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YOGESH KUMAR, J.S. RAGHUNAHTAN, C. RAGHURAMAN, R. SREERAJ, C.R. and VENKATARAMAN, K.

ZOOLOGICAL SURVEY OF INDIA

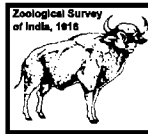


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INTRODUCTION

Gorgonians are marine coelenterates of the class Anthozoa, which include sea fan, sea whips, corals, sea anemones and other related species. Based on structural differences in their symmetry, the Anthozoans are divided into three subclasses (Octocorallia, Hexacorallia and Ceriantharia). The sub class Octocorallia includes soft corals (Alcyonacea), sea fans (Gorgonacea), sea pens (Pennatulacea) and blue coral (Helioporacea). They are colonial in habit, polyps have eight tentacles and the body cavity is also divided into eight radial compartments. The second sub class Hexacorallia or Zoantharia includes sea anemones (Actiniaria), zoanthids (Zoanthiniaria), mushroom anemones (Corallimorpharia) and hard corals (Scleractinia) and the third sub class Ceriantipatharia includes tube anemones (Ceriantharia) and black and wire corals (Antipatharia), whereas the polyps of the Hexacorallia bear six or multiples of six tentacles without pinnules. Antipatharians have a slender growth forms, commonly branching, a central skeletal axis covered with thorns and short, cylindrical, non-retractile polyps bearing six tentacles (Katharina and Alderslade, 2001). Out of the six orders of the sub class octocorallia, the Alcyonacea and Gorgonacea are widely distributed in coastal belts of the Indo Pacific region (Benayahu and Loya, 1977; Nishihira, 1981). Recently, Grasshoff (2000) introduced the new suborder Calcaxonia for five gorgonian families that are characterized by heavy calcification of the axis (Ifalukellidae, Chrysogorgiidae, Primnoidae, Ellisellidae and Isididae). The axis has no soft cross-chambered core, but is solid throughout and the calcareous deposits comprise a large proportion of the axial material compared to the horny substance.

The gorgonians are popularly called as sea fans and sea whips are marine sessile coelenterates with colonial skeleton and living polyps. They are exceptionally productive and valuable natural asset. Most of the animals grow in a reticulate pattern and the branches divide in one plane giving the shape of a fan. The gorgonian skeleton is composed of two parts, an outer cortex containing loosely arranged calcareous sclerites and an inner medulla with a solid axis made of calcareous or horny matter with or without the addition of calcareous sclerites. Based on the arrangement of the skeleton, the order Gorgonacea is divided into three suborders namely Calcaxonia, Holaxonia and Scleraxonia.

Gorgonians act as refuge habitats for many small invertebrates such as crabs, snails and brittle stars (Goh et al., 1999; Buhl-Mortensen and Mortensen 2005; Gili et al., 2006). They also provide shelter for a variety of commercially important fishes and serve as good feeding and nursery ground in a marine ecosystem (Thomas and Rani Mary George, 1987 a, b). The gorgonian distribution and abundance is influenced by environmental factors such as light, temperature, water flow, current, and substrate (Russo, 1985; Weinbauer and Velimirov, 1995; Zeevi and Benayahu, 1999). Azooxanthellate gorgonians are usually occur in mid-depth reefs and deep windward fore-reef terrace areas with high currents and sedimentation (Goh and Chou, 1995; Goh et al., 1997; Sanchez et al., 1998). Their shape and complexity have an influence on the diversity and abundance of associated animals (Buhl- Mortensen and Mortensen, 2005). Further, the genus *Subergorgia* has been associated with promising bioactivities such as cytotoxicity, antifeeding activity etc. (Bokesch et al., 1996; Wang et al., 2002; Qi et al., 2005; Rezanka et al., 2008).

In India, gorgonian fishery started in 1975 and bulks of material have been exported to France, Germany, Belgium, USA and Netherlands till 1984. A quantitative analysis of the exports during the 1975-84 period revealed that as much as 80.6 tonnes were exploited from India, particularly 22 species from 7 families and 15 genera were contributed more in the important export (Thomas and Rani Mary George, 1987a). The reason behind such large scale export was due to the discovery of Prostaglandins (PGA, PGB, PGE, PGE2, PGF, PGF2-D, PGF etc.) from a gorgonian *Plexaura homomalla* (Weiheimer and Spraggins, 1969). Prostaglandins play important roles in ovulation, luteal function, implantation, maintenance of gestation, microbial-induced abortion, parturition, postpartum uterine and ovarian infections and resumption of postpartum ovarian cycle. Gorgonians are also known to be a rich source of several other compounds like sterols, Terpenoids, with proven medical properties. Prostaglandin prepared from the prostate glands of mammals is very limited. Its derivatives extracted from gorgonians serve as "Wonder Drugs" for many systemic diseases in both humans and animals. Apart from prostaglandins, gorgonians are rich sources of terpenoids. So far about 74 such compounds have been isolated from different species of gorgonians and these may be classified under diterpene, sesquiterpene and artifact. The types and concentration of these compounds vary greatly between various species (Coll et al., 1982).

In India, the gorgonians exported are commercially classified under 4 types under 22 species belonging to 7 families and 15 genera. They are commonly called Black, Red, Flower and Monkey tail. Among them 15 species of gorgonian belonging to 5 families and 15 genera reported from Gulf of Mannar coast, 14 species under 5 families and 10 genera from Palk Pay region, 10 species, 2 families and 6 genera from Arabian coast (Thomas and Rani, 1987b). Venkataraman *et al.* (2004) reported 27 species of gorgonians belonging to 8 families and 19 genera from India of which 10 species under 4 families and 9 genera have found from Andaman and Nicobar Islands. Among them 8 species under 5 families and 7 genera reported from Laccadive. Only 2 species of gorgonians reported from Gulf of Kachchh by Usha *et al.*, 2008. Later on 13 species belonging 8 families and 12 genera reported from Ritchie's Archipelago, South Andaman (Yogesh *et al.*, 2012). The present work reports 51 species belonging to 25 genera, 8 families and 3 sub - orders. Among them 44 species belonging to 24 genera and 7 families are new to India. This paper gives an updated list of all known gorgonian species found in the Andaman and Nicobar Islands.

REVIEW OF LITERATURE

The Indo-Pacific shallow water, gorgonians have been listed by the contributions of several authors (Stiasny, 1941; Mai-Bao-Thu and Domantay, 1970, 1971; Muzik and Wainwright, 1977; Zou and Scott, 1980; Howard and Alice, 1983; Zou and Chen, 1984; Alderslade, 1986; van Ofwegen, 1987, 1994; Goh and Chou, 1995, 1996; Williams, 1992; Williams and Lindo, 1997; Grasshoff and Alderslade, 1997; Grasshoff, 1999; 2000; Katharina Fabricius and Alderslade 2001; Dautova, 2007).

Taxonomic literature on gorgonians from the Indo-Malayan region includes the monographs of the Siboga (Nutting 1910 a-f; Stiasny, 1937) and Snellius (Stiasny, 1940) expeditions which have described the fauna of the Malay Archipelago. Van Ofwegen (1987) described species of the family Melithaeidae from the Indian Ocean and the Malay Archipelago. In Southeast Asia, few additions have been reported concerning the diversity of gorgonians (Goh and Chou 1996; Goh *et al.*, 1997; Ofwegen *et al.*, 2000; Ofwegen and Alderslade, 2007).

Hickson (1906a, b) and Faure (1977) have described the gorgonian fauna of Maldives and the Mascarene Archipelago. Alcyonarians including

gorgonians collected by the Royal Indian Marine Survey Ship have been reported about 187 species from the Indian Ocean (Thompson and Simpson, 1909). From Thailand 28 genera are known (Alderslade *et al.*, 1989) and in Singapore, 12 genera of gorgonians were found (Goh and Chou 1996).

Taxonomic studies on gorgonian species along the coast of India and its adjacent waters have been studied by Pratt (1903); Thompson and Crane (1909); Thomson and Simpson (1909). According to Thomas *et al.* (1995), in India, 27 species of gorgonians belonging to 8 families and 19 genera have been reported. Among them 12 species of gorgonians from 4 families and 9 genera have been reported from the northeast coast of India. However in the Andaman and Nicobar Islands, 10 species from 4 families and 9 genera have been recorded (Venkataraman *et al.*, 2004). There are scattered taxonomic descriptions of gorgonians in most parts of the Asian region and isolated distributional records, many of them inadequately substantiated.

STUDY AREA

The Andaman and Nicobar (Fig. 1) group consists of 572 islands, islets and rocky outcrops and have an aggregate coastline of 1,912 km, which is about a fourth of the coastline of India (ANDFISH, 2006). The coastline is very wavy with many long, narrow creeks, lagoons and bays supporting sandy, rocky and muddy beaches and mangroves. The islands are spread in a linear distance of about 1120 km and constitute the summits of the submarine range of hills connecting the Arkan Yoma of Myanmar with the Achin Head in southeast of Sumatra. The Andaman and Nicobar Islands are distinctly separated by the wide Ten Degree channel which is about 150 km wide and 400 fathoms deep. The total land area is about 8249 sq km (Fig. 1). The continental shelf area is limited with an estimated area of 16,000 km² and the sea is very deep within a few kilometers from the shore. the Exclusive Economic Zone (EEZ) around the Islands encompasses around 0.6 million km², which is around 30% of the EEZ of India. This provides a great opportunity to explore the vast diversity of the seas around these islands.

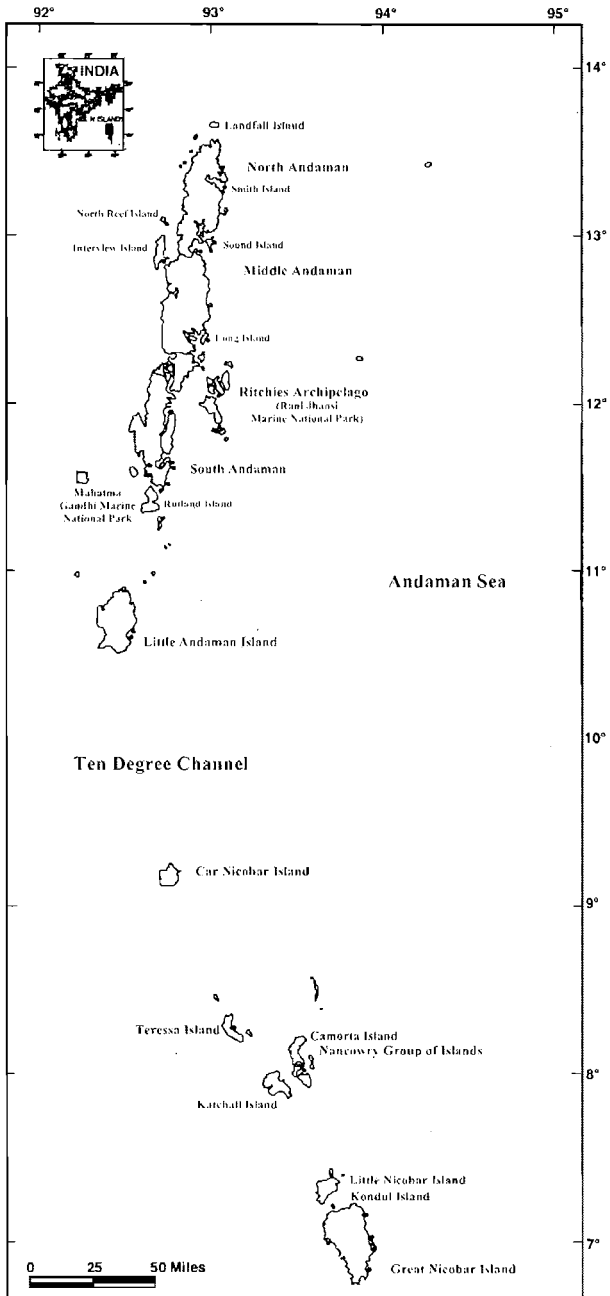


Fig. 1. Andaman and Nicobar Islands

No.	AREA SURVEYED	CO-ORDINATES
SOUTH ANDAMAN		
1.	Pongibalu	(Lat. 11°31.030' N; Long. 092°39.159' E)
2.	Rutland Island	(Lat. 11°28.541' N ; Long. 092°40.371' E)
3.	Jolly Buoy Island	(Lat. 11°30.251' N ; Long. 092°32.591' E)
4.	Twins Island	(Lat. 11°23.773' N ; Long. 092°33.097' E)
Ritchie's Archipelago		
5.	Havelock Island	(Lat. 12°00.005' N; Long. 092°56.808' E)
6.	Henry Lawrence Island	(Lat. 12°05.000' N; Long. 093°06.312' E)
7.	Inglis Island	(Lat. 12°08.639' N; Long. 093°06.786' E)
8.	John Lawrence Island	(Lat. 12°04.075' N; Long. 093°00.398' E)
9.	Outram Island	(Lat. 12°00.574' N; Long. 092°56.808' E)
10.	South Button Island	(Lat. 12°13.467' N; Long. 092°01.334, E)
LITTLE ANDAMAN ISLAND		
11.	Sister Island	(Lat. 10°55.830' N; Long. 092°07.023' E)
MIDDLE ANDAMAN		
12.	Quaiter Island	(Lat. 12°20.323' N; Long. 092°54.529' E)
13.	Long Island	(Lat. 12°21.749' N; Long. 092°55.410' E)
14.	North Passage	(Lat. 12°18.121' N; Long. 092°55.718' E)
NICOBAR ISLANDS		
Car Nicobar Island		
15.	Malacca	(Lat. 09°10.490' N ; Long. 092°49.714' E)
Nancowry Islands		
16.	Trinket Island	(Lat. 08°02.806' N ; Long. 093°34.556' E)
17.	Kamorta Island - Kardip	(Lat. 08°02.151' N ; Long. 093°33.182' E)
18.	Alukiah (Munak Gate)	(Lat. 07°59.806' N ; Long. 093°29.852' E)

MATERIAL AND METHODS

During the study period from July 2009 to June 2011, specimens have sampled from 18 stations with the help of SCUBA (Self contained Underwater Breathing Apparatus) at 5m to 40m depth. The specimens were deposited at the National Zoological Collections of ZSI-ANRC, Port Blair and the specimens were preserved in 70% ethanol (Breedy, 2001). The terminology used in the description was followed by Bayer *et al.* (1983). They were identified based on the morphological characteristics of the colonies and sclerite structure. Sclerites were extracted using 5% Sodium hypochlorite (Bayer, 1961) and examined under the compound microscope (Leica – DFC 500), and underwater pictures were taken using Sony T-900 camera.

