252.
1906. *Nucula layardi* : Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 791.
1949. *Nucula layardi*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55, fig. 1.

1986 *Nucula (Leionucula) layardi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 174.

2000. *Nucula (Leionucula) layardi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 200.

Distribution : India : Andaman and Nicobar Islands, Maharashtra.

Elsewhere : Sri Lanka, Persian Gulf, Pakistan coast.

Remarks : Ovate, trigonal, beaks well behind mid line; posterior end narrowly rounded, anterior end broad; escutcheon short, scarcely domed; lunule long, projecting as a low ridge; sculpture smooth except for growth lines, inner margin smooth. Inhabitant of muddy areas of offshore regions.

Superfamily NUCULANOIDEA

The Superfamily Nuculanoidea is instantly recognisable by the form of hinge; allied to the superfamily Nuculoidea. Teeth taxodont, typically v-shaped in section, long and sharply pointed with internal ligament in resilifer. Shell elongate, elliptical to rostrate in outline. This superfamily represented by eight families of which three families Nuculanidae, Yoldiidae and Malletiidae are reported from Indian waters. Nuculanidae are strongly or partly rostrate with strong sculpture; whereas Yoldiidae are generally elliptical smooth and shining.

Family NUCULANIDAE

Subfamily NUCULANINAE

Genus *Nuculana* Link, 1807

1807. *Nuculana* Link, *Bes. nat. Samm. Univ. Rostock*, **1807** : 155. Type species : *Arca rostrata* Chemnitz, 1774.

Subgenus *Nuculana* s. st.

68. *Nuculana (Nuculana) brookei* (Hanley)

1860. *Leda brookei* Hanley, *Proc. zool. Soc. London*, **1860** : 132.

1906. *Leda brookei*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 792.

1986 *Nuculana (Nuculana) brookei*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Nuculana (Nuculana) brookei*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 200.

Distribution : India : Andaman and Nicobar Islands, Maharashtra.

Elsewhere : Persian Gulf, Borneo.

Remarks : Beaks almost central, transversely oval, anterior rounded, posterior end acute with a low ridge close to the dorsal margin; Sculpture evenly spaced, elevated, concentric ridges; Hinge massive white.

Found in offshore regions.

69. *Nuculana (Nuculana) fumosa* Smith

1895. *Nucula fumosa* Smith, *Ann. Mag. nat. Hist.*, (6)16 : 16, pl. 2, figs. 10-10a. Type locality : Off Coromandel coast, Bay of Bengal, 145 -250 fathoms. Types : NCZ, ZSI.
2004. *Nucula fumosa*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 53.

Distribution : India : Bay of Bengal.

Elsewhere : No subsequent records.

70. *Nuculana (Nuculana) indica* Smith

1895. *Nucula indica* Smith, *Ann. Mag. nat. Hist.*, (6)16 : 16, pl. 2, figs. 11-11a. Type locality : Off Coromandel coast, Bay of Bengal, 145-250 fathoms. Types : NCZ, ZSI.
2004. *Nucula indica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 53.

Distribution : India : Tamil Nadu.

Elsewhere : No subsequent records.

71. *Nuculana (Nuculana) mauritiana* (Sowerby)

1833. *Nucula mauritiana* Sowerby, *Conch. Illustr.*, *Nucula*, p. 4, fig. 22.
1895. *Leda mauritiana*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
1906. *Leda mauritiana*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 792.
1906. *Nuculana mauritiana* : Comber, *J. Bombay nat. Hist. Soc.*, **17** : 214.
1941. *Nuculana mauritiana*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(2) : 32, fig. 14b.
1949. *Nuculana mauritiana*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55, fig. 2.
1956. *Nuculana mauritiana*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat Hist.)*, **1**(2), pt. 7 : 16, pl. 2, figs. 1a & 1b.
1968. *Nuculana mauritiana*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 127.

Distribution : India : Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

72. *Nuculana (Nuculana) retusa* (Hinds)

1843. *Nucula retusa* Hinds, *Proc. zool. Soc. London*, **1843** : 99.
- 1986 *Nuculana (Nuculana) retusa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
2000. *Nuculana (Nuculana) retusa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 200.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Moluccas, Philippines.

73. *Nuculana (Nuculana) robsoni* Prashad

1932. *Nuculana (Nuculana) robsoni* Prashad, *Siboga Exped. Lamellibranch*, **53C** : 20, pl. 1, figs. 19-20.

1991. *Nuculana (Nuculana) robsoni*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 101. Zool. Surv. India.

Distribution : India : Andaman Islands, Orissa, West Bengal.

Elsewhere : Sri Lanka, Indonesia, Malaysia.

Subgenus *Jupiteria* Bellardi, 1875

1875. *Jupiteria* Bellardi, *Mon. Nuculidi Terr. Tèrz. Piemonte e Liguria*, p. 155. Type species: *Nuculana concava* Bronn, 1831.

74. *Nuculana (Jupiteria) fragilis* Chemnitz

1784. *Arca fragilis* Chemnitz, *Syst. Cab. Conch* **7** : 165, fig. 546.

1904. *Nuculana fragilis*: Smith, *Ann. Mag. nat. Hist.* London, (7)**14** : 12.

1992. *Nuculana (Secella) fragilis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 216, pl.14, figs.4 & 6. Zool. Surv. India.

2008. *Nuculana (Jupiteria) fragilis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 16.

Distribution : India : Andaman and Nicobar Islands, West Bengal.

Elsewhere : Indonesia, Malaysia, China.

Family YOLDIIDAE

Subfamily YOLDIINAE

Genus *Yoldia* Mueller, 1842

1842. *Yoldia* Mueller, *Ind. Moll. Groenl.*, **1842** : 18. Type species: *Yoldia hyperborea* Torell, 1859.

75. *Yoldia nicobarica* (Bruguiere)

1814. *Nuculana nicobarica* Bruguiere in Lamarck, *Hist. Nat. Anim. Sans. Vert.*, **6(1)** : 59.

1896. *Yoldia nicobarica*: Smith, *Ann. Mag. nat. Hist.*, (6)**18** : 370.

1906. *Yoldia nicobarica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 792.

1949. *Yoldia nicobarica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 55, fig. 3.

1986 *Yoldia (Yoldia) nicobarica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1992. *Yoldia nicobarica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 217, pl. 14, figs. 7 & 9. Zool. Surv. India.

2000. *Yoldia nicobarica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 201.

2008. *Yoldia nicobarica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 16.

Distribution : India : Andaman and Nicobar Islands, Maharashtra.

Elsewhere : Gulf of Oman, Sri Lanka

76. *Yoldia tenella* Hinds

1843. *Yoldia tenella* Hinds, *Proc. zool. Soc. London*, 1843 : 99.

1916. *Yoldia tenella*: Preston, *Rec. Indian Mus.*, 12 : 94.

2000. *Yoldia tenella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 201.

Distribution : India : Andaman Islands.

Elsewhere : Gulf of Oman.

Remarks : Preston (1916) reported this species from Semiramis Bay, Port Balir, Andaman Islands, in 2-6 fathoms, in fine mud.

Family MALLETIIDAE

Genus *Malletia* Des Moulins, 1832

1832. *Malletia* Des Moulins, *Acta Soc. Linn. Bordeaux*, 5(26) : 85. Type species : *Malletia chilensis* Des Moulins, 1832.

77. *Malletia conspicua* Smith

1895. *Malletia conspicua* Smith, *Ann. Mag. nat. Hist.*, (6)16 : 17, pl. 11, fig. 12. Type locality : Laccadive sea, 636 fathoms.

2004. *Malletia conspicua*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 40.

Distribution : India : Lakshadweep.

Elsewhere : No subsequent records.

Subclass PTERIOMORPHIA

Order ARCOIDA

Superfamily ARCOIDEA

Hinge teeth of the superfamily Arcoidea are long, with two series of small teeth (taxodont) , increases in size towards the margin. Dorsal area is long and carries ligament made up of alternating elastic and fibrous bands (duplivincular). The outline approximately trapezoidal, varying from subovate, subrectangular to quadrate. Sculpture variously radially ribbed. Periostracum well developed and extended into concentric lamellae, hairs or scales. Adductor scars subequal, the pallial line is entire

and the inner margin smooth or deeply crenulate. The animals are suspension feeder with large simple gills and small palps; mantle edge free and siphons are never formed; epifaunal species often with colour and bears eyes spots.

This superfamily represented by four families of which three families; Arcidae, Noetiidae and Cuculaeidae are present in India. Arcidae is the best represented family characterised by obliquely aligned ligament bands which form a distinctive chevron pattern. The Arcidae have two distinct ecological groups and divided into two subfamilies. The Arcinae attached themselves in hard surfaces (epifaunal) by a byssus and found in a variety of littoral and sub littoral habitats. The Anadarinae are either free living in soft sediments (in faunal) or possess a weak byssus threads attached to sand grains or gravel within the sediments. The Noetiidae are less diverse group. The ligament has vertically aligned bands and the range of shell form is more conservative than the Arcidae. Shell sculpture with radial riblets and the animals are infaunal or epifaunal. The Cuculaeidae have the chevron ligament, but the hinge teeth are subparallel and the adductor muscles are attached to elevated buttresses.

Family ARCIDAE

Subfamily ARCINAE

Genus *Arca* Linnaeus, 1758

1758. *Arca* Linnaeus, *Syst. Nat.*, ed. 10 : 693. Type species : *Arca noae* Linnaeus, 1758

Subgenus *Arca* s. st.

78. *Arca (Arca) avellana* Lamarck

1819. *Arca (Arca) avellana* Lamarck, *Hist. nat. Anim. Sans. Vert.*, (1)6 : 38.

1895. *Arca Kraussi*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1940. *Arca avellana*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 338.

1941. *Arca avellana*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 34.

1956. *Arca avellana*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1, 2(7) : 20, pl. 2, figs. 2a-c.

1965. *Arca avellana*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 88, pl. 4, figs. 9a & 9b.

1972. *Arca maculata*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 286.

1974. *Arca avellana*: Sarma, *J. mar. biol. Ass, India*, 16(3) : 755.

1986. *Arca avellana*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1991. *Arca avellana*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 346. Zool. Surv. India.

2000. *Arca (Arca) avellana*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 201.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific. Widely distributed.

Remarks : Shell irregularly boat shaped, 4 to 6 riblets on posterior area, elsewhere finely decussate; ligament covers entire dorsal area, serrated, spathulate, periostracal bristles on prominent sharp keel.

Found in crevices of rocks and corals, in lower shore or below. For detail synonymy see Prashad (1932).

79. *Arca (Arca) complanata* Chemnitz

1784. *Arca complanata* Chemnitz, *Conch. Cab.*, 7 : 198, pl. 55, figs. 544 & 545.

1941. *Arca complanata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 33, fig. 14e.

1956. *Arca complanata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 22, pl.2, figs. 4a and 4b.

1965. *Arca complanata*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 88, pl. 4, figs. 11a and 11b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Philippines.

80. *Arca (Arca) gubernaculum* (Reeve)

1844. *Arca gubernaculum* Reeve, *Proc. zool. Soc. London*, 1844 : 40.

1941. *Arca gubernaculum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 34.

1956. *Arca gubernaculum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 25, pl. 2, figs. 8a and 8b.

1965. *Arca gubernaculum*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 86, pl. 2, figs. 2a and 2b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Philippines.

81. *Arca (Arca) navicularis* Bruguiere

1845. *Arca navicularis* Bruguiere, *Encyl. Meth.Vers.*, p. 99.

1965. *Arca navicularis*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 87, pl. 3, figs. 8a and 8b.

Distribution : India : Gujarat.

Elsewhere : Sri Lanka, Japan, China.

82. *Arca (Arca) profundicola* Verrill

1885. *Arca profundicola* Verrill, *Ann. Mag. nat. Hist.*, (6)14 : 171, pl. 5, fig. 7.

1981. *Arca profundicola*: Das, Mitra and Mukhopadhyaya, *Proc. zool. Soc. Calcutta*, 32 : 83.

Distribution : India : Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Japan, East and West Indies.

83. *Arca (Arca) ventricosa* Lamarck

1819. *Arca ventricosa* Lamarck, *Hist. nat. Anim. Sans. Vert.*, (1)6 : 38

1941. *Arca ventricosa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 34, fig, 14d.

1986. *Arca ventricosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Arca (Arca) ventricosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 202.

2008. *Arca (Arca) ventricosa*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 143. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : Indo-Pacific.

Remarks : Shell shape as in *Arca avellana*, but 2-4 ribs on posterior area; ligament confined to anterior inter-umbonal area; posterior dorsal area with brown transverse bars; posterior half of the shell with V-shaped brown or black stripes.

Found in crevices of rocks and corals of sublittoral zones. For detailed synonymy see Prashad (1932).

Genus *Barbatia* Gray, 1842

1842. *Barbatia* Gray, *Syn. Cont. Brit. Mus.*, ed. 44 : 81. Type species : *Arca barbata* Linnaeus; subsequent designation, Gray, 1857

Genus *Barbatia* s. st.

84. *Barbatia (Barbatia) amygdalumtosum* (Roeding)

1798. *Arca amygdalumtosum* Roeding, *Mus. Bolten.*, 1798 : 175.

1895. *Arca (Barbatia) fusca*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1965. *Arca fusca*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 88, pl.4, figs. 10a-10b.

1986. *Barbatia amygdalumtosum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1991. *Barbatia (Barbatia) amygdalumtosum*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 347. Zool. Surv. India.

2000. *Arca (Barbatia) amygdalumtosum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 202.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

85. *Barbatia (Barbatia) cancellata* Preston

1908. *Arca cancellata* Preston, *Rec. Indian Mus.*, **2** : 205, pl. 16, figs. 47. Type locality : Andaman Islands. Types : NCZ, ZSI.
2000. *Arca (Barbatia) cancellata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 202.
2004. *Arca (Barbatia) cancellata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 10.

Distribution : India : Andaman Islands.

Elsewhere : No records.

86. *Barbatia (Barbatia) coelata* (Reeve)

1798. *Arca coelata* Reeve, *Proc. zool. Soc. London*, **1844** : 126.
1986. *Barbatia coelata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
2000. *Arca (Barbatia) coelata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 202.

Distribution : India : Andaman and Nicobar Islands, Karnataka.

Elsewhere : Mauritius.

87. *Barbatia (Barbatia) decussata* (Sowerby)

1883. *Byssoarca decussata* Sowerby, *Proc. zool. Soc. London*, **1883** : 22.
1895. *Arca (Barbatia) decussata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
1895. *Arca (Barbatia) lima*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
1972. *Arca lima* : Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 286.

Distribution : India : Andaman Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Attached to the rocks of upper shore.

88. *Barbatia (Barbatia) incerta* (Smith)

1899. *Arca (Barbatia) incerta* Smith, *Ann. Mag. nat. Hist.*, (7)**4** : 251. Type locality : Sta. 232, Laccadive Sea, 430 fathoms. Types : NCZ, ZSI.
1904. *Arca (Barbatia) incerta*: Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 12.
2004. *Arca (Barbatia) incerta*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 7.

Distribution : India : Kerala, Lakshadweep, Tamil Nadu.

Elsewhere : Coast of Indian Peninsula only.

89. *Barbatia (Barbatia) innocens* (Smith)

1899. *Arca (Barbatia) innocens* Smith, *Ann. Mag. nat. Hist.*, (7)4 : 251. Type locality : Sta. 258, Laccadive Sea, 102 fathoms. Types : NCZ, ZSI.
2004. *Arca (Barbatia) innocens*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 8.

Distribution : India : Lakshadweep.

Elsewhere : No subsequent records.

90. *Barbatia (Barbatia) obliquata* Gray

1828. *Arca obliquata* Gray in Wood, *Index Test. Suppl.*, tab. 2, fig. 4.
1906. *Barbatia divaricata*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 796.
1906. *Barbatia obliquata*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 214.
1949. *Arca obliquata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55.
1965. *Barbatia obliquata*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 89, pl.4, figs. 13a and 13b.
2007. *Barbatia obliquata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 170. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Maharashtra.

Elsewhere : South African Coast, Gulf of Arabia.

Remarks : Attached on the rocks and crevices of littoral and sublittoral regions.

91. *Barbatia (Barbatia) tenella* (Reeve)

1819. *Arca tenella* Reeve, *Proc. zool. Soc. London*, 1844 : 124
1986. *Barbatia tenella*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
2000. *Barbatia (Barbatia) tenella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 203.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Malagasy, Red Sea, Indonesia, Philippines, Japan.

Subgenus *Acar* Gray, 1857

1857. *Acar* Gray, *Ann. Mag. Nat. Hist.*, (2)19 : 369. Type species : *Acar gradata* Broderip and Sowerby.

92. *Barbatia (Acar) plicatum* (Dillwyn)

1817. *Acar plicatum* Dillwyn, *Des. Cat. Rec. Shell*, 1 : 227
1895. *Arca (Acar) divaricata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1986. *Barbatia plicata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1991. *Acar plicata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 347. Zool. Surv. India.
2000. *Barbatia (Acar) plicatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 203.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Attached to corals and rocks of lower shore and below.

Subgenus *Calloarca* Gray, 1857

1857. *Calloarca* Gray, *Ann. Mag. nat. Hist.*, (2)19 : 369. Type species : *Byssoarca alternata* Sowerby, 1833

93. *Barbatia (Calloarca) bistrigata* (Dunker)

1866. *Arca bistrigata* Dunker, *Novit. Conch.*, 2 : 87, pl. 30, figs. 4-6.
1906. *Arca bistrigata*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 793.
1906. *Arca bistrigata*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 214.
1941. *Arca bistrigata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 34.
1949. *Arca bistrigata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 9.
1965. *Arca bistrigata*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 88, pl. 4, figs. 12a-d.
1991. *Barbatia (Calloarca) bistrigata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 102. Zool. Surv. India.
1998. *Arca bistrigata*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 90, pl. 12, fig.2.

Distribution : India : Gujarat, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Pakistan, China.

Subgenus *Cucullaearca* Conrad, 1865

1865. *Cucullaearca* Conrad, *Am. J. Conch.*, 1 : 11. (Type species : *Byssoarca lima* Conrad, 1865)

94. *Barbatia (Cucullaearca) helblingii* (Bruguiere)

1789. *Acar helblingii* Bruguiere, *Encyl. Meth. Vers.*, 1 : 99
1906. *Barbatia (Acar) tenebrica*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 798.
1986. *Barbatia helblingii*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1991. *Barbatia (Cucullaearca) helblingii*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 102. Zool. Surv. India.
2000. *Barbatia (Cucullaearca) helblingii*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 203.

Distribution : India : Andaman and Nicobar Islands, Maharashtra, Orissa.

Elsewhere : Indo-Pacific.

95. *Barbatia (Cucullaearca) lacerata* (Linnaeus)

1817. *Acar lacerata* Linnaeus, *Mus. Tessin*, 1753 : 116, pl. 6, fig. 1.
1986. *Barbatia lacerata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Barbatia (Cucullaearca) lacerata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 203.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Zanzibar, Philippines.

Subgenus *Fossularca* Cossman, 1887

1887. *Fossularca* Conrad, *Ann. Soc. Malac. Belgique*, 22 : 138. Type species : *Arca (Fossularca) quadrilatera* Lamarck, 1818.

96. *Barbatia (Fossularca) symmetrica* (Reeve)

1844. *Arca symmetrica* Reeve, *Conch. Icon.*, 2 : *Arca* sp. no. 120, pl. 17, fig. 120.
1878. *Arca (Scapharca) myristica* : Smith, *Proc. zool. Soc. London*, 1878 : 820.
1895. *Arca symmetrica*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.
1940. *Arca symmetrica*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 338.
1941. *Arca symmetrica*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 34.
1949. *Arca symmetrica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5): 55, fig. 7.
1956. *Arca symmetrica*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 22, pl. 2, figs. 5a and 5b.
1965. *Arca symmetrica*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 87, pl. 3, figs. 7a and 7b.
1969. *Fossularca symmetrica*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, 38 : 694.
1972. *Arca symmetrica*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 286.
1998. *Arca symmetrica*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 90, pl. 12, fig. 3.

Distribution : India : Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Genus *Trisidos* Roeding, 1798

1798. *Trisidos* Roeding, *Mus. Bolten.*, p. 175. Type species : *Arca tortuosa* Linnaeus, 1758.

97. *Trisidos tortuosa* (Linnaeus)

1758. *Arca tortuosa* Linnaeus, *Syst. Nat.* ed. 10 : 693.
1895. *Arca (Parallelipipedum) tortuosa*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.
1906. *Parallelipipedum tortuosum*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 796.
1906. *Trisis (Parallelipipedum) tortum*: Standen and Leicester, *Supply Rept. on Ceylon Pearl Oyster Fisheries in the Gulf of Manaar*, 38 : 291.
1921. *Arca tortuosa*: Hornell, *Madras Fish. Bull.*, 14 : 155, fig. 37.
1940. *Trisidos tortuosa*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 335.
1941. *Arca tortuosa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 33, fig. 14c.
1949. *Arca tortuosa*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 10.
1956. *Arca tortuosa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 26, pl. 3, figs. 1a and 1b.
1968. *Arca tortuosa*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 127.
1986. *Trisidos tortuosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
1998. *Arca tortuosa*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 90, pl. 12, fig. 4.
2000. *Trisidos tortuosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 204.
2007. *Trisidos tortuosa*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 171. *Zool. Surv. India*.
2008. *Trisidos tortuosa*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 143. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Persian Gulf, Gulf of Aden, Red Sea, Malagasy, Zanzibar, Sri Lanka, Myanmar, Singapore, New Guinea, Philippines, China and Japan.

Remarks : Found on sandy bottoms in half buried condition in Offshore regions.

Subfamily ANADARINAE

Genus *Anadara* Gray, 1847

1847. *Anadara* Gray, *Proc. zool. Soc. London*, 15 : 198, 206. Type species : *Arca antiquata* Linnaeus, 1758.

98. *Anadara antiquata* (Linnaeus)

1758. *Arca antiquata* Linnaeus, *Syst. Nat.* ed 10 : 694, nr. 144.

1986. *Anadara antiquata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.175.

2000. *Anadara scapha*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 205.

2007. *Anadara antiquata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 172. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Mauritius, Malagasy, Mocambique, Zanzibar, Red sea, Sri Lanka, Maynmar, Indonesia, Philippines, Japan, North Australia.

Remarks : Inhabitant of muddy sand areas of intertidal and offshore regions. For detail synonymy see Prashad (1932).

99. *Anadara ehreenbergi* (Dunker)

1868. *Anomalocardia ehreenbergi* Dunker, *Novitate Conch.*, p. 116, tab., 38, figs. 17 and 18.

2000. *Anadara (Imparilarca) ehreenbergi*: Lutaenko, *Bull. Russian Far East malac. Soc.*, 10 : 108.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Throughout Indo-Pacific.

Remarks : Common in sand and shell gravel of offshore region.

100. *Anadara erythraeonensis* (Jonas)

1851. *Arca erythraeonensis* Jonas, *Zeit. Fur. Malaco.*, 8 : 85.

2000. *Anadara (Mosambicarca) erythraeonensis*: Lutaenko, *Bull. Russian Far East malac. Soc.* 10 : 110.

Distribution : India : Tamil Nadu.

Elsewhere : Throughout Indo-Pacific.

Remarks : Found in sand of offshore region.

101. *Anadara ferruginea* (Reeve)

1844. *Arca ferruginea* Reeve, *Conch. Icon.*, 2 : *Arca* sp No., 39.

2000. *Anadara (Mabellarca) ferruginea*: Lutaenko, *Bull. Russian Far East malac. Soc.*, 10 : 115.

Distribution : India : Tamil Nadu.

Elsewhere : Throughout Indo-Pacific.

102. *Anadara granosa* (Linnaeus)

1758. *Arca granosa* Linnaeus, *Syst. Nat.*, ed. 10 : 694.
1895. *Arca (Anadara) granosa*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.
1906. *Arca (Anamalocardia) granosa*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 796.
1906. *Anamalocardia granosa*: Comber, *J. Bombay nat. Hist. Soc.*, 17 : 214.
1916. *Arca granosa*: Preston, *Rec. Indian Mus.*, 12 : 35.
1941. *Arca granosa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 34.
1949. *Arca granosa*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 4.
1951. *Arca granosa*: Hornell, *Indian Molluscs*, p. 495.
1965. *Arca granosa*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 86, pl. 2, figs. 3a & 3b.
1969. *Arca granosa*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, 38 : 694.
1986. *Anadara granosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
1987. *Anadara granosa*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, 8(1-3) : 154.
1988. *Anadara granosa*: Purkait and Manna, *Environ. and Ecology*, 6(2) : 443, fig. 1. 32a and b.
1991. *Anadara granosa*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 102; *Zool. Surv. India*.
1992. *Anadara granosa*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 218, pl. 15, fig. 3. *Zool. Surv. India*.
1995. *Anadara granosa*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 412. *Zool. Surv. India*.
1995. *Anadara granosa*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, 2 : 63. *Zool. Surv. India*.
1998. *Arca granosa*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 90, pl. 12, fig. 1.
2000. *Anadara granosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 204.
2001. *Anadara granosa*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 70. *Zool. Surv. India*.
2006. *Anadara granosa*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 61.
2006. *Anadara (Tegillarca) granosa*: Lutaenko, *Bull. Russian Far East malac. Soc.*, 10 : 104.
2007. *Anadara granosa*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 172. *Zool. Surv. India*.

2007. *Anadara (Tegillarca) granosa*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.
2008. *Anadara granosa*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 38, pl. 4, figs 1 & 2.
2008. *Anadara granosa*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p. 29.
2008. *Anadara granosa*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 144. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Throughout Indo-Pacific.

Remarks : Shells very common on the muddy substratum. Dey (2006) reported this species commercially used for the preparation of poultry feed.

For details synonymy see Prashad (1932)

103. *Anadara holoserica* (Reeve)

1844. *Arca holoserica* Reeve, *Proc. zool. Soc. London*, **1844** : 39.
1916. *Arca (Anadara) holoserica*: Preston, *Rec. Indian Mus.*, **12** : 93.
2000. *Anadara holoserica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 204.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Remarks : A young specimen collected from Seniramis Bay, in 2-6 fathoms, in fine mud (Preston, 1916).

104. *Anadara rhombea* (Born)

1780. *Arca rhombea* Born, *Test. Mus. Cae. Vinodob.*, **1780** : 90.
1906. *Arca (Scapharca) rhombea*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 796.
1906. *Scapharca rhombea*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.
1941. *Arca rhombea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 34, fig, 14d.
1949. *Arca rhombea*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.
1951. *Arca rhombea*: Hornell and Tomlin, *Indian Molluscs*, p. 90.
1965. *Arca rhombea*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 87, pl. 3, figs. 4a & 4b.
1986. *Anadara rhombea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1991. *Anadara rhombea*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 103. Zool. Surv. India.

1995. *Anadara rhombea*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 412. Zool. Surv. India.
2000. *Anadara rhombea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 204.
2001. *Anadara rhombea*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 71. Zool. Surv. India.
2006. *Anadara (Tegillarca) rhombea*: Lutaenko, *Bull. Russian Far East malac. Soc.*, 10 : 107.
2007. *Anadara rhombea*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 173. Zool. Surv. India.
2007. *Anadara rhombea*: Arularasan and Kasinathan, *Zoos Print J.*, 22(1) : 2546.
2008. *Anadara rhombea*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 145. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : African coast, Sri Lanka, Myanmar, Malaysia, Indonesia, Philippines, China Sea.

105. *Anadara uropygmellana* (Bary De st. Vincent)

1824. *Arca uropygmellana* Bary De st. Vincent, *Ency. Meth. Vers.*, 7 : 156, pl. 307, fig. 2.
1986. *Anadara uropygmellana*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Anadara uropygmellana*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 205.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Zanzibar, Scycheles.

Remarks : Found in the sand of offshore region.

Subgenus *Scapharca* Gray, 1847

1847. *Scapharca* Gray, *Proc. zool. Soc. London*, 15 : 198 (as *Scapharea*). Type species : *Arca inaequalvis* Bruguiere, 1798.

106. *Anadara (Scapharca) clathrata* (Reeve)

1844. *Arca clathrata* Reeve, *Conch. Icon.*, 2 : *Arca* sp. No., 48, pl. 7, fig. 48.
1986. *Scapharca clathrata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1991. *Scapharca clathrata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 104. Zool. Surv. India.
2000. *Scapharca clathrata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 205.

Distribution : India : Andaman and Nicobar Islands, Orissa, Tamil Nadu.

Elsewhere : Red sea, Gulf of Aden, Gulf of Oman, Siam, Amboina, Philippines.

107. *Anadara (Scapharca) deyrollei* Jousseaume

1883. *Scapharca deyrollei* Jousseaume, *Le Natura liste, Islamnae*, p. 191.

1948. *Arca (Arca) deyrollei*: Ray, *Rec. Indian Mus.*, **46** : 110.

1972. *Scapharaca deyrollei crispi* Patel and Patel, *J. mar. biol. Ass. India*, **14**(2) : 558. Type locality : Mahim Creeck Oyster Farm, Bombay.

1991. *Scapharaca deyrollei*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 104. Zool. Surv. India.

1992. *Scapharaca deyrollei*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 218, pl. 15, figs. 4 & 5. Zool. Surv. India.

1995. *Scapharca deyrollei*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 412. Zool. Surv. India.

2007. *Anadara (Scapharca) deyrollei*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 173. Zool. Surv. India.

2008. *Scapharca deyrollei*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 146. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Maynmar, Malaysia, Indonesia, China Sea.

108. *Anadara (Scapharca) inaequivalvis* (Bruguiere)

1792. *Arca inaequivalvis* Bruguiere, *Encyl. Meth. Vers.*, **1** : 106, pl. 305, fig. 3a.

1895. *Arca (Scapharca) inaequivalvis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1906. *Arca (Scapharca) inaequivalvis*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 793.

1906. *Arca inaequivalvis*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 214.

1941. *Arca inaequivalvis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 34, fig. 14f.

1949. *Arca inaequivalvis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55, fig. 8.

1956. *Arca inaequivalvis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 24, pl. 2, figs. 7a and 7b.

1965. *Arca inaequivalvis*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 87, pl. 3, figs. 5a & 5b.

1968. *Arca inaequivalvis*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 127.

1986. *Scapharaca inaequivalvis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1988. *Anadara inaequivalvis*: Purkait and Manna, *Environ. and Ecology*, **6**(2) : 443, fig. 1.31.
1991. *Scapharca inaequivalvis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 103. Zool. Surv. India.
1992. *Scapharca inaequivalvis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 219, pl. 15, figs. 6 and 7. Zool. Surv. India.
2000. *Scapharca inaequivalvis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 205.
2001. *Scapharca inaequivalvis*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 71. Zool. Surv. India.
2006. *Anadara (Scapharca) inaequivalvis*: Lutaenko, *Bull. Russian Far East malac. Soc.* **10** : 110.
2007. *Anadara (Scapharca) inaequivalvis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 174. Zool. Surv. India.
2007. *Scapharca inaequivalvis*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.
2008. *Anadara (Scapharca) inaequivalvis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 17.
2008. *Scapharca inaequivalvis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 146. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Persian Gulf, Singapore, Indonesia, Philippines, China and Japan, Australia.

109. *Anadara (Scapharca) indica* (Gmelin)

1791. *Arca indica* Gmelin, *Syst. Nat.*, ed. **13** : 3312.
1941. *Arca indica*: Gravelly, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 34.
1968. *Arca indica*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 128.

Distribution : India : Kerala, Maharashtra, Nicobar Islands, Tamil Nadu.

Elsewhere : East African Coast, Persian Gulf, Myanmar, Indonesia, Australia.

110. *Anadara (Scapharca) japonica* (Reeve)

1844. *Arca japonica* Reeve, *Proc. zool. Soc. London*, **1844** : p.32.
1851. *Arca japonica* Reeve, *Conch. Icon.*, **2** : *Arca* sp. No. 32, pl. 5, fig. 32.
1906. *Arca (Scapharca) japonica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 793.
1906. *Arca japonica*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.
1949. *Arca japonica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.

Distribution : India : Maharashtra.

Elsewhere : Persian Gulf, Japan.

111. *Anadara (Scapharca) lischkei* (Dunker)

1868. *Anomalocardia lischkei* Dunker, *Nouv. Conch. Moll. Mar.*, **1868** : 115, pl. 38, figs. 14-16.
 2000. *Scapharca lischkei*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 206.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indonesia, Philippines.

112. *Anadara (Scapharca) pilula* (Reeve)

1843. *Arca pilula* Reeve, *Conch. Icon.*, 2 : Arca, pl. 2, fig. 8.
 1844. *Arca pilula* Reeve, *Proc. zool. Soc. London*, **1844** : p.39.
 1906. *Scapharca pilula*: Standen and Leicester, *Supply Rept. On Ceylon Pearl Oyster Fisheries in the Gulf of Manaar*, **38** : 291.
 1941. *Arca (Cunearca) pilula*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 35.
 1986. *Scapharca pilula*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
 2000. *Scapharca pilula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 206.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Sri Lanka, Myanmar, Indonesia, New Caledonia, Philippines.

Genus *Scaphula* Benson, 1834

1834. *Scaphula* Benson, *Proc. zool. Soc. London*, **1834** : 91. Type species: *Scaphula celox* Benson, 1836.

113. *Scaphula celox* Benson

1836. *Scaphula celox* Benson, *J. Asiat. Soc. Beng.*, **5** : 750, pl. 7, figs. 2-3
 1992. *Scaphula celox*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 217 pl. 15, figs. 3 and 4. *Zool. Surv. India*.
 1995. *Scaphula celox*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 63. *Zool. Surv. India*.

Distribution : India : Madhya Pradesh (River Cane), Orissa (Mahanadi), West Bengal (River Hooghly).

Elsewhere : Restricted to Indian Penninsula.

Remarks : This occurs in low saline water only. It can not tolerate the higher salinity, as reason it is treated as freshwater species.

114. ***Scaphula deltae*** Blanford

1876. *Scaphula deltae* Blanford, *J. Asiat. Soc. Beng.*, **36**(2) : 71, pl. 14, figs 7-10. Type locality : Irravaddy delta.
1992. *Scaphula deltae*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 217 pl. 15, figs. 1 and 2. Zool. Surv. India.
1995. *Scaphula deltae*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 63. Zool. Surv. India.
2008. *Scaphula deltae*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 7.

Distribution : India : River Hooghly, West Bengal.

Elsewhere : Myanmar.

Remarks : This occurs in low saline water only. It can not tolerate the higher salinity, as reason it is treated as freshwater species.

Family NOETIIDAE

Subfamily NOETIINAE

Genus *Noetia* Gray, 1857

1857. *Noetia* Gray, *Ann. Mag. Nat. Hist.*, (2)**19** : 371. Type species : *Noetia triangularis* Gray = *Arca reversa* Sowerby, 1833

115. ***Noetia martinii*** (Reeve)

1852. *Arca (Byssarca) martinii* Recluz, *J. de Conchly.*, **3** : 409.
2007. *Noetia martinii*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 175. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Indo-Pacific.

Subfamily STRIARCINAE

Genus *Striarca* Conrad, 1862

1862. *Striarca* Conrad, *Proc. Acad. Nat. Sci. Philad.*, **14** : 290. Type species: *Arca lactea* Linnaeus, 1758.

116. ***Striarca afra*** (Gmelin)

1791. *Arca afra* Gmelin, *Syst. Nat.*, ed. 13.
2007. *Striarca afra*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 176. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra.

Elsewhere : Indo-Pacific.

117. *Striarca lactea* (Linnaeus)

1758. *Arca lactea* Linnaeus, *Syst. Nat. ed.*, **10** : 694.
1906. *Barbatia lactea*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 797.
1915. *Arca (Fossularca) lactea*: Preston, *Rec. Indian Mus.*, **11** : 298.
1916. *Arca (Fossularca) lactea*: Preston, *Rec. Indian Mus.*, **12** : 35.
1949. *Arca lactea*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 55.
1972. *Arca lactea*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 286.
1991. *Striarca lactea*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 105. Zool. Surv. India.
1992. *Striarca lactea*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 219, pl. 15, figs. 8 and 9. Zool. Surv. India.
1995. *Striarca lactea*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 64. Zool. Surv. India.
1995. *Striarca lactea*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 413. Zool. Surv. India.
2007. *Striarca lactea*: Ramakrishna, Dey, Barua and Mukhopadhyaya, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 176. Zool. Surv. India.
2008. *Striarca lactea*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 17.
2008. *Striarca lactea*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 147. Zool. Surv. India.

Distribution: India: Andhra Pradesh, Lakshadweep, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

118. *Striarca lateralis* (Reeve)

1844. *Arca lateralis* Reeve, *Conch. Icon.*, **2** : *Arca* sp. no., pl. fig.
1941. *Arca lateralis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 33.
1956. *Arca lateralis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 23, pl. 2, figs. 6a and 6b.
1968. *Arca lateralis*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 127.

Distribution : India : Kerala, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Found attached to the rocks in crevices of lower shore line.

Family CUCULAEIDAE

Genus *Cucullaea* Lamarck, 1801

1801. *Cucullaea* Lamarck, *Syst. Anim. S. Vert.*, (1)**6** : 116. Type species: *Cucullaea auriculifera* Lamarck = *Arca cucullata* Roeding, 1798.

119. *Cucullaea (C.) concamerata* (Martini)

1869. *Arca concamerata* Martini, *Beschaeft. Berl. Naturefr.*, **3** : 292, t. 7, figs. 15 and 16.
 1941. *Arca concamerata*: Gravelly, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 33, fig. 14h.
 2007. *Cucullaea (C.) concamerata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 177. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Tamil Nadu.

Elsewhere : Isle of France

120. *Cucullaea (C.) labiata* (Lightfoot)

1786. *Arca labiata* Lightfoot, *Catalogue of Portland Museum*, p. 185.
 1940. *Cucullaea concamera*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 335.
 1991. *Cucullaea (Cucullaea) labiata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 104. Zool. Surv. India.
 2007. *Cucullaea (Cucullaea) labiata*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 177. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman Islands, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : China, Japan. Widely distributed in Western Pacific.

Remarks : Found in sand of shallow water.

Superfamily LIMOPSOIDEA

The Superfamily Limopsoidea represented by two distinct families Limopsidae and Glycymerididae, both with taxodont dentitions on their hinge and anatomically similar with the Arcoidea. This group is poor burrowers, usually living in mobile, fairly coarse sand and gravel, often in shallow water. The Limopsidae are small (upto 30 mm), subcircular to ovoid-quadrate in outline; ligament simple, a small triangular structure lying in a shallow depression between beaks and the sculpture varies from cancellate to weakly ribbed. Glycymerididae are comparatively larger (upto 80 mm), circular to ovoid with a duplivincular (chevrons) ligament; sculpture varies from smooth, radially striate to strongly ribbed.

Family LIMOPSIDAE

Genus *Limopsis* Sassi, 1827

1827. *Limopsis* Sassi, *Giorn Ligustico*, **1**(5) : 476. Type species : *Arca aurita* Brocchi, 1814.
 1843. *Pectunculina* d'Orbigny, *Palaeont. Francaise Terr. Cret.*, **3** : 182.

121. *Limopsis belcheri* Adams and Reeve

1848. *Limopsis belcheri* Adams and Reeve, *Zool. Voy. HMS Samarang, Mollusca*, **1848** : 76.

1895. *Limopsis belcheri*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1956. *Limopsis belcheri*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **1(2)**, pt. 7 : 28, pl. 3, figs. 3a and 3b.

Distribution : India : Tamil Nadu.

Elsewhere : Sri Lanka.

122. *Limopsis compressa* G. and H. Nevill

1874. *Limopsis compressa* G. and H. Nevill, *J. Asiat. Soc. Beng.*, **43(2)** : 28, pl. 1, fig. 17.
Type locality : Off Columbo Lighthouse, Ceylon. Types : NZC, ZSI.

2000. *Limopsis compressa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 206.

2004. *Limopsis compressa*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 38.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Sri Lanka.

123. *Limopsis indica* Smith

1894. *Limopsis indica* Smith, *Ann. Mag. nat. Hist.*, (6)**14** : 171, pl. 5, fig. 7. Type locality : Ceylon.

1904. *Limopsis indica*: Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 2.

1906. *Limopsis indica*: Smith, *Ann. Mag. nat. Hist. London*, (7)**18** : 254.

1981. *Limopsis indica*: Das, Mitra and Mukhopadhyaya, *Proc. zool. Soc. Calcutta*, **32** : 83.

Distribution : India : Kerala, Minicoy Islands, Tamil Nadu.

Elsewhere : Maldives, Sri Lanka, Celebes.

Family GLYCYMERIDIDAE

Genus *Glycymeris* Da Costa, 1778

1778. *Glycymeris* Da Costa, *Brit. Conch.*, p. 168. Type species : *Arca orbicularis* Da Costa = *Arca glycymeris* Linnaeus, 1758

124. *Glycymeris arabica* (H. Adam)

1871. *Pectunculus arabica* H. Adams, *Gen. Rec. Shell*, **2** : 542.

2007. *Glycymeris arabica*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 178. Zool. Surv. India.

Distribution : Andhra Pradesh.

Elsewhere : Persian Gulf.

Remarks : Found in clean sand of shallow water.

125. *Glycymeris castaneus* (Lamarck)

1819. *Pectunculus castaneus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6(1) : 53.
1986. *Glycymeris castaneus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Glycymeris castaneus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 206.
2007. *Glycymeris castaneus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 179. Zool. Surv. India.

Distribution : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : Indo-Pacific.

126. *Glycymeris lividus* (Reeve)

1843. *Pectunculus lividus* Reeve, *Proc. zool. Soc. London*, 1843 : 190.
1986. *Glycymeris lividus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Glycymeris lividus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 207.
2007. *Glycymeris lividus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 179. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : Red sea.

Remarks : Found in clean sand and gravel of shallow water.

127. *Glycymeris taylori* (Angus)

1843. *Pectunculus taylori* Angus, *Proc. zool. Soc. London*, 1843 : 190.
1895. *Pectunculus taylori*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.
1921. *Glycymeris taylori*: Hornell, *Madras Fish. Bull.*, 14 : 156.
1941. *Glycymeris taylori*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 35.
1956. *Glycymeris taylori*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 27, pl.3, figs. 2a and 2b.
1965. *Glycymeris taylori*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 89, pl.4, figs. 14a & 14b.
2007. *Glycymeris taylori*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 179. Zool. Surv. India.

Distribution : Andhra Pradesh, Gujarat, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

128. *Glycymeris tenuicostatus* (Reeve)

1843. *Pectunculus tenuicostatus* Reeve, *Proc. zool. Soc. London*, pt. 2: 80.
 1991. *Glycymeris tenuicostatus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 105. Zool. Surv. India.
 1995. *Glycymeris tenuicostatus*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 413. Zool. Surv. India.
 2007. *Glycymeris tenuicostatus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 180. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa, Tamil Nadu.

Elsewhere : South Africa, Myanmar, Indonesia, Australia.

Remarks : For detail synonymy see Prashad (1932).

Order MYTILOIDA

Superfamily MYTILOIDEA

Commonly called as mussels. Shell thin, smooth, elongate, anteriorly beaked, with weak ribs in some species; ligament long, narrow rest on resilial ridge along the dorsal margin. Hinge teeth absent, but simple small, feeble teeth (dysodont) may be present in front or behind the ligament. Anterior adductor muscle small or absent. This superfamily represented by single family Mytilidae with four subfamilies. The Mytilinae are the typical mussels found attached with rocks, pilings etc. and occurs in dense patches. Modiolinae are the horse mussels found partly buried in soft or mixed sediments with the byssus threads attached to sediments particles. Some build the byssus nest, which forms a cocoon within soft mud. Crenellinae are the most variable group. Many of them are shaped like Modiolinae but with a fine radial sculpture which is absent in the middle part of the shell. Others are oval or quadrate with divaricate sculpture. They live in crevices, among the weeds or in tranquil sediments offshore, some live embedded in a sea squirt nests. Lithophaginae are rock borers, used an acid secretion to burrow into calcareous rocks and corals. They are cylindrical shells, brown or thin greyish encrustations.

Family MYTILIDAE

Subfamily MYTILINAE

Genus *Brachidontes* Swainson, 1840

1840. *Brachidontes* Swainson, *Treat. Malacol.*, 1840 : 384. Type species : *Modiola sulcata* Lamarck, 1919

129. *Brachidontes variabilis* Krauss

1848. *Mytilus variabilis* Krauss, *Sudafr. Moll.*, 1848 : 25, pl.2, fig. 5.
 1906. *Brachidontes karachiensis* Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 800, pl. 54, fig. 8.
 1949. *Brachidontes karachiensis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig.13.

1956. *Brachidontes variabilis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 34, pl.4, fig. 2.
1998. *Brachidontes karachiensis*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 91, pl. 12, fig. 6.
2000. *Brachidontes variabilis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 207.

Distribution : India : Andaman Islands, Maharashtra, Tamil Nadu.

Elsewhere : East and South African Coast, Red Sea, Pakistan, Indonesia.

Remarks : Found attached to stones and rocks or among rock oysters and attached to root of mangroves of upper shore. For detail synonymy see Prashad (1932).

Genus *Perna* Philipsson, 1788

1788. *Perna* Philipsson, *Diss. Nova. Test. Gen.*, 1788 : 20. Type species : *P. magellanica* Linnaeus = *Mya perna* Linnaeus; subsequent designation, Soot-Ryen, 1955.

130. *Perna indica* Kuriacose and Nair

1980. *Perna indica* Kuriacose and Nair, *Aquatic Biol.*, 1 : 32, fig. d. 1976.
1980. *Perna viridis*: Kuriakose, *CMFRI Bull.*, 29 : 3, figs. 2a-f.

Distribution : India : West coast of India.

Elsewhere : Endemic to West Coast of India.

131. *Perna samoensis* (Kuester)

1889. *Tichonia (Septifer) samoensis* Kuester in Martinii-Chemnitz, *Conch. Cab.*, 8 (3) : 19, pl. 15, figs 8, 9.
1899. *Perna samoensis*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 45.
1878. *Isognomon samoensis*: Smith, *Proc. zool. Soc. London*, 1878 : 820.
2000. *Perna samoensis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 207.

Distribution : India : Andaman Islands.

Elsewhere : Philippines.

132. *Perna viridis* (Linnaeus)

1758. *Mytilus viridis* Linnaeus, *Syst. Nat.*, ed. 10 : 706.
1758. *Mytilus smargdinus* Chemnitz, *Conch. Cab.*, 8 : pl. 83, fig. 745.
1895. *Mytilus viridis*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1906. *Mytilus smargdinus*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 214.
1915. *Mytilus smargdinus*: Preston, *Rec. Indian Mus.*, **11** : 297.
1916. *Mytilus smargdinus*: Annandale, *Mem. Indian Mus.*, **5** : 350.
1921. *Mytilus viridis*: Hornell, *Madras Fish. Bull.*, **14** : 156, fig. 38.
1940. *Mytilus viridis*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 336.
1941. *Perna smaragdinus*: Rao, *Sci. and Cult.*, **7** : 69.
1941. *Perna viridis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 35.
1949. *Perna viridis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55, fig. 11.
1956. *Mytilus viridis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 42, pl. 5, fig. 1.
1968. *Mytilus viridis*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 128.
1965. *Mytilus viridis*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 90, pl. 5, figs. 15a & 15b.
1969. *Mytilus viridis*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1976. *Perna viridis*: Kuriakose and Nair, *Aqua. Biol.*, **1** : 25.
1980. *Perna viridis*: Kuriakose, *CMFRI Bull.*, **29** : 3, figs. 1 a-d.
1986. *Perna viridis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1991. *Perna viridis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 106. Zool. Surv. India.
1992. *Perna viridis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 220, pl. 16, fig. 1. Zool. Surv. India.
1995. *Perna viridis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 414. Zool. Surv. India.
1998. *Perna viridis*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 91, pl. 12, fig. 5.
2000. *Perna viridis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 207.
2007. *Perna viridis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 181. Zool. Surv. India.
2007. *Perna viridis*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.
2008. *Perna viridis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 147. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Red sea, Pakistan, Thailand, Indonesia, Philippnes, China.

Genus **Septifer** Recluz, 1848

1848. *Septifer* Recluz, *Rev. Zool. Soc. Cuv.*, **11** : 275. Type species : *Mytilus bilocularis* Linnaeus; subsequent designation, Stoliczka, 1871

133. ***Septifer bilocularis*** (Linnaeus)

1758. *Mytilus bilocularis* Linnaeus, *Syst. Nat.* ed. **10** : 705.

1895. *Septifer bilocularis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1898. *Septifer nicobaricus*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 45.

1904. *Septifer bilocularis*: Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 11.

1941. *Septifer bilocularis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 37.

1956. *Septifer bilocularis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 35, pl.4, figs. 3a and 3b.

1965. *Septifer bilocularis*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 90, pl. 5, figs. 17a and 17b.

1974. *Septifer bilocularis*: Sarma, *J. mar. biol. Ass. India*, **16**(3) : 755.

2000. *Septifer bilocularis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 208.

2007. *Septifer bilocularis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 181. *Zool. Surv. India*.

Distribution : India: Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : South African coast, Persian Gulf, Red Sea, Gulf of Aden, Mauritius, Malagasy, Zanzibar, Reunion, Scydhelles, Amaranthes, Maldive, Maynmar, Indonesia, Philippines, Japan.

Remarks : Found attached to the rocks and shells of shallow water. For detail synonymy see Prashad (1932)

Subfamily MODIOLINAE

Genus **Modiolus** Lamarck, 1799

1799. *Modiolus* Lamarck, *Mem. Soc. Hist. nat. Paris*, p. 87. Type species : *Mytilus modiolus* Linnaeus, 1758

134. ***Modiolus albicostata*** Lamarck

1836. *Modiolus albicostata* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **7** : 18.

1898. *Modiolus albicostata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 45.

2000. *Modiolus albicostata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 210.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Australia.

135. *Modiolus arborens* Chemnitz

1786. *Modiolus arborens* Chemnitz, *Conch. Cab.*, 2 : t. 198, figs. 2016-17.

1972. *Modiola arborens*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : West Indies.

Remarks : Nagabhushanam and Rao (1972) recorded this species from Lakshadweep, which is doubtful.

136. *Modiolus aratus* (Dunker) Reeve

1857. *Modiola arata* (Dunker MS) Reeve, *Conch Icon.*, 10, sp. No., 12, pl. 4, fig. 12.

2000. *Modiolus aratus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 210.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Australia.

137. *Modiolus argentea* Reeve

1972. *Modiola argentea*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, 48(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : No records

138. *Modiolus curvatus* (Dunker)

1856. *Mytilus curvatus* Dunker, *Proc zool. Soc. London*, 1856 : 361.

1916. *Mytilus curvatus* Preston, *Rec. Indian Mus.*, 12(2) : 93.

2000. *Modiolus curvatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 210.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Remarks : This species is collected from Bridge Creeck, Andaman Islands in 2-5 fathoms, on a bottom composed of decaying vegetation.

139. *Modiolus cymbula* Preston

1908. *Modiola cymbula* Preston, *Rec. Indian Mus.*, 2 : 204, pl. 14, fig. 18. Type locality : Andaman Islands; Types : NZC, ZSI.

2000. *Modiolus cymbula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 210.

2004. *Modiolus cymbula*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 43.

Distribution : India : Andaman Islands.

Elsewhere : No records.

140. *Modiolus flavida* (Dunker)

1856. *Volsella flavida* Dunker, *Proc. zool. Soc. London*, **1856** : 364.

1972. *Modiola flavida* : Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.

Distribution : India: Andaman Islands, Lakshadweep.

Elsewhere : Philippines.

141. *Modiolus metcalfei* Hanley

1844. *Modiola metcalfei* Hanley, *Proc. zool. Soc. London*, **1844** : 14.

1895. *Modiola metcalfei*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1941. *Modiolus metcalfei*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 36.

1956. *Modiolus metcalfei*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**, **2** (7) : 31, pl. 3, figs. 4a and 4b.

1965. *Modiolus metcalfei*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 90, pl. 5, figs. 16a and 16b.

1974. *Modiolus metcalfei*: Sarma, *J. mar. boil. Ass, India*, **16**(3) : 755.

2007. *Modiolus metcalfei*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 182. *Zool. Surv. India*.

2007. *Modiolus metcalfei*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.

Distribution : India : Andhra Pradesh, Gujarat, Tamil Nadu.

Elsewhere : Philippines Islands.

142. *Modiolus philippinarum* Hanley

1843. *Modiola philippinarum* Hanley, *Recent Biv. Shells*, **1843** : 235, pl. 24, fig. 26.

1906. *Modiola philippinarum* : Smith, *Ann. Mag. nat. Hist. London*, (7)**18** : 254.

1986. *Modiolus philippinarum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.

1991. *Modiolus philippinarum*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 348. *Zool. Surv. India*.

1991. *Modiolus philippinarum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 108. *Zool. Surv. India*.

1995. *Modiolus philippinarum*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 414. *Zool. Surv. India*.

2000. *Modiolus philippinarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 211.

2007. *Modiolus philippinarum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 183. Zool. Surv. India.

Distribution : India : Andman and Nicobar Islands, Andhra Pradesh, Lakshadweep, Orissa.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

143. *Modiolus striatulus* Hanley

1844. *Modiolus striatulus* Hanley, *Proc. zool. Soc. London*, 1844 : 14, pl. 12.

1906. *Modiola emerginata*: Comber, *J. Bombay nat. Hist. Soc.*, 17 : 214.

1909. *Modiola cochinesis* Preston, *Rec. Indian Mus.*, 3 : 278, fig. 2. Type locality : Cochin backwater, Kerala. Types : NZC, ZSI.

1910. *Modiola jenkinsi* Preston, *Rec. Indian Mus.*, 5 : 36, fig. 5. Type locality : Manikpatna, Chilka Lake, Orissa. Types : NZC, ZSI.

1911. *Modiola annandalei* Preston, *Rec. Indian Mus.*, 6 : 40, fig. 4. Type locality : Rambha, Chilka Lake, Orissa. Types : NZC, ZSI.

1911. *Modiola celator* Preston, *Rec. Indian Mus.*, 6 : 41, fig. 5. Type locality : Puri beach, Orissa. Types : NZC, ZSI.

1916. *Modiolus taprobanensis* Preston, *Rec. Indian Mus.*, 12 : 35. Type locality, Cochin backwater. Types : NZC, ZSI.

1941. *Modiolus striatulus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 35.

1949. *Modiolus emarginatus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 12.

1968. *Modiolus striatulus*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India, Part-1* : 128.

1972. *Modiolus striatulus*: Satyanarayana Rao and Sundaram, *Proc. Indian Nat. Sci. Acad.*, 38B (5 & 6) : 464.

1975. *Modiolus striatulus*: Subba Rao and Mookherjee, *Recent Researches in Estuarine Biology*, p. 172.

1991. *Modiolus striatulus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 107. Zool. Surv. India.

1992. *Modiolus striatulus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 221 pl. 16, figs. 2 & 4. Zool. Surv. India.

1995. *Modiolus striatulus*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Estuarine Ecosystem Series*, 2 : 64. Zool. Surv. India.

1995. *Modiolus striatulus*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 414. Zool. Surv. India.

2006. *Modiolus striatulus*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 62.

2007. *Modiolus striatulus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 183, Zool. Surv. India.
2008. *Modiolus striatulus*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 17.
2008. *Modiolus striatulus*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p29.
2008. *Modiolus striatulus*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 148. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Myanmar, Singapore, Gulf of Thailand, Philippines, China and Japan.

144. *Modiolus trailli* Reeve

1857. *Modiolus trailli* Reeve, *Conch Icon.*, 10 : *Modiola* sp. no 13, pl. 4, figs. 13 and 14.
1895. *Modiola trailli*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.
1956. *Arca traillii*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 33, pl. 4, fig. 1.

Distribution : India : Tamil Nadu.

Elsewhere : Malagasy, Sri Lanka, Myanmar, Indonesia, Japan.

145. *Modiolus tulipa* (Lamarck)

1836. *Modiola tulipa* Lamarck, *Hist. Nat. Anim. Sans. Vert.*, 7 : 18.
1895. *Modiola tulipa*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.
1921. *Modiola tulipa*: Hornell, *Madras Fish. Bull.*, 14 : 160.
1956. *Modiola tulipa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 33, figs. 6a and 6b.
1968. *Modiola tulipa*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India, Part-1* : 128.
1974. *Modiolus tulipa*: Sarma, *J. mar. biol. Ass, India*, 16(3) : 755.
1986. *Modiolus tulipa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Modiolus tulipa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 211.
1992. *Modiolus tulipa*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 221 pl.16, figs., 3 & 6. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Tamil Nadu.

Elsewhere : Mauritius.

146. *Modiolus undulatus* (Dunker)

1856. *Valsella undulata* Hanley, *Proc. zool. Soc. London*, **26** : 363.
1911. *Modiola chilkaensis* Preston, *Rec. Indian Mus.*, **6** : 41, fig. 6. Type locality : Rambha, Chilka Lake, Orissa. Types : NZC, ZSI.
1914. *Modiola undulatus* var. *crassicostata* Preston, *Rec. Indian Mus.*, **10** : 304, fig. 15. Type locality: Samal Island, Chilka Lake, Orissa. Types : NZC, ZSI.
1915. *Modiolus undulatus*: Preston, *Rec. Indian Mus.*, **11** : 298.
1915. *Modiolus undulatus* var. *Crassicostata* :Preston, *Rec. Indian Mus.*, **11** : 298.
1940. *Modiolus undulatus*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 340.
1941. *Modiolus undulatus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 35.
1968. *Modiolus undulatus*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 128.
1987. *Modiolus undulatus*: Misra and Barua, *J. Indian Soc. Coastal agric. Res.*, **5**(1) : 342.
1987. *Modiolus undulatus*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Modiolus undulatus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 108. Zool. Surv. India.
1992. *Modiolus undulatus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 222, pl. 16, figs. 5 & 7. Zool. Surv. India.
1995. *Modiolus undulatus*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 64. Zool. Surv. India.
1995. *Modiolus undulatus*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 414. Zool. Surv. India.
2000. *Modiolus undulatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 211.
2001. *Modiolus undulatus*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 72. Zool. Surv. India.
2007. *Modiolus undulatus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 184. Zool. Surv. India.
2008. *Modiolus undulatus*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 17.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Kerala, Lakshadweep, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indonesia, Malacca.

147. *Modiolus zebra* Preston

1908. *Modiola zebra* Preston, *Rec. Indian Mus.*, **2** : 204, pl. 14, fig. 17. Type locality : Andaman Islands. Types : NZC, ZSI.
2000. *Modiolus zebra*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 211.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Australia.

Genus *Adipicola* Dautzenberg, 1927

1927. *Adipicola* Dautzenberg, *Res. Canp. Sci. Prince de Monaco*, **72** : 274. Type species : *Myrina coppingeri* Smith, 1895

148. *Adipicola indica* (Smith)

1904. *Myrina indica* Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 11.

2000. *Adipicola indica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 211.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Genus *Amygdalum* Megerle, 1811

1811. *Amygdalum* Megerle, *Mag. Ges. Nat. Fr. Berlin*, **5** : 69. Type species : *Amygdalum dentriticum* Megerle, 1811

149. *Amygdalum watsoni* (E.A. Smith)

1885. *Modiola watsoni* Smith, *Lamellibranchiata Challenger*, **13** : 275, pl. 4, figs. 5-5C. Type locality : Off Andaman Islands, 194 fathoms.

1904. *Modiola watsoni* : Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 11.

1906. *Modiola watsoni*: Smith, *Ann. Mag. nat. Hist. London*, (7)**18** : 254.

1991. *Amygdalum watsoni*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 109. *Zool. Surv. India*.

2000. *Amygdalum watsoni*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 212.

2007. *Amygdalum watsoni*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 184. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh. Andaman Islands, Kerala, Orissa, Tamil Nadu.

Elsewhere : Gulf of Oman, Sri Lanka, Myanmar, Indonesia, Philippines, Japan.

Remarks : Found in soft mud of deeper water.

Subfamily CRENELLINAE

Genus *Botula* Moerch, 1853

1853. *Botula* Moerch, *Cat. Conch. Yoldi*, **2** : 55. Type species : *Mytilus fuscus* Gmelin, 1791

150. *Botula cinnamomea* (Gmelin)

1791. *Modiola cinnamomea* Gmelin, *Syst. Nat.*, ed. **13** : 3359.

1895. *Modiola cinnamomea*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
 1956. *Lithophaga cinnamomea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**, **2**(7) : 41.
 1965. *Lithophaga cinnamomea*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 91, pl.4, figs. 18a and 18b.
 1972. *Lithophaga cinnamomea*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 287.

Distribution: India: Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Genus ***Gregariella*** Monterosato, 1833

1833. *Gregariella* Monterosato, *Natural Sicil.*, **3** : 90. Type species : *Modiola sulcatus* Risso, 1826

151. ***Gregariella coralliophaga*** Gmelin

1791. *Mytilus coralliophaga* Gmelin, *Syst. Nat.*, ed. **13** : 3359.
 2000. *Gregariella coralliophaga*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 208.

Distribution : India : Andaman Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Genus ***Musculus*** Roeding, 1798

1833. *Musculus* Roeding, *Mus. Bolten.* p. 156, Type species : *Mytilus discors* Linnaeus, 1767

152. ***Musculus cumingianus*** (Reeve)

1857. *Modiola cumingiana* Reeve, *Conch. Icon.*, **10** : *Modiola* sp. No., 50, pl. 9, figs. 63a-b.
 1941. *Lithophaga cumingianus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 37.
 1956. *Musculus cumingianus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**, **2**(7) : 36, pl. 4, fig. 4.
 1974. *Musculus cumingianus*: Sarma, *J. mar. biol. Ass, India*, **16**(3) : 755.
 1991. *Musculus cumingianus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 107. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Orissa, Tamil Nadu.

Elsewhere : Yeman, Australia.

Remarks : Found in sea squirt tests, offshore. For detail synonymy see Prashad (1932).

153. ***Musculus nanus*** (Dunker)

1858. *Lavistina nana* Dunker, *Proc. zool. Soc. London*, **14** : 365.

1956. *Musculus nanus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 37, pl. 4, fig. 5.

1974. *Musculus nanus*: Sarma, *J. mar. biol. Ass. India*, 16(3) : 755.

Distribution : India : Andhra Pradesh, Tamil Nadu.

Elsewhere : No records.

154. *Musculus perfragilis* (Dunker)

1856. *Volsella perfragilis* Dunker, *Proc. zool. Soc. London*, 1856 : 362.

1895. *Modiola perfragilis*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1956. *Modiolus perfragilis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 32, pl. 3, fig. 5.

Distribution : India : Tamil Nadu.

Elsewhere : Japan.

Subfamily LITHOPHAGINAE

Genus *Lithophaga* Roeding, 1798

1798. *Lithophaga* Roeding, *Mus. Bolten.*, 1798 : 156. Type species : *L. mytiloides* = *Mytilus lithophagus* Linnaeus, 1780.

155. *Lithophaga canalifera* (Hanley)

1885. *Lithodomus canalifera* Hanley, *Proc. zool. Soc. London*, 1844 : 16.

2000. *Lithophaga canalifera*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 209.

Distribution : India : Andaman Islands.

Elsewhere : Philippines.

156. *Lithophaga levigata* (Quoy and Gaimard)

1835. *Lithodomus levigata* Guoy and Gaimard, *Voy. Astralobe*, 3 : 464, pl. 78, figs. 17 and 18.

1986. *Lithophaga levigata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.

2000. *Lithophaga levigata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 209.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

157. *Lithophaga lithophaga* (Linnaeus)

1767. *Mytilus lithophaga* Linnaeus, *Syst. Nat.*, ed. 12 : 1156.

1956. *Lithodomus lithophaga*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 702.

Distribution : India : Gujarat.

Elsewhere : Red Sea.

158. *Lithophaga nigra* (d'Orbigny)

1846. *Lithodomus nigra* d'Orbigny, *Hist. nat. de l'isle de Cuba*, **2** : 331, pl. 28, figs. 10 and 11.
 1895. *Lithodomus antillarum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
 1956. *Lithophaga nigra*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 40, pl. 4, fig. 8.
 1965. *Lithophaga nigra*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 91, pl. 6, figs. 22a & 22b.
 1972. *Lithophaga nigra*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.

Distribution : India : Andaman islands, (Appukuttan, 1974) Gujarat, Tamil Nadu.

Elsewhere : Philippines.

159. *Lithophaga straminea* (Dunker)

1857. *Lithodomus straminea* Dunker MS in Reeve, *Conch. Icon.*, 10 : *Lithodomus* sp. no. 11, pl. 2, fig. 11.
 1895. *Lithodomus stramineus*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
 1921. *Modiola straminea*: Hornell, *Madras Fish. Bull.*, **14** : 161.
 1956. *Lithophaga straminea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 40, pl. 3, fig. 9.

Distribution: India: Tamil Nadu.

Elsewhere : Japan.

160. *Lithophaga teres* (Philippi)

1846. *Modiola teres* Philippi, *Abbild. Besch. Conch.*, **2** : 148, *Modiola* pl. 1, fig. 3.
 1956. *Lithophaga teres*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 39, pl. 4, figs. 6a and 6b.
 1956. *Lithophaga gracilis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 30, pl. 4, figs. 7a and 7b.
 1965. *Lithophaga teres*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 91, pl. 6, figs. 21a & 21b.
 1972. *Lithophaga teres*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.
 1986. *Lithophaga gracilis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
 2000. *Lithophaga gracilis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 209.

2000. *Lithophaga teres*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 209.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Kerala, Lakshadweep, Minicoy Islands, Orissa, Tamil Nadu.

Elsewhere : Gulf of Oman, Sri Lanka, Myanmar, Indonesia, Japan.

Remarks : For detail synonymy see Prashad (1932).

Order PTERIOIDA

Suborder PTERIINA

Superfamily PTERIOIDEA

This superfamily includes the pearl, wing and hammer oysters found attached with byssal thread. Shell has a deep anterior notch with the beaks close to anterior. Posterior adductor muscle larger and placed centrally; hinge bears no true teeth and the ligament is external, set in single or multiple series of shallow triangular pits. Sculpture with scaly growths, lined internally with mother of pearls. This superfamily is represented by three families Pteriidae, Malleidae and Isognomonidae. The family Pteriidae the wing oysters, are obliquely ovate with prominent extensions of the dorsal margin, lives in association with colonial coelenterates. Pearl oysters are obliquely ovate to subquadrate and lack of prominent wing like projections. They lived attached to hard substrates among rocks and crevices. Malleidae are the hammer oysters with greatly elongate and spathulate shells with dorsal margins being drawn into long projections. Lives in partially embedded in soft substrates or in crevices. Isognomonidae resembles with Malleidae but differs in that the ligament is in a multiple series of small pits along the hinge line.

Family PTERIIDAE

Genus *Pteria* Scopoli, 1777

1777. *Pteria* Scopoli, *Introd. Hist. nat.*, p. 397. Type species : *Mytilus hirundo* Linnaeus, 1758

161. *Pteria castanea* Reeve

1858. *Avicula castanea* Reeve, *Conch. Icon.*, 10 : *Avicula* sp. no. 49, pl. 13, fig. 49.

1956. *Pteria castanea*: Satyamurti, *Bull Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 50, pl. 6, figs. 3a and 3b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

162. *Pteria chinensis* (Leach)

1814. *Avicula chinensis* Leach, *Zool. Miscell.*, 1 : 86, pl. 38, fig. 1.

1895. *Avicula radiata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1998. *Pteria chinensis*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 92, pl. 12, fig. 8.

2000. *Pteria chinensis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 214.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

163. *Pteria penguin* Roeding

1798. *Pteria penguin* Roeding, *Mus. Bolten.*, **1798** : 167.

2000. *Pteria penguin*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 214.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : Found attached to sea whips in offshore region.

164. *Pteria smithi* (Preston)

1910. *Avicula smithi* Preston, *Rec. Indian Mus.*, **5** : 35, fig. 4.

1991. *Pteria smithi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 110. Zool. Surv. India.

2004. *Pteria smithi*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 8.

2007. *Pteria smithi*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 185. Zool. Surv. India.

Distribution: Andhra Pradesh, Orissa.

Elsewhere : Sri Lanka.

Genus *Electroma* Stoliczka, 1871

1871. *Electroma* Stoliczka, *Palaeont. Indica*, (6)**3** : 391. Type species : *Avicula smaragdina* Reeve, 1857.

165. *Electroma ovata* (Quoy and Gaimard)

1834. *Meleagrina ovata* Quoy and Gaimard, *Voy. Astrolobe*, **3** : 459.

1986. *Electroma ovates*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Electroma ovata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 215.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Genus *Pinctada* Roeding, 1798

1798. *Pinctada* Roeding, *Mus. Bolten*, p. 166. Type species : *Mytilus margaritiferus* Linnaeus, 1758

166. *Pinctada anomioides* (Reeve)

1857. *Avicula anomioides* Reeve, *Conch. Icon.*, **10** : pl. 9, fig. 26.
1916. *Pinctada anomioides*: Prashad and Bhaduri, *Rec. Indian Mus.*, **35**(1) : 172.
1972. *Pinctada anomioides*: Satyanarayana Rao and Sundaram, *Proc. Indian Nat. Sci. Acad.*, **38B**(5 &6) : 464.
1986. *Pinctada anomioides*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
2000. *Pinctada anomioides*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 215.
2007. *Pinctada anomioides*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 186. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu.

Elsewhere : Gulf of Aden, Sri Lanka, Myanmar, Indonesia.

167. *Pinctada chemnitzii* (Philippi)

1849. *Avicula chemnitzii* Philippi, *Zeitschr. f. malac.*, p. 19.
1940. *Pinctada chemnitzii*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 326.
1941. *Pinctada chemnitzii*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 38.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : Japan. Widely distributed in Pacific.

168. *Pinctada fucata* (Gould)

1850. *Avicula fucata* Gould, *Proc. Boston Soc. nat. Hist.*, **3** : 309.
1895. *Avicula fucata* : Thurston, *Madras Govt. Mus. Bull.*, **1** : 18, pl. 1.
1991. *Pinctada fucata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 348. *Zool. Surv. India*.

Distribution : Andaman and Nicobar Islands, Andhra Pradesh, Lakshadweep, Tamil Nadu.

Elsewhere : Gulf of Aden, Sri Lanka, Myanmar, Indonesia.

169. *Pinctada inquinata* (Reeve)

1844. *Avicula inquinata* Reeve, *Conch. Icon.*, **10**, *Avicula* sp. No.
1895. *Avicula inquinata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
1898. *Avicula inquinata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 45.
2000. *Pinctada inquinata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 215.

Distribution: India: Andaman Islands, Tamil Nadu.

Elsewhere : Philippines.

170. *Pinctada margaritifera* (Linnaeus)

1758. *Mytilus margaritifera* Linnaeus, *Syst. Nat. ed.*, **10** : 704.
1817. *Margaritifera vulgaris* Schumacher, *Essai Nouv. Syst.*, **1817** : 108, pl. 20, figs. 39, b.
1895. *Avicula margaritifera*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
1895. *Avicula vulgaris*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
1906. *Margaritifera margaritifera*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 803.
1906. *Meleagrina margaritifera*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.
1916. *Pinctada margaritifera*: Prashad and Bhaduri, *Rec. Indian Mus.*, **35(1)** : 172.
1916. *Pinctada vulgaris*: Prashad and Bhaduri, *Rec. Indian Mus.*, **35(1)** : 172.
1921. *Pinctada margaritifera*: Hornell, *Madras Fish. Bull.*, **14** : 165.
1941. *Pinctada margaritifera*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5(1)** : 38.
1941. *Pinctada vulgaris*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5(1)** : 38.
1956. *Pteria vulgaris*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54(3)** : 702.
1965. *Pinctada vulgaris*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(1)** : 93, pl. 6, figs. 23a & 23b.
1969. *Pinctada vulgaris*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1975. *Pinctada vulgaris*: Durve, *Rec. zool. Surv. India*, **68** : 424.
1986. *Pinctada margaritifera*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1986. *Pinctada vulgaris*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1998. *Pinctada vulgaris*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 92, pl. 12, fig. 9.
2000. *Pinctada margaritifera*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 215.
2007. *Pinctada margaritifera*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 186. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : East coast of Africa, Mauritius, Malagasy, Seychelles, Amirantes, Zanzibar, Persian Gulf, Red sea, Indonesia, Australia, Polynesia.

Remarks : This species is common pearl oyster species, found attached among rocks from lower shore and below.

171. *Pinctada sugillata* (Reeve)

1846. *Avicula sugillata* Reeve, *Conch. Iconica*, **10** : *Avicula* sp. no. 27, pl. 9, fig. 27.

2000. *Pinctada sugillata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 216.

Distribution : India : Andhra Pradesh, Andaman Islands, Kerala, Orissa, Tamil Nadu.

Elsewhere : Gulf of Oman, Sri Lanka, Myanmar, Indonesia, Japan.

Family MALLEIDAE**Genus *Malleus* Lamarck, 1799**

1799. *Malleus* Lamarck, *Mem. Soc. Hist. nat. Paris*, p. 82. Type species : *Ostrea malleus* Linnaeus, 1758

172. *Malleus albus* Lamarck

1819. *Malleus albus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **6**(1) : 144.

1941. *Malleus albus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 37.

1986. *Malleus albus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.

2000. *Malleus albus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 218.

Distribution: India: Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : Found attached to rocks from lower shore and below.

173. *Malleus anatinus* (Gmelin)

1791. *Ostrea anatinus* Gmelin, *Syst. Nat.*, ed. **13** : 3333.

1972. *Malleus anatinus*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.

Distribution : India : Lakshadweep, Nicobar Islands.

Elsewhere : Philippines.

174. *Malleus malleus* (Linnaeus)

1758. *Ostrea malleus* Linnaeus, *Syst. Nat.*, ed., **10** : 699.

1921. *Malleus malleus*: Hornell, *Madras Fish. Bull.*, **14** : 167.

1956. *Malleus malleus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 47, pl.6, fig. 1.

1986. *Malleus malleus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.

2000. *Malleus malleus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 218.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

175. *Malleus regula* (Forsk.)

1775. *Ostrea regula* Forskal, *Des. Anim.*, 1775 : 124.

1986. *Malleus regula*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Malleus regula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 219.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : Found attached in crevices under rocks of lower shore and below.

Genus *Vulsella* Roeding, 1798

1798. *Vulsella* Roeding, *Mus. Bolten*, p. 156. Type species : *Vulsella major* = *Mya vulsella* Linnaeus, 1758

176. *Vulsella vulsella* (Linnaeus)

1758. *Mya vulsella* Linnaeus, *Syst. Nat*, ed., 10 : 671.

1895. *Vulsella lingulata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 131.

1941. *Vulsella vulsella*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 37.

1986. *Vulsella vulsella*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Vulsella vulsella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 219.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : Found embedded in sponges of sublittoral zone.

Family ISOGNOMONIDAE

Genus *Isognomon* Solander in Lightfoot, 1786

1786. *Isognomon* Solander in Lightfoot, *Catal. Portland. Mus.*, pp. 9, 41, 52, 115, 137. Type species : *Ostrea perna* Linnaeus, 1758

177. *Isognomon ehippium* (Linnaeus)

1758. *Ostrea ehippium* Linnaeus, *Syst. Nat*, ed., 10 : 700.

1986. *Isognomon ehippium*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Isognomon ehippium*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 216.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

178. *Isognomon isognomon* (Linnaeus)

1758. *Ostrea isognomon* Linnaeus, *Syst. Nat*, ed., 10 : 699.

1986. *Isognomon isognomon*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1991. *Isognomon isognomon*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 110. Zool. Surv. India.

2000. *Isognomon isognomon*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 216.

Distribution : India : Andaman and Nicobar Islands, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific, Common.

var. *attenuata* (Reeve)

1858. *Ostrea attenuata* Reeve, *Conch. Icon.*, 9, pl. 6, fig. 25.

2000. *Isognomon isognomon* var *attenuata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 217.

Distribution: India: Andaman Islands.

Elsewhere : Red Sea to Australia.

var. *carina* (Lamarck)

1819. *Perna carina* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 141.

1956. *Isognomon isognomon* var *carina*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 45, pl. 5, fig. 4.

2000. *Isognomon isognomon* var *carina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 217.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indian Ocean, Philippines.

var. *norma* (Roeding)

1798. *Isognomon Norma* Roeding, *Mus. Bolten.*, p. 168.

1956. *Isognomon isognomon* var *norma*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 46, pl. 5, figs. 5a and 5b.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Red Sea to Australia.

179. *Isognomon legumen* (Gmelin)

1791. *Ostrea legumen* Gmelin, *Syst. Nat.*, ed., **13** : 3339.
1941. *Isognomon legumen*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 37.
1956. *Isognomon legumen*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 45, pl. 5, figs. 3a and 3b.
1974. *Isognomon legumen*: Sarma, *J. mar. boil. Ass, India*, **16**(3) : 755.
1986. *Isognomon legumen*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
1991. *Isognomon legumen*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 110; Zool. Surv. India.
2000. *Isognomon legumen*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 217.
2007. *Isognomon legumen*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 187. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Island, Andhra Pradesh, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

180. *Isognomon nucleus* (Lamarck)

1836. *Perna nucleus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **7**(2) : 78.
1941. *Isognomon nucleus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 37.
1956. *Isognomon nucleus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 44, pl. 5, figs. 2a and 2b.
1974. *Isognomon nucleus*: Sarma, *J. mar. boil. Ass, India*, **16**(3) : 755.
1986. *Isognomon nucleus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Isognomon nucleus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 217.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

181. *Isognomon perna* (Linnaeus)

1767. *Ostrea perna* Linnaeus, *Syst. Nat.*, ed., **12** : 1149.
1986. *Isognomon perna*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Isognomon perna*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 218.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Suborder PINNINA

Superfamily PINNOIDEA

Commonly known as fan shells. The fan shells are large, thin and brittle bivalves, triangular in shape, hinge along the straight dorsal margin. Hinge teeth absent, anterior adductor very small and situated at the pointed end whereas the posterior adductor is large and sub-central in position. Byssus well developed, consists of numerous very fine threads; sculpture variable. Semi-infaunal in habit, living embedded in sand and muddy substratum, attached with byssus threads attached to the sediment particles. Represented by single family Pinnidae from Indian waters.

Family PINNIDAE

Genus *Pinna* Linnaeus, 1758

1758. *Pinna* Linnaeus, *Syst. Nat.*, ed., 10 : 707. Type species : *Pinna rudis* Linnaeus, 1758

182. *Pinna bicolor* Gmelin

1791. *Pinna bicolor* Gmelin, *Syst. Nat.*, ed., 13 : 3366.

1921. *Pinna bicolor*: Hornell, *Madras Fish. Bull.*, 14 : 176.

1940. *Pinna attenuata*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 326.

1941. *Pinna attenuata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 39.

1956. *Pinna bicolor*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 55, pl. 8, fig. 2.

1956. *Pinna atropurpurea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 54, pl. 8, fig. 1.

1965. *Pinna bicolor*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 93, pl. 7, figs. 24a and 24b.

1965. *Pinna atropurpurea*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 88, pl. 4, figs. 25a-25b.

2000. *Pinna bicolor*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 212.

2007. *Pinna bicolor*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 188. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Tamil Nadu.

Elsewhere : South African coast, Mocambique, Malagasy, Mauritius, Tanzania, Persian Gulf, Sri Lanka, Thailand, Indonesia, New Guinea, Philippines, China, Australia, New Caledonia, Hawaii.

Remarks : Embedded in muddy sand and reef flats, in shallow water of 1 to 2 fathoms depths. *P. bicolor* differs from *P. muricata* in having a rounded portion margin rather than a truncate one; in having the ventral nacreous area rounded rather than somewhat truncate; usually with 8 to 17 radiating ribs, rather than 12 to 26.

183. *Pinna incurva* Gmelin

1791. *Pinna incurva* Gmelin, *Syst. Nat.*, ed., **13** : 3366.

1941. *Pinna incurva*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 39.

2007. *Pinna incurva*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 188. Zool. Surv. India.

Distribution : India: Andhra Pradesh, Tamil Nadu.

Elsewhere : Indonesia, Philippines, Australia.

Remarks : This is a rare species lives embedded deeply in sandy-muddy bottom, below the low water mark.

184. *Pinna muricata* Linnaeus

1758. *Pinna muricata* Linnaeus, *Syst. Nat.*, ed., **10** : 707.

1986. *Pinna muricata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.175.

1972. *Pinna muricata*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 287.

2000. *Pinna muricata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 213.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : South African coast, Mocambique, Malagasy, Tanzania, Zanzibar, Seychelles, Gulf of Aden, Maldives, Sri Lanka, Indonesia, Philippines, Japan, Australia, New Caledonia, Marshal Island, Gilbert Island.

Remarks : Commonly found with only the posterior margin of the shell protruding from sand or silt among rocks, in eel grass sand flats and in sandy patches on coral reef, in shallow water from a few feet to 2 fathoms depths.

185. *Pinna saccata* Linnaeus

1758. *Pinna saccata* Linnaeus, *Syst. Nat.*, ed., **10** : 707.

1972. *Pinna saccata*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : Atlantic Ocean.

Remarks : Nagabhushanam and Rao (1972) recorded this species from Lakshadweep is doubtful.

186. *Pinna serrata* Reeve

1845. *Pinna serrata* Reeve, *Conch. Icon.*, **11** : *Pinna* sp. no. 65, pl. 34, fig. 65.

1972. *Pinna serrata*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : West Indies.

Remarks : Nagabhushanam and Rao (1972) recorded this species from Lakshadweep is doubtful.

Genus *Atrina* Gray, 1840

1840. *Atrina* Gray, *Syst. Cat. British Mus.*, ed. 42 : 151. Type species : *Pinna nigra* Dillwyn
= *Pinna vexillum* Born, 1778.

Subgenus *Atrina* s.st187. *Atrina (Atrina) vexillum* (Born)

1767. *Perna rudis* var. B, *Syst. Nat.*, ed., 10 : 1159.
1778. *Pinna vexillum* Born, *Index Rerum Natur. Mus. Caes. Vinodob.*, p. 118.
1906. *Pinna nigra*: Comber, *J. Bombay nat. Hist. Soc.*, 17 : 214.
1940. *Pinna vexillum*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 326.
1941. *Pinna vexillum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 39.
1949. *Pinna nigra*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 14.
1956. *Pinna nigra*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, 54(3) : 702.
1956. *Pinna vexillum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 56, pl. 8, fig. 3.
1972. *Pinna vexillum*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, 48(2) : 287.
1986. *Pinna vexillum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Atrina (Atrina) vexillum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 213.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Maharashtra, Tamil Nadu.

Elsewhere : Malagasy, Mauritius, Zanzibar, Sri Lanka, Thailand, Philippines, Australia, Fili, New Caledonia, Marshal Island, Gilbert Island, Hawaii Island.

Remarks : This species occurs in sandy or in sandy eel grass patches on reefs. It usually occurs in water depth of 1 to 2 fathoms. Rosewaters (1961) mentioned that this species more economically important member of the family and used as food in Indo-Pacific area.

For detail synonymy see Prashad (1932).

Subgenus *Servatrina* Iredale, 1939

1939. *Servatrina* Iredale, *Great Barrier Reef Exped. 1928-29 Sci. Rept.*, 5(6) : 309. Type species : *Pinna assimilis* Reeve, 1858.

188. *Atrina (Servatrina) pectinata pectinata* (Linnaeus)

1767. *Pinna pectinata* Linnaeus, *Syst. Nat.*, ed., 12 : 1160.
1940. *Pinna pectinata*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 326 and 339.
1941. *Pinna pectinata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1): 39, fig. 15g.

1969. *Pinna pectinata*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 696.
 1986. *Atrina (Servatrina) pectinata pectinata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
 1992. *Pinna (Atrina) pectinata pectinata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 222, pl. 17, fig. 2. Zool. Surv. India.
 2000. *Atrina (Servatrina) pectinata pectinata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 213.
 2002. *Pinna (Atrina) pectinata pectinata*: Mitra, Sarkar, Ramakrishna and Dey, *Rec. zool. Surv. India*, **100(3 & 4)** : 229.
 2008. *Atrina pectinata pectinata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 17.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Indonesia, Malayasia, Singapore, Hong Kong, Philippines, Australia, China and Japan.

Remarks : Lives in sand or sandy mud and buried almost completely during the summer, but moves up so that only the anterior tip is buried in winter, ventral portion of the shell facing towards the water current. This species survive a wide range of temperature from 1° C to 39°C.

For detail synonymy see Prashad (1932).

Order LIMOIDA

Superfamily LIMOIDEA

Known as file shells resemble the scallops in having shells with small ears at the sides of the hinge. Shell usually oblong or suborbicular, asymmetrical; hinge with central triangular, external ligament and teeth absent; single adductor muscle; sculpture often with radial ribs with erect flattened spines. Colour white to pale brown.

The superfamily Limoidea is represented by single family Limidae lives mainly under rocks or in crevices attached by a byssus threads, sometimes around themselves like a nest. Free living forms are less common and live in burrow in the surface of gravel and sand. The mantle edge is lined with tentacles often orange or yellow in colour, which are sticky and produce acrid secretions.

Family LIMIDAE

Genus *Lima* Bruguiere, 1797

1797. *Lima* Bruguiere, *Encyl. Meth. Tabl. Vers.*, **2** : pl. 206. Type species : *Lima alba* Cuvier, = *Ostrea lima* Linnaeus, 1758.

189. *Lima indica* Smith

1899. *Lima indica* Smith, *Ann. Mag. nat. Hist.*, (6)**16** : 18, pl. 2, figs. 13, 13a. Type locality : Sta. 232, Laccadive sea, 430 fathoms. Types : NZC, ZSI.

1904. *Lima indica*: Smith, *Ann. Mag. nat. Hist.* London, (7)**14** : 14.

2004. *Lima indica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 37.

Distribution: India: Lakshadweep, Kerala.

Elsewhere : Indian ocean.

190. *Lima inflata* (Chemnitz)

1784. *Pecten inflata* Chemnitz, *Conch Cab.*, 7 : 346, t. 621-649.

1807. *Lima inflata* Lamarck, *Ann. Mag. Hist. Nat.*, **8**(48) : 463.

1972. *Lima inflata*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : West Indies.

Remarks : Nagabhushanam and Rao (1972) reported this species from Lakshadweep is doubtful.

191. *Lima lima* (Linnaeus)

1758. *Ostrea lima* Linnaeus, *Syst. Nat.*, ed., **10** : 699.

1895. *Lima squamosa*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1941. *Lima lima*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 41.

1949. *Lima lima*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55, fig. 21.

1956. *Lima lima*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 64, pl. 10, figs. 2a and 2b.

1965. *Lima lima*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1): 95, pl.9, figs. 31a & 31b.

1972. *Lima squamosa*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 287.

2007. *Lima lima*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 189. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

192. *Lima subtilis* Smith

1895. *Lima subtilis* Smith, *Ann. Mag. nat. Hist.*, (7)**4** : 251. Type locality : Sta. 176, Laccadive sea, 107 fathoms. Types : NZC, ZSI.

2004. *Lima (Limatula) subtilis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 37.

Distribution : India : Lakshadweep, Kerala.

Elsewhere : Indian Ocean.

193. *Lima vulgaris* (Link)

1807. *Limaria vulgaris* Link, *Beschr. Nat. Samml. Univ. Rostock.*, **3** : 157.

2000. *Lima vulgaris*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 232.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Genus *Ctenoides* Moersch, 1853

1853. *Ctenoides* Moersch, *Yoldi.*, **2** : 56. Type species : *Ostrea scabra* Born, 1778

194. *Ctenoides annulata* (Lamarck)

1758. *Lima annulata* Lamarck, *Hist. nat. Anim. Sans., Vert.*, **6**(1) : 157.

1991. *Ctenoides annulata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 113. *Zool. Surv. India*.

1995. *Ctenoides annulata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 415. *Zool. Surv. India*.

2000. *Ctenoides annulata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 233.

Distribution : India : Andhra Pradesh, Andaman Islands, Gujarat, Orissa.

Elsewhere : Indo-Pacific.

Remarks : Found in sand or muddy sand of Offshore zone.

Genus *Limaria* Link, 1807

1807. *Limaria* Link, *Beschr. Nat. Samml. Univ. Rostock*, **3**: 157. Type species : *Limaria inflata* Link, 1807 = *Ostrea tuberculata* Olivi, 1792

195. *Limaria basilanica* (Admas and Reeve)

1850. *Lima basilanica* Adams and Reeve, *Zool. Voy HMS, Samarang.*, Mollusca, **1850** : 75, pl. 21, fig. 6.

2000. *Limaria basilanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 232.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

196. *Limaria fragilis* (Gmelin)

1791. *Ostrea fragilis* Gmelin, *Syst. Nat.*, ed. **13** : 3332.

1941. *Lima fragilis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5**(1) : 41.

1972. *Lima fragilis*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, **48**(2) : 287.

2000. *Limaria fragilis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 232.

2007. *Lima fragilis*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 189. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Found under rocks, lower shore and below.

Order OSTREOIDA

Suborder OSTREINA

Superfamily OSTREOIDEA

The Superfamily Ostreoidae are true oysters, epifaunal in habit, living cemented with the various substrata by the left valve. Shell shape varies, often influenced by and conforming to the substratum. Generally the shells are semicircular to elongate oval, more or less equilateral, but usually inequivalve, cemented with inflated left valve. Sculpture of thin, foliaceous lamellae which are often eroded but occasionally developed into hollow (hyote) spines. The valves flat or variously folded, most noticeable at the margins. All oysters with a single large adductor situated at centre towards the posterior ventral edge. Hinge without teeth but a variety of marginal ridges or pustules known as chomata may be present. Vermiculate chomata are long, narrow ridges present in dense patches just below the ligament. Nodular chomata are circular to oval, rounded denticles which often have corresponding pits in the opposite valve, occurs single or in small groups. Pustulose chomata are tiny pin headed occurs in multiples over the inner margin. Ligament is simple, forming three part triangle beneath the beaks. Shell varies in colour; most of them are greyish white ground colour with shades of red to purple black occurring as radial or irregular markings.

Oysters are not easy to identify. General shape and sculpture cannot be trusted and confirmation must be based on details of the chomata, adductor scar, shell structure and sculpture.

Represented by two families Ostreidae and Gryphaeidae from the Indian waters.

Family OSTREIDAE

Subfamily CRASSOSTREINAE

Genus *Crassostrea* Sacco, 1897

1897. *Crassostrea* Sacco in Bellardi and Sacco, *Moll. Terr. terz. Piemonte e Liguria*, 23 : 15.
Type species : *Ostrea virginica* Gmelin, 1791

197. *Crassostrea cuttackensis* (Newton and Smith)

1912. *Crassostrea graphoides* var. *cuttackensis* Newton and Smith, *Rec. Geol. Surv. India*, 42(1) : 13, pl. 7 and 8, figs. A and B.

1916. *Ostrea madrasensis* Preston, *Rec Indian Mus.*, 12 : 33, figs. 11-11a. Type locality, Ennur backwaters, Madras.

1916. *Ostrea virginiana*: Annandale and Kemp, *Mem Indian Mus.*, **5** : 348.
1921. *Ostrea madrasensis*: Hornell, *Madras Fish. Bull.*, **14** : 158, 159 & 169.
1940. *Ostrea madrasensis*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 340.
1941. *Ostrea madrasensis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 41, fig. 16f.
1956. *Ostrea madrasensis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 68, pl. 11, fig. 1.
1965. *Ostrea madrasensis*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 97, pl. 10, fig. 34.
1967. *Ostrea madrasensis*: Durve, *J. Mar. biol. Ass. India*, **9**(1) : 173.
1969. *Ostrea madrasensis*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1974. *Crassostrea madrasensis*: Rao, *Bull. Cent. Mar. Fish. Res. Inst*, **25** : 14.
1975. *Crassostrea madrasensis*: Durve, *Rec. zool. Surv. India*, **68** : 422.
1975. *Crassostrea graphoides* var. *cuttackensis*: Durve, *Rec. zool. Surv. India*, **68** : 422.
1975. *Crassostrea graphoides* var. *cuttackensis*: Subba Rao and Mookherjee, *Recent Researches in Estuarine Biology*, p. 173.
1985. *Crassostrea madrasensis*: Kasinathan and Shanmugam, *Proc. Nat. Symp. Biol. Util. Cons. Mangroves*, (November) **1985** : 441.
1986. *Crassostrea madrasensis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.
1987. *Crassostrea madrasensis*: Satyanarayana Rao, *CMFRI Bulletin*, **38** : 2, pl. 1, figs. A-D.
1987. *Crassostrea cuttackensis*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Crassostrea cuttackensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 114. *Zool. Surv. India*.
1992. *Crassostrea cuttackensis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 224. *Zool. Surv. India*.
1995. *Crassostrea cuttackensis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 64. *Zool. Surv. India*.
1995. *Crassostrea cuttackensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 416. *Zool. Surv. India*.
2000. *Crassostrea cuttackensis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 231.
2001. *Crassostrea cuttackensis*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 73. *Zool. Surv. India*.
2006. *Crassostrea cuttackensis*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 64.

2007. *Crassostrea cuttackensis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 190. Zool. Surv. India.
2007. *Crassostrea madrasensis*: Arularasan and Kasinathan, *Zoos Print J.*, 22(1) : 2546.
2008. *Crassostrea cuttackensis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 39, pl. 3, figs. 11 & 12.
2008. *Crassostrea cuttackensis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 150. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Bangladesh, Myanmar, Malaysia, Indonesia, Philippines.

198. *Crassostrea gryphoides* (Schlotheim)

1813. *Ostrea graphoides* Schlotheim, *Beitr. Natur. Versteingeogn Hinicht.*, 7 : 52.
1961. *Crassostrea graphoides*: Durve and Bal, *J. zool. Soc. India*, 13 : 70.
1967. *Ostrea graphoides*: Durve, *J. Mar. biol. Ass. India*, 9(1) : 173.
1974. *Crassostrea graphoides*: Rao, *Bull. Cent. Mar. Fish. Res. Inst*, 25 : 27.
1975. *Crassostrea graphoides*: Durve, *Rec. zool. Surv. India*, 68 : 422.
1987. *Crassostrea graphoides*: Satyanarayana Rao, *CMFRI Bulletin*, 38 : 3, pl. 2, figs. A-B.
1992. *Crassostrea graphoides*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 225, pl. 18, figs. 3 & 4. Zool. Surv. India.
1995. *Crassostrea graphoides*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, 2 : 64. Zool. Surv. India.
2006. *Crassostrea graphoides*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 64.
2008. *Crassostrea graphoides*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 40, pl. 3, figs. 7 & 8.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Bangladesh, Myanmar, Malaysia, Indonesia, Philippines.

199. *Crassostrea lacerata* (Hanley)

1845. *Ostrea lacerata* Hanley, *Proc. zool. Soc. London*, 1845 : 13.
1949. *Ostrea lacerata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17B (5) : 175, fig. 19.
1991. *Crassostrea lacerata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 115. Zool. Surv. India.

Distribution : India : Gujarat, Maharashtra, Orissa.

Elsewhere : Bangladesh, South Korea, Malaysia, Indonesia, Australia, South America, West Indies.

200. *Crassostrea rivularis* (Gould)

1861. *Ostrea rivularis* Gould, *Proc. Boston Soc. nat. Hist.*, **8** : 39.
 1974. *Crassostrea discoidea*: Rao, *Bull. Cent. Mar. Fish. Res. Inst*, **25** : 36.
 1987. *Crassostrea rivularis*: Satyanarayana Rao, *CMFRI Bulletin*, **38** : 3, pl. 2, fig. C.
 1991. *Crassostrea rivularis*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 349. Zool. Surv. India.

Distribution : India : Lakshadweep, Maharashtra.

Elsewhere : East coast of Africa, Pakistan, Fiji, New Zealand, China, Japan, West coast of United States.

Genus *Saccostrea* Dollfus and Dautzenberg, 1920

1920. *Saccostrea* Dollfus and Dautzenberg, *Mem. Soc. geol. France Paleont. Mem.*, **27** : 47.
 Type species: *Ostrea cucullata* Born.

201. *Saccostrea cucullata* (Born)

1778. *Ostrea cucullata* Born, *Index Rerum Naturalism Musei Cae. Vindob.*, **1778** : 100, t. 6, figs. 11-12.
 1916. *Ostrea cucullata*: Annandale and Kemp, *Mem Indian Mus.*, **5** : 349.
 1921. *Ostrea cucullata*: Hornell, *Madras Fish. Bull.*, **14** : 169 & 175.
 1941. *Ostrea forskalii*: Gravely, *Bull. Madras Govt. Mus. N.S. (Nat. Hist.)*, **5**(1) : 41.
 1956. *Ostrea forskalii*: Satymurti, *Bull. Madras Govt. Mus. New Ser.*, **1**(2) pt. **7** : 67, pl. 10, fig. 4.
 1940. *Ostrea forskalii*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 338.
 1968. *Ostrea forskalii*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 129.
 1969. *Ostrea cucullata*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
 1972. *Crassostrea cucullata*: Satyanarayana Rao and Sundaram, *Proc. Indian Nat. Sci. Acad.*, **38B** (5 & 6) : 464.
 1974. *Crassostrea cucullata*: Rao, *Bull. Cent. Mar. Fish. Res. Inst*, **25** : 33.
 1975. *Crassostrea cucullata*: Durve, *Rec. zool. Surv. India*, **68** : 422.
 1986. *Saccostrea cucullata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
 1987. *Saccostrea cucullata*: Satyanarayana Rao, *CMFRI Bulletin*, **38** : 4, pl. 2, fig. D.
 1991. *Crassostrea cucullata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 349. Zool. Surv. India.
 1991. *Crassostrea cucullata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 115. Zool. Surv. India.
 1992. *Saccostrea cucullata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 225, pl. 19, fig. 1. Zool. Surv. India.

1995. *Saccostrea cucullata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Estuarine Ecosystem Series*, **2** : 64. Zool. Surv. India.
1995. *Saccostrea cucullata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 416. Zool. Surv. India.
2000. *Saccostrea cucullata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 231.
2001. *Saccostrea cucullata*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 74. Zool. Surv. India.
2006. *Saccostrea cucullata*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, *Zool. Surv. India Kolkata*, p. 66.
2007. *Saccostrea cucullata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 191. Zool. Surv. India.
2007. *Saccostrea cucullata*: Arularasan and Kasinathan, *Zoos Print J.*, **22(1)** : 2546.
2008. *Saccostrea cucullata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 17.
2008. *Saccostrea cucullata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 151. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Kerala, Lakshadweep, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

202. *Saccostrea deformis* (Lamarck)

1806. *Ostrea deformis* Lamarck, *Ann. Mag. Hist. Nat. Paris.*, **8** : 164.
1991. *Saccostrea deformis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 116. Zool. Surv. India.

Distribution : India : Nicobar Islands, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

203. *Saccostrea futamiensis* (Seki)

1929. *Ostrea futamiensis* Seki, *Proc. Imp. Acad.*, **5(10)**, 477, tf.
1991. *Saccostrea futamiensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 116. Zool. Surv. India.

Distribution : India : Gujarat, Orissa.

Elsewhere : Indo-Pacific.

Subfamily LOPHINAE

Genus *Lopha* Roeding, 1798

1798. *Lopha* Roeding, *Mus. Bolten.*, p. 168.

204. *Lopha (Lopha) crista galli* (Linnaeus)

1758. *Mytilus crista galli* Linnaeus, *Syst. Nat.*, ed., **10** : 704.

1895. *Ostrea crista galli*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 131.
 1921. *Ostrea crista galli*: Hornell, *Madras Fish. Bull.*, **14** : 126.
 1941. *Ostrea crista galli*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 41.
 1956. *Ostrea crista galli*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 68, pl. 11, figs. 2a and 2b.
 1975. *Ostrea crista galli*: Durve, *Rec. zool. Surv. India*, **68** : 422.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Found attached to corals and rocks, mainly sublittoral.

For detail synonymy see Prashad (1932).

205. *Lopha (Lopha) folium* (Gmelin)

1758. *Ostrea folium* Gmelin, *Syst. Nat.*, ed., **13** : 3334.
 1895. *Ostrea (Alcetryonia) folium*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 131.
 1956. *Ostrea folium*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 69, pl. 11, fig. 3.
 1965. *Ostrea folium*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 97, pl. 10, figs. 35a and 35b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Australia.

206. *Lopha (Lopha) frons* (Linnaeus)

1758. *Mytilus frons* Linnaeus, *Syst. Nat.*, ed., **10** : 704.
 1991. *Lopha (Lopha) frons*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 116. *Zool. Surv. India*.

Distribution: India: Orissa.

Elsewhere : Widely distributed in Indo-Pacific.

Genus *Alectryonella* Sacco in Bellardi and Sacco, 1887

1887. *Alectryonella* Sacco in Bellardi and Sacco, *Moll. Terr. Terz. Piemonte e Liguria*, **23** : 19.

207. *Alectryonella crenulifera* (Sowerby)

1871. *Ostrea crenulifera* Sowerby, *Conch. Icon.*, **18** : *Ostrea* sp. no. 67, fig. 67.
 1906. *Ostrea crenulifera*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 214.
 1906. *Ostrea crenulifera*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 806.
 1949. *Ostrea crenulifera*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.
 1969. *Ostrea crenulifera*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 693.

Distribution : India : Andhra Pradesh, Maharashtra.

Elsewhere : Arabian Gulf, Tropical Western Pacific.

Remarks : Found attached to rocks in middle shore.

Family GRYPHAEIDAE

Subfamily PYCNODONTEINAE

Genus *Hyotissa* Stenzel, 1971

1971. *Hyotissa* Stenzel, *Treat. Invert. Palaeont. Moll.*, 6(3-3) : 1107. Type species : *Mytilus hyotis* Linnaeus, 1758

208. *Hyotissa hyotis* (Linnaeus)

1758. *Mytilus hyotis* Linnaeus, *Syst. Nat.*, ed., 10 : 704.

1895. *Ostrea hyotis*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 131.

1986. *Hyotissa hyotis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

1991. *Hyotissa hyotis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 117. Zool. Surv. India.

1995. *Hyotissa hyotis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 416. Zool. Surv. India.

2000. *Hyotissa hyotis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 231.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Found attached to rocks and corals in lower shore and below.

For detail synonymy see Prashad (1932).

Superfamily PLICATULOIDEA

The Superfamily Plicatuloidea represented by a single family Plicatulidae from Indian waters are very much resembles with the family Spondylidae, are cemented and possess an isodont hinge. They are much smaller shells, sculptured with divaricating, smooth or imbricate radial ribs. The attachment area ranges widely from being restricted to the umbo to involving the whole of the cemented valve.

Family PLICATULIDAE

Genus *Plicatula* Lamarck, 1801

1801. *Plicatula* Lamarck, *Hist. nat. Anim. Sans. Vert.*, p. 132. Type species : *Spondylus plicatus* Linnaeus, 1767

209. *Plicatula australis* Lamarck

1819. *Plicatula australis* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **6** : 185.

1898. *Plicatula imbricata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.

1956. *Plicatula australis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 58, pl. 8, fig. 4.

1972. *Chama imbricata*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 286.

Distribution : India : Andaman Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Found cemented to rocks in mid shore and below.

210. *Plicatula plicata* (Linnaeus)

1767. *Spondylus plicatus* Linnaeus, *Mus. Lud. Ult.*, **1767** : 511.

1986. *Plicatula plicata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

2000. *Plicatula plicata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 229.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : Found cemented to rocks and coral in lower shore and below.

Suborder PECTININA

Superfamily PECTINOIDEA

Represented by four families of which three families, Pectinidae, Propeamussiidae (scallops) and Spondylidae (thorny oysters) are represented from Indian waters. The shells are discoidal to fan shaped, with single large adductor muscle; ligament triangular set on an internal shallow resilifer. Free living, can able to swim by clapping the valves together.

The Pectinidae are either free living or attached by byssus are fan shaped, often unequally convex and have ear like extension (auricles). Hinge teeth are absent, except some having weak, simple pair of teeth, crural teeth along the auricles. Sculpture usually of radial ribs but some are smooth.

Propeamussiidae similar in most respect with Pectinidae except the absence of ctenolium and shells are more fragile, strengthened by internal ribs.

Spondylidae are sessile, shells heavy and cemented with rocks, coral etc by right valve. Auricles weak, radially sculptured shells; hinge reinforced by the presence of heavy crural teeth which often interlocked so that the valves are can not be open without breaking. As the lower valve is cemented, growth of the ligament is often asymmetric resulting in the extension of the dorsal area of the attached valve. Due to

their cemented life style the shells are subject to great variation in form and development of sculpture, making them one of the most difficult groups for identification.

Family PECTINIDAE
Subfamily CHLAMYDINAE
Genus ***Chlamys*** Roeding, 1798

1798. *Chlamys* Roeding, *Mus. Bolten.*, p. 161. Type species: *Pecten islandicus* Mueller; subsequent designation, Herrmannsen, 1847.

211. *Chlamys albolineata* (Sowerby)

1842. *Pecten albolineatus* Sowerby, *Proc zool. Soc. London*, **1842** : 95.

1878. *Pecten albolineatus*: Smith, *Proc. zool. Soc. London*, **1878** : 820.

1898. *Pecten albolineatus*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.

1986. *Chlamys albolineata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.

2000. *Mimachlamys albolineata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 224.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : Living byssally attached to corals or amongst coral rubble in the littoral zone.

For reference see Dijkstra (1991).

212. *Chlamys andamanica* Preston

1908. *Chlamys andamanicus* Preston, *Rec. Indian Mus.*, **2** : 204, pl. 14, fig. 19. Type locality : Andaman Islands. Types, NZC, ZSI.

2000. *Chlamys andamanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 222.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Living on sandy bottoms amongst coral rubble in the littoral zone.

For synonyms, reference and discussion see Dijkstra (1991)

213. *Chlamys fricata* (Reeve)

1853. *Pecten fricatus* Reeve, *Conch. Icon*, **8** : *Pecten* sp. no 161, pl. 34, fig. 161.

1898. *Pecten fricatus*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.

2000. *Chlamys fricata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 222.

Distribution: India: Andaman and Nicobar Islands.

Elsewhere : West Pacific, North-east. Australia.

214. *Chlamys irregularis* (Sowerby)

1842. *Pecten irregularis* Sowerby, *Thes. Conch.*, **1** : 69, pl. 34, figs. 51-52.

1972. *Pecten irregularis*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 287.

2000. *Chlamys irregularis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 231.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : Australia, Indonesia to Japan and Central Pacific.

Remarks : For synonyms see Dijkstra (1991)

215. *Chlamys lentigenosa* (Reeve)

1853. *Pecten lentigenosa* Reeve, *Conch. Icon.*, **8** : *Pecten* sp. no., 76, pl. 20, fig. 76.

1898. *Pecten lentigenosa*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.

2000. *Mimachlamys lentigenosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 224.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : South west Pacific and upto Andaman and Nicobar Islands.

Remarks : Found attached by byssal thread to rocks, corals on sandy or muddy sand sediments in the littoral region.

For synonymy, references and discussion see Dijkstra (1991).

216. *Chlamys madreporarum* (Sowerby)

1842. *Pecten madreporarum* Sowerby, *Thes. Conch.*, part **2** : 68.

2000. *Coralichlamys madreporarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 223.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : Living embedded between branches of *Acropora* in the littoral zone.

217. *Chlamys senatoria* (Gmelin)

1791. *Ostrea senatoria* Gmelin, *Syst. Nat.*, ed **13** : 3327.

1897. *Pecten senatoria*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.

1906. *Pecten senatorius*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 809.

1949. *Chlamys senatoria*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.
1972. *Pecten senatoria*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.
2000. *Mimachlamys senatoria*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 224.
2007. *Chlamys senatoria*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 192. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Lakshadweep, Maharashtra.

Elsewhere : Throughout Indo-Pacific.

Remarks : Living byssally attached to rocks, corals or amongst coral rubble on sandy or muddy sand sediments in the littoral zone.

For synonymy, references and type data see Dijkstra and Marshall (1997).

218. *Chlamys squamosa* (Gmelin)

1842. *Ostrea squamosa* Gmelin, *Syst. Nat.*, **13** : 3319, no 17.
1986. *Chlamys squamosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 175.
2000. *Chlamys squamosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 222.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : South Africa, Mauritius, Malagasy, Red Sea, New Caledonia, Japan.

Remarks : Living byssally attached to rocks and corals, or in sandy or muddy sediments in the littoral zone.

For synonyms, reference and discussion see Dijkstra (1991)

219. *Chlamys testudinea* (Reeve)

1842. *Pecten testudinea* Reeve, *Conch. Icon.*, **8**, *Pecten* sp. No., 160, pl. 34, figs. 160.
1898. *Pecten testudinea*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.
2000. *Chlamys testudinea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 222.

Distribution : India : Andaman Islands.

Elsewhere : South African Coast, Moluccas.

Subgenus *Argopecten* Monterosato, 1889

1889. *Argopecten* Monterosato, *J. Conch. Paris*, **37** : 20. Type species: *Pecten solidulus* Reeve, 1853

220. *Chlamys (Argopecten) inaequalvis* (Sowerby)

1842. *Pecten inaequalvis* Sowerby, *Thes. Conch.*, **1** : 50, pl. 19, figs. 193-195.
 1898. *Pecten inaequalvis*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.
 2000. *Haumea inaequalvis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 224.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Mauritius, Indonesia, New Guinea, Philippines.

221. *Chlamys (Argopecten) singaporina* (Sowerby)

1842. *Pecten singaporinus* Sowerby, *Thes. Conch.*, **1** : 74, t. 13, fig. 55.
 1895. *Pecten singaporensis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 131.
 1906. *Pecten singaporinus*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 809.
 1949. *Chlamys singaporina*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.
 1956. *Pecten singaporina*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 702.
 1998. *Chlamys singaporina*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 93, pl. 12, fig. 11.

Distribution : India : Goa, Maharashtra.

Elsewhere : South East Asia. Uncommon.

Remarks : Found attached by byssal thread under rocks, muddy sand or sandy sediments in the littoral region.

For details synonymy, references, type data, description, and discussion see Dijkstra and Kastoro (1997).

222. *Chlamys (Argopecten) tranquebaria* (Gmelin)

1791. *Ostrea tranquebaria* Gmelin, *Syst. Nat.*, ed **13** : 3328.
 1940. *Pecten tranquebaricum*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 326 & 331.
 1941. *Pecten tranquebaricus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5**(1) : 39, fig. 16a.
 1949. *Chlamys tranquebarius*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55, fig. 16.
 1956. *Pecten tranquebaricus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 59, pl. 8, figs. 5a and 5b.
 1965. *Pecten tranquebaricum*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 94, pl. 7, figs. 26a and 26b.
 1968. *Pecten tranquebaricus*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part-1 : 128.

1991. *Chlamys (Argopecten) tranquebaria*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 111. Zool. Surv. India.
1998. *Chlamys tranquebaricus*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 93, pl. 12, fig. 10.
2000. *Argopecten tranquebaria*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 223.
2007. *Chlamys (Argopecten) tranquebaria*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 193. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Sri Lanka, Indonesia, New Guinea, North Australia, South China, Philippines.

Subfamily PECTININAE

Tribe Hinnitini

Genus *Lyropecten* Conrad, 1862

1862. *Lyropecten* Conrad, *Proc. Acad. Nat. Sci. Philad.*, 14 : 291. Type species : *Pallium estrellanum* Conrad, 1857

223. *Lyropecten corallinoides* (d'Orbigny)

1834. *Pecten corallinoides* d'Orbigny, *Moll. des. Isles Canomes*, p. 102.
1898. *Pecten corallinoides*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 46.
2000. *Lyropecten corallinoides*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 223.

Distribution : India : Andaman Islands.

Elsewhere : East African Coast, Red Sea, Morocco.

Genus *Pedum* Bruguiere, 1791

1791. *Pedum* Bruguiere, *Encyl. Meth. (Tab. Vers.)*, 1 : pl. 178. Type species : *Ostrea spondyloidea* Gmelin, 1791

224. *Pedum spondyloideum* (Gmelin)

1791. *Pedum spondyloidea* Gmelin, *Syst. Nat.*, 13 : 3335.
2000. *Pedum spondyloideum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 225.

Distribution : India : Andaman Islands.

Elsewhere : East African Coast, Red Sea, Morocco.

Remarks : Found in cavities of massive beds of coral *Porites lutea* Milne-Edwardi and Haime in the littoral zone.

For synonyms, references and discussions see Dijkstra (1991)

Tribe **Decatopectenini**Genus **Decatopecten** Sowerby, 1839

1839. *Decatopecten* Sowerby in Reeve, *Conch. Icon.*, **8** : 37. Type species : *Ostrea plica* Linnaeus, 1758

225. *Decatopecten amiculum* (Philippi)

1851. *Pedum amiculum* Philippi, *Zeit. Fur. Malak.*, **8** : 89.

1986. *Decatopecten* (*Decatopecten*) *amiculum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Decatopecten amiculum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 226.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

226. *Decatopecten plica* (Linnaeus)

1791. *Ostrea plica* Linnaeus, *Syst. Nat.*, ed., **10** : 696, no 162

1895. *Pecten* (*Pallium*) *plica*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 131.

1956. *Pecten plica*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 61, pl. 9, figs. 3a and 3b.

1972. *Pecten plica*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 287.

2000. *Decatopecten plica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 226.

Distribution : India : Lakshadweep, Tamil Nadu, Indian Ocean.

Elsewhere : Western and South-western Pacific.

Remarks : For synonyms see Dijkstra (1991)

227. *Decatopecten radula* (Linnaeus)

1758. *Ostrea radula* Linnaeus, *Syst. Nat.*, ed. **10** : 698.

2000. *Comptopallium radula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 226.

Distribution : India : Andaman Islands.

Elsewhere : Western Pacific, North to Australia, Indian Ocean.

Remarks : Living amongst seaweeds under stones or dead corals on muddy or sandy sediments in the littoral zone.

For references and discussion see Dijkstra (1991).

Genus ***Bratechlamys*** Iredale, 1939

1939. *Bratechlamys* Iredale, *Great Barrier reef Exped. Sci. Rep.*, 5(6) : Moll. 1 : 366. Type species : *Bratechlamys evecta* Iredale, 1939

228. ***Bratechlamys vexillum*** (Reeve)

1857. *Avicula vexillum* Reeve, *Conch. Icon.*, 10 : *Avicula* sp. No., 70, pl. 17, fig. 70.
2000. *Bratechlamys vexillum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 225.

Distribution : India : Andaman Islands.

Elsewhere : Indonesia, Philippines, New Caledonia.

Remarks : Living amongst seaweeds and coral rubble on muddy or sandy sediments in the littoral zone.

Genus ***Excellichlamys*** Iredale, 1939

1939. *Excellichlamys* Iredale, *Great Barrier reef Exped. Sci. Rep.*, 5(6) : 347, 366. Type species : *Pecten spectabilis* Reeve, 1853

229. ***Excellichlamys histrionica*** (Gmelin)

1791. *Ostrea histrionica* Gmelin, *Syst. Nat.*, ed. 13 : 3326.
1898. *Pecten historionicus*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 46.
1941. *Pecten historionicus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 39.
2000. *Excellichlamys histrionica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 227.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Indo West Pacific.

Genus ***Gloripallium*** Iredale, 1939

1939. *Gloripallium* Iredale, *Great Barrier reef Exped. Sci. Rep.*, 5(6) : Moll. 1 : Type species : *Ostrea pallium* Linnaeus, 1758

230. ***Gloripallium pallium*** (Linnaeus)

1758. *Ostrea pallium* Linnaeus, *Syst. Nat.*, ed. 10 : 697.
1895. *Pecten speciosus*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 131.
1898. *Pecten pallium*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 46.
1986. *Chlamys pallium*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.
2000. *Gloripallium pallium*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 227.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Throughout Indo-Pacific.

Remarks : This species attached by byssal threads to rocks or coral slabs or amongst coral rubble on sandy or muddy sediments in the littoral.

For synonyms, references and discussion see Dijkstra (1991)

Genus *Semipallium* Joussaeume in Lamy, 1928

1928. *Semipallium* Joussaeume in Lamy, *Bull. Mus. Nat. Hist. Paris*, **34** : 169. Type species: *Pecten tigris* Lamarck, 1819

231. *Semipallium tigris* (Lamarck)

1819. *Pecten tigris* Lamarck, *Hist. nat. Anim. Sans. Vert.*, (6)**1** : 171.

2000. *Semipallium tigris*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 225.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific, down to Queensland and northern New South Wales.

Remarks : Found byssally attached under coral boulders or amongst coral rubble on sand in the littoral zones.

For reference and discussion see Dijkstra (1991)

Tribe Eburneopectenini

Genus *Delectopecten* Stewart, 1930

1930. *Delectopecten* Stewart, *Acad. nat. Philad. Spec. Pub.*, **3** : 37. Type species : *Pecten (Pseudoamussium) vancouverensis* Whiteaves, 1893

232. *Delectopecten alcocki* (Smith)

1894. *Amussium Alcocki* Smith, *Ann. Mag. Nat. Hist. London*, **14** : 172, pl. 5, figs. 15, 16. Type locality : Cape Comarin.

1906. *Pecten alcocki*: Smith, *Ann. Mag. nat. Hist. London*, (7)**18** : 254.

2000. *Delectopecten alcocki*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 221.

2004. *Amusium alcocki*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 4.

Distribution : India : Andaman Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Indian Ocean and South west Pacific.

Remarks : For synonyms see Dijkstra (1991).

Genus ***Hemipecten*** Adams and Reeve, 1848

1848. *Hemipecten* Adams and Reeve, *Zool. Voy, Samarang, Moll.*, p. 72. Type species : *Ostrea maxima* Linnaeus; subsequent designation, Schmidt, 1818.

233. ***Hemipecten forbesianus*** Adams and Reeve

1849. *Hemipecten forbesianus* Adams and Reeve, *Proc. zool. Soc. London*, **1849** : 133.
1906. *Hemipecten forbesianus*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 808.
1972. *Semipecten forbesianus*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 287.

Distribution : India : Lakshadweep.

Elsewhere : Maldives, Sooloo Archipelago.

Remarks : Nagabhushanam and Rao (1972) recorded this species from Lakshadweep is doubtful.

Genus ***Hyalopecten*** Verrill, 1897

1897. *Hyalopecten* Verrill, *Trans. Conn. Acad. Arts. Sci.*, **10** : 71. Type species: *Pecten undatus* Verrill (non Defrance) 1825

234. ***Hyalopecten fluctuatus*** (Bavay)

1904. *Chlamys fluctuatus* Bavay, *Mem. Soc. Zool. Fr.*, **17** :
2000. *Cyclopecten (Hyalopecten) fluctuatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 220.
2004. *Chlamys fluctuatus*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 60.

Distribution : India : Andaman Islands.

Elsewhere : Philippines.

Tribe ***Pectenini***Genus ***Pecten*** Mueller, 1776

1776. *Pecten* Mueller, *Zool. Donicae Prod.*, p. 248. Type species: *Ostrea maxima* Linnaeus, 1758

235. ***Pecten crassicostatus*** Sowerby

1842. *Pecten crassicostatus* Sowerby, *Thes. Conch.*, **1** : 75, pl. 15, fig 3, pl. 17, fig. 152.
1941. *Pecten crassicostatus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 39.
1956. *Pecten crassicostatus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 60 pl. 9, figs. 2a and 2b.
1965. *Pecten crassicostatus*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 94, pl. 8, figs. 28a and 28b.

1998. *Chlamys crassicostatus*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 93, pl. 12, fig. 12.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

236. *Pecten gardineri* (E. A. Smith)

1903. *Janira gardineri* Smith in Gardiner's, *Fauna of Maldives and Laccadive Archipelagoes*, 11(2) : 622, pl. 36, figs. 21-22.

2000. *Serratovola gardineri*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 227.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean, Western Pacific.

237. *Pecten gibbus* (Linnaeus)

1767. *Ostrea gibba* Linnaeus, *Syst. Nat.* ed. 12 : 1147.

1906. *Spondylus rubicaundus*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 214.

1906. *Spondylus rubicaundus*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 811.

1949. *Spondylus rubicaundus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 20.

Distribution : India : Maharashtra.

Elsewhere : West Africa.

Remarks : Comber (1906) and Subrahmanyam *et al.* (1949) reported this species from Bombay is doubtful.

238. *Pecten maldivensis* Smith

1906. *Pecten maldivensis* Smith, *Fauna and geography of Maldives and Laccadive Archipelago*, (2)2 : 622, pl. 36, figs. 19 and 20.

1972. *Pecten maldivensis* : Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : West Africa.

239. *Pecten splendidulus* Sowerby

1842. *Pecten splendidulus* Sowerby, *Thes. Conch.*, 7 : 76, pl. 20, figs. 296.

1941. *Pecten splendidulus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 39.

1956. *Pecten splendidulus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 60 pl. 9, figs. 1a and 1b.

Distribution : India : Tamil Nadu.

Elsewhere : Indian Ocean.

240. *Pecten varius* (Linnaeus)

1767. *Ostrea varius* Linnaeus, *Syst. Nat.*, ed. 12 : 1146.

1895. *Pecten varius*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 131.

1972. *Pecten varius*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : Seas of Europe.

Remarks : Nagabhushanam and Rao (1972) recorded this species from Lakshadweep is doubtful.

Subfamily PATINOPECTININAE**Genus *Patinopecten* Dall, 1898**

1898. *Patinopecten* Dall, *Trans. Wagner Inst. Philad.*, 3(4) : 695. Type species : *Pecten caurinus* Gould, 1850

Subgenus *Minnivola* Iredale, 1939

1939. *Minnivola* Iredale, *Great Barrier reef Exped. Sci. Rep.*, 5(6) : Moll. Type species : *Minnivola isomeres* Iredale, 1939

241. *Patinopecten (Minnivola) pyxidata* (Born)

1780. *Pecten pyxidata* Born, *Mus. Caes. Vindob.*, p. 108, pl. 6, figs. 5-6.

1895. *Pecten (Vola) pyxidata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 131.

1898. *Pecten (Vola) pyxidata*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 46.

1940. *Pecten pyxidata*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 331.

1941. *Pecten pyxidata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 5(1) : 39.

1965. *Pecten pyxidata*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 94, pl. 8, figs. 29a & 29b.

1986. *Pecten pyxidata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

1991. *Pecten (Pecten) pyxidata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 111. Zool. Surv. India.

2000. *Minnivola pyxidata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 228.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Orissa, Tamil Nadu.

Elsewhere : Indian Ocean, China sea, Indonesia, Queensland, Philippines.

Remarks : Living amongst seaweed on muddy sand sediments at sublittoral and littoral regions. Absence of ctenolium in the adult indicates that this species are probably not byssally attached.

Family PROPEAMUSSIIDAE

Genus *Propeamussium* De Gregorio, 1884

1884. *Propeamussium* De Gregorio, *Natural Sicil.*, **3** : 119. Type species: *Pecten* (*Propeamussium*) *cecillae* De Gregorio, 1884

242. *Propeamussium caducum* (Smith)

1885. *Amussium caducum* Smith, *Challenger Report Zoology*, **13**(35) : 309, pl. 23, figs. 1-1c.
1904. *Amussium caducum*: Smith, *Ann. Mag. nat. Hist. London*, (7)**14** : 13.
2000. *Propeamussium caducum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 219.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : For synonyms see Dijkstra (1991)

Genus *Parvamussium* Sacco, 1897

1897. *Parvamussium* Sacco, *Moll. Terr. Terz. Piemonte e Liguria*, **24** : 48. Type species : *Pecten* (*Pleuronectes*) *duodecimiamellatus* Bronn, 1832.

243. *Parvamussium cristellum* (Dautzenberg and Bavay)

1991. *Paramussium cristellum*: Dijkstra, *Zool. Verhan.*, **271** : 13, figs. 28-31.
2000. *Parvamussium cristellum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 220.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : For synonyms see Dijkstra (1991)

244. *Parvamussium scitulum* (Smith)

1885. *Amussium scitulum* Smith, *Challenger Report Zoology*, **13**(35) : 312, pl. 23, figs. 4-4b.
2000. *Parvamussium scitulum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 220.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : Living on muddy or muddy sand sediments with coral rubble at littoral to bathyal depths.

For synonyms, references, description see Dijkstra (1995)

Genus ***Amusium*** Roeding, 1798

1798. *Amusium* Roeding, *Mus. Bolten.*, p.165 (*Amussium* -error). Type species : *Amussium pleuronectes* Linnaeus; subsequent designation, Herrmannsen, 1846

245. ***Amusium andamanense*** Bavay

1905. *Amussium andamaense* Bavay, *Mem. Soc. zool. France*, 17 : 186. Type locality : Andamans. Types : NCZ, ZSI.

2004. *Amusium andamanense*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India Occ. Paper No.*, 228 : 4.

Distribution : India : Andaman Sea.

Remarks : No further records after original discovery.

246. ***Amusium andamanicum*** Smith

1894. *Amussium andamanicum* Smith, *Ann. Mag. nat. Hist. London*, (6)14 : 172-173, pl. 5, figs. 13 and 14. Type locality : Bay of Bengal, Andaman sea, 688-922 fathoms. Types : NCZ, ZSI.

1904. *Amussium andamanicum*: Smith, *Ann. Mag. nat. Hist. London*, (7)14 : 14.

1906. *Amussium andamanicum*: Smith, *Ann. Mag. nat. Hist. London*, (7)18 : 255.

1986. *Amusium andamanicum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

2000. *Amusium andamanicum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 221

2004. *Amusium andamanicum*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India Occ. Paper No.*, 228 : 5.

Distribution : India : Andaman Sea, Lakshadweep sea.

Elsewhere : No records.

247. ***Amusium cristatum*** Bavay

1905. *Amussium cristatum* Bavay, *Mem. Soc. zool. France*, 17 : 187. Type locality : Masandam Island, Andamans. Types : NCZ, ZSI.

2004. *Amusium cristatum*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 5.

Distribution : India : Andaman Sea. No further records after original discovery.

248. ***Amusium investigatoris*** Smith

1906. *Amussium investigatoris* Smith, *Ann. Mag. nat. Hist. London*, (7)18 : 255. Type locality : Laccadive sea. Types : NCZ, ZSI.

2004. *Amusium investigatoris*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India Occ. Paper No.*, 228 : 5.

Distribution : India : Lashadweep. No further records after original discovery.

249. *Amusium japonicum* (Gmelin)

1791. *Ostrea japonicum* Gmelin, *Syst. Nat.*, ed. 13 : 3317

2000. *Amusium japonicum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 221.

Distribution : India : Andaman Islands.

Elsewhere : Japan to West Pacific.

250. *Amusium manaricum* Smith

1904. *Amusium manaricum*: Smith, *Ann. Mag. nat. Hist. London*, (7)14 : 14.

1906. *Amusium manaricum*: Smith, *Ann. Mag. nat. Hist. London*, (7)18 : 256.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : No records.

251. *Amusium paucilirata* Smith

1903. *Amusium paucilirata* Smith, *Fauna Geography Maldives and Laccadive Archipelagoes*, 2 : 622.

1972. *Amusium paucilirata*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 286.

Distribution : India : Lakshadweep.

Elsewhere : Maldives.

252. *Amusium pleuronectes* (Linnaeus)

1758. *Ostrea pleuronectes* Linnaeus. *Syst. Nat.*, ed. 10 : 696

1895. *Pecten (Pleuronectia) pleuronectes*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 131.

1898. *Amusium pleuronectes*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 229.

1940. *Amusium pleuronectes*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 331.

1941. *Amusium pleuronectes*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 5(1) : 39.

1986. *Amusium pleuronectes*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 175.

1991. *Amusium pleuronectes*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 111. Zool. Surv. India.

1998. *Amusium (error) pleuronectes*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 93, pl. 12, fig. 13.

2000. *Amusium pleuronectes*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 221

2001. *Amusium pleuronectes*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 73. Zool. Surv. India.

2007. *Amusium pleuronectes*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 193. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Goa.

Elsewhere : Japan to Australia.

253. *Amusium solitarium* Smith

1894. *Amusium solitarium* Smith, *Ann. Mag. nat. Hist.* London, (6)14 : 173, pl. 5, figs. 11, 12. Type locality : Bay of Bengal, 1803 fathoms.

2004. *Amusium solitarium*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 6.

Distribution : India : Bay of Bengal. No further records after original discovery.

Family SPONDYLIDAE

Genus *Spondylus* Linnaeus, 1758

1758. *Spondylus* Linnaeus, *Syst. Nat.*, ed. 10 : 690. Type species : *Spondylus garderopus* Linnaeus, subsequent designation, Schmidt, 1818

254. *Spondylus hystrix* Roeding

1798. *Spondylus hystrix* Roeding, *Mus. Bolten.*, p. 195.

1949. *Spondylus hystrix*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55, fig. 19.

1986. *Spondylus hystrix*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

1991. *Spondylus hystrix*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 112. Zool. Surv. India.

2000. *Spondylus hystrix*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 228

2007. *Spondylus hystrix*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 194. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Orissa, Maharashtra.

Elsewhere : Indonesia.

255. *Spondylus imperialis* Chenu

1844. *Spondylus imperialis* Chenu, *Illust. Conchyl.*, p. 6, *Spondylus* pl. 26, figs 2, 2a, 3, 3a, 3b.

1956. *Spondylus imperialis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 1(2), pt. 7 : 63, pl. 10, fig. 1.

1972. *Spondylus imperialis*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 288.

Distribution : India : Lakshadweep, Tamil Nadu.

Elsewhere : Japan, China.

256. *Spondylus layardi* Reeve

1836. *Spondylus layardi* Reeve, *Conch. Icon.*, **9** : *Spondylus* sp. no., 66, pl. 18, fig. 66.
 1895. *Spondylus layardi*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 131.
 1921. *Spondylus layardi*: Hornell, *Madras Fish. Bull.*, **14** : 152.
 1941. *Spondylus layardi*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 40, fig. 16b.
 1956. *Spondylus layardi*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 62, pl. 9, figs. 4a and 4b.
 1965. *Spondylus layardi*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 95, pl. 8, figs. 30^a and 30^b.
 1991. *Spondylus layardi*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 348. Zool. Surv. India.
 1991. *Spondylus layardi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 112. Zool. Surv. India.
 2000. *Spondylus layardi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 228
 2007. *Spondylus layardi*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 195. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Lakshadweep, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

257. *Spondylus microlepus* Lamarck

1819. *Spondylus microlepus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **6** : 192.
 1986. *Spondylus microlepus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
 2000. *Spondylus microlepus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 229.
 2007. *Spondylus microlepus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 195. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : Indonesia.

258. *Spondylus multisetosus* Reeve

1856. *Spondylus multisetosus* Reeve, *Conch. Icon.*, **9** : *Spondylus* sp. No., 11, pl. 3, fig. 11.

1986. *Spondylus multisetosus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
1991. *Spondylus multisetosus*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 349. Zool. Surv. India.
2000. *Spondylus multisetosus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 229.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : No records.

259. *Spondylus zonalis* Chenu

1847. *Spondylus zonalis* Chenu, *Illus. Conch.*, pl. 17, figs. 3 and 4.
2000. *Spondylus zonalis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 229.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Superfamily ANOMIOIDEA

The superfamily Anomioidea included two families Anomiidae (saddle oysters) and Placunidae (window pane oysters) both are present in Indian water.

The Anomiidae resembles with true oysters Ostreidae in that the lower valve closely conforms with the substrate but not cemented. Shells are irregularly circular or oval; true hinge teeth are absent but divergent umbonal ridges (Crural teeth) may present; muscle scars are present, distinct in upper valve, consisting of subcentral adductor scar with one or more pedal and byssus retractor scar. They are live attached to rocks and other shells from mid shore and below.

The Placunidae are free living do not have byssal notch, sheltered muddy lagoons in shallow water.

Family ANOMIIDAE

Genus *Anomia* Linnaeus, 1758

1758. *Anomia* Linnaeus, *Syst. Nat.*, ed. 10 : 700. Type species, *Anomia ephippium* Linnaeus, 1758.

260. *Anomia achaeus* Gray

1849. *Anomia achaeus* Gray, *Proc. zool. Soc. London*, 1849 : 116.
1906. *Anomia achaeus*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 214.
1941. *Anomia achaeus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 41, fig. 16d.
1949. *Anomia achaeus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55.

1965. *Anomia achaeus*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 96, pl. 8, figs. 32a & 32b.
1969. *Anomia achaeus*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 696.
1992. *Anomia achaeus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 223, pl. 17, figs. 4 & 5. Zool. Surv. India.
1995. *Anomia achaeus*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 415. Zool. Surv. India.
2001. *Anomia achaeus*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 73, Zool. Surv. India.
2007. *Anomia achaeus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 196. Zool. Surv. India.
2008. *Anomia achaeus*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 149. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Gujarat, Kerala, Maharashtra, West Bengal.

Elsewhere : Persian Gulf, Gulf of Aden, Pakistan coast, West coast of Ceram.

261. *Anomia ephippium* Linnaeus

1758. *Anomia ephippium* Linnaeus, *Syst. Nat.*, ed. **10** : 700.
2000. *Anomia ephippium*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 230
2000. *Placuna sella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 230
2007. *Anomia ephippium*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 196. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

262. *Anomia scabra* Reeve

1859. *Anomia scabra* Reeve, *Conch. Icon.*, **11** : *Anomia* sp. no. 27, pl. 6, fig. 27.
1991. *Anomia scabra*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 113. Zool. Surv. India.
2000. *Anomia scabra*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 230.

Distribution : India : Andaman Islands, Maharashtra, Orissa.

Elsewhere : Indo-Pacific.

Genus *Enigmonia* Iredale, 1918

1918. *Enigmonia* Iredale, *Proc. malac. Soc. London*, **13** : 28. Type species, *Anomia rosea* Gray, 1825.

263. *Enigmonia aenigmatica* (Anton)

1837. *Anomia aenigmatica* Anton, *Arch. Fur. Naturges*, **3**(1) : 285.
1949. *Anomia aenigmatica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.
1975. *Anomia aenigmatica*: Subba Rao and Mookherjee, *Recent Researches in Estuarine Biology*, p. 173.
1991. *Enigmonia aenigmatica*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 113. *Zool. Surv. India*.
1992. *Enigmonia aenigmatica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 224, pl. 18, figs, 1 & 2. *Zool. Surv. India*.
1995. *Enigmonia aenigmatica*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 64. *Zool. Surv. India*.
2000. *Enigmonia aenigmatica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 230
2006. *Enigmonia aenigmatica*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 67.
2008. *Enigmonia aenigmatica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 18.

Distribution : India : Andhra Pradesh, Andaman Islands, Maharastra, Orissa, West Bengal.

Elsewhere : Bangladesh, Myanmar, Singapore, Thailand, Australia, Philippines.

Family PLACUNIDAE**Genus *Placuna* Solander in Lightfoot, 1786**

1786. *Placuna* Solander in Lightfoot, *Catal. Portland Mus.*, p. 16. Type species : *Anomia placenta* Linnaeus; subsequent designation, Schmidt, 1818.

264. *Placuna placenta* Linnaeus

1758. *Placuna placenta* Linnaeus, *Syst. Nat.*, ed **10** : 703.
1898. *Placuna placenta*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 229.
1906. *Placenta orbicularis*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 943.
1906. *Placuna placenta*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.
1916. *Placuna placenta*: Preston, *Rec. Indian Mus.*, **12** : 35.
1940. *Placenta placenta*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 340.
1941. *Placuna placenta*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5**(1) : 41, fig. 16e.
1949. *Placuna placenta*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 55.
1956. *Placuna placenta*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 702.

1956. *Placuna placenta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 65, pl. 10, fig. 3.
1965. *Placuna placenta*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 96, pl. 9, figs. 33a & 33b.
1969. *Placuna placenta*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, 38 : 695.
1975. *Placuna placenta*: Durve, *Rec. zool. Surv. India*, 68 : 424.
1986. *Placuna (Placuna) placenta*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
1992. *Placuna placenta*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 223, pl. 17, figs. 1 and 3. Zool. Surv. India.
1995. *Placuna placenta*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, 2 : 64. Zool. Surv. India.
1995. *Placuna placenta*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 415. Zool. Surv. India.
1998. *Placenta placenta*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 93, pl. 12, fig. 14.
2000. *Placuna placenta*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 230.
2001. *Placuna placenta*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 73. Zool. Surv. India.
2003. *Placuna placenta*: Ramakrishna and Dey, *Manual on identification of Schedule Molluscs from India*, Zool. Surv. India, p. 34, pl. 16, figs. 51 & 52.
2007. *Placuna placenta*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 197. Zool. Surv. India.
2007. *Placuna placenta*: Arularasan and Kasinathan, *Zoos Print J.*, 22(1) : 2546.
2008. *Placuna placenta*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 18.
2008. *Placuna placenta*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 149. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Gulf of Aden, Malaya, China, Borneo, Philippines.

Remarks : Found in the muddy banks of low water regions. Largely used in India and China for the manufacturing of window panes and is a general substitute of glass.

Subclass HETERODONTA

Order VENEROIDA

Superfamily LUCINOIDEA

The superfamily Lucinidea superficially resemble the venerid clams, predominantly lenticular or subovate in form and are burrowers into sand, gravel and mud. They are distinct anatomically as they do not possess paired posterior siphons and the pallial line is always entire. Unlike the venerids the inhalant aperture

is anterior and the contact with the surface is maintained by the finger like foot which formed a muscular tube.

This superfamily represented by six families of which three Lucinidae, Fimbriidae and Ungulinidae are reported from Indian waters.

Lucinidae are lenticular often with an anterior and posterior sulcus. Hinge with two cardinal teeth and anterior and posterior laterals are developed to various degrees. Ligament external, but in some forms deeply shunken; sculpture concentric, often with radial sculpture. Anterior adductor muscle relatively short.

In Fimbriidae the hinge poorly developed are without teeth or a small cardinal peg; and represented by only single species from India.

In Undulinidae the anterior adductor muscles not elongate. Shells are orbicular with smooth sculpture. Hinge consists of two cardinal teeth in each valve, and without any lateral teeth.

Family LUCINIDAE

Subfamily LUCININAE

Genus *Lucina* Bruguiere, 1797

1797. *Lucina* Bruguiere, *Encyl. Meth.*, 2 : pl. 284. Type species : *Venus jamaicensis* Spengler, 1784.

265. *Lucina bengalensis* Smith

1894. *Lucina bengalensis* Smith, *Ann. Mag. nat. Hist.*, (6)14 : 171, pl. 5, figs. 1-2. Type locality : Off Godavari delta, 410 fathoms. Types, NCZ, ZSI

1904. *Lucina bengalensis* Smith, *Ann. Mag. nat. Hist.*, (7)14 : 10.

2004. *Lucina bengalensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 39

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu.

Elsewhere : No records.

266. *Lucina macandreae* A. Adams

1850. *Lucina macandreae* A. Adams, *Proc. zool. Soc. London*, 1870 : 791, pl. 48, fig. 15.

2000. *Lucina macandreae*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 235.

Distribution : India : Andaman Islands.

Elsewhere : No records.

267. *Lucina pisum* Reeve

1850. *Lucina pisum* Reeve, *Conch. Icon.*, 6 : *Lucina* sp. No., 66, pl. 9, fig. 66.

1869. *Lucina semperiana* Issel, *Mal. Del. Mar. Risso*, p. 82.
1895. *Lucina pisum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1898. *Lucina (Codakia) semperiana*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46, pl. 3, fig. 1.
1916. *Lucina semperiana*: Preston, *Rec. Indian Mus.*, **12**(2) : 95.
1956. *Lucina pisum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **1**(2), pt. 7 : 77, pl. 12, figs. 3a and 3b.
2000. *Lucina pisum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 235.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : No records.

268. *Lucina simplex* Reeve

1850. *Lucina simplex* Reeve, *Conch. Icon.*, **6** : sp. No., 11, pl., figs. 11.
1986. *Lucina simplex*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.
2000. *Lucina simplex*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 235.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : No records.

269. *Lucina vesicula* Gould

1850. *Lucina vesicula* Gould, *Proc. Boston Soc. Nat. Hist.*, **3** : 256.
1895. *Cryptodon vesicula*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1921. *Cryptodon vesicula*: Hornell, *Madras Fish. Bull.*, **14** : 177.
1956. *Lucina vesicula*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 77 pl. 12, fig. 4.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

Genus *Codakia* Scopali, 1777

1777. *Codakia* Scopali, *Intr. Hist. Nat.*, p. 398. Type species : *Venus orbicularis* Linnaeus, 1758.

270. *Codakia angela* (Melvill)

1899. *Lucina (Codakia) angela* Melvill, *Ann. Mag. Nat. Hist.*, (7) **4** : 98, pl. 2, fig. 8.
1921. *Lucina angela*: Hornell, *Madras Fish. Bull.*, **14** : 177.
1941. *Codakia angela*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 45.

1956. *Codakia angela*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 79 pl. 12, figs. 6a and 6b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

271. *Codakia divergens* (Philippi)

1850. *Lucina divergens* Philippi, *Abbild. Beschreib.*, 3 : 103, pl. 2, fig. 4.
1895. *Lucina (Lentillaria) divergens*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1906. *Lucina fibula* : Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 815.
1906. *Lucina fibula* : Comber, *J. Bombay nat Hist. Soc.*, 17 : 214.
1949. *Lucina fibula*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 64, pl. 3, fig. 22.
1956. *Codakia divergens*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 80, pl. 12, figs. 7a and 7b.
1965. *Codakia divergens*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 99, pl. 12, figs. 41a and 41b.
1991. *Ctena bella*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 350. Zool. Surv. India.
2000. *Codakia divergens*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 234.