SYSTEMATIC POSITION

Phylum	CNIDARIA Hatschek, 1888
Class	ANTHOZOA Ehrenberg, 1831
Order	GORGONACEA Lamouroux, 1816
Sub Order	CALCAXONIA Grasshoff, 2000
Family	ELLISELLIDAE Gray, 1859

Genus *Dichotella* Gray, 1870

1. *Dichotella gemmacea* (Milne Edwards & Haime, 1857),

Plate - I

Material Examined: 1. ZSI/ANRC: 5425, Havelock, Ritchie's Archipelago, South Andaman, 28 m depth, 28.5 cm height, 8 cm width; 2. ZSI/ANRC: 6087, Long Island, Middle Andaman, 25 m depth, 1 meter height and 30 cm width.



Description: Colony reddish brown in colour when live and dried. Size of the colony is up to 1m in height and 30 cm broad. Specimens commonly show dichotomous branched fans or bushes. Colonies do not form nets. Polyps may be very conspicuous and monomorphic but not retractile and arranged all around the branches.

Sclerites: Sclerites are usually colourless. The surface of the coenenchyme contains clubs where the head is formed with a cluster of distally pointed tubercles. The subsurface contains symmetrical capstans.

Depth range and Habitat: 30m depth; common at depths less than 50m. It was observed mostly in reef flats and turbid current water.

Distribution: Central Indo-Pacific, New Caledonia, India: Andaman Islands.

Remark: New to Indian waters.

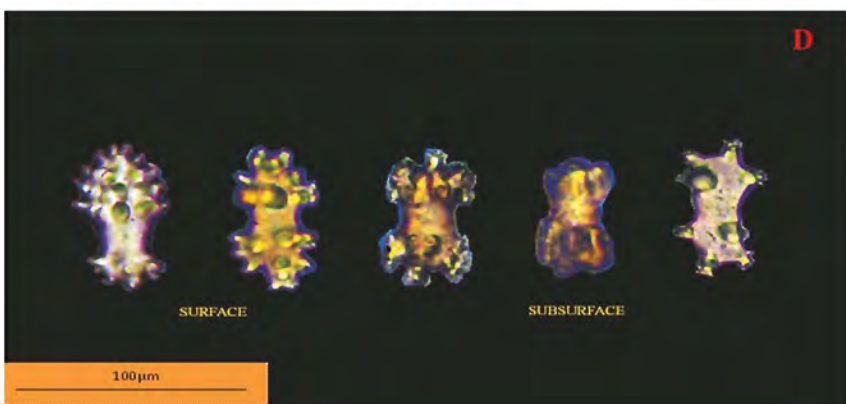
Taxonomic references

Milne Edwards, H. and Haime, J. 1857. Histoire naturelle des coralliaires ou polypes proprement dits, I. 1-34 + 1-326, 8 pls. in separate "Atlas" numbered A1-6, B1-2; Roret, Paris.

Goh, N.K.C., Chou, L.M. 1996. An annotated checklist of the gorgonians of Singapore, with a discussion of gorgonian diversity in the Indo-West Pacific. *Raff. Bull. Zool.*, **44**:435-459.

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – I *Dichotella gemmacea* (Milne Edwards and Haime, 1857)
A&B Colony, C – Branch and polyps, D- Sclerites from surface and subsurface



Genus *Ellisella* Gray, 1858
2. *Ellisella azilia* (Grasshoff, 1999)

Plate - 2

Material Examined: ZSI/ANRC: 6089, Gutor Island, Middle Andaman, 15 m depth, 43 cm height.

Description: Colony reddish brown in colour when live and dried. Size of the colony is up to 40 cm with very delicate branches. The stem is 3.0mm in diameter, end branches is only 0.3 mm thick. The polyps are scattered all around the branches are little elevated.

Sclerites: Pale red colour and less than 0.09mm in size. The coenenchyme contains elongated double heads, some larger and few smaller. The polyp contains elongated, many of them very thin and slender, up to 0.07 mm long.



Depth range and Habitat: 25 to 70 m; reef slope and bottom. It was observed mostly in turbid environments.

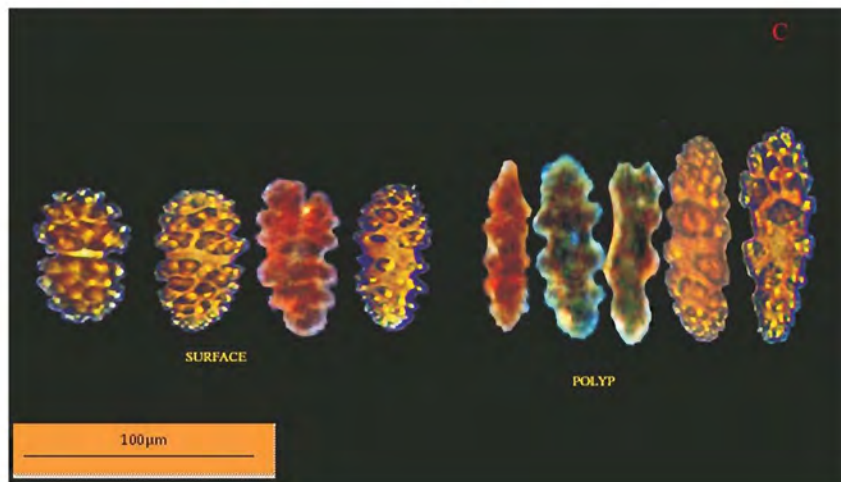
Distribution: New Caledonia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 2 *Ellisella azilia* (Grasshoff, 1999)
A&B- Colony, C – Sclerites from surface and polyp



3. *Ellisella cercidia* (Grasshoff, 1999)

Plate - 3

Material Examined: ZSI/ANRC: 6067, Havelock, Ritchie's Archipelago, South Andaman, 35 m depth, 40 cm specimen; ZSI/ANRC: 6084, Long Island, Middle Andaman, 25 m depth, 65 cm specimen.

Description: Colony red in colour when live and dried. Size of the colony is more than 1 m and richly branched fans. The branches are long and ascending; they are blunt ending and are in dried condition about 5mm in diameters. The polyps are scattered all around the branches, strongly elevated, many even tubular and up to 3.5 mm high.



Sclerites: Amber colour and less than 0.1 mm in size, the surface of the coenenchyme contains double heads, 0.05 – 0.06 mm long with densely crowded tubercles, which are prevailing; in inner layer double heads up to a length of 0.08 mm with large tubercles which are somewhat separated from each other. The polyps contain slender sclerites up to 0.1 mm long.

Depth range and Habitat: 20 to 55 m; reef slope and bottom. It was observed mostly in turbid and current water environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

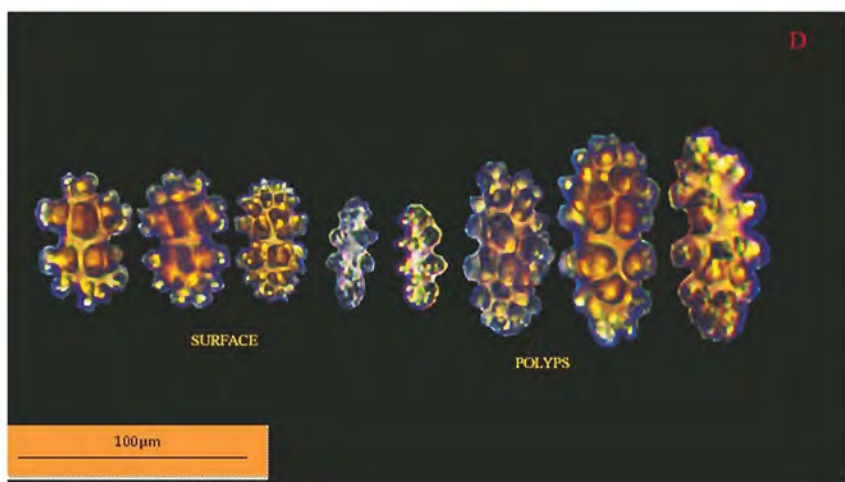
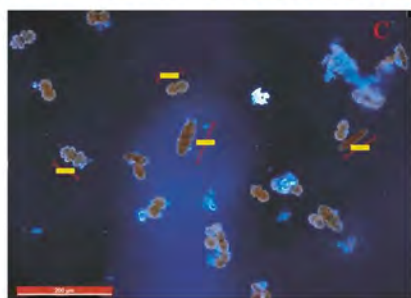
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 3 *Ellisella cercidia* (Grasshoff, 1999)

A – Elevated polyps and branch, B – Colony, C&D – Sclerites from surface and polyps



4. *Ellisella eustala* (Grasshoff, 1999)

Plate - 4

Material Examined: ZSI/ANRC: 6208, Havelock, Ritchie's Archipelago, South Andaman, 30 m depth, 18 cm height, 9 cm width specimen.

Description: Brownish red colour when live and dried. Size of the colony is 30 to 50 cm and regular dichotomous or asymmetrical branches. The stem is 3 – 4 mm in diameter, end branches are 1 – 1.5 mm. The polyps are slightly elevated and biserially arranged, so the branches are flattened in the plane of the fan.

Sclerites: Pale red colour and less than 0.11 mm in size. In the coenenchyme double heads of 0.05 to 0.07 mm length. The upper parts of the polyps are remarkably long and slender, 0.08 to 0.11 mm long.

Depth range and Habitat: 25 - 60 m; reef slope and reef bottom at turbid environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.



5. *Ellisella marisrubri* (Stiasny, 1938)

Plate - 5

Material Examined: ZSI/ANRC: 6062, Havelock, Ritchie's Archipelago, South Andaman, 30 m depth, 5.5 cm height specimen.

Description: Red colour when live and dried. Size of the colony is 30 cm and sparsely branched. In this specimen, only the stem is 6.5 cm long and 1.5 mm in diameter. The polyps arranged in two rows, are little elevated.



Sclerites: Pale yellow colour and less than 0.08 mm in size, coenenchyme between the polyps, double – heads and slightly elongated forms, 0.05-0.08 mm long, are prevalent, their tubercles are small and not clearly arranged in girdles; the slender sclerites in the polyps are 0.06- 0.08 mm long.

Depth range and Habitat: 25 - 55 m; reef slope and reef bottom at turbid environments.

Distribution: Northern Red Sea, and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

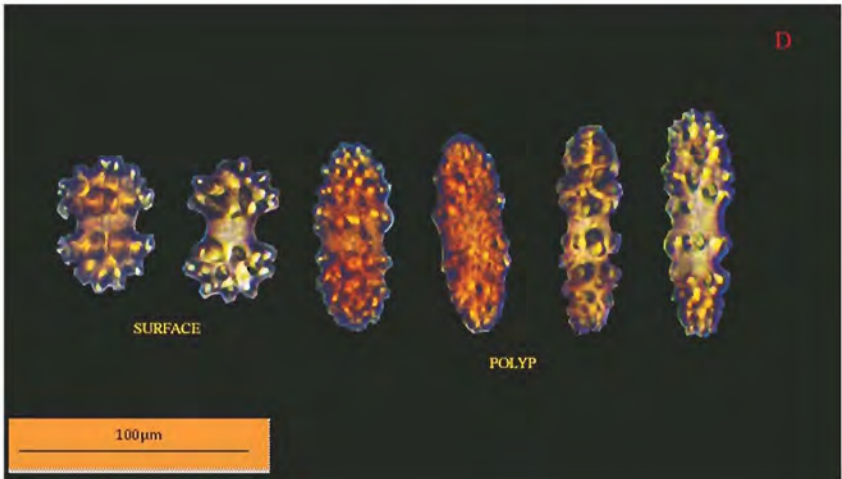
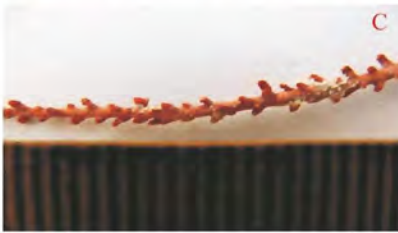
Taxonomic references

Stiasny, G. 1938. Diagnosen einiger neuer Gorgonarien – Arten aus dem Roten Meere. *Zool.Anz. Leipzig*, **121**:336-341.

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour.Forsch – Inst. Senckenberg*, **1**-224.

PLATE – 5 *Ellisella marisrubri* (Stiasny, 1938)

A&B – Colony, C – Elevated polyps, D – Sclerites from surface and polyp



6. *Ellisella nuctenea* (Grasshoff, 1999)

Plate - 6

Material Examined: ZSI/ANRC: 6077, John Lawrence, Ritchie's Archipelago, South Andaman, 28 m depth, 25 cm height specimen.

Description: Colony reddish brown in colour, when live and dried. Size of the colony is up to one meter and bushy in structure. Richly branched fans or bushes, often composed of several fans. The polyps are scattered all around the branches and are little elevated.

Sclerites: Orange yellow in colour and less than 0.1 mm in size. Double heads 0.05–0.07 mm long with densely crowded tubercles predominate in the coenenchyme; some larger double heads, 0.08 mm long with less densely arranged tubercles are scattered among them. The sclerites of the upper parts of the polyps are elongated, 0.08–0.09 mm long and many are somewhat club shaped.