Distribution : India: Andaman and Nicobar Islands, Gujarat, Lakshadweep Maharashtra, Tamil Nadu, West Bengal.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For synonyms see Prashad (1932)

272. *Codakia punctata* (Linnaeus)

1850. *Venus punctata* Linnaeus, *Syst. Nat.*, ed. 10 : 688.
1986. *Codakia punctata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
1991. *Codakia punctata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 350. Zool. Surv. India.
2000. *Codakia punctata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 234

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For synonyms see Prashad (1932)

273. *Codakia tigerina* (Linnaeus)

1758. *Venus tigerina* Linnaeus, *Syst. Nat.*, ed. 10 : 688.

1898. *Lucina (Codakia) exasperata*: Melvill and Skyes, *Proc. malac. Soc. London*, 3 : 46.

2000. *Codakia tigerina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 234.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For synonyms see Prashad (1932).

Subfamily MILTHINAE

Genus *Anodontia* Link, 1807

1807. *Anodontia* Link, *Beschr. Nat. Samml. Univ. Rostock*, (3) : 156. Type species : *Venus edentula* Linnaeus, 1758.

274. *Anodontia edentula* (Linnaeus)

1758. *Venus edentula* Linnaeus, *Syst. Nat.*, ed. 10 : 689.

1895. *Lucina (Anodontia) edentula*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.

1941. *Lucina ovum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 45.

1941. *Lucina edentula*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 45.

1956. *Lucina edentula*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 76, pl. 12, figs. 1a and 1b.

1956. *Lucina ovum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 75, pl. 12, figs. 2a and 2b.

1965. *Lucina edentula*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 99, pl. 12, figs. 40a and 40b.

1968. *Lucina ovum*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 129.

2000. *Anodontia edentula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 234.

2007. *Anodontia edentula*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 197. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Gujarat, Kerala, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For synonyms see Prashad (1932)

Genus *Eamisiella* Chavan, 1951

1951. *Eamisiella* Chavan, *C. R. Soc. Geol. France*, 1951 : 211. Type species : *Lucina corrugata* Deshayes, 1843.

275. *Eamisiella philippinarum* (Hanley)

1850. *Lucina philippinarum* Hanley in Reeve, *Conch. Icon.*, **6** : sp. No., 18, pl. 14, figs. 18a and 18b.
1992. *Eamisiella philippinarum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 226, pl. 19, figs. 2 & 3. Zool. Surv. India.
1995. *Eamisiella philippinarum*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 49. Zool. Surv. India.
2000. *Eamisiella philippinarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 235.
2008. *Eamisiella philippinarum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 18.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, West Bengal.

Elsewhere : Myanmar, Singapore, Thailand, Philippines.

Subfamily DIVARICELLINAE**Genus *Divaricella* von Martens, 1880**

1880. *Divaricella* von Martens, *Moeb. Beitr. Meer. Mauritius, Secyghelles*, p. 211. Type species : *Divaricella angulifera* von Martens, 1880.

276. *Divaricella cumingii* (Adams and Angas)

1865. *Lucina (Cyclas) cumingii* Gould, *Proc. zool. Soc. London*, **1865** : 651.
1895. *Lucina (Divaricella) cumingii*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1921. *Lucina cumingii*: Hornell, *Madras Fish. Bull.*, **14** : 177.
1956. *Divaricella cumingii*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 78 pl. 12, figs. 5a and 5b.
1965. *Divaricella cumingii*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 100, pl. 12, figs. 42a and 42b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Family FIMBRIIDAE**Genus *Fimbria* Megerle von Muehfeld, 1811**

1811. *Fimbria* Megerle von Muehfeld, *Mag. Ges. Nat. Fr. Berlin*, **5** : 52. Type species : *Venus frimbriata* Linnaeus, 1758.

277. *Fimbria fimbriata* (Linnaeus)

1758. *Venus frimbriata* Linnaeus, *Syst. Nat.*, ed. **10** : 487.

2000. *Fimbria fimbriata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 236.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Family UNGULINIDAE

Genus *Diplodonta* Bronn, 1831

1831. *Diplodonta* Bronn, *Ergeb. Nat. Reisen*, **22** : 484. Type species : *Venus lupinus* Brocchi, 1814.

278. *Diplodonta barhampurensis* Preston

1915. *Diplodonta barhampurensis* Preston, *Rec. Indian Mus.*, **11** : 302, figs. 15, 15a-b. Type locality : Channel of Barhamapur Island, Chilka Lake).

1991. *Diplodonta barhampurensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 118. Zool. Surv. India.

1995. *Diplodonta barhampurensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 417. Zool. Surv. India.

2004. *Diplodonta barhampurensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India Occ. Paper No.*, **228** : 31.

Distribution : India : Orissa.

Elsewhere : No records.

279. *Diplodonta bullata* Dunker

1865. *Diplodonta bullata* Dunker, *Novitat. Conch. Meeres Conch. Suppl.*, **2** : 76, pl. 26, fig. 1.

1986. *Diplodonta bullata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

1991. *Diplodonta bullata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 118. Zool. Surv. India.

2000. *Diplodonta bullata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 236.

Distribution : India : Andaman and Nicobar Islands, Orissa.

Elsewhere : Gulf of Aden, Sri Lanka, Myanmar, Indonesia.

280. *Diplodonta globosa* (Forskal)

1775. *Venus globosa* Forskal, *Des. Anim.*, p. 22.

1941. *Diplodonta globosa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5(1)** : 45, fig. 19a.

2000. *Diplodonta globosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 236.

Distribution : India : Nicobar Islands, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

281. *Diplodonta indica* Deshayes

1906. *Diplodonata indica*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 214. Goa

1906. *Diplodonata indica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 828.

1949. *Diplodonata indica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : No records.

282. *Diplodonta insulsa* Preston

1908. *Diplodonta insulsa* Preston, *Rec. Indian Mus.*, **2** : 207, pl. 16, fig. 54. Type locality : Andaman islands; Types; NZC, ZSI.

2000. *Diplodonta insulsa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 236.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

283. *Diplodonta satparansis* Preston

1915. *Diplodonta satparansis* Preston, *Rec. Indian Mus.*, **11** : 302, figs. 14, 14a-b. Type locality : Channel between Satpara and Barhmapur Island, Chilka Lake). Types : NZC, ZSI.

1991. *Diplodonta satparansis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 118. Zool. Surv. India.

1995. *Diplodonta satparansis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 417. Zool. Surv. India.

2004. *Diplodonta (Felania) satparansis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 32.

Distribution : India : Orissa.

Elsewhere : No records.

Genus *Felania* Recluz, 1851

1851. *Felania* Recluz, *J. Conchyl.*, **2** : 69. Type species: *Venus diaphana* Gmelin, 1790.

284. *Felania annandalei* Preston

1914. *Felania annandalei* Preston, *Rec. Indian Mus.*, **10** : 307, figs. 20, 20a-b. Type locality : Between Barniakuda and Nalban Island, Chilka Lake); Types : NZC, ZSI.

1915. *Diplodonta (Felania) annandalei*: Preston, *Rec. Indian Mus.*, **11** : 303.
1991. *Felania annandalei*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 119; *Zool. Surv. India*.
1995. *Felania annandalei*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 417. *Zool. Surv. India*.
2004. *Felania annandalei*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 31.

Distribution : India : Orissa.

Elsewhere : No subsequent records.

285. *Felania chilkaensis* Preston

1914. *Felania chilkaensis* Preston, *Rec. Indian Mus.*, **10** : 307, figs. 21, 21a-b. Type locality : Chilka Lake). Types : NZC, ZSI.
1915. *Diplodonta (Felania) chilkaensis*: Preston, *Rec. Indian Mus.*, **11** : 303.
1991. *Felania chilkaensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 119. *Zool. Surv. India*.
1995. *Felania chilkaensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 417. *Zool. Surv. India*.
2004. *Felania chilkaensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 31.

Distribution : India : Orissa.

Elsewhere : No records.

286. *Felania ovalis* Preston

1914. *Diplodonta ovalis* Preston, *Rec. Indian Mus.*, **10** : 308. Type locality : Manikpatna, Lake Chilka, Orissa. Types : NZC, ZSI.
1915. *Diplodonta (Felania) ovalis*: Preston, *Rec. Indian Mus.*, **11** : 303.
1995. *Felania ovalis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 418. *Zool. Surv. India*.
2004. *Felania ovalis*: Ramakrishna Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 32.

Distribution : India : Orissa.

Elsewhere : No records.

Superfamily GALEOMMATOIDEA

The superfamily Galeommatoidea comprises a large group of rarely collected, poorly known small bivalves, includes five families of which three families Galeommatidae, Kellidae and Montacutidae are represented from the Indian waters. The shells are variable in outline and dentition. They are equivalve with two equal

size adductor muscles and broad pallial line. Pallial sinus absent, but three mantle aperture represented by anterior inhalant, pedal and posterior exhalant openings. Hinge small, tuberculate cardinal teeth with elongate laterals present having tendency to become obsolete. Ligament is usually set internally on weak resilium.

They are either free living in soft sediments or byssally attached to undersides rocks or in crevices. Some species adapted as slug like habit creeping on undersides of rocks. In these forms the mantle is reflected over the shell and is often ornamented with fleshy tentacle like lobes. Other species are commensal with marine invertebrates. In such cases the bivalves attached to the host or may live free in the host burrow.

Family GALEOMMATIDAE

Genus *Galeomma* Turton, 1825

1825. *Galeomma* Turton, *Zool. Journ.*, **2**(7) : 361. Type species : *Galeomma turtoni* Sowerby, 1825.

287. *Galeomma argentea* Deshayes

1855. *Galeomma argentea* Deshayes, *Proc. zool. Soc. London*, **1855** : 169.

1991. *Galeomma argentea*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 121. *Zool. Surv. India*.

Distribution : India : Orissa.

Elsewhere : Philippines.

288. *Galeomma paucistriata* Deshayes

1855. *Galeomma paucistriata* Deshayes, *Proc. zool. Soc. London*, **1855** : 170.

1941. *Galeomma paucistriata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 27.

1956. *Galeomma paucistriata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser., (Nat. Hist.)*, **1**(2), pt. 7 : 82 pl. 12, fig. 9.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

Genus *Scintilla* Deshayes, 1856

1856. *Scintilla* Deshayes, *Proc. zool. Soc. London*, **1856** : 173. Type species : *Scintilla philippinensis* Stoliczka, 1871

289. *Scintilla candida* Deshayes

1855. *Scintilla candida* Deshayes, *Proc. zool. Soc. London*, **1855** : 177.

1895. *Scintilla candida*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1906. *Anatinella candida*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1956. *Scintilla candida*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 84.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

290. *Scintilla chilkaensis* Preston

1915. *Scintilla chilkaensis* Preston, *Rec. Indian Mus.*, **11** : 299, figs. 12, 12a-b. Type locality : Mahosa southwards sandhills, Chilka Lake; Types, NZC, ZSI.

1991. *Scintilla chilkaensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 122. Zool. Surv. India.

1995. *Scintilla chilkaensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 418. Zool. Surv. India.

2004. *Scintilla chilkaensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 69.

Distribution : India : Orissa.

Elsewhere : No records.

291. *Scintilla citrina* Preston

1908. *Scintilla citrina* Preston, *Rec. Indian Mus.*, **2** : 205, pl. 17, fig. 71. Type locality : Andaman Islands; Types, NZC, ZSI.

2000. *Scintilla citrina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 236.

2004. *Scintilla citrina*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 66.

Distribution : India : Andaman Islands.

Elsewhere : No records.

292. *Scintilla elongata* Preston

1908. *Scintilla elongata* Preston, *Rec. Indian Mus.*, **2** : 206, pl. 17, fig. 72. Type locality : Andaman Islands; Types, NZC, ZSI.

2000. *Scintilla elongata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 238.

2004. *Scintilla elongata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 66.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records after its original discovery.

293. *Scintilla faba* Deshayes

1856. *Scintilla faba* Deshayes, *Proc. zool. Sioc. London*, **1856** : 517.

2000. *Scintilla faba*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 239.

Distribution : India : Andaman Islands.

Elsewhere : Gulf of Aden, Thailand, Indonesia.

294. *Scintilla hanleyi* Deshayes

1855. *Scintilla hanleyi* Deshayes, *Proc. zool. Soc. London*, **1855** : 180.

1895. *Scintilla hanleyi*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.

1921. *Scintilla hanleyi*: Hornell, *Madras Fish. Bull.*, **14** : 178, fig. 44.

1941. *Scintilla hanleyi*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 27.

1956. *Scintilla hanleyi*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 83 pl. 12, fig. 10.

Distribution : India : Tamil Nadu.

Elsewhere : Philippines.

295. *Scintilla lactea* Sowerby

1865. *Scintilla lactea* Sowerby, *Proc. zool. Soc. London*, **1865** : 517.

2000. *Scintilla lactea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 239

Distribution : India : Andaman Islands.

Elsewhere : Borneo.

296. *Scintilla perflex* Preston

1908. *Scintilla perflex* Preston, *Rec. Indian Mus.*, **2** : 206, pl. 17, fig. 72. Type locality: Andaman Islands; Types, NZC, ZSI.

2000. *Scintilla perflex*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 239.

2004. *Scintilla perflex*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 66.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records after original discovery.

297. *Scintilla timorensis* Deshayes

1855. *Scintilla timorensis* Deshayes, *Proc. zool. Soc. London*, **1855** : 174.

1956. *Scintilla timorensis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 84.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

298. *Scintilla translucida* Preston

1908. *Scintilla translucida* Preston, *Rec. Indian Mus.*, **2** : 206, pl. 17, fig. 69. Type locality : Andaman Islands; Types, NZC, ZSI.

2004. *Scintilla translucida*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 67.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records after its original discovery.

Family KELLIIDAE

Subfamily KELLIINAE

Genus *Kellia* Turton, 1822

1822. *Kellia* Turton, *Conch. Insularum Brit.*, **19** : 56. Type species : *Mya suorbicularis* Montagu, 1803.

299. *Kellia chilkaensis* Preston

1915. *Kellia chilkaensis* Preston, *Rec. Indian Mus.*, **11** : 298, figs. 10, 10a and b. Type locality : Channel between Satpara and Barhampur Islands, Chilka Lake; Types, NZC, ZSI.
1991. *Kellia chilkaensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 121; *Zool. Surv. India*.
1995. *Kellia chilkaensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 418. *Zool. Surv. India*.
2004. *Kellia chilkaensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 34.

Distribution : India : Orissa.

Elsewhere : No records.

300. *Kellia mirabilis* Preston

1908. *Kellia mirabilis* Preston, *Rec. Indian Mus.*, **2** : 205, pl. 16, figs. 48 and 48a. Type locality : Andaman Islands; Types, NZC, ZSI.
2000. *Kellia mirabilis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 238.
2004. *Kellia mirabilis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 34.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Family MONTACUTIDAE

Genus *Montacuta* Turton, 1822

1822. *Montacuta* Turton, *Conch. Insularum Brit.*, **19** : 58. Type species : *Ligula substriata* Montagu, 1808.

301. *Montacuta (Montacuta) viaderi* Ray

1951. *Montacuta (Montacuta) viaderi* Ray, *Rec. Indian Mus.*, **49(1)** : 38, text fig. 1. Type locality : Andaman Islands; Types : NZC, ZSI.

2004. *Montacuta (Montacuta) viaderi*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 44.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records after original discovery.

Superfamily CARDITOIDEA

The Carditoidea are variable in forms, some of them resemble with cockles, some with mussels and some are minutely trigonal; represented by two families, of which the family Carditidae represented from Indian waters. They possess a strong radial sculpture; hinge with strong large oblique cardinals but poorly developed laterals; ligament external; pallial sinus absent. The heart shape species, like the cockles are free living but some use the byssus at an early stages; shallow burrowers in soft sediments. The mussels like species are epifaunal and live attached by a byssus in crevices on rocky or coral substrates.

Family CARDITIDAE

Subfamily CARDITINAE

Genus *Cardita* Bruguiere, 1792

1792. *Cardita* Bruguiere, *Encycl. Meth. Vers.*, **1**(2) : 401. Type species : *Chama calyculata* Linnaeus, 1758.

302. *Cardita antiquata* (Linnaeus)

1758. *Chama antiquata* Linnaeus, *Syst. Nat.*, ed. **10** : 691.

1906. *Cardita antiquata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 812.

1906. *Cardita antiquata*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 214.

1949. *Cardita antiquata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56, fig. 26.

1991. *Cardita antiquata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 122. *Zool. Surv. India*.

1995. *Cardites antiquata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 419. *Zool. Surv. India*.

1998. *Cardita antiquata*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 94, pl. 12, fig. 15.

2000. *Cardita antiquata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 240.

2007. *Cardita antiquata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 198. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Maharashtra, Nicobar Islands, Orissa, Puducherry, Tamil Nadu.

Elsewhere : Myanmar, Sri Lanka.

303. *Cardita crassicostata* Lamarck

1819. *Cardita crassicostata* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 24.

1956. *Beguina crassicostata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 73, pl. 11, figs. 7a and 7b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

304. *Cardita distorta* Reeve

1843. *Cardita distorta* Reeve, *Conch. Icon.*, 1 : *Cardita* sp. no., 13, pl. 4, fig. 13.

1898. *Mytilcardia distorta*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 46.

2000. *Cardita distorta*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 240.

Distribution: India: Andaman Islands.

Elsewhere : Philippines.

305. *Cardita variegata* Bruguiere

1792. *Cardita variegata* Bruguiere, *Encyl. Meth. Vers.*, 1 : 404, pl. 223, fig. 6.

1895. *Cardita variegata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1906. *Cardita calyculata*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 214.

1941. *Beguina variegata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 44, fig. 17c.

1949. *Cardita calyculata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.

1956. *Beguina variegata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 72, pl. 11, figs. 6a and 6b.

1965. *Beguina variegata*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 98, pl. 11, figs. 38a and 38b.

1986. *Cardita variegata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

1991. *Cardita variegata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 352. Zool. Surv. India.

1998. *Beguina variegata*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 94, pl. 12, fig. 16.

2000. *Cardita variegata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 240.

2007. *Cardita variegata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 199. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Lakshadweep, Maharashtra, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus ***Beguina*** Roeding, 1798

1798. *Beguina* Roeding, *Mus. Bolten.*, 1798 : 160. Type species : *Chama phrenetica* Born, 1780.

306. ***Beguina pica*** Reeve

1843. *Cardita pica* Reeve, *Conch. Icon.*, 1 : *Cardita* sp. no. 8, pl. 2, figs. 8a & b.

2000. *Beguina pica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 239.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Myanmar, Philippines, Japan.

Remarks : For detail synonymy see Prashad (1932).

307. ***Beguina semiorbiculata*** (Linnaeus)

1758. *Chama semiorbiculata* Linnaeus, *Syst. Nat.*, ed. 10 : 691.

1986. *Beguina semiorbiculata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

2000. *Beguina semiorbiculata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 239.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo west Pacific.

Subfamily CARDITESTINAE

Genus ***Cardites*** Link, 1807

1807. *Cardites* Link, *Beschr. Nat. Samml. Univ. Rostock*, (3) : 153. Type species : *Chama antiquata* Linnaeus, 1758.

308. ***Cardites bicolor*** (Lamarck)

1819. *Cardita bicolor* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 427.

1895. *Cardita bicolor*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 130.

1921. *Cardita bicolor*: Hornell, *Madras Fish. Bull.*, 14 : 177.

1941. *Cardita bicolor*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 45, fig. 17b.

1956. *Cardita bicolor*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 71, pl. 11, figs. 5a and 5b.

1965. *Cardita bicolor*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 98, pl. 11, figs. 37a and 37b.

2007. *Cardita bicolor*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 199. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Puducherry, Tamil Nadu.

Elsewhere : Sri Lanka, Myanmar.

Superfamily CHAMOIDEA

The Chamoidea are commonly known as jewel box clams are heterodont bivalves, epifaunal, living with one valve cemented to a hard substratum such as rocks, corals or other shells. Represented by single family Chamidae, resembles with Ostreidae, or Spondylidae, but unlike those they have two adductor muscles, a parivincular ligament, a heterodont hinge and a pair of short siphon. As that of the other cemented bivalves they are highly variable and led to confusion in nomenclature.

Family CHAMIDAE

Genus *Chama* Linnaeus, 1758

1758. *Chama* Linnaeus, *Syst. Nat.*, ed. 10 : 691. Type species : *Chama lazarus* Linnaeus, 1758.

309. *Chama brassica* Reeve

1847. *Chama brassica* Reeve, *Conch. Icon.*, 4 : *Chama*, sp. no., 32, pl. 6, fig. 32.

1986. *Chama brassica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

2000. *Chama brassica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 237.

2007. *Chama brassica*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 200. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : Tropical Pacific.

Remarks : For synonymy see Kuroda and Habe (1981).

310. *Chama fragum* Reeve

1846. *Chama fragum* Reeve, *Proc. zool. Soc. London*, 1846 : 117.

1846. *Chama fragum* Reeve, *Conch. Icon.*, 4 : *Chama* sp. no. 42, pl. 4, fig. 42.

1956. *Chama fragum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 87 pl. 13, figs. 3a and 3b.

1965. *Chama fragum*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 100, pl. 13, figs. 44a and 44b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

311. *Chama isotoma* Conrad

1837. *Chama isotoma* Conrad, *J. Acad. nat. Sci. Philad.*, 7 : 256.

1991. *Chama isotoma*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 351. *Zool. Surv. India*.

2000. *Chama isotoma*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 237.

2007. *Chama isotoma*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 201. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Lakshadweep.

Elsewhere : Indo-pacific.

Remarks : For synonymy see Prashad (1932).

312. *Chama japonica* Lamarck

1819. *Chama japonica* Lamarck, *Hist. Nat. Anim. Sans. Vert.*, **6(1)** : 97.

2000. *Chama japonica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 237.

Distribution : India : Andhra Pradesh, Lakshadweep.

Elsewhere : Indo-pacific.

313. *Chama lazarus* Linnaeus

1758. *Chama lazarus* Linnaeus, *Syst. Nat.*, ed. **10** : 691.

1767. *Chama lazarus* Linnaeus, *Syst. Nat.*, ed. **12** : 1139.

1895. *Chama lazarus*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.

1956. *Chama lazarus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. **7** : 87, pl. 13, figs. 2a and 2b.

1991. *Chama lazarus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 120; *Zool. Surv. India*.

2000. *Chama lazarus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 237.

Distribution : India : Andaman Islands, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Mauritius, Sri Lanka, Myanmar, Philippines.

314. *Chama multisquamosa* Reeve

1846. *Chama multisquamosa* Reeve, *Conch. Icon.*, **4** : sp. No., 12.

1986. *Chama multisquamosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

1991. *Chama multisquamosa*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 351. *Zool. Surv. India*.

2000. *Chama multisquamosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 238.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : Philippines.

315. *Chama reflexa* Reeve

1846. *Chama reflexa* Reeve, *Conch. Icon.*, 4 : *Chama*, sp. No., 16, pl. 4, fig. 16.
1941. *Chama reflexa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 5(1) : 46, fig. 19b.
1949. *Chama reflexa*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
1956. *Chama reflexa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 1(2), pt. 7 : 86, pl. 13, figs. 1a and 1b.
1965. *Chama reflexa*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 101, pl. 13, figs. 45a and 45b.
1986. *Chama reflexa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
1991. *Chama reflexa*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 120. Zool. Surv. India.
2007. *Chama reflexa*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 201. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

316. *Chama spinosa* Broderip

1834. *Chama spinosa* Broderip, *Tran. zool. Soc.*, Sec., 1 : 706, t. 38, figs. 8 and 9.
1965. *Chama spinosa*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 100, pl. 12, figs. 43a and 43b.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : Pacific ocean.

Remarks : Kundu (1965) recorded this species from Bombay may be a wrong identification.

Genus *Pseudochama* Odhner, 1917

1917. *Pseudochama* Odhner, *K. Svenska Vetensk. Akad. Handl.*, 52(16) : 28. Type species : *Chama cristella* Lamarck, 1819.

317. *Pseudochama cristella* (Lamarck)

1819. *Chama cristella* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 96.
1956. *Pseudochama cristella*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 88, pl. 13, figs. 4a and 4b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

Superfamily CRASSATELLOIDEA

The superfamily Crassatelloidea represented by single family Crassatellidae are quadrangular to trigonal in outline, rounded anterior end and truncated posterior end. Sculpture with concentric lines or broad ridges, covered with thick dark brown periostracum; ligament internal; hinge with prominent radiating cardinal teeth. Very little is known about their habits as they are found in deeper water probably with mixed coarse sediments.

Family CRASSATELLIDAE

Subfamily CRASSELLINAE

Genus *Bathytormus* Stewart, 1930

1930. *Bathytormus* Stewart, Acad. Nat. Sci. Philad. Spec. Publ., **3** : 37. Type species : *Crassatella protexta* Conrad, 1832.

318. *Bathytormus radiatus* Sowerby

1825. *Bathytormus radiatus* Sowerby, Cat. Tankerville, p. 7, pl. 1, fig. 2.

1878. *Crassatella radiatus*: Smith, Proc. zool. Soc. London, **1878** : 820.

1895. *Crassatella radiata*: Thurston, Madras Govt. Mus. Bull., **3** : 130.

1904. *Crassatella radiata*: Smith, Ann. Mag. nat. Hist. London, (7)**14** : 9.

1941. *Crassatella radiata*: Gravely, Bull. Madras Govt. Mus. New Ser. (Nat. Hist.), **5**(1) : 43, fig. 17a.

1986. *Crassatella radiatus*: Tikader, Daniel and Subba Rao, Sea shore animals of Andaman and Nicobar Islands, Zool. Surv. India, p. 176.

2000. *Bathytormus radiatus*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., **187** : 241.

Distribution : India : Andaman and Nicobar Islands, Karnataka, Kerala, Tamil Nadu.

Elsewhere : Red sea, Persian Gulf, Myanmar, Singapore, Thailand, Indonesia.

var. *obsoleta* (Preston)

1904. *Crassatella radiatus* var. *obsoleta* Preston, Rec. Indian Mus., **2** : 205. Type locality : Andaman Islands. Types : NZC, ZSI.

2004. *Crassatella radiatus* var. *obsoleta*: Ramakrishna, Dey and Mitra, Rec. zool. Surv. India, Occ. Paper No., **228** : 24.

Distribution : India : Andaman Islands.

Elsewhere : No records after its original discovery.

Genus *Eucrassatella* Iredale, 1924

1924. *Eucrassatella* Iredale, Proc. Linn. Soc. N. S. Wales, **49** : 181, 202. Type species : *Crassatella kingicola* Lamarck, 1805.

319. ***Eucrassatella rostrata*** (Lamarck)

1819. *Crassatella rostrata* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **6** : 110.
 1895. *Crassatella rostrata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 130.
 1956. *Crassatella rostrata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 70, pl.11, figs. 4a and 4b.
 1965. *Crassatella rostrata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 97, pl. 10, figs. 36a and 36b.
 2007. *Eucrassatella rostrata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 202. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

Genus ***Crassatella*** Lamarck, 1799

1799. *Crassatella* Lamarck, *Mem. Soc. H.N. Paris*, p. 85. Type species : *Crassatella* Lamarck, 1805.

320. ***Crassatella indica*** Smith

1895. *Crassatella indica* Smith, *Ann. Mag. nat. Hist.*, (6)**16** : 265.
 2004. *Crassatella indica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 23.

Distribution : India : Arabian sea.

Elsewhere : No records.

Superfamily CARDIOIDEA

The superfamily Cardioidea comprises of three families of which only family Cardiidae is represented from India. Commonly known as cockles; are rounded, ovate or ovate-angular shells with prominent umbones; sculpture with raised radial ribs and the crenulate ventral margin, in some cases the sculpture is obsolete. Hinge with two cardinal teeth in each valve and with one lateral in left valve and two in right valve. Ligament is external, highly arched bad behind the beaks; adductor muscles are subequal and pallial line is entire and lack of pallial sinus. Siphons short, restricted to shallow burrowing habit in a variety of soft sediments.

Family CARDIIDAE

Subfamily CARDIINAE

Genus ***Cardium*** Linnaeus, 1758

1758. *Cardium* Linnaeus, *Syst. Nat.*, ed. **10** : 678. Type species : *Cardium costatum* Linnaeus, 1758.

321. ***Cardium assimile*** Reeve

1834. *Cardium assimile* Reeve, *Conch. Illustr.*, pl. 1, fig. 12.

1941. *Cardium assimile*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 46.
1956. *Cardium assimile*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 94, pl. 14, figs. 4a and 4b.
1965. *Cardium assimile*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 101, pl. 14, figs. 47a and 47b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

322. *Cardium leucostomum* Born

1840. *Cardium leucostomum* Born, *Mus.*, p. 46, t. 3, figs. 6 and 7.
1972. *Cardium leucostomum*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 286.

Distribution : India : Lakshadweep.

Elsewhere : Singapore.

Remarks : Nagabhushanam and Rao (1972) reported this species from Lakshadweep may be a wrong identification.

323. *Cardium lobulatum* Deshayes

1854. *Cardium lobulatum* Deshayes, *Proc. zool. Soc., London*, 1854 : 332.
1972. *Cardium lobulatum* : Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 286.

Distribution : India : Lakshadweep.

Elsewhere : Philippines.

Remarks : Nagabhushanam and Rao (1972) reported this species from Lakshadweep may be a wrong identification.

324. *Cardium maculosum* Sowerby

1833. *Cardium maculosum* Sowerby, *Proc. zool. Soc., London*, 1833 : 85.
1972. *Cardium maculosum*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 286.

Distribution : India : Lakshadweep.

Elsewhere : Seas of California.

Remarks : Nagabhushanam and Rao (1972) reported this species from Lakshadweep is doubtful.

325. *Cardium virgo* Reeve

1845. *Cardita virgo* Reeve, *Conch. Icon.*, 2 : *Cardium* sp. no. 120, pl. 14, fig. 120.
1898. *Hemicardium virgo*: Melvill and Skyes, *Proc. malac. Soc. London*, 3 : 48.
2000. *Cardium virgo*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 241.

Distribution : India : Andaman Islands.

Elsewhere : No record.

Genus *Acanthocardia* Gray, 1851

1851. *Acanthocardia* Gray, *List. Brit. Anim. Coll. Brit. Mus.*, (7) : 23. Type species : *Cardium aculeatum* Linnaeus, 1758

326. *Acanthocardia coronata* (Schroeter)

1819. *Cardium bicolor* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 427.
 1904. *Cardium coronatum*: Smith, *Ann. Mag. nat. Hist. London*, (7)14 : 10.
 1906. *Cardium coronatum*: Comber, *J. Bombay nat. Hist. Soc.*, 17 : 215.
 1941. *Cardium coronatum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 47, fig. 19c.
 1956. *Cardium coronatum*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, 54(3) : 703.
 1991. *Acanthocardia coronata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 122. Zool. Surv. India.
 1995. *Acanthocardia coronata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 419. Zool. Surv. India.
 2001. *Acanthocardia coronata*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 74. Zool. Surv. India.
 2007. *Acanthocardia coronata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 203. Zool. Surv. India.
 2008. *Acanthocardia coronata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 151. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Gujarat, Maharashtra, Nicobar Islands, Orissa, Tamil Nadu.

Elsewhere : Persian Gulf, Iran, Sri Lanka, Myanmar, Indonesia.

327. *Acanthocardia lata* (Born)

1778. *Cardium latum* Born, *Testacea Musi Caes. Vinod.*, pl. 3, fig. 9.
 1895. *Cardium latum*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
 1906. *Cardium latum* : Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.
 1949. *Cardium latum*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56, fig. 30.
 1991. *Acanthocardia lata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 123. Zool. Surv. India.
 1995. *Acanthocardia lata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 419. Zool. Surv. India.

2007. *Acanthocardia lata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 203. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Sind, Myanmar, Philippnes, Australia.

Subfamily TRACHYCARDIINAE

Genus *Trachycardium* Moersch

1853. *Trachycardium* Moersch, *Cat. Conch. Yoldi.*, (2) : 34. Type species : *Cardium isocardia* Linnaeus, 1758.

328. *Trachycardium asiaticum* (Bruguiere)

1792. *Cardium asiaticum* Bruguiere, *Encyl. Meth. Vers.*, 1 : 224.

1895. *Cardium asiaticum*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.

1906. *Cardium* (*Acanthocardia*) *asiaticum*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 837.

1921. *Cardium asiaticum*: Hornell, *Madras Fish. Bull.*, 14 : 192.

1940. *Cardium asiaticum*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 336.

1941. *Cardium asiaticum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 47.

1949. *Cardium asiaticum*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56, fig. 28.

1956. *Cardium asiaticum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 92, pl. 14, figs. 2a and 2b.

1956. *Cardium asiaticum*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, 54(3) : 702.

1965. *Cardium asiaticum*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 101, pl. 13, figs. 46a and 46b.

1992. *Trachycardium asiaticum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 226, pl. 19, figs. 4 & 5. Zool. Surv. India.

1998. *Cardium asiaticum*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 95, pl. 12, fig. 18.

2000. *Trachycardium asiaticum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 245.

2007. *Trachycardium asiaticum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 204. Zool. Surv. India.

2008. *Trachycardium asiaticum*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 152. Zool. Surv. India.

2008. *Trachycardium asiaticum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 18.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

329. *Trachycardium elongatum* Bruguiere

1792. *Cardium elongatum* Bruguiere, *Dict. Encyl. Meth.*, **26** : 228, no. 26.
 1986. *Trachycardium elongatum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
 2000. *Trachycardium elongatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 245.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indian Ocean, South West Pacific.

330. *Trachycardium flavum* (Linnaeus)

1758. *Cardium flavum* Linnaeus, *Syst. Nat.* ed. **10** : 680.
 1895. *Cardium rugosum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
 1898. *Cardium rugosum*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.
 1906. *Cardium (Trachycardium) rugosum*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 837.
 1906. *Cardium rugosum*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 215.
 1956. *Cardium flavum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 91, pl. 14, figs. 1a to c.
 1965. *Cardium flavum*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 101, pl. 14, figs. 49a and 49b.
 1986. *Trachycardium flavum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.176.
 1998. *Cardium flavum*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 94, pl. 12, fig. 17.
 2000. *Trachycardium flavum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 245.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

331. *Trachycardium unicolor* (Sowerby)

1840. *Cardium unicolor* Sowerby, *Proc. zool. Soc. London*, **1840** : 107.
 1986. *Trachycardium unicolor*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
 2000. *Trachycardium unicolor*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 245.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

332. *Trachycardium variegatum* (Sowerby)

1840. *Cardium variegatum* Sowerby, *Proc. zool. Soc. London*, **1840** : 107.

1991. *Trachycardium variegatum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 123. *Zool. Surv. India*.

Distribution : India : Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Gulf of Aden, Sri Lanka, Myanmar, Hongkong, China.

Subfamily FRAGINAE**Genus *Fragum* Roeding, 1798**

1798. *Fragum* Roweding, *Mus. Bolten.*, **1798** : 189. Type species: *Cardium fragum* Linnaeus, 1758.

333. *Fragum fornicatum* (Sowerby)

1840. *Cardium fornicatum* Sowerby, *Proc. zool. Soc. London*, **1840** : 110.

1972. *Cardium fornicatum*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 286.

1986. *Fragum fornicatum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

1991. *Ctenocardia fornicatum*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 352, *Zool. Surv. India*.

2000. *Fragum fornicatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 242.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : South West Pacific, Philippines.

334. *Fragum fragum* (Linnaeus)

1758. *Cardium fragum* Linnaeus, *Syst. Nat.*, ed. **10** : 679.

2000. *Fragum fragum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 242.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

335. *Fragum unedo* (Linnaeus)

1758. *Cardium unedo* Linnaeus, *Syst. Nat.*, ed. **10** : 680.

1897. *Fragum unedo*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.

1986. *Fragum unedo*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

2000. *Fragum unedo*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 242.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Subgenus *Lunulicardia* Gray, 1853

1853. *Lunulicardia* Gray, *Ann. Mag. nat. Hist.*, (2)11 : 41. Type species : *Cardium retusum* Linnaeus, 1758

336. *Fragum (Lunulicardia) hemicardia* (Linnaeus)

1758. *Cardium hemicardia* Linnaeus, *Syst. Nat.*, ed. 10 : 678.

1904. *Cardium (Fragum) hemicardium*: Smith, *Ann. Mag. nat. Hist. London*, (7)14 : 10.

1986. *Lunulicardia hemicardia*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

2000. *Lunulicardia hemicardia*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 243.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : South West pacific to Australia.

Remarks : For detail synonymy see Prashad (1932).

337. *Fragum (Lunulicardia) retusa* (Linnaeus)

1767. *Cardium retusum* Linnaeus, *Syst. Nat.*, ed. 12 : 1121.

1895. *Cardium retusum*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.

1941. *Lunulicardia retusa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 46.

1956. *Lunulicardia retusa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 96, pl. 14, figs. 7a and 7b.

2000. *Lunulicardia retusa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 243.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus *Corculum* Roeding, 1798

1798. *Corculum* Roeding, *Mus. Bolten.*, 1798 : 188. Type species : *Cardium cardissa* Linnaeus, 1758.

338. *Corculum cardissa* (Linnaeus)

1758. *Cardium cardissa* Linnaeus, *Syst. Nat.*, ed. 10 : 678.

1898. *Hemicardium cardissa*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.

1986. *Corculum cardissa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

2000. *Corculum cardissa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 241.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus ***Ctenocardia*** Adams and Adams, 1857

1857. *Ctenocardia* Adams and Adams, *Gen. Rec. Shell*, **2** : 459. Type species : *Cardium hystrix* Reeve, 1844.

339. *Ctenocardia hystrix* (Reeve)

1844. *Cardium hystrix* Sowerby, *Proc. zool. Soc. London*, **1844** : 168.

1878. *Cardium hystrix*: Smith, *Proc. zool. Soc. London*, **1878** : 819.

1986. *Ctenocardia hystrix*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

2000. *Ctenocardia hystrix*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 242.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Philippines.

var. ***brevispinosa*** (Preston)

1908. *Hemicardium hystrix* var. *brevispinosa* Preston, *Rec. Indian Mus.*, **2** : 206. Type locality : Andaman islands. Types : NZC, ZSI.

2004. *Corculum (Hemicardium) hystrix* var. *brevispinosa*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 33.

Distribution : India : Andaman Islands.

Elsewhere : No records after its original discovery.

Subfamily PROTOCARDIINAE

Genus ***Nemocardium*** Meek, 1876

1876. *Nemocardium* Meek, *Rep. U.S. Geol. Surv.*, **9** : 167. Type species : *Cardium semiasperum* Deshayes, 1858.

340. *Nemocardium exasperatum* (Sowerby)

1841. *Cardium exasperatum* Sowerby, *Proc. zool. Soc. London*, **8(92)** : 106.

1986. *Nemocardium exasperatum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

2000. *Nemocardium exasperatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 244.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Western Australia.

Subgenus *Lyrocardium* Meek, 1876

1876. *Lyrocardium* Meek, *Rep. U.S. Geol. Surv.*, **9** : 173. Type species : *Cardium lyratum* Sowerby, 1841.

341. *Nemocardium (Lyrocardium) aeolicum* (Born)

1840. *Cardium aeolicum* Born, *Mus.*, p. 48.

1898. *Laevicardium aeolicum*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.

2000. *Lyrocardium aeolicum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 244.

Distribution : India : Andaman Islands.

Elsewhere : West Africa.

342. *Nemocardium (Lyrocardium) lyratum* (Sowerby)

1840. *Cardium lyratum* Sowerby, *Proc. zool. Soc. London*, **1840** : 107.

1921. *Cardita bicolor*: Hornell, *Madras Fish. Bull.*, **14** : 177.

1941. *Cardium setosum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 47.

1956. *Cardium setosum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 93, pl. 14, figs. 3a and 3b.

1965. *Chama setosum*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 102, pl. 15, figs. 50a and 50b.

1986. *Lyrocardium lyratum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 176.

1998. *Cardium setosum*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 95, pl. 12, fig. 19.

2000. *Lyrocardium lyratum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 244.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Tamil Nadu.

Elsewhere : Japan to North Australia.

Subfamily LAEVICARDIINAE

Genus *Laevicardium* Swainson, 1840

1840. *Laevicardium* Swainson, *Treat. Malacol.*, p. 373. Type species : *Cardium oblongum* Gmelin, 1791.

Subgenus ***Fulvia*** Gray, 1853

1853. *Fulvia* Gray, *Ann. Mag. nat. Hist.*, **2**(11) : 40. Type species : *Cardium apertum* Bruguiere, 1792.

343. *Laevicardium (Fulvia) apertum* (Bruguiere)

1789. *Cardium apertum* Bruguiere, *Encycl. Method.*, **1** : 226.
1895. *Cardium (Papyridea) rugatum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1915. *Cardium (Fulvia) rugatum*: Preston, *Rec. Indian Mus.*, **11** : 299.
1991. *Laevicardium (Fulvia) apertum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 124. Zool. Surv. India.
1995. *Laevicardium (Fulvia) apertum*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 419. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa.

Elsewhere : Indo-Pacific.

344. *Laevicardium (Fulvia) australis* (Sowerby)

1841. *Cardium australis* Sowerby, *Proc. zool. Soc. London*, **8** : 105.
1878. *Cardium (Laevicardium) australe*: Smith, *Proc. zool. Soc. London*, **1878** : 819.
1895. *Laevicardium australe*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1898. *Cardium australe*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 48.
1941. *Cardium australe*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 46.
1956. *Cardium australe*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 94, pl.14, fig.5.
1965. *Cardium australe*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 101, pl. 14, figs. 48a and 48b.
1972. *Cardium australe*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 286.
1986. *Laevicardium australe*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
2000. *Fulvia australis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 243.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

345. *Laevicardium (Fulvia) papyracea* (Sowerby)

1844. *Cardium papyracea* Sowerby in Reeve, *Conch. Icon.*, **2** : *Cardium* sp. no. 9, pl. 2, fig. 9.
1916. *Fulvia papyracea* Preston, *Rec. Indian Mus.*, **12**(2) : 94.

1956. *Cardium papyracea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 95, pl. 14, figs. 6a and 6b.
1986. *Papyridea (Papyridea) papyracea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
2000. *Fulvia papyracea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 243.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

Superfamily TRIDACNOIDEA

The superfamily Tridacnoidea are known as gaint clam represented by single family Tridacnidae, with their massive, ribbed shells are familiar to all. This group having the heavy and bigger size of bivalves found associated with coral reefs.

Family TRIDACNIDAE

Genus *Tridacna* Bruguiere, 1797

1797. *Tridacna* Bruguiere, *Encyl. Meth.*, 2 : pl. 235. Type species : *Chama gigas* Linnaeus, 1758.

346. *Tridacna crocea* Lamarck

1819. *Tridacna crocea* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 106.
1986. *Tridacna crocea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.176.
2000. *Tridacna crocea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 246.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : South West Pacific to Japan.

Remarks : For detail synonymy see Prashad (1932).

347. *Tridacna maxima* Roeding

1798. *Tridacna maxima* Roeding, *Mus. Bolten.*, p. 171.
1906. *Tridacna compressa*: Comber, *J. Bombay nat. Hist. Soc.*, 17 : 215.
1986. *Tridacna maxima*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.
1991. *Tridacna (Chamotrachea) maxima*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 353. Zool. Surv. India.
2000. *Tridacna maxima*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 246.
2003. *Tridacna maxima*: Ramakrishna and Dey, *Manual on identification of Schedule Molluscs from India*, Zool. Surv. India, p. 23, pl. 7, fig. 19.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Widely distributed in Indo-pacific.

Remarks : This species is the most ubiquitous of the family, inhabiting reefs throughout the tropical Indo-Pacific. Both the colour of the mantle and the shape and structure of the valves are extremely variable.

For details see Rosewater (1965)

348. *Tridacna squamosa* Lamarck

1844. *Tridacna squamosa* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 106.

1986. *Tridacna squamosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Tridacna squamosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 247.

2003. *Tridacna squamosa*: Ramakrishna and Dey, *Manual on identification of Schedule Molluscs from India*, Zool. Surv. India, p. 24, pl. 7, figs. 20 & 21.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Throughout Indo-Pacific.

Remarks : Commonly known as scaly or fluted giant clam. This species is one of the strikingly beautiful inhabitants of tropical Indo-Pacific coral reefs. The shell can display exquisite flutes and certain of the animal's patterns of colourations are extremely beautiful.

For details see Rosewater (1965) and synonymy Prashad (1932).

Genus *Hippopus* Lamarck, 1799

1799. *Hippopus* Lamarck, *Mem. Soc. Hist. nat. Paris.*, 1799 : 86. Type species : *Chama hippopus* Linnaeus, 1758.

349. *Hippopus hippopus* (Linnaeus)

1758. *Chama hippopus* Linnaeus, *Syst. Nat.*, ed. 10 : 691.

1986. *Hippopus hippopus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 176.

2000. *Hippopus hippopus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 246.

2003. *Hippopus hippopus*: Ramakrishna and Dey, *Manual on identification of Schedule Molluscs from India*, Zool. Surv. India, p. 24, pl. 8, figs. 22 & 23.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : Inhabitants of sandy substrate in coral reef water down to 20 feet in depth. Adults are unattached, but young specimens are found byssally attached to coral heads.

For details see Rosewater (1965) and for synonymy Prashad (1932).

Superfamily MACTROIDEA

The superfamily Mactroidea represented by four families of which two families Mactridae and Mesodesmatidae are represented from India.

The Mactridae are oval, oval trigonal or oblong in outline, equivalve and having slight gape at posterior end. Hinge well developed with inverted V-shaped, fused cardinals in the left valve; siphons are fused at the tip.

The family Mesodesmatidae differs from Mactridae in siphons which are not fused. The resilifer in the case of Mesodesmatidae is narrow and deep; hinge contracted and left cardinals are rarely bifid. Generally lives in shallow water burrowing in littoral and sublittoral sands.

Family MACTRIDAE

Subfamily MACTRINAE

Genus *Mactra* Linnaeus, 1767

1767. *Mactra* Linnaeus, *Syst. Nat.*, ed. 12 : 1125. Type species: *Cardium sultorium* Linnaeus, 1758.

Subgenus *Mactra* s.st.

350. *Mactra achatina* Chemnitz

1795. *Mactra achatina* Chemnitz, *Conch Cab.*, 11 : 218, t. 200, fig. 195.

1898. *Mactra achatina*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.

1941. *Mactra achatina*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 55.

1986. *Mactra achatina*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Mactra achatina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 247.

Distribution : India : Andaman and Nicobar Island, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

351. *Mactra andamanica* Smith

1904. *Mactra andamanica* Smith, *Ann. Mag. nat. Hist. London*, (7)14 : 8.

2000. *Mactra andamanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 248.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent record after discovery.

352. *Macra apicina* Dehsyaes

1854. *Macra apicina* Deshayes, *Conch. Icon.*, **8** : *Macra*, sp. no., 111, pl. 19, fig. 111.

1986. *Macra apicina*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Macra apicina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 248.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : No records.

353. *Macra attenuata* Deshayes

1854. *Macra attenuata* Deshayes, *Proc. zool. Soc. London*, **1854** : 62.

1895. *Macra attenuata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.

2007. *Macra attenuata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 206. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Myanmar, Indonesia, Philippines, Australia.

354. *Macra cuneata* Gmelin

1791. *Macra cuneata* Gmelin, *Syst. Nat.*, ed. **13** : 3260.

1895. *Macra corbuloides*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.

1895. *Macra lurida*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1921. *Macra corbuloides*: Hornell, *Madras Fish. Bull.*, **14** : 183.

1956. *Macra cuneata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 139, pl. 21, figs. 2a and 2b.

1965. *Macra cuneata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 217, pl. 21, figs. 70a & 70b.

1991. *Macra cuneata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 125. Zool. Surv. India.

2000. *Macra cuneata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 248.

2001. *Macra cuneata*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 75. Zool. Surv. India.

2007. *Macra cuneata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 206. Zool. Surv. India.

2008. *Macra cuneata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 152. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Island, Andhra Pradesh, Gujarat, Orissa, Tamil Nadu.

Elsewhere : South African Coast, Malagasy, Sri Lanka.

355. *Macra cygnus* Gemiln

1791. *Macra cygnus* Gemiln, *Syst. Nat.*, ed. 13 : 3260.

1940. *Macra cygnus*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.

1941. *Macra cygnus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 55.

Distribution : India : Nicobar Islands, Tamil Nadu.

Elsewhere : African coast.

356. *Macra decora* Deshayes

1854. *Macra decora* Deshayes in Reeve, *Conch. Icon.*, 8 : *Macra*, sp. no., 80, pl. 16, fig. 80.

1895. *Macra decora*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 127.

1986. *Macra decora*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Macra decora*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 248.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Gulf of Aden, Myanmar.

357. *Macra gibbosula* Deshayes

1854. *Macra gibbosula* Deshayes in Reeve, *Conch. Icon.*, 8 : *Macra* sp. no. 79, pl. 16, fig. 79.

1965. *Macra gibbosula*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 217; pl. 21 figs. 68 & 69

Distribution : India : Gujarat.

Elsewhere : New Caledonia.

358. *Macra gradis* Gmelin

1791. *Macra gradis* Gmelin, *Syst. Nat.*, ed., 13 : 3259.

1991. *Macra gradis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 125. Zool. Surv. India.

1995. *Macra gradis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 420. Zool. Surv. India.

Distribution : India : Orissa.

Elsewhere : African coast, Persian Gulf, Myanmar, Singapore.

359. *Mactra hepatica* Deshayes

1854. *Mactra hepatica* Deshayes in Reeve, *Conch. Icon.*, **8** : *Mactra*, sp. no., 110, pl. 19, fig. 110.
2000. *Mactra hepatica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 248.
1986. *Mactra hepatica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

Distribution: India: Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

360. *Mactra luzonica* Deshayes

1854. *Mactra luzonica* Deshayes, *Proc. zool. Soc. London*, **1854** : 64.
1906. *Mactra luzonica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 827.
1906. *Mactra luzonica*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1949. *Mactra luzonica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 57.
1987. *Mactra luzonica*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8(1-3)** : 154.
1991. *Mactra luzonica*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 353. *Zool. Surv. India*.
1991. *Mactra luzonica*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 126. *Zool. Surv. India*.
1992. *Mactra luzonica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 228, pl. 19, figs. 7 & 8. *Zool. Surv. India*.
1995. *Mactra luzonica*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 49. *Zool. Surv. India*.
1995. *Mactra luzonica*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 420. *Zool. Surv. India*.
2000. *Mactra luzonica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 248.
2001. *Mactra luzonica*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 75. *Zool. Surv. India*.
2007. *Mactra luzonica*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 207. *Zool. Surv. India*.
2008. *Mactra luzonica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 18.
2008. *Mactra luzonica*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 153. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Lakshadweep, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Myanmar, Indonesia, Philippnes, Australia.

361. *Mactra maculata* Gmelin

1791. *Mactra maculata* Gmelin, *Syst. Nat.*, ed. 13 : 3260.
 1986. *Mactra maculata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 2000. *Mactra maculata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 249.

Distribution : India : Andaman and Nicobar Island.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

362. *Mactra mera* Deshayes

1853. *Mactra mera* Deshayes, *Proc. zool. Soc. London*, 1853 : 16.
 1940. *Mactra mera*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.
 1941. *Mactra mera*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 54, fig. 21a.
 1949. *Mactra mera*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 57, fig. 53.
 1956. *Mactra mera*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 140, pl. 21, figs. 4a and 4b.
 1987. *Mactra mera*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, 8(1-3) : 154.
 1991. *Mactra mera*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 126. Zool. Surv. India.
 1992. *Mactra mera*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 228, pl. 20, figs. 5 & 6. Zool. Surv. India.
 1995. *Mactra mera*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 420. Zool. Surv. India.
 2007. *Mactra mera*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 207. Zool. Surv. India.
 2008. *Mactra mera*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 18.

Distribution : India : Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indonesia, China sea.

363. *Mactra symmetrica* Deshayes

1853. *Mactra symmetrica* Deshayes, *Proc. zool. Soc. London*, 1853 : 17.
 1991. *Mactra symmetrica*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 127. Zool. Surv. India.
 2008. *Mactra symmetrica*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 153. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa.

Elsewhere : Red sea, Sri Lanka, Myanmar.

Subgenus ***Coelomactra*** Dall, 1895

1895. *Coelomactra* Dall, *Proc. malac. Soc. London*, **1** : 211. Type species : *Mactra violacea* Gmelin, 1791

364. *Mactra (Coelomactra) antiquata* Spengler

1802. *Mactra antiquata* Spengler, *Skriv. Naturah Selsk. Copenhagen*, **5**(2) : 102.
1898. *Mactra antiquata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 229.
1906. *Mactra cornea*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 827.
1906. *Mactra cornea*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1949. *Mactra cornea*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.
1956. *Mactra cornea*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.
1986. *Mactra antiquata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Coelomactra antiquata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 247.

Distribution : India : Andaman and Nicobar Island, Goa, Maharashtra.

Elsewhere : Indo-Pacific.

365. *Mactra (Coelomactra) turgida* Gmelin

1791. *Mactra turgida* Gmelin, *Syst. Nat.*, ed. **13** : 3260.
1940. *Mactra turgida*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 325.
1941. *Mactra turgida*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 54.
1956. *Mactra turgida*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 140, pl. 21, figs. 3a and 3b.
1987. *Mactra turgida*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Mactra turgida*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 127. Zool. Surv. India.
1992. *Mactra (Coelomactra) turgida*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 229, pl. 20, figs. 2 & 4. Zool. Surv. India.
1995. *Mactra (Coelomactra) turgida*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 421. Zool. Surv. India.
2000. *Mactra turgida*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 249.
2007. *Mactra (Coelomactra) turgida*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 208. Zool. Surv. India.

2008. *Mactra (Coelomactra) turgida*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 154. Zool. Surv. India.

2008. *Mactra (Coelomactra) turgida*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 18.

Distribution : India : Andhra Pradesh, Goa, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, Myanmar, Indonesia, Philippnes.

366. *Mactra (Coelomactra) violacea* Gmelin

1791. *Mactra violacea* Gmelin, *Syst. Nat.*, ed. 13 : 3260.

1941. *Mactra violacea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 55.

1956. *Mactra violacea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 141, pl. 21, figs. 5a and 5b.

1986. *Mactra violacea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1987. *Mactra violacea*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, 8(1-3) : 154.

1988. *Mactra violacea*: Purkait and Manna, *Environ. and Ecology*, 6(2) : 443, fig. 1.25.

1992. *Mactra violacea*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 228, pl. 20, figs. 1 & 3. Zool. Surv. India.

2000. *Mactra (Coelomactra) violacea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 249.

2007. *Mactra (Coelomactra) violacea*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 208. Zool. Surv. India.

2008. *Mactra (Coelomactra) violacea*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 155. Zool. Surv. India.

2008. *Mactra (Coelomactra) violacea*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 18.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu, West Bengal.

Elsewhere : Indian ocean to Philippnes.

Subgenus *Mactrinula* Gray, 1853

1853. *Mactrinula* Gray, *Ann. Mag. Nat. Hist.*, (2)11 : 41. Type species : *Mactra plicataria* Linnaeus, 1767.

367. *Mactra (Mactrinula) laevis* Chemnitz

1782. *Mactra laevis* Chemnitz, *Conch. Cab.*, 6 : 214, pl.21, figs. 205 & 206.

1991. *Mactra (Mactrinula) laevis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 127. Zool. Surv. India.

2007. *Mactra (Mactrinula) laevis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 209. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Orissa, Tamil Nadu.

Elsewhere : Indonesia, Philippines.

368. *Macra (Macrinula) plicataria* Linnaeus

1767. *Macra plicataria* Linnaeus, *Syst. Nat.*, ed. 12 : 1125.
1906. *Macrinula plicataria*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 828.
1906. *Macra plicaria*: Comber, *J. Bombay nat. Hist. Soc.*, 17 : 215.
1941. *Macra plicaria*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 55.
1949. *Macra plicaria*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 57.
1988. *Macrinula plicataria*: Purkait and Manna, *Environ. & Ecology*, 6(2) : 443, fig. 1.26.
1991. *Macra (Macrinula) plicataria*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 128. Zool. Surv. India.
1992. *Macra (Macrinula) plicataria*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 228, pl. 20, figs, 7 & 8. Zool. Surv. India.
2007. *Macra (Macrinula) plicataria*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 209. Zool. Surv. India.
2008. *Macra (Macrinula) plicataria*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 19.
2008. *Macra (Macrinula) plicataria*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 154. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Myanmar, Indonesia, Sumatra.

369. *Macra (Macrinula) reevesi* Gray

1837. *Macra reevesi* Gray, *Ann. Mag. nat. Hist.*, (7) : 372.
1991. *Macra (Macrinula) reevesi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 128. Zool. Surv. India.

Distribution : India : Orissa, West Bengal.

Elsewhere : Malacca.

Genus *Harvella* Gray, 1853

1853. *Harvella* Gray, *Ann. Mag. nat. Hist.*, (2) 11 : 42. Type species: *Macra elegans* Sowerby, 1825.

370. *Harvella capillacea* (Deshayes)

1854. *Mactra capillacea* Deshayes, *Proc. zool. Soc. London*, **1854** : 69.

1906. *Harvella capillacea*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1949. *Standella capillacea* : Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 69, pl. 4, fig. 54.

Distribution : India : Maharashtra.

Elsewhere : Philippines.

Genus *Spisula* Gray, 1837

1837. *Spisula* Gray, *Mag. Nat. Hist.*, (N.S.), **1** : 372. Type species : *Mactra solida* Montagu = *Cardium solidum* Linnsaeus, 1758.

371. *Spisula triangularis* (Lamarck)

1853. *Mactra triangularis* Lamarck, *Hist. nat. Anim. Sans. Vert.*, (2)**6** : 103.

1965. *Mactra triangularis*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 217, pl. 21, figs. 71a and 71b.

Distribution : India : Gujarat.

Elsewhere : Cape of Good Hope. Known from its type locality only.

Subgenus *Standella* Gray, 1853

1853. *Standella* Gray, *Mag. Nat. Hist.*, (N.S.), **11** : 42. Type species : *Mactra striatella* Lamarck, 1818.

372. *Spisula (Standella) annandalei* (Preston)

1915. *Standella annandalei* Preston, *Rec. Indian Mus.*, **11** : 305, figs. 19, 19a-b. Type locality : Satpara Bay, Lake Chilka, Orissa : Types. NZC, ZSI.

1991. *Spisula (Standella) annandalei*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 128. Zool. Surv. India.

1995. *Spisula (Standella) annandalei*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 421. Zool. Surv. India.

Distribution : India : Orissa.

Elsewhere : Known from its type locality only.

373. *Spisula (Standella) transversalis* (Deshayes)

1854. *Mactra transversa* Deshayes in Reeve, *Conch. Icon.*, **8** : *Mactra* sp. no. 88, pl. 17, fig. 88.

1906. *Caecella transversalis*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 842.

1906. *Lutraria transversalis*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1949. *Coecella tranversalis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 57.

Distribution : India : Goa, Maharashtra.

Elsewhere : South-east Asia.

Subfamily LUTRARIINAE

Genus *Lutraria* Lamarck, 1799

1799. *Lutraria* Lamarck, *Mem. Soc. H.N. Paris*, p. 85. Type species: *Mya lutraria* Linnaeus, 1758.

374. *Lutraria arcuata* Deshayes

1854. *Lutraria arcuata* Deshayes in Reeve, *Conch. Icon.*, **8** : *Lutraria* sp. no. 6, pl. 1, fig. 6.

1965. *Lutraria arcuata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 218, pl. 22, figs. 74a and 74b.

Distribution : India : Gujarat.

Elsewhere : South East Asia.

375. *Lutraria planata* Chemnitz

1782. *Macra planata* Chemnitz, *Conch. Cab.*, **6** : 238.

1906. *Lutraria planata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 842.

1949. *Lutraria planata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.

2007. *Lutraria planata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 210. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra.

Elsewhere : Moluccas.

Genus *Meropesta* Iredale, 1929

1929. *Meropesta* Iredale, *Mem. Queensland Mus.*, **9**(3) : 268. Type species : *Macra nicobarica* Gmelin, 1791.

376. *Meropesta nicobarica* (Gmelin)

1791. *Macra nicobarica* Gmelin, *Syst. Nat.*, ed. **13** : 3261.

1965. *Standella nicobarica*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 217, pl. 22, figs. 71a and 71b.

1986. *Meropesta nicobarica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Meropesta nicobarica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 249.

Distribution: India: Andaman and Nicobar Islands, Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

377. *Meropesta pellucida* (Gmelin)

1791. *Mactra pellucida* Gmelin, *Syst. Nat.*, ed. 13 : 3260.
 1906. *Standella (Meroe) pellucida*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 828.
 1940. *Standella pellucida*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 339.
 1941. *Standella pellucida*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 53.
 1949. *Standella pellucida*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 57.
 1965. *Standella pellucida*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 217, pl. 22, figs. 72a & 72b.
 1968. *Standella pellucida*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part-1 : 133.
 2007. *Meropesta pellucida*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 211. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Arabian Gulf.

Subfamily PTEROPSELLINAE

Genus *Raeta* Gray, 1853

1853. *Raeta* Gray, *Ann. Mag. nat. Hist.*, (2) 11 : 43. Type species : *Mactra campechensis* Gray, 1825 = *L. plicatella* Lamarck, 1818.

378. *Raeta abercrombiei* Melvil

1893. *Raeta abercrombiei* Melvill, *J. Bombay nat. Hist. Soc.*, 8 : 243, PL. 1, fig. 18. Type locality : Bombay.
 1906. *Raeta abercrombiei* Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 828.
 1949. *Raeta abercrombiei*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 55.

Distribution : India : Gujarat, Maharashtra.

Elsewhere : Philippines.

Family MESODESMATIDAE

Subfamily MESODESMATINAE

Genus *Paphies* Lesson, 1831

1831. *Paphies* Lesson, *Voy. Coquille Zool.*, 2(1) : 424. Type species : *Paphies roissyana* = *Mya trails* Gmelin, 1791.

Subgenus *Atactodea* Dall, 1895

1895. *Atactodea* Iredale, *Proc. malac. Soc. London*, 1 : 213. Type species : *Mactra glabrata* Gmelin, 1791.

379. *Paphies (Atactodea) striata* (Gmelin)

1791. *Macra striata* Gmelin, *Syst. Nat.*, ed. 13 : 3267.
1940. *Macra striatula*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.
2000. *Atactodea striata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 250.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

380. *Paphies (Atactodea) glabrata* (Gmelin)

1791. *Macra glabrata* Gmelin, *Syst. Nat.*, ed. 13 : 3258.
1895. *Mesodesma (Paphia) glabratum*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
1898. *Paphies glabrata* : Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.
1921. *Mesodesma glabratum*: Hornell, *Madras Fish Bull.*, 14(6) : 182.
1956. *Mesodesma glabratum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 136, pl. 20, figs. 9a and 9b.
1965. *Mesodesma glabratum*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 216, pl. 21, figs. 68a and 68b.
1986. *Atactodea glabrata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.
1991. *Atactodea glabrata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 353. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Subfamily DAVILINAE**Genus *Davila* Gray, 1853**

1853. *Davila* Iredale, *Ann. Mag. nat. Hist.*, (2) 11 : 44. Type species: *Davila polita* = *Mesodesma planum* Hanley, 1843.

381. *Davila crassula* (Deshayes)

1854. *Mesodesma crassula* Deshayes in Reeve, *Conch. Icon.*, 8 : *Mesodesma* sp. no. 26, pl. 4, fig. 26.
2000. *Davila crassula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 250.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Superfamily SOLENOIDEA

The superfamily Solenoidea represented by two families, both present in Indian waters. They are commonly known as razor clams, greatly elongate, cylindrical shells, having wide gape at both the ends. Beak terminal, hinge reduced, with few cardinal teeth only; ligament external. Shells smooth, rather thin and usually covered with thin glossy periostracum. Siphons short; pallial sinus shallow. Some members of the family Cultellidae are less elongate, with beaks close to mid line, resembles with the tellinids. The small peg like cardinal teeth and lack of cruciform mussels scars the typical solenoids characters.

Razor clams are highly adapted for rapid burrowing into mud and sand. The elongate shell allows the easy penetration to the substratum and achieved by the large foot which emerge from the anterior gape. Siphons are short, so the animal is close to the surface when feeding and retreats rapidly if disturbed.

Family SOLENIDAE

Genus *Solen* Linnaeus, 1758

1758. *Solen* Linnaeus, *Syst. Nat.*, ed. 10 : 672. Type species : *Solen vagina* Linnaeus, 1758.

382. *Solen annandalei* Preston

1915. *Solen annandalei* Preston, *Rec Indian Mus.*, 11 : 305, fig. 17. Type locality : Satpara Bay, Lake Chilka, Orissa.

1940. *Solen annandalei*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 341.

1941. *Solen annandalei*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1): 63.

1991. *Solen annandalei*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 129. Zool. Surv. India.

1995. *Solen annandalei*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 421. Zool. Surv. India.

2007. *Solen annandalei*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 212. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa, Tamil Nadu.

Elsewhere : No records.

383. *Solen asperus* Dunker

1861. *Solen asperus* Dunker, *Proc. zool. Soc. London*, 1861 : 420.

1895. *Solen asperus*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 127.

1956. *Solen asperus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt.7 : 159, pl. 14, figs. 1a and 1b.

1986. *Solen asperus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Solen asperus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 251.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Australia.

384. *Solen brevis* Gray

- 1842-56. *Solen brevis* Gray in Hanley's *Rec. Bivalves*, p. 12, pl. 13, fig. 42.
1949. *Solen brevis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.
1986. *Solen brevis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.
1992. *Solen brevis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 230, pl. 21, figs. 1 & 2. *Zool. Surv. India*.
1995. *Solen brevis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Estuarine Ecosystem Series*, **2** : 64. *Zool. Surv. India*.
2000. *Solen brevis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 251.
2006. *Solen brevis*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India, Kolkata*, p. 68.
2007. *Solen brevis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 212. *Zool. Surv. India*.
2008. *Solen brevis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 19.
2008. *Solen brevis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 155. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Myanmar, Thailand.

385. *Solen fonesi* Dunker

1861. *Solen fonesi* Dunker, *Proc. zool. Soc. London*, **1861** : 419.
1940. *Solen fonesi*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 340.

Distribution : India : Tamil Nadu.

Elsewhere : North Australia

Remarks : Crichton (1940) reported this species from Tamil Nadu, may be a wrong identification.

386. *Solen gravelyi* Ghosh

1930. *Solen gravelyi* Ghosh, *Rec Indian Mus.*, **19** : 54, pl. 2, figs. 6-9. Type locality : Chandipur, Orissa.
1991. *Solen gravelyi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 130. *Zool. Surv. India*.
2008. *Solen gravelyi*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 155. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Orissa.

Elsewhere : No records.

387. *Solen kempi* Preston

1915. *Solen kempi* Preston, *Rec. Indian Mus.*, **11** : 305, fig. 18. Type locality : Patrsanhanpur, Lake Chilka, Orissa.
1941. *Solen kempi*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 63.
1983. *Solen kempi*: Subba Rao, Dey and Barua, *Bull. zool. Surv. India*, **5**(1) : 50.
1987. *Solen kempi*: Misra and Barua, *J. Indian Soc. Coastal agric. Res.*, **5**(1) : 342.
1987. *Solen kempi* : Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Solen kempi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 130. *Zool. Surv. India*.
1995. *Solen kempi*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 421. *Zool. Surv. India*.
2007. *Solen kempi*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 213. *Zool. Surv. India*.
2008. *Solen kempi*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 156. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Recorded from India only.

388. *Solen lamarckii* Chenu

- 1843-45. *Solen lamarckii* Chenu, *Illustr. Conchl.*, **19**(2) : pl. 1, figs. 2, 3 and 4.
1941. *Solen lamarckii*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 63.
1949. *Solen lamarckii*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.
1956. *Solen lamarckii*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.
1956. *Solen lamarckii*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 159, pl. 14, fig. 2.

Distribution: India: Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Philippines.

389. *Solen truncatus* Sowerby

1815. *Solen truncatus* Sowerby, *Gen. Shells*, pl. 26, figs. 3 & 4.
1941. *Solen truncatus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 63.
1949. *Solen truncatus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.
1956. *Solen truncatus*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.

1965. *Solen truncatus*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 222, pl. 26, figs. 88a & 88b.
1991. *Solen truncatus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 130. Zool. Surv. India.
1998. *Solen truncatus*: Apte, *Indian Shells. Bombay Nat.Hist. Soc.*, p. 102, pl. 13, fig. 25.
2008. *Solen truncatus*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 157. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Pakistan, Sri Lanka.

390. *Solen vagina* Linnaeus

1758. *Solen vagina* Linnaeus, *Syst. Nat.*, ed., **10** : 1113.
2007. *Solen vagina*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 213. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Great Britain.

Remarks : Dey and Ramakrishna (2007) identified 4 valves as *Solen vagina*, but these shells may be *S. truncatus* with a little variations.

Family CULTELLIDAE

Genus *Cultellus* Schumacher, 1877

1877. *Cultellus* Schumacher, *Essai Vers. Test.*, **43** : 150. Type species : *C. magnus*=*Solen lacteus* Spengler, 1794.

391. *Cultellus cumingianus* Dunker

1861. *Cultellus cumingianus* Dunker, *Proc. zool. Soc. London*, **1861** : 422.
1898. *Cultellus cumingianus*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.
2000. *Cultellus cumingianus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 251.

Distribution : India: Andaman Islands.

Elsewhere : Philippines : Zebu.

392. *Cultellus maximus* (Gmelin)

1791. *Solen maximus* Gmelin, *Syst. Nat.*, ed. **13** : 3227.
1940. *Cultellus maximus*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 332.
1941. *Cultellus maximus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 63.
1949. *Cultellus maximus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.
1965. *Cultellus maximus*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 222, pl. 26, figs. 89a & 89b.

1986. *Cultellus (Cultellus) maximus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Cultellus maximus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 251.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Wideky distributed in Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

393. *Cultellus subelliptica* Dunker

1861. *Cultellus subelliptica* Dunker, *Proc. zool. Soc. London*, **1861** : 421.
1916. *Cultellus subelliptica*: Preston, *Rec. Indian Mus.*, **12** : 37.
1992. *Cultellus subelliptica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 231, pl. 21, figs. 3 & 4. Zool. Surv. India.
1995. *Cultellus subelliptica*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 49. Zool. Surv. India.
1995. *Cultellus subelliptica*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 422. Zool. Surv. India.
2008. *Cultellus subelliptica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 19.

Distribution : India : Orissa, Tamil Nadu, West Bengal.

Elsewhere : Malacca, Indonesia.

Genus *Ensiculus* H. Adams, 1860

1860. *Ensiculus* H. Admas, *Proc. zool. Soc. London*, **2** : 369. Type species : *Solen cultellus* Linnaeus.

394. *Ensiculus cultellus* (Linnaeus)

1758. *Solen cultellus* Linnaeus, *Syst. Nat.*, ed., **10** : 673.
1898. *Cultellus cultellus*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.
1941. *Cultellus cultellus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 63, fig. 23a.
1949. *Cultellus cultellus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 58.
1986. *Phaxus (Ensiculus) cultellus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
1998. *Cultellus cultellus*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 102, pl. 13, fig. 26.
2000. *Ensiculus cultellus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 252.

Distribution : India : Andaman and Nicobar Islands, Maharashtra, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

var. *lividus* Dunker

1861. *Cultellus lividus* Dunker, *Proc. zool. Soc. London*, **1861** : 423.

1986. *Cultellus lividus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Ensiculus cultellus* var. *lividus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 252.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil nadu, West Bengal.

Elsewhere : Widely distributed in Indo-Pacific.

Genus *Neosolen* Ghosh, 1920

1920. *Neosolen* Ghosh, *Rec. Indian Mus*, Type species : *Neosolen aquae-ducioris* Ghosh, 1920.

395. *Neosolen aquae-dulcioris* Ghosh

1920. *Neosolen aquae-ducioris* Ghosh, *Rec. Indian Mus.*, **19**(2) : 57, pl. 2, fig. 12, pl. 3, figs. 13, 14. Type locality : Off Samal Island, Chilka Lake. Types : NZC, ZSI.

1940. *Neosolen aquae-ducioris*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 340.

1941. *Neosolen aquae-ducioris*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 62.

1968. *Neosolen aquae-ducioris*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part-**1** : 134.

1991. *Neosolen aquae-ducioris*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 131. Zool. Surv. India.

1995. *Neosolen aquae-ducioris*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 64. Zool. Surv. India.

1995. *Neosolen aquae-ducioris*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 422. Zool. Surv. India.

2001 *Neosolen aquae-ducioris*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 75. Zool. Surv. India.

2008. *Neosolen aquae-ducioris*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 19.

2008. *Neosolen aquae-ducioris*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 157. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Kerala, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Great Britain.

Genus **Pharella** Gray, 1854

1854. *Pharella* Gray, *Ann. Mag. Nat. Hist.*, **2**(14) : 24. Type species : *Solen javanicus* Lamarck, 1818.

396. **Pharella javanica** (Lamarck)

1818. *Solen javanicus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **5** : 59.

1991. *Pharella javanica*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 131. Zool. Surv. India.

1992. *Pharella javanica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 231, pl. 21, figs, 6 & 7. Zool. Surv. India.

1995. *Pharella javanica*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 64. Zool. Surv. India.

2000. *Pharella javanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 251.

2006. *Pharella javanica*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, *Zool. Surv. India Kolkata*, p. 69.

2008. *Pharella javanica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 19.

2008. *Pharella javanica*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 158. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa, West Bengal.

Elsewhere : Indo-Pacific.

Genus **Siliqua** Megerle, 1811

1811. *Siliqua* Megerle, *Mag. Ges. Nat. Fr. Berlin*, **5** : 44. Type species : *Solen radiata* Linnaeus, 1758.

397. **Siliqua albida** (Dunker)

1874. *Solen albidus* Dunker in Reeve, *Conch. Icon.*, **19** : *Cultellus* sp. no. 16, pl. 5, fig. 16.

1906. *Machaera albida*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 844.

1941. *Siliqua albida*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5**(1) : 63.

1949. *Siliqua albida*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.

1969. *Siliqua albida*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.

1983. *Siliqua albida*: Subba Rao, Dey and Barua, *Bull. zool. Surv. India*, **5**(1) : 50.

1987. *Siliqua albida*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.

1991. *Siliqua (Siliqua) albida*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 133. Zool. Surv. India.

1992. *Siliqua albidus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 232. Zool. Surv. India.

1995. *Siliqua albida*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 64. Zool. Surv. India.

2008. *Siliqua albida*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 19.

Distribution : India : Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Bangladesh, Philippines.

398. *Siliqua fasciata* (Spengler)

1874. *Solen fasciata* Spengler, *Skript. Nat. Selsk. Copenhagen*, **4** : no. 12.

1991. *Siliqua (Siliqua) fasciata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 133. Zool. Surv. India.

Distribution : India : Orissa.

Elsewhere : Myanmar, Japan.

399. *Siliqua radiata* (Linnaeus)

1758. *Solen radiata* Linnaeus, *Syst. Nat.*, ed., **10** : 1114.

1895. *Cultellus radiata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1898. *Siliqua radiata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 229.

1906. *Machaera radiata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 844.

1941. *Siliqua radiata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5(1)** : 62, fig. 23c.

1949. *Siliqua radiata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 58.

1956. *Siliqua radiata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 157, pl. 14, figs. 1a and 1b.

1965. *Psammobia radiata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(1)** : 219, pl. 23, figs. 76a and 76b.

1986. *Siliqua radiata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1988. *Siliqua radiata*: Purkait and Manna, *Environ. and Ecology*, **6(2)** : 443, fig. 1.21.

1991. *Siliqua radiata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 132. Zool. Surv. India.

1992. *Siliqua radiata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 232, pl. 21, figs. 8 & 9. Zool. Surv. India.

1995. *Siliqua radiata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 422. Zool. Surv. India.

1998. *Siliqua radiata*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 102, pl. 13, fig. 22.

2000. *Siliqua radiata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 252.

2007. *Siliqua radiata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 214. Zool. Surv. India.

2008. *Siliqua radiata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 158. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : South African coast, Sri Lanka, Maynmar, Indonesia, Philippines.

Genus *Tanysiphon* Benson, 1858

1858. *Tanysiphon* Benson, *Ann. Mag. Nat. Hist.*, (3)1 : 407. Type species : *Tanysiphon rivalis* Benson, 1858.

400. *Tanysiphon rivalis* Benson

1858. *Tanysiphon rivalis* Benson, *Ann. Mag. Nat. Hist.*, (3)1 : 407, pl. 12b, figs. 1-3.

1987. *Tanysiphon rivalis*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, 8(1-3) : 154.

1915. *Anatina induta* Preston, *Rec. Indian Mus.*, 11 : 482, fig. 4. Type locality : Canal near Chingrighata, West Bengal. Types : NZC, ZSI.

1992. *Tanysiphon rivalis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 233. Zool. Surv. India.

1995. *Tanysiphon rivalis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 64. Zool. Surv. India.

2006. *Tanysiphon rivalis*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 70.

2008. *Tanysiphon rivalis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 19.

Distribution : India : Andhra Pradesh, Andaman and Nicobar Islands, Goa, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : South African coast, Sri Lanka.

Superfamily TELLINOIDEA

The superfamily Tellinoidea represented by four families Tellinidae, Semelidae, Psammobiidae and Donacidae are represented from Indian water also. They are much diversified group, found in wide ranges of habitat from littoral mobile sand to deep tranquil mud. They are actively burrower, living at deep levels within the substrate. Shells tend to be rather thin, flattened, with narrow posterior gape, variable outline from circular to cylindrical. Hinge with two cardinal teeth in each valve, with laterals or without laterals. Ligament external set in a prominent nymph but in Semelidae it is a shallow resilifer. The most important character of this group is presence of cruciform muscles scars closely to the ventral extremity of the pallial sinus. Siphons are long and pallial sinus deep. They are the deposit feeders using the inhalant siphon to suck up surface particles.

The Tellinidae are compressed subovate to circular, with twisted posterior end. Ligament external; many of them have coloured forms; inhabitant of soft sediments. The family is subdivided with two subfamilies Tellininae and Macominae; the lateral is distinguished from former without lateral teeth.

The Semelidae differs from the other Tellinoidea by having an internal ligament set on a spoon shaped resilium as well as an external one. Externally they vary from circular to sub ovate and externally confused with the tellinids.

The Pasammobiidae are similar to tellinids in many respect, but unlike the tellinids the psammobiids are not twisted posteriorly; more oblong in outline, expanded posteriorly; ligament set on a raised nymph and usually lack of lateral teeth. Many of them are brightly coloured.

The Donacidae are wedge clams, particularly adapted for living on exposed sandy beach. Shells are wedge shaped, posterior area reduced, margin steeply angled. Mostly small and generally smooth, shining; some trends towards radially sculptured, especially the posterior area. They are active burrowers which enables them to withstand the repeated disturbances caused by wave action.

Family TELLINIDAE

Subfamily TELLININAE

Genus *Tellina* Linnaeus, 1758

1758. *Tellina* Linnaeus, *Syst. Nat.*, ed., **10** : 674. Type species : *Tellina radiata* Linnaeus, 1758 ; Subsequent designation, Children, 1823.

Subgenus *Tellina* s.st.

401. *Tellina (Tellina) planata* Linnaeus

1758. *Tellina planata* Linnaeus, *Syst. Nat.*, ed. **10** : 675.

1767. *Tellina planata* Linnaeus, *Syst. Nat.*, ed. **12** : 1117.

1906. *Tellina planata* : Comber, *J. Bombay nat. Hist. Soc.*, **17** : 214.

Distribution : India : Goa.

Elsewhere : Atlantic Ocean.

Remarks : Comber (1906) reported the occurrence of this species from Goa is doubtful.

402. *Tellina (Tellina) rubella* Deshayes

1854. *Tellina rubella* Hanley, *Proc. zool. Soc. London*, **1854** : 364.

1906. *Tellina rubella* : Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.

1949. *Angulus rubella*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 72.

2006. *Tellina rubella*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 15.

Distribution : India : Maharashtra.

Elsewhere : Sri Lanka.

403. *Tellina (Tellina) scapellum* Hanley

1844. *Tellina scapellum* Hanley, *Proc. zool. Soc. London*, **1844** : 147.

1895. *Tellina scapellum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1956. *Tellina scapellum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**, **2(7)** : 156, pl. 13, fig. 5.

2006. *Tellina scapellum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 15.

Distribution : India : Tamil Nadu.

Elsewhere : Philippines.

404. *Tellina (Tellina) unguis* Preston

1916. *Tellina unguis* Preston, *Rec. Indian Mus.*, **12(2)**: 98, fig. 16. Type locality : Bamboo flat, Port Blair, Andamans.

2006. *Tellina (Tellina) unguis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 20, pl. 1, fig. 1.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Remarks : This species is collected from the depth of 1-4 fathoms, from bottom of muddy sand. It is reported from its type locality only.

405. *Tellina (Tellina) vestalis* Hanley

1844. *Tellina vestalis* Hanley, *Proc. zool. Soc.*, London, **1844** : 141.

1916. *Tellina vestalis*: Preston, *Rec. Indian Mus.*, **12(2)** : 98.

2006. *Tellina vestalis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 15.

Distribution : India : Andaman and Nicobar Islands, Goa.

Elsewhere : Philippines.

Remarks : Inhabitant of coral sands.

406. *Tellina (Tellina) viator* Preston

2006. *Tellina viator* : Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 15.

Distribution: India :

Elsewhere :

Subgenus *Angulus* Megerle, 1811

1811. *Angulus* Megerle, *Mag. Ges. Nat. Fr. Berlin*, **5** : 47. Type species : *Tellina lanceolata* Gmelin, 1791; Subsequent designation, Gray, 1847.

407. *Tellina (Angulus) corbuloides* Hanley

1844. *Tellina corbuloides* Hanley, *Proc. zool. Soc. London*, **1844** : 70.

1986. *Tellina (Angulus) corbuloides*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

1992. *Tellina corbuloides*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 234. Zool. Surv. India.
1995. *Tellina corbuloides*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 49. Zool. Surv. India.
2000. *Tellina (Angulus) corbuloides*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 253.
2006. *Tellina (Angulus) corbuloides*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 21, pl. 1, figs. 2 & 3; pl. 4, fig. 1.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Philippines.

Remarks : *T. corbuloides* Hanley can be distinguished from the other species by its corbuloid shape, pallial sinus, pallial line and adductor muscle impression.

408. *Tellina (Angulus) incisa* Preston

1908. *Tellina incisa* Preston, *Rec. Indian Mus.*, 2 : 209, pl. 17, fig. 61. Type locality : Andaman Islands; Types, NZC, ZSI.
1986. *Tellina (Arcopagia) incisa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Tellina (Angulus) incisa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 253.
2006. *Tellina (Angulus) incisa*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 22, pl. 2, figs. 2.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : No records.

Remarks : This species is not recorded after its original discovery. It is distinguished by its elongately ovate shape and its sculpture.

409. *Tellina (Angulus) lanceolata* Gmelin

1791. *Tellina lanceolata* Gmelin, *Syst. Nat.*, ed. 13 : 3236.
1941. *Tellina lanceolata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 60.
1986. *Tellina (Angulus) lanceolata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
1991. *Tellina (Angulus) lanceolata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 137. Zool. Surv. India.
2000. *Tellina (Angulus) lanceolata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 253.
2006. *Tellina (Angulus) lanceolata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 24, pl. 2, fig. 3.

2007. *Tellina (Angulus) lanceolata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 215. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species can be distinguished by its elongate, lanceolate shape, fine concentric sculpture and pallial sinus, The posterior region is elongated and contains the ridges which is a prominent character. Boss (1969) pointed out some similarities between *T. lanceolata* Hanley and *T. canonica* Salisbury.

410. *Tellina (Angulus) rhomboides* Quoy and Gaimard

1835. *Tellina rhomboides* Quoy and Gaimard, *Voy. Astralabe*, 3 : 502, pl. 81, figs. 4-7.

1914. *Tellina confusa*: Preston, *Rec. Indian Mus.*, 10 : 309, figs. 18a, 18b. Type locality : Lake Chilka, Orissa.NZC, ZSI.

1972. *Tellina rhomboides*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 288.

2006. *Tellina (Angulus) rhomboides*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 23, pl. 2, fig. 1; pl.4, fig. 2.

Distribution : India : Lakshadweep, Orissa.

Elsewhere : Indo-west Pacific.

Remarks : For detail synonymy see Prashad (1932) and other details Dey (2006).

411. *Tellina (Angulus) rhodon* Hanley

1835. *Tellina rhodon* Hanley, *Proc. zool. Soc.*, London, 1844 : 140.

2006. *Tellina (Angulus) rhodon*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 15.

Distribution : India : Andaman Islands.

Elsewhere : Indo- Pacific.

412. *Tellina (Angulus) rubra* Deshayes

1854. *Tellina rubra* Deshayes, *Proc. zool. Soc. London*, 1854 : 364.

1906. *Tellina (Angulus) rubra*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 822

1906. *Tellina rubra* : Comber, *J. Bombay nat. Hist. Soc.*, 17 : 214.

1949. *Angulus rubra*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 72, pl. 5, fig. 72.

Distribution : India : Maharashtra.

Elsewhere : Sri Lanka.

Remarks : Subrahmanyam *et al.* (1949) reported this species from Bombay and remarked that it is a very common species resembles with *M. ala*; may be a mistaken identification.

Subgenus ***Cadella*** Dall, Bartsch and Rehder, 1939

1827. *Cadella* Dall, Bartsch and Rehder, *Bull. Bishop Mus.*, **153** : 169. Type species : *T. lechriogramma* Melvill, 1893; Original designation.

413. ***Tellina (Cadella) lechriogramma*** Melvill

1893. *Tellina lechriogramma* Melvill, *Mem. Manchester Soc.*, **7** : 65. Type locality : Bombay.

1906. *Tellina (Moera) lechriogramma*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 819.

1949. *Angulus lechriogramma*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 72, pl. 5, fig. 73.

2006. *Tellina (Angulus) lechriogramma*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 15.

Distribution : India : Maharashtra.

Elsewhere : Gulf of Aden, Pakistan coast.

Remarks : Subrahmanyam *et al.* (1949) reported this species from Bombay and remarked that this species superficially resembles with *Donax incarnatus*, may be wrong identification.

414. ***Tellina (Cadella) semen*** Hanley

1844. *Tellina semen* Hanley, *Proc. zool. Soc. London*, **1844** : 64.

1986. *Tellina (Cadella) semen*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Tellina (Cadella) semen*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 256.

2006. *Tellina (Cadella) semen*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 25, pl. 3, fig. 1; pl. 8, fig. 1.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : South African coast, Mocambique, Seychelles, Persian Gulf, Pakistan coast, Malaya, Australia, Philippines, Fiji.

Remarks : *T. (C.) semen* Hanley although variable in shape can be distinguished by its concentric sculpture, position of lateral teeth and pallial sinus.

Subgenus ***Dallitellina*** Afshar, 1969

1969. *Dallitellina* Afshar, *Mem. Geol. Soc. Am.*, **119** : 38. Type species : *Tellina rostrata* Linnaeus, 1758

415. ***Tellina (Dallitellina) rostrata*** Linnaeus

1758. *Tellina rostrata* Linnaeus, *Syst. Nat.*, ed., **10** : 675.

1991. *Tellina (Dallitellina) rostrata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 136. *Zool. Surv. India*.

2006. *Tellina (Dallitellina) rostrata*: Dey, Rec. zool. Surv. India, Occ. Paper No., **249** : 26, pl. 3, fig. 2; pl. 4, fig. 3.

2007. *Tellina (Dallitellina) rostrata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 216. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Thailand, Gulf of Siam, Malaysia, Indonesia, Philippines.

Subgenus *Eurytellina* Fischer, 1887

1887. *Eurytellina* Fischer, *Man. Conch.*, p., 1147. Type species : *Tellina punicea* Born, 1790.

416. *Tellina (Eurytellina) alfredensis* Bertsch

1846. *Tellina alfredensis* Bertsch, *Proc. U.S. nat. Mus.*, **91** : 205, pl. 46, fig. 7 and 8.

2006. *Tellina (Eurytellina) alfredensis*: Dey, Rec. zool. Surv. India, Occ. Paper No., **249** : 15.

Distribution : India : Tamil Nadu.

Elsewhere : South Africa.

417. *Tellina (Eurytellina) sowerbyi* Hanley

1844. *Tellina sowerbii* Hanley, *Proc. zool. Soc. London*, **1844** : 62.

1898 *Tellina (Peronaeoderma) sowerbyi*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.

Distribution: India: Andaman Islands.

Elsewhere : Australia.

Remarks : Melvill and Skyes (1998) reported this species from Andaman and Nicobar Islands may be a wrong identification.

Subgenus *Heminetis* Thiele, 1934

1934. *Heminetis* Thiele, *Hand, Syst. Weich.*, pt. **3** : 915. Type species : *Tellina plicata* Valenciennes = *angulata* Linnaeus, 1767.

418. *Tellina (Heminetis) angulata* Linnaeus

1767. *Tellina angulata* Linnaeus, *Syst. Nat. ed.*, **12** : 1116.

1986. *Tellina (Arcopagia) angulata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1988. *Tellina angulata*: Purkait and Manna, *Environ. & Ecology*, **6(2)** : 443, fig. 1.24.

2000. *Tellina (Arcopagia) angulata*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., **187** : 254.

2006. *Tellina (Heminetis) angulata*: Dey, Rec. zool. Surv. India, Occ. Paper No., **249** : 27, pl. 5, figs. 1& 2; pl. 19, fig. 4.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu, West Bengal.

Elsewhere : Malagasy, Moluccas, New Caledonia, Fiji.

Remarks : There is a lot of confusion in the nomenclature of *T. angulata*. Linnaeus (1767) described *T. angulata* and Chemnitz (1782) described one species in the name of *T. angulata*, based on some other specimen and refers Linnaeus as a first reference. Later a number of subsequent workers followed this, but the *angulata* Linnaeus is entirely different than the *angulata* Chemnitz.

T. (H.) angulata Linnaeus can be distinguished by its shape, sculpture, cardinal complex and lateral teeth.

Subgenus ***Homalina*** Stoliczka, 1870

1870. *Homalina* Stoliczka, *Palaeont. Indica*, (6)3 : 118. Type species : *Tellina triangularis* Dillwyn, 1817; Original designation.

419. ***Tellina (Homalina) myaeformis*** Sowerby

1867. *Tellina myaeformis* Sowerby in Reeve, *Conch. Icon.*, 17 : *Tellina* sp. no., 268, pl. 45, fig. 268.

1991. *Tellina (Homalina) myaeformis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 136. Zool. Surv. India.

2006. *Tellina (Homalina) myaeformis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 28, pl.6, fig. 1; pl. 12, fig. 6.

Distribution : India : Orissa, Tamil Nadu, West Bengal.

Elsewhere : No. records.

Remarks : *T. (H.) myaeformis* Sowerby can be easily distinguished by its semioval equivalve, cardinal teeth, presence of deltoid lateral teeth in the right valve, pallial sinus and pallial line.

Subgenus ***Moerella*** Fischer, 1887

1887. *Moerella* Fischer, *Manuel de Conch.*, p. 1147. Type species : *Tellina donacina* Linnaeus, 1758.

420. ***Tellina (Moerella) ostracea*** Lamarck

1791. *Tellina ostracea* Lamarck, *Encyl. Meth.*, t. 290, fig. 13.

1986. *Tellina (Moerella) ostracea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Tellina (Moerella) ostracea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 256.

2006. *Tellina (Moerella) ostracea*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 30, pl. 6, fig. 2; pl. 8, fig. 6.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Malagasy, Mauritius, Gulf of Aden, Sri Lanka, Merqui Archipelago.

Remarks : This species shows variation in the regularity of the laminated striae. It resembles with *T. longirostra* Sowerby, but differs from it being more transverse with a produces beak and double flexure.

421. *Tellina (Moerella) philippinarum* Hanley

1844. *Tellina philippinarum* Hanley, *Proc. zool. Soc. London*, **1844** : 69.

1941. *Tellina philippinarum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 60.

1986. *Tellina (Moerella) philippinarum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Tellina (Moerella) philippinarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 257.

2001. *Angulus philippinarum*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 76. *Zool. Surv. India*.

2006. *Tellina (Moerella) philippinarum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 31, pl. 6, fig. 3; pl. 7, fig. 1; pl. 8, figs. 2 & 3.

2007. *Tellina (Moerella) philippinarum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 216. *Zool. Surv. India*.

2008. *Tellina (Anugulus) philippinarum*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 159. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu.

Elsewhere : Myanmar, Philippines.

422. *Tellina (Moerella) subtruncata* Hanley

1844. *Tellina subtruncata* Hanley, *Proc. zool. Soc. London*, **1844** : 69.

1893. *Tellina kolabana* Melvill, *Mem. Manchester Soc.*, **7** : 64, pl. 1, fig. 23. Type locality : Bombay.

1893. *Tellina kolabana* Melvill, *J. Bombay nat. Hist. Soc.*, **8** : 244, pl. L, fig. 23. Type locality : Bombay.

1906. *Tellina kolabana* : Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 819.

1949. *Tellina kolabana*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 71.

1986. *Tellina (Moerella) subtruncata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Tellina (Moerella) subtruncata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 257.

2006. *Tellina (Moerella) subtruncata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 31, pl. 7, figs. 2 & 3; pl. 8, figs. 4 & 5.

Distribution : India : Andaman and Nicobar Islands, Maharashtra.

Elsewhere : Gulf of Aden, Mauritius, Persian Gulf, Philippines.

Subgenus ***Omala*** Schumacher, 1817

1817. *Omala* Schumacher, *Essai Vers. Test.*, **43** : 128. Type species : *Omala inaequalis* = *Tellina hyalina* Gmelin, 1971.

423. *Tellina (Omala) cuspis* Hanley

1844. *Tellina cuspis* Hanley, *Proc. zool. Soc. London*, **1844** : 72.

1940. *Tellina cuspis*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 338.

2006. *Tellina (Omala) cuspis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 16.

Distribution : India : Andaman Islands.

Elsewhere : No records.

424. *Tellina (Omala) texturata* Sowerby

1867. *Tellina texturata* Sowerby in Reeve, *Conch. Icon.*, **17** : *Tellina* sp. no., 233, pl. 41, fig. 233.

1914. *Tellina confusa* Preston, *Rec. Indian Mus.*, **10** : 309, fig. 18. Type locality : Lake Chilka, Orissa, types, NZC, ZSI.

1916. *Tellina confusa* : Annandale, *Mem. Indian Mus.*, **5** : 356.

1941. *Tellina texturata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 60.

1968. *Tellina confusa*: Ray, *Indian Mus. Bull.*, **3(1 & 2)** : 32.

1986. *Tellina (Omala) texturata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

1991. *Tellina (Omala) texturata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 135. *Zool. Surv. India*.

1995. *Tellina (Omala) texturata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 423. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Orissa, Tamil Nadu.

Elsewhere : Singapore.

Subgenus ***Pharanonella*** Lamy, 1918

1918. *Pharaonella* Lamy, *Bull. Mus. Natl. Hist. nat. Paris*, **24** : 31. Type species: *Tellina pharaonis* Hanley, 1844; Subsequent designation, Salisbury, 1934.

425. *Tellina (Pharanonella) cuneolus* Sowerby

1844. *Tellina cuneolus* Sowerby, *Zeitschr. F. Malak.*, p. 162.

2006. *Tellina (Pharanonella) cuneolus*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 33, pl. 9, fig. 3; pl. 11, fig. 4.

Distribution : India : Andhra Pradesh, Orissa.

Elsewhere : Indo-Pacific.

426. *Tellina (Pharanonella) iridescens* (Benson)

1842. *Tellina iridescens* Benson, *Ann. Mag. Nat. Hist.*, (1)9 : 490.
1915. *Tellina chilkaensis* Preston, *Rec. Indian Mus.*, 11 : 306, figs. 20-20a-b. Type locality : Off Brahampur, Lake Chilka, Orissa.
1983. *Tellina (Pharanonella) iridescens*: Subba Rao, Dey and Barua, *Bull. zool. Surv. India*, 5(1) : 50.
1987. *Tellina iridescens*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, 8(1-3) : 154.
1991. *Tellina (Pharanonella) iridescens*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 135. *Zool. Surv. India*.
1992. *Tellina iridescens*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 234. *Zool. Surv. India*.
1995. *Tellina iridescens*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 65. *Zool. Surv. India*.
1995. *Tellina (Pharanonella) iridescens*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 423. *Zool. Surv. India*.
2006. *Tellina (Moerella) iridescens*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 34, pl. 9, figs. 1 & 2 ; pl. 11, figs. 3 and 5.
2007. *Tellina (Pharanonella) iridescens*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 217. *Zool. Surv. India*.
2008. *Tellina (Pharanonella) iridescens*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 19.

Distribution : India : Andhra Pradesh, Gujarat, Orissa, West Bengal.

Elsewhere : Seychelles, Philippines, China, Japan.

427. *Tellina (Pharanonella) perna* Spengler

1798. 1844. *Tellina perna* Spengler *Skr. Nat. Hist. Sels. Kab.*, 4(2) : 79.
1898. *Tellina (Tellinella) perna*: Melvill and Sykes; *Proc. malac. Soc. London*, 3 : 47.
1986. *Tellina (Pharanonella) perna*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.
2000. *Tellina (Pharanonella) perna*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 257.
2006. *Tellina (Pharanonella) perna*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 35 pl. 10, fig. 2; pl. 9, fig. 6.

Distribution : India : Andaman and Nicobar Islands, Maharashtra.

Elsewhere : South African coast, Malagasy, Mauritius, Seychelles, Sri Lanka, Malaya, China, Australia, Japan, Philippines, Palau Island, Marshall Islands, Samoa Island and Hawaiian Islands.

428. *Tellina (Pharanonella) vulsella* Hanley

1844. *Tellina vulsella* Hanley in Sowerby, *Thes. Conch.*, 1(6) : 235, pl. 6, figs. 162 & 162.
1897. *Tellina (Tellinella) vulsella*: Melvill and Sykes, *Proc. malac. Soc. London*, 2 : 172.
2000. *Tellina (Pharanonella) vulsella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 257.
2006. *Tellina (Pharanonella) vulsella*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 36, pl.10, fig. 1; pl. 22, fig. 3.

Distribution : India : Andaman Islands.

Elsewhere : East African coast, Seychelles, Sri Lanka, Indonesia, Philippines, Japan.

Remarks : This species very much resembles with *T. (P.) perna* Spengler but differs by its thin, typical reddish or flesh coloured small shell, more narrowly elongate, with elongated and rostrate posterior end.

Subgenus *Phylloda* Schumacher, 1817

1817. *Phylloda* Schumacher, *Eassai* : 49, 148. Type species : *P. aurea* Schunacher = *T. foliacea* Linnaeus, 1758.

429. *Tellina (Phylloda) foliacea* Linnaeus

1758. *Tellina foliacea* Linnaeus, *Syst. Nat.*, ed. 10 : 675.
1941. *Tellina foliacea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 60.
1898. *Tellina foliacea*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 229.
2000. *Tellina (Phylloda) foliacea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 258.
2006. *Tellina (Phylloda) foliacea*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 37, pl. 12, fig. 2; pl. 16, fig. 5.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Red sea, Gulf of Aden, Mauritius, Pakistan coast, Indonesia, South Australia, Japan, Philippines.

Remarks : For detail synonymy see Prashad (1932).

Subgenus *Pinguitellina* Iredale, 1927

1927. *Pinguitellina* Iredale, *Rec. Austr. Mus.*, (5)16 : 76. Type species : *Tellina robusta* Hanley, 1844; Original designation.

430. *Tellina (Pinguitellina) robusta* Hanley

1845. *Tellina robusta* Hanley, *Proc. zool. Soc. London*, 1844 : 63.
1916. *Tellina bertiniana* Preston, *Rec. Indian Mus.*, 12 : 95, figs. 10-10a. Type locality : Semiramis Bay, Andamans.

1986. *Tellina (Arcopagia) robusta*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2006. *Tellina (Pinguitellina) robusta*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 39, pl. 13, figs 1 & 2; pl. 16, fig. 2; pl. 27, fig. 4.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : Malagasy, Mauritius, Reunion, Seychelles, Persian Gulf, Maldives, Sri Lanka, Malaya, Indonesia, East coast of Australia, Philippines.

Remarks : This species very much allied to *T. nux* Handley, *T. (A.) pinguis* Hanley and *T. (A.) casta* Hanley. It is distinguished from all the above three species by its stouter texture, even in the young individuals. In the case of *T. pinguis* the ligament is decidedly convex.

For detail synonymies see Prashad (1932).

Subgenus *Quidnipagus* Iredale, 1929

1929. *Quidnipagus* Iredale, *Mem. Queensland Mus.*, **9** : 266. Type species : *Cochlea palatam* Martens, 1784; Original designation.

431. *Tellina (Quidnipagus) gargadia* Linnaeus

1758. *Tellina gargadia* Linnaeus, *Syst. Nat.*, ed. **10** : 697.

2000. *Tellina (Quidnipagus) gargadia*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 258.

2006. *Tellina (Quidnipagus) gargadia*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 40, pl. 14, fig. 1; pl. 16, fig. 6.

Distribution : India : Nicobar Islands.

Elsewhere : South African coast, Seychelles, Sri Lanka, Gulf of Siam, Indonesia, Australia, Philippines.

Remarks : Linnaeus (1758) described this species, but the description is insufficient and missing of the type species from the Linnaeus collection created problem to the taxonomist.

432. *Tellina (Quidnipagus) palatam* Iredale

1929. *Tellina palatam* Iredale, *Mem. Queensland Mus.*, **9** : 266.

1972. *Tellina rugosa*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 288.

1986. *Tellina (Quidnipagus) palatam*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1991. *Tellina (Quidnipagus) palatam*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 354. Zool. Surv. India.

2000. *Tellina (Quidnipagus) palatam*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 259.

2006. *Tellina (Quidnipagus) palatam*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 41, pl. 14, fig. 2; pl. 11, fig. 1.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Common in Indo-Pacific.

Remarks : *T. (Q.) palatam* Iredale have very peculiar type of sculpture, distinguished from any other group. This species is widely distributed in the Indo-Pacific region.

Subgenus *Scutarcopagia* Pilsbry, 1918

1918. *Scutarcopagia* Pilsbry, *Proc. Acad. Nat. Sci. Philad.*, **69** : 332. Type species : *Tellina scobinata* Linnaeus, 1758; Original designation.

433. *Tellina (Scutarcopagia) lingua-felis* Linnaeus

1758. *Tellina lingua-felis* Linnaeus, *Syst. Nat.*, ed. **10** : 674.
1986. *Macoma (Scutarcopagia) lingua-felis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.
2006. *Tellina (Scutarcopagia) lingua-felis* : Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 43, pl. 15, fig. 2; pl. 16, fig. 3.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : This species is very much allied to *T. (S.) scobinata* Linnaeus by its sculpture, but it differs from it by its elongated-oval shape and pink umbonal colour.

434. *Tellina (Scutarcopagia) scobinata* Linnaeus

1758. *Tellina scobinata* Linnaeus, *Syst. Nat.*, ed. **10** : 676.
1986. *Macoma (Scutarcopagia) scobinata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.
1991. *Tellina (Scutarcopagia) scobinata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 355. *Zool. Surv. India*.
2000. *Tellina (Scutarcopagia) scobinata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 259.
2006. *Tellina (Scutarcopagia) scobinata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 44, pl. 15, fig. 1; pl. 16, fig. 4.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Maharashtra.

Elsewhere : Red sea, Gulf of Aden, Seychelles, Persian Gulf, Pakistan coast, Maldives, Malaya, Indonesia, Asustralia, Philippines, Japan.

Remarks : This species is very much allied to *T. (S.) lingua-felis* Linnaeus by its sculpture, but differs from it by its rounded shape and brown umbonal region.

Subgenus **Serratina** Pallary, 1922

1922. *Serratina* Pallary, *Explor. Sci. Moroe Malac.*, p. 95. Type species : *Tellina serrata* Brocchi, 1814; Original designation.

435. *Tellina (Serratina) capsoides* Lamarck

1818. *Tellina capsoides* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 5 : 531.
 1895. *Tellina (Arcopagia) pristis*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
 1898. *Tellina (Arcopagia) capsoides*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.
 1906. *Tellina (Tellinella) thymares*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 822.
 1906. *Tellina capsoides*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.
 1941. *Tellina pristis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 60, fig. 22c.
 1949. *Arcopagia capsoides*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 71, pl.5, fig.71.
 1949. *Angulus thymares*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 71.
 1965. *Tellina pristis*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 219, pl. 23, figs. 80a & 80b.
 1986. *Tellina (Serratina) capsoides*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 2000. *Tellina (Serratina) capsoides*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 259.
 2006. *Tellina (Serratina) capsoides*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 45, pl. 12, fig. 1; pl. 11, fig. 2.
 2007. *Tellina (Serratina) capsoides*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 217. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : South African coast, Mozambique, Malagasy, Tanzania, Red Sea, Gulf of Aden, Persian Gulf, Pakistan coast, Sri Lanka, Malaya, Indonesia, Philippines, China, Asustralia.

Remarks : This species is extremely variable due to which a large number of species are synonymies with this species.

For detail synonymy see Prashad (1932), Dey (2006).

Subgenus **Tellinella** Moerch, 1853

1853. *Tellinella* Moerch, *Cat. Conch. Com. Di. Yoldi.*, 2 : 13. Type species : *Tellina virgata* Linnaeus, 1758; Subsequent designation, Stoliczka, 1870.

436. *Tellina (Tellinella) staurella* Lamarck

1818. *Tellina staurella* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **5** : 522.
1898. *Tellina (Tellinella) staurella*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
1972. *Tellina elegans* : Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 288.
1986. *Tellina (Tellinella) staurella*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Tellina (Tellinella) staurella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 260.
2006. *Tellina (Tellinella) staurella*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 48, pl. 18, fig. 1; pl. 19, fig. 1.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : South African coast, Malagasy, Mauritius, Seychelles, Gulf of Aden, Sri Lanka, Thailand, Indonesia, Philippines, Carolina Islands, Marshall Islands, New Caledonia, Fiji, Samoa, Tonga, Asustralia.

Remarks : This species generally confused with *T. (T.) virgata* Linnaeus and *T. (T.) crucigera* of Indo-pacific region. *T. (T.) staurella* Lamarck can be distinguished with *T. (T.) virgata* as the former is less elongate, with very much short posterior end, posterior dorsal margin has very steep slope, hinge plate thin, right anterior lateral strong; whereas the latter is more elongated, subequalateral, posterior end rostrate, posterior dorsal margin less slope. Boss (1969) remarks under *T. virgata* "the young of *T. staurella* are not distinctly cancellate and have closely set concentric librations"

437. *Tellina (Tellinella) travancorica* Smith

1818. *Tellina travancorica* Smith, *Ann. Mag. Nat. Hist.*, (7)**4** : 249. Type locality : Laccadwip Sea.
1904. *Tellina travancorica* Smith, *Ann. Mag. Nat. Hist.*, (7) **14** : 11.
2006. *Tellina (Tellinella) travancorica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 48, pl. 18, fig. 1; pl. 19, fig. 1.

Distribution : India : Lakshadweep, Kerala.

Elsewhere : Endemic to India.

438. *Tellina (Tellinella) verrucosa* Hanley

1844. *Tellina verrucosa* Hanley, *Proc. zool. Soc. London*, **1844** : 60.
1972. *Tellina verrucosa*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 288.
2006. *Tellina (Tellinella) verrucosa*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 16.

Distribution : India : Lakshadweep.

Elsewhere : Philippines.

Remarks : For detail synonymy see Prashad (1932).

439. *Tellina (Tellinella) virgata* Linnaeus

1758. *Tellina virgata* Linnaeus, *Syst. Nat.*, ed. 10 : 674.
1986. *Tellina (Tellinella) virgata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Tellina (Tellinella) virgata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 260.
2006. *Tellina (Tellinella) virgata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 50, pl. 18, fig. 2; pl. 19, fig. 3.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : South African coast, Malagasy, Mauritius, Seychelles, Red Sea, Gulf of Aden, Persian Gulf, Maldives, Sri Lanka, Thailand, Indonesia, Philippines, China.

Remarks : This species is very common in Indo-Pacific region and very much similar to *T. (T.) staurella* Lamarck.

Subgenus *Tellinides* Lamarck, 1818

1818. *Tellinides* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 5 : 535. Type species : *Tellina timorensis* Lamarck, 1818.

440. *Tellina (Tellinides) opalina* Gmelin

1791. *Tellina opalina* Gmelin, *Syst. Nat.*, ed. 13 : 3236.
1986. *Tellina (Tellinides) opalina*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Tellina (Tellinides) opalina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 261.
2006. *Tellina (Tellinides) opalina*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 52, pl. 10, fig. 2; pl. 22, fig. 2.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : South African coast, Mozambique, Persian Gulf, Pakistan coast, Bangladesh, Indonesia, Mollucca, Philippines, Fiji.

Remarks : This species can be distinguished by its fine incised sulcated sculpture, obsolete radial striae and anterior lateral tooth in right valve which is small rounded blunt and peg like.

441. *Tellina (Tellinides) ovalis* Sowerby

1825. *Tellina ovalis* Sowerby, *Tank. Cat. App.*, 3 : 198.
1986. *Tellina (Tellinides) ovalis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Tellina (Tellinides) ovalis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 261.

2006. *Tellina (Tellinides) ovalis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 53, pl. 20, fig. 1; pl. 22, fig. 1.

Distribution : India : Andaman and Nicobar Islands, Goa.

Elsewhere : Persian Gulf, Gulf of Omman, Pakistan coast, Indonesia, Philippines.

442. *Tellina (Tellinides) sinuata* Spengler

1798. *Tellina sinuata* Spengler, *Nat. Selsk. Skrivt.*, **4** : 109.

1906. *Tellina (Tellinides) sinuata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 822

1906. *Tellina sinuata* :Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.

1941. *Tellina timorensis*: Gravely, *Bull. Madras Govt.Mus. New Ser. (Nat. Hist.)*, **5**(1) : 60.

1949. *Angulus sinuata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.

1956. *Angulus sinuata*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.

1986. *Tellina (Tellinides) sinuata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

1991. *Tellina (Tellinides) sinuata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 136. *Zool. Surv. India*.

1992. *Tellina (Tellinides) sinuata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 235. *Zool. Surv. India*.

1995. *Tellina sinuata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 50. *Zool. Surv. India*

1998. *Angulus sinuata*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 101, pl. 13, fig. 23.

2000. *Tellina (Tellinides) sinuata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 261.

2006. *Tellina (Tellinides) sinuata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 54, pl. 21, figs. 1 & 2; pl. 22, figs. 4 & 5.

2007. *Tellina (Tellinides) sinuata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 218. *Zool. Surv. India*.

2008. *Tellina (Tellinides) sinuata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 19.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Malagasy, Pakistan coast, Sri Lanka, Indonesia, Philippines.

Genus *Arcopagia* Brown, 1827

1827. *Arcopagia* (Leach MS) Brown, *Iius. Conch. Great Britain Ireland*, pl. 16, figs 8-10.
Type species : *Tellina crassa* Pennan, 1777; Subsequent designation, Herrmansen, 1846.

443. *Arcopagia carnicolor* (Hanley)

1846. *Tellina carnicolor* Hanley in Sowerby, *Thes. Conch.*, 1(6) : 263, pl. 56, fig. 15.
 1898. *Tellina (Arcopagia) carnicolor*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 46.
 1908. *Tellina cancellata* Preston, *Rec. Indian Mus.*, 2 : 209, pl. 17, figs. 58-58A. Type locality : Andaman Islands. Types, NZC, ZSI.
 1986. *Tellina (Arcopagia) carnicolor*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 2000. *Tellina (Arcopagia) carnicolor*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 254.
 2006. *Arcopagia carnicolor*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 56, pl. 23, figs. 1-3; pl. 19, figs. 4 & 5.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : Maldives Indonesia, Moluccas, Philippines, New Caledonia, East Australia.

Remarks : *A. carnicolor* (Hanley) can be distinguished from the other species by its sculpture of concentrically spaced lamellae crossed by close radial striae giving it a decussate appearance.

444. *Arcopagia casta* (Hanley)

1844. *Tellina casta* Hanley, *Proc. zool. Soc. London*, 1844 : 63.
 1916. *Tellina persimplex* Preston, *Rec. Indian Mus.*, 12(2): 96, fig. 12. Type locality : Port Blair, Andaman Islands; Types, NCZ, ZSI.
 1916. *Tellina vadorum* Preston, *Rec. Indian Mus.*, 12(2) : 98, figs. 17, and 17a. Type locality : Bamboo flat Bay, Andaman Islands. Types, NCZ, ZSI.
 1968. *Tellina vadorum*: Ray, *Indian Mus. Bull.*, 3(1 & 2) : 32, Text fig. 34.
 1986. *Tellina (Arcopagia) casta*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 1991. *Tellina (Arcopagia) casta*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 135. Zool. Surv. India.
 2000. *Tellina (Arcopagia) casta*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 254.
 2006. *Arcopagia casta*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 57, pl. 17, fig. 2; pl. 24, figs. 1-3; pl. 27, figs. 5 & 6.

Distribution : India : Andaman and Nicobar Islands, Orissa.

Elsewhere : Mauritius, Mergui Archipelago, Malaya, Indonesia.

Remarks : *A. casta* (Hanley) can be distinguished from the other species by its thin, subovate shape, umbo, cardinal complex, pallial sinus and pallial line. It resembles with *T. nux* Hanley but can be differentiated from it in broad shape, decidedly arcuated ventral edge, dorsal edge less complex and shorter, umbonal region colourless. It also resembles with *A. pinguis* (Hanley) and *A. robusta* (Hanley) but the former differs by its more orbicular outline and the later distinguished by its texture even in the case of young individuals.

445. *Arcopagia costata* (Sowerby)

1867. *Tellina costata* Sowerby in Reeve, *Conch. Icon.*, **17** : *Tellina* sp. no. 194, pl. 34, fig. 194.

2006. *Tellina costata* : Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 15.

Distribution : India : Arabian sea.

Elsewhere : Philippines.

Remarks : Status of this species remain undetermined due to non availability of the specimens in National Zoological Collections.

446. *Arcopagia inflata* (Gmelin)

1791. *Tellina inflata* Gmelin, *Syst. Nat.* ed. **13** : 3230.

1843. *Tellina hippoidea* Jonas in Philippi, *Abbild. Beschr. Conch.*, **1** : 72.

1897. *Macoma inflata*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.

1898. *Tellina hippoidea*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.

1906. *Tellina (Tellinella) inflata* : Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 819.

1986. *Tellina (Arcopagia) inflata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1991. *Tellina (Arcopaginula) inflata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 355. Zool. Surv. India.

2000. *Tellina (Arcopagia) inflata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 255.

2006. *Arcopagia inflata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 58, pl. 25, fig. 1; pl. 27, fig. 1.

Distribution : India : Andaman and Nicobar Islands, Goa, Lakshadweep, Maharashtra.

Elsewhere : Indo-West Pacific.

Remarks : *A. inflata* (Gmelin) can be distinguished by its general shape, sculpture of the concentric striae obscurely decussated with fine radial striae.

For detail synonymy see Prashad (1932) and other details Dey (2006).

447. *Arcopagia pinguis* (Hanley)

1844. *Tellina pinguis* Hanley, *Proc. zool. Soc. London*, **1844** : 63.

1941. *Tellina pinguis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 59.

1968. *Tellina pinguis*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part-1 : 134.

1986. *Tellina (Arcopagia) pinguis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Tellina (Arcopagia) pinguis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 255.

2006. *Arcopagia pinguis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 59, pl. 25, fig. 2; pl. 27, fig. 2.

Distribution : India : Andaman and Nicobar Islands, Maharashtra, Kerala, Tamil Nadu.

Elsewhere : Cocos-Keeling, Terres straites, Philippiines.

Remarks : *A. pinguis* (Hanley) can be easily distinguished by its orbicular outline, ligament, pallial complex, pallial sinus and pallial line. It is very much allied with *A. casta* (Hanley) but differs from it by its more orbicular outline.

448. *Arcopagia pudica* (Hanley)

1844. *Tellina pudica* Hanley, *Proc. zool. Soc. London*, **1844** : 62.

1916. *Tellina innocens* Preston, *Rec. Indian Mus.*, **12**(2) : 96, fig. 11. Type locality : Phoenix Bay, Andaman Islands; Types, NCZ, ZSI.

2000. *Tellina (Arcopagia) pudica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 255.

2006. *Arcopagia pudica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 60, pl. 25, fig. 3.

Distribution : India : Andaman Islands.

Elsewhere : Gulf of Siam, Singapore, Philippines, Japan.

Remarks : *A. pudica* (Hanley) can be distinguished by its shape, sculpture, cardinal complex and lateral teeth.

449. *Arcopagia remies* (Linnaeus)

1758. *Tellina remies* Linnaeus, *Syst. Nat.*, ed. **10** : 676.

1895. *Tellina sulcata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1898. *Tellina (Arcopagia) remies*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 46.

1908. *Tellina jousseaumei* Preston, *Rec. Indian Mus.*, **2**(1) : 209, pl. 17, figs. 60. Type locality : Andaman Islands; Types : NZC, ZSI.

1986. *Tellina (Arcopagia) remies*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

1991. *Tellina (Arcopagia) remies*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 355. *Zool. Surv. India*.

2000. *Tellina (Arcopagia) remies*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 255.

2006. *Arcopagia remies*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 61, pl. 26, figs. 1 & 2; pl. 16, fig. 1, pl. 27, fig. 3.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Sri Lanka, Indonesia, New Guinea, Australia, Philippines.

Remarks : *T (A.) discus* Hanley, synonym of *A. remies* (Linnaeus). Sowerby (1866) treated these two species as different species by having wrinkles on the shell surface which are more and less continuous, and the posterior end acuminate and broadly truncated. Dey (2006) remarked that these characters are not enough for the separation of these two species and *T (A.) discus* treated as synonymy of *A. remies*.

For detail synonymy see Prashad (1932).

Genus ***Strigilla*** Turton, 1822

1822. *Strigilla* Turton, *Conch. Insu. Brit. Dithyra*, p. 117. Type species: *Tellina cararia* Linnaeus, 1758; Susequent designation, Gray, 1847.

Subgenus ***Aeretica*** Dall, 1900

1819. *Aeretica* Dall, *Trans. Wagner Free Inst. Sci. Philad.*, **3** : 1038. Type species : *Strigilla senegalensis* Hanley, 1844

450. ***Strigilla (Aeretica) splendida*** (Anton)

1838. *Tellina splendida* Anton, *Vers. Conch.*, p. 5.

1908. *Strigilla denestriata* Preston, *Rec. Indian Mus.*, **2**(1) : 210, pl. 14, figs. 20 & 20A. Type locality : Andaman Islands. Types : NZC, ZSI.

1983. *Strigilla (Aeretica) splendida*: Subba Rao, Dey and Barua, *Bull. zool. Surv. India*, **5**(1) : 50.

1986. *Strigilla (Aeretica) splendida*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

1987. *Strigilla splendida*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.

1991. *Strigilla (Aeretica) splendida*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 137. *Zool. Surv. India*.

1992. *Strigilla splendida*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 235. *Zool. Surv. India*.

1995. *Strigilla splendida*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 50. *Zool. Surv. India*.

2000. *Strigilla (Aeretica) splendida*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 253.

2001. *Strigilla (Aeretica) splendida*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 76. *Zool. Surv. India*.

2006. *Strigilla splendida*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 71.

2006. *Strigilla (Aeretica) splendida*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 63, pl. 28, figs. 1-3; pl. 4, figs. 4-6.

2008. *Strigilla splendida*: Dey, Rec. zool. Surv. India, Occ. Paper No., **286** : 19.

2008. *Strigilla splendida*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p29.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Orissa, West Bengal.

Elsewhere : Indonesia, Philippines.

Remarks : *S. splendida* (Anton) can be distinguished by its sculpture which has oblique scissulation on the posterior part but finely closed spaced concentric striae on the anterior end. The colour of the shell are highly variable white, rosy or yellowish.

Subfamily MACOMINAE

Genus *Macoma* Leach, 1819

1819. *Macoma* Leach in Ross, *Voy. Discov. Baffins Bay App.*, **2** : 52. Type species : *Macoma tenera* = *Tellina calcarea* Gmelin, 1791.

451. *Macoma blainvillei* (Reeve)

1897. *Tellina blainvillei*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.

Distribution : India : Andaman Islands.

Elsewhere : Pakistan coast.

Remarks : Found in muddy sand near rocks.

452. *Macoma nobilis* (Hanley)

1844. *Tellina nobilis* Hanley, *Proc. zool. Soc.*, London, **1844** : 165.

2006. *Macoma nobilis*: Dey, Rec. zool. Surv. India, Occ. Paper No., **249** : 17.

Distribution : India : Goa.

Elsewhere : Philippines.

Remarks : Status of this species remains undetermined due to non availability of specimens in National Zoological Collections.

453. *Macoma pellucida* (Philippi)

1847. *Tellina pellucida* Philippi, *Abblid. und Beschr.*, **1** : 72, *Tellina* tab. 1, fig. 4.

2006. *Macoma pellucida*: Dey, Rec. zool. Surv. India, Occ. Paper No., **249** : 17.

Distribution : India : Maharashtra.

Elsewhere : Philippines.

Remarks : Status of this species remains undetermined due to non availability of specimens in National Zoological Collections..

Subgenus *Pinguimacoma* Iredale, 1936

1936. *Pinguimacoma* Dall, *Proc. U.S. natl. Mus.*, **23** : 292. Type species : *Psammotaea candida* Lamarck, 1818; Original designation.

454. *Macoma (Pinguimacoma) albissima* (Smith)

1906. *Tellina albissima* Smith, *Ann. Mag. Nat. Hist.*, (7)**18** : 259. Type locality : Port Blair, Andamans.

2006. *Macoma (Pinguimacoma) albissima*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 65, pl. 29, fig. 1.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

Subgenus *Psammacoma* Dall, 1900

1900. *Psammacoma* Dall, *Proc. U.S. natl. Mus.*, **23** : 292. Type species : *Psammotaea candida* Lamarck, 1818; Original designation.

455. *Macoma (Psammacoma) birmanica* (Philippi)

1849. *Tellina birmanica* Philippi, *Abbil. Besch.*, **3** : 27, 55, no 1.

1987. *Macoma birmanica*: Misra and Barua, *J. Indian Soc. Coastal agric. Res.*, **5**(1) : 342.

1987. *Macoma birmanica*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.

1991. *Macoma (Psammacoma) birmanica*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 137. *Zool. Surv. India*.

1992. *Macoma birmanica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 236, pl. 22, figs. 6 & 7. *Zool. Surv. India*.

1995. *Macoma birmanica*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 65. *Zool. Surv. India*.

1995. *Macoma (Psammacoma) birmanica*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 423. *Zool. Surv. India*.

2001 *Macoma (Psammacoma) birmanica*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 76. *Zool. Surv. India*.

2006. *Macoma birmanica*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 72.

2006. *Macoma (Psammacoma) birmanica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 66, pl. 29, fig. 2; pl. 35, fig. 1.

2008. *Macoma birmanica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 20.

2008. *Macoma birmanica*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p29.

2008. *Macoma (Psammacoma) birmanica*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 160. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Orissa, West Bengal.

Elsewhere : Myanmar.

Remarks : *M. birmanica* (Philippi) can be distinguished by its general shape, cardinal complex, adductor muscle impression and shape of the pallial line and pallial sinus. This species is very common in the muddy areas of the estuaries. They found buried in the mud and extending their long siphon in the water.

456. *Macoma (Psammacoma) candida* (Lamarck)

1818. *Psammacoma candida* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 5 : 517.
 1986. *Macoma (Psammacoma) candida*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 2000. *Macoma (Psammacoma) candida*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 263.
 2006. *Macoma (Psammacoma) candida*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 67, pl. 29, fig. 3; pl. 35, fig. 2.
 2007. *Macoma (Psammacoma) candida*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 219. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : Philippines, China, Japan, Australia.

457. *Macoma (Psammacoma) truncata* (Jonas)

1844. *Tellina truncata* Jonas in Philippi, *Abbil. Besch.*, 1(3) : pl. 1, fig. 2.
 1906. *Macoma truncata*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 824.
 1906. *Macoma truncata*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.
 1906. *Macoma blairensis* Smith, *Ann. Mag. nat. Hist.*, (7)18 : 259. Type locality : Port Blair, Andaman Islands, 100 fathoms.
 1949. *Macoma truncata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 72, pl. 5, fig. 67.
 1986. *Macoma (Psammacoma) truncata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 1991. *Macoma (Psammacoma) truncata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 138. Zool. Surv. India.
 1992. *Macoma (Psammacoma) truncata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 236, pl. 22, figs. 2 & 4. Zool. Surv. India.
 1995. *Macoma (Psammacoma) truncata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1: 423. Zool. Surv. India.
 2000. *Macoma (Psammacoma) truncata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 263.
 2006. *Macoma (Psammacoma) truncata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 249 : 68, pl. 30, figs. 1 & 2; pl. 35, fig. 3.
 2008. *Macoma (Psammacoma) truncata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 160. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Red sea, Persian Gulf, Pakistan coast, Indonesia, Philippines.

Subgenus **Scissulina** Dall, 1924

1924. *Scissulina* Dall, *Proc. Biol. Soc. Wash.*, **37** : 88. Type species : *Tellina dispar* Conrad, 1837; Original designation.

458. *Macoma (Scissulina) dispar* (Conrad)

1837. *Tellina dispar* Conard, *J. Acad. Nat. Sci. Philad.*, **7** : 259.

1986. *Macoma (Scissulina) dispar*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Macoma (Scissulina) dispar*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 263.

2006. *Macoma (Scissulina) dispar*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 73, pl. 34, fig. 1; pl. 35, fig. 4.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh.

Elsewhere : South African coast, Malagasy, Mauritius, Seychelles, Maldives, Malaya, Indonesia, New Guinea, Australia, Philippines.

Remarks : *M. (S.) dispar* (Conard) has been for a long time incorrectly placed under genus *Tellina*. This species actually belongs to genus *Macoma* due to absence of lateral dentitions.

459. *Macoma (Scissulina) reticulata* (Sowerby)

1867. *Tellina reticulata* Sowerby in Reeve, *Conch. Icon.*, **17**, *Tellina* sp. no 252, pl. 43, fig. 252.

1986. *Macoma (Scissulina) reticulata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.177.

1991. *Macoma (Scissulina) reticulata*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 356. Zool. Surv. India.

2000. *Macoma (Scissulina) reticulata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 263.

2007 *Macoma (Scissulina) reticulata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 220. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Lakshadweep.

Elsewhere : Mauritius.

Remarks : This species is very much similar to *T. rhomboides* Quoy and Gaimard in general form but it can be distinguished by its minutely reticulated sculpture.

Genus ***Apolymetis*** Salisbury, 1929

1929. *Apolymetis* Salisbury, *Proc. malac. Soc. London*, **18** : 258. Type species : *Tellina meyeri* Philippi, 1846, ex Dunker MS

460. ***Apolymetis edentula*** (Spengler)

1782. *Tellina angulata* Spengler, *Nat. Selsk. Ser.*, **4** : 96.
 1895. *Tellina (Metis) angulata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
 1906. *Macoma edentula*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
 1941. *Tellina angulata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 60.
 1949. *Apolymetis edentula*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 71.
 1956. *Tellina angulata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 155, pl. 13, figs. 2a and 2b.
 1991. *Apolymetis edentula*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 138. *Zool. Surv. India*.
 1992. *Apolymetis edentula*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 237, pl. 22, fig. 5; pl. 23, fig. 1. *Zool. Surv. India*.
 2006. *Apolymetis edentula*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 75, pl. 36, fig. 1; pl. 38, fig. 4.
 2007. *Apolymetis edentula*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 220. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Malagassy, Red Sea, Sri Lanka, Thailand, Indonesia, Philippines, Fiji.

Remarks : This species has some similarities with *M. (P.) truncata* (Jonas) but differs from it in the shape, cardinal teeth, pallial line and pallial teeth.

461. ***Apolymetis papyracea*** (Gmelin)

1791. *Tellina papyracea* Gmelin, *Syst. Nat.*, ed. **13** : 3231.
 1941. *Tellina coarctata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1): 59, fig. 22h.
 1941. *Tellina papyracea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 60.
 1956. *Tellina coarctata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 154, pl. 13, figs. 1a and 1b.
 1965. *Tellina coarctata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 219, pl. 23, figs. 80a and 80b.
 1986. *Apolymetis papyracea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Apolymetis papyracea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 262.
2006. *Apolymetis papyracea*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 76, pl. 36, fig. 2; pl. 38, fig. 5.
2007. *Apolymetis papyracea*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 221. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Gulf of Aden, Persian Gulf, Pakistan coast, Sri Lanka, Malaya, Philippines.

Remarks : *A. papyracea* (Gmelin) can be distinguished by its irregular shape, sculpture with wide spaced growth lines and with close concentric ridges.

Genus *Gastrana* Schumacher, 1817

1817. *Gastrana* Schumacher, *Essai. Nouv. Syst. Vers. Test.*, p. 132. Type species : *Gastrana donacina* = *Tellina abildgaardiana* Spengler, 1798 = *Tellina matadoa* Gmelin, 1791 : Subsequent designation Bucquoy, Dautzenberg and Dollfus, 1898

462. *Gastrana polygona* (Gmelin)

1791. *Tellina polygona* Gmelin, *Syst. Nat.*, ed. **13** : 324
1906. *Gastrana polygona*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1941. *Tellina multangula*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 60.
1949. *Gastrana polygona*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 71, pl. 5, fig. 68.
1965. *Gastrana polygona*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 221, pl. 26, figs. 87a & 87b.
1986. *Gastrana polygona*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.177.
2000. *Gastrana polygona*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 262.
2006. *Gastrana polygona*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 77, pl. 37, fig. 1; pl. 38, fig. 6.
2007. *Gastrana polygona*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 221. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Pakistan coast.

Genus *Macalia* H. Adams, 1860

1860. *Macalia* H. Adams, *Proc. zool. Soc. London*, **1860** : 359. Type species : *Tellina bruguieri* Hanley, 1844.

463. *Macalia bruguieri* (Hanley)

1844. *Tellina bruguieri* Hanley, *Proc. zool. Soc. London*, **1844** : 142.
1895. *Tellina (Macalia) Bruguieri*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1906. *Macoma bruguieri*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 823.
1941. *Tellina bruguieri*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 61.
1949. *Macoma bruguieri*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 72, pl. 5, fig. 65.
1956. *Tellina bruguieri*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 156, pl. 13, figs. 4a and 4b.
1965. *Tellina bruguieri*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 221, pl. 25, figs. 85a & 85b.
1986. *Macoma (Macalia) bruguieri*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.
2000. *Macalia bruguieri*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 262.
2006. *Macalia bruguieri*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 79, pl. 37, figs. 2 & 3; pl. 38, fig. 3.

Distribution : India : Andaman and Nicobar Islands, Goa, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Persian Gulf, Myanmar, Philippines, China, Japan.

Remarks : The shell present in the National Zoological Collections ZSI differs from the types material NHM 1976155 of National History Museum, London in general shape. The shells from Andaman Islands are less broad than length which is not in the case of type specimen.

Genus *Psammotreta* Dall, 1900

1900. *Psammotreta* Dall, *Proc. U.S. natl. Mus.*, **23** : 292. Type species: *Tellina aurora* Hanley, 1844.

464. *Psammotreta ala* (Hanley)

1844. *Tellina ala* Hanley, *Proc. zool. Soc. London*, **1844** : 165.
1906. *Macoma ala*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 823.
1906. *Tellina (Homala) ala* :Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.
1941. *Tellina ala*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 61.
1949. *Macoma ala*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 72, pl. 5, fig. 65.
1956. *Tellina ala*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 155, pl. 13, figs. 3a and 3b.

1965. *Tellina ala*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 219, pl. 25, figs. 82a & 82b.
1986. *Macoma (Psammotreta) ala*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
1991. *Psammotreta ala*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 138; Zool. Surv. India.
2000. *Psammotreta ala*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 264.
2006. *Macoma (Psammotreta) ala*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 69, pl. 32, fig. 1; pl. 35, fig. 6.
2007. *Psammotreta ala*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 222. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Inhabitant of mud flats at low water. *M. (P.) ala* (Hanley) can be distinguished by its subtrigonal shape, sculpture of close concentric striae, and shape of pallial sinus and adductor muscles. Many worker treated this species under genus *Tellina* but absence of lateral teeth, is placed this species under genus *Macoma*.

465. *Psammotreta alba* (Quoy and Gaimard)

1835. *Tellina alba* Quoy and Gaimard, *Voy. Astro. Zool.*, **3** : 500, t. 81.
2006. *Macoma (Psammotreta) alba*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 70, pl. 32, figs. 2 & 3; pl. 38, fig. 1.

Distribution : India : Andaman and Nicobar Islands, South India.

Elsewhere : Indo-Pacific.

466. *Psammotreta micans* (Hanley)

1844. *Tellina micans* Hanley, *Proc. zool. Soc. London*, **1844** : 72.
1916. *Tellina micans* : Preston, *Rec. Indian Mus.*, **12**(2) : 96.
1916. *Tellina soror* Preston, *Rec. Indian Mus.*, **12**(2): 97, figs. 15 a and b. Type locality : Port Blair, Andamans; Types, NZC, ZSI.
1916. *Tellina pervitrea* Preston, *Rec. Indian Mus.*, **12**(2) : 96, fig. 13. Type locality : Semiramis Bay, Andaman Islands; Types, NCZ, ZSI.
1916. *Tellina phoenicensis* Preston, *Rec. Indian Mus.*, **12**(2) : 97, figs. 14 a and b. Type locality : Phoenix Bay, Andamans; Types, NZC, ZSI.
1916. *Tellina ennurensis*: Preston, *Rec. Indian Mus.*, **12** : 38, figs. 14, 14A. (Type locality : Ennur backwater, Madras; Types, NZC, ZSI.
1986. *Macoma (Psammotreta) micans*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Psammotreta micans*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 264.

2006. *Macoma (Psammotreta) micans*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **249** : 71, pl. 33, figs. 1 & 2; pl. 38, fig. 2.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Family SEMELIDAE

Genus *Semele* Schumacher, 1817

1817. *Semele* Schumacher, *Essai. Vers. Test.*, **53** : 165. Type species : *Semele reticulata* = *Tellina proficua* Pultency, 1799.

467. *Semele casta* A. Adams

1853. *Semele casta* A. Adams, *Proc. zool. Soc. London*, **1853** : 152.

1895. *Semele casta*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1956. *Semele casta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**, **2**(7) : 152, pl.22, figs. 10a and 10b.

Distribution : India : Tamil Nadu.

Elsewhere : Myanmar, Indonesia.

468. *Semele cordiformis* (Sowerby)

1833. *Amphidesma cordiformis* Sowerby, *Conch. Illustr.Cat. Rec. sp. of Amphidesma*, **21** : fig. 9.

1906. *Semele cordiformis*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1949. *Semele cordiformis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.

1951. *Semele cordiformis*: Hornel and Tomlin, *Check list of marine and fluviatile mollusca of Bombay and neighbourhood*, p. 92.

Distribution : India : Maharashtra.

Elsewhere : Indonesia.

469. *Semele crenulata* (Sowerby)

1833. *Amphidesma crenulata* Sowerby, *Conch.*, **33** : 16.

1895. *Semele crenulata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1956. *Semele crenulata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**, **2**(7) : 151, pl. 22, figs. 9a and 9b.

1965. *Semele crenulata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 219, pl. 23, figs. 78a and 78b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Indonesia.

470. *Semele sinensis* A. Adams

1853. *Semele sinensis* A. Adams, *Proc. zool. Soc. London*, 1853 : 95.

2007. *Semele sinensis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 223. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh.

Elsewhere : Arabian Gulf, Sri Lanka.

Genus *Abra* Lamarck, 1818

1818. *Abra* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 5 : 492. Type species: *Macra tenuis* Montagu, 1818; Subsequent designation, Herrmansen, 1846.

471. *Abra affinis* Smith

1889. *Abra affinis* Smith, *Ann. Mag. Nat. Hist.*, (6)16 : 10-11, pl. 2, figs. 4, 4a. Type locality : Off Travancore coast, 498 meters. Types : NZC, ZSI.

1904. *Abra affinis* Smith, *Ann. Mag. Nat. Hist.*, (7) 14 : 11.

1932. *Abra sibogai* Prashad, *Siboga Expedition, Sci. Rep. Mong.*, 53C : 200, pl. 16, figs.

2004. *Abra sibogai*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 3.

Distribution : India : Kerala.

Elsewhere : Indonesia.

472. *Abra maxima* (Sowerby)

1894. *Syndesmya maxima* Sowerby, *Proc. zool. Soc. London*, 1 : 199. Type locality : Bay of Bengal, 577 fathoms. Types : NZC, ZSI.

1894. *Abra maxima* : Smith, *Ann. Mag. Nat. Hist.*, 14 : 169.

1895. *Abra maxima* : Smith, *Ann. Mag. Nat. Hist.*, (6)16 : 10.

1904. *Abra maxima* : Smith, *Ann. Mag. Nat. Hist.*, (7)14 : 11.

1986. *Abra maxima*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Abra maxima*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 269.

2004. *Abra (Syndesmya) maxima*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 4.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Genus *Cumingia* Sowerby, 1833

1833. *Cumingia* Sowerby, *Proc. zool. Soc. London*, 1 : 34. Type species : *Cumingia lamellosa* Gray, 1847.

473. *Cumingia hinduorum* Preston

1915. *Cumingia hinduorum* Preston, *Rec. Indian Mus.*, **11** : 308, fig. 22. Type locality : Main Channel, Satpura Islands, Chilka Lake; types, NZC, ZSI.
1991. *Cumingia hinduorum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 143. Zool. Surv. India.
1995. *Cumingia hinduorum*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 425. Zool. Surv. India.

Distribution : India : Orissa.

Elsewhere : Known from the type locality only.

474. *Cumingia rostrata* A. Adams

1844. *Cumingia rostrata* A. Adams, *Proc. zool. Soc. London*, **1844** :
1986. *Cumingia rostrata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Cumingia rostrata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 269.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

475. *Cumingia striata* Rueppelei

1855. *Amphidesma striata* Rueppelei MS Reeve, *Conch. Icon.*, **8** : *Amphidesma* sp. no., 16, pl. 7, fig. 16.
1895. *Semele striata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1956. *Semele striata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 152, pl. 22, figs. 11a and 11b.
1965. *Semele striata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 219, pl. 24, figs. 79a and 79b.
1986. *Cumingia striata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Cumingia striata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 269.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Red sea.

Remarks : This species inhabitant of rocky shores in crevices.

Genus *Theora* H. and A. Adams, 1856

1856. *Theora* H. and A. Adams, *Gen. Rec. Moll.*, **2** : 369. Type species : *Neaera lata* Hinds, 1843; Subsequent designation, Stoliczka, 1871

476. *Theora hindsiana* Preston

1916. *Theora hindsiana* Preston, *Rec. Indian Mus.*, **12**(2) : 99, figs. 18, 18a. Type locality : Phoenix Bay, Andaman Islands, 1-3 fathoms; Tyeps : NZC, ZSI.
2000. *Theora hindsiana*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 268.
2004. *Theora hindsiana*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 71.

Distribution : India : Andaman Islands, Tamil Nadu.

Elsewhere : Red sea.

Remarks : This species allied to *T. opalina*, but differs from its by more tumid form, anteriorly excavated and posteriorly sloping dorsal margin, broader and more obtusely rounded anterior end and more rostrate posterior.

477. *Theora opalina* Hind,

1843. *Neaera opalina* Hinds, *Proc. zool. Soc. London*, **1843** : 78.
1906. *Syndesma opalina*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 825.
1914. *Theora opalina*: Preston, *Rec. Indian Mus.*, **10** : 310.
1915. *Theora opalina*: Preston, *Rec. Indian Mus.*, **11** : 308.
1916. *Theora opalina*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 357, fig. 6.
1916. *Theora opalina*: Preston, *Rec. Indian Mus.*, **12** : 38.
1942. *Theora opalina*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(2) : 57, fig. 22f.
1949. *Abra opalina*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.
1968. *Theora opalina*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 133.
1968. *Theora opalina*: Ray, *Indian Mus. Bull.*, **3**(1 & 2) : 31, Text fig. 33.
1983. *Theora opalina*: Subba Rao, Dey and Barua, *Bull. zool. Surv. India*, **5**(1) : 50.
1987. *Theora opalina*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Theora opalina*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 143. Zool. Surv. India.
1992. *Theora opalina*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 239, pl. 24, figs. 1 & 3. Zool. Surv. India.
1995. *Theora opalina*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 50. Zool. Surv. India.
1995. *Theora opalina*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 425. Zool. Surv. India.
2006. *Theora opalina*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, *Zool. Surv. India Kolkata*, p. 73.