Depth range and Habitat: 20 to 60 m; reef slope and outer side of the main reef; turbid environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

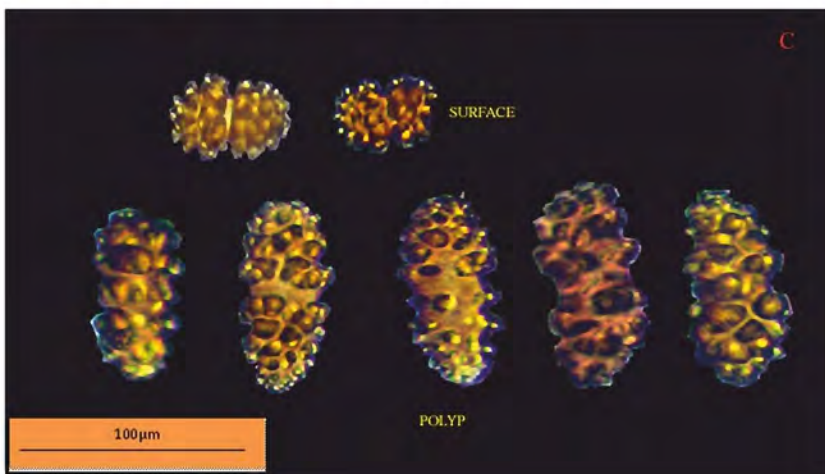
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.



PLATE – 6 *Ellisella nuctenea* (Grasshoff, 1999)
A&B – Colony, C – Sclerites from surface and polyp



Genus *Junceella* Valenciennes, 1855
7. *Junceella delicata* (Grasshoff, 1999)

Plate - 7

Material Examined: ZSI/ANRC: 6125, Pongibalu, Mahatma Gandhi Marine National Park, South Andaman, 25 m depth, 21 cm height specimen.

Description: Colony is white in colour when live and dried. Size of the colony is up to 70 cm and whips structure. Polyps inclined upward, large, so the whips in preserved material have the aspect of a string of beads in the slender, upper parts.

Sclerites: Colourless and less than 0.07 mm in size. The surface cortex contains clubs with large tubercles, the upper part distinctly set off from the short smooth waist; short stout clubs occur mixed with slender ones; beneath the clubs are capstans and double stars.



Depth range and Habitat: 25 to 70 m; reef slope and outer reef edge. It was observed mostly in strong current and turbid environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

8. *Junceella eunicelloides* (Grasshoff, 1999)

Plate - 8

Material Examined: ZSI/ANRC: 6109, Munak Gate, Nancowry group of islands, Nicobar, 20 m depth, 35 cm height specimen.

Description: Colony is red in colour, when live and reddish brown in dried. Size of the colony is up to one meter and whips long and slender, exceptionally as much as 3

m; but only up to 4.2 mm in diameter. The polyps are small, inclined upward and appressed to the coenenchyme, densely crowded, and leaving two narrow bands free of polyps.

Sclerites: Colourless and less than 0.08 mm in size, the club shaped sclerites are short, with few small tubercles and an almost smooth upper surface. The double stars of the inner coenenchymal layers are but little larger than the clubs.

Depth range and Habitat: 15 to 35 m; outer reef edge and bottom. It was observed mostly in turbid environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

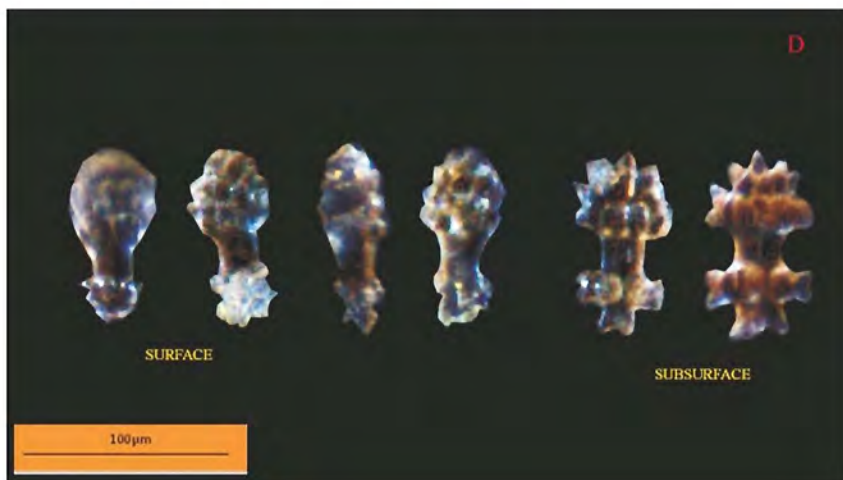
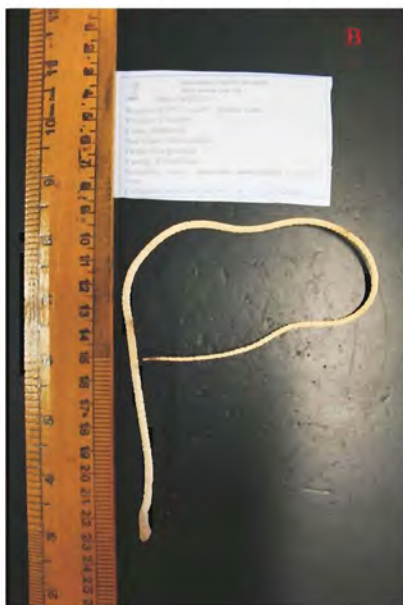
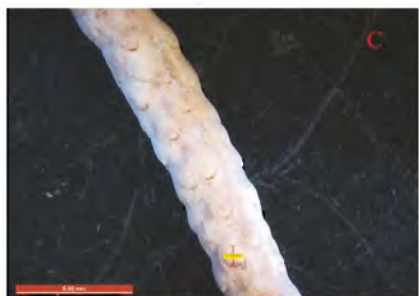
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.



PLATE – 8 *Junceella eunicelloides* (Grasshoff, 1999)
A&B – Colony, C – Polyps, D – Sclerites from surface and subsurface



9. *Juncella juncea* (Pallas, 1766)

Plate - 9

Material Examined: ZSI/ANRC: 5424, John Lawrence, Ritchie's Archipelago, South Andaman, 28 m depth, 25 cm height, Wight colour specimen; ZSI/ANRC: 6112, Munak Gate, Nancowry group of islands, Nicobar, 20 m depth, 21 cm height, red colour specimen; ZSI/ANRC: 6119, Pongi Balu, Mahatma Gandhi Marine National Park, South Andaman, 20 m depth, 1 m height, red colour specimen.



Description: Colony dark red in colour when live and dried. Axis white internally and pale brown externally. Size of the colony is more than 2 meters. Colonies are usually un-branched and whip like, rarely branched. The calyces papillae are directed towards the growing tips. The polyps are small, clubs.

Sclerites: The sclerites are dumbbell shaped and size up to 0.1 mm, subsurface have clubs, size 0.1 mm.

Depth range and Habitat: 20 to 40 m; current-swept muddy bases of reef, and moderately common on mid shelf reefs at greater depth. Uncommon on outer shelf reefs. Also occurs in turbid coastal inter-reef environment and muddy estuaries.

Distribution: Red sea, South China, Indo Pacific, Great Barrier Reef, Micronesia, New Caledonia, and India: Gulf of Mannar and Andaman and Nicobar Islands.

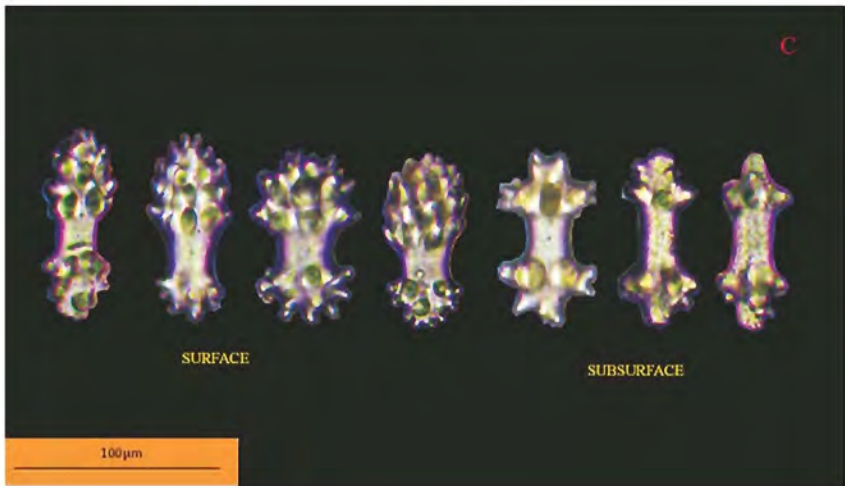
Taxonomic references

Pallas, P.S. 1766. Elenchus zoophytorum sistens generum adumbrations generaliores et specierum cognitarum succinctas descriptions cum selectis auctorum synonymis. *Petrum van Cleef*, Hagrae Comitum, 1-451.

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

Thomas, P.A. and Rani Mary George, 1987. Gorgonid Resources of India. *Marine Fisheries Information Service*, CMFRI, Cochin, **74**: 1-14.

PLATE – 9 *Juncella juncea* (Pallas, 1766)
A&B – Colony, C – Sclerites from surface and subsurface



Genus *Viminella* Gray, 1870
10. *Viminella crassa* (Grasshoff, 1999)

Plate - 10

Material Examined: ZSI/ANRC: 6091, Guitor Island, Middle Andaman, 22 m depth, 13 cm height, red colour specimen; ZSI/ANRC: 6126, Pongibalu, Mahatma Gandhi Marine National Park, South Andaman, 20 m depth, 12 cm height, red colour specimen.



Description: Colony red in colour, when live and dried. Size of the colony is up to 60 cm and whip like structure. Colonies are relatively short and thick, 1 cm in diameter. The polyps are large and elevated, in some places inclined upward, in others downward, crowded all around, leaving a trace of polyp free zone only for some short distances.

Sclerites: Reddish brown colour and less than 0.15 mm in size. The surface coenenchyme contains double heads (0.06 to 0.09 mm). The polyp contains thick spindles (0.07 to 0.15 mm).

Depth range and Habitat: 20 to 45 m; passages and outside the main reef environment.

Distribution: New Caledonia, and India: Andaman and Nicobar Islands.

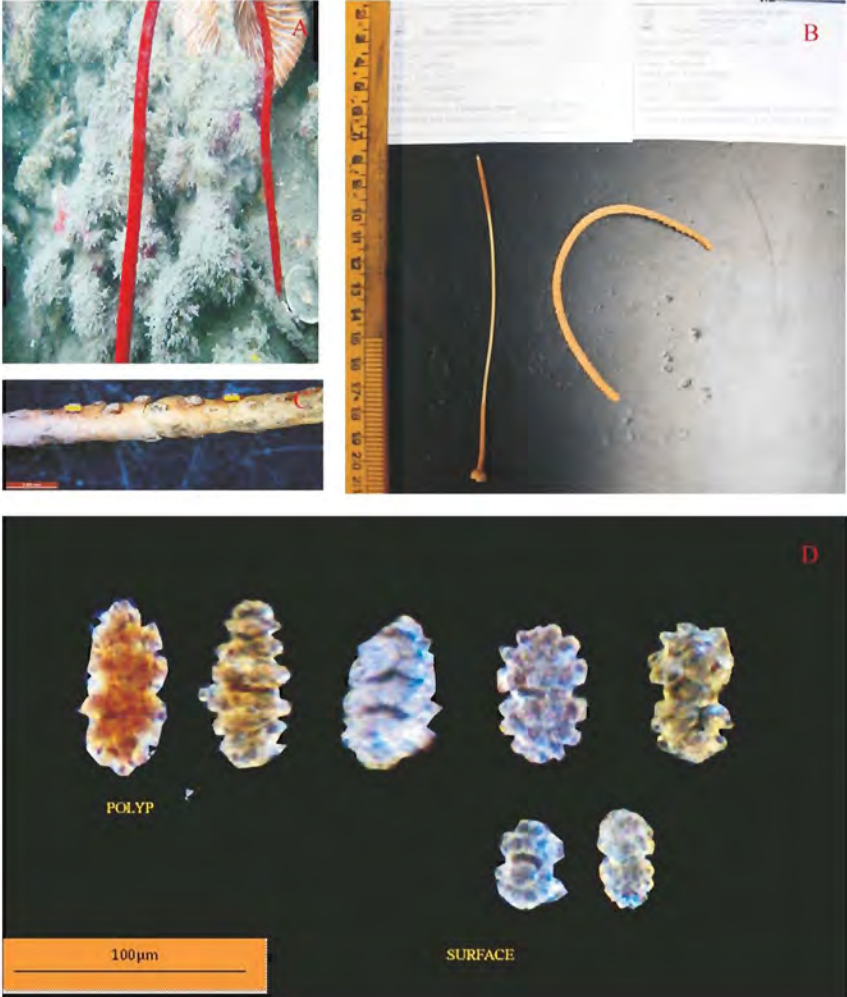
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 10 *Viminella crassa* (Grasshoff, 1999)

A&B – Colony, C- Elevated polyp, D – Sclerites from subsurface and polyps



11. *Viminella junceelloides* (Stiasny, 1938)

Plate - 11

Material Examined: ZSI/ANRC: 6098, Guitor Island, Middle Andaman, 20 m depth, 30 cm height specimen.

Description: Colony is white in colour when live and dried. Size of the colony is up to one meter and whip in structure. The polyps are large and elevated, in some places inclined upwards, in other downward, crowded all around, leaving no trace of a polyp free zone.

Sclerites: Colourless in inner layer and amber in surface layer, less than 0.08 mm in size. The coenenchyme contains double heads, capstan like and elongated forms. The sclerites in the upper part of the polyps are thick spindles, 0.06 to 0.08 mm long.

Depth range and Habitat: 15 to 35 m; reef slope and below the reef with current water environments.

Distribution: Northern Red Sea and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic references

Stiasny, G. 1938. Diagnosen einiger neuer Gorgonarien – Arten aus dem Roten Meere. *Zool.Anz.*, 121:336-341.

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour. Forsch – Inst. Senckenberg*, 1-224.



PLATE – II *Viminella junceelloides* (Stiasny, 1938)
A&B – Colony, C – Sclerites from surface and polyp



Genus *Nicella* Gray, 1870
12. *Nicella flabellata* (Whitelegge, 1897)

Plate - 12

Material Examined: ZSI/ANRC: 5426, John Lawrence, Ritchie's Archipelago, South Andaman, 28 m depth, 14 cm height, 12 cm width specimen.