2008. *Theora opalina*: Dey, Rec. zool. Surv. India, Occ. Paper No., 286 : 20.

2008. *Theora opalina*: Roy, Dey, Banerjee and Nandi, Zoological Research in Human Welfare, p. 29.

Distribution : India : Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Gulf of Oman, Pakistan coast, Indonesia, Philippines, Japan.

478. *Theora translucens* Preston

1916. *Theora translucens* Preston, Rec. Indian Mus., 12 : 39, figs. 16, 16a. Type locality : Ennur backwater, Madras. Types : NZC, ZSI.

2004. *Theora translucens*: Ramakrishna, Dey and Mitra, Rec. zool. Surv. India, Occ. Paper No., 228 : 71.

Distribution : India : Tamil Nadu.

Elsewhere : No subsequent records.

Family PSAMMOBIIDAE

Subfamily PSAMMOBIINAE

Genus *Gari* Schumacher, 1817

1817. *Gari* Schumacher, Essai Vers. Test., 44 : 131. Type species : *Gari vulgaris* Schumacher = *Solen amethystus* Wood, 1815.

Subgenus *Gari* s.st.

479. *Gari (Gari) elongata* (Lamarck)

1818. *Psammotaea elongata* Lamarck, Hist. nat. Anim. Sans. Vert., 5 : 515.

1986. *Sangunolaria (Psammotella) elongata*: Tikader, Daniel and Subba Rao, Sea shore animals of Andaman and Nicobar Islands, Zool. Surv. India, p. 177.

2000. *Gari elongata*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., 187 : 267.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

480. *Gari (Gari) maculosa* (Lamarck)

1818. *Psammobia maculosa* Lamarck, Hist. nat. Anim. Sans. Vert., 5 : 515.

1898. *Psammobia ornata*: Melvill and Sykes, Proc. malac. Soc. London, 3 : 48.

1991. *Gari (Gari) maculosa*: Rao, Rao and Maitra, Fauna of Orissa, State Fauna series, 1(3) : 141. Zool. Surv. India.

2000. *Gari maculosa*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., 187 : 267.

Distribution : India : Andaman Islands, Orissa.

Elsewhere : Indo-West Pacific.

Remarks : For detail synonymy see Prashad (1932).

481. *Gari (Gari) malaccana* Reeve

1906. *Gari malaccana*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 841.

1949. *Gari malaccana*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 70.

Distribution : India : Maharashtra.

Elsewhere : Indo-Pacific.

482. *Gari (Gari) obtusa* Preston

1908. *Psammobia obtusa* Preston, *Rec. Indian Mus.*, **2** : 208, pl. 16, fig. 41.

2000. *Gari obtusa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 267.

2004. *Psammobia obtusa*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 64.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

483. *Gari (Gari) suffusa* (Reeve)

1857. *Psammobia suffusa* Reeve, *Conch. Icon.*, **10** : *Psammobia* sp. no., 10, pl. 2, fig. 10.

1986. *Gari (Psammobia) suffusa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Gari suffusa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 267.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Malacca.

484. *Gari (Gari) tenuis* (Deshayes)

1854. *Psammobia tenuis* Deshayes, *Proc. zool. Soc. London*, **1854** : 320.

1986. *Gari (Psammobia) tenuis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 177.

2000. *Gari tenuis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 268.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Philippines.

Subgenus *Grammatomya* Dall, 1898

1898. *Grammatomya* Dall, *Proc. Acad. Nat. Sci. Philad.*, **50** : 57. Type species: *Psammobia squamosa* Lamarck, 1818.

485. *Gari (Grammatomya) pulcherrima* (Deshayes)

1855. *Psammobia pulcherrima* Deshayes, *Proc. zool. Soc. London*, **1855** : 325.

1898. *Psammobia pulcherrima*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 48.

1986. *Gari (Psammobia) pulcherrima*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Gari (Grammatomya) pulcherrima*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 268.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

486. *Gari (Grammatomya) squamosa* Lamarck

1818. *Psammobia squamosa* Lamarck, *Hist, nat. Anim. Sans. Vert.*, **5** : 514.
1972. *Psammobia rugulosa*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48(2)** : 287.
1986. *Gari (Grammatomya) squamosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Gari (Grammatomya) squamosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 268.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep.

Elsewhere : Indo-Pacific.

Subgenus *Psammobia* Lamarck, 1818

1818. *Psammobia* Lamarck, *Hist, nat. Anim. Sans. Vert.*, **5** : 511. Type species: *Tellina fervensis* Gmelin, 1791; Subsequent designation Children, 1822.

487. *Gari (Psammobia) mahosaensis* Preston

1915. *Psammobia mahosaensis* Preston, *Rec. Indian Mus.*, **11** : 303, figs. 16, 161a-b. Type locality : Southwards from Mahosa, Chilka Lake. Types : NZC, ZSI.
1916. *Psammobia mahosaensis*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 353,
1991. *Gari (Psammobia) mahosaensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 142. Zool. Surv. India.
1995. *Gari (Psammobia) mahosaensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 424. Zool. Surv. India.
2004. *Psammobia mahosaensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 64.

Distribution : India : Andaman Islands, Orissa.

Elsewhere : Indo-West Pacific.

488. *Gari (Psammobia) pulchella* Lamarck

1818. *Psammobia pulchella* Lamarck, *Hist, nat. Anim. Sans. Vert.*, **6** : 177.
1986. *Gari (Psammobia) pulchella*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

2000. *Gari pulchella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 267.

2007. *Gari (Psammobia) pulchella*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 224. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh;

Elsewhere : Philippines.

489. *Gari (Psammobia) weinkauffi* (Crosse)

1864. *Psammobia weinkauffi* Crosse, *J. Conchyliol.*, **12** : 17, pl. 2, fig. 4.

1932. *Gari (Gari) weinkauffi*: Prashad, *Siboga Exped.*, **32C** : 301.

2007. *Gari (Psammobia) weinkauffi*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 224. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Indo-Pacific.

Remarks : This species found on the muddy gravels in offshore region. For detail synonymy see Prashad (1932).

Genus *Asaphis* Modeer, 1793

1793. *Asaphis* Modeer, *Kengl. Vet. Acad. Mya. Handl.*, **14** : 176. Type species : *Venus deflorata* Linnaeus, 1758.

490. *Asaphis violascens* (Forskal)

1795. *Venus violascens* Forskal, *Desc. Anim.*, p. 31, sp. no. 28.

1898. *Asaphis deflorata*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.

1949. *Asaphis deflorata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 57.

1986. *Asaphis deflorata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1991. *Asaphis violascens*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 356. Zool. Surv. India.

2000. *Asaphis violascens*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 266.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Maharashtra.

Elsewhere : Widely distributed in Indo-Pacific.

491. *Asaphis rugosa* (Lamarck)

1801. *Capsa rugosa* Lamarck, *Syst. Anim.*, p. 125.

1906. *Asaphis (Capsa) rugosa*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

Distribution : India : Tamil Nadu.

Elsewhere : No records.

Subfamily SANGUINOLARIINAE

Genus *Sanguinolaria* Lamarck, 1799

1799. *Sanguinolaria* Lamarck, *Mem. Soc. H. N. Paris*, p. 84. Type species : *Solen sanguinolentus* Gmelin, 1791.

Subgenus *Soletellina* Blainville, 1824

1824. *Soletellina* Blainville, *Dict. Sci. nat.*, **32** : 350. Type species : *Sanguinolaria radiata* = *Solen diphos* Linnaeus, 1771.

492. *Sanguinolaria (Soletellina) atrata* (Deshayes)

1857. *Soletellina atrata* Deshayes in Reeve's, *Conch. Icon.*, **10** : *Soletellina*, sp. no., 14, pl. 3, fig. 14.
 1906. *Soletellina atrata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 842.
 1949. *Soletellina atrata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 70.

Distribution : India : Maharashtra.

Elsewhere : Philippines, Japan, West Indian Archipelago.

493. *Sanguinolaria (Soletellina) acuminata* (Deshayes)

1857. *Soletellina acuminata* Deshayes in Reeve's, *Conch. Icon.*, **10** : *Soletellina*, sp. no., 12, pt. 3, fig. 12.
 1987. *Sanguinolaria (Soletellina) acuminata*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8(1-3)** : 154.
 1991. *Sanguinolaria (Soletellina) acuminata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 142. *Zool. Surv. India*.
 1992. *Sanguinolaria (Soletellina) acuminata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 239, pl. 23, figs. 2 & 4. *Zool. Surv. India*.
 1995. *Sanguinolaria (Soletellina) acuminata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 64. *Zool. Surv. India*.
 1995. *Sanguinolaria (Soletellina) acuminata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 425. *Zool. Surv. India*.
 2001. *Sanguinolaria (Soletellina) acuminata*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 77. *Zool. Surv. India*.
 2007. *Sanguinolaria (Soletellina) acuminata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 225. *Zool. Surv. India*.
 2008. *Sanguinolaria (Soletellina) acuminata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 20.
 2008. *Sanguinolaria (Soletellina) acuminata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 162. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Pakistan, Bangladesh, Sri Lanka, Molucca, Myanmar, Philippines, China, Japan.

494. *Sanguinolaria (Soletellina) diphos* (Linnaeus)

1771. *Solen diphos* Linnaeus, *Mantissa Plantarum*, **2** : 544. Type locality : India.
1906. *Soletellina diphos*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 214.
1940. *Soletellina diphos*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 325.
1941. *Soletellina diphos*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 57, fig. 21f.
1949. *Soletellina diphos*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.
1965. *Soletellina diphos*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 219, pl. 23, figs. 77a & 22a.
1991. *Sanguinolaria (Soletellina) diphos*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 142. Zool. Surv. India.
2007. *Sanguinolaria diphos*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.

Distribution : India : Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Sri Lanka, Molucca, Malaysia, Philippines, China, Japan.

495. *Sanguinolaria (Soletellina) lunulata* (Deshayes)

1854. *Capsella lunulata* Deshayes, *Proc. zool. Soc. London*, **1854** : 349.
2007. *Sanguinolaria (Soletellina) lunulata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 225. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Philippines Islands.

Subfamily SOLECURTINAE

Genus *Solecurtus* Blainville, 1824

1824. *Solecurtis* Blainville, *Dict. Sci. nat.*, **32** : 351. Type species : *Solen strigilatus* Linnaeus, 1758 ; Subsequent designation, Deshayes, 1829.

496. *Solecurtis australis* (Dunker)

1861. *Cultellus australis* Dunker, *Proc. zool. Soc. London*, **1861** : 423.
2007. *Solecurtis australis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 226. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Australia.

Remarks : This species found in offshore region.

497. *Solecurtis philippinarum* Dunker

1861. *Mactra philippinarum* Dunker, *Proc. zool. Soc. London*, **1861** : 424.
1898. *Solecurtis (Macha) philippinarum*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.

2000. *Solecurtis philippinarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 269.

Distribution : India : Andaman Islands.

Elsewhere : Philippines.

Genus *Azorinus* Recluz, 1869

1869. *Azorinus* Recluz, *Act. Soc. Linn. Boreaux*, **27** : 67. Type species : *Solen coarctatus* Gmelin, 1791.

498. *Azorinus coarctatus* (Gmelin)

1791. *Solen coarctatus* Gmelin, *Syst. Nat.*, ed. **13** : 3227.

1898. *Solecurtis (Azor) coarctatus*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.

2000. *Azorinus coarctatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 270.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : This species found in the muddy sediments in offshore region.

499. *Azorinus emarginata* (Spengler)

1793. *Solen emarginatus* Spengler, *Skript. Nat. Selsk.*, **3** : 105.

1908. *Novaculina andamanensis* Preston, *Mem. Indian Mus.*, **2** : 209, pl. 16, fig. 40. Types : Andaman Islands; Types : NCZ, ZSI.

1941. *Tellina emarginata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 60, fig. 22j.

1949. *Angulus emarginata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.

1965. *Tellina emarginata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 221, pl. 24, figs. 84a and 84b.

2000. *Novaculina andamanensis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187**: 270.

2004. *Azorinus emarginata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 49.

2007. *Azorinus emarginata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 226. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Subfamily NOVACULININAE

Genus *Novaculina* Benson, 1830

1830. *Novaculina* Benson, *Gleaning in Science*, **2** : 63. Type species : *Novaculina gangetica* Benson, 1830.

500. *Novaculina gangetica* Benson

1830. *Novaculina gangetica* Benson, *Gleaning in Science*, p. 263.
1992. *Novaculina gangetica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 240, pl. 24, figs 5 & 7. Zool. Surv. India.
1995. *Novaculina gangetica*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 50. Zool. Surv. India.
2008. *Novaculina gangetica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 20.

Distribution : India : River Ganges.

Elsewhere : No records.

Family DONACIDAE

Genus *Donax* Linnaeus, 1758

1758. *Donax* Linnaeus, *Syst. Nat.* ed. **10** : 682. Type species : *Donax rugosa* Linnaeus, 1791; Subsequent designation, Schumacher, 1871.

Subgenus *Donax* s.st501. *Donax pulchella* Hanley

1843. *Donax pulchella* Hanley, *Proc. zool. Soc. London*, **1843** : 6.
1915. *Donax pulchella* Preston, *Rec. Indian Mus.*, **11** : 303.
1941. *Donax spiculum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 56.
1968. *Donax spiculum*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 133.
1986. *Donax (Donax) pulchella*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **91** : 4, figs 1-3, 14-19.
1991. *Donax pulchella*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 139. Zool. Surv. India.
1995. *Donax (Donax) pulchella*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 424. Zool. Surv. India.
2007. *Donax pulchella*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 227. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Karnataka, Kerala, Orissa, Puducherry, Tamil Nadu.

Elsewhere : Pakistan coast, Myanmar.

502. *Donax dussumieri* Bertin

1881. *Donax dussumieri* Bertin, *Arch. Mus.*, (2)4 : 395, pl. 3, fig. 2-7.

1940. *Donax dussumieri*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.

Distribution : India : Kerala, Tamil Nadu.

Elsewhere : No records.

Subgenus *Hecuba* Schumacher, 1817

1817. *Hecuba* Schumacher, *Eassai Vers. Test.*, 52 : 157. Type species : *Venus scortum* Linnaeus, 1758; Subsequent designation, Herrmannse, 1847.

503. *Donax (Hecuba) scortum* (Linnaeus)

1758. *Venus scortum* Linnaeus, *Syst. Nat.*, ed. 10 : 686.

1895. *Donax scortum*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.

1906. *Donax (Hecuba) scortum*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 825.

1906. *Donax scortum* :Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.

1940. *Donax scortum*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.

1941. *Donax scortum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1): 56.

1949. *Donax scortum*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 57.

1956. *Donax scortum*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, 54(3) : 703.

1956. *Donax scortum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 146, pl. 22, figs. 3a and 3b.

1986. *Donax (Hecuba) scortum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 7, figs 4, 20-21.

1991. *Donax (Hecuba) scortum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3): 140. *Zool. Surv. India*.

1992. *Donax (Hecuba) scortum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 237, pl. 23, figs. 3 & 5. *Zool. Surv. India*.

1995. *Donax (Hecuba) scortum*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 424. *Zool. Surv. India*.

1998. *Donax scortum*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 100, pl. 13, fig. 19.

2001 *Donax (Hecuba) scortum*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, 4 : 77. *Zool. Surv. India*.

2007. *Donax (Hecuba) scortum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 228. *Zool. Surv. India*.

2008. *Donax (Hecuba) scortum*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 161. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Republic of South Africa, Sri Lanka, Maynmar, China.

Subgenus *Latona* Schumacher, 1817

1817. *Latona* Schumacher, *Essai Nov. Syst.*, p. 156. Type species : *Donax cuneatus* Linnaeus, 1758.

504. *Donax (Latona) cuneatus* Linnaeus

1758. *Donax cuneatus* Linnaeus, *Syst. Nat.*, ed. 10 : 683.
 1895. *Donax cuneatus*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
 1898. *Tellina (Latona) cuneatus*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.
 1908. *Donax tiesenhauseni* Preston, *Rec. Indian Mus.*, 2 : 208, pl. 16, fig. 56. Type locality : Andaman Islands; Types, NZC, ZSI
 1940. *Donax cuneatus*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.
 1941. *Donax cuneatus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 56, fig. 21f.
 1949. *Donax cuneatus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 57.
 1956. *Donax cuneatus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 145, pl. 22, figs. 2a and 2b.
 1965. *Donax cuneatus*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 218, pl. 23, figs. 75a & 75b.
 1986. *Donax (Latona) cuneatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 11, figs. 5-6, 22, 23, 27, 36.
 1986. *Donax cuneatus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
 2000. *Donax (Latona) cuneatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 264.
 2004. *Donax tiesenhauseni*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 28.
 2007. *Donax (Latona) cuneatus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 229. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Puducherry, Tamil Nadu.

Elsewhere : Sri Lanka, New Caledonia.

505. *Donax (Latona) faba* Schumacher

1788. *Donax faba* Schumacher, *Conch. Cab. Nomen. Reg.*, 1788 : 30.
 1895. *Donax faba*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
 1956. *Donax faba*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 147, pl. 22, figs. 4a to c.
 1986. *Donax (Latona) faba*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 14, figs 7, 32 & 33.
 1986. *Donax (Latona) faba*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.

1991. *Donax (Latona) faba*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 354. Zool. Surv. India.
1998. *Donax faba*: Apte, *Indian Shells, Bombay nat. Hist. Soc.*, p. 101, pl. 13, fig. 21.
2000. *Donax (Latona) faba*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 265.
2008. *Donax (Latona) faba*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 161. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Lakshadweep, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

506. *Donax (Latona) incarnatus* Gmelin

1791. *Donax incarnatus* Gmelin, *Syst. Nat.*, ed. **13** : 3265.
1895. *Donax Dysoni*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1906. *Donax dysoni*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 825.
1906. *Donax incarnatus*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1908. *Donax trigonalis* Preston, *Rec. Indian Mus.*, **2** : 208, pl. 16, fig. 57. Type locality : Andaman Islands. Types : NZC, ZSI.
1949. *Donax incarnatus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 57.
1956. *Donax incarnatus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt.7 : 148, pl.22, figs. 6a to d.
1986. *Donax (Latona) incarnatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **91** : 16, figs. 8, 97, 34, 35.
1986. *Donax (Latona) incarnatus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
1987. *Donax incarnatus*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Donax (Latona) incarnatus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3): 140. Zool. Surv. India.
1992. *Donax (Latona) incarnatus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 238, pl. 23, figs. 6 & 7. Zool. Surv. India.
1995. *Donax incarnatus*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 50. Zool. Surv. India.
1998. *Donax incarnatus*: Apte, *Indian Shells, Bombay nat. Hist. Soc.*, p. 101, pl. 13, fig. 22.
2000. *Donax (Latona) incarnatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 265.
2007. *Donax (Latona) incarnatus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 229. Zool. Surv. India.
2008. *Donax incarnatus*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p29.

2008. *Donax (Latona) incarnatus*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 162. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Malacca, Maynmar, Thailand, Indonesia.

507. *Donax (Latona) lubricus* Hanley

1845. *Donax lubricus* Hanley, *Proc. zool. Soc. London*, 1845 : 17.

1956. *Donax lubricus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 148, pl. 22, fig. 5.

1986. *Donax (Latona) lubricus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 19, figs. 10, 36-39.

1991. *Donax (Latona) lubricus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 140. Zool. Surv. India.

Distribution : India : Andaman Islands, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

508. *Donax (Latona) spinosus* Gmelin

1845. *Donax spinosus* Gmelin, *Syst. Nat.*, ed. 13 : 3265.

1895. *Donax paxillus*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.

1941. *Donax spinosus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 56.

1956. *Donax spinosus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 149, pl. 22, figs. 7a and 7b.

1986. *Donax (Latona) spinosus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 20.

Distribution : India : Tamil Nadu.

Elsewhere : Sri Lanka.

Subgenus *Paradonax* Cossman, 1910

1910. *Paradonax* Cossman, *Act. Soc. Linn. Bordeaux*, 64 : 307. Type species : *Donax transverses* Deshayes, 1830; Original designation.

509. *Donax (Paradonax) aperitus* Melvill

1897. *Donax aperitus* Melvill, *Mem. Proc. Manchestr Lit. Phil. Soc.*, 41(7) : 24, pl. 7, fig. 33.

1941. *Donax aperitus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 57.

1956. *Donax aperitus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 150, pl. 22, fig. 8.

1968. *Donax (Serrula) aperitus*: Ray, *Indian Mus. Bull.*, 3(1 & 2) : 31, Text fig. 32.

1986. *Donax (Paradonax) aperitus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 22, figs. 11, 28-31.

1991. *Donax (Paradonax) aperitus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 141. Zool. Surv. India.

Distribution : India : Orissa, Tamil Nadu.

Elsewhere : Iran, Pakistan coast.

510. *Donax (Paradonax) nuxfagus* Preston

1908. *Donax nuxfagus* Preston, *Rec. Indian Mus.*, 2 : 207, pl. 17, fig. 57. Type locality : Andaman Islands; Types, NZC, ZSI.
1986. *Donax (Paradonax) nuxfagus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 24, figs. 12, 40, 41.
1986. *Donax (Paradonax) nuxfagus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Donax (Paradonax) nuxfagus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 265.
2004. *Donax nuxfagus*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 28.

Distribution: India : Andaman and Nicobar Islands.

Elsewhere : No records.

Subgenus *Plebidonax* Iredale, 1930

1908. *Plebidonax* Iredale, *Rec. Australian Mus.*, 17 : 398. Type species : *Donax deltoides* Lamarck, 1818; Original designation.

511. *Donax (Plebidonax) compressus* Lamarck

1835. *Donax compressus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 6 : 240.
1898. *Donax (Latona) compressus*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.
1986. *Donax (Paradonax) compressus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 91 : 26, figs. 13, 24, 25.
1986. *Donax (Plebidonax) compressus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 177.
2000. *Donax (Plebidonax) compressus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 266.

Distribution: India: Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Malacca, Maynmar, Thailand, Indonesia.

Superfamily DREISSENOIDEA

Family DRESSENIDAE

Genus *Mytilopsis* Conrad, 1758

1858. *Mytilopsis* Conrad, *Proc. Acad. nat. Sci. Philad.*, 9 : 167. Type species : *Mytilus leucophaeatus* Conrad, 1831; Subsequent designation, Dall, 1898.

512. *Mytilopsis adamsi* Morrison

2007. *Mytilopsis adamsi*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 230. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Singapore.

Superfamily ARCTICOIDEA

It is a diverse superfamily with three families of which the family Trapeziidae present form Indian waters. These are elongate, modioliform shells closely resembles with epifaunal of Carditoidea, such as *Cardita*, *Begonia* etc. The hinge is well developed with two cardinal teeth in each valve and anterior and posterior laterals; ligament external; pallial line entire or has a shallow sinus.

The Trapeziidae are commonly byssal nestling forms, living in crevices or beneath coral debris and rocks. *Copralliophaga* is more specific, inhabiting empty burrows made by date mussels and flask shells.

Family TRAPEZIIDAE**Genus *Trapezium* Megerle, 1811**

1811. *Trapezium* Megerle, *Mag. Ges. Nat. Fr. Berlin*, 5 : 68. Type species: *Trapezium perfectum* = *Chama oblonga* Linnaeus, 1758; Subsequent designation, Stewart, 1930

Subgenus *Trapezium* s.st**513. *Trapezium angulata* (Lamarck)**

1898. *Libitina angulata*: Melvill and Skyes, *Proc. malac. Soc. London*, 3 : 48.

Distribution : India : Andaman islands.

Elsewhere : No records.

514. *Trapezium (Trapezium) bicarinatum* (Schumacher)

1817. *Libitina bicarinatum* Schumacher, *Eassai Nouv. Syst. Vers. Test.*, 168 : pl. 17, figs. 2 a & b.

2000. *Trapezium (Trapezium) bicarinatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 270.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Subgenus **Neotrapezium** Habe, 1951

1951. *Neotrapezium* Habe, *Genera Japan Shells*, 1 : 119. Type species : *Cardita sublaevigata* Lamarck, 1819.

515. **Trapezium (Neotrapezium) sublaevigatum** (Lamarck)

1819. *Cardita sublaevigata* Lamarck, *Hist. nat Anim. Sans. Vert.*, 6 : 26.
1898. *Libitina vellicata* : *Proc. malac. Soc. London*, 3 : 48.
1906. *Libitina (Cypricardia) vellicata*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.
1941. *Libitina vellicata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 44, fig. 18.
1949. *Trapezium vellicatum* : Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 63, pl. 3, fig. 25.
1965. *Libitina vellicata*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 99, pl. 11, figs. 399a and 399b.
1986. *Trapezium (Neotrapezium) sublaevigatum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1991. *Trapezium (Neotrapezium) sublaevigatum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 144. Zool. Surv. India.
1992. *Trapezium sublaevigatum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 241, pl. 24, figs 6 & 8. Zool. Surv. India.
1995. *Trapezium sublaevigatum*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 65. Zool. Surv. India.
1995. *Trapezium (Neotrapezium) sublaevigatum*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 426. Zool. Surv. India.
2000. *Trapezium (Neotrapezium) sublaevigatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 271.
2006. *Trapezium sublaevigatum*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans*, Zool. Surv. India Kolkata, p. 74.
2007. *Trapezium (Neotrapezium) sublaevigatum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 231. Zool. Surv. India.
2008. *Trapezium sublaevigatum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 20.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Red Sea, Persian Gulf, Pakistan coast, Myanmar, Singapore, Philippines, Japan.

Remarks : This species inhabitant of intertidal region, attached to the rocks in the vicinity of mangroves.

Genus **Coralliophaga** Blainville, 1824

1824. *Coralliophaga* Blainville, *Dict. Sci. Nat.*, 32 : 343. Type species : *Chama coralliophaga* Gmelin, 1791.

516. *Coralliophaga coralliophaga* (Gmelin)

1791. *Chama coralliophaga* Gmelin, *Syst. Nat.*, ed. 13 :

2000. *Coralliophaga coralliophaga*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 271.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : This species nestling in empty burrows of date mussels and flask shells.

Superfamily GLOSSOIDEA

The superfamily Glossoidea represented by two families Glossidae and Vesicomidae are present from India. They are closely allied to the superfamily Arcticoidea, by hinge structure. The Glossidae found in offshore water whereas the Vesicomidae are reported from deep water. Glossidae have inflated shells, umbones are spirally twisted, in fauna, shallow burrowers, live in soft offshore sediments.

Family GLOSSIDAE**Genus *Meiocardia* H. and A. Adams, 1857**

1857. *Meiocardia* H. and A. Adams, *Gen. Rec. Moll.*, 2 : 461. Type species : *Meiocardia moltkiana* Spengler=*Chama moltkiana* Gmelin, 1791; Subsequent designation, Stoliczka, 1870

517. *Meiocardia lamarckii* (Reeve)

1845. *Isocardia lamarckii* Reeve, *Conch. Icon.*, 2 : *Isocardia* sp. no., 5, pl. 1, fig. 5.

2007. *Meiocardia lamarckii*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 231. *Zool. Surv. India*.

Distribution: India: Andhra Pradesh.

Elsewhere : Japan, China.

518. *Meiocardia moltkiana* (Gmelin)

1791. *Isocardia moltkiana* Gmelin, *Syst. Nat.*, ed. 13 : 3303.

2000. *Meiocardia moltkiana*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 272.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Family VESICOMYIDAE**Genus *Vesicomya* Dall, 1886**

1886. *Vesicomya* Dall, *Bull. Mus. Comp. zool. Harvard*, 12 : 212. Type species : *Callocardia atlantica* Smith, 1885; Original designation.

519. *Vesicomya brevis* Smith

1906. *Vesicomya brevis* Smith, *Ann. Mag. nat. Hist.* London, (7)18 : 261. Type locality : Malabar coast, 295-360 fathoms.
2004. *Vesicomya brevis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 85.

Distribution : India : Kerala.

Elsewhere : No subsequent records.

520. *Vesicomya cretacea*⁴ E.A. Smith

1906. *Vesicomya cretacea* E.A. Smith, *Ann. Mag. nat. Hist.* London, (7)18 : 261. Type locality : Bay of Bengal, 419 fathoms. Types : NZC, ZSI.
2004. *Vesicomya cretacea*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 85.

Distribution : India : Bay of Bengal.

Elsewhere : No subsequent records.

521. *Vesicomya indica* E.A. Smith

1904. *Vesicomya indica* E.A. Smith, *Ann. Mag. nat. Hist.* London, (7)14 : 9. Type locality : Travancore.
1986. *Vesicomya indica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
2000. *Vesicomya indica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 272.

Distribution: India: Andaman and Nicobar Islands, Kerala, Lakshadweep.

Elsewhere : Indo-West pacific.

Superfamily CORBICULOIDEA

Family CORBICULIDAE

Genus *Polymesoda* Rafinesque, 1820

1820. *Polymesoda* Rafinesque: *Ann. Gen. Sci. Phys. (Bruxelles)*, 5 : 319. Type species : *Cyclas caroliniana* Bosc, 1801; Original designation.

522. *Polymesoda bengalensis* (Lamarck)

1818. *Cyrena bengalensis* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 5 : 564.
1992. *Polymesoda (Geloia) bengalensis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 240. Zool. Surv. India.
1995. *Polymesoda (Geloia) bengalensis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 50. Zool. Surv. India.

2006. *Polymesoda bengalensis*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, *Zool. Surv. India Kolkata*, p. 74.

2008. *Polymesoda (Geloina) bengalensis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 20.

2008. *Polymesoda (Geloina) bengalensis*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p29.

Distribution : India : Andaman and Nicobar Islands, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus *Batissa* Gray, 1853

1853. *Batissa* Gray, *Ann. Mag. nat. Hist.*, (2)11 : 38. Type species: *Cyrena tenebrosa* Hinds, 1842; Subsequent designation, Stoliczka, 1853.

523. *Batissa similis* Prime

1908. *Batissa cancellata* Preston, *Rec. Indian Mus.*, **2** : 207, pl. 16, fig. 39.

2004. *Batissa similis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 11.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Superfamily VENEROIDEA

The superfamily Veneroidea includes five families of which three are represented from India. They are commonly known as venus clams are familiar as food items in most part of the world. Shells are oval to triangular, tumid and with solid, often thick shells, with well developed escutcheon. Ligament external and set on a prominent nymph. Hinge with strong well developed teeth; comprising of three cardinals in each valve with many anterior laterals. Sculpture generally with concentric striae, but many of them with radial striae also, resulting decussate, reticulate and cancellate forms. Adductor muscles scars are equal or subequal in size; pallial sinus variable, from absent to reaching beyond the mid line; inner margins may be smooth or denticulate.

Venus clams are commonly intertidal and inshore faunas, habit a wide variety of substrates often an important fauna of sand flats and the more consolidated sediment of offshore. They possess a large hatchet shaped foot and efficient burrower with very short to moderately long siphons. A few of them occurs on hard substratum adapting a byssate habit.

The Petricolidae are major exception to the typical venerid plan. Shells are ovate to elongate or distorted, having two cardinal teeth in the right valve and their sculpture is primarily radial. Most of them are burrower, buried in corals or calcareous rocks with the help of acid secretion.

Family VENERIDAE
Subfamily VENERINAE
Genus **Venus** Linnaeus, 1758

1758. *Venus* Linnaeus, *Syst. Nat.*, ed. 10 : 684. Type species : *Venus verrucosa* Linnaeus, 1758 ; Subsequent designation, Gray, 1847.

524. ***Venus chemnitzii*** Hanley

1844. *Venus chemnitzii* Hanley, *Proc. zool. Soc. London*, 1844 : 169.
1956. *Venus chemnitzii*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 121, pl. 18, figs. 2 a and 2b.
1965. *Venus chemnitzii*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 213, pl. 18, figs. 59a and 59b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

525. ***Venus juvenilis*** Smith

1895. *Venus juvenilis* Smith, *Ann. Mag. nat. Hist.*, (6)16 : 9, pl. 2, figs. 2, 2a. Type locality : Off Coromondel coast, 142-400 fathoms. Types : NZC, ZSI.
2004. *Venus juvenilis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 84.

Distribution : India : Tamil Nadu.

Elsewhere : No records.

Subgenus ***Antigona*** Schumacher, 1817

1817. *Antigona* Schumacher, *Eassai Nouv. Syst. Vers. Test.*, p. 154. Type species : *A. lamellaris* Schumacher, 1817 ; Original designation.

526. ***Venus (Antigona) lamellaris*** Schumacher

1817. *Antigona lamellaris* Schumacher, *Eassai Nouv. Syst. Vers. Test.*, p. 155, pl. 14, figs. 2, 2a.
1895. *Venus lamellaris*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1895. *Venus Lamarcki*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1895. *Isocardia Lamarcki*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1941. *Venus lamellaris*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 51.
1956. *Antigona lamellaris*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 123, pl. 18, figs. 9a and 9b.
1986. *Venus (Antigona) lamellaris*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
2000. *Venus (Antigona) lamellaris*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 273.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : This species common in offshore region. For detail synonymy see Prashad (1932).

Genus *Periglypta* Jukes-Browne, 1914

1914. *Periglypta* Jukes-Browne, *Proc. malac. Soc. London*, **11** : 72. Type species : *Venus puerpera* Linnaeus, 1758; Original designation.

527. *Periglypta crispata* (Deshayes)

1853. *Venus crispata* Deshayes, *Proc. zool. Soc. London*, **1853** : 2.

2007. *Periglypta crispata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 232. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh.

Elsewhere : Malagasy, Mauritius, Scyelles, Myanmar.

528. *Periglypta fischeri* (Recluz)

1852. *Venus fischeri* Recluz, *J. Conchyl.*, **3** : 411, pl. 12, fig. 9.

1941. *Periglypta fischeri*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 107.

1956. *Periglypta fischeri*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 126, pl. 19, figs. 4a -c.

1998. *Periglypta fischeri*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 98, pl. 13, fig. 11.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

529. *Periglypta puerpera* (Linnaeus)

1771. *Venus puerpera* Linnaeus, *Mantissa*, **2** : 545.

1986. *Periglypta puerpera*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.

2000. *Periglypta puerpera*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 273.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : Found in sandy gravels, lower shore and below. For detail synonymy see Prashad (1932).

530. *Periglypta reticulata* (Linnaeus)

1758. *Venus reticulata* Linnaeus, *Syst. Nat.*, ed. **10** : 687.

1895. *Venus reticulata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.

1921. *Venus reticulata*: Hornell, *Madras Fish. Bull.*, **14** : 184.
 1956. *Venus reticulata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 120, pl. 18, figs. 1a and 1b.
 1965. *Venus reticulata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 213, pl. 19, figs. 60a and 60b.
 1972. *Venus reticulata*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 288.
 1976. *Venus reticulata*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 235.
 1986 *Periglypta reticulata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 1998. *Venus reticulata*: Apte, *Indian Shells, Bombay nat. Hist. Soc.*, p. 98, pl. 13, fig. 10.
 2000. *Periglypta reticulata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 273.

Distribution : India : Andaman and Nicobar Islands, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus *Ventricolaria* Sacco, 1900

1900. *Ventricolaria* Sacco, *Moll. Terr. Terz. Piemonte e Linguria*, **28** : 31. Type species: *Venus rigida* Dillwyn, 1817; Original designation.

531. *Ventricolaria toreuma* Gould

1851. *Ventricolaria toreuma* Gould, *Proc. Boston Soc. Nat. Hist.*, **3** : 277.
 1895. *Venus toreuma*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
 1972. *Venus toreuma*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, **48**(2) : 288.
 1976. *Venus toreuma*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 235.
 1986 *Venus toreuma*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
 2000. *Ventricolaria toreuma*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187**: 272.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Subfamily CIRCINAE

Genus *Circe* Schumacher, 1817

1817. *Circe* Schumacher, *Essai, Vers. Test.*, **50** : 152. Type species : *Circe violacea* Schumacher = *Venus scripta* Linnaeus, 1758.

532. *Circe scripta* Linnaeus

1758. *Circe scripta* Linnaeus, *Syst. Nat.*, ed. 10 : 689.
1895. *Circe scripta*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
1906. *Circe scripta*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 831.
1921. *Circe scripta*: Hornell, *Madras Fish. Bull.*, 14 : 184.
1941. *Circe scripta*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 48, fig. 20a.
1956. *Circe scripta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 105, pl. 15, figs. 2a and 2b.
1965. *Circe scripta*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(1) : 213, pl. 17, figs. 58a & 58b.
1968. *Circe scripta*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 132.
1972. *Circe scirpta*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 287.
1986 *Circe scirpta*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
2000. *Circe scripta*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 274.
2007. *Circe scripta*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 232. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Kerala, Lakshadweep, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus *Gafrarium* Roeding, 1798

1798. *Gafrarium* Roeding, *Mus. Bolten.*, 2 : 176. Type species : *Venus pectinata* Linnaeus; Subsequent designation, Dall, 1902.

533. *Gafrarium divaricatum* (Gmelin)

1791. *Venus divaricatum* Gmelin, *Syst. Nat.*, ed. 13 : 3277.
1895. *Circe (Crista) divaricatum*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
1898. *Crista divaricatum*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.
1906. *Circe divaricata*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.
1941. *Gafrarium divaricatum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 48, fig. 20b.
1948. *Gafrarium (Gafrarium) divaricata*: Ray, *Rec. Indian Mus.*, 46 : 118.
1949. *Gafrarium divaricatum*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
1956. *Gafrarium divaricatum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 110, pl. 16, figs. 1a and 1b.

1965. *Gafrarium divaricatum*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 214, pl. 19, figs. 62a & 62b.
- 1986 *Gafrarium divaricatum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1998. *Gafrarium divaricata*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 96, pl. 13, fig. 1.
2000. *Gafrarium divaricatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 274.
2007. *Gafrarium divaricatum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 233. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

534. *Gafrarium pectinatum* (Linnaeus)

1798. *Venus pectinatum* Linnaeus, *Syst. Nat.*, ed. **10** : 689.
1817. *Venus dispar*: Dillwyn, *Des. Cat. Rec. Shells*, **1** : 199.
1895. *Circe pectinatum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1895. *Circe dispar*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1897. *Gafrarium pectinatum*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.
1956. *Gafrarium dispar*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 109, pl. 15, figs. 5a and 5b.
1956. *Gafrarium pectinatum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 108, pl. 15, figs. 4a and 4b.
1976. *Gafrarium pectinatum*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 236.
- 1986 *Gafrarium pectinatum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1991. *Gafrarium pectinatum*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 357. Zool. Surv. India.
1991. *Gafrarium pectinatum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 145; Zool. Surv. India.
1992. *Gafrarium pectinatum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 242. Zool. Surv. India.
1995. *Gafrarium pectinatum*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary, Eustarine Ecosystem Series*, **2** : 50. Zool. Surv. India.
2000. *Gafrarium pectinatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 274.
2007. *Gafrarium pectinatum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 234. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Karnataka, Kerala, Lakshadweep, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

535. *Gafrarium tumidum* Roeding

1798. *Gafrarium tumidum* Roeding, *Mus. Bolten.*, p. 176.
1895. *Circe (Crista) gibba*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1898. *Crista gibba*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
1921. *Circe gibba*: Hornell, *Madras Fish. Bull.*, **14** : 184.
1949. *Dosinia gibba*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Gafrarium tumidum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 108, pl. 15, figs. 5a and 5b.
1965. *Gafrarium tumidum*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 214, pl. 20, figs. 63a & 63b.
1986 *Gafrarium tumidum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
2000. *Gafrarium tumidum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 275.
2007. *Gafrarium tumidum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 234. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Subfamily SUNETTINAE

Genus *Sunetta* Link, 1807

1807. *Sunetta* Link, *Beschr. Nat. Samml. Uni. Rostock*, (**3**) : 148. Type species : *Donax scripta* Linnaeus; Subsequent designation, Dall, 1902.

536. *Sunetta donacina* (Gmelin)

1791. *Venus donacina* Gmelin, *Syst. Nat.*, ed. **13** : 3295.
1941. *Sunetta donacina*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50.
1949. *Sunetta donacina*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Sunetta donacina*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.
1976. *Sunetta donacina*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 239.

1991. *Sunetta donacina*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 146. Zool. Surv. India.
1995. *Sunetta donacina*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 428. Zool. Surv. India.
1998. *Sunetta donacina*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 97, pl. 13, fig. 4.
2007. *Sunetta donacina*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 235. Zool. Surv. India.
2007. *Sunetta kurachensis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 236. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Karnataka, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Persian Gulf, Pakistan Coast, Sri Lanka, Myanmar.

537. *Sunetta effosa* (Hanley)

1842. *Cytherea effosa* Hanley, *Proc. zool. Soc. London*, 10 : 123.
1895. *Venus (Sunetta) effosa*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1906. *Sunetta effosa*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 831.
1906. *Moroe effosa*: Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.
1941. *Sunetta effosa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 50.
1949. *Sunetta effosa*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
1951. *Sunetta effosa* : Hornell and Tomlin, *Check list of marine and fluviatile mollusca of Bombay and neighbourhood*, p. 91.
1991. *Sunetta effosa*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 147. Zool. Surv. India.
1998. *Sunetta effosa*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 97, pl. 13, fig. 5.
2007. *Sunetta effosa*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 235. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Persian Gulf, Red sea, Gulf of Aden, Myanmar, Malacca, Philippines.

538. *Sunetta meroe* (Linnaeus)

1758. *Venus meroe* Linnaeus, *Syst. Nat.*, ed. 10 : 687.
1914. *Meroe chilkaensis* Preston, *Rec. Indian Mus.*, 10 : 304, figs 13-13a. Type locality : Satpara, Chilka lake, Orissa. Types : NZC, ZSI.
1941. *Sunetta meroe*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 50, fig. 20e.

1949. *Sunetta meroe*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
1976. *Sunetta meroe*: Fischer-Piette, *Rec. zool. Surv. India*, 70 : 238.
1991. *Sunetta meroe*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 147. Zool. Surv. India.
1995. *Sunetta meroe*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 428. Zool. Surv. India.
2007. *Sunetta meroe*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 236. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Kerala, Maharashtra, Orissa, Puducherry, Tamil Nadu.

Elsewhere : Indian Ocean.

539. *Sunetta perexcavata* Fulton

2007. *Sunetta perexcavata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 237. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : No records.

540. *Sunetta scripta* (Linnaeus)

1758. *Donax scripta* Linnaeus, *Syst. Nat.*, ed. 10 : 683.
1895. *Venus (Sunetta) scripta*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1914. *Meroe satparaensis* Preston, *Rec. Indian Mus.*, 10 : 305-306, figs. 12-12a. Type locality : Satpara, Chilka lake, Orissa; Types : NZC, ZSI.
1940. *Sunetta scripta*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 325.
1941. *Sunetta scripta*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 50.
1949. *Sunetta scripta*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
1956. *Sunetta scripta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 115, pl. 17, figs. 1a and 1b.
1965. *Sunetta scripta*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 214, pl. 19, figs. 61a & 61b.
1976. *Sunetta scripta*: Fischer-Piette, *Rec. zool. Surv. India*, 70 : 238.
1991. *Sunetta scripta*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 146. Zool. Surv. India.
1995. *Sunetta scripta*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 428. Zool. Surv. India.
2000. *Sunetta scripta*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 275.
2007. *Sunetta scripta*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 237. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Sri Lanka, Indonesia, Myanmar, Philippines.

Subgenus **Cyclosunetta** Fischer-Piette, 1939

1939. *Cyclosunetta* Fischer-Piette, *Bull. Mus. Hist. nat. Paris*, (2)11 : 14. Type species : *Sunettina sunettina* Jousseaume, 1891; Original designation.

541. ***Sunetta (Cyclosunetta) excavata*** (Hanley)

1842. *Cytherea excavata* Hanley, *Proc. zool. Soc. London*, 19 : 123.

1895. *Venus (Sunetta) excavata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.

1941. *Sunetta excavata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 50.

1991. *Sunetta (Cyclosunetta) excavata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 148. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Maharashtra, Orissa, Puducherry, Tamil Nadu.

Elsewhere : South African coast, Sri Lanka, Myanmar, Australia, New Holland, Japan.

Subgenus **Sunettina** Pfeiffer, 1869

1869. *Sunettina* Pfeiffer, *Syst. Conch. Cab.*, 11(1) : 86. Type species : *Cytherea solanderi* Gray, 1825.

542. ***Sunetta (Sunettina) solanderi*** (Gray)

1825. *Cytherea solanderi* Gray, *Proc. zool. Soc. London*, 1825 : 134.

1906. *Sunetta slanderi*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 832.

1906. *Moroe solanderi*: Crichton, *J. Bombay nat. Hist. Soc.*, 17 : 215.

1949. *Sunetta slanderi*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.

1976. *Sunetta slanderii*: Fischer-Piette, *Rec. zool. Surv. India*, 70 : 239.

Distribution : India : Goa, Karnataka, Kerala, Maharashtra, Puducherry, Tamil Nadu.

Elsewhere : Arabian Gulf, Japan.

Subfamily CHIONINAE

Genus **Chione** Megerle, 1811

1811. *Chione* Megerle, *Ges. Nat. Fr. Berlin Mal.*, 5 : 51. Type species: *Venus dysera* Linnaeus, 1758=*Venus cancellata* Linnaeus, 1767; Original designation.

543. ***Chione layardi*** (Reeve)

1864. *Venus layardi* Reeve, *Conch. Icon.*, 14, *Venus* sp. no., 136 pl. 26, fig. 136.

1895. *Venus (Chione) layardi*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.

1898. *Chione layardi*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
1949. *Chione layardi*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
2000. *Chione layardi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 283.

Distribution : India : Andaman and Nicobar Islands, Maharashtra, Tamil Nadu.

Elsewhere : Sri Lanka.

Genue *Anomalocardia* Schumacher, 1817

1817. *Anomalocardia* Schumacher, *Eassai Ver. Test.*, 44 : 134. Type species : *Venus flexuosa* Linnaeus, 1767; Original designation.

544. *Anomalocardia squamosa* (Linnaeus)

1758. *Venus squamosa* Linnaeus, *Syst. Nat.*, ed., **10** : 688.
1895. *Venus (Cryptogramma) squamosa*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1916. *Anomalocardia squamosa*: Preston, *Rec. Indian Mus.*, **12** : 36.
1991. *Anomalocardia (Anomalocardia) squamosa*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 153. *Zool. Surv. India*.

Distribution : India : Andaman Islands, Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Genus *Bassina* Jukes-Browne, 1914

1914. *Bassina* Jukes-Browne, *Proc. malac. Soc. London*, **11** : 81. Type species : *Mercenaria paucilamellata* Dunker, 1858 = *Venus pachyphylla* Jonas, 1839; Original designation.

545. *Bassina callophylla* (Philippi)

1836. *Venus callophylla* Philippi, *Arch. Naturgesch.*, **1**, 229, pl. 8, fig. 2.
1895. *Venus (Anaitis) callophylla*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1898. *Anaitis callophylla*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
1949. *Chione callophylla*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Chione callophylla*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **1**(2), pt. 7 : 125, pl. 18, figs. 3a and 3b.
1986 *Clausinella callophylla*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1991. *Bassina callophylla*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 154. *Zool. Surv. India*.
2000. *Bassina callophylla*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 284.

Distribution : India : Andaman and Nicobar Islands, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Found in the muddy sand and shell gravels in offshore region. For detail synonymy see Prashad (1932).

Genus ***Placamen*** Iredale, 1925

1925. *Placamen* Iredale, *Rec. Australian Mus.*, **14** : 248. Type species : *Venus placida* Philippi, 1844; Original designation.

546. ***Placamen tiara*** (Dillwyn)

1817. *Venus tiara* Dillwyn, *Des. Cat. Rec. Shells*, **14** : 248.

1895. *Venus foliacea*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.

1898. *Anaitis foliacea* : Melvill and Sykes *Proc. malac. Soc. London*, **3** : 47.

1941. *Venus tiara*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 51.

1956. *Chione tiara*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 125, pl. 19, figs. 2a and 2b.

1968. *Chione tiara*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India, Part-1* : 132.

2007. *Placamen tiara*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 238. Zool. Surv. India.

Distribution : India : Andaman Islands, Andhra Pradesh, Kerala, Tamil Nadu.

Elsewhere : Indo-Pacific.

Genus ***Timoclea*** Brown, 1827

1827. *Timoclea* Brown, *Conch.*, **3** : pl. 19, fig. 11. Type species : *Venus ovata* Pennant, 1777.

547. ***Timoclea arakana*** (G. and H. Nevill)

1871. *Timoclea arakana* (G. and H. Nevill), *J. Asiat. Soc. Beng.*, **49**(2) : 10, pl.1, fig. 16.

1895. *Venus arakana*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.

1941. *Venus arakana*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 51.

1956. *Venus arakana*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 121, pl. 18, fig. 3.

1968. *Timoclea arakana*: Ray, *Indian Mus. Bull.*, **3**(1 & 2) : 31.

1991. *Timoclea arakana*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 154. Zool. Surv. India.

2007. *Timoclea arakana*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 239. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : This species found in sand and muddy sand of offshore region, having very much similarity with *T. layardi* (Reeve) which may be the synonym of this species. For detail synonymy see Prashad (1932).

548. *Timoclea imbricata* (Sowerby)

1853. *Venus imbricata* Sowerby, *Thes. Conch.*, pt. 2 : 715, pl. 156, fig. 81, 82.
1853. *Venus cochinchensis* Sowerby, *Thes. Conch.*, pt. 2 : 716, pl. 156, fig. 79, 80.
1895. *Venus (Timoclea) imbricata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1916. *Chione imbricata* : Preston, *Rec. Indian Mus.*, 12 : 36.
1941. *Venus imbricata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 51.
1949. *Chione imbricata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
1956. *Venus imbricata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 122, pl. 18, figs. 4a and 4b.
1968. *Venus imbricata*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 130.
1976. *Timoclea cochinchensis*: Fischer-Piette, *Rec. zool. Surv. India*, 70 : 236.
1992. *Timoclea imbricata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 246, pl. 26, figs. 3 & 6. *Zool. Surv. India*.
1991. *Timoclea imbricata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 155. *Zool. Surv. India*.
1995. *Timoclea imbricata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 429. *Zool. Surv. India*.
2007. *Timoclea imbricata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 239. *Zool. Surv. India*.
2008. *Timoclea imbricata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 20.
2008. *Timoclea imbricata*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, 5 : 166. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Sri Lanka, China, Pakistan.

549. *Timoclea scabra* (Hanley)

1844. *Venus scabra* Hanley, *Proc. zool. Soc. London*, pt. 12 : 161.
1895. *Venus (Timoclea) scabra*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 129.
1956. *Chione scabra*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 124, pl. 19, figs. 1a and 1b.
1991. *Timoclea scabra*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 357. *Zool. Surv. India*.
1991. *Timoclea scabra*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 155. *Zool. Surv. India*.
1995. *Timoclea scabra*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 430. *Zool. Surv. India*.

Distribution : India : Lakshadweep, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Subgenus *Glycydonta* Cotton, 1936

1936. *Glycydonta* Cotton, *Rec. Australian Mus.*, **5** : 503. Type species : *Venus marcia* Linnaeus, 1758; Original designation.

550. *Timoclea (Glycydonta) marcia* (Linnaeus)

1836. *Venus marcia* Linnaeus, *Syst. Nat.*, ed., **10** : 685

2000. *Timoclea (Glycydonta) marcia*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 284.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Philippines, Japan.

Subfamily MERETRICINAE

Genus *Meretrix* Lamarck, 1799

1799. *Meretrix* Lamarck, *Mem. Soc. Hist. nat. Paris*, p. 85. Type species : *Venus meretrix* Linnaeus, 1758

551. *Meretrix attenuata* Dunker

1858. *Meretrix attenuata* Dunker, *Besch. Abb. Meer Conch.*, p. 53, pl. 17, figs. 7-9.

1917. *Meretrix attenuata*: Hornell, *Rec. Indian Mus.*, **13** : 163.

Distribution : India : Nicobar Islands.

Elsewhere : No records.

var. *flava* Hornell

1917. *Meretrix attenuata* var. *flava* Hornell, *Rec. Indian Mus.*, **13** : 162, pl. 4, figs. 12. Type locality: Nicobar.

2004. *Meretrix attenuata* var. *flava*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 40.

Distribution : India : Nicobar Islands.

Elsewhere : Baluchistan.

552. *Meretrix casta* (Gmelin)

1791. *Venus casta* Gmelin, *Syst. Nat.*, ed. **13** : 3278.

1895. *Callista (Meretrix) casta*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1915. *Meretrix casta*: Preston, *Rec. Indian Mus.*, **11** : 300.

1915. *Meretrix ovum*: Preston, *Rec. Indian Mus.*, **11** : 300.

1916. *Meretrix casta*: Preston, *Rec. Indian Mus.*, **12** : 35.
1916. *Meretrix ovum*: Preston, *Rec. Indian Mus.*, **12** : 35.
1916. *Meretrix ovum*: Annandale and Kemp, *Mem. Indian Mus.*, **5**(4) : 351.
1917. *Meretrix casta*: Hornell, *Rec. Indian Mus.*, **13** : 166, pl. 5, figs. 30-33.
1941. *Meretrix casta*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50.
1941. *Meretrix ovum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50.
1956. *Meretrix casta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 111, pl. 16, figs. 2a & 2b.
1965. *Meretrix casta*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 103, pl. 15, figs. 52a & 52b.
1968. *Meretrix casta*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 130.
1968. *Meretrix ovum*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 130.
1969. *Meretrix casta*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1975. *Meretrix casta*: Durve, *Rec. zool. Surv. India*, **68** : 423.
1976. *Meretrix casta*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 240.
1991. *Meretrix casta*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 148. Zool. Surv. India.
1995. *Meretrix casta*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 428. Zool. Surv. India.
2000. *Meretrix casta*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 276.
2001. *Meretrix casta*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 78. Zool. Surv. India.
2007. *Meretrix casta*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 240. Zool. Surv. India.
2007. *Meretrix casta*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.
2008. *Meretrix casta*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 163. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Karnataka, Kerala, Orissa, Puducherry, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : Used as food in the coastal areas of India.

553. *Meretrix meretrix* (Linnaeus)

1758. *Venus meretrix* Linnaeus, *Syst. Nat.*, ed., **10** : 686.
1895. *Cythaerea morphina*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1906. *Meretrix impudica* var. *castenea*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 829.
1906. *Meretrix impudica* var. *morphina*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 829.

1906. *Meretrix petechialis*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 829.
1906. *Meretrix morphina*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1915. *Meretrix morphina*: Preston, *Rec. Indian Mus.*, **11** : 300.
1917. *Meretrix meretrix* var. *aurora* Hornell, *Rec. Indian Mus.*, **13** : 162, pl. 4, figs. 9-11.
Type locality : Tellicherry, Kerala; Types : NZC, ZSI.
1917. *Meretrix meretrix* var. *impudica*: Hornell, *Rec. Indian Mus.*, **13** : 160, pl. 5, figs. 14-18, pl. 7, figs. 39, 40.
1917. *Meretrix meretrix* var. *castenea*: Hornell, *Rec. Indian Mus.*, **13** : 161, pl. 4, fig. 12.
1917. *Meretrix meretrix* var. *zonaria*: Hornell, *Rec. Indian Mus.*, **13** : 162.
1917. *Meretrix meretrix* var. *morphina*: Hornell, *Rec. Indian Mus.*, **13** : 163, pl. 4, figs. 5-8.
1941. *Meretrix meretrix*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50.
1949. *Meretrix meretrix*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1965. *Meretrix meretrix*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(1) : 102, pl. 15, figs. 51a & 51b.
1975. *Meretrix meretrix*: Durve, *Rec. zool. Surv. India*, **68** : 423.
1976. *Meretrix meretrix*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 240.
1986. *Meretrix meretrix*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1987. *Meretrix meretrix*: Misra and Barua, *J. Indian Soc. Coastal agric. Res.*, **5**(1) : 342.
1987. *Meretrix meretrix* : Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1988. *Meretrix meretrix*: Purkait and Manna, *Environ. & Ecology*, **6**(2) : 443, fig. 1.29a & b.
1991. *Meretrix meretrix*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 148. *Zool. Surv. India*.
1992. *Meretrix meretrix*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 242, pl. 25, figs 1 & 2. *Zool. Surv. India*.
1995. *Meretrix meretrix*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 65. *Zool. Surv. India*.
1995. *Meretrix meretrix*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 428. *Zool. Surv. India*.
1998. *Meretrix meretrix*: Apte, *Indian Shells. Bombay nat. Hist. Soc.*, p. 96, pl. 13, fig. 2.
2000. *Meretrix meretrix*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 276.
2001. *Meretrix meretrix*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 78. *Zool. Surv. India*.
2006. *Meretrix meretrix*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans*, *Zool. Surv. India Kolkata*, p. 76.
2007. *Meretrix meretrix*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 241. *Zool. Surv. India*.

2007. *Meretrix meretrix*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.
2008. *Meretrix meretrix*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 43, pl. 4, figs. 3 and 4.
2008. *Meretrix meretrix*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p29.
2008. *Meretrix meretrix*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 164. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Orissa, Puducherry, Tamil Nadu.

Elsewhere : Widely distributed in Indo-Pacific.

Remarks : Used as food in the coastal areas of India. For detail synonymy see Prashad (1932).

Genus *Tivela* Link, 1807

1807. *Tivela* Link, *Beschr. Nat. Samml. Univ. Rostock*, (3) : 152. Type species : *Venus tripla* Linnaeus, 1771; Subsequent designation, Kobelt, 1881

554. *Tivela dillwyni* (Deshayes)

1853. *Trigona dillwyni* Deshayes in Gray, *Cat. Conch. Biv. Shells Coll. of British Museum*, pt. 1 : 49.
1915. *Tivela dillwyni*: Preston, *Rec. Indian Mus.*, **11** : 300.
1991. *Tivela dillwyni*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 149. *Zool. Surv. India*.
1995. *Tivela dillwyni*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 429. *Zool. Surv. India*.

Distribution: India: Orissa.

Elsewhere : Indian Ocean.

Subfamily PITARINAE

Genus *Pitar* Roemer

1857. *Pitar* Roemer, *Krit. Untersuch Venus*, 15. Type species: *Venus tumens* Gmelin, 1791

555. *Pitar alabastrum* (Reeve)

1863. *Dione alabastrum* Reeve, *Conch. Icon.*, 14, *Dione* sp. no., 42, pl. 10, fig. 42.
1895. *Circe alabastrum*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1894. *Cytherea (Caryatis) pudicissima* Smith, *Ann. Mag. nat. Hist.*, (6)**14** : 169, pl. 5, figs. 4, 5. Type locality : Sta 81, Off Ganjam coast, Orissa.
1941. *Pitar alabastrum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50, fig. 20d.
1956. *Pitar alabastrum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 113, pl. 16, fig. 3.

1976. *Pitar alabastrum*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 243.
 1991. *Pitar alabastrum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 149. *Zool. Surv. India*.
 1992. *Pitar alabastrum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 243, pl. 25, figs 3 & 4. *Zool. Surv. India*.
 2007. *Pitar alabastrum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 242. *Zool. Surv. India*.
 2008. *Pitar alabastrum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 21.

Distribution : India : Andhra Pradesh, Orissa, Tamil Nadu.

Elsewhere : Gulf of Oman, Myanmar, Singapore.

556. *Pitar inflata* (Sowerby)

1853. *Tapes inflata* Sowerby, *Proc. zool. Soc. London*, **1853** : 8, pl. 19, fig. 3.
 1898. *Caryatis inflata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
 2000. *Pitar inflata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 276.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean.

557. *Pitar nobilis* (Reeve)

1849. *Cytherea nobilis* Sowerby, *Proc. zool. Soc. London*, **1849**, pt. **2** : 126.
 1956. *Pitar nobilis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 114, pl. 17, figs. 1a and 1b.
 1965. *Pitar nobilis*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 212, pl. 17, figs. 57a and 57b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Indo-Pacific.

Subgenus *Pitarina* Jukes-Browne, 1913

1913. *Pitarina* Jukes-browne, *Proc. malac. Soc. London*, **10** : 346. Type species : *Cytherea citrina* Lamarck, 1818; Original designation.

558. *Pitar (Pitarina) citrina* (Lamarck)

1818. *Cytherea citrina* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **6** : 306.
 2000. *Pitar (Pitarina) citrina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 277.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

559. *Pitar (Pitarina) varina* (Wood)

1828. *Cytherea varina* Wood, *Ind. Test. Suppl.*, pl. 5, fig. 33.
 2000. *Pitar (Pitarina) varina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 277.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Genus ***Callista*** Poli, 1791

1791. *Callista* Poli, *Test. Sicil.*, **1** : 30. Type species: *Venus chione* Linnaeus; subsequent designation, Meek, 1876; Subsequent designation, Meek, 1876.

560. ***Callista nivea*** Hanley

1843. *Cytherea nivea* Hanley, *Cat. Bivalves Shells*, p. 97.
2007. *Callista nivea*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 242. Zool. Surv. India.

Distribution: India: Andhra Pradesh, Gujarat.

Elsewhere : Persian Gulf.

Subgenus ***Costacallista*** Palmer, 1927

1927. *Costacallista* Palmer, *Palaeontogr. Amer.*, **1(5)** : 73, 84. Type species: *Venus erycina* Linnaeus, 1758.

561. ***Callista (Costacallista) erycina*** (Linnaeus)

1758. *Venus erycina* Linnaeus, *Syst. Nat.*, ed. **10** : 686.
1895. *Callista erycina*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1906. *Callista erycina*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1906. *Callista chinensis* :Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1941. *Pitar erycina*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5(1)** : 50.
1956. *Pitar erycina*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt.7 : 113, pl. 16, figs.4a and 4b.
1965. *Pitar erycina*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 212, pl. 17, figs. 56a and 56b.
1976. *Callista erycina*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 241.
1998. *Pitar erycina*: Apte, *Indian Shells, Bombay nat. Hist. Soc.*, p. 96, pl. 13, fig. 3.
2000. *Callista (Costacallista) erycina*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 277.

Distribution : India : Andaman Islands, Goa, Gujarat, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : Indo-West Pacific.

Genus ***Lioconcha*** Moerch, 1853

1853. *Lioconcha* Moerch, *Cat. Conch. Yoldi*, (**2**) : 26. Type species: *Venus castrensis* Linnaeus, 1758; Subsequent designation, Stoliczka, 1870.

562. *Lioconcha castrensis* (Linnaeus)

1758. *Venus castrensis* Linnaeus, *Syst. Nat.*, ed. 10 : 1132.

2000. *Lioconcha castrensis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 277.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

563. *Lioconcha ornata* (Dillwyn)

1817. *Venus ornata* Dillwyn, *Des. Cat.*, 1 : 184.

1972. *Lioconcha picta*: Nagabhushanam and Rao, *Mitt. zool. Mus. Berlin*, 48(2) : 287.

1986 *Lioconcha ornata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.

2000. *Lioconcha ornata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 278.

Distribution : India : Andaman and Nicobar Islands, Kerala, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

564. *Lioconcha polita* (Roeding)

1798. *Venus polita* Roeding, *Mus. Bolten.*, 1798 : 181.

1898. *Lioconcha sulcatina*: Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.

2000. *Lioconcha polita*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 278.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

565. *Lioconcha sphragitis* (Roemer)

1898. *Lioconcha sphragitis* Roemer, *Malac. Blatt.*, p. 122.

1898. *Lioconcha sphragites* : Melvill and Sykes, *Proc. malac. Soc. London*, 3 : 47.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean.

566. *Lioconcha trimaculata* (Lamarck)

1818. *Cytherea trimaculata* Lamarck, *Hist. nat. Anim. Sans. Vert.*, 5 : 571.

1897. *Lioconcha trimaculata*: Melvill and Sykes, *Proc. malac. Soc. London*, 2 : 172.

2000. *Lioconcha trimaculata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 278.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Subgenus ***Sulciloconcha*** Habe, 1951

1951. *Sulciloconcha* Habe, *Gen. Jap. Shells Pelecypoda*, **2** : 158. Type species : *Cytherea philippinarum* Hanley, 1844

567. *Lioconcha (Sulciloconcha) philippinarum* (Hanley)

1844. *Cytherea philippinarum* Hanley, *Proc. zool. Soc. London*, **1844** : 110.
1897. *Venus (Dione) philippinarum*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.
1898. *Dione philippinarum*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
2000. *Lioconcha (Sulciloconcha) philippinarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 278.

Distribution : India : Andaman Islands.

Elsewhere : Red sea, Philippines, Fiji.

Genus ***Pelecypora*** Dall, 1902

1902. *Pelecypora* Dall, *Proc. U.S. natl. Mus.*, **26** : 346. Type species : *Cytherea atchetigheensis* Aldrich, 1886; Original designation.

568. *Pelecypora jukes-broniana* Preston

1915. *Sinodia jukes-broniana* Preston, *Rec. Indian Mus.*, **11** : 481, figs. 3-3a. Type locality : Canal near Chinrighata, West Bengal.
2004. *Sinodia jukes-broniana*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 29.

Distribution: India: West Bengal.

Elsewhere : No subsequent records.

569. *Pelecypora trigona* (Reeve)

1850. *Artemis trigona* Reeve, *Conch. Icon.*, **6** : *Artemis* sp. no. 42, pl. 7, fig. 42.
1895. *Dosinia trigona*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.
1941. *Dosinia excisa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50.
1949. *Dosinia excisa*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Dosinia trigona*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 118, pl. 17, figs. 6a-6b.
1968. *Dosinia trigona*: Cheriyian, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 129.
1983. *Dosinia excisa*: Subba Rao, Dey and Barua, *Bull. zool. Surv. India*, **5**(1) : 50.
1987. *Dosinia trigona*: Misra and Barua, *J. Indian Soc. Coastal agric. Res.*, **5**(1) : 341.

1987. *Dosinia trigona* : Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1988. *Dosinia excisa*: Purkait and Manna, *Environ. & Ecology*, **6**(2) : 443, fig. 1.30.
1991. *Pelecypora (Pelecypora) excisa*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 150. Zool. Surv. India.
1992. *Pelecypora trigona*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 244, pl. 25, figs. 5 & 6. Zool. Surv. India.
1995. *Pelecypora trigona*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 65. Zool. Surv. India.
2006. *Pelecypora trigona*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, *Zool. Surv. India Kolkata*, p. 76.
2007. *Dosinia excisa*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 247. Zool. Surv. India.
2008. *Pelecypora trigona*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 45, pl. 4, figs. 4 & 6.
2008. *Pelecypora trigona*: Roy, Dey, Banerjee and Nandi, *Zoological Research in Human Welfare*, p. 29.
2008. *Pelecypora trigona*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 165. Zool. Surv. India.

Distribution : India : Andaman Islands, Andhra Pradesh, Kerala, Maharashtra, Orissa, Tamil Nadu. West Bengal.

Elsewhere : Red sea, Myanmar, Philippines, Fiji.

Subfamily TAPETINAE

Genus *Tapes* Megerle, 1811

1811. *Tapes* Megerle, *Mag. Ges. Nat. Fr. Berlin*, **5** : 51. Type species : *Venus literata* Linnaeus, 1758.

570. *Tapes albomarginata* Preston

1908. *Tapes albomarginata* Preston, *Rec. Indian Mus.*, **2** : 207, pl. 14, fig. 16. Type locality : Andaman Islands. Types : NZC, ZSI.
2004. *Tapes albomarginata* Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 71.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

571. *Tapes deshayesi* (Hanley)

1844. *Venus deshayesi* Hanley in Wood's, *Ind. Test. App.*, pl. 16, fig. 35.
1898. *Tapes deshayesi* : Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
2000. *Tapes deshayesi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 280.

Distribution : India : Andaman Islands.

Elsewhere : Philippines.

572. *Tapes dorsatus* (Lamarck)

1844. *Venus dorsatus* Lamarck, *Hist. nat. Anim. Sans. Vert.*,

1906. *Tapes (Pullastra) turgida*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1916. *Tapes turgida*: Preston, *Rec. Indian Mus.*, **187** : 36.

Distribution : India : Andaman Islands, Maharashtra.

Elsewhere : Philippines.

573. *Tapes literatus* (Linnaeus)

1758. *Venus literatus* Linnaeus, *Syst. Nat.*, ed. **10** : 1135.

1895. *Tapes literatus*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.

1986 *Tapes literatus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

2000. *Tapes literatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 280.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

Subgenus *Ruditapes* Chiamenti, 1900

1900. *Ruditapes* Chiamenti, *Riv. Ital. Sci. nat. Siena*, **20** : 13. Type species: *Venus decussata* Linnaeus; Subsequent designation, Dall, 1902.

574. *Tapes (Ruditapes) bruguieri* (Hanley)

1845. *Venus bruguieri* Hanley, *Proc. zool. Soc. London*, **1845** : 21.

1976. *Ruditapes bruguieri*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 247.

1992. *Tapes bruguieri*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 244, pl. 25, figs. 7 & 8. Zool. Surv. India.

2000. *Ruditapes bruguieri*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 280.

2007. *Tapes (Ruditapes) bruguieri*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 249. Zool. Surv. India.

2008. *Tapes bruguieri*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286**: 21.

Distribution : India : Andhra Pradesh, West Bengal.

Elsewhere : Indo-Pacific.

575. *Tapes (Ruditapes) philippinarum* (Adams and Reeve)

1850. *Venus philippinarum* Adams and Reeve, *Voy. Samarang.*, 79, pl. 32, fig. 10.

1906. *Tapes (Amygdala) indica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 833.

1906. *Tapes indica*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1949. *Paphia indica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 56.

1956. *Tapes philippinarum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 132, pl. 20, figs. 5a and 5b.
1898. *Tapes indica*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47, 229.
2000. *Ruditapes philippinarum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 281.

Distribution : India : Andaman and Nicobar Islands, Goa, Maharashtra, Tamil Nadu.

Elsewhere : South East Asia, Korea, China, Japan..

576. *Tapes (Ruditapes) variegatus* (Sowerby)

1852. *Tapes variegata* Sowerby, *Thes. Conch.*, **2** : 196, pl. 151, figs. 133-138
- 1986 *Tapes (Ruditapes) variegatus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
2000. *Ruditapes variegatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 280.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Genus *Marcia* H. and A. Adams, 1857

1857. *Marcia* H. and A. Adams, *Gen. Rec. Moll.*, **2** : 423. Type species: *Venus pinguis* Chemnitz = *Venus opima* Gmelin; Subsequent designation, Kobelt, 1881.

577. *Marcia japonica* (Gmelin)

1791. *Venus japonica* Gmelin, *Syst. Nat.*, ed. **13** : 3279.
1898. *Chione striata* : Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
2000. *Marcia japonica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 281.