Description: Colony is dirty red or brown in colour when live and dried. Size of the colony is up to 30cm in height and 12 cm broad. Specimens commonly show a tendency towards dichotomous branching, made irregular by out of place lateral branches. Colonies do not form nets. Polyps may be very conspicuous and monomorphic but not retractile and arranged all around the branches or biserially.



Sclerites: Mostly colourless, the surface layer contains small double heads, above a thick subsurface layer of flattened rods or spindles generally without a distinct waist. These subsurface layer sclerites can be two to four times length of the double heads.

Depth range and Habitat: 30m; rare, has been found at diving depth and rare at depths less than 50m. It was observed mostly in muddy reef flats and turbid environments.

Distribution: Caribbean from Nicaragua to Dominican Republic, Bahamas, North and East Mexico, India: Andaman Islands.

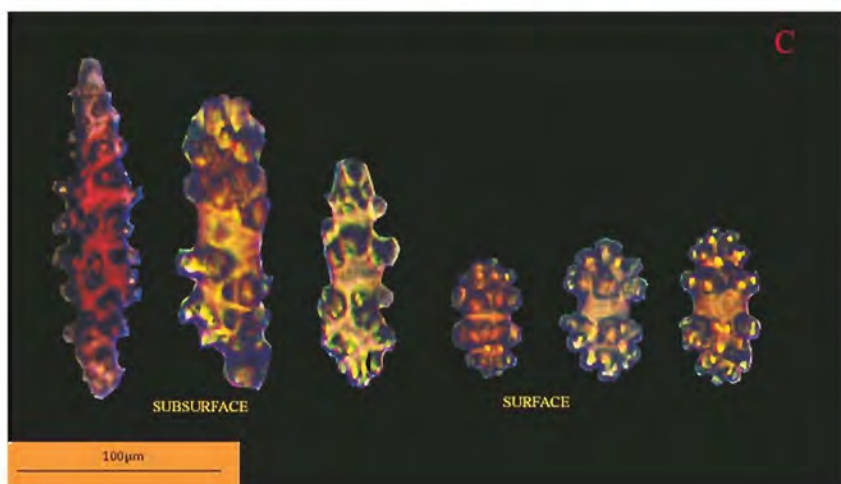
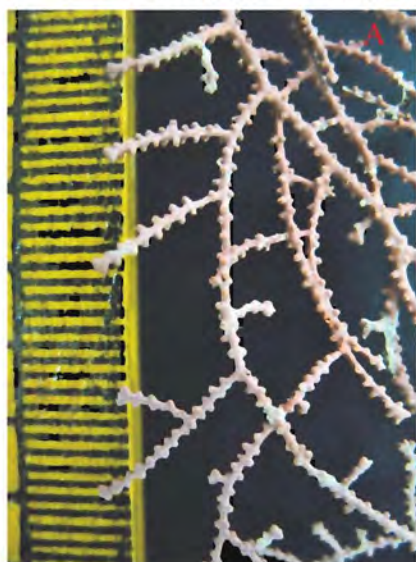
Taxonomic references

Whitelegge, T. 1897. The Alcyonaria of Funafuti. Part 2. *Mem. Australian Mus.*, Sydney, **3**(3): 211-225 (Publ. July 12, 1897); **3**(5): 307-320, (Publ. Nov. 17, 1897).

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE 12 *Nicella flabellata* (Whitelegge, 1897)

A – Brach and polyp, B – Colony, C – Sclerites from Surface and Subsurface



13. *Nicella laxa* Whitelegge, 1897

Plate - 13

Material Examined: ZSI/ANRC: 6072, Twin Islands, Mahatma Gandhi Marine National Park, South Andaman, 22 m depth 7 cm height, 4 cm width specimen.

Description: Dried specimen is red in colour. Size of the colony is 8.5 cm and fan like structure. Small fans, sparsely branched with elevated polyps widely separated.



Sclerites: Brownish yellow colour and less than 0.08 mm in size. The surface layer contains double heads, above a thick subsurface layer of flattened rods or spindles generally without a distinct waist. These subsurface layer sclerites can be two to four times length of the double heads.

Depth range and Habitat: 20 – 50 m; reef bottom at channels with strong water currents.

Distribution: Funafuti, New Caledonian - Prony Bay and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic references

Whitelegge, T. 1897. The Alcyonaria of Funafuti. Part 2. *Mem. Australian Mus.*, Sydney, **3** (3): 211-225 (Publ. July 12, 1897); **3** (5): 307-320, (Publ. Nov. 17, 1897).

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

Genus *Verrucella* Milne Edwards & Haime, 1858
14. *Verrucella cerasina* (Grasshoff, 1999)

Plate - 14

Material Examined: ZSI/ANRC: 6061, Havelock, 30 m depth, 9 cm height, 12 cm width; ZSI/ANRC: 6074, John Lawrence, Ritchie's Archipelago, South Andaman, 28 m depth, 5 cm height, 5 cm width; ZSI/ANRC: 6092, Guitior Island, 20 m depth, 11 cm height, 13 cm width; ZSI/ANRC: 6083, Long Island, Middle Andaman, 20 m depth, 11 cm height, 12 cm width; ZSI/ANRC: 6121, Pongibalu, Mahatma Gandhi Marine National Park, South Andaman, 25 m depth, 8 cm height, 10 cm width specimen.



Description: Colony is pale red in colour, when live and dried. Size of the colony is up to 28 cm tall and irregularly branched with end branches more or less pinnately arranged. The polyps are little elevated, scattered, leaving a polyp free zone in some places on the main branches.

Sclerites: Brownish colour and less than 0.09 mm in size. The coenenchymes are remarkably diverse in shape; double head 0.05 – 0.07 mm long, some with densely crowded tubercles and few with widely separated tubercles; double head with the girdle free of tubercles weakly developed, some having the shape of ellipsoids; various forms of more elongated sclerites, some with irregularly arranged tubercles occur in the polyps.

Depth range and Habitat: 20 to 60 m; reef slope and reef flat. It was observed, mostly found in strong current and turbid environments.

Distribution: New Caledonia, and India: Andaman and Nicobar Islands.

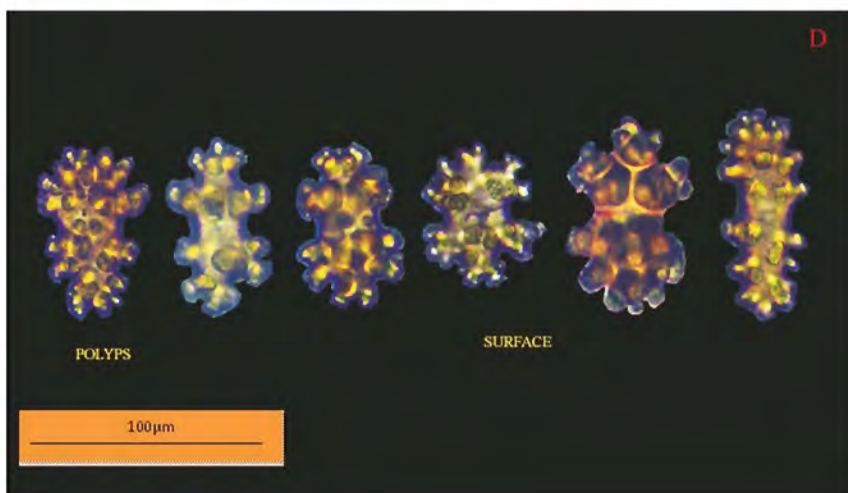
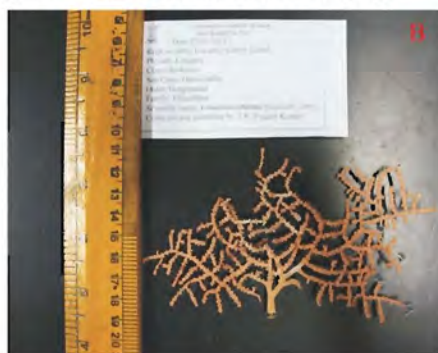
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 14 *Verrucella cerasina* (Grasshoff, 1999)

A&B – Colony, C – Little elevated polyps, D – Sclerites from surface and polyp



15. *Verrucella corona* (Grasshoff, 1999)

Plate - 15

Material Examined: ZSI/ANRC: 6075, John Lawrence Island, 28 m depth, height of the specimen 27 cm; ZSI/ANRC: 6063, Havelock Island, Ritchie's Archipelago, South Andaman, 25 m depth, height of the specimen 15 cm; ZSI/ANRC: 6090, Guitor Island, Middle Andaman, 20 m depth, height of the specimen 20 cm.



Description: Colony is red in colour, when live and dried. Size of the colony is up to 50 cm meter tall and fan structure, many of them wider than height. The fans are densely branched with many anastomoses, but the end and many small short branches within the meshwork are free. The branches arise from the main thick branch at more or less right angles, the short ones remain straight, and the larger ones bend slightly upward. The polyps are slightly elevated, arranged irregularly on the thin end branches, biserial.

Sclerites: Brown colour and less than 0.08 mm in size. The surface coenenchyme are double heads 0.04 – 0.07 mm long; the elongated sclerites of the polyp are 0.06 – 0.08 mm.

Depth range and Habitat: 20 to 45 m; reef slope and reef edge of the turbid environments.

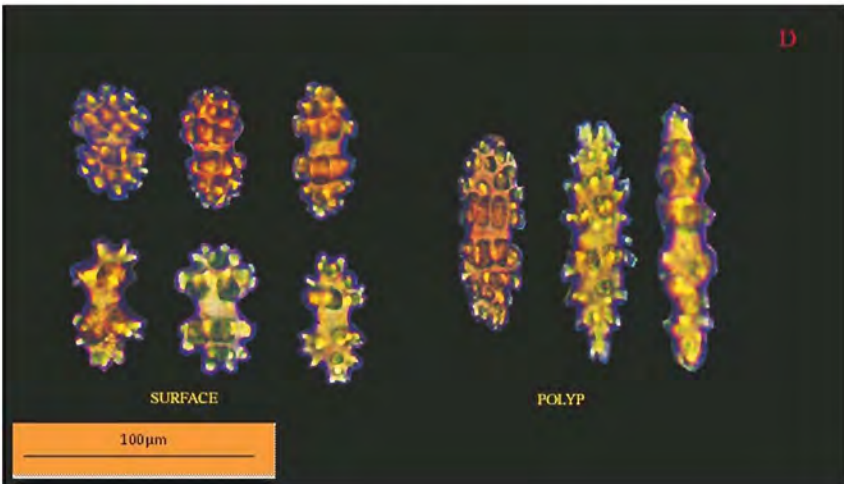
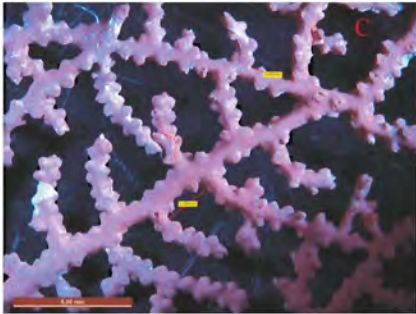
Distribution: New Caledonia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 15 *Verrucella corona* (Grasshoff, 1999)
A&B – Colony, C – Branch and polyp, D – Sclerites from surface and polyp



16. *Verrucella diadema* (Grasshoff, 1999)

Plate - 16

Material Examined: ZSI/ANRC: 6127, Havelock, Ritchie's Archipelago, South Andaman, 30 m depth, 18 cm height, 35 cm specimen.



Description: Colony is red in colour, when live and dried. The fans are up to 30 cm high, 50 cm wide; the very delicate branches are numerous and connected by many anastomoses. The main branch of the dry fragment is 3 mm in diameter, the side and end branches only 0.4 – 0.3 mm. The main branch is free of polyps; on thin branches the polyps are biserially arranged and slightly elevated.

Sclerites: Red colour and less than 0.08 mm in size. The coenenchyme are small double heads, only 0.05–0.06 mm long; elongated mostly very slender sclerites of the polyps are longer, 0.05- 0.8 mm.

Depth range and Habitat: 20 to 65 m; outer reef slope and edge. It was found mostly in turbid and strong currents environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

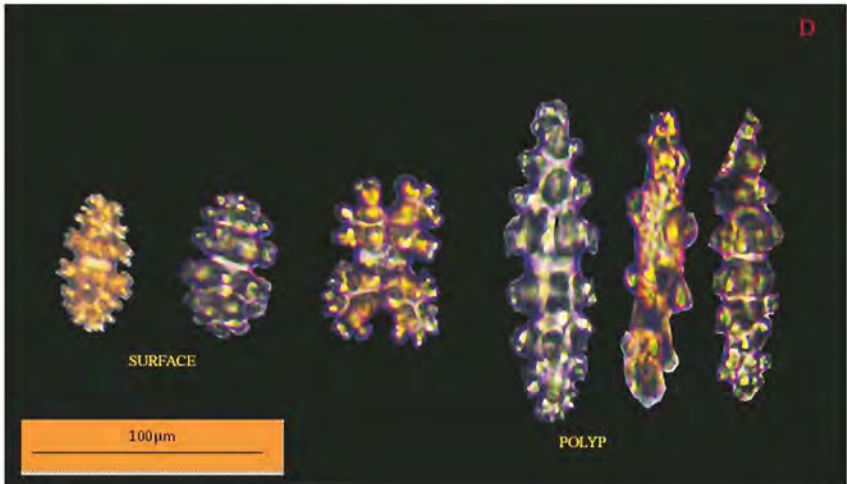
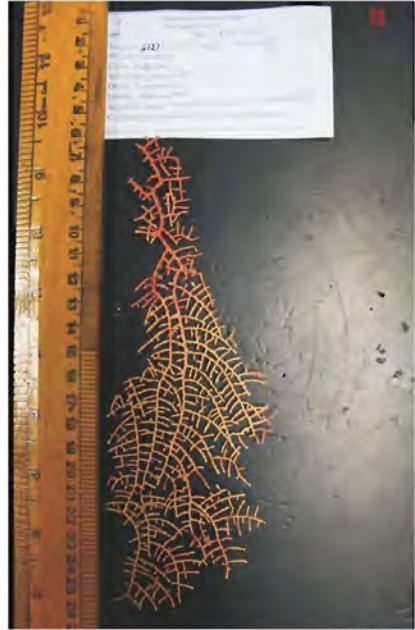
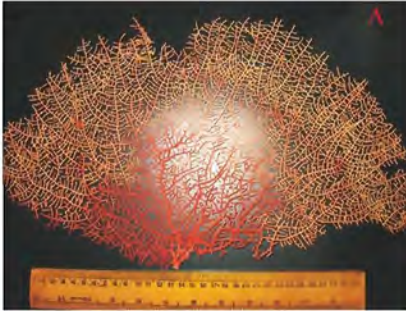
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 16 *Verrucella diadema* (Grasshoff, 1999)

A&B – Colony, C – Polyps and branches, D – Sclerites from surface and polyp



17. *Verrucella gubalensis* Grasshoff, 2000

Plate - 17

Material Examined: ZSI/ANRC: 6100, Gutor Island, Middle Andaman, 20 m, height of specimen 9 cm, 6 cm width specimen.