Distribution: India: Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

578. *Marcia pinguis* (Schroeter)

1788. *Venus pinguis* Schroeter, *Nomen. Register*, **10** : 112.
1895. *Hemitapes pinguis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1895. *Hemitapes ceylonensis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1906. *Venus (Chione) pinguis*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1915. *Tapes pinguis*: Preston, *Rec Indian Mus.*, **11** : 300.
1915. *Tapes ceylonensis* Preston, *Rec Indian Mus.*, **11** : 301.
1948. *Katelsia opima*: Ray, *Rec Indian Mus.*, **46** : 118.

1949. *Katelsia opima*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1941. *Catelsia opima*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 52.
1956. *Catelsia opima*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 128, pl. 19, figs. 6a -c.
1968. *Catelsia opima*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 131.
1969. *Catelsia opima*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1975. *Katelsia opima*: Durve, *Rec. zool. Surv. India*, **68** : 423.
1976. *Marcia pinguis*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 248.
1991. *Marcia pinguis*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, **2** : 357. Zool. Surv. India.
1991. *Marcia pinguis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 152; Zool. Surv. India.
1995. *Marcia pinguis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 429. Zool. Surv. India.
1998. *Catelsia opima*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 98, pl. 13, fig. 12.
2000. *Marcia pinguis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 282.
2001. *Marcia pinguis*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 79. Zool. Surv. India.
2007. *Marcia pinguis*:: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 243. Zool. Surv. India.
2007. *Katelsia opima*: Arularasan and Kasinathan, *Zoos Print J.*, **22**(1) : 2546.
2008. *Marcia pinguis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 165. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Kerala, Lakshadweep, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

579. *Marcia recens* (Dillwyn)

1795. *Venus recens* Chemnitz, *Syst. Conch. Cab.*, **11** : 229, fig. 1979. Type locality : Indian coasts of Coromandel.
1818. *Venus marmorata* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **5** : 365.
1852. *Tapes recens*: Sowerby, *Thes. Conchy.*, **2** : 685, pl. 148, fig. 62.
1906. *Tapes (Hemitapes) marmorata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 833.
1906. *Venus (Chione) radiata*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 215.
1916. *Chione marmorata* Preston, *Rec Indian Mus.*, **12** : 36.
1948. *Katelsia (Hemitapes) marmorata*: Ray, *Rec Indian Mus.*, **46** : 118.
1949. *Katelsia marmorata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.

1965. *Tapes radiatus* : Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 215, pl. 20, figs. 66a and 66b.
1975. *Katelesia marmorata*: Durve, *Rec. zool. Surv. India*, **68** : 423.
1976. *Marcia recens*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 249.
1991. *Marcia (Marcia) recens*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 152. *Zool. Surv. India*.

Distribution : India : Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Genus *Paphia* Roeding, 1758

1798. *Paphia* Roeding, *Mus. Bolten.*, p. 175. Type species : *Paphia alapapilionis* = *Venus rotundata* Linnaeus; Subsequent designation, Dall, 1902

Subgenus *Paphia* s.st

580. *Paphia alapapiliones* Roeding

1798. *Paphia Ala-papiliones* Roeding, *Mus. Bolten.*, **1798** : 175.
1895. *Tapes rotundata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1940. *Paphia alapapiliones*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 331.
1941. *Paphia alapapiliones*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 52.
1949. *Diplodonata rotundata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Paphia alapapiliones*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 130, pl. 20, fig. 2.
1965. *Paphia alapapiliones*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 212, pl. 16, figs. 55a & 55b.
1998. *Paphia ala-papiliones*: Apte, *Indian Shells, Bombay nat. Hist. Soc.*, p. 99, pl. 13, fig. 15.
2000. *Paphia alapapiliones*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 282.

Distribution : India : Andman Islands, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Indian Ocean.

Remarks : For detail synonymy see Prashad (1932).

581. *Paphia amabilis* (Philippi)

1788. *Tapes amabilis* Philippi, *Zeitschr. F. Naturg.*, 1847 : 90
2000. *Paphia amabilis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 282.

Distribution : India : Andaman Islands.

Elsewhere : China, Japan.

582. *Paphia malabarica* (Schroeter)

1788. *Venus malabarica* Schroeter, *Namen. Register.*, p. 112, pl. 6, figs 4, 4a, 4b.
1895. *Tapes malabaricus*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1898. *Tapes malabarica*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 47.
1906. *Tapes (Textrix) malabarica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 832.
1906. *Tapes (Pullastra) malabarica* : Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1940. *Paphia malabarica*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 331.
1940. *Paphia gallus*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 331.
1941. *Paphia malabarica*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 52.
1949. *Paphia malabaricus*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Paphia malabarica*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.
1956. *Paphia malabarica*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 130, pl. 20, figs. 3a and 3b.
1965. *Paphia malabarica*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 211, pl. 16, figs. 54a & 54b.
1968. *Paphia malabarica*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 131.
1969. *Paphia malabarica*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1976. *Paphia malabarica*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 247.
- 1986 *Paphia malabarica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p.178.
1987. *Paphia malabarica*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Paphia malabarica*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 153. *Zool. Surv. India*.
1992. *Paphia malabarica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 245, pl. 26, fig. 1. *Zool. Surv. India*.
2000. *Paphia malabarica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 282.
- 2001 *Paphia malabarica*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 79. *Zool. Surv. India*.
2007. *Paphia malabarica*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 246. *Zool. Surv. India*.
2007. *Paphia (Protapes) gallus*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 245. *Zool. Surv. India*.
2008. *Paphia malabarica*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 21.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Persian Gulf, Gulf of Aden, Pakistan, Sri Lanka, Myanmar, Malaysia, Indonesia, Philippines, China.

583. *Paphia textris* (Schroeter)

1788. *Venus textris* Schroeter, *Namen. Register.*, p. 112
1895. *Tapes textris*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1906. *Tapes (Textrix) textris*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 833.
1906. *Tapes (Pullastra) textris*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1916. *Tapes textrix*: Preston, *Rec Indian Mus.*, **12** : 95.
1940. *Paphia textile*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 331.
1941. *Paphia textile*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **5**(1) : 52.
1948. *Paphia (Paratapes) textile*: Ray, *Rec Indian Mus.*, **46** : 119.
1949. *Paphia textile*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1956. *Paphia textile*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 129, pl. 20, figs. 1a and 1b.
1956. *Paphia textile*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.
1965. *Paphia textile*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 211, pl. 16, figs. 53a & 53b.
1969. *Paphia textile*: Radhakrishna and Ganapati, *Bull. natn. Inst. Sci. India*, **38** : 695.
1976. *Paphia textrix*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 248.
- 1986 *Paphia textris*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1988. *Paphia textile*: Purkait and Manna, *Environ. & Ecology*, **6**(2) : 443, fig. 1.27.
1992. *Paphia textile*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 245, pl. 26, figs. 2 & 4. *Zool. Surv. India*.
1998. *Paphia textile*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 99, pl. 13, fig. 14.
2000. *Paphia textris*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 283.
2007. *Paphia textris*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 244. *Zool. Surv. India*.
2008. *Paphia textris*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 21.
2008. *Paphia textris*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 166. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific. Shallow, mudflats.

Remarks : For detail synonymy see Prashad (1932).

584. *Paphia undulata* (Born)

1778. *Venus undulata* Born, *Index Mus. Caes. Vinod.*, p. 54.
1895. *Tapes undulata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1940. *Paphia undulata*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 332.

1956. *Paphia undulata*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, **54**(3) : 703.
1976. *Paphia undulata*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 247.
1991. *Paphia undulata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 153. Zool. Surv. India.
1995. *Paphia undulata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 429. Zool. Surv. India.
2000. *Paphia undulata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 283.
2007. *Paphia undulata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 244. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Gujarat, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Subgenus ***Protapes*** Dall, 1902

1902. *Protapes* Dall, *Proc. U.S. natl. Mus.*, **26** : 362. Type species: *Venus gallus* Gmelin, 1791; Original designation.

585. *Paphia (Protapes) cor* (Sowerby)

1853. *Venus cor* Sowerby, *Thes. Conch.*, pt. **14** : 727, pl. 160, fig. 184.
1949. *Paphia cor*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
2007. *Paphia (Protapes) cor* : Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 245. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra.

Elsewhere : Pakistan: Karachi.

Genus ***Venurupis*** Lamarck, 1818

1818. *Venurupis* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **5** : 506. Type species : *Venus perforans* Montagu, 1803; Subsequent designation, Children, 1823.

586. *Venurupis dashamii* Ray

1848. *Venurupis (Venurupis) dashamii* Ray, *Rec. Indian Mus.*, **46** : 119, pl. 3, figs. 6 & 7. Types : NZC, ZSI.
2004. *Venurupis (V.) dashamii*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 84.

Distribution : India : Tamil Nadu.

Elsewhere : No subsequent records.

587. *Venurupis exoticus* (Lamarck)

1818. *Venurupis exoticus* Lamarck, *Hist. nat. Anim. Sans. Vert.*, **5** : 507.
1895. *Dosinia puella*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.

1941. *Dosinia puella*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 50.
 1956. *Irus exoticus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 133, pl. 20, figs. 5a and 5b.
 1956. *Dosinia puella*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 119, pl. 17, figs. 7a and 7b.
 1965. *Dosinia puella*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 215, pl. 19, figs. 64a and 64b.
 1974. *Irus exoticus*: Sarma, *J. mar. boil. Ass, India*, 16(3) : 755.

Distribution : India : Andhra Pradesh, Tamil Nadu.

Elsewhere : Indo-Pacific.

588. *Venurupis macrophylla* (Deshayes)

1853. *Venus macrophylla* Deshayes, *Proc. zool. Soc. London*, 1853 : pl. 18, fig. 8.
 1940. *Venurupis macrophylla*: Crichton, *J. Bombay nat. Hist. Soc.*, 42 : 337.
 1941. *Venurupis macrophylla*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 52.
 1949. *Venurupis macrophylla*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 56.
 1956. *Venurupis macrophylla*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 127, pl. 19, figs. 5a and 5b.
 1965. *Venurupis macrophylla*: Kundu, *J. Bombay nat. Hist. Soc.*, 62(2) : 216, pl. 21, figs. 67a & 67b.
 1968. *Venurupis macrophylla*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part 1 : 131.
 1974. *Venurupis macrophylla*: Sarma, *J. mar. boil. Ass, India*, 16(3) : 755.
 2000. *Venurupis macrophylla*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 284.

Distribution : India : Andaman Islands, Andhra Pradesh, Kerala, Gujarat, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

Subfamily CLEMENTIINAE

Genus *Clementia* Gray, 1842

1842. *Clementia* Gray, *Syn. Cont. Brit. Mus.*, ed. 42 : 149. Type species : *Venus papyracea* Gray, 1825; Subsequent designation, Gray, 1847.

589. *Clementia vatheleti* Mabile

1901. *Clementia vatheleti* Mabile, *Bull. Soc. Philom. Paris*, (9)3 : 53.
 1914. *Clementia annandalei* Preston, *Rec. Indian Mus.*, 10 : 306, fig. 14. Type locality : Off Balugaon, Chilka Lake; Types : NZC, ZSI.

1915. *Clementia annandalei*: Preston, *Rec Indian Mus.*, **11** : 301.
1916. *Clementia annandalei*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 352.
1991. *Clementia vatheleti*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 151; *Zool. Surv. India*.
1995. *Clementia vatheleti*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 429. *Zool. Surv. India*.

Distribution : India : Orissa, West Bengal.

Elsewhere : Japan.

Subfamily DOSINIINAE

Genus *Dosinia* Scopoli, 1777

1777. *Dosinia* Scopoli, *Intr. Hist. nat.*, p. 399. Type species : *Chama dosin* Adamson, 1757 = *Venus concentrica* Born, 1778.

590. *Dosinia bruguieri* (Gray)

1838. *Arthemis bruguieri* Gray, *Analyst.*, **8** : 309.
1906. *Dosinia prostrata*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 835.
1906. *Dosinia prostrata*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1941. *Dosinia prostrata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 50, fig. 20f.
1949. *Dosinia prostrata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 56.
1976. *Dosinia (Dosinella) bruguieri*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 246.
1998. *Dosinia prostata*: Apte, *Indian Shells, Bombay Nat. Hist. Soc.*, p. 97, pl. 13, fig. 6.
2007. *Dosinia bruguieri*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 247, *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Kerala, Goa, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

591. *Dosinia cretacea* (Reeve)

1851. *Artemis cretacea* Reeve, *Conch. Icon.* **6** : *Artemis* sp. no. 35, pl. 6, fig. 35.
1941. *Dosinia prostrata* var. *cretacea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 51.
1956. *Dosinia cretacea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 118, pl. 17, figs. 5a and 5b.
1965. *Dosinia cretacea*: Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 215, pl. 19, figs. 65a and 65b.
1998. *Dosinia cretacea*: Apte, *Indian Shells, Bombay nat. Hist. Soc.*, p. 97, pl. 13, fig. 7.

Distribution : India : Goa, Gujarat, Kerala, Tamil Nadu.

Elsewhere : Indo-Pacific.

592. *Dosinia eudeli* Fischer-Piette and Delmas

1967. *Dosinia (Sinodia) eudeli* Fischer-Piette and Delmas, *Mem. Mus. Natn. Hist. Paris*, **42**(6) : 12, pl. 3, figs. 12 & 16.

1987. *Dosinia eudeli*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.

Distribution : India : Karnataka, Tamil Nadu.

Elsewhere : No records.

593. *Dosinia fibula* (Reeve)

1850. *Arthemis fibula* Reeve, *Conch. Icon.*, **6** : *Artemis*, sp. no., 26, pl. 5, fig. 26.

1991. *Dosinia fibula*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 150. Zool. Surv. India.

1995. *Dosinia fibula*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 429. Zool. Surv. India.

2000. *Dosinia fibula*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 279.

2007. *Dosinia fibula*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 248. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Nicobar Islands, Orissa, Tamil Nadu.

Elsewhere : Indian Ocean.

594. *Dosinia histrio* (Gmelin)

1791. *Venus histrio* Gmelin, *Syst. Nat.*, ed. **13** : 3287

1895. *Dosinia histrio*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1898. *Dosinia histrio*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.

1956. *Dosinia histrio*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, **1**(2), pt. 7 : 116, pl. 17, fig. 3.

1968. *Dosinia histrio*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 130.

2000. *Dosinia histrio*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 279.

Distribution : India : Andaman Islands, Kerala, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

595. *Dosinia indica* Fischer-Piette and Metvier

1970. *Dosinia (Asa) indica* Fischer-Piette and Metvier, *Bull. Mus. Natn. Hist. Paris*, **42**(6) : 1284, fig. 1. Type locality: Vizagapatnam; Types : NZC, ZSI.

2004. *Dosinia (Asa) indica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 29.

Distribution : India : Andhra Pradesh.

Elsewhere : No subsequent records.

596. *Dosinia juvenilis* (Gmelin)

1791. *Venus juvenilis* Gmelin, *Syst. Nat.*, ed. **13** : 3287
1897. *Dosinia juvenilis*: Melvill and Sykes, *Proc. malac. Soc. London*, **2** : 172.
1916. *Dosinia laminata*: Preston, *Rec. Indian Mus.*, **12**(2) : 94.
1916. *Dosinia laminata*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 47.
2000. *Dosinia juvenilis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 279.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Japan.

597. *Dosinia katiawarensis* Fischer-Piette and Metvier

1970. *Dosinia (Sinodia) katiawarensis* Fischer-Piette and Metvier, *Bull. Mus. Natn. Hist. Paris*, **42**(6) : 1282, fig. 2. Type locality : Katiawar, Gujarat; Types : NZC, ZSI.
2004. *Dosinia (Sinodia) katiawarensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 29.

Distribution : India : Gujarat.

Elsewhere : No subsequent records.

598. *Dosinia modesta* (Sowerby)

1835. *Cytherea modesta* Sowerby, *Proc. zool. Soc. London*, **1835** : 47.
1895. *Dosinia modesta*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.
1941. *Dosinia prostrata* var. *modesta*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 50.
1956. *Dosinia modesta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 117, pl. 17, figs. 4a and 4b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

599. *Dosinia planatum* (G. and H. Nevill)

1853. *Pectunculus planatum* G. and H. Nevill, *J. asiat. Soc. Beng.*, **43**(2) : 29, pl. 1, fig. 16.
2000. *Dosinia planatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 279.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent report.

600. *Dosinia rajagopali* Fischer-Piette

1976. *Dosinia (Sinodia) rajagopali* Fischer-Piette, *Rec. Indian Mus.*, **70** : 244, pl. 1, fig. 2.
Type locality : Ganguli (Sandy beach) Karnataka; Types : NZC, ZSI.

2004. *Dosinia (Sinodia) rajagopali*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 29.

Distribution : India : Karnataka.

Elsewhere : No subsequent records.

601. *Dosinia trancobarica* Fischer-Piette

1976. *Dosinia (Asa) trancobarica* Fischer-Piette, *Rec. Indian Mus.*, **70** : 244, pl. 1, fig. 2.
Type locality : Sea coast near Tranvancore, Kerala; Types : NZC, ZSI.
2004. *Dosinia (Asa) trancobarica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 29.

Distribution : India : Kerala.

Elsewhere : No subsequent records.

602. *Dosinia rustica* (Roemer)

1850. *Artemis rustica* Roemer, *Conch. Icon.*, **6** : *Artemis* sp. no. 42, fig. 42.
1906. *Dosinia rustica*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 835.
1906. *Dosinia rustica*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1949. *Dosinia rustica*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1998. *Dosinia rustica*: Apte, *Indian Shells. Bombay Nat. Hist. Soc.*, p. 97, pl. 13, fig. 8.

Distribution : India : Goa, Maharsashtra.

Elsewhere : No records.

603. *Dosinia tumida* (Gray)

1838. *Cytherea tumida* Gray, *Catalogue*, **8** : 309.
1906. *Dosinia pubescens*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 835.
1906. *Dosinia pubescens*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
1949. *Dosinia pubescens*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 56.
1976. *Dosinia (Asa) tumida*: Fischer-Piette, *Rec. zool. Surv. India*, **70** : 246.
1991. *Dosinia tumida*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 151. *Zool. Surv. India*.
1995. *Dosinia tumida*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 429. *Zool. Surv. India*.
2000. *Dosinia pubescens*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 280.
2007. *Dosinia tumida*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 248. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Gulf of Aden, Sri Lanka, Myanmar, Australia, Philippines, Japan.

604. *Dosinia salebroza* (Roemer)

1898. *Dosinia salebroza*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 48.

Genus *Pectunculus* Da Costa, 1778

1778. *Pectunculus* Da Costa, *British Conch.*, p. 183. Type species : *Pectunculus capillaceus* = *Venus exoleta* Linnaeus, 1758; Subsequent designation, Jukes-Browne, 1911.

605. *Pectunculus corditoides* Nevill

1916. *Pectunculus corditoides* Nevill, *Hand List of Mollusca*, **70** : 244, pl. 1, fig. 2. Type locality : Andaman islands.

2004. *Pectunculus corditoides*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 60.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

Family GLAUCONOMIDAE**Genus *Glaucanome* Gray, 1828**

1828. *Glaucanome* Gray, *Spicil. Zool.*, 6. Type species : *Glaucanome chinensis* Gray, 1828

606. *Glaucanome angulata* Reeve

1844. *Glaucanome angulata* Reeve, *Proc. zool. Soc. London*, **1844** : 20.

1991. *Glaucanome angulata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 156. *Zool. Surv. India*.

Distribution : India : Orissa.

Elsewhere : Philippines.

607. *Glaucanome cerea* Reeve

1844. *Glaucanome cerea* Reeve, *Proc. zool. Soc. London*, **1844** : 20.

1906. *Glaucomya cerea*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 837.

1906. *Glaucomya cerea*: Comber, *J. Bombay nat. Hist. Soc.*, **17** : 215.

1949. *Glaucomya cerea*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 58.

1965. *Glaucomya cerea* : Kundu, *J. Bombay nat. Hist. Soc.*, **62(2)** : 222, pl. 28, figs. 94a and 94b.

1995. *Glaucanome cerea*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 51. *Zool. Surv. India*.

Distribution : India : Gujarat, Maharsashtra.

Elsewhere : Philippines.

608. *Glauconome sculpta* Sowerby

1894. *Glauconome sculpta* Sowerby, *Proc. malac. Soc. London*, **1** : 40. Type locality : Bay of Bengal.
1991. *Glauconome sculpta*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 155. Zool. Surv. India.
1992. *Glauconome sculpta*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 246. Zool. Surv. India.
1995. *Glauconome sculpta*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 65. Zool. Surv. India.
2001. *Glauconome sculpta*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 80. Zool. Surv. India.
2004. *Glauconome sculpta*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 33.
2006. *Glauconome sculpta*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, *Zool. Surv. India Kolkata*, p. 78.
2007. *Glauconome sculpta*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 250. Zool. Surv. India.
2008. *Glauconome sculpta*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 21.
2008. *Glauconome sculpta*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 167. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa, West Bengal.

Elsewhere : Bay of Bengal.

Family PETRICOLIDAE

Genus *Petricola* Lamarck, 1801

1801. *Petricola* Lamarck, *Hist. Nat. Anim. Sans. Vert.*, 1801 : 121. Type species : *Petricola costata*=*Venus lapicida* Gmelin, 1791; Subsequent designation, Schmidt, 1818.

609. *Petricola biparitta* Deshayes

1906. *Petricola biparitta*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 836.
1949. *Petricola biparitta*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 68.

Distribution : India : Maharashtra.

Elsewhere : No records.

610. *Petricola divergens* (Gmelin)

1853. *Venus divergens* Gmelin, *Syst. Nat.*, ed. **13** : 3269.
1895. *Petricola (Navania) divaricata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 129.
1956. *Petricola divergens*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 134, pl.20, figs. 7a and 7b.

2000. *Petricola divergens*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 285.

Distribution : India : Andaman Islands, Minicoy, Tamil Nadu.

Elsewhere : Indo-Pacific.

611. *Petricola esculpturata* Preston

1915. *Petricola esculpturata* Preston, *Rec. Indian Mus.*, **11** : 301, figs. 13-13a. Type locality : Manikpatna, Lake Chilka, Orissa; types: NZC, ZSI.

2004. *Petricola esculpturata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 60.

Distribution : India : Orissa.

Elsewhere : No subsequent records.

612. *Petricola lithophaga* (Retzius)

1786. *Venus lithophaga* Retzius, *Mem. Acad. R. Sc. Turin*, **3** : 135, pl. 20, figs. 8a and 8b.

1956. *Petricola lithophaga*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 135, pl. 20, figs. 8a and 8b.

1972. *Petricola lithophaga*: Satyanarayana Rao and Sundaram, *Proc. Indian Nat. Sci. Acad.*, **38B**(5 & 6) : 466.

2000. *Petricola lithophaga*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 285.

Distribution : India : Andaman Islands, Minicoy, Tamil Nadu.

Elsewhere : Indo-Pacific.

613. *Petricola monstrosa* (Gmelin)

1853. *Venus monstrosa* Gmelin, *Syst. Nat.*, ed. **13** : 3269.

2000. *Petricola monstrosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 285.

Distribution : India : Andaman Islands.

Elsewhere : Indo-Pacific.

Order MYOIDA

Suborder MYININA

Superfamily MYOIDEA

The superfamily Myoidea included four families, of which two families Myidae and Corbulidae present from Indian waters. Externally the shells of the two families are dissimilar, but both the families have a projecting spoon shaped chondrophore which supports the internal ligament.

The family Myidae have elliptical to oval shaped shells, often truncated and mostly with posterior gape. Siphons always fused and of varying length. Most of the species

are burrow into soft sediments, but some have nestling habitat. Sculpture is weak and may with radial lines.

The family Corbulidae is small. inequivalve shells, without gape at the ends. Shell ovate, rounded or angulate, and often keeled. Sculpture if present is concentric and may be heavily ridged. Pallial sinus shallow and siphons are short. They are found burrowing in various sediments, some with byssus.

Family MYIDAE

Subfamily CRYPTOMYINAE

Genus **Cryptomya** Conrad, 1848

1848. *Cryptomya* Conrad, *Proc. Acad. Nat. Sci. Philad.*, **4** : 121. Type species: *Sphaenia californica* Conrad, 1837.

614. ***Cryptomya philippinarum*** A. Adams

1906. *Cryptomya philippinarum*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1906. *Cryptomya philippinarum* : Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 844.

1949. *Cryptomya philippinarum*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 74.

Distribution : India : Andaman Islands, Maharashtra, Tamil Nadu.

Elsewhere : No records.

Subfamily SPHENIINAE

Genus **Sphenia** Turton, 1822

1822. *Sphenia* Turton, *Encycl. Meth.*, **2** : pl. 230. Type species : *Sphaenia bighami* Turton, subsequent Gray, 1847.

615. ***Sphenia perversa*** Blanford

1867. *Sphenia perversa* Blanford, *J. Asiat. Soc. Beng.*, **36(2)** : 68, pl. 3, figs. 4 & 6.

1992. *Sphenia perversa*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 247, pl. 26, figs. 5 & 7. Zool. Surv. India.

1995. *Sphenia perversa*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 51. Zool. Surv. India.

2008. *Sphenia perversa*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 21.

Distribution : India : West Bengal.

Elsewhere : Myanmar.

Family CORBULIDAE

Genus **Corbula** Bruguiere, 1797

1797. *Corbula* Bruguiere, *Encycl. Meth.*, **2** : pl. 230. Type species : *Corbula sulcata* Lamarck; subsequent designation, Schmidt, 1818.

616. *Corbula abbreviata* Preston

1907. *Corbula abbreviata* Preston, *Ann. Mag. Nat. Hist.*, (7)19 : 215, fig. 1. Type locality : Port Canning.
1907. *Corbula alcocki* Preston, *Ann. Mag. Nat. Hist.*, (7)19 : 215, fig. 2. Type locality : Port Canning.
1907. *Corbula pfeifferi* Preston, *Ann. Mag. Nat. Hist.*, (7)19 : 215, fig. 5. Type locality : Port Canning.
1992. *Corbula abbreviata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 247, pl. 27, figs. 1-4. Zool. Surv. India.
1995. *Corbula abbreviata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 51. Zool. Surv. India.
2008. *Corbula abbreviata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 21.

Distribution : India : West Bengal.

Elsewhere : No records.

617. *Corbula andamanica* E.A. Smith

1906. *Corbula andamanica* Smith, *Ann. Mag. Nat. Hist.*, (7)18 : 263. Type locality : Port Blair, Andaman Islands.
2000. *Corbula andamanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 285.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

618. *Corbula calcarea* Preston

1907. *Corbula calcarea* Preston, *Ann. Mag. Nat. Hist.*, (7)19 : 216, fig. 3.
1992. *Corbula calcarea*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 248, pl. 27, figs. 5-7. Zool. Surv. India.
1995. *Corbula calcarea*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 51. Zool. Surv. India.
2008. *Corbula calcarea*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 22.

Distribution: India: West Bengal.

Elsewhere : No records.

619. *Corbula crassa* Hinds

1843. *Corbula crassa* Hind, *Proc. zool. Soc. London*, 1843 : 55.
1895. *Corbula crassa*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 128.
1898. *Corbula crassa*: Melvill and Skyes, *Proc. malac. Soc. London*, 3 : 48.
1906. *Corbula crassa*: Smith, *Ann. Mag. Nat. Hist.*, (7)18 : 262.
- 1986 *Corbula crassa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p.178.

2000. *Corbula crassa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 285.

Distribution : India : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

Remarks : For detail synonymy see Prashad (1932).

620. *Corbula fortisulcata* E.A. Smith

1878. *Corbula fortisulcata* Smith, *Proc. zool. Soc. London*, **1878** : 821, pl. L, figs. 23, 24.

1895. *Corbula fotisulcata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

2000. *Corbula fortisulcata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 286.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

621. *Corbula gracilis* Preston

1907. *Corbula gracilis* Preston, *Ann. Mag. Nat. Hist.*, (7)**19** : 216, fig. 4.

1992. *Corbula gracilis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 248, pl. 27, fig. 6. *Zool. Surv. India*.

1995. *Corbula gracilis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 51. *Zool. Surv. India*.

2008. *Corbula gracilis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

Distribution : India : West Bengal.

Elsewhere : No subsequent records.

622. *Corbula modesta* Hinds

1843. *Corbula modesta* Hinds, *Proc. zool. Soc. London*, **1843** : 57.

1895. *Corbula modesta*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1941. *Aloides modesta*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5(1)** : 64.

1949. *Aloides modesta*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 58.

1956. *Aloides modesta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 160, pl. 14, figs. 4a and 4b.

Distribution : India : Maharashtra, Tamil Nadu.

Elsewhere : Philippines.

Remarks : For detail synonymy see Prashad (1932).

623. *Corbula rotalis* Hinds

1843. *Corbula rotalis* Hinds, *Proc. zool. Soc. London*, **1843** : 56.

1991. *Corbula rotalis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 156. *Zool. Surv. India*.

Distribution : India : Orissa, Tamil Nadu, West Bengal.

Elsewhere : Singapore, Philippines.

624. *Corbula subquadrata* Melvill and Standen

1906. *Corbula subquadrata* Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 843, pl. 56, fig. 7. Type locality : Bombay.

Distribution : India : Maharashtra.

Elsewhere : No subsequent records.

625. *Corbula sulcolosa* H. Adams

1870. *Corbula sulcolosa* H. Adams, *Proc. zool. Soc. London*, **1870** : 6.

1895. *Corbula sulcolosa*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 128.

1941. *Aloides sulcata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 64, fig. 23d.

1956. *Aloides sulcolosa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 161, pl. 14, figs. 5a and 5b.

Distribution : India : Tamil Nadu.

Elsewhere : Singapore.

626. *Corbula tunicata* Hind

1843. *Corbula tunicata* Hind, *Proc. zool. Soc. London*, **1843** : 55.

2007. *Corbula tunicata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 250. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh.

Elsewhere : Indo-Pacific.

Superfamily GASTROCHAENOIDEA

The superfamily Gastrochaenoidea are commonly known as flask shells, represented by single family Gastrochaenidae, and also represented from India. They are found in cavity of calcareous rocks and corals; others build a cases or tube round themselves. The end of the tube or flask is very narrow and forms a figure of eight. The shell elongates, with a large ventral gape and without hinge teeth; burrow themselves by mechanical as well as chemical.

Family GASTROCHAENIDAE

Genus *Gastrochaena* Spengler, 1783

1783. *Gastrochaena* Spengler, *Ney. Saml. K. Danisk Skrifter.*, **2** : 179. Type species : *Gastrochaena cuneiformis* Splengler, 1783; Subsequent designation, Children, 1822

627. *Gastrochaena apertissima* (Deshayes)

1854. *Gastrochaena apertissima* Deshayes, Adams, *Proc. zool. Soc. London*, **1854** : 326.

1927. *Gastrochaena apertissima*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(1) : 108.

1956. *Gastrochaena apertissima*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 164, pl. 14, figs. 7a to d.

Distribution : India : Tamil Nadu.

Elsewhere : Philippines.

628. *Gastrochaena cuneiformis* Spengler

1783. *Gastrochaena cuneiformis* Spengler, *Ney. Saml. K. Danisk Skrifter.*, 2 : 179.

1974. *Gastrochaena gigantea*: Appukuttan,

1941. *Gastrochaena gigantea*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 65.

1956. *Gastrochaena gigantea*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 163, pl. 14, figs. 6a and 6b.

1991. *Gastrochaena cuneiformis*: Rao and Rao, *Fauna of Lakshadweep, State Fauna series*, 2 : 358. Zool. Surv. India.

2000. *Gastrochaena cuneiformis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 286.

Distribution : India : Andaman and Nicobar Islands, Kerala, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific.

629. *Gastrochaena impressa* Deshayes

1854. *Gastrochaena impressa* Deshayes, *Proc. zool. Soc. London*, 1854 : 327.

1956. *Gastrochaena impressa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 165, pl. 14, figs. 10a to c.

Distribution : India : Tamil Nadu.

Elsewhere : Singapore.

630. *Gastrochaena indistincta* Deshayes

1854. *Gastrochaena indistincta* Deshayes, *Proc. zool. Soc. London*, 1854 : 328.

1956. *Gastrochaena indistincta*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 164, pl. 14, figs. 9a and 9b.

1991. *Gastrochaena indistincta*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 157. Zool. Surv. India.

Distribution : India : Orissa, Tamil Nadu.

Elsewhere : Singapore, Philippines.

631. *Gastrochaena lamellosa* Deshayes

1854. *Gastrochaena lamellosa* Deshayes, *Proc. zool. Soc. London*, **1854** : 328.
1956. *Gastrochaena lamellosa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 164, pl. 14, figs. 8a and 8b.
1965. *Gastrochaena lamellosa*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 222, pl. 28, figs. 94a and 94b.

Distribution : India : Gujarat, Tamil Nadu.

Elsewhere : Philippines.

Suborder PHOLADINA**Superfamily PHOLADOIDEA**

The superfamily Pholadoidea are exclusively adapted for boring into hard substratum such as rocks, corals, other shells, peat and wood. The shells and soft parts are modified for this function and exhibit a number of unique features. This superfamily represented by three families Pholadidae, Xylophagaidae and Teredinidae are present from Indian waters.

The family Pholadidae are subovate to sublong shells, with a wide pedal gape and a large posterior gape; divided into two or more areas, the anterior slope is usually having a sculptured or toothed concentric lamellae, which act as rasp when making boring movements. Umbonal area bears reflected ridge; hinge toothless and a small ligament is supported by chondrophore; also projecting from the umbonal cavity is a long calcareous process, known as apophysis to which the pedal retractors are attached. Along the dorsal area there are accessory shell plates. The Protoplax is anterior to beaks lies over and projects the anterior adductor muscle; mesoplax lies over the beaks and its posterior covers the posterior-dorsal gape; hypoplax, present covering the posterior-ventral gape. Except *Martesia*, this family member is bored into rocks, corals, peat or hard clay, whereas the *Martesia* is a wood borer.

The shell of the family Teredinidae are globose, otherwise resembles with the pholadids; except the anterior is rarely or weakly serrated and there are no accessory plates. The animal is much larger than the shell, greatly elongated, worm like, with a pair short siphon at the end. Close to the siphons are inserted at their base is a pair of pallets, which are partly periostracal and partly calcareous and may be simple or segmented, which are prime diagnostic characters.

Family PHOLADIDAE**Subfamily PHOLADINAE****Genus *Pholas* Linnaeus, 1758**

1758. *Pholas* Linnaeus, *Syst. Nat.*, ed. **10** : 669. Type species : *Pholas dactylus* Linnaeus; subsequent designation, Children, 1822.

632. *Pholas bakeri* Reeve

1872. *Pholas Bakeri* Reeve, *Conch. Icon.*, **18** : *Pholas* sp. no. 47, pl. 12, fig. 47.
 1906. *Pholas bakeri*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.
 1906. *Pholas bakeri*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 845
 1949. *Pholas bakeri*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 74.

Distribution : India : Maharashtra.

Elsewhere : Pakistan coast.

633. *Pholas orientalis* Gmelin

1791. *Pholas orientalis* Gmelin, *Syst. Nat.*, ed., **13** : 3216.
 1895. *Dactylus orientalis*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.
 1921. *Dactylus orientalis*: Hornel, *Madras Fish. Bull.*, **14** : 195.
 1941. *Pholas (Monotyra) orientalis*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 66.
 1949. *Pholas orientalis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.
 1956. *Pholas (Monothya) orientalis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 167, pl. 25, fig. 1.
 1968. *Pholas orientalis*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 135.
 1986 *Pholas orientalis*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
 1991. *Pholas orientalis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 157. *Zool. Surv. India*.
 1992. *Pholas orientalis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 250, pl. 28, fig. 5. *Zool. Surv. India*.
 2000. *Pholas orientalis*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 286.
 2001. *Pholas (Monothya) orientalis*: Mahapatra, *Fauna of Godavari Estuary, Estuarine Ecosystem series*, **4** : 80. *Zool. Surv. India*.
 2007. *Pholas orientalis*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 251. *Zool. Surv. India*.
 2008. *Pholas orientalis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 168. *Zool. Surv. India*.

Distribution: India: Andaman and Nicobar Islands, Andhra Pradesh, Goa, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Indo-Pacific.

Subgenus *Thovana* (Leach MS) Gray, 1847

1847. *Thovana* (Leach MS) Gray, *Proc. zool. Soc.*, London, **15** : 187. Type species : *Pholas oblongatus* Say, 1822=*P. campechiensis* Gmelin, 1791; Original designation.

634. *Pholas (Thovana) chiloensis* (Molina)

1782. *Pholas chiloensis* Molina, *Saggio sulla storia naturale del Chile*, p. 204.

1994. *Pholas (Thovana) chiloensis*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 47.

Distribution : India : Lakshadweep.

Elsewhere : Mexico, Chile.

Remarks : Nair and Salim (1994) recorded this species from Lakshadweep is doubtful.

Genus *Barnea* Leach in Risso, 1826

1826. *Barnea* Leach in Risso, *H.N. Europe*, **4** : 376. Type species : *Pholas candida* Linnaeus, 1758; Original designation.

635. *Barnea candida* (Linnaeus)

1758. *Pholas candida* Linnseus, *Syst. Nat.*, ed., **10** : 669.

1906. *Anatinella candida*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 828.

1906. *Anatinella candida*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1987. *Barnea candida*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.

1988. *Pholas candida*: Purkait and Manna, *Environ. & Ecology*, **6**(2) : 443, fig. 1.23.

1991. *Pholas candida*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 158. *Zool. Surv. India*.

1992. *Barnea candida*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 250, pl. 28, figs. 2 & 4. *Zool. Surv. India*.

1995. *Barnea candida*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 66. *Zool. Surv. India*.

2000. *Barnea candida*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 286.

2006. *Barnea candida*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 79.

2008. *Barnea candida*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

2008. *Barnea candida*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 168. *Zool. Surv. India*.

Distribution : India : Andhra Pradesh, Maharashtra, Orissa, West Bengal.

Elsewhere : Indo-Pacific and Atlantic.

Subfamily MARTESIINAE

Genus *Martesia* (Leach MS) G.B. Sowerby, 1824

1824. *Martesia* (Leach MS) G.B. Sowerby, *Gen. Shells*, (23) *Pholas* : 2, 4. Type species : *Pholas clavata* Lamarck=*Pholas striata* Linnaeus, 1758; Original designation.

636. *Martesia delicatula* Preston

1910. *Martesia delicatula* Preston, *Rec. Indian Mus.*, **5** : 119, fig.4. Type locality : Mouth of Devi River, Orissa Coast, 22-23 fathims; Types : NZC, ZSI.

2004. *Martesia delicatula*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 40.

Distribution : India : Orissa.

Elsewhere : Known from type locality only.

637. *Martesia denticulata* Preston

1910. *Martesia denticulata* Preston, *Rec. Indian Mus.*, **5** : 119. Type locality : Mouth of Devi River, Orissa Coast; Types : NZC, ZSI.

1991. *Martesia denticulata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 158. *Zool. Surv. India*.

Distribution : India : Orissa.

Elsewhere : Known from type locality only.

638. *Martesia fragilis* Verrill and Bush

1898. *Martesia (Martesiella) fragilis* Verrill and Bush, *Proc. U.S. nat. Mus.*, **20** : 777, fig.

1955. *Martesia fragilis*: Daniel and Srinivasan, *Curr. Sci.*, **25** : 59.

1965. *Martesia fragilis*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 123.

1973. *Martesia fragilis* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62(3)** : 356.

1992. *Martesia fragilis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 249. *Zool. Surv. India*.

1994. *Martesia fragilis*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 49, pl. 9C.

1995. *Martesia fragilis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 66. *Zool. Surv. India*.

2008. *Martesia fragilis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

2008. *Martesia fragilis*: Mahapatra, *Fauna of Krishna Estuary, Estuarine Ecosystem series*, **5** : 169. *Zool. Surv. India*.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific, West Atlantic.

Remarks : *M. fragilis* is closely related to *M. striata* and has been confused with it often. It is usually found in floating wood or nuts in the open sea (Turner, 1955). This species also recorded from the catamarans and fishing boats that plays in the open sea but was not found inside the harbour. Nair and Dharmaraj (1983) reported this species from floating coconuts and drift wood gathered from the atolls of Lakshadweep Archipelago.

639. *Martesia multistriata* Sowerby

1849. *Pholas multistriata* Sowerby, *Thes. Conch.*, **2** : 494.
1986 *Martesia multistriata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
2000. *Martesia multistriata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 287.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indonesia.

640. *Martesia striata* (Linnaeus)

1758. *Pholas striata* Linnaeus, *Syst. Nat.* ed. **10** : 669.
1895. *Pholas striata*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.
1906. *Martesia striata*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 845.
1941. *Martesia striata*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 22.
1949. *Martesia striata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17**(5) : 58.
1955. *Martesia striata*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 10, Text figs. 2a, b.
1955. *Martesia americana*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 11, Text figs. 2c, d.
1955. *Martesia striata*: Palekar and Bal, *J. Bombay nat. Hist. Soc.*, **53**(2) : 201.
1956. *Martesia striata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. **7** : 168, pl. 25, figs. 2a–2c.
1962. *Martesia striata*: Nagabhushanam, *Bull. Nat. Inst. Sci. India*, **19** : 126.
1965. *Martesia striata*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 223, pl. 27, figs. 92a & 92b.
1965. *Martesia striata*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 123.
1968. *Martesia striata*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 128.
1968. *Martesia (Martesia) striata*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 92.
1973. *Martesia striata* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 356.
1980. *Martesia striata*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 184.
1986 *Martesia striata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1987. *Martesia striata*: Rambabu, Prasad, and Balaparameswara Rao, *Mahasagar*, **20**(4) : 263.
1989. *Martesia nairi*: Turner and Santhakumaran, *Ophelia*, **30**(3) : 163, figs. 7–10.
1991. *Martesia striata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 158. Zool. Surv. India.
1994. *Martesia striata*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 49, pl. 9C.
1995. *Martesia striata*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 431. Zool. Surv. India.

2000. *Martesia striata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 287.

2007. *Martesia striata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 252. Zool. Surv. India.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Gulf of Aden, Sri Lanka, Myanmar, Australia, Philippines, Japan.

Remarks : *M. striata* is the most destructive and widely distributed species of the genus *Martesia*. It has a world wide distribution ranging from temperate to tropical areas in salinity ranging from normal sea tom as low as 6 ppt. Nair and Dharmaraj (1983) collected shells of *M. striata* from a plank-built cargo boat dry docked at Minicoy Atoll for repair, which frequently anchored at estuarine ports of the Indian mainland.

Genus *Parapholas* Conrad, 1848

1848. *Parapholas* Conrad, *Proc. Acad. Nat. Sci. Philad.*, **4** : 121. Type species : *Pholas californica* Conrad, 1837; Original designation.

641. *Parapholas quadrizonata* (Spengler)

1792. *Pholas quadrizonata* Spengler, *Skriiv. Naturah Selsk. Copenhagen*, **2(1)** : 93.

2000. *Parapholas quadrizonata* Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 287.

Distribution : Andaman Islands.

Elsewhere : Indo-Pacific.

Genus *Lignopholas* Turner, 1955

1955. *Lignopholas* Turner, *Johnsonia*, **3(34)** : 98. Type species : *Lignopholas clappi* Turner, 1955; Subsequent designation.

642. *Lignopholas fluminalis* (Blanford)

1867. *Martesia fluminalis* Blanford, *J. Asiat. Soc. Beng.*, **36(2)** : 67, pl. 3, figs. 1-3.

1922. *Martesia fluminalis*: Annandale, *J. Proc. Asiat. Soc. Beng.*, **18(10)** : 557.

1989. *Lignopholas fluminalis*: Turner and Santhakumaran, *Ophelia*, **30(3)** : 175, figs. 14, 15 and 16.

1992. *Lignopholas fluminalis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 249. Zool. Surv. India.

1995. *Lignopholas fluminalis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 51. Zool. Surv. India.

Distribution : India : Kerala, West Bengal.

Elsewhere : Myanmar, Borneo.

643. *Lignopholas rivicola* Sowerby

1840. *Lignopholas rivicola* Sowerby, *Proc. zool. Soc. London*, **1840** :

1989. *Lignopholas rivicola*: Turner and Santhakumaran, *Ophelia*, **30**(3) : 155, figs. 12 and 13.

Distribution : Andhra Pradesh.

Elsewhere : River Pontai.

Remarks : Turner and Santhakumaran (1989) recorded this species from Vishakhapatnam is doubtful.

Subfamily JOUANNETIINAE**Genus *Jouannetia* Des Moulins, 1828**

1828. *Jouannetia* Des Moulins, *Bull. Hist. Nat. Linn. Bordeaux*. Type species : *J. semicaudata* Des Moulins, 1828; Original designation.

644. *Jouannetia cumingii* (Sowerby)

1849. *Triumphalia cumingii* Sowerby, *Proc. zool. Soc. London*, **1849** : pl. 161, pl. 5, figs. 3, 3a.

1956. *Jouannetia cumingii*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 170, pl. 15, fig. 4.

1965. *Jouannetia cumingii*: Kundu, *J. Bombay nat. Hist. Soc.*, **62**(2) : 223, pl. 27, figs. 91a -c.

2000. *Jouannetia cumingii*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 287.

Distribution : Andaman Islands, Gujarat, Minicoy, Tamil Nadu.

Elsewhere : Indo-Pacific.

645. *Jouannetia globosa* Quoy and Gaimard

1835. *Pholas globosa* Quoy and Gaimard, *Voy. Astrolabe Zool.*, **3** : 549, pl. 185, figs. 16 to 19.

1895. *Jouannetia globosa*: Thurston, *Madras Govt. Mus. Bull.*, **3** : 127.

1956. *Jouannetia globosa*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 170, pl. 15, figs. 3a and 3b.

1986 *Jouannetia globosa*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.

2000. *Jouannetia globosa*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 288.

Distribution : Andaman and Nicobar Islands, Tamil Nadu.

Elsewhere : Indo-Pacific.

Family XYLOPHAGAIIDAE**Genus *Xylophaga* Turton, 1822**

1822. *Xylophaga* Turton, *Conch Insul. Brit.*, p. 253. Type species : *Teredo dorsalis* Turton, 1819; Original designation.

646. *Xylophaga indica* Smith

1904. *Xylophaga indica* Smith, *Ann. Mag. Nat. Hist.*, (7)14 : 7-8. Type locality : Andaman sea, 185 fathoms.

2000. *Xylophaga indica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 288.

Distribution : Andaman Islands.

Elsewhere : Indian Ocean.

Family TEREDINIDAE

Commonly known as shipworms. They are highly specialised group of bivalves adapting for boring into wood. This group mostly resembles with the family Pholadidae. The important characters of this group are closed mantle; truncated discoid foot; reduced hinge; small ligament; anterior adductor muscle small, posterior adductor muscles strong and large; anterior adductor muscles protected by cephalic hood. Large pedal gape present in the shell. Body worm like, shell greatly reduced, with pallets; specialized organs located at the base of siphon close the burrow when the siphons are withdrawn. Siphon short, united or separated and protrude through the minute opening of burrow into the water for respiration and feeding.

The surface of the foot and mantle has ciliary tracts which carried the fine particles of wood into the mantle cavity and the mouth. They are finally extruded thorough the excurrent siphon after passing through the digestive tract. The extent of which the wood can be utilised as food probably varies with the species.

Shipworms invade a new wood during short free swimming larval period. The animal entrance hole is extremely small and normally slightly enlarged throughout the life of the animal. The damage which they do often go undetected until the interior is nearly or completely destroyed and the wood disintegrates for which they are called as "termites of the sea"

Salinity, temperature and the presence of wood are the main factors for the distribution of shipworms. The other factors are tide, water currents, turbidity, pollution and bottom fouling communities are also involved.

Subfamily TEREDININAE

Genus *Teredo* Linnaeus, 1758

1758. *Teredo* Linnaeus, *Syst. Nat.*, ed. 10 : 651. Type species : *Teredo navalis* Linnaeus, 1758; Subsequent designation.

647. *Teredo bartschi* Clapp

1923. *Teredo (Teredo) bartschi* Clapp, *Proc. Boston Soc. nat. Hist.*, 37 : 33.

1955. *Teredo (Teredo) bartschi*: Nagabhushanam, *Rec. Indian Mus.*, 53 : 3, Text figs. 1e, f.

1973. *Teredo bartschi* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, 62(3) : 351.

1994. *Teredo bartschi*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, 159 : 28, pl. 3D.

Distribution : India : Andhra Pradesh, Kerala, Lakshadweep, Tamil Nadu.

Elsewhere : Persian Gulf, Red Sea, Malagasy, Australia, Hawaiian Islands, South Carolina to Texas, Florida.

Remarks : World wide distributed species, in the tropical and sub tropical regions.

648. *Teredo clappi* Bartsch

1923. *Teredo (Zopoteredo) clappi* Bartsch, *Proc. Biol. Soc. Washington*, **36** : 96.
1955. *Teredo (Zopoteredo) trulliformis*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 6, Text figs. 10, p.
1958. *Teredo (Teredo) renschi*: Daniel, *J. Madras Univ.*, **B28**(2 &3) : 115.
1959. *Teredo (Zopoteredo) trulliformis* : Ganapati and Rao, *Curr. Sci.*, **28**(2) : 332.
1964. *Teredo (Coeloteredo) renschi*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1965. *Teredo (Coeloteredo) renschi* : Nair, *J. Bombay nat. Hist. Soc.*, **62** : 126.
1965. *Teredo clappi*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 580.
1965. *Teredo (Zopoteredo) trulliformis* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 580.
1965. *Teredo (Coeloteredo) renschi* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 580.
1966. *Teredo clappi* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 380.
1973. *Teredo clappi* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **70**(2) : 351.
1994. *Teredo clappi*: Nair and Salim, *Rec. zool.Surv. India, Occ. Paper No*, **159** : 29, pl. 4A.

Distribution : India : Andhra Pradesh, Goa, Kerala, Lakshadweep, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : Port Aden, Singapore, Florida, Hawaiian Island.

Remarks : World wide distributed species, in the tropical and sub tropical regions. This species attacking the live mangroves (Santhakumaran, 1966).

649. *Teredo fulleri* Clapp

1924. *Teredo (Zopoteredo) fulleri* Clapp, *Trans. Acad. Sci. St. Louis*, **25**(1) : 12, pl. 3, figs. 16-22.
1965. *Teredo (Terodothyra) indomalaica*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 125.
1973. *Teredo fulleri* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 352.
1994. *Teredo fulleri*: Nair and Salim, *Rec. zool.Surv. India, Occ. Paper No*, **159** : 30, pl. 4B.

Distribution : India : Andhra Pradesh, Gujarat, Lakshadweep, Tamil Nadu.

Elsewhere : Malagasy, Singapore, Virgin Island.

Remarks : This is a common species in the atolls of Lakshadweep, and is highly destructive both to fixed underwater structure and to wooden craft in the area (Nair and Dharmaraj, 1980).

650. *Teredo furcifera* von Martens

1894. *Teredo furcifera* von Martens, *Zoologische Forschungsreisen in Australien und dem Malayischen Archipel*, 5 : Mollusken, p. 95, pl. 4, fig. 9.
1955. *Teredo (Teredo) parksi*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 3, Text figs. 1c, d.
1955. *Teredo (Teredo) furcillatus*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 5, Text figs. 1g, h.
1955. *Teredo (Teredo) parksi madrasensis*: Nair, *Rec. Indian Mus.*, **53** : 265, Text fig. 2.
Type locality : Boat Basin, Madras Harbour.
1955. *Teredo (Teredo) furcillatus* Nair, *Rec. Indian Mus.*, **53** : 267, Text fig. 3.
1956. *Teredo (Teredo) parksi*: Nair and Gurumani, *J. Bombay nat. Hist., Soc.* **54**(3) : 670.
1959. *Teredo (Teredo) furcillatus*: Ganapati and Rao, *Curr. Sci.*, **28**(2) : 332.
1958. *Teredo (Teredo) furcillatus* : Daniel, *J. Madras Univ.*, **B28**(2 & 3) : 115.
1960. *Teredo bensoni*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57**(2) : 363.
1963. *Teredo (Teredo) australasiatica* Nair, *Curr. Sci.*, **32** : 215.
1964. *Teredo (Teredo) elongata*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1964. *Teredo (Teredo) parksi*: Palekar, Santhakumaran and Bal, *J. Timb. Dry. Presev. Ass. India*. **10**(3) : 12.
1973. *Teredo furcifera* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 351.
1980. *Teredo furcifera*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 180.
1987. *Teredo furcifera*: Rambabu, Prasad, and Balaparameswara Rao, *Mahasagar*, **20**(4) : 263.
1994. *Teredo furcifera*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 30, pl. 4C.
2000. *Teredo furcifera*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 288.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Gujarat, Karnataka, Kerala, Maharashtra, Tamil Nadu.

Elsewhere : East African coast, Malagasy, Red sea, Persian Gulf, Sri Lanka, Indonesia, New Guinea, Philippines, Hawaii Islands.

Remarks : This is a very common and dominant wood boring species along the coasts of India. It occurs in most of the harbours attacking wooden water front structures. One of the serious impediments for the culture of oyster around Tuticorin is the massive infestation by this species.

651. *Teredo navalis* Linnaeus

1767. *Teredo navalis* Linnaeus, *Syst. Nat.*, ed., **12** : 1267.
1955. *Teredo (Teredo) navalis*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 3, Text figs. 1a, b.
1955. *Teredo (Teredo) navalis* Nair, *Rec. Indian Mus.*, **53** : 270, Text fig. 5.
1955. *Teredo navalis*: Palekar and Bal, *J. Bombay nat. Hist. Soc.*, **53**(2) : 201.
1956. *Teredo (Teredo) navalis*: Nair and Gurumani, *J. Bombay nat. Hist., Soc.* **54**(3) : 667.

Distribution : India : Andhra Pradesh, Kerala.

Elsewhere : Africa, Australia, Europe, Atlantic coast of North America.

652. *Teredo triangularis* Edmondson

1942. *Teredo (Zopoterredo) triangularis* Edmondson, *Occ. Paper P.P. Bishop Mus.*, **17**(10) : 126.

1955. *Teredo (Zopoterredo) triangularis*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 6, Text figs. 1q, r.

1973. *Teredo triangularis* : Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 351.

1994. *Teredo triangularis*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 33, pl. 5B.

Distribution : India : Andhra Pradesh, Lakshadweep, Tamil Nadu.

Elsewhere : Hawaiian Island.

Remarks : Distributed in the tropical and subtropical regions of the Indo-Pacific.

Genus *Cornuterredo* Dall, Bartsch and Rehder, 1938

1938. *Cornuterredo* Dall, Bartsch and Rehder, *Bull. B.P. Bishop Mus.*, **153** : 209. Type species : *Teredo (Cornuterredo) milleri* Dall, Bartsch and Rehder, 1938; Original designation.

653. *Teredo (Cornuterredo) milleri* Dall, Bartsch and Rehder

1938. *Teredo (Cornuterredo) milleri* Dall, Bartsch and Rehder, *Bull. B.P. Bishop Mus.*, **153** : 210, pl. 54, figs. 1-2.

1972. *Teredo (Cornuterredo) milleri*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57**(2) : 365.

1973. *Lyredo affinis*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 350.

Distribution : India : Andhra Pradesh.

Elsewhere : Hawaii.

Remarks : The locality Andhra Pradesh mentioned by Nagabhushanam (1960) is doubtful.

Genus *Bactronophorus* Tapparone-Canefri, 1877

1877. *Bactronophorus* Tapparone-Canefri, *Ann. Mus. Stor. Nat. Geneva*, **9** : 290. Type species : *Teredo thoracites* Gould, 1862; Original designation.

654. *Bactronophorus thoracites* (Gould)

1856. *Teredo thoracites* Gould, *Proc. Boston Soc. nat. Hist.*, **6** : 15, pt. 65, figs. 1-6.

1955. *Bactronophorus thoracites*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 7, Text figs. 1u, v.

1957. *Teredo (Bactronophorus) thoracites*: Palekar and Bal, *Curr. Sci.*, **26**(9) : 359.

1966. *Bactronophorus thoracites*: Roonwal, *Proc. Dacca Sympos. Paris (UNESCO)*, p. 279, pls. 8a & 9a.

1968. *Bactronophorus thoracites*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. 1 : 86.
1973. *Bactronophorus thoracites*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, 62(3) : 349.
1980. *Bactronophorus thoracites*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, 77 : 181, fig. 1A.
1981. *Bactronophorus thoracites*: Das and Dev Roy, *Bull. zool. Surv. India.*, 4(3) : 391.
1986. *Bactronophorus thoracites*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1987. *Bactronophorus thoracites*: Rambabu, Prasad, and Balaparameswara Rao, *Mahasagar*, 20(4) : 263.
1991. *Bactronophorus thoracites*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 160. Zool. Surv. India.
1992. *Bactronophorus thoracites*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 251. Zool. Surv. India.
1994. *Bactronophorus thoracites*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, 159 : 14.
1995. *Bactronophorus thoracites*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 66. Zool. Surv. India.
2000. *Bactronophorus thoracites*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 289.
2006. *Bactronophorus thoracites*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans*, Zool. Surv. India Kolkata, p. 82.
2007. *Bactronophorus thoracites*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 253. Zool. Surv. India.
2008. *Bactronophorus thoracites*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 22.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : Common species occurs in the mangroves, estuaries and along sheltered coastlines of the Indo-west Pacific. This species is a major forest pest for both living and dead mangrove forest tree in Sundarbans, West Bengal. Even though it is restricted to mangrove forest, this species occasionally appears in the logs of timber and in catamarans (Nagabhushanam, 1955).

Genus *Dicyathifer* Iredale, 1932

1932. *Dicyathifer* Iredale in Johnson and McNeill, *Destr. Timber Port of Sydney*, p. 28. Type species : *Teredo manni* Wright in Calman, 1920; Original designation.

655. *Dicyathifer manni* (Wright)

1866. *Kuphus manni* Wright, *Trans. Linn. Soc. London*, 25(3) : 565, pt. 65, figs. 1-6.
1955. *Teredo (Teredothyra) mannii*: Nagabhushanam, *Rec. Indian Mus.*, 53 : 5, Text figs. 1i, j.

1957. *Teredo (Kuphus) mannii*: Palekar and Bal, *Curr. Sci.*, **26**(9) : 359.
1958. *Teredo (Kuphus) mannii*: Daniel, *J. Madras Univ.*, **B28**(2 & 3) : 115.
1963. *Teredo (Kuphus) mannii*: Nair, *Curr. Sci.*, **32** : 215.
1964. *Teredo (Kuphus) mannii*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1964. *Teredo (Kuphus) mannii*: Palekar, Santhakumaran and Bal, *J. Timb. Dry. Presev. Ass. India*, **10**(3) : 11.
1965. *Teredo (Kuphus) mannii*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 126.
1966. *Teredo (Kuphus) mannii*: Roonwal, *Proc. Dacca Sympos. Paris (UNESCO)*, p. 281, pls. 8d & 9d.
1968. *Dicyathifer manni*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 87.
1973. *Dicyathifer manni*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 349.
1980. *Dicyathifer manni*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 181, fig. 1B.
1981. *Dicyathifer manni*: Das and Dev Roy, *Bull. zool. Surv. India.*, **4**(3) : 391.
1986. *Dicyathifer manni*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1987. *Dicyathifer manni*: Rambabu, Prasad, and Balaparameswara Rao, *Mahasagar*, **20**(4) : 263.
1991. *Dicyathifer manni*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 160. *Zool. Surv. India*.
1992. *Dicyathifer manni*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 251. *Zool. Surv. India*.
1994. *Dicyathifer manni*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 17, pl. 1C.
1995. *Dicyathifer manni*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 66. *Zool. Surv. India*.
2000. *Dicyathifer manni*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 289.
2007. *Dicyathifer manni*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 253. *Zool. Surv. India*.
2008. *Dicyathifer manni*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Gujarat, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species is reported to be common infesting mangrove trees in marine and brackish water of tropical and subtropical region of South-east Asia. This species is common infesting both living and dead mangrove trees in Sundarbans, West Bengal.

Genus *Lyrodus* Gould, 1870

1870. *Lyrodus* Gould, *Binneys Rept. Invert. Mass.*, ed. **2** : 34. Type species : *Teredo chlorotica* Gould, 1870; Original designation.

656. *Lyrodus massa* (Lamy)

1923. *Teredo massa* Lamy, *Bull. Mus. Natl. Hist. Nat. Paris*, **29** : 176, Text fig..
 1972. *Teredo (Coeloteredo) singaporensis*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57(2)** : 364.
 1965. *Teredo (Coeloteredo) singaporensis*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 126.
 1994. *Lyrodus massa*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 36, pl. 5D.

Distribution : India : Andhra Pradesh, Goa, Lakshadweep, Kerala, Tamil Nadu.

Elsewhere : East Africa, Malagasy, Gulf of Aden, Indonesia.

Remarks : This species has been collected in fair numbers from all the atolls of Lakshadweep archipelago and is apparently a high destructive species in this area (Nair and Salim, 1994).

657. *Lyrodus pedicellatus* (Quatrefagus)

1849. *Teredo pedicellata* Quatrefagus, *Ann. Sci. Nat. Zool.*, (3)**11** : 26, pl. 1, fig. 2.
 1954. *Teredo (Teredo) madrasensis* Nair, *Rec. Indian Mus.*, **52** : 401, figs. 6 a-c. Type locality : Mylapore, Madras.
 1955. *Teredo (Teredops) diegensis*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 5, Text figs. 1k, l.
 1955. *Teredo (Teredops) samoensis*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 6, Text figs. 1m, n.
 1955. *Teredo (Teredo) indica* : Nair, *Rec. Indian Mus.*, **53** : 268, Text fig. 4. Type locality : Madras Harbour.
 1957. *Teredo (Teredo) madrasensis*: Nair and Gurumani *J. Bombay nat. Hist., Soc.* **54(3)** : 668.
 1957. *Teredo (Teredo) indica*: Nair and Gurumani *J. Bombay nat. Hist., Soc.* **54(3)** : 669.
 1960. *Teredo (Lyrodus) malaccana*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57(2)** : 366.
 1960. *Teredo (Coeloteredo) singaporena*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57(2)** : 366.
 1964. *Teredo (Lyrodus) malaccana*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
 1964. *Teredo (Lyrodus) pedicellatai*: Palekar, Santhakumaran and Bal, *J. Timb. Dry. Presev. Ass. India*. **10(3)** : 11.
 1965. *Teredo (Teredothyra) madrasensis*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 125.
 1965. *Teredo (Lyrodus) malaccana*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 125.
 1968. *Lyrodus pedicellatus*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 87.
 1973. *Lyrodus pedicellatus*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62(3)** : 350.
 1980. *Lyrodus pedicellatus*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 183, fig. 1D.
 1981. *Lyrodus pedicellatus*: Das and Dev Roy, *Bull. zool. Surv. India.*, **4(3)** : 392.

- 1986 *Lyrodus pedicellatus*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1987. *Lyrodus pedicellatus*: Rambabu, Prasad, and Balaparameswara Rao, *Mahasagar*, **20**(4) : 263.
1991. *Lyrodus pedicellatus*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 160. Zool. Surv. India.
1994. *Lyrodus pedicellatus*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 34, pl. 6A.
2000. *Lyrodus pedicellatus*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 289.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : African coast, Malagasy, Red Sea, Persian Gulf, Indonesia, New Guinea, Philippines, Australia, New Zealand.

Genus *Teredora* Bartsch, 1921

1921. *Teredora* Bertsch, *Proc. Biol. Soc. Washington*, **34** : 26. Type species : *Teredo malleolus* Turton, Original designation.

658. *Teredora malleolus* (Turton)

1822. *Teredo malleolus* Turton, *Conch. Insul. Brit.*, p. 255, pl. 2, fig. 19.
1955. *Teredo (Teredora) thomsoni*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 7, Text figs. 1s, t.

Distribution : India : Andhra Pradesh.

Elsewhere : America.

Ramarks : *Teredo (Teredora) thomsoni* reported by Nagabhushanam (1955) is synonym of *Teredo malleolus* Turton. The locality of Andhra Pradesh as mentioned by Nagabhushanam (1955) is doubtful.

659. *Teredora princessae* (Sivicks)

1928. *Teredo princessae* Sivicks, *Philippine J. Sci.*, **37** : 291, pl. 2, fig. 11.
1955. *Teredo (Teredo) minori* Nair, *Rec. Indian Mus.*, **53** : 274, Text figs. 7. Type locality : Madras coast.
1958. *Teredo (Dactyloteredo) diderichsensi*: Daniel, *J. Madras Univ.*, **B28**(2 &3) : 115.
1964. *Teredo (Dactyloteredo) diderichsensi*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1965. *Teredo (Dactyloteredo) diderichsensi*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 127.
1968. *Teredo princessae*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 87.
1973. *Teredo princessae*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 352.
1991. *Teredo princessae*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 161. Zool. Surv. India.

1994. *Teredora princesae* : Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No, 159* : 22, pl. 2C.

Distribution : Andhra Pradesh, Karnataka, Kerala, Lakshadweep, Maharashtra, Orissa, Tamil Nadu.

Elsewhere : South Africa, Mocambique, Philippines, New Guinea, North Pacific, Hawaiian Island.

Remarks : This species is typically an open ocean species and attacks drift logs, habitually adapted to the floating wood.

Genus *Teredothyra* Bartsch, 1921

1921. *Teredothyra* Bartsch, *Proc. biol. Soc. Washington*, **34** : 26. Type species: *Teredo dominicensis* Bartsch

660. *Teredothyra excavata* (Jefferys)

1860. *Teredo excavata* Jefferys, *Ann. Mag. Nat. Hist.* (3)**6** : 123.
 1955. *Teredo (Teredothyra) linearis* Nair, *Rec. Indian Mus.*, **53** : 272, Text fig. 6. Type locality : Rayapuram shore, Madras.
 1973. *Teredothyra excavata*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 352.
 1994. *Teredothyra excavata* : Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No, 159* : 19, pl. 1D.
 1994. *Teredothyra palauensis* : Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No, 159* : 19, pl. 2B.
 2004. *Teredora excavata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 77.

Distribution : India : Karnataka, Lakshadweep, Tamil Nadu.

Elsewhere : Africa, New Guinea, Philippines, England, Victoria

Remarks : This species occurs in fair numbers in the mangrove forests adjoining the mouth of rivers in the west coast of India. It can tolerate the very high range of salinity changes i.e. almost freshwater in the monsoon to marine condition during the pre-monsoon.

661. *Teredothyra smithi* (Bartsch)

1927. *Teredo (Teredothyra) smithi* Bartsch, *Bull. U.S. Natl. Mus.*, **100**(2) : pt. 4 : 540, pl. 53, figs. 6 & 7.
 1954. *Teredo (Zopoterdo) bengalensis* Nair, *Rec. Indian Mus.*, **52** : 411, figs. 10a-c. Type locality : Drift Wood, Madras.
 1956. *Teredo (Nototerdo) nambudalensis* Nair and Gurumani, *J. Wash. Acad. Sci.*, **47** : 157, fig. 2. Type locality : Nambudala, Ramnad, Madras.
 1956. *Teredo (Zopoterdo) bengalensis*: Nair and Gurumani *J. Bombay nat. Hist., Soc.* **54**(3) : 671.

1963. *Teredo (Nototeredo) nambudalensis*: Nair, *Curr. Sci.*, **32** : 215.
1973. *Teredothyra smithi*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 352.
1994. *Teredothyra smithi* : Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 19, pl. 1D.
2004. *Teredora smithi*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 77.

Distribution : India : Gujarat, Karnataka, Lakshadweep, Tamil Nadu.

Elsewhere : Indo-Pacific. Tropical and Subtropical regions.

Remarks : This species occurs in fairly deep water in tropical and subtropical Indo-pacific regions.

Genus *Uperotus* Guettard, 1770

1770. *Uperotus* Guettard, *Mem. Diff. Part. Sci.*, **3** : 126. Type species: *Teredo clava* Gmelin, 1791

662. *Uperotus clava* (Gmelin)

1791. *Teredo clava* Gmelin, *Syst. Nat.*, ed. **13** : 3748.
1954. *Teredo (Teredora) clava* : Nair, *Rec. Indian Mus.*, **52** : 407, figs. 8a-c.
1954. *Teredo (Teredora) rehderi* Nair, *Rec. Indian Mus.*, **52** : 408, fig. 9a-d. Type locality : Drift wood, Madras.
1956. *Teredo (Teredora) vattanansis* Nair and Gurumani, *Ann. Mag. nat. Hist.*, (12)**10** : 174, figs. 1-2. Type locality: Vattanam, Ramnad, Madras.
1965. *Teredo (Uperotus) clava*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 127.
1973. *Uperotus clavus*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 353.
1980. *Uperotus rehderi*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 183, fig. 1C.
1986. *Uperotus rehderi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1992. *Uperotus clavus*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 254. *Zool. Surv. India*.
1994. *Uperotus clavus*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 24, pl. 3D.
1994. *Uperotus rehderi*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 19, pl. 3A.
2000. *Uperotus clava*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 290.
2000. *Uperotus rehderi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 290.

Distribution : India : Andaman and Nicobar Islands, Kerala, Lakshadweep, Puducherry, Tamil Nadu, West Bengal.

Elsewhere : Tropical Indo-Pacific.

Remarks : This species occurs in floating nuts and drift wood in the tropical and subtropical areas. The large and extensive gills suggest that this species can more effectively utilize the phytoplankton as food in the over crowded substratum.

Subfamily BANKIINAE

Genus *Bankia* Gray, 1842

1842. *Bankia* Gray, *Syn. Cont. Brit. Mus.*, ed. 42 : 150. Type species : *Teredo bipalmulata* Lamarck; subsequent designation, Gray, 1847.

663. *Bankia bipennata* (Turton)

1819. *Teredo bipennata* Turton, *Conch. Dict. British Is.*, p. 184, figs. 38-40.

1956. *Bankia* (*Neobankia*) *denticuloserrata*: Daniel, *J. Madras Univ.*, B26(3) : 593.

1958. *Bankia* (*Neobankia*) *denticuloserrata*: Daniel, *J. Madras Univ.*, B28(2 &3) : 115.

1955. *Bankia* (*Neobankia*) *lineata* Nair, *J. Madras Univ.*, 25(1) : 109, figs a-f. Type locality : Madras beach.

1965. *Bankia* (*Plumulella*) *lineata*: Nair, *J. Bombay nat. Hist. Soc.*, 62 : 125.

1972. *Bankia* (*Plumulella*) *lineata*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* 57(2) : 368.

1973. *Bankia bipennata*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, 62(3) : 353.

1980. *Bankia bipennata*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, 77 : 184, fig. 1G.

1986. *Bankia bipennata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

1994. *Bankia bipennata*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, 159 : 43, pl. 7C.

2000. *Bankia bipennata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 290.

2004. *Bankia bipennata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 9.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Tamil Nadu.

Elsewhere : African coast, Philippines, Japan.