Description: Colony is pale red in colour, when live and dried. Size of the colony is up to 20 cm high and 18 cm wide, with thick branches and many anastomoses, the main branches are 5 mm in diameter, the terminal ones 2.5 mm; in the meshes left by the anastomoses free branches are present, so the fan is not a complete net. The polyps are little elevated and irregularly distributed, more are on the convex side, somewhat bent fan than on its concave side.

Sclerites: Red colour and less than 0.08 mm in size. The surface coenenchyme is only 0.04 – 0.08 mm long, are double heads with densely placed tubercles and capstan like forms in the inner layer; elongate sclerites 0.05 to 0.07 mm long are present in the polyps.

Depth range and Habitat: 15 to 35 m; reef slope and flat reef. It was found mostly in strong current and turbid environments.

Distribution: Gubal Island, and India: Andaman and Nicobar Islands.

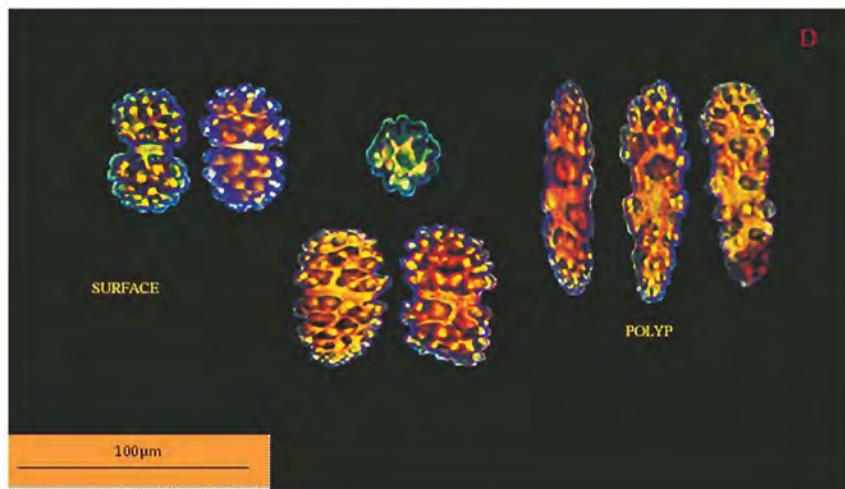
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour. Forsch – Inst. Senckenberg*, 1-224.

PLATE – 17 *Verrucella gubalensis* Grasshoff, 2000

A&B – Branch and polyps, C – Colony, D – Sclerites from the surface and polyp



18. *Verrucella klunzingeri* Grasshoff, 2000

Plate - 18

Material Examined:

ZSI/ANRC: 6097, Guitor Island, Middle Andaman, 20 m depth, 20 cm height; ZSI/ANRC: 6079, Havelock, Ritchie's Archipelago, South Andaman, 30 m depth, 12 cm height specimen.



Description: Colony is red in colour when live and dried. Size of the colony is up to 25 cm and

fan in structure. Colonies attain a medium size, as can be judged from the fragmentary materials found so far; they are richly branched with few anastomoses in the middle portions of the fan, the branches arising roughly at right angles and pointing in all directions. The main branches are 3 mm in diameter, the small terminal ones only 1 mm. the polyps, scattered around the branches, are distinctly elevated.

Sclerites: Reddish colour and less than 0.7 mm in size. The surface coenenchyme contains double heads and blunt capstans. The elongate forms are crowded in the polyps.

Depth range and Habitat: 15 to 35 m; reef slope and flat reef. It was found mostly in strong current and turbid environments.

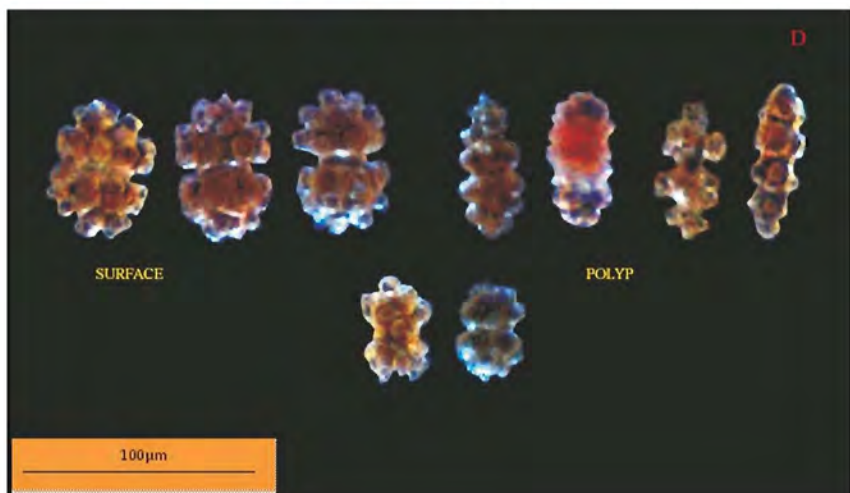
Distribution: Northern Red Sea and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour. Forsch – Inst. Senckenberg*, 1-224.

PLATE – 18 *Verrucella klunzingeri* Grasshoff, 2000
A&B – Colony, C – Branch and polyps, D – Sclerites from surface and polyp



Family ISIDIDAE Lamouroux, 1812

Genus: *Isis* Linnaeus, 1758

19. *Isis hippuris* Linnaeus, 1758

Plate - 19

Material Examined: ZSI/ANRC: 5429, John Lawrence, Ritchie's Archipelago, South Andaman, 15 m depth, height of the specimen 10 cm; ZSI/ANRC: 6116, Trinket Island, Nancowry groups, Nicobar, 5 m depth, height of the specimen 14 cm.

Description: Colony is bright yellow to green or brown. Size of the colony is up to 50 cm in height and 12 cm width. Branches are always smooth and cylindrical. A very thick outer layer



covers the characteristic, white and dark brown segmented axis. The white calcareous internodes are conspicuously ridged. Colonies can be sparingly or richly branched, mostly grow like a fan in a single plane, they can be extremely bushy. Most branches are usually quite short.

Sclerites: The surface layer contains small clubs with a whorl of 3 large warts surrounding with terminal wart on the head. Below, there is a subsurface layer of 6 to 8 radiate capstans, spindles, ovals and spheroids.

Depth range and Habitat: 5-15 m; common and widely distributed in shallow moderately clear waters. It is particularly abundant on mid shelf reefs, where it occurs in shallow water away from wave action and also in turbid coastal areas.

Distribution: Philippines, Taiwan, Palau, Indonesia, Papua New Guinea, Great Barrier Reef, Ryukyu Islands and India: Andaman Islands.

Taxonomic references

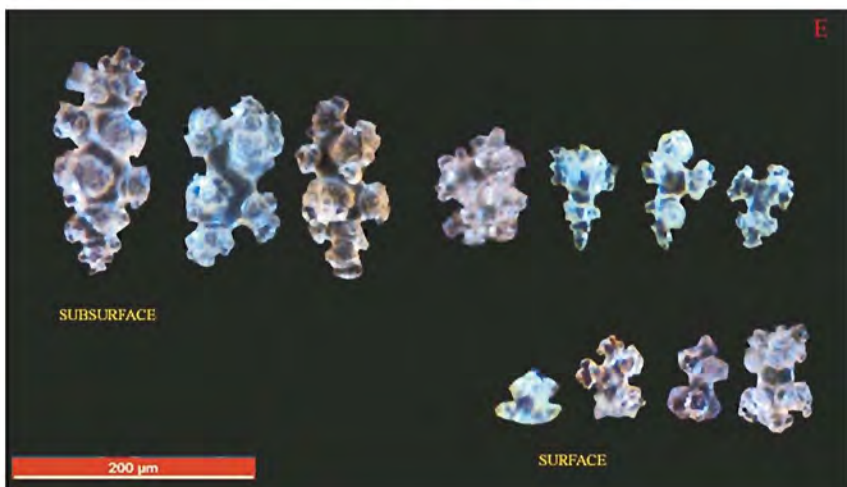
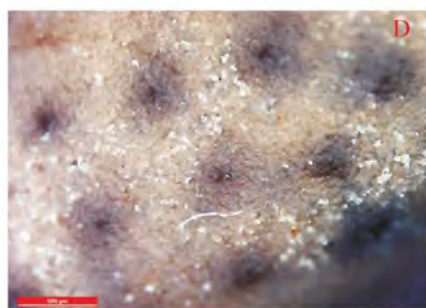
Thomson, J.A. and Henderson, W.D. 1906. An account of the Alcyonarians collected by the Royal Indian Marine Survey Ship Investigator from the Indian Ocean. The Alcyonarians of deep sea, The Indian Museum, Calcutta, 1-132.

Thomas, P.A. and Rani Mary George, 1987. Gorgonid Resources of India. *Marine Fisheries Information Service*, CMFRI, Cochin, 74: 1-14.

Fabricius, K., Alderslade, P. 2001. *Soft corals and Sea fans: a comprehensive guide to the tropical shallow water genera of the central west Pacific, the Indian Ocean and Red sea*, Australian Institute of Marine Science, Townsville, 264.

PLATE – 19 *Isis hippuris* Linnaeus, 1758

A&B – Colony, C&D – Branch and polyps, E – Sclerites from surface and subsurface



Sub Order: HOLAXONIA Gray, 1859
Family: ACANTHOGORGIIDAE Gray, 1859
Genus *Muricella* Verrill, 1868
20. *Muricella paraplectana* (Grasshoff, 1999)

Plate - 20

Material Examined: ZSI/ANRC: 6073, Twins Island, Mahatma Gandhi Marine National Park, South Andaman, 22 m depth, height of the specimen 7 cm.



Description: Colony is reddish brown in colour, when live and dried. Size of the colony is up to 80 cm, dried specimen is 9 cm and branches are thin and fan like structure.

Sclerites: Reddish colour and less than 0.35 mm in size. The polyp tentacles contain small rods and the polyp body is covered with blunt spindles with large warts. The surface coenenchyme contains small capstans and spindles similar to those in the polyps, but many of these spindles are very large.

Depth range and Habitat: 25 – 50 m; reef bottom at channels with strong water currents.

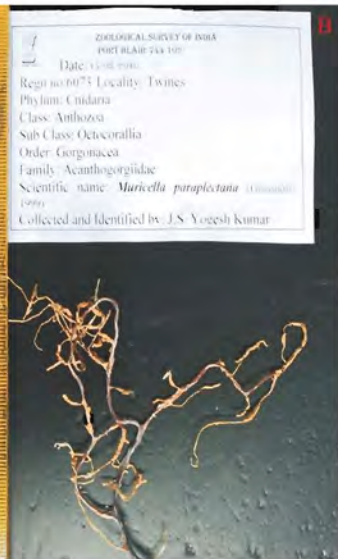
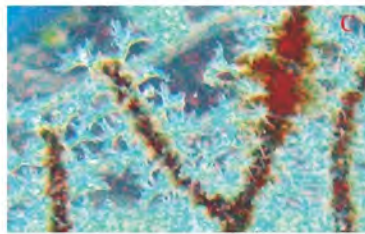
Distribution: New Caledonian, and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

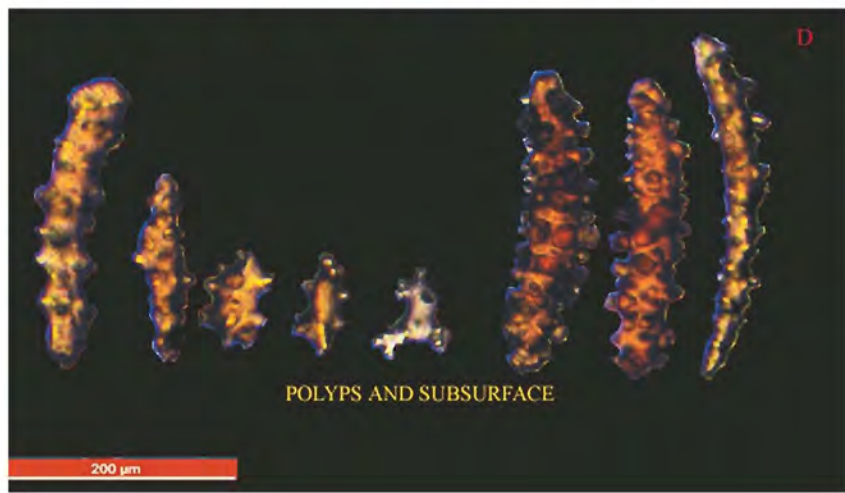
Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 20 *Muricella paraplectana* (Grasshoff, 1999)
A&B – Colony, C – Polyps, D – Sclerites from the polyps and subsurface



ZOOLOGICAL SURVEY OF INDIA
PORT BLAIR 744 101
Date: 13.08.1996
Regn no: 0073 Locality: Twines
Phylum: Cnidaria
Class: Anthozoa
Sub Class: Octocorallia
Order: Gorgonacea
Family: Acanthogorgiidae
Scientific name: *Muricella paraplectana* (Grasshoff, 1999)
Collected and identified by: J.S. Yogesh Kumar



POLYPS AND SUBSURFACE

200 μm

21. *Muricella ramosa* (Thompson & Henderson, 1906)

Plate – 21

Material Examined: ZSI/ANRC: 5428, Henry Lawrence Island, Ritchie's Archipelago, South Andaman, 25 m depth, height of the specimen 11 cm.



Description: Colony is dirty red or brown in colour, when live and dried. Size of the colony is up to 12 cm in height and 7 cm broad. It grows in one plane as open fans, with irregular lateral branching. In old colonies, small branches often bend and grow out perpendicular to the fan. The coenenchyme layer between the polyps is thick and obscures the axis.

Sclerites: Mostly colourless, the polyp tentacles contain small rods and the polyp body is covered with blunt spindles with large warts. The spindles tend to be arranged along the body wall in angled double rows. Surface layer contains small capstans and spindles are similar to those in the polyps, but many of these spindles are very large.

Depth range and Habitat: 15 m; rare, has been found at diving depth and rare at depths less than 50m. It was observed mostly in reef slopes and turbid environment.

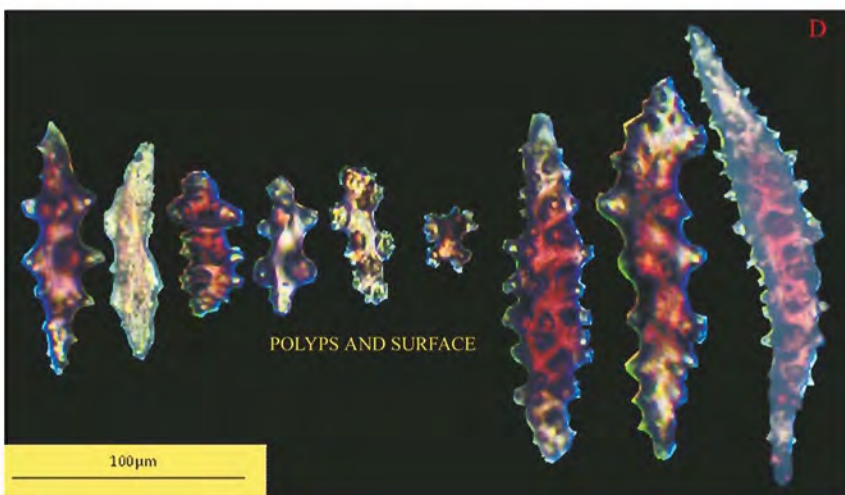
Distribution: Indonesia, Red Sea, South Africa, and India: Andaman Islands.

Remark: New to Indian waters.

Taxonomic reference

Thomson, J.A. and Henderson, W.D. 1906. An account of the Alcyonarians collected by the Royal Indian Marine Survey Ship Investigator from the Indian Ocean. The Alcyonarians of deep sea, The Indian Museum, Calcutta, 1-132.

PLATE – 21 *Muricella ramosa* (Thompson & Henderson, 1906)
A&B – Colony, C – Polyps, D – Sclerites from the polyp and surface



Family ACANTHOGORGIIDAE Gray, 1859
Genus *Acanthogorgia* Gray, 1857
22. *Acanthogorgia breviflora* Whitelegge, 1897

Plate – 22

Material Examined: ZSI/ANRC: 6111, Munak Gate, Nancowry groups, Nicobar, 15 m depth, height of specimen 18 cm.



Description: Colony is bluish yellow in colour, when live and brown in dried samples. Size of the colony is 25 cm and fan shape. Colonies are free from branches.

Polyps remote of each other, only at the end branches densely crowded.

Sclerites: Colourless and less than 0.45 mm in size. Sclerites are spine of crown spines smooth and long. Coenenchyme is densely paved with many thornstars, only few simple spindles are strewn in between them.

Depth range and Habitat: 15 – 40 m; reef bottom and mostly in reef channels.

Distribution: Funafuti, Malaccas, Red Sea, New Caledonia, India: Andaman and Nicobar Islands.

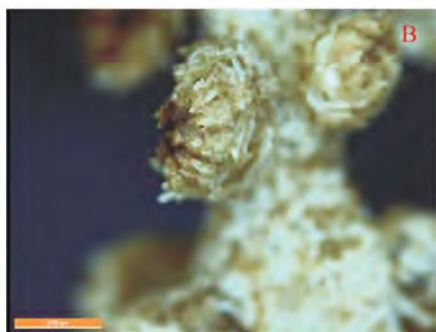
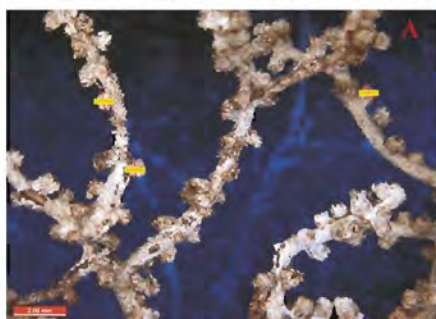
Remark: New to Indian waters.

Taxonomic references

Whitelegge, T. 1897. The Alcyonaria of Funafuti. Part 2. *Mem. Australian Mus., Sydney*, 3(3): 211-225 (Publ. July 12, 1897); 3(5): 307-320, (Publ. Nov. 17, 1897).

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour. Forsch – Inst. Senckenberg*, 1-224.

PLATE – 22 *Acanthogorgia breviflora* Whitelegge, 1897
A&B – Branch and polyps, C – Colony, D – Sclerites from surface and polyp



23. *Acanthogorgia spinosa* Hiles, 1899

Plate – 23

Material Examined: ZSI/ANRC:

6060, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, 8 cm height; ZSI/ANRC: 6104, Munak Gate, Nancowry groups, Nicobar, 15 m depth, height of the specimen 9 cm.



Description: Colony is pale blue in colour, when live and dark brown in dried. Size of the colony is 18 cm and tangles of very thin branches. Branchlets within a fan may sometimes fuse, netlike. The polyps are densely crowded.

Sclerites: Colourless and less than 0.32 mm in size. The coenenchyme contains spindles and thorn stars. The polyp contains spindles and crown – spines.

Depth range and Habitat: 15 to 30 m; reef bottom and mostly in reef channels.

Distribution: Malaysia, Egypt, New Caledonia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic references

Hilles, I. 1899. The gorgonacea collected by Dr. Willey. Zoological Results.

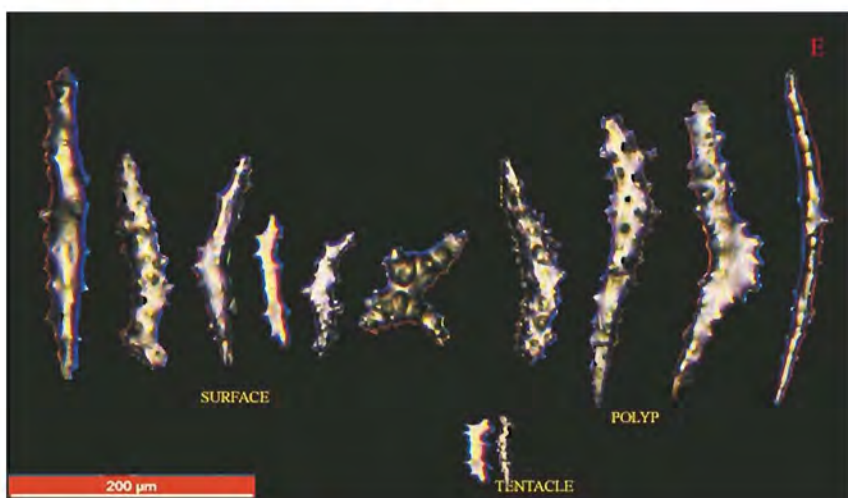
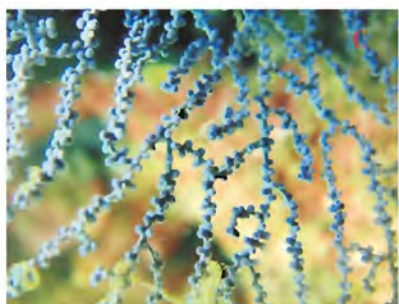
Based on the material from New Britain, New Guinea, Loyalty Island and elsewhere, collected during the years 1895, 1896 and 1897 by Arthur Willey, Cambridge. Part 2: 195-206 pp.

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour. Forsch – Inst. Senckenberg*, 1-224.

PLATE – 23 *Acanthogorgia spinosa* Hiles, 1899

A&B – Colony, C – Branch and polyp, E – Sclerites from the surface, tentacle and polyps



Genus *Anthogorgia* Verrill, 1868
24. *Anthogorgia ochracea* (Grasshoff, 1999)

Plate – 24

Material Examined: ZSI/ANRC: 6110, Munak Gate, Nancowry groups, Nicobar; 15 m depth, specimen - 15 cm height and 6 cm width.



Description: Colony is yellow in colour, when live and brown in dried samples. Size of the colony is 25cm; fans in structure and commonly with free branches and few netlike branch fusions. Coenenchyme layer between the polyps is thick and obscures. The axis and polyps are densely crowded.

Sclerites: The polyps are covered with blunt spindles with large warts that are arranged in angled double rows. The tentacles contain small rods; the surface coenenchyme contains spindles similar to those in the polyps, with ovals, small capstans and capstan derivatives. The sclerites are pale brown in colour.

Depth range and Habitat: 15 - 50 m; reef bottom. It was found mostly in channels and turbid environment.

Distribution: New Caledonia, Indo Pacific and India: Andaman and Nicobar Islands.

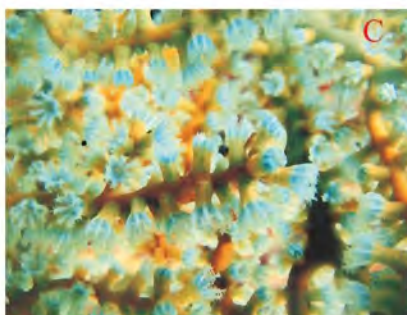
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 24 *Anthogorgia ochracea* (Grasshoff, 1999)

A&B – Colony, C – Live polyps, D – Sclerites from the polyp, tentacle and surface



Family GORGONIIDAE Lamouroux, 1812
Genus *Rumphella* Bayer, 1955
25. *Rumphella aggregata* (Nutting, 1910)

Plate – 25

Material Examined: ZSI/ANRC: 5306, South Button Island, 20 m depth, height of the specimen 24 cm; ZSI/ANRC: 6070, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, height of the specimen 20 cm; ZSI/ANRC: 6085, Long Island, 18 m depth, height of the specimen 15 cm.



Description: Colony is dirty white to grey in colour, when live and brown when dried. Size of the colony is up to one meter and bushy in structure. Colonies are forming compact large shrubs with whip - like branches. The branches are smooth, thick and have blunt tips. The polyps are yellowish brown in colour, monomorphic and retractile with smooth branching surface.

Sclerites: Colourless and less than 0.1mm in size. The surface contains terminal wart. The subsurface layer contains spindles with acute ends (0.1mm), four radiates (0.04 to 0.06 mm), Blunt spindles with acute ends (0.05 to 0.08) and the polyps have flattened rods (0.06 mm).

Depth range and Habitat: 10 - 20 m; lower reef slope and bottom. It was observed mostly in turbid environments.

Distribution: Gilbert Islands, Onotoa Atoll, Approx. 3.25 Mile NW from Tabuarorae Maneaba and India: Andaman and Nicobar Islands.

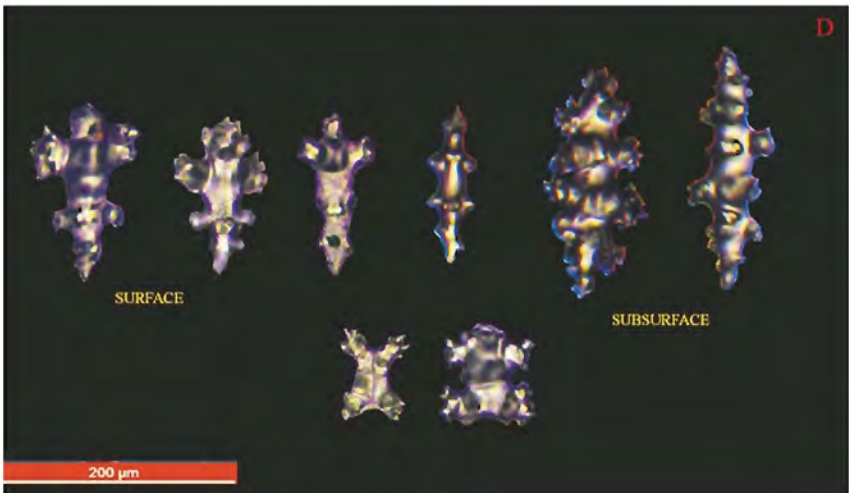
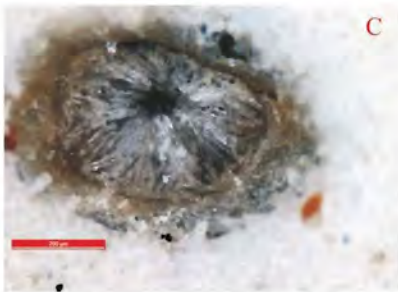
Remark: New to Indian waters.

Taxonomic references

Nutting, C.C. 1910b. The Gorgonacea of the Siboga Expedition. IV. The Isidae. *Siboga-Expedite Monograph* 13b1, (Livr. 48), pp. 1-20.

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 25 *Rumphella aggregata* (Nutting, 1910)
A&B – Colony, C – Polyp, D – Sclerites from the surface and subsurface



26. *Rumphella torta* Klunzinger, 1877

Plate – 26

Material Examined: ZSI/ANRC: 5307, Jolly Buoy Island, 25 m depth, height of the specimen 22 cm; ZSI/ANRC: 6081, Long Island, Middle Andaman, 18 m depth, height of the specimen 15 cm.