Remarks : This is a world wide distributed species, in the tropical and subtropical regions.).

664. *Bankia bipalmulata* (Lamarck)

1801. *Teredo bipalmulata* Lamarck, *Syst. Anim. Sans. Vert.*, p. 129.

1954. *Bankia* (*Bankia*) *bipalmulata* : Nair, *Rec. Indian Mus.*, 52 : 391, figs. 2a-6.

1958. *Bankia* (*Bankia*) *bipalmulata*: Daniel, *J. Madras Univ.*, B28(2 &3) : 115.

1962. *Bankia* (*Bankia*) *bipalmulata*: Nair, *Curr. Sci.*, 31(7) : 290.

1965. *Bankia* (*Bankia*) *bipalmulata*: Nair, *J. Bombay nat. Hist. Soc.*, 62 : 124.

1973. *Bankia bipalmulata*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 353.
1980. *Bankia bipalmulata*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 180.
1994. *Bankia bipalmulata*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 42, pl. 7B.
2000. *Bankia bipalmulata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 290.

Distribution : India : Andaman and Nicobar Islands, Puducherry, Tamil Nadu.

Elsewhere : Indo-Pacific. Tropical and subtropical regions.

Remarks : An Indo-Pacific species distributed in the tropical and subtropical regions.

665. *Bankia campanellata* Moll and Roch

1931. *Bankia campanellata* Moll and Roch, *Proc. malac. Soc. London*, **19**(4) : 215, pl. 25.
1954. *Bankia (Bankia) bengalensis* Nair, *Rec. Indian Mus.*, **52**(2-4) : 388, figs. 1 a-c. Type locality : Mylapore, Madras.
1955. *Bankia (Bankia) setacea*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 8, Text figs. 1w, x.
1955. *Bankia setacea*: Palekar and Bal, *J. Bombay nat. Hist. Soc.*, **53**(2) : 201.
1959. *Bankia (Liliobankia) campanellata*: Ganapati and Rao, *Curr. Sci.*, **28**(2) : 332.
1964. *Bankia (Liliobankia) campanellata*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1964. *Bankia (Liliobankia) campanellata*: Palekar, Santhakumaran and Bal, *J. Timb. Dry. Presev. Ass. India*, **10**(3) : 11.
1966. *Bankia campanellata*: Roonwal, *Proc. Dacca Sympos. Paris (UNESCO)*, p. 279, pls. 8e & 9e.
1968. *Bankia campanellata*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 90.
1972. *Bankia (Liliobankia) campanellata*: Nagabhushanam, *J. Bombay nat. Hist., Soc.*, **57**(2) : 367.
1973. *Bankia campanellata*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 354.
1991. *Bankia campanellata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 161; *Zool. Surv. India*.
1992. *Bankia campanellata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 252. *Zool. Surv. India*.
1994. *Bankia campanellata*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 44, pl. 8A.
1995. *Bankia campanellata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 66. *Zool. Surv. India*.
2000. *Bankia campanellata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 290.
2004. *Bankia campanellata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 8.

2006. *Bankia campanellata*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata, p. 85.
2007. *Bankia campanellata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 254. Zool. Surv. India.
2008. *Bankia campanellata*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

Distribution : India : Andaman Islands, Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species settle on freshly immersed test panels during August and February and has not been found in the summer months March to July. This is in contrast with the seasonal distribution of the other two important molluscan borers in the local harbour i.e. *Martesia striata* and *Teredo furcifera* which occurs throughout the year, maximum attack being in the summer month (Nagabhushanam, 1962).

666. *Bankia carinata* (Gray)

1827. *Teredo carinata* Gray, *Phil. Mag.*, (N.S.) **2** : 411.
1954. *Bankia (Bankiella) edmondsoni* Nair, *Rec. Indian Mus.*, **52** : 396, figs. 4 a-c. Type locality : Drift wood, Madras.
1954. *Bankia (Bankiella) indica* Nair, *Rec. Indian Mus.*, **52** : 393, fig. 3a-d. Type locality : Mylapore, Madras.
1956. *Bankia (Bankiella) edmondsoni*: Nair and Gurumanui, *J. Bombay nat. Hist., Soc.* **54**(3) : 664.
1956. *Bankia (Bankiella) indica*: Nair and Gurumanui, *J. Bombay nat. Hist., Soc.* **54**(3) : 665.
1958. *Bankia (Bankiella) carinata*: Daniel, *J. Madras Univ.*, **B28**(2 &3) : 115.
1959. *Bankia (Bankiella) edmondsoni*: Ganapati and Rao, *Curr. Sci.*, **28**(2) : 332.
1960. *Bankia (Bankiella) carinata*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57**(2) : 367.
1964. *Bankia (Bankiella) carinata*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1964. *Bankia (Bankiella) conularis*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1965. *Bankia (Bankiella) indica*: Nair, *J. Bombay nat. Hist. Soc.*, **62** : 124.
1968. *Bankia carinata*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 90.
1973. *Bankia carinata*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 353.
1991. *Bankia carinata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 161. Zool. Surv. India.
1994. *Bankia carinata*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 45, pl. 7B.
1995. *Bankia carinata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 52. Zool. Surv. India.
2004. *Bankia carinata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 8.

2007. *Bankia carinata*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 254. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Goa, Karnataka, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Remarks : This species occurs in fair numbers in the wooden floats employed in fishing. Occasionally it has also been recorded from wooden structures, discarded country canoes as well as from the drift wood cast ashore. It is very common species all along the Indian coasts, is quite destructive and appears readily on test panels exposed in the sea.

667. *Bankia frimbricata* Moll and Roch

1931. *Bankia frimbricata* Moll and Roch, *Proc. malac. Soc. London*, 19 : 213, pl. 25, fig.37.

1968. *Bankia frimbricata*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. 1 : 91, pl. 1.

1991. *Bankia frimbricata*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 162. Zool. Surv. India.

Distribution : India : Orissa.

Elsewhere : Atlantic Ocean, East Pacific.

668. *Bankia nordi* Moll

1931. *Bankia nordi* Moll, *Proc. malac. Soc. London*, 19 : 215, pl. 25.

1964. *Nausitora sajnakhaliensis* Rajagopal, *J. Bombay nat. Hist. Soc.* 61(1) : 113, Text fig. 2, figs. 4-6. Type locality: Saznakhali, Sunderbans, West Bengal; Types : NZC, ZSI.

1965. *Bankia (Bankiella) nordi*: Nair, *J. Bombay nat. Hist. Soc.*, 62 : 124.

1966. *Teredo nordi*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, 62(3) : 580.

1966. *Nausitora sajnakhaliensis*: Roonwal, *Proc. Dacca Sympos. Paris (UNESCO)*, p. 281, pls. 8f and 9f.

1973. *Bankia nordi*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, 62(3) : 355.

1992. *Bankia nordi*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 253. Zool. Surv. India.

1995. *Bankia nordi*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, 2 : 52. Zool. Surv. India.

2006. *Bankia nordi*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India, Kolkata*, p. 86.

2008. *Bankia nordi*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 22.

Distribution : India : Andaman and Nicobar Islands, Orissa, West Bengal.

Elsewhere : African coast, Malagasy, Red Sea, Persian Gulf.

669. **Bankia rochi** Moll

1931. *Bankia rochi* Moll, *Proc. malac. Soc. London*, **19** : 215, pl.25.
1960. *Bankia (Plumulella) theilei*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* **57**(2) : 368.
1961. *Bankia (Neobankia) roonwali* Rajagopalaiengar, *Sci. & Cult., Calcutta*, **27** : 9. Type locality : Saznakhali, Sundrbans.
1964. *Bankia (Bankiella) minima*: Palekar, Santhakumaran and Bal, *J. Timb. Dry. Presev. Ass. India.* **10**(3) : 11.
1964. *Bankia (Bankiella) roonwali*: Palekar, Santhakumaran and Bal, *J. Timb. Dry. Presev. Ass. India.* **10**(3) : 11.
1966. *Bankia (Neobankia) roonwali*: Roonwal, *Proc. Dacca Sympos. Paris (UNESCO)*, p. 279, pls. 8b and 9b.
1968. *Bankia roonwali*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 91.
1973. *Bankia rochi*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 355.
1986. *Bankia rochi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1987. *Bankia rochi*: Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1987. *Bankia rochi*: Rambabu, Prasad, and Balaparameswara Rao, *Mahasagar*, **20**(4) : 263.
1991. *Bankia rochi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 162; *Zool. Surv. India*.
1992. *Bankia rochi*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 253. *Zool. Surv. India*.
1994. *Bankia rochi*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 46, pl. 8C.
1995. *Bankia rochi*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 52. *Zool. Surv. India*.
2000. *Bankia rochi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 291.
2004. *Bankia rochi*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 9.
2006. *Bankia rochi*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata*, p. 88.
2008. *Bankia rochi*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Karnataka, Maharashtra, Orissa, West Bengal.

Elsewhere : African coast, Malagasy, Red Sea, Persian Gulf, Indoensia, Japan.

Genus **Nausitora** Wright, 1864

1864. *Nausitora* Wright, *Trans. Linn. Soc. London*, **24** : 451. Type species : *N. dunlopei* Wright, 1864.

670. **Nausitora dunlopei** Wright

1864. *Nausitora dunlopei* Wright, *Trans. Linn. Soc. London*, **24** : 453, pl. 46, figs. 1-12.

1954. *Bankia (Nausitora) madrasensis* Nair, *Rec. Indian Mus.*, **52** : 399, figs. 5 a-d. Type locality : Ruyapuram beach, Madras.
1956. *Bankia (Nausitora) madrasensis* Nair, *J. Scient. Industr. Res.*, **C15(3)** : 81.
1960. *Nausitora dunlopei*: Nagabhushanam, *J. Bombay nat. Hist. Soc.*, **57(2)** : 369.
1964. *Nausitora lanceolata*: Rajagopal, *J. Bombay nat. Hist. Soc.* **61(1)** : 109, Text fig. 1, figs. 1-3. Type locality : Saznakhali, Sunderbans, West Bengal; types: NZC, ZSI.
1966. *Nausitora lanceolata*: Roonwal, *Proc. Dacca Sympos. Paris (UNESCO)*, p. 280, pls. 8c and 9c.
1968. *Nausitora lanceolata*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India.*, pt. **1** : 89.
1969. *Nausitora dunlopei*: Rajagopal and Daniel, *J. Bombay nat. Hist. Soc.*, **69(3)** : 676.
1973. *Nausitora dunlopei*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62(3)** : 355.
1980. *Nausitora dunlopei*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 180.
1986. *Nausitora dunlopei*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
1991. *Nausitora dunlopei*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 163. *Zool. Surv. India*.
1992. *Nausitora dunlopei*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 254. *Zool. Surv. India*.
1994. *Nausitora dunlopei*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, **159** : 39, pl. 6D.
1995. *Nausitora dunlopei*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 52. *Zool. Surv. India*.
2000. *Nausitora dunlopei*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 291.
2006. *Nausitora dunlopei*: Dey, *Handbook on Mangrove associate Molluscs of Sundarbans*, *Zool. Surv. India Kolkata*, p. 89.
2008. *Nausitora dunlopei*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 22.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Goa, Kerala, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Throughout Indo-Pacific.

Remarks : This species is restricted to the Indo-Pacific region. It is a common species in Sundarbans, West Bengal damaging the mangrove trees living as well as in dead conditions. The burrow is lined by calcareous tubing which is fairly thick, particularly at the posterior end (Rajagopal, 1964). Rajagopal and Daniel (1969) remarked that this species occurs in freshwater, brackish water and marine waters which suggests that it can thrive well under all conditions of salinity dilutions.

671. *Nausitora fusticula* (Jeffreys)

1860. *Teredo fusticula* Jefferys, *Ann. Mag. Nat. Hist.*, (3)**6** : 125.
1955. *Bankia (Nausitora) excolpa*: Nagabhushanam, *Rec. Indian Mus.*, **53** : 9, Text figs. 1y, z.

1960. *Bankia (Nausitora) excolpa*: Nagabhushanam, *J. Bombay nat. Hist. Soc.*, **57**(2) : 369.
1968. *Nausitora fusticula*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 88, figs.1 &2.
1991. *Nausitora fusticula*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 163. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Orissa.

Elsewhere : Scotland, Brazil, Gulf of California.

672. *Nausitora hedleyi* Schepman

1919. *Nausitora hedleyi* Schepman, *Nava Guinea*, **13** : Zoologie, p. 195, pl. 7, fig. 3.
1955. *Bankia (Nausitora) gabrielli* Nair, *Rec. Indian Mus.*, **53** : 262, Text fig. 1. Type locality : Ernakulum.
1956. *Bankia (Nausitora) gabrielli*: Nair, *J. Scient. Industr. Res.*, **C15**(3) : 81.
1963. *Nausitora hedleyi*: Nair, *Curr. Sci.*, **32** : 216.
1964. *Nausitora hedleyi* : Nair, *Fishery Tecno.*, **1**(1) : 88.
1964. *Nausitora hedleyi*: Saraswathy, *J. mar. biol. Ass. India*, **6** : 309.
1968. *Nausitora hedleyi*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. **1** : 89.
1973. *Nausitora hedleyi*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, **62**(3) : 355.
1980. *Nausitora hedleyi*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, **77** : 184, fig. 1F
1986. *Nausitora hedleyi*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1991. *Nausitora hedleyi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 163. Zool. Surv. India.
1994. *Nausitora hedleyi*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No*, **159** : 40.
2000. *Nausitora hedleyi*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 291.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Kerala, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : African coast, Malagasy, Red Sea, Persian Gulf.

Remarks : This is one of the destructive species of shipworms in the brackish water areas in India. This species well adapted to the salinity. It shows the discontinuous distribution along the coasts of India occurring in certain brackish water lakes and backwaters and also in the mangroves swamps.

Genus *Nototeredo* Bartsch, 1923

1923. *Nototeredo* Bartsch, *Proc. Biol. Soc. Washington*, **36** : 100. Type species : *Teredo (Nototeredo) edax* Hedley, 1895.

673. *Nototeredo edax* (Hedley)

1895. *Teredo edax* Hedley, *Proc. Linn. Soc. New South Wales*, (2) : 501, pl. 32, figs. 1-5.
1955. *Teredo (Teredora) thomsoni*: Nagabhushanam, *Rec. Indian Mus.*, 53 : 9.
1956. *Teredo (Psiloteredo) tondiensis* Nair and Gurumani, *Curr. Sci.*, 25 : 361, 3 figs. Type locality : Tondi, Madras.
1956. *Teredo (Psiloteredo) tondiensis* Nair and Gurumani, *J. Bombay nat. Hist., Soc.* 54(3) : 672.
1959. *Teredo (Dactyloterredo) juttingae*: Ganapati and Rao, *Curr. Sci.*, 28(2) : 332.
1960. *Teredo (Dactyloterredo) juttingae*: Nagabhushanam, *J. Bombay nat. Hist., Soc.* 57(2) : 365.
1971. *Nototeredo edax*: Santhakumaran, *Curr. Sci.*, 40(8) : 199.
1973. *Nototeredo edax*: Santhakumaran, *J. Bombay nat. Hist. Soc.*, 62(3) : 357.
1980. *Nototeredo edax*: Das and Dev Roy, *Rec. zool. Surv. India, Occ. Paper No.*, 77 : 183, fig. 1E, H
1986. *Nototeredo edax*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.
1994. *Nototeredo edax*: Nair and Salim, *Rec. zool. Surv. India, Occ. Paper No.*, 159 : 37, pl. 6B.
2000. *Nototeredo edax*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 291.

Distribution : India : Andaman and Nicobar Islands, Andhra Pradesh, Diu, Maharashtra, Tamil Nadu.

Elsewhere : Indonesia, Australia, New Guinea, Philippines, Japan.

Remarks : This species is known to occur throughout the Indo-Pacific. It occurs in the marine and estuarine conditions, as well as mangroves. It is well adapted to a diet of both wood and phytoplankton having well developed gills, food grooves and labial palps as well as large caecum.

674. *Nototeredo knoxi* (Bartsch)

1917. *Teredo (Psiloteredo) knoxi* Bartsch, *Bull. U.S. nat. Mus.*, 122 : 51, pl. 29, fig. 2, pl. 34, fig. 2.
1968. *Nototeredo knoxi*: Subba Rao, *Proc. Symp. Mollusca, Mar. Biol. Ass. India*, pt. 1 : 88.
1991. *Nototeredo knoxi*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 163. Zool. Surv. India.
2007. *Nototeredo knoxi*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 255. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-Pacific.

Subclass ANOMALOCARDIA
Order PHOLADOMYOIDA
Superfamily PANDOROIDEA

The superfamily Pandoroidea represented by seven families of which five families, Thraciidae, Laternulidae, Lyonsiidae, Pandoridae and Myochamidae are represented from Indian waters. These families show little immediate similarities in shell form except the absence of hinge teeth and for the position of the ligament which partly lies an internal resilium and is often further reinforced by a calcareous lithodesma.

The Thraciidae are thin, smooth, nonnacreous, inequivalve shells, surface most cases granular; hinge edentulous; chondrophore directed obliquely towards posterior end; pallial line with sinus.

The Latrnulidae are known as lantern shells, very thin and oblong in outline; lacks of true hinge teeth and the ligament lies on a projecting internal chondrophore supported by two buttresses. They burrow deeply in mud or sandy mud from the intertidal zone downwards.

The Lyonsiidae comprises of five genera of which *Lyonsia* only present in India. Shells thin, inequivalve, subnacreous; hinge edentulous; beaks without slit, ligament sunken or submarginal, lithodesma present, median; pallial sinus distinct.

The Pandoridae are small group of bivalves, unequal valves in which the dorsal border of one overlap the other. They lack of heterodont dentition which is substituted by lamellar buttresses and an internal resilium, often reinforced by a lithodesma. Shell rather thin, nacreous; lives in tranquil muddy situation, burrowing shallowly and leading a rather sedentary existence.

The Myochamidae is small family comprises of two genera. The members of this family free living or sessile, shell inequivalve, subnacreous; edentulous, dorsal margins overlapping; ligament external or wanting, resilium internal; pallial sinus small.

Family THRACIIDAE

Genus *Thracia* Leach in Blainville, 1824

1824. *Thracia* Leach in Blainville, *Dict. Sci. nat.*, **32** : 347. Type species : *T. pubescens* Lamarck=*Mya pubescens* Pulteney, 1799; Susequent designation, Anton, 1839.

675. *Thracia salsettensis* Melvill

1893. *Thracia salsettensis* Melvill, *Mem. Manchester Soc.*, **7** : 65. Type locality: Bombay.

1906. *Thracia salsettensis*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 215.

1906. *Thracia salsettensis*: Melvill and Standen, *Proc. zool. Soc. London*, **1906** : 845.

1949. *Thracia salsettensis*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, **17(5)** : 74.

Distribution : India : Maharashtra.

Elsewhere : No records.

Family PANDORIDAE

Genus *Pandora* Bruguiere, 1797

1797. *Pandora* Bruguiere, *Encyl. Meth.*, 2, pl. 250. Type species : *Solen inequivalvis* Linnaeus

676. *Pandora brevifrons* Sowerby

1835. *Pandora brevifrons* Sowerby, *Proc. zool. Soc. London*, 1835 : 93.

1910. *Pandora perangusta* Preston, *Rec. Indian Mus.*, 5 : 120, fig. 5. Type locality : Off Devi river, Orissa coast; types : NZC, ZSI.

1991. *Pandora brevifrons*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, 1(3) : 164. Zool. Surv. India.

2004. *Pandora perangusta*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 54.

Distribution : India : Orissa.

Elsewhere : Indonesia, Panama.

677. *Pandora carinatum* (Prashad)

1932. *Calopodium (Konnerlia) carinata* Prashad, *Siboga Exped. Sci. Rept. Mongr.*, 53C : 323, pl. 7, figs. 15-18.

2004. *Pandora carinatum*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 11.

Distribution : India : Orissa.

Elsewhere : Indonesia, Panama.

678. *Pandora flexuosa* Sowerby

1858. *Pandora flexuosa* Sowerby, *Genera of Shells*, No 2.

1941. *Pandora flexuosa*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 66, fig. 24d.

1949. *Pandora flexuosa*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 74.

Distribution : India : Tamil Nadu.

Elsewhere : Arabian Gulf.

Subgenus *Frenamya* Iredale, 1930

1930. *Frenamya* Iredale, *Rec. Australia, Mus.*, 17 : 387. Type species : *Coelodon patulus* Tate, 1889.

679. *Pandora (Frenamya) zeilanica* Sowerby

1758. *Pandora zeilanica* Sowerby, *Proc. zool. Soc. London*, 1835 : 94.

1986. *Pandora zeilanica*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

1992. *Pandora ceylonica*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, 3(9) : 255. Zool. Surv. India.

2000. *Pandora (Frenamya) zeilanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 292.

Distribution : India : Andaman and Nicobar Islands, West Bengal.

Elsewhere : Sri Lanka.

Remarks : Inhabitant of sand mud at the depth of 11 fathoms.

Family LYONSIIDAE

Genus *Lyonsia* Turton, 1822

1822. *Lyonsia* Turton, *Conch. Indsul. Brit.*, 17 : 34. Type species : *Mya striata* Montagu, 1815.

680. *Lyonsia annandalei* Ray

1951. *Lyonsia (Lyonsia) annandalei* Ray, *Rec. Indian Mus.*, 49(2) : 187, figs. 4 & 5. Type locality : Indian Ocean.

2004. *Lyonsia annandalei*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 38.

Distribution : India : Indian Ocean.

Elsewhere : No subsequent records.

681. *Lyonsia jucunda* E. A. Smith

1896. *Lyonsia jucunda* Smith, *Ann. Mag. Nat. Hist.*, (6)18 : 314.

2000. *Lyonsia jucunda*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 292.

Distribution : India : Andaman Island.

Elsewhere : No records.

Family MYOCHAMIDAE

Genus *Myadora* Gray, 1840

1840. *Myadora* Gray, *Ann. Mag. Nat. Hist.*, (1)4 : 306. Type species : *Pandora brevis* Sowerby, 1829.

682. *Myadora quadrata* Smith

1899. *Myadora quadrata* Smith, *Ann. Mag. Nat. Hist.* (7)4 : 250. Type locality : off Trivandam coast, Kerala.

1904. *Myadora quadrata*: Smith, *Ann. Mag. Nat. Hist.*, (7)14 : 9.

1986. *Myadora quadrata*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 178.

2000. *Myadora quadrata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 292.

Distribution : India : Andaman and Nicobar Islands, Lakshadweep Islands.

Elsewhere : Indo-Pacific.

Family LATERNULIDAE

Genus *Laternula* Roeding, 1798

1798. *Laternula* Roeding, *Mus. Bolten.*, p. 155. Type species : *Laternula anatina* Roeding=*Solen anatinus* Linnaeus; subsequent designation, Gray, 1847.

683. *Laternula anatina* (Linnaeus)

1758. *Solen anatinus* Linnaeus, *Syst. Nat.*, ed. 10 : 673.

1895. *Anatina labiata*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 127.

1906. *Anatina labiata*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 845.

1906. *Anatina labiata* :Comber, *J. Bombay nat Hist. Soc.*, 17 : 215.

1949. *Laternula labiata*: Subrahmanyam, Karandikar and Murti, *J. Univ. Bombay*, 17(5) : 58.

1956. *Laternula anatina*: Satyamurti, *Bull Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. 7 : 172, pl. 15, figs. 6a and 6b.

1956. *Laternula labiata*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist. Soc.*, 54(3) : 703.

2007. *Laternula anatina*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 255. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Maharashtra, Tamil Nadu.

Elsewhere : Indo-Pacific.

684. *Laternula andamanica* (Smith)

1904. *Anatina andamanica* Smith, *Ann. Mag. Nat. Hist.*, (7)14 : 8. Type locality : Off West Andaman.

2004. *Anatina andamanica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 6.

Distribution : India : Orissa, West Bengal.

Elsewhere : Indian Ocean, Philippines.

685. *Laternula corrugata* (Reeve)

1863. *Anatina corrugata* Reeve, *Conch. Icon.*, 16. *Anatina* sp. no. 25, pl. 4, fig. 25.

1956. *Laternula corrugata*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1, 2(7) : 173, pl. 15, figs. 6a and 6b.

Distribution : India : Tamil Nadu.

Elsewhere : Philippines.

686. *Laternula lanterna* (Lamarck)

1817. *Anatina lanterna* Lamarck, *Hist. Nat. Anim. Sans. Vert.*, **6** : 77.

1898. *Anatina lanterna*: Melvill and Skyes, *Proc. malac. Soc. London*, **3** : 48.

2000. *Laternula lanterna*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 293.

Distribution : India : Andaman Islands.

Elsewhere : Indian Ocean.

687. *Laternula navicula* (Reeve)

1863. *Anatina navicula* Reeve, *Conch. Icon.*, **14** : *Anatina* sp. no., 21, pl. 4, fig. 21.

1914. *Anatina granulosa* Preston, *Rec. Indian Mus.*, **10** : 310, figs. 17, 17a. Type locality : Chilka Lake.

1914. *Lyonsia samalinsulae* Preston, *Rec. Indian Mus.*, **10** : 310, figs. 16, 16a. Type locality : Off Samal Island, Ganjam district, Orissa; Types, NZC, ZSI.

1915. *Anatina barkulensis* Preston, *Rec. Indian Mus.*, **11** : 309, figs. 24, 24a. Type locality : Barkul Island, Chilka Lake, Orissa; Types : NZC, ZSI.

1915. *Anatina barkudaensis* Preston, *Rec. Indian Mus.*, **11** : 309, figs. 25, 25a. Type locality : Barkul Island, Chilka Lake, Orissa; Types : NZC, ZSI.

1916. *Anatina barkulensis*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 358.

1916. *Anatina barkudaensis*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 358.

1991. *Laternula navicula*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1(3)** : 164. Zool. Surv. India.

1995. *Laternula navicula*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, **1** : 430. Zool. Surv. India.

2004. *Anatina granulosa*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 6.

2004. *Lyonsia samalinsulae*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 38.

Distribution : India : Andaman Islands, Orissa.

Elsewhere : Indian Ocean.

688. *Laternula truncata* (Lamarck)

1818. *Anatina truncata* Lamarck, *Hist. Nat. Anim. Sans. Vert.*, **5** : 463.

1977. *Laternula truncata*: Subba Rao, *Newsl. zool. Surv. India*, **3(5)** : 301.

1987. *Laternula truncata*: Misra and Barua, *J. Indian Soc. Coastal agric. Res.*, **5(1)** : 342.

1992. *Laternula truncata*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 255. Zool. Surv. India.

1995. *Laternula truncata*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 52. Zool. Surv. India.

2006. *Laternula truncata*: Dey, Handbook on Mangrove associate Molluscs of Sundarbans, Zool. Surv. India Kolkata, p. 90.

2008. *Laternula truncata*: Dey, Rec. zool. Surv. India, Occ. Paper No., 286 : 22.

Distribution : India : Orissa, West Bengal.

Elsewhere : Indian Ocean, Philippines.

Order POROMYOIDA

Superfamily POROMYACEA

Shell elongate to rounded, without gape between two valves; hinge with well developed cardinal and lateral teeth; resilium reinforced by lithodesma; pallial sinus small. Gills scanty reticulate or even absent; united mantle lobes.

Family POROMYIDAE

Genus *Cetoconcha* Dall, 1886

1886. *Cetoconcha* Dall, Bull. Mus.Comp. zool. Harvard, 12 : 282. Type species : *Lyonsia bulla* Dall, 1878.

689. *Cetoconcha indica* Ray

1951. *Cetoconcha indica* Ray, Rec. Indian Mus., 49(2) : 189, pl. 4, figs. 6-7. Type locality : Indian Ocean.

2004. *Cetoconcha indica*: Ramakrishna, Dey and Mitra, Rec. zool. Surv. India, Occ. Paper No., 228 : 12.

Distribution : India : Indian Ocean.

690. *Cetoconcha brunneo-flavida* (Preston)

1916. *Tellina brunneo-flavida* Preston, Rec. Indian Mus., 12 : 38, figs. 15,15a. Type locality : Ennur backwater, Madras. Types : NZC, ZSI.

2004. *Cetoconcha brunneo-flavida*: Ramakrishna, Dey and Mitra, Rec. zool. Surv. India, Occ. Paper No., 228 : 72.

Distribution : India : Tamil Nadu.

Elsewhere : No subsequent records.

Family CUSPARIIDAE

Genus *Cuspidaria* Nardo, 1840

1840. *Cuspadaria* Nardo, Atti. Riun. Sci. Ital., 1(1839) : 2024. Type species : *Tellina cuspidata* Olivier, 1792.

691. *Cuspidaria annandalei* Preston

1915. *Cuspidaria annandalei* Preston, Rec. Indian Mus., 11 : 308. Type locality : Patshnipur, Chilka Lake, Orissa.

1916. *Cuspidaria annandalei*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 357.
 1916. *Cuspidaria annandalei* Preston, *Rec. Indian Mus.*, **12** : 39.
 1991. *Cuspidaria annandalei*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 165. Zool. Surv. India.
 2004. *Cuspidaria annandalei*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 25.

Distribution : India : Kerala, Orissa, Tamil Nadu.

Elsewhere : No record.

692. *Cuspidaria approximata* Smith

1896. *Cuspidaria approximata* Smith, *Ann. Mag. Nat. Hist.*, (6)**18** : 373-374. Type locality : Sta. 116, Andaman sea, 405 fathoms.
 1906. *Cuspidaria approximata* : Smith, *Ann. Mag. Nat. Hist.*, (7)**18** : 264.
 2000. *Cuspidaria approximata*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 293.
 2004. *Cuspidaria approximata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 25.

Distribution : India : Andaman Island.

Elsewhere : No records.

693. *Cuspidaria caduca* Smith

1894. *Cuspidaria (Myonera) caduca* Smith, *Ann. Mag. Nat. Hist.*, (6)**14** : 170, pl.5, figs. 9 & 10. Type locality : Sta. 115, Andaman sea, 188-220 fathoms; Types : NZC, ZSI.
 2000. *Cuspidaria caduca*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 293.
 2004. *Cuspidaria (Myonera) caduca*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 26.

Distribution : India : Andaman Island.

Elsewhere : No subsequent records.

694. *Cuspidaria chilkaensis* (Preston)

1911. *Corbula chilkaensis* Preston, *Rec. Indian Mus.*, **6** : 39, fig. 2. Type locality : Rambha, Chilka Lake, Orissa.
 1916. *Corbula chilkaensis*: Annandale and Kemp, *Mem. Indian Mus.*, **5** : 356.
 1991. *Cuspidaria chilkaensis*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 166. Zool. Surv. India.
 1992. *Cuspidaria chilkaensis*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 256. Zool. Surv. India.
 1995. *Cuspidaria chilkaensis*: Subba Rao, Dey and Barua, *Fauna of Hugli Matla estuary Eustarine Ecosystem Series*, **2** : 52. Zool. Surv. India.

1995. *Cuspidaria chilkaensis*: Subba Rao, Surya Rao and Manna, *Fauna of Chilka Lake, Wetland Ecosystem series*, 1 : 430. Zool. Surv. India.

2008. *Cuspidaria chilkaensis*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 286 : 23.

Distribution : India : Orissa.

Elsewhere : No records.

695. *Cuspidaria cochinensis* Preston

1916. *Cuspidaria cochinensis* Preston, *Rec. Indian Mus.*, 12 : 39, figs. 17, 17a. Type locality : Cochin backwater, Ernakulum, Kerala; Types : NZC, ZSI.

2004. *Cuspidaria cochinensis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 26.

Distribution : India : Kerala.

Elsewhere : No Subsequent records.

696. *Cuspadaria elegans* Hind

1906. *Cuspadaria elegans*: Melvill and Standen, *Proc. zool. Soc. London*, 1906 : 847.

1972. *Cuspadaria elegans*: Nagabhushanam and Rao, *Mitt. Zool. Mus. Berlin*, 48(2) : 287.

Distribution : India : Lakshadweep.

Elsewhere : Gulf of Oman.

Genus *Cardiomya* Adams, 1864

1864. *Cardiomya* Adams, *Ann. Mag. Nat. Hist.*, (3)13 : 208. Type species : *Neaera gouldiana* Hinds, 1843.

697. *Cardiomya andamanica* Preston

1916. *Cardiomya andamanica* Preston, *Rec. Indian Mus.*, 12 : 99, figs. 19-19a. Type locality : Semiramis Bay, Andaman islands, in 2-6 fathoms; Types, NZC, ZSI.

2000. *Cardiomya andamanica*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, 187 : 293.

2004. *Cardiomya andamanica*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, 228 : 26.

Distribution : India : Andaman Islands.

Elsewhere : No subsequent records.

Genus *Myonera* Dall and Smith, 1886

1886. *Myonera* Dall and Smith, *Bull. Mus. Comp. zool. Harvard*, 12 : 282. Type species : *Neaera paucistriata* Dall, 1885.

698. *Myonera bicarinata* Smith

1895. *Myonera bicarinata* Smith, *Ann. Mag. Nat. Hist.*, (7)4 : 250. Type locality : Laccadive Sea, 636 fathoms.

2004. *Myonera bicarinata*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 45.

Distribution : India : Lakshadweep Sea.

Elsewhere : No subsequent records.

Family VORTICORDIIDAE

Genus *Euciroa* Dall, 1881

1881. *Eucirca* Dall, *Bull Mus. Comp. Zool.*, **9** : 106. Type species: *Verticordia elegantissima* Dall, 1881.

699. *Euciroa eburnea* Woodmason and Alcock

1891. *Euciroa (Euciroa) eburnea* Woodmason and Alcock, *Ann. Mag. Nat. Hist. Lond.* (6)**8** : 447-448, text figs. 14a-d.
1986. *Verticordia eburnea*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, *Zool. Surv. India*, p. 178.
2000. *Euciroa (Euciroa) eburnea*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 294.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Indo-Pacific.

Genus *Verticordia* Sowerby, 1844

1844. *Verticordia* Sowerby, *Mem. Conch. Great Britain*, **7** : 67. Type species: *Hippagus? cordiformis* Sowerby, 1844.

700. *Verticordia opima* Sowerby

1893. *Verticordia opima* Sowerby, *Proc. malac. Soc. London*, **1**(1893-95) : 39, pl. 5, fig. 3. Type locality : Off Port Blair, Andaman Islands.
2000. *Verticordia opima*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 294.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Superfamily CLAVAGELLOIDEA

The superfamilies Clavagelloidea are unusual among bivalves because they assume in part or completely the form a tube. The most familiar shell are the watering pot shells of the genus *Brechites* where both valves are fused into the wall of the tube which is multi perforated at one end and open in other hand. They lived in sand with the multi perforate end downwards. *Clavagella* only one valve is incorporated into the tube, the other remaining free.

Family CLAVAGELLIDAE

Genus *Penicillus* Bruguiere, 1789

1789. *Penicillus* Bruguiere, *Encycl. Meth. Vers.*, (1)15 : 126. Type species : *Penicillus javanus* Bruguiere=*Serpula penis* Linnaeus; subsequent designation, Habe, 1952.

701. *Penicillus dichotomus* (Chenu)

- 1843-45. *Aspergillum dichotomus* Chenu, *Illus. Conch.*, *Aspergillum* p. 3, pl. 2, fig. 6.
 1895. *Aspergillum dichotomus*: Thurston, *Madras Govt. Mus. Bull.*, 3 : 127.
 1921. *Brechites dichotomus*: Hornell, *Madras Fish. Bull.*, 14 : 197.
 1941. *Brechites dichotomus*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 5(1) : 66.
 1956. *Brechites dichotomus*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 1(2), pt. 7 : 174, pl. 15, figs. 8a and 8b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

702. *Penicillus penis* (Linnaeus)

1758. *Serpula penis* Linnaeus, *Syst. Nat.* ed. 10 :
 2007. *Penicillus penis*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, 5(7) : 256. Zool. Surv. India.

Distribution : India : Andhra Pradesh.

Elsewhere : Indo-Pacific.

Remarks : These animals' lives embedded in sand with the multiperforate end downwards. Lives in excavated burrows in rock or coral with only tube projecting. They may over look because of its rock boring habit and reduce shells.

SUMMARY AND GENERAL DISCUSSION

In all 606 species of Bivalves, falling under 171 genera, 69 families, 11 orders and 4 subclasses are recorded from India of which 88 species are endemic to India.

The subclass Protobranchia comprises of 2 Orders, 3 Superfamilies, 5 Families, 3 Genera and 21 Species. Order Solemyoida is represented by one Superfamily, one family and single genus and 2 species. Both the species are endemic to India and there is no record after its original discovery.

Order Nuculoidea represented by 2 Superfamilies, 4 Families, 4 Genera and 19 species of which 7 species are endemic to India and there are no discovery of these species after its original discovery. Others 6 species are reported from Andaman and Nicobar Islands, 7 from East coast, one from west coast, 3 from both east and west coast, one from Andaman and Nicobar islands and east coast and one from Andaman and Nicobar islands and west coast.

Subclass Pteriomorpha represented by 5 Orders, 10 Superfamilies, 19 Families, 62 genera and 187 species of which 13 species are endemic to India.

Order Arcoida represented by 51 species under 10 genera and 5 families. Of these species, 23 species represented from both east and west coast; 15 species from east coast; 7 from Andaman and Nicobar Islands, 2 from west coast; 2 from east coast, Andaman and Nicobar Islands and Lakshadweep; one from west coast and Andaman and Nicobar Islands; and one from Lakshadweep. 3 species are endemic to India, of which 2 endemic to Andaman Islands and one to Lakshadweep.

Order Mytiloida represented by 32 species under 10 genera and single family. Out of these 5 species endemic to India; 3 from Andaman and Nicobar Islands and one from Lakshadweep and one from west coast. A maximum of 10 species are reported from east and west coast; 8 only from east coast; 3 from west coast; 2 from Lakshadweep; 6 from Andaman and Nicobar Islands; one from east coast, Andaman and Nicobar Islands and Lakshadweep; and one from Andaman and Nicobar Islands and Lakshadweep.

Order Pteroida represented by 28 species under 8 genera and 4 families. The maximum 8 species reported from east coast including the Andaman and Nicobar Islands; 6 from Andaman and Nicobar Islands; 3 from east coast, west coast and Andaman and Nicobar Islands; 3 from east coast; 2 from east coast, Andaman and Nicobar Islands and Lakshadweep; 2 from Andaman and Nicobar Islands and Lakshadweep; 2 from Lakshadweep; one from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep and one from east and west coast. No species is endemic to India.

Order Limoida the smallest order represented by 8 species under 3 genera and single family. No species is endemic to Indian subcontinent. Out of these seven reported species 2 represented from west coast including Lakshadweep; and one from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep; one from east coast, west coast and Andaman and Nicobar Islands; one from east coast and Andaman and Nicobar Islands; one from east coast, Andaman Nicobar Islands and Lakshadweep; and one each from Andaman and Nicobar Islands and Lakshadweep.

Order Ostreoida having the maximum of 68 species under 26 genera and 8 families. Out of 68 reported species 8 species are endemic to India. Andaman and Nicobar Islands having 24 species; 10 from east coast, west coast and Andaman and Nicobar Islands; 5 from east coast and west coast; 5 from east coast and Andaman and Nicobar Islands; 4 from east coast; 4 from Lakshadweep; 3 from west coast; 3 from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep; 2 from east coast, Andaman and Nicobar Islands and Lakshadweep; 2 from east coast and Lakshadweep; one from west coast and Andaman and Nicobar Islands; one from west coast and Lakshadweep; one from Andaman and Nicobar Islands and Lakshadweep.

The subclass Heterdonta comprises of 2 Orders, 18 Superfamilies, 33 Families, 97 Genera and 411 Species. This subclass having the two Orders Veneroida and Myoidea among which Veneroida the largest order of bivalvia, comprises of 15 superfamilies, 26 families, 87 genera and 250 species.

The Superfamily Lucinoidea having 3 families 9 genera and 22 species, among these 10 species are endemic to India. Out of these 10 species the Andaman and Nicobar Islands having 3 species and 7 species from east coast of India. Among the other 12 species, 4 species represented from east coast and Andaman and Nicobar Islands; 2 from east coast, west coast and Andaman and Nicobar Islands; 2 from Andaman and Nicobar Islands; one from east coast; one from east and west coast; one from Andaman and Nicobar Islands as well as Lakshadweep; and one from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep.

The Superfamily Galeommatoidea having 3 families 4 genera and 15 species, among these 8 species are endemic to India. Out of the remaining 7 species, 4 represented from east coast; 2 from Andaman and Nicobar Islands; and one from east and west coast of India. Among the 8 endemic species, the east coast of India represented by 2 species and Andaman and Nicobar Islands represented by 6 species.

The Superfamily Carditoidea having one family 3 genera and 7 species, among these only one species is endemic to Andaman and Nicobar Islands. Among the rest 6 species, 2 species represented from Andaman and Nicobar Islands; one species from east coast; one species common in both east and west coast; one from east coast, west coast and Andaman and Nicobar Islands; and one from east coast, west coast Andaman and Nicobar Islands and Lakshadweep.

The Superfamily Chamoidea having one family, 2 genera and 9 species. Among these 2 species from the east coast of India; 2 from east and west coast and Andaman and Nicobar Islands; 2 east coast and Lakshadweep; one species from Andaman and Nicobar Islands as well as east coast, one from Andaman and Nicobar Islands and Lakshadweep; and one from east coast as well as west coast.

The Superfamily Crassatelloidea having one family, 3 genera and 3 species, of which one species endemic to India. East coast, west coast and Andaman and Nicobar Islands represented by one species; and one from east coast and west coast of India.

The Superfamily Cardioidea having one family, 8 genera and 25 species, among these one species is endemic to Andaman and Nicobar Islands of India. Among the other 24 species, Andaman and Nicobar Islands represented by 10 species; east coast, west coast and Andaman and Nicobar Islands represented by 5 species; 3 from Lakshadweep; 2 species common in both east and west coast; 2 species from Andaman and Nicobar Islands as well as east coast; one from Andaman and Nicobar Islands and Lakshadweep; one from east and west coast and one species from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep.

The Superfamily Tridacnoidea having one family, 2 genera and 4 species of which the Andaman and Nicobar Islands represented by 3 species and one species from east, west coast as well as Andaman and Nicobar Islands.

The Superfamily Mactroidea having 2 families, 8 genera and 32 species, among these 3 species are endemic to India; 2 from Andaman and Nicobar Islands and one

from east coast. Among the rest 29 species, the west coast of India represented by 6 species; 6 species from Andaman and Nicobar Islands; 5 species from east and west coast; 5 species from Andaman and Nicobar Islands as well as east and west coast; 4 from east coast; 4 from east coast and Andaman and Nicobar Islands; one from west coast and Andaman and Nicobar Islands; and one from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep.

The Superfamily Solenoidea having 2 families, 7 genera and 19 species, among these 2 species are endemic to east coast of India. Among the other 17 species, the east coast of India represented by 7 species; east coast, west coast and Andaman and Nicobar Islands 5 species; 4 species common in both east and west coast; one species from Andaman and Nicobar Islands and one species from east coast and Andaman and Nicobar Islands.

The Superfamily Tellinoidea the largest superfamily among the bivalves having 4 families 19 genera and 112 species, among these 11 species are endemic to India. Out of these 11 endemic species the Andaman and Nicobar Islands having 6 species, 4 species from east coast of India and one from west coast. Among the other 101 species the east coast of India represented by 15 species; west coast by 13 species; Andaman and Nicobar Islands 28 species; 10 species common in both east and west coast; 15 species from Andaman and Nicobar Islands as well as east and west coast; 16 species from Andaman and Nicobar Islands and east coast; one species from east coast, west coast, Andaman and Nicobar Islands and Lakshadweep; 3 from west coast and Andaman and Nicobar Islands; one from east coast and Lakshadweep; one from west coast and Lakshadweep; 4 from Andaman and Lakshadweep; and 3 from west coast, Andaman and Nicobar Islands and Lakshadweep. The east coast of India having maximum representation of this superfamily in comparison to west coast of India. As many as 26 species of this superfamily described from the Indian localities; 16 from Andaman and Nicobar Islands, 7 from east coast and 3 from west coast of which 17 species (9 from Andaman and Nicobar Islands, 4 from east coast and one from west coast) are synonymies with the earlier described species.

The Superfamily Dreissenoidea the smallest superfamily represented by single family, genus and represented by single species from Andhra Pradesh, east coast of India.

The Superfamily Arcticoidea having one family, 2 genera and 3 species of which the Andaman and Nicobar Islands represented by 2 species and one species from east, west coast as well as Andaman and Nicobar Islands.

The Superfamily Glossoidea having 2 families, 2 genera and 5 species of which 2 species are endemic to India, one from east coast and one from west coast. Out of remaining 3 species, one species represented from east coast; one from Andaman and Nicobar Islands and one from east and west coast as well as Andaman and Nicobar Islands.

The Superfamily Corbuloidea having one family, 2 genera and 2 species, one from Andaman and Nicobar Islands and one from east coast as well as Andaman and Nicobar Islands.

The Superfamily Veneroidea the second largest superfamily by number of species represented among the bivalves having, 3 families 27 genera and 90 species. Among these 15 species are endemic to India; 4 from Andaman and Nicobar Islands, 6 from east and coast, 5 from west coast and one from east and west coast. Among the remaining 75 species the east coast of India represented by 17 species, west coast having 6 species, Andaman and Nicobar Islands 20 species, 14 species common in both east west coast, 17 species from Andaman and Nicobar Islands as well as east and west coast, 3 species from Andaman and Nicobar Islands and east coast, 5 species from east, west coast, Andaman and Nicobar Islands and Lakshadweep; 3 from east coast, Andaman and Nicobar Islands and Lakshadweep; and one from east coast and Lakshadweep. The east coast of India having maximum representation of this Superfamily in comparison to west coast of India. As many as 15 species of this superfamily described from the Indian localities; 4 from Andaman and Nicobar Islands, 7 from east coast and 4 from west coast of which 3 species (2 from east coast and one from west coast) are synonymies with the earlier described species.

The Order Myoida comprises of 3 superfamilies, 6 families, 21 genera and 61 species. The Superfamily Myoidea having 2 families 3 genera and 13 species, of which 5 species are endemic, 2 from Andaman and Nicobar Islands and 3 from (West Bengal) east coast of India. Among the other 6 species the east coast of India represented by 5 species and one from Andaman and Nicobar Islands.

The Superfamily Gastrochaenoidea having one family, one genus and 5 species. The east coast of India represented 3 species, one from Andaman and Nicobar Islands and west coast and one Andaman and Nicobar Islands as well as east and west coast.

The Superfamily Pholadoidea represented by 3 families 17 genera and 43 species, of which 3 species are endemic to east coast of India. Out of the remaining 39 species, 9 distributed in the east coast, 3 in Andaman and Nicobar Islands, 9 from both east and west coast, 3 from Andaman and Nicobar Islands as well as east coast and 14 from east, west coast as well as Andaman and Nicobar Islands.

The subclass Anomalocardia comprises of 2 Orders, 3 Super families, 9 Families, 12 Genera and 28 Species. The Order Pholadomyoida having one superfamily, Pandoroidea comprises of 5 families, 5 genera and 14 species, of which 2 species are endemic to India, one from Andaman and Nicobar Islands and one from west coast. Out of remaining 12 species 6 are represented from east coast; 2 from east coast and Andaman and Nicobar Islands; one from Andaman and Nicobar Islands and Lakshadweep; one from east coast, west coast and Andaman and Nicobar Islands; one from east and west coast; and one from Andaman and Nicobar Islands.

The Order Poromyoida comprises of 2 superfamilies, Poromyacea and Clavagelloidea. Poromyacea comprises of 3 families 6 genera and 12 species, of which 8 are endemic, 5 from Andaman and Nicobar Islands, one from Lakshadweep and 3 from east and west coast of India. Out of remaining 4 species. 2 species distributed in the east coast and 2 from Andaman and Nicobar Islands. The Superfamily Clavagelloidea are unusual among the bivalves, assume partly or fully in the form of represented by 2 species from east coast of India.

Class SCAPHOPODA

Scaphopoda is very small but distinctive Class of the Phylum Mollusca. The body completely wrapped around by mantle and tusk like shell thus termed as scaphopoda. The animal is elongated, the head appendages and the foot projected from the wider anterior opening of the shell, the other end extending above the surface of the soft substratum in which these animals invariably, sometimes obliquely burrow. There is no ctenidium, water current drawn posteriorly partly due to extension of foot and partly by action of cilia present on a series of ridges on the ventral side in front of the anus. Water is expelled backward periodically, as the foot being withdrawn, when defecation may also occur. There is no separate inhalant and exhalant aperture as in other molluscs. The head bears numerous prehensile and ciliated captacula which collect the food particles from substratum as well as from the inhalant current which accumulates on the ciliated ridges. The gut is less reduced, posses a dorsal mandible and a short radula with five teeth in each row and a pair of esophageal pouches. Due to the smaller in size and inactivity of this group the circulatory system greatly reduced without pulsetile heart. The kidneys are paired structure communicate with exterior. Nerve ganglions are four pairs and there is a subradular organ with an associated ganglion like Polyplacophora. Sexes are separate and the animals have a single posterior gonad which opens by way of the right kidney.

According to Vaught (1989) the Class Scaphopoda have 2 Orders and 9 families. The details as follows :

- Order DENTALIIDA
- Family DENTALIIDAE
- Family LAEVIDENTALIIDAE
- Family GADILINIDAE
- Family OMNIGLYPTIDAE
- Order GADILIDA
- Family ENTALINIDAE
- Family PULSELLIDAE
- Family SIPHONODENTALIIDAE
- Family GADILIDAE
- Family WEMERSONIELLIDAE

Out of these nine families only two families Dentaliidae and Gadilidae are present in Indian waters.

Class SCAPHOPODA

Order DENTALIIDA

Family DENTALIIDAE

Genus *Dentalium* Linnaeus, 1758

1758. *Dentalium* Linnaeus, *Syst. Nat.*, 10 : 785. Type species : *Dentalium elephantinum* Linnaeus, 1758; Subsequent designation, Montfort, 1810.

703. *Dentalium aprinum* Linnaeus

1767. *Dentalium aprinum* Linnaeus, *Syst, Nat*, ed. **12** : 1263.
1898. *Dentalium aprinum*: Melvill and Sykes, *Proc. malac. Soc. London*, **3** : 45.
1956. *Dentalium aprinum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist)*, 1(2), pt. **7** : 4, pl.1, figs. 2a and 2b.
1968. *Dentalium aparinum*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 126.
1986 *Dentalium aprinum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 174.
2000. *Dentalium aprinum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 294.

Distribution : India : Andaman and Nicobar Islands, Kerala, Tamil Nadu;

Elsewhere : Indo-Pacific.

704. *Dentalium cornu-bovis* Smith

1906. *Dentalium cornu-bovis* Smith, *Ann. Mag. Nat. Hist.*, (7)**18** : 249. Type locality : Laccadive sea, 1154 fathoms; Types : NZC, ZSI.
2004. *Dentalium cornu-bovis*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 88.

Distribution : India : Kerala, Lakshadweep sea.

Elsewhere : Indian Ocean.

705. *Dentalium eburneum* Linnaeus

1767. *Dentalium eburneum* Linnaeus, *Syst, Nat*, ed. **12** : 1263.
1906. *Dentalium eburneum* : Smith, *Ann. Mag. nat. Hist.* London, (7)**18** : 250.
1941. *Dentalium (Laevidentalium) eburneum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 25.
1941. *Dentalium (Laevidentalium) philippinarum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 5(1) : 25.
2004. *Dentalium eburneum*: Rao, Maitra, Barua and Ramakrishna, *Fauna of Gujarat, State Fauna series*, **8**(2) : 328. Zool. Surv. India.

Distribution : India : Andaman Islands, Kerala, Tamil Nadu.

Elsewhere : Indo-West Pacific.

706. *Dentalium elpis* Winckworth

1927. *Dentalium elpis* Winckworth, *Proc. malac. Soc. London*, **17** : 168, pl. 14, figs. 6 and 7.
1956. *Dentalium elpis*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, 1(2), pt. **7** : 5, pl. 1, figs. 4a and 4b.
1968. *Dentalium elpis*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 127.

Distribution : India : Kerala, Tamil Nadu.

Elsewhere : Indo-Pacific.

707. *Dentalium insolitum* Smith

1894. *Dentalium insolitum*: Smith, *Ann. Mag. Nat. Hist.*, (6)**14** : 168, pl. 4, figs. 17, 17a.
1906. *Dentalium insolitum*: Smith, *Ann. Mag. nat. Hist.* London, (7)**18** : 250.
1986 *Dentalium insolitum*: Tikader, Daniel and Subba Rao, *Sea shore animals of Andaman and Nicobar Islands*, Zool. Surv. India, p. 174.
2000. *Dentalium insolitum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 294.

Distribution : India : Andaman and Nicobar Islands.

Elsewhere : Sri Lanka.

708. *Dentalium longitrorsum* Reeve

1843. *Dentalium longitrorsum* Reeve, *Proc. zool. Soc.* London, **1843** : 197.
1906. *Dentalium longitrorsum*: Comber, *J. Bombay nat Hist. Soc.*, **17** : 212.
2004. *Dentalium longitrorsum*: Rao, Maitra, Barua and Ramakrishna, *Fauna of Gujarat, State Fauna series*, **8(2)** : 328. Zool. Surv. India.

Distribution : India : Gujarat, Maharsashtra.

Elsewhere : Indo-West Pacific.

709. *Dentalium magnificum* Smith

1896. *Dentalium magnificum* Smith, *Ann. Mag. Nat. Hist.*, **18** : 371.
1904. *Dentalium magnificum* : Smith, *Ann. Mag. nat. Hist.* London, (7)**14** : 7.
1906. *Dentalium magnificum* : Smith, *Ann. Mag. nat. Hist.* London, (7)**18** : 248.

Distribution : India : Andaman Islands, Kerala.

Elsewhere : Sri Lanka.

710. *Dentalium mannarensense* Winckworth

1927. *Dentalium mannarensense* Winckworth, *Proc. malac. Soc.* London, **17** : 167, pl. 9, figs. 1 and 2.
1956. *Dentalium mannarensense*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1(2)**, pt. 7 : 5, pl. 1, figs. 3a and 3b.

Distribution : India : Tamil Nadu.

Elsewhere : Indo-Pacific.

711. *Dentalium mirificum* Smith

1895. *Dentalium mirificum* Smith, *Ann. Mag. Nat. Hist.*, (6)**16** : 9, pl. 2, fig. 1.

Distribution : India : Tamil Nadu.

Elsewhere : Sri Lanka.

Remarks : This species is distinct by its sub quadrate form and sharply curved end. The four angles are acute at the tip and gradually obtuse as the shell increases.

712. *Dentalium octangulatum* Donovan

1804. *Dentalium octangulatum* Donovan, *Nat. Hist. Brit. Shells*, **5** : pl.162.
1940. *Dentalium octangulatum*: Crichton, *J. Bombay nat. Hist. Soc.*, **42** : 327.
1941. *Dentalium (Dentalium) octangulatum*: Gravely, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **5**(1) : 25.
1956. *Dentalium octangulatum*: Gideon, Menon, Rao and Jose, *J. Bombay nat. Hist Soc.*, **54**(3) : 697.
1956. *Dentalium octangulatum*: Satyamurti, *Bull. Madras Govt. Mus. New Ser. (Nat. Hist.)*, **1**(2), pt. 7 : 3, pl. 1, figs. 1a & 1b.
1968. *Dentalium octangulatum*: Cheriyan, *Proc. Symp. Molluscs, Mar. biol. Ass. India*, part **1** : 126.
1987. *Dentalium octangulatum* : Subba Rao, Surya Rao, and Mitra, *Bull. zool. Surv. India*, **8**(1-3) : 154.
1991. *Dentalium octangulatum*: Rao, Rao and Maitra, *Fauna of Orissa, State Fauna series*, **1**(3) : 99. *Zool. Surv. India*.
1992. *Dentalium octangulatum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3**(9) : 214, pl. 14, fig. 2. *Zool. Surv. India*.
2004. *Dentalium octangulatum*: Rao, Maitra, Barua and Ramakrishna, *Fauna of Gujarat, State Fauna series*, **8**(2) : 329. *Zool. Surv. India*
2007. *Dentalium octangulatum*: Dey and Ramakrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5**(7) : 256. *Zool. Surv. India*.
2008. *Dentalium octangulatum*: Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **286** : 23.

Distribution : India : Andhra Pradesh, Gujarat, Kerala, Orissa, Tamil Nadu, West Bengal.

Elsewhere : Indo-West Pacific.

713. *Dentalium serrulatum* Smith

1906. *Dentalium serrulatum* Smith, *Ann. Mag. Nat. Hist.*, (7)**18** : 249.
2000. *Dentalium serrulatum*: Subba Rao and Dey, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 295.
2004. *Dentalium serrulatum*: Ramakrishna, Dey and Mitra, *Rec. zool. Surv. India, Occ. Paper No.*, **228** : 89.

Distribution : India : Andaman Islands.

Elsewhere : No records.

714. *Dentalium shoplandi* Jousseaume

1894. *Dentalium shoplandi* Jousseaume, *Bull. Soc. Philom.*, **6** : 102.

1904. *Dentalium magnificum*: Smith, Ann. Mag. nat. Hist. London, (7)14 : 7.

Distribution : India : Kerala.

Elsewhere : Gulf of Aden.

715. *Dentalium subcurvatum* Smith

1906. *Dentalium subcurvatum* Smith, Ann. Mag. nat. Hist. London, (7)18 : 251. Type locality : Cape Comarin, 731-771 fathoms.

Distribution : India : Tamil Nadu;

Elsewhere : No subsequent records.

716. *Dentalium subfissura* Nevill

2000. *Dentalium subfissura*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., 187 : 295.

Distribution : India : Andaman Islands.

Elsewhere : No records.

717. *Dentalium subfolium* Nevill

1926. *Dentalium subfolium* Nevill,

2000. *Dentalium subfolium*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., 187 : 295.

2007. *Dentalium subfolium*: Dey and Ramakrishna, Fauna of Andhra Pradesh, State Fauna series, 5(7) : 256. Zool. Surv. India.

Distribution : India : Andhra Pradesh, Andaman Islands.

Elsewhere : Philippines.

718. *Dentalium subquadráculere* Nevill

2000. *Dentalium subquadráculere*: Subba Rao and Dey, Rec. zool. Surv. India, Occ. Paper No., 187 : 295.

Distribution : India : Andaman Islands.

Elsewhere : No records.

Subgenus *Lentigodentalium* Habe, 1963

1963. *Lentigodentalium* Habe, Bull. Natn. Sci. Mus., 6 : 258. Type species : *Dentalium variabile* Deshayes

719. *Dentalium (Lentigodentalium) variabile* Deshayes

1925. *Dentalium variabile* Deshayes, Mem. Soc. Hist. nat. Paris, 2(2) : 367, pl. 16, fig. 30.

1986 *Dentalium variabile*: Tikader, Daniel and Subba Rao, Sea shore animals of Andaman and Nicobar Islands, Zool. Surv. India, p. 174.

2000. *Dentalium variable*: Subba Rao, *Rec. zool. Surv. India, Occ. Paper No.*, **187** : 295.

2007. *Dentalium variable*: Dey and Ramkrishna, *Fauna of Andhra Pradesh, State Fauna series*, **5(7)** : 257. *Zool. Surv. India*.

Distribution : India : Andman and Nicobar Islands, Andhra pradesh.

Elsewhere : Indo-Pacific.

Order GADILIDA

Family GADILIDAE

Genus *Cadulus* Philippi, 1844

1844. *Cadulus* Philippi, *Moll. Sicil.*, **2** : 209.

720. *Cadulus clavatum* (Gould)

1860. *Cadulus clavatum* Gould, *Proc. Boston Soc. Nat. Hist.*, **7** : 3166.

2000. *Cadulus clavatum*: Subba Rao, Dey and Barua, *Fauna of West Bengal, State Fauna series*, **3(9)** : 214, pl. 14, fig.1. *Zool. Surv. India*.

Distribution : India : Andaman Islands, West Bengal.

Elsewhere : Indo-West Pacific.

SUMMARY AND GENERAL DISCUSSION

This is small and widely distributed class poorly represented from the Indian region. This class was not paid much attention in collection and identification. 18 species reported from India under 2 Orders 2 families 2 genera. The Order Dentaliida represented by one family under one genus and 17 species whereas the Order Cadilida having one species only. Due to lack of proper records it will not be wise to comment on its distribution. The present work is based on the available records. The Order Dentaliida comprises of family Dentalidae with one genus and 17 species of which 4 species are endemic to India, 3 from Andaman Islands and one from east coast. Out of remaining 13 species 3 species reported from east coast; 3 from east coast and Andaman and Nicobar Islands; 2 from west coast; 2 from both east and west coast; 2 from Andaman and Nicobar Islands as well as west coast; one from Andaman Islands; one from Lakshadweep; and one from east and west coast and Andaman and Nicobar Islands. The Order Cadilida represented by family Cadilidae and only one species under genus *Cadulus* from Andaman and Nicobar Islands and east coast of India.