Description: Colony is yellowish grey in colour, when live and dried. Size of the colony is up to one meter and bushes without anastomoses. No calyces are formed around the polyps, so the branches are cylindrical and thick.

Sclerites: Colourless and less than 0.15 mm in size. The coenenchyme is thick, with a surface layer of club shaped sclerites and numerous symmetrical spindles below it. The polyps head contains flattened rods arranged longitudinally in a group below the base of each tentacle.

Depth range and Habitat: 15 to 30 m; shallow reef and reef slope with clear water, some time in turbid environments.

Distribution: Red Sea, Malaccas Sea and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

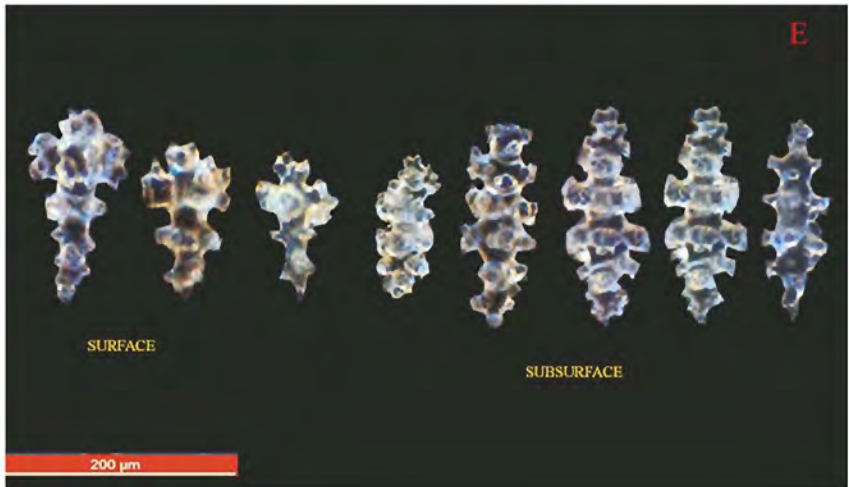
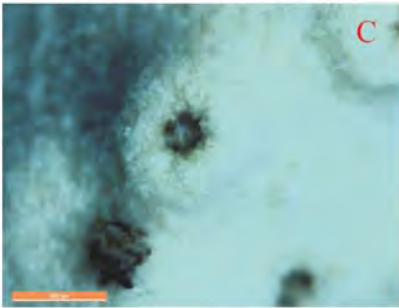
Taxonomic references

Klunzinger, C.B. 1877. Die Karallthiere des Roten Meeres: Erster Teil: Die Alcyonarien und Malacodermen, Gutmann, Berlin, 1-7 and 1-98.

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour.Forsch – Inst. Senckenberg*, 1- 224.

PLATE – 26 *Rumphella torta* Klunzinger, 1877

A&B – Colony, C&D – Polyp and branch, E – Sclerites from the surface and subsurface



Genus *Hicksonella* Nutting, 1910
27. *Hicksonella princeps* Nutting, 1910

Plate – 27

Material Examined: ZSI/ANRC: 6099, Guitor Island, Middle Andaman, 20 m depth, height of the specimen 7 cm.

Description: Colony is yellow in colour, when live and white in dried. Size of the colony is 20 cm and thick branches; form dense bushes. The coenenchyme may grow web like right in the junction of some branches.



Sclerites: Colourless and less than 0.16 mm in size. The surface contains a layer of clubs. The clubs head commonly has a terminal wart with a whorl of 3 large warts below, but irregular forms also occur. The subsurface layer contains spindles that covered with complex warts or have the warts arranged in several girdles. The coenenchyme are found like long rods with a warty handle and smooth shaft. Polyp heads contain flattened rodlets.

Depth range and Habitat: 15 to 30 m; reef slope and bottom. It was found mostly in turbid environments.

Distribution: Malaccas, Great Barrier Reef, New Caledonia, South Western, and India: Andaman and Nicobar Islands.

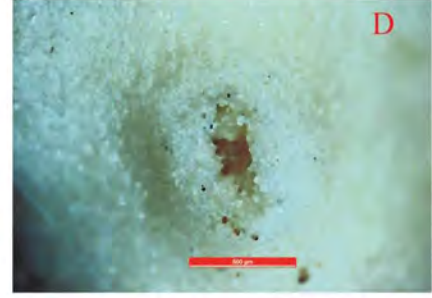
Remark: New to Indian waters.

Taxonomic references

- Nutting, C.C. 1910. The Gorgonacea of the Siboga Expedition. IV. The Isidae. *Siboga-Expedite Monograph* 13b1, (Livr.48), pp. 1-20.
- Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 27 *Hicksonella princeps* Nutting, 1910

A&B – Colony, C&D – Branch and polyps, E – Sclerites from the tentacle, polyp and surface



Family PLEXAURIDAE Gray, 1859
Genus *Menella* Gray, 1870
28. *Menella indica* Gray, 1870

Plate – 28

Material Examined: ZSI/ANRC: 5423, Havelock Island, Ritchie's Archipelago, South Andaman, 25 m depth, height of the specimen 14 cm.



Description: Colony yellow in colour when live and dirty yellow in dried. Size of the colony is up to 30 cm height. Colonies are un-branched and whip like, but occasionally richly branched. Branches often quite thick. Side branches usually arising at near right angles from the main branches and curving upwards. Colonies do not form nets. The polyps are yellow in colour, monomorphic and totally retractile within low to prominent, hemispherical calyces.

Sclerites: The characteristic sclerite form is a leaf – scale which is shaped somewhat like a ping – pong bat, that has replaced its handle by a tuberculate or root structure observed at the calyx and surface. The subsurface layer contains tripod shaped of spindles and the polyps have rod like and bow shaped. Sclerites are colourless.

Depth range and Habitat: 10 – 20 m; lower reef slope and bottom. It was found mostly in fast flowing turbid environments.

Distribution: New Caledonia, Australia, Papua New Guinea, Indonesia, Singapore, Malaysia, Sri Lanka, Madagascar, Mauritius, South Africa, Red Sea, and India: Bay of Bengal and Andaman Islands.

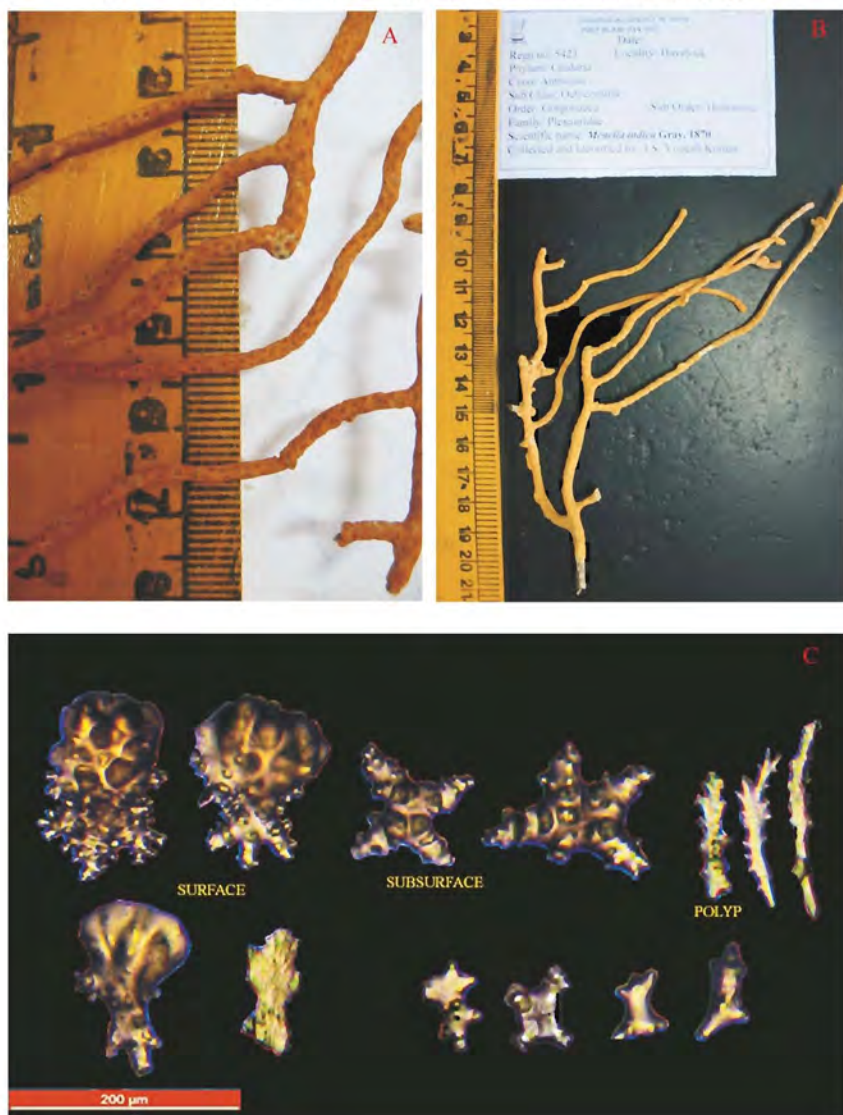
Remark: New to Indian waters.

Taxonomic reference

Gray, J.E. 1870. Notes on some new genera and species of alcyonid corals in the British Museum. *Ann. Mag. Nat. Hist.*, London, (4) 3: 21-23.

PLATE – 28 *Menella indica* Gray, 1870

A&B – Colony, C – Sclerites from the surface, subsurface and polyp



29. *Menella kanisa* (Grasshoff, 2000)

Plate – 29

Material Examined: ZSI/ANRC: 6069, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, 30 cm height; ZSI/ANRC: 6103, Munak Gate, Nancowry groups, Nicobar, 20 m depth, specimen height 18 cm.

Description: Colony is red and pale yellow in colour when live and dried. Size of the colony is up to 22 cm and loosely branched, branches long and ascending, tapering to 2 mm in diameter. The polyps are irregularly scattered around the branched and no elevated calyces are developed.



Sclerites: Bright red colour and 0.12 mm to 0.35 mm in size. The surface of coenenchyme contains leaf – scale or Ping-pong bat, that replaced by a complex root structure. The leaf scales cover the entire surface of the branches and form the walls of the calyces. Between and underneath the roots of the scales have small spindles, capstans and branched forms. The sclerites of the inner layer are irregular, often branched forms up to 0.35 mm large. The tentacles bases are armed with flat elongate sclerites in crown and points arrangement.

Depth range and Habitat: 15 – 35 m; reef slope and bottom. It was found mostly in turbid with current environments.

Distribution: Gubal Island: Red Sea, and India: Andaman and Nicobar Islands.

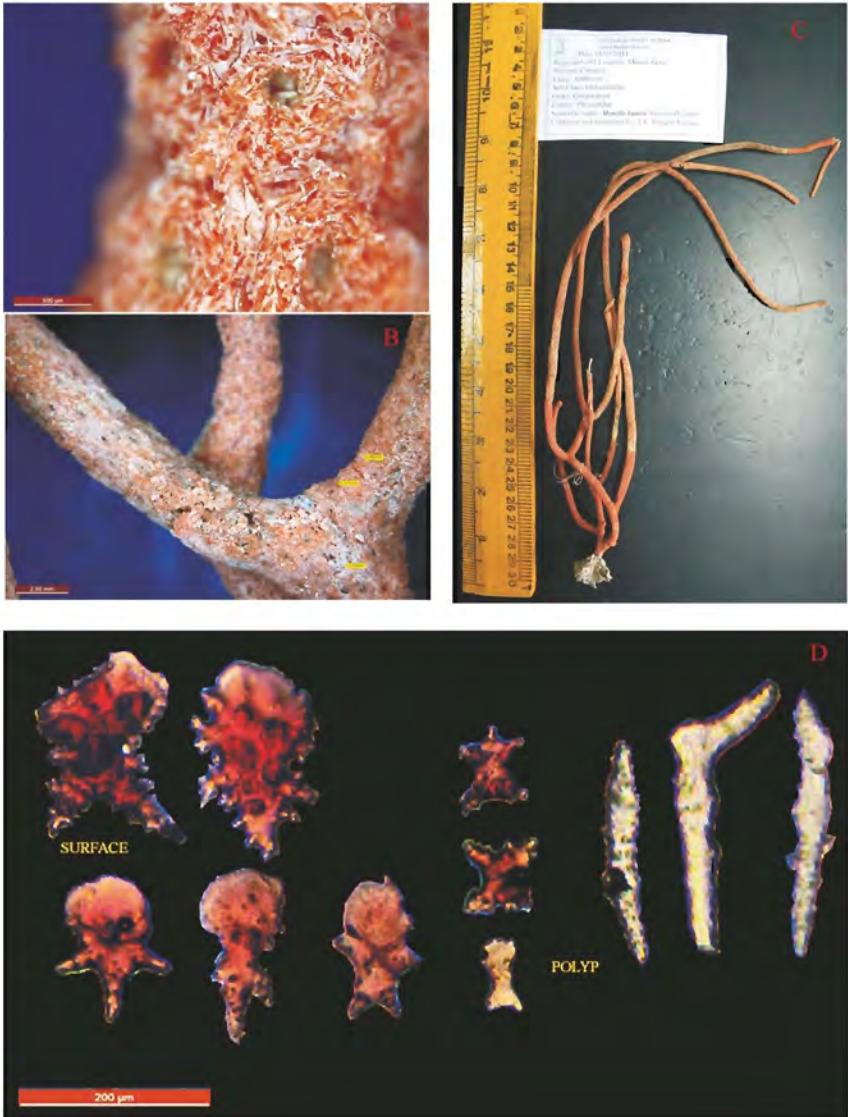
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour. Forsch – Inst. Senckenberg*, 1-224.

PLATE – 29 *Menella kanisa* (Grasshoff, 2000)

A&B – Polyp and branch, C – Colony, D – Sclerites from the surface and polyp



30. *Menella kouare* Grasshoff, 1999

Plate – 30

Material Examined: ZSI/ANRC: 6065, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, Specimen height 15 cm and width 12 cm.