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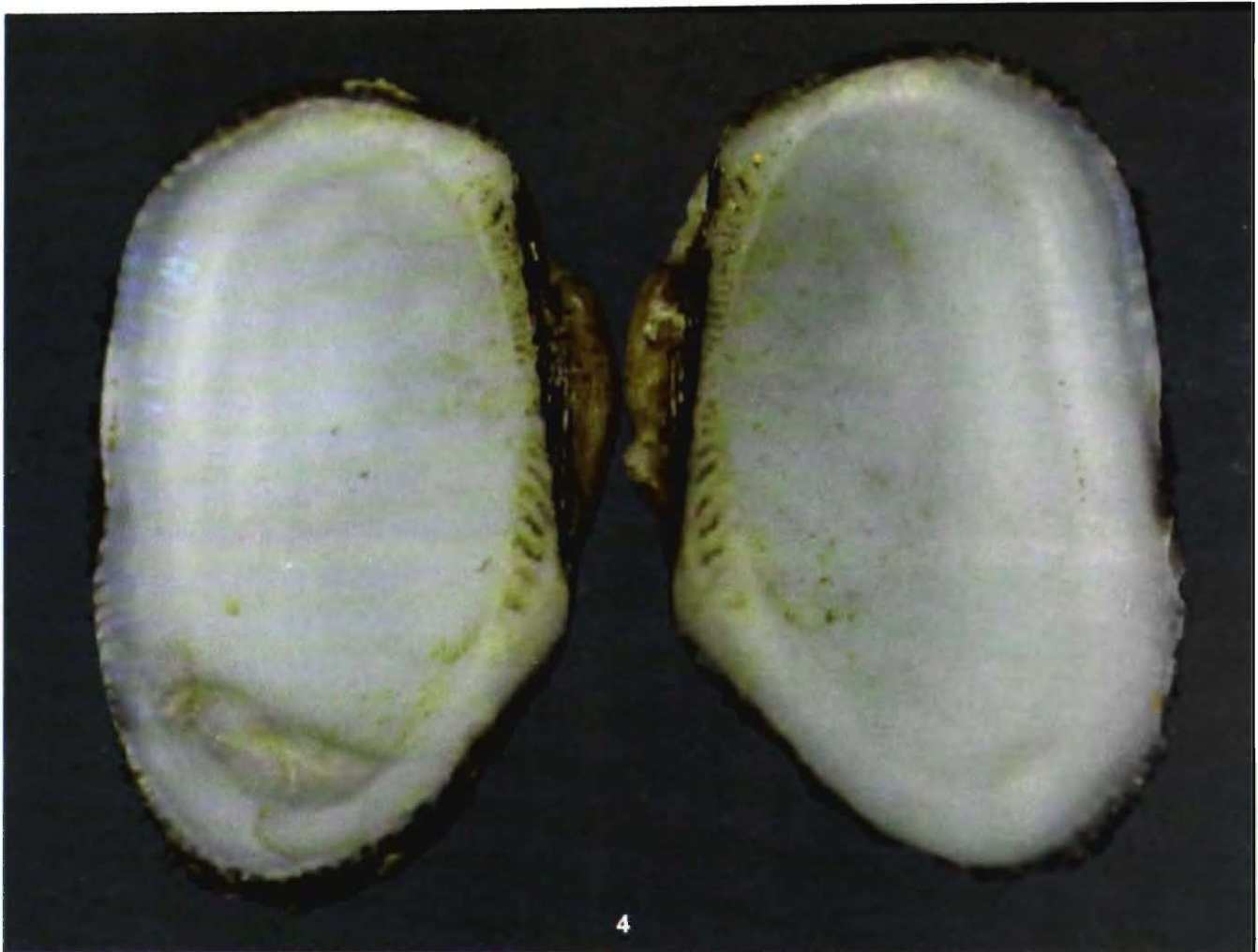
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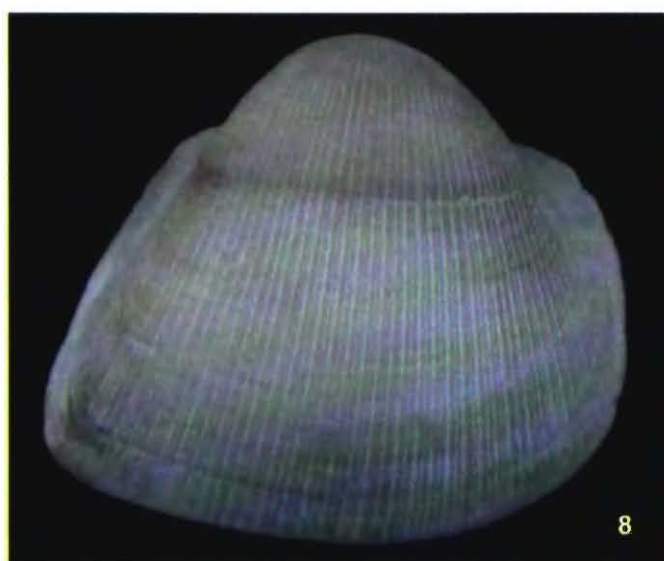
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<i>subtilis</i> Limatula	99	<i>taylori</i> Pectunculus	73
<i>subtruncata</i> Moerella	188	<i>Tellina</i>	181
<i>subtruncata</i> Tellina	188	<i>Tellinella</i>	194
<i>suffusa</i> Gari	215	<i>Tellinides</i>	196
<i>suffusa</i> Psammobia	215	<i>tenebrica</i> Acar	59
<i>sugillata</i> Avicula	91	<i>tenebrica</i> Barbatia	59
<i>sugillata</i> Pinctada	91	<i>tenebrosa</i> Cyrena	231
<i>sulcata</i> Corbula	268	<i>tenella</i> Arca	58
<i>sulcata</i> Aloides	271	<i>tenella</i> Barbatia	58
<i>sulcata</i> Modiola	84	<i>tenella</i> Yoldia	53
<i>sulcata</i> Tellina	200	<i>tenera</i> Macoma	202
<i>sulcatina</i> Lioconcha	250	<i>tenuicostatus</i> Glycymeris	74
<i>sulcatus</i> Modiola	74	<i>tenuicostatus</i> Pectunculus	74
<i>Sulciloconcha</i>	251	<i>tenuis</i> Gari	215
<i>sulcolosa</i> Corbula	271	<i>tenuis</i> Mactra	211
<i>sultorium</i> Cardium	160	<i>tenuis</i> Psammobia	215

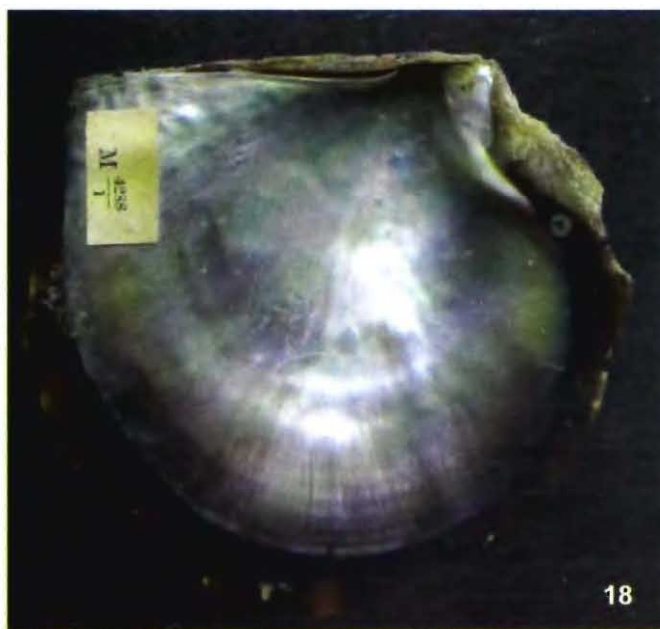
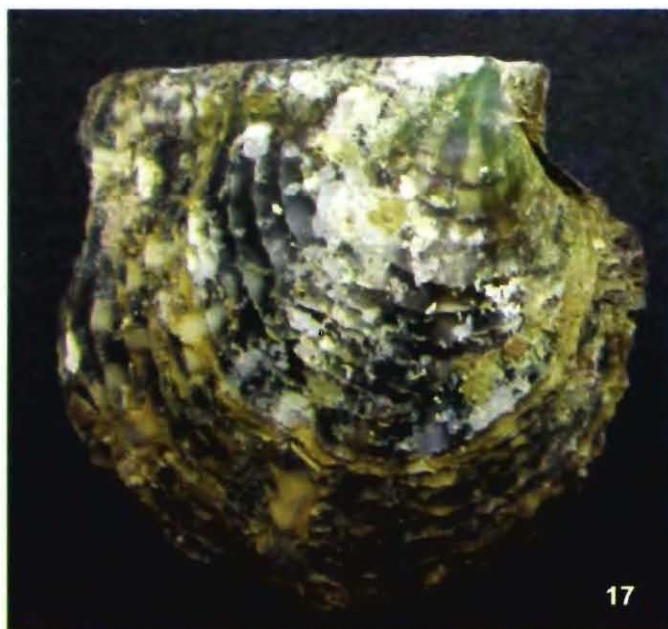
Teredo	280	<i>testudinea</i> Pecten	111
Teredora	287	<i>textile</i> Paphia	258
Teredothyra	288	<i>textile</i> Paratapes	258
<i>teres</i> Lithophaga	86	<i>textris</i> Paphia	258
<i>teres</i> Modiola	86	<i>textris</i> Pullastra	258
Teretectopus	32	<i>textris</i> Tapes	258
<i>testudinea</i> Chlamys	111	<i>textris</i> Venus	258









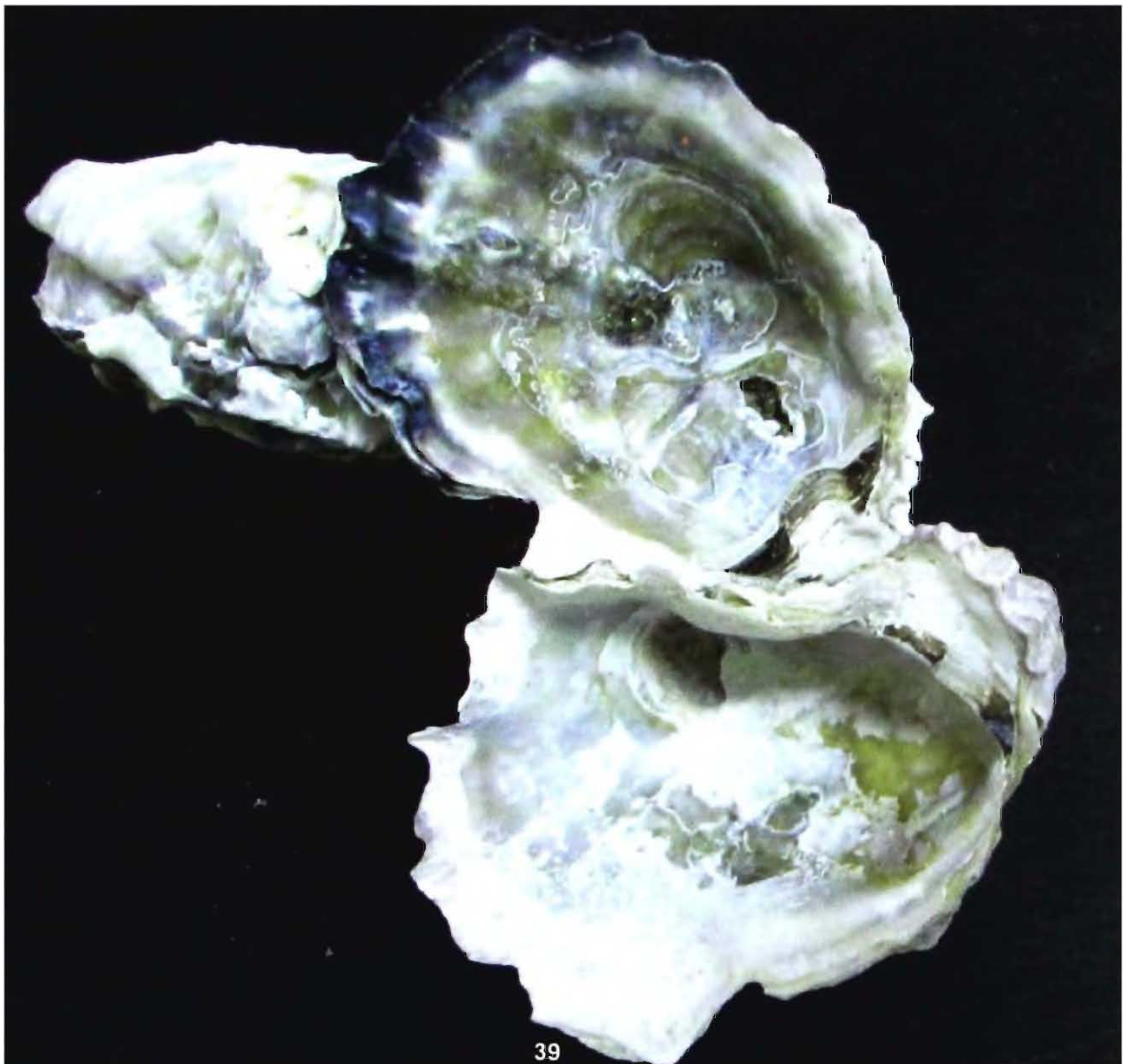






















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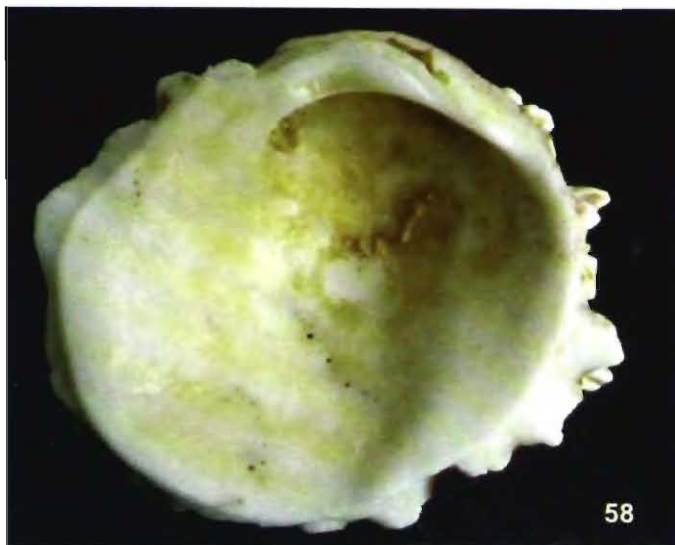
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53



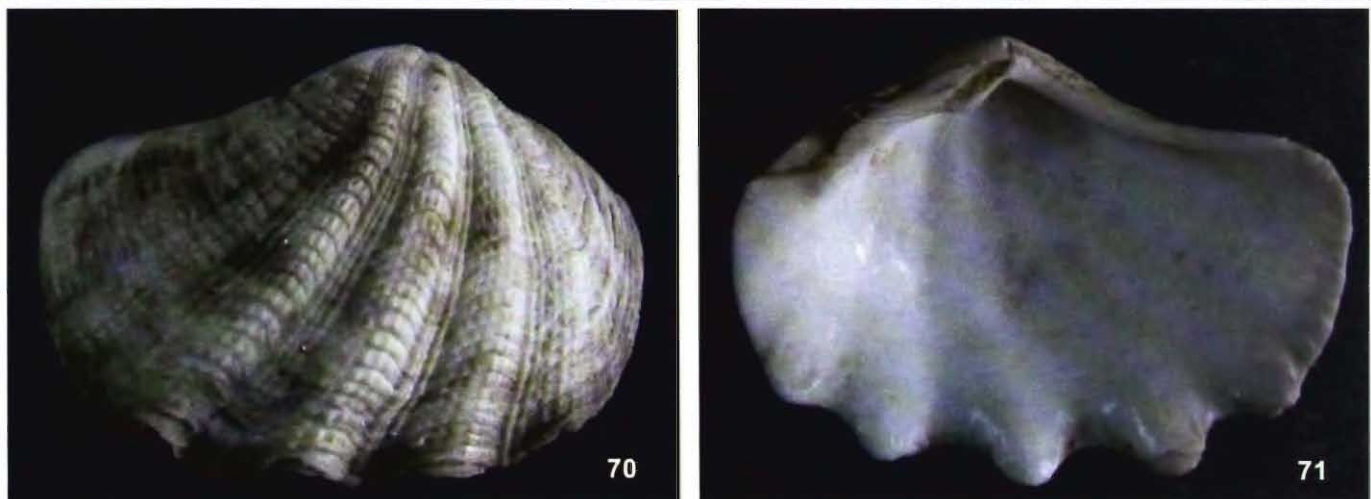
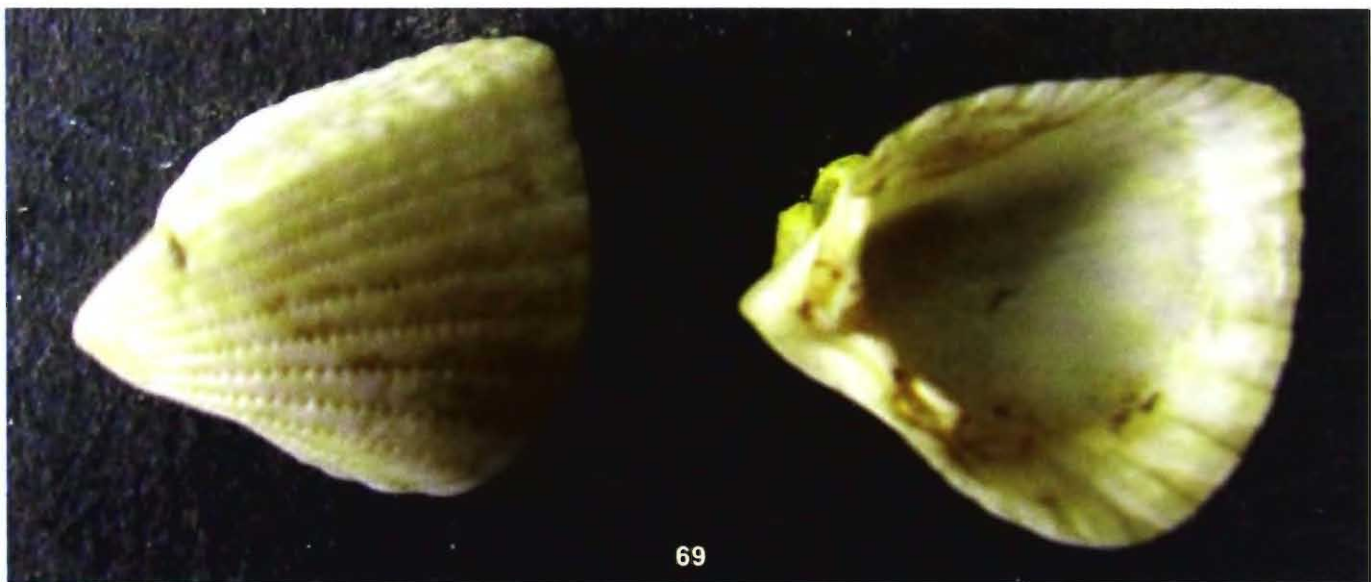
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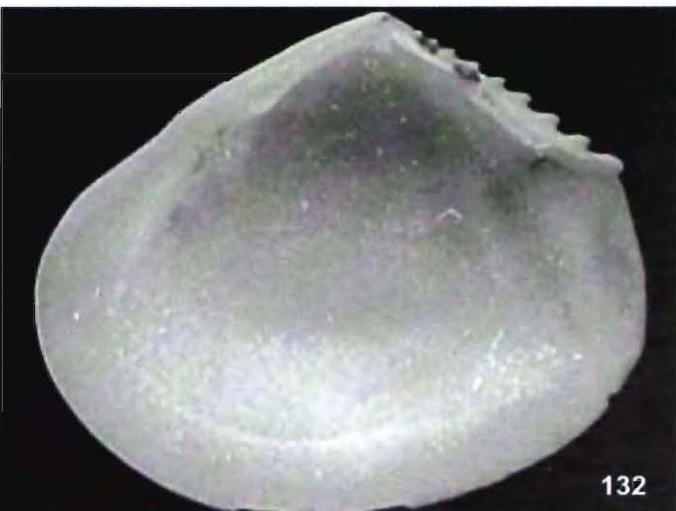


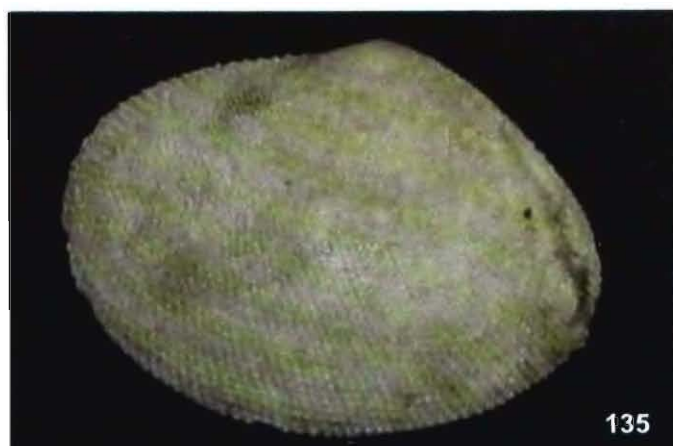






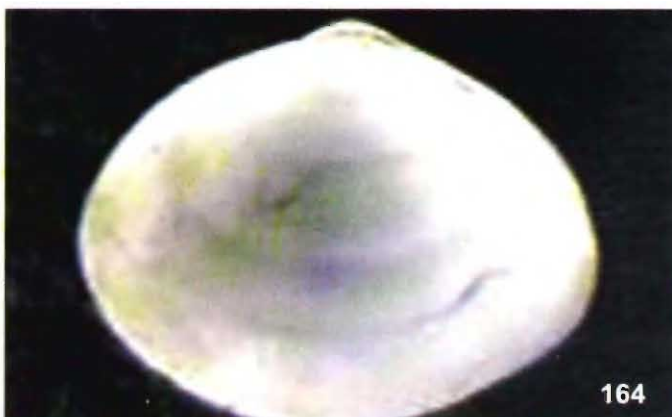
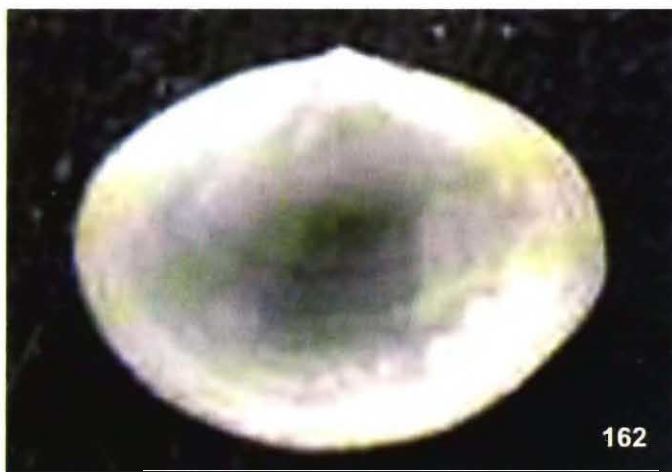


















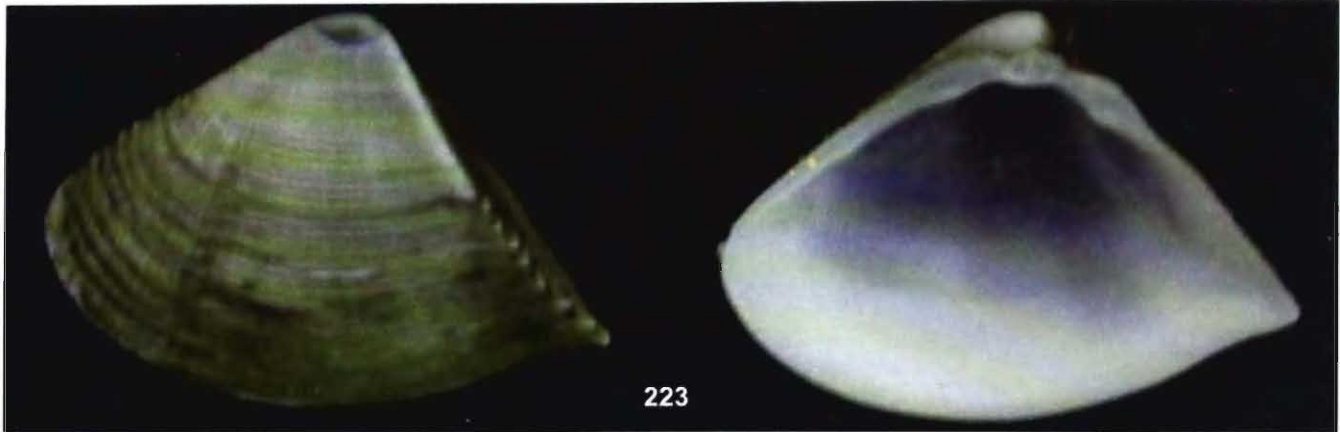






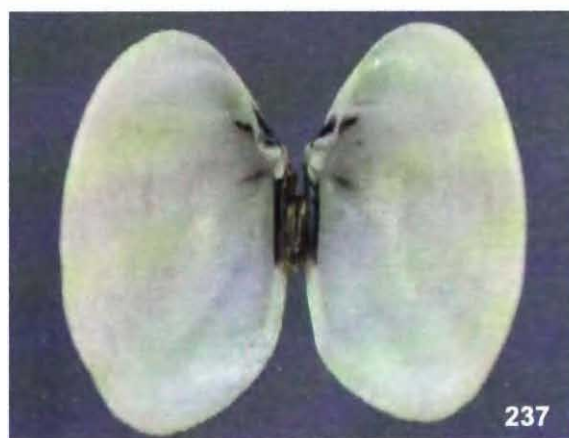


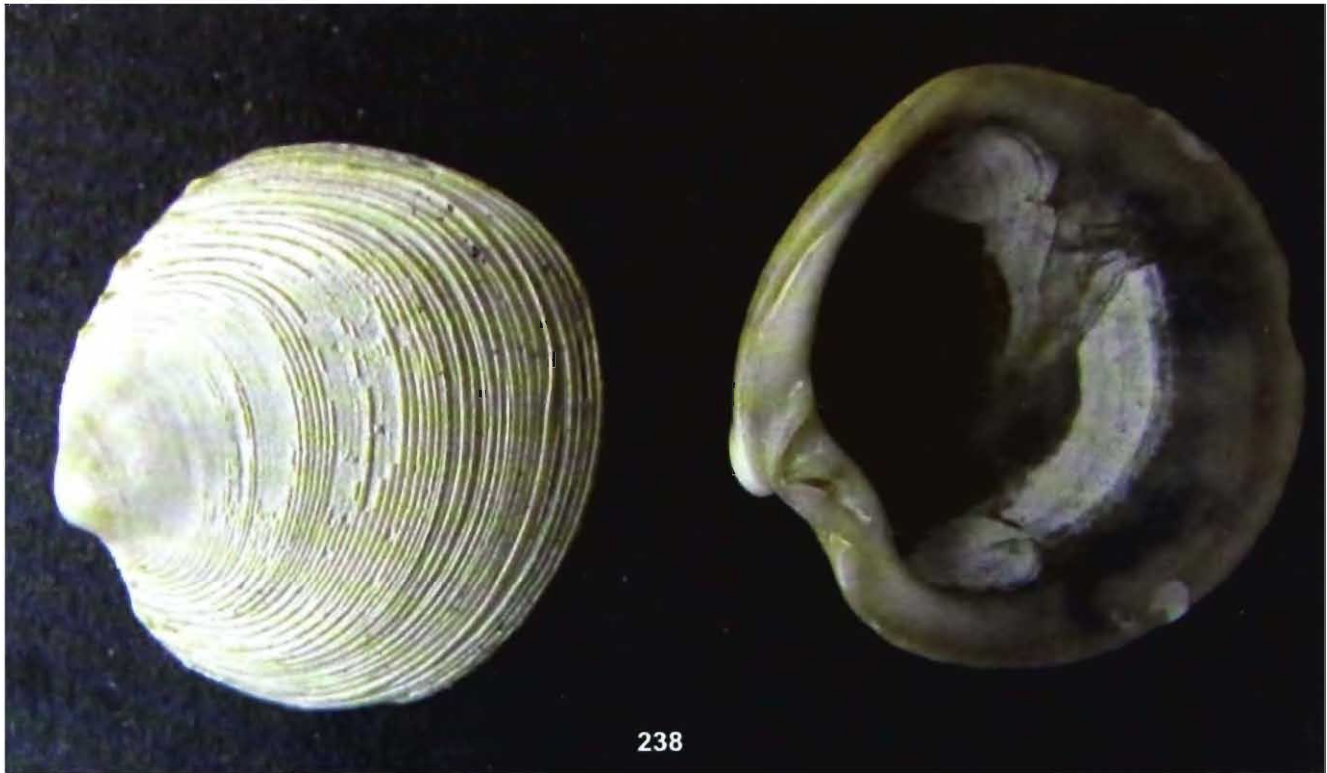


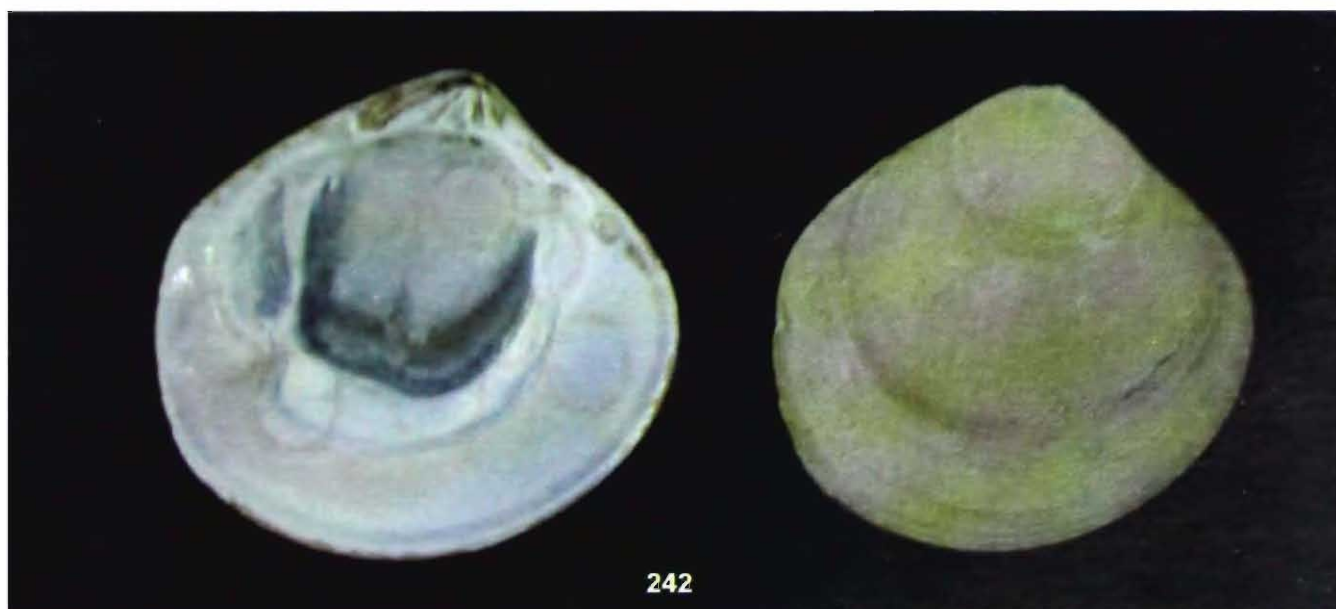
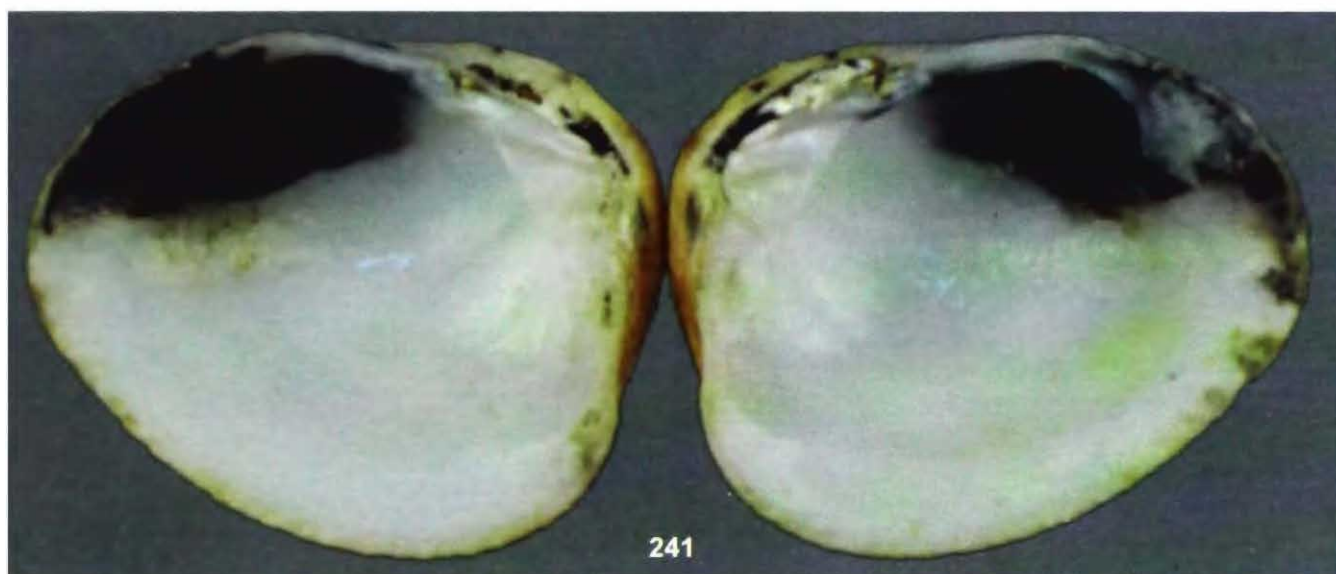
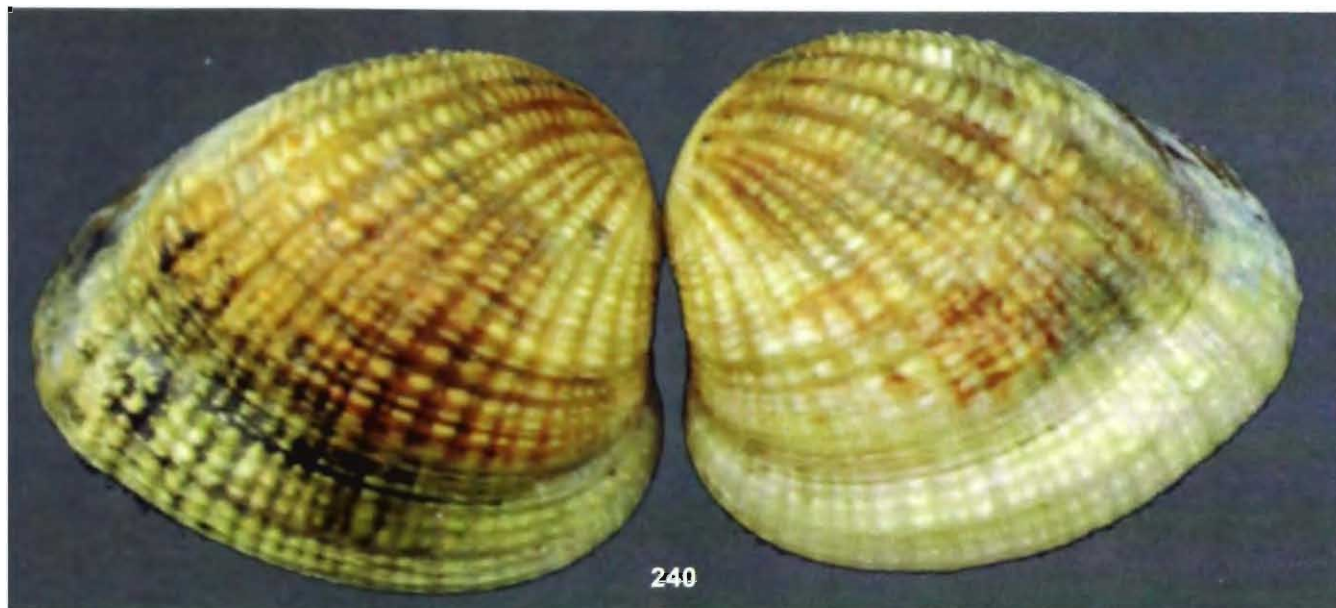






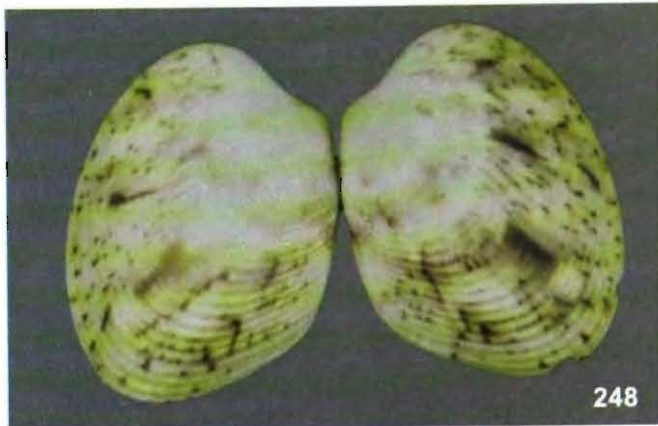
















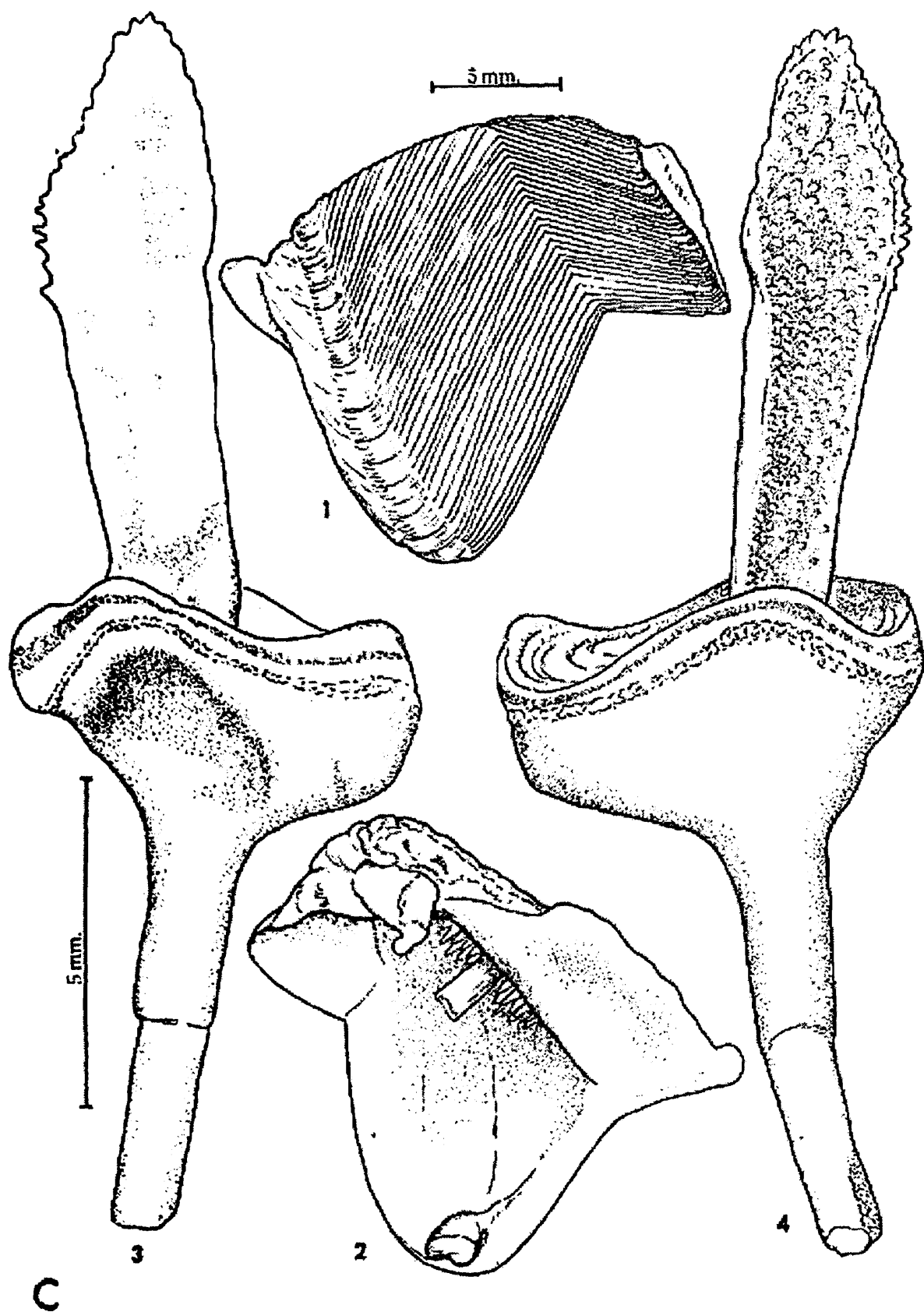


Fig. 268

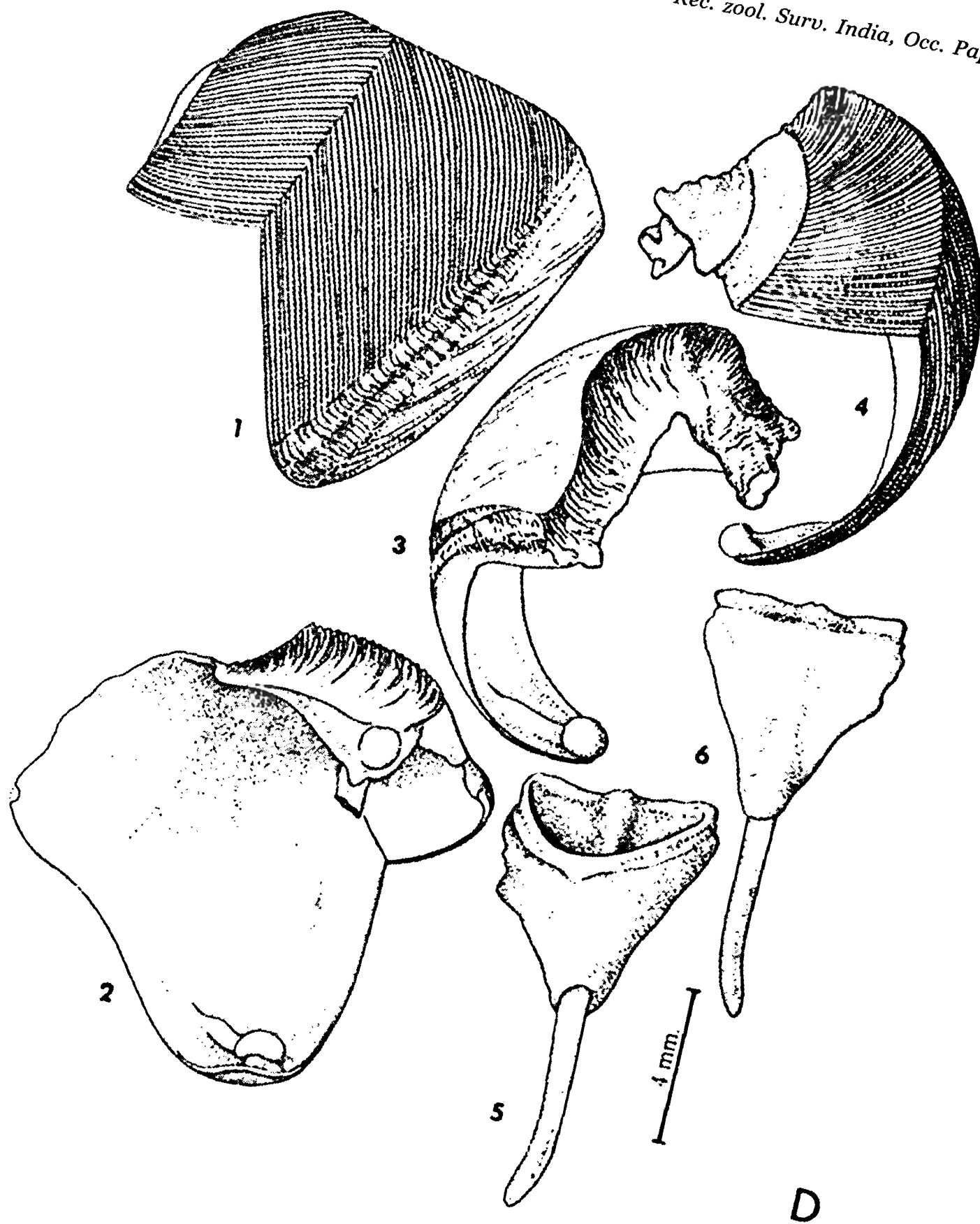


Fig. 269

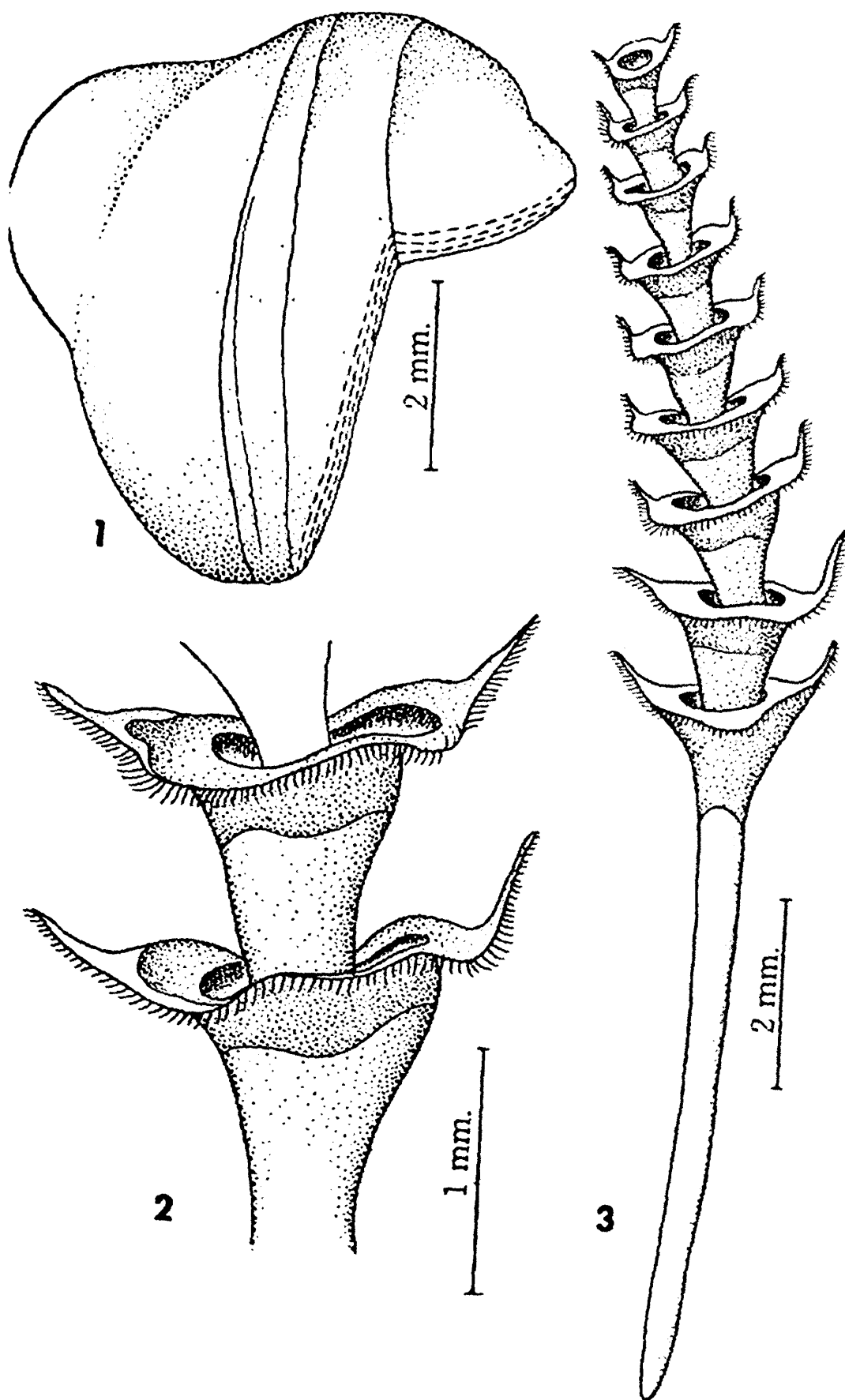


Fig. 270

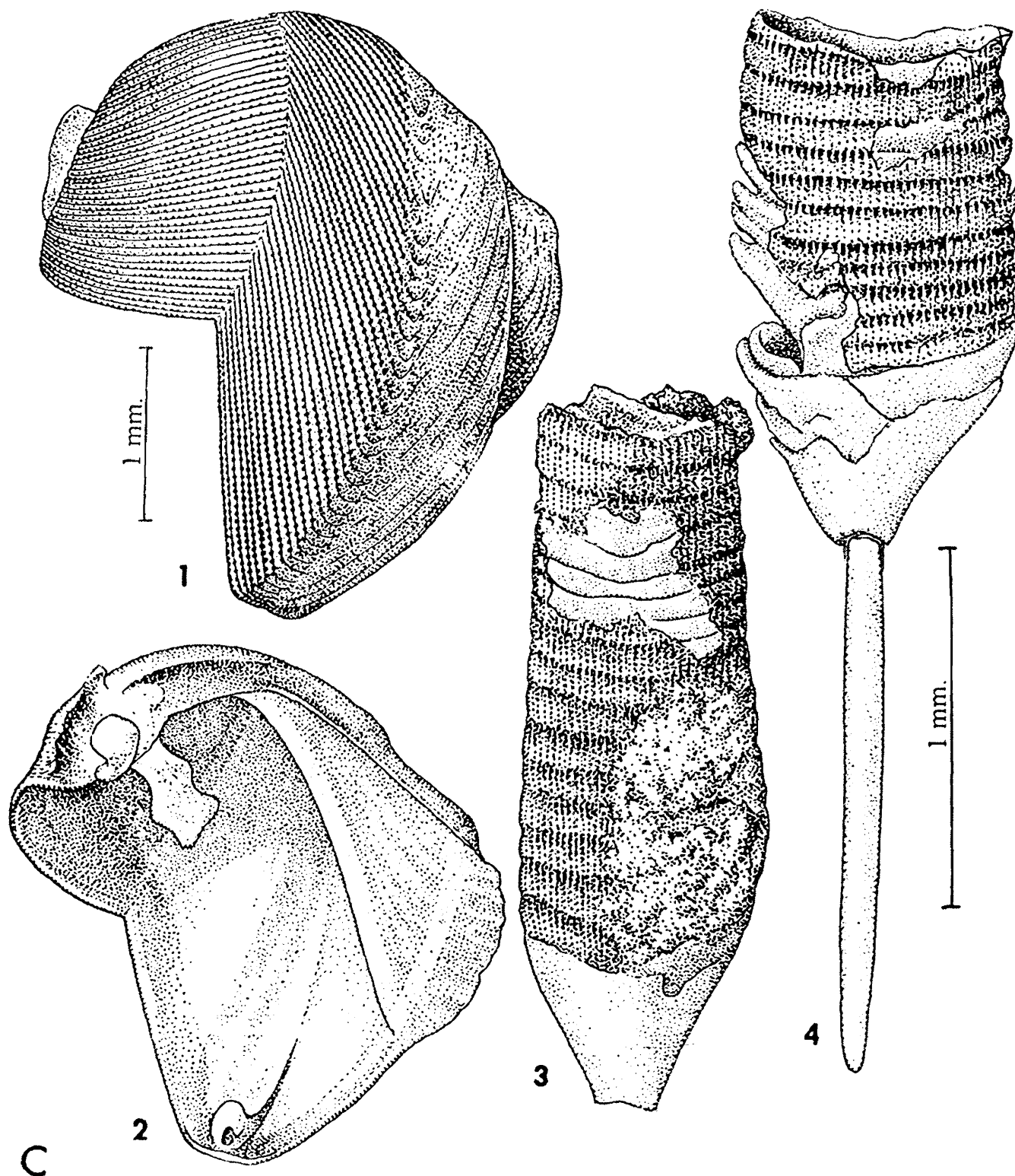


Fig. 271

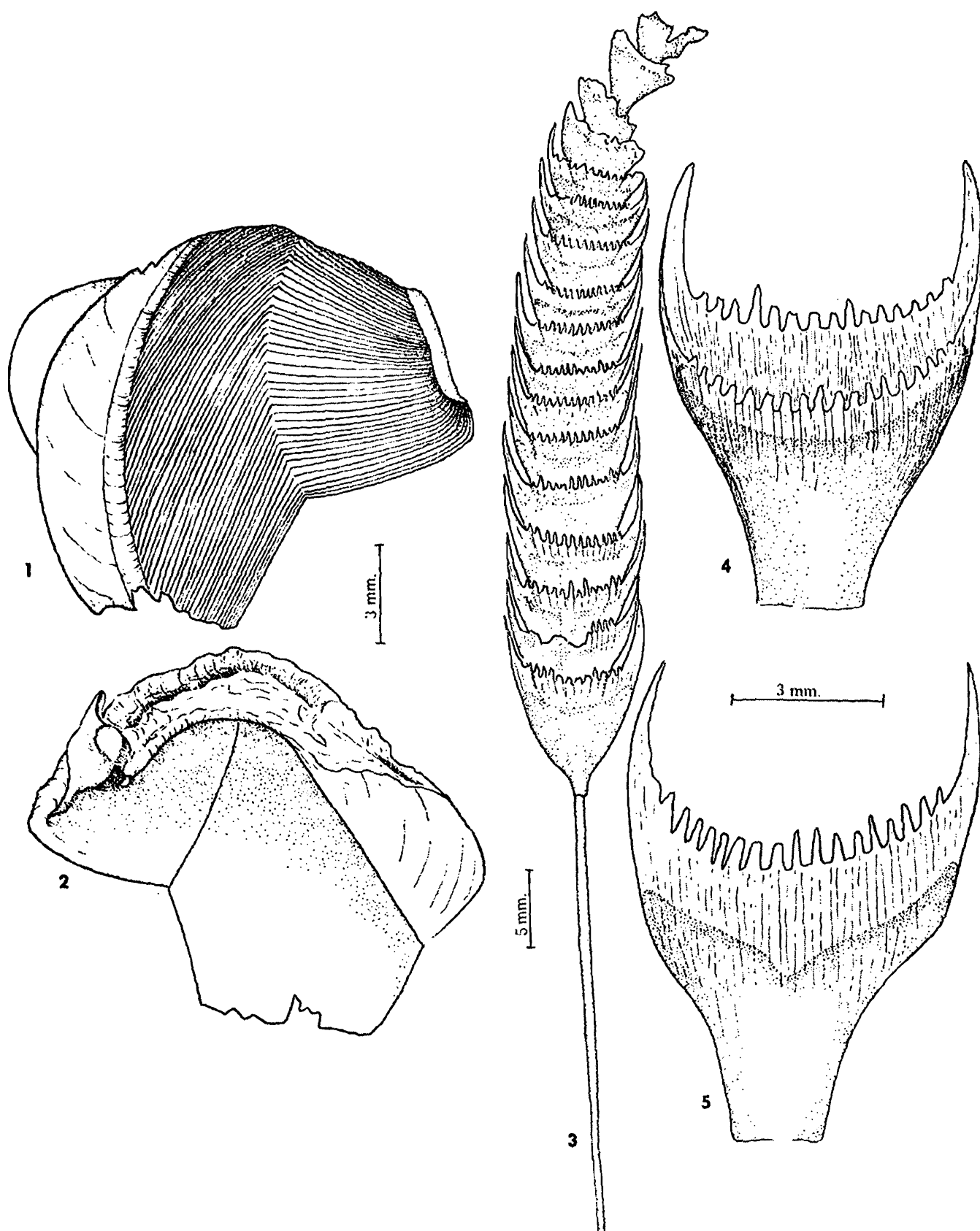


Fig. 272

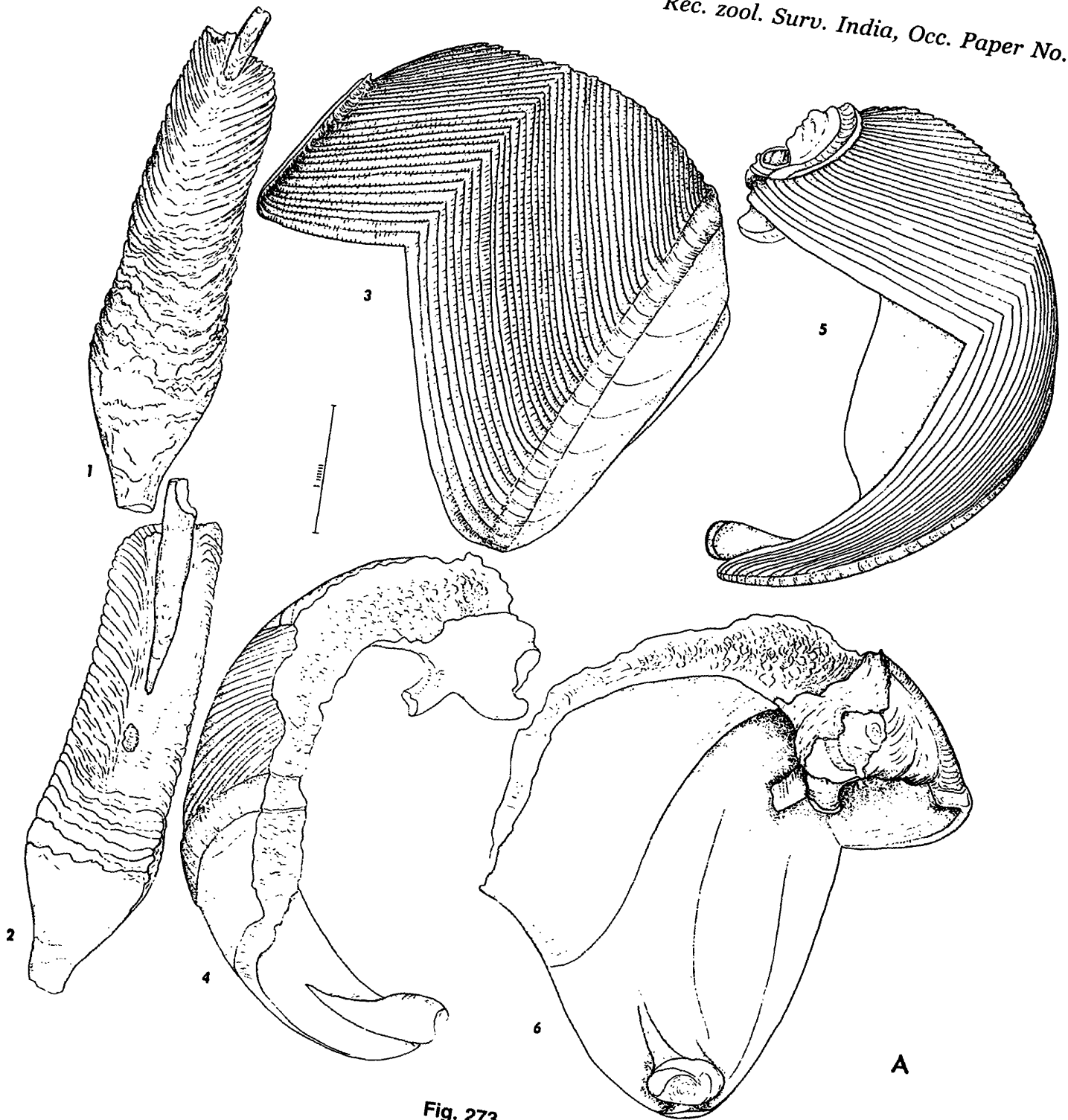


Fig. 273

EXPLANATION OF PHOTOGRAPHS

1. Exterior view of *Anadara granosa* (Linnaeus)
2. Interior view of *Anadara granosa* (Linnaeus);
3. Exterior view of *Barbatia (Barbatia) decussata* Sowerby
4. Interior view of *Barbatia (Barbatia) decussata* Sowerby
5. Exterior and Interior view of *Barbatia (Cucullaearca) lacerata* (Linnaeus);
6. Exterior and Interior view of *Anadara antiquata* (Linnaeus)
7. Exterior view of *Cucullaea (C.) labiata* (Lightfoot)
8. Exterior view of *Cucullaea (C.) concamerata* (Martini)
9. Exterior and Interior view of *Cucullaea (C.) labiata* (Lightfoot)
10. Exterior and Interior view of *Glycymeris castaneus* (Lamarck)
11. Exterior and Interior view of *Limopsis indica* Smith
12. Exterior view of *Perna viridis* (Linnaeus)
13. Exterior view of *Modiolus striatulus* Hanley
14. Interior view of *Modiolus striatulus* Hanley
15. Exterior view of *Atrina (Atrina) vexillum* (Born)
16. Interior view of *Atrina (Atrina) vexillum* (Born)
17. Exterior view of *Pinctada margaritifera* (Linnaeus)
18. Interior view of *Pinctada margaritifera* (Linnaeus)
19. Exterior and Interior view of *Pinna bicolor* Gmelin
20. Exterior and Interior view of *Pteria castaneus* Reeve
21. Exterior view of *Pteria penguin* Roeding
22. Interior view of *Pteria penguin* Roeding
23. Exterior view of *Amusium pleuronectes* (Linnaeus)
24. Interior view of *Amusium pleuronectes* (Linnaeus)
25. Exterior view of *Pedum spondyloideum* (Gmelin)
26. Interior view of *Pedum spondyloideum* (Gmelin)
27. Exterior view of *Patinopecten (Minnivola) pyxidata* (Born)
28. Interior view of *Patinopecten (Minnivola) pyxidata* (Born)
29. Exterior view of *Gloripallium pallium* (Linnaeus)
30. Exterior and Interior view of *Chlamys senatoria* (Gmelin)
31. Exterior view of *Lima lima* (Linnaeus)
32. Interior view of *Lima lima* (Linnaeus)
33. Exterior view of *Crassostrea cuttackensis* (Newton and Smith)
34. Interior view of *Crassostrea cuttackensis* (Newton and Smith)
35. Exterior view of *Crassostrea gryphoides* (Schlotheim)
36. Interior view of *Crassostrea gryphoides* (Schlotheim)
37. Exterior view of *Saccostrea cucullata* (Born)
38. Interior view of *Saccostrea cucullata* (Born)
39. Interior view of *Saccostrea cucullata* (Born)
40. Exterior and Interior view of *Ctenoides annulata* (Lamarck)
41. Exterior and Interior view of *Limaria fragilis* (Gmelin)
42. Exterior view of *Spondylus layardi* Reeve
43. Interior view of *Spondylus layardi* Reeve
44. Exterior view of *Spondylus hystrix* Roeding
45. Interior view of *Spondylus hystrix* Roeding

46. Exterior and Interior view of *Spondylus zonalis* Chenu
47. Exterior and Interior view of *Spondylus imperialis* Chenu
48. Exterior and Interior view of *Spondylus imperialis* Chenu
49. Exterior and Interior view of *Spondylus hystrix* Roeding
50. Exterior view of *Enigmonia aenigmatica* (Anton)
51. Interior view of *Enigmonia aenigmatica* (Anton)
52. Exterior view of *Placuna placenta* Linnaeus
53. Exterior and Interior view of *Anomia achaeus* Gray
54. Exterior and Interior view of *Anomia ephippium* Linnaeus
55. Exterior and Interior view of *Anodontia edentula* (Linnaeus)
56. Exterior view of *Codakia tigerina* (Linnaeus)
57. Interior view of *Codakia tigerina* (Linnaeus)
58. Interior view of *Chama lazarus* Linnaeus
59. Exterior view of *Chama lazarus* Linnaeus
60. Exterior and Interior view of *Cardites bicolor* (Lamarck)
61. Exterior and Interior view of *Cardita antiquata* (Linnaeus)
62. Exterior and Interior view of *Cardita variegata* Bruguiere
63. Exterior and Interior view of *Lyrocardium lyratum* (Sowerby)
64. Exterior and Interior view of *Cardites bicolor* (Lamarck)
65. Exterior and Interior view of *Corculum cardissa* (Linnaeus)
66. Exterior and Interior view of *Fragum unedo* (Linnaeus)
67. Exterior and Interior view of *Laevicardium (Fulvia) australis* (Sowerby)
68. Exterior and Interior view of *Glycymeris castaneus* (Lamarck)
69. Exterior and Interior view of *Fragum (Lunulicardia) retusa* (Linnaeus)
70. Exterior view of *Tridacna crocea* Lamarck
71. Interior view of *Tridacna crocea* Lamarck
72. Exterior view of *Tridacna squamosa* Lamarck
73. Interior view of *Tridacna squamosa* Lamarck
74. Exterior view of *Hippopus hippopus* (Linnaeus)
75. Interior view of *Hippopus hippopus* (Linnaeus)
76. Exterior view of *Paphies (Atactodea) glabrata* (Gmelin)
77. Interior view of *Paphies (Atactodea) glabrata* (Gmelin)
78. Exterior and Interior view of *Mactra luzonica* Deshayes
79. Exterior view of *Mactra mera* Deshayes
80. Interior view of *Mactra mera* Deshayes
81. Exterior view of *Mactra (Coelomactra) antiquata* Spengler
82. Interior view of *Mactra (Coelomactra) antiquata* Spengler
83. Exterior view of *Mactra (Coelomactra) violacea* Gmelin
84. Interior view of *Mactra (Coelomactra) violacea* Gmelin
85. Exterior view of *Mactra (Mactrinula) laevis* Chemnitz
86. Interior view of *Mactra (Mactrinula) laevis* Chemnitz
87. Exterior and Interior view of *Meropesta nicobarica* (Gmelin)
88. Exterior and Interior view of *Solen brevis* Gray
89. Exterior and Interior view of *Solen truncatus* Sowerby
90. Exterior view and Interior of *Pharella javanicus* (Lamarck)
91. Exterior view of *Tanysiphon rivalis* Benson

92. Interior view of *Tanysiphon rivalis* Benson
93. Exterior view of *Tellina (Angulus) incisa* Preston (Left valve)
94. Interior view of *Tellina (Angulus) incisa* Preston (Right valve)
95. Exterior view of *Tellina (Angulus) lanceolata* Wood (Left valve)
96. Interior view of *Tellina (Angulus lanceolata* Wood (Right valve)
97. Exterior view of *Tellina (Angulus) rhomboides* Quoy and Gaimard (Left valve)
98. Interior view of *Tellina (Angulus) rhomboides* Quoy and Gaimard (Left valve)
99. Exterior view of *Tellina (Cadella) semen* Hanley (Left valve)
100. Interior view of *Tellina (Cadella) semen* Hanley (Right valve)
101. Exterior view of *Tellina (Dallitellina) rostrata* Linnaeus (Left valve)
102. Interior view of *Tellina (Dallitellina) rostrata* Linnaeus (Left valve)
103. Exterior view of *Tellina (Hemimetis) angulata* Linnaeus (Left valve)
104. Interior view of *Tellina (Hemimetis) angulata* Linnaeus (Left valve)
105. Exterior view of *Tellina (Homalina) myaeformis* Sowerby (Left valve)
106. Interior view of *Tellina (Homalina) myaeformis* Sowerby (Right valve)
107. Exterior view of *Tellina (Moerella) ostracea* Lamarck (Left valve)
108. Interior view of *Tellina (Moerella) ostracea* Lamarck (Right valve)
109. Exterior view of *Tellina (Moerella) philippinarum* Hanley (Left valve)
110. Interior view of *Tellina (Moerella) philippinarum* Hanley (Right valve)
111. Exterior view of *Tellina (Moerella) subtruncata* Hanley (Left valve)
112. Interior view of *Tellina (Moerella) subtruncata* Hanley (Right valve)
113. Exterior view of *Tellina (Pharaonella) cuneolus* Sowerby (Left valve)
114. Interior view of *Tellina (Pharaonella) cuneolus* Sowerby (Right valve)
115. Exterior view of *Tellina (Pharaonella) iridescens* (Benson) (Left valve)
116. Interior view of *Tellina (Pharaonella) iridescens* (Benson) (Right valve)
117. Exterior view of *Tellina chilkaensis* Preston (Left valve) Type
118. Interior view of *Tellina chilkaensis* Preston (Right valve) Type
119. Exterior view of *Tellina phoenicensis* Preston (Left valve) Type
120. Interior view of *Tellina phoenicensis* Preston (Right valve) Type
121. Exterior view of *Tellina (Pharaonella) perna* Spengler (Left valve)
122. Interior view of *Tellina (Pharaonella) perna* Spengler (Right valve)
123. Exterior view of *Tellina (Pharaonella) vulsella* Gmelin (Left valve)
124. Interior view of *Tellina (Pharaonella) vulsella* Gmelin (Right valve)
125. Exterior view of *Tellina (Phylloda) foliacea* Linnaeus (Left valve)
126. Interior view of *Tellina (Phylloda) foliacea* Linnaeus (Right valve)
127. Exterior view of *Tellina (Pinguittelina) robusta* Hanley (Left valve)
128. Interior view of *Tellina (Pinguittelina) robusta* Hanley (Right valve)
129. Exterior view of *Tellina bertiniana* Preston (Left valve) Type
130. Interior view of *Tellina bertiniana* Preston (Right valve) Type
131. Exterior view of *Tellina (Quidnipagus) gargadia* Linnaeus (Left valve)
132. Interior view of *Tellina (Quidnipagus) gargadia* Linnaeus (Right valve)
133. Exterior view of *Tellina (Quidnipagus) palatam* Iredale (Left valve)
134. Interior view of *Tellina (Quidnipagus) palatam* Iredale (Right valve)
135. Exterior view of *Tellina (Scutarcopagia) lingua-felis* Linnaeus (Left valve)
136. Interior view of *Tellina (Scutarcopagia) lingua-felis* Linnaeus (Right valve)
137. Exterior view of *Tellina (Scutarcopagia) scobinata* Linnaeus (Left valve)
138. Interior view of *Tellina (Scutarcopagia) scobinata* Linnaeus (Right valve)

139. Exterior view of *Tellina (Serratina) capsoides* Lamarck (Left valve)
140. Interior view of *Tellina (Serratina) capsoides* Lamarck (Right valve)
141. Exterior view of *Tellina (Tellinella) travancorica* E.A.Smith (Left valve)
142. Interior view of *Tellina (Tellinella) travancorica* E.A.Smith (Right valve)
143. Exterior view of *Tellina (Tellinella) staurella* Lamarck (Left valve)
144. Interior view of *Tellina (Tellinella) staurella* Lamarck (Right valve)
145. Exterior view of *Tellina (Tellinella) staurella* Lamarck (Right valve)
146. Interior view of *Tellina (Tellinella) staurella* Lamarck (Left valve)
147. Exterior view of *Tellina (Tellinella) virgata* Linnaeus (Left valve)
148. Interior view of *Tellina (Tellinella) virgata* Linnaeus (Right valve)
149. Exterior view of *Tellina (Tellinides) opalina* Gmelin (Left valve)
150. Interior view of *Tellina (Tellinides) opalina* Gmelin (Right valve)
151. Exterior view of *Tellina (Tellinides) ovalis* Sowerby (Left valve)
152. Interior view of *Tellina (Tellinides) ovalis* Sowerby (Right valve)
153. Exterior view of *Tellina (Tellinides) sinuata* Spengler (Left valve)
154. Interior view of *Tellina (Tellinides) sinuata* Spengler (Right valve)
155. Exterior view of *Arcopagia carnicolor* Hanley (Left valve)
156. Interior view of *Arcopagia carnicolor* Hanley (Right valve)
157. Exterior view of *Tellina cancellata* Preston (Left valve) Type
158. Interior view of *Tellina cancellata* Preston (Right valve) Type
159. Exterior view of *Arcopagia casta* Hanley (Left valve)
160. Interior view of *Arcopagia casta* Hanley (Right valve)
161. Exterior view of *Tellina persimplex* Preston (Left valve)
162. Interior view of *Tellina persimplex* Preston (Right valve)
163. Exterior view of *Tellina vadorum* Preston (Left valve)
164. Interior view of *Tellina vadorum* Preston (Right valve)
165. Exterior view of *Arcopagia inflata* Gmelin (Left valve)
166. Interior view of *Arcopagia inflata* Gmelin (Right valve)
167. Exterior view of *Arcopagia pinguis* Hanley (Left valve)
168. Interior view of *Arcopagia pinguis* Hanley (Right valve)
169. Exterior view of *Arcopagia pudica* Hanley (Left valve)
170. Interior view of *Arcopagia pudica* Hanley (Right valve)
171. Exterior view of *Tellina innocens* Preston (Left valve) Type
172. Interior view of *Tellina innocens* Preston (Right valve) Type
173. Exterior view of *Arcopagia remies* Linnaeus (Left valve)
174. Interior view of *Arcopagia remies* Linnaeus (Right valve)
175. Exterior view of *Tellina jousseaumei* Preston (Left valve) Type
176. Interior view of *Tellina jousseaumei* Preston (Right valve) Type
177. Exterior view of *Strigilla (Aeretica) splendida* (Anton) (Left valve)
178. Interior view of *Strigilla (Aeretica) splendida* (Anton) (Right valve)
179. Exterior view of *Strigilla denestriata* Preston (Right valve) Type
180. Interior view of *Strigilla denestriata* Preston (Right valve) Type
181. Exterior view of *Macoma (Pinguimacoma) albissima* Smith (Right valve) Type
182. Interior view of *Macoma (Pinguimacoma) albissima* Smith (Right valve) Type
183. Exterior view of *Macoma (Psammacoma) birmanica* (Philippi) (Left valve)
184. Interior view of *Macoma (Psammacoma) birmanica* (Philippi) (Right valve)
185. Exterior view of *Macoma (Psammacoma) candida* (Lamarck) (Left valve)

186. Interior view of *Macoma (Psammacoma) candida* (Lamarck) (Right valve)
187. Exterior view of *Macoma (Psammacoma) truncata* (Jonas) (Left valve)
188. Interior view of *Macoma (Psammacoma) truncata* (Jonas) (Right valve)
189. Exterior view of *Macoma blairensis* Smith (Right valve) Type
190. Interior view of *Macoma blairensis* Smith (Right valve) Type
191. Exterior view of *Psammotreta ala* (Hanley) (Left valve)
192. Interior view of *Psammotreta ala* (Hanley) (Right valve)
193. Exterior view of *Psammotreta alba* (Quoy and Gaimard) (Left valve)
194. Interior view of *Psammotreta alba* (Quoy and Gaimard) (Left valve)
195. Exterior view of *Macoma (Scissulina) dispar* (Conard) (Left valve)
196. Interior view of *Macoma (Scissulina) dispar* (Conard) (Right valve)
197. Exterior view of *Psammotreta micans* (Hanley) (Left valve)
198. Interior view of *Psammotreta micans* (Hanley) (Right valve)
199. Exterior view of *Tellina unguis* Preston (Left valve)
200. Interior view of *Tellina unguis* Preston (Right valve)
201. Exterior view of *Tellina (Angulus) corbuloides* Hanley (Left valve)
202. Interior view of *Tellina (Angulus) corbuloides* Hanley (Right valve)
203. Exterior view of *Macoma (Scissulina) reticulata* (Sowerby) (Left valve)
204. Interior view of *Macoma (Scissulina) reticulata* (Sowerby) (Right valve)
205. Exterior view of *Apolymetis edentula* (Spengler) (Left valve)
206. Interior view of *Apolymetis edentula* (Spengler) (Right valve)
207. Exterior view of *Apolymetis papyracea* (Gmelin) (Right valve)
208. Interior view of *Apolymetis papyracea* (Gmelin) (Right valve)
209. Exterior view of *Gastrana polygona* (Gmelin) (Left valve)
210. Interior view of *Gastrana polygona* (Gmelin) (Right valve)
211. Exterior view of *Macalia bruguieri* (Hanley) (Left valve)
212. Interior view of *Macalia bruguieri* (Hanley) (Right valve)
213. Exterior view of *Sanguinolaria (Soletellina) acuminata* (Hanley)
214. Interior view of *Asaphis violascens* (Forskal)
215. Exterior view of *Asaphis violascens* (Forskal)
216. Exterior view of *Sanguinolaria (Soletellina) lunulata* (Deshayes)
217. Interior view of *Sanguinolaria (Soletellina) lunulata* (Deshayes)
218. Exterior view of *Asaphis diflorata* = *Asaphis violascens* (Forskal)
219. Interior view of *Asaphis diflorata* = *Asaphis violascens* (Forskal)
220. Exterior and Interior view of *Donax (Plebidonax) compressus* Lamarck
221. Exterior and Interior view of *Donax (Latona) cuneatus* Linnaeus
222. Exterior and Interior view of *Donax (Latona) faba* Schumacher
223. Exterior and Interior view of *Donax (Hecuba) scortum* (Linnaeus)
224. Exterior view of *Trapezium (Neotrapexium) sublaevigatum* (Lamarck)
225. Interior view of *Trapezium (Neotrapexium) sublaevigatum* (Lamarck)
226. Exterior view of *Polymesoda bengalensis* (Lamarck)
227. Interior view of *Polymesoda bengalensis* (Lamarck)
228. Exterior view of *Periglypta reticulata* (Linnaeus)
229. Interior view of *Periglypta reticulata* (Linnaeus)
230. Exterior and Interior view of *Gafrarium divaricatum* (Gmelin)
231. Exterior and Interior view of *Sunetta meroe* (Linnaeus)
232. Exterior and Interior view of *Sunetta scripta* (Linnaeus)

233. Exterior and Interior view of *Sunetta (Sunettina) solanderi* (Gray)
234. Exterior view of *Tapes (Ruditapes) bruguieri* (Hanley)
235. Interior view of *Tapes (Ruditapes) bruguieri* (Hanley)
236. Exterior view of *Tapes (Ruditapes) philippinarum* (Adams and Reeve)
237. Interior view of *Tapes (Ruditapes) philippinarum* (Adams and Reeve)
238. Exterior and Interior view of *Dosinia bruguieri* (Gray)
239. Exterior and Interior view of *Dosinia prostrata* = *Dosinia bruguieri* (Gray)
240. Exterior view of *Gafrarium tumidum* Roeding
241. Interior view of *Gafrarium tumidum* Roeding
242. Interior and Exterior view of *Circe scripta* Linnaeus
243. Exterior and Interior view of *Marcia japonica* (Gmelin)
244. Exterior view of *Marcia pinguis* (Schroeter)
245. Interior view of *Marcia pinguis* (Schroeter)
246. Exterior and Interior view of *Paphia alapapiliones* Roeding
247. Exterior and Interior view of *Paphia malabarica* (Schroeter)
248. Exterior view of *Tapes literatus* (Linnaeus)
249. Interior view of *Tapes literatus* (Linnaeus)
250. Exterior view of *Lioconcha ornata* (Dillwyn)
251. Interior view of *Lioconcha ornata* (Dillwyn)
252. Exterior and Interior view of *Pelecypora trigona* (Reeve)
253. Exterior view of *Meretrix meretrix* (Linnaeus)
254. Interior view of *Meretrix meretrix* (Linnaeus)
255. Exterior view of *Glauconome sculpta* Sowerby
256. Interior view of *Glauconome sculpta* Sowerby
257. Exterior view of *Barnea candida* (Linnaeus)
258. Interior view of *Barnea candida* (Linnaeus)
259. Exterior view of *Bactronophorus thoracites* (Gould)
260. Exterior view of *Dicyathifer manni* (Wright)
261. Exterior view of *Bankia campanellata* Moll and Roch
262. Exterior and Interior view of *Meretrix casta* (Gmelin)
263. Exterior view of *Bankia campanellata* Moll and Roch
264. Exterior view of *Bankia nordi* Moll
265. Exterior view of *Bankia rochi* Moll
266. Exterior view of *Nausitora dunlopei* Wright
267. Exterior and Interior view of *Laternula truncata* (Lamarck)
268. Pallet of *Bactronophorus thoracites* (Gould)
269. Pallet of *Dicyathifer manni* (Wright)
270. Pallet of *Bankia campanellata* Moll and Roch
271. Pallet of *Bankia nordi* Moll
272. Pallet of *Bankia rochi* Moll
273. Pallet of *Nausitora dunlopei* Wright