Description: Colony is red in colour, when live and dried. Size of the colony is 35 cm and fan structure with long ascending branches, the longest end branches reaching only 7 cm.



Sclerites: Red colour and less than 0.25 mm in size. The surface of the coenenchyme have thick leaves, their sides with more or less elevated tubercles; in many the margin is a thin, finely denticulate keel. Inner layers are irregular compact forms with high tubercles. Adaxial layer with small capstans of various forms. Each tentacle base with two or three transverse sclerites and four or more longitudinal sclerites; they are somewhat variable from polyp to polyp.

Depth range and Habitat: 20 to 40 m; Found in outer reef edge and reef slope with current water environments.

Distribution: New Caledonian and India: Andaman and Nicobar Islands.

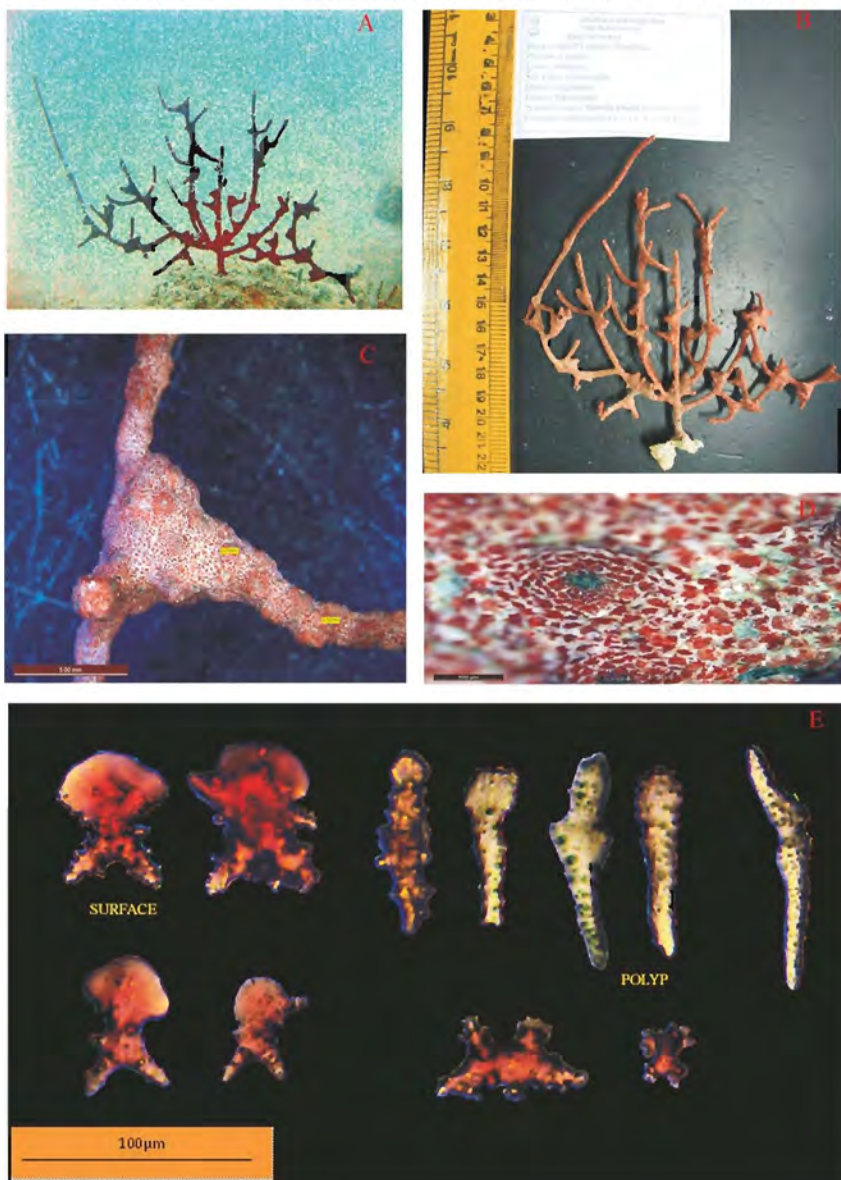
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 30 *Menella kouare* Grasshoff, 1999

A&B – Colony, C&D – Branch and polyps, E – Sclerites from the surface and polyps



31. *Menella woodin* Grasshoff, 1999

Plate – 31

Material Examined: ZSI/ANRC: 6068, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, 28 cm height, 15 cm width; ZSI/ANRC: 6082, Long Island, Middle Andaman, 18 m depth, 22 cm height and 11 cm width.



Description: Colony is red in colour, when live and dried. Size of the colony is 35 cm and fans with long ascending branched becoming bushes. The polyps are monomorphic and totally retractile within low to prominent, hemispherical calyces.

Sclerites: Reddish colours and less than 0.25 mm in size. The surface of the coenenchyme have flat leaves, their margins smooth or finely denticulate. Inner layers are irregular forms and branched spindles with slender projections, many of them with tree, four or five rays. Adaxial layer with small capstans of various forms. Each tentacles base with three to four transverse sclerites and four to six longitudinal sclerites; they are somewhat variable from polyp to polyps

Depth range and Habitat: 15-40 m; Found in outer reef edge and reef slope with current water environments.

Distribution: New Caledonia, and India: Andaman and Nicobar Islands.

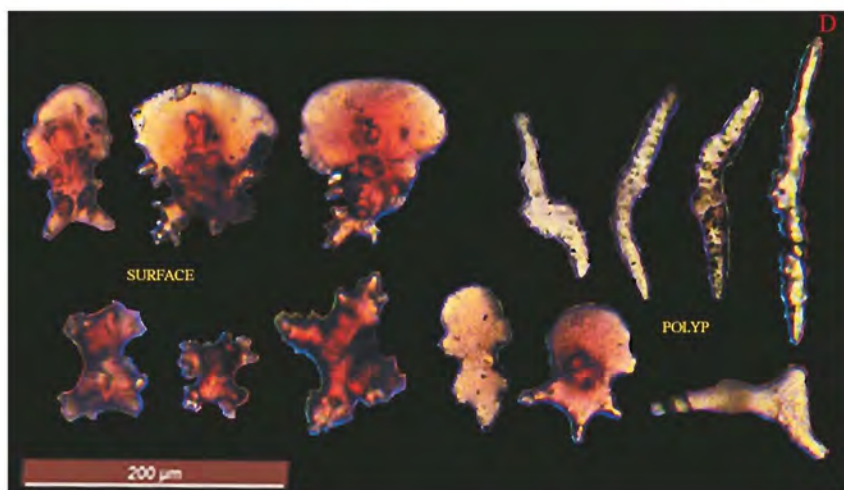
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 31 *Menella woodin* Grasshoff, 1999

A&B – Colony, C – Branch and polyp, D – Sclerites from the surface and polyp



Genus *Bebryce* Philippi, 1841
32. *Bebryce sirene* (Grasshoff, 1999)

Plate – 32

Material Examined:

ZSI/ANRC: 6108, Munak Gate, Nancowry groups, Nicobar, 20 m depth, 8 cm height and 9 cm width.

Description: Colony pale yellow in colour, when live and brown in dried. Size of the colony is 20 cm and fans in structure. Branching is lateral,



irregular and often untidy. Polyps are monomorphic and retractile within calyces, that may be relatively prominent.

Sclerites: Colourless and less than 0.35 mm in size. The surface coenenchyme contains antlers (not cups) with four to five slender projections that may be simple or branched. Sclerites are not embedded in a superficial tissue sheet. The oblique projection on the spindles of the calyx ends in small antler like projections. The inner sclerites are mostly four rayed with a thick central boss; those with five or more arms are less common and few irregular and compact forms are also present.

Depth range and Habitat: 15–40 m; reef bottom. It was observed mostly in channels and turbid environments.

Distribution: New Caledonia, and India: Andaman and Nicobar Islands.

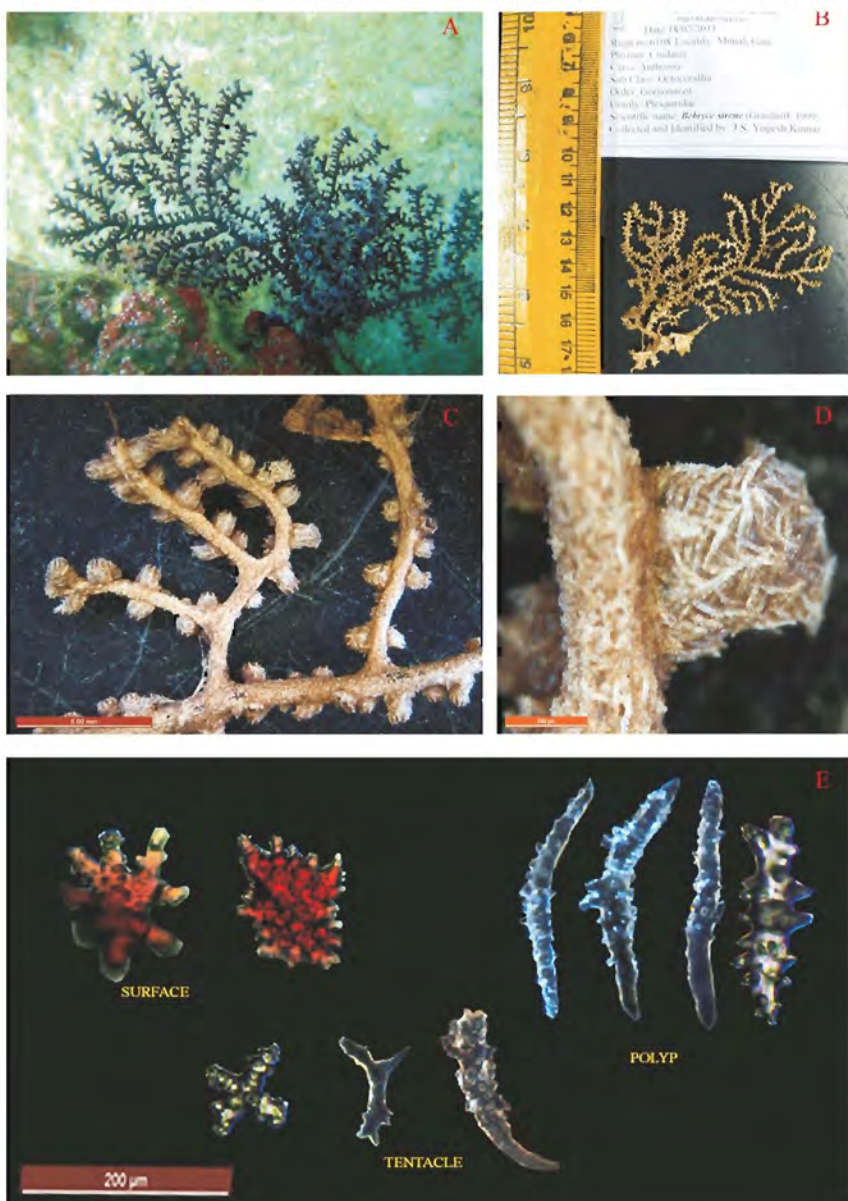
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 32 *Bebryce sirene* (Grasshoff, 1999)

A&B – Colony, C&D – Branch and polyp, E – Sclerites from the surface, tentacle and polyp



33. *Bebryce studeri* Whitelegge, 1897

Plate – 33

Material Examined: ZSI/ANRC: 6064, Havelock, Ritchie's Archipelago, South Andaman, 28 m depth, height of the specimen 8 cm.

Description: Colony is pale yellow in colour, when live and dried. Size of the colony is 30 cm and bushy in structure. Branch joins are rare and net like fans are never formed.

Sclerites: Colourless and less than 0.15 mm in size. The surface sclerites are very small, less than 0.05 mm with a convex surface made up by many short projections; these sclerites resemble small ellipsoids with a brush on one side. The oblique projection of the spindles on the calyx is similarly structured, in some spindles almost smooth. Irregular forms and ellipsoids predominate among the inner coenenchymal sclerites and they are forms with five or more short arms, which are divided again; ellipsoid sclerites are also present. The sclerites are slender and in the apical part, small slender rods.



Depth range and Habitat: 25-40 m; Found in reef slope and bottom. It was observed mostly in turbid environments.

Distribution: Funsfuti; New Caledonia, Vanuatu, and India: Andaman and Nicobar Islands.

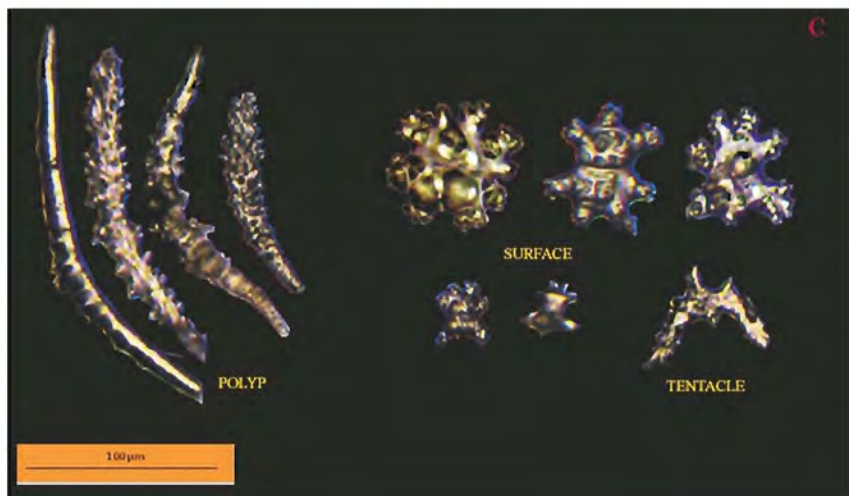
Remark: New to Indian waters.

Taxonomic references

Whitelegge, T. 1897. The Alcyonaria of Funafuti. Part 2. *Mem. Australian Mus.*, Sydney, **3**(3): 211-225 (Publ. July 12, 1897); **3**(5): 307-320, (Publ. Nov. 17, 1897).

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 33 *Bebryce studeri* Whitelegge, 1897
A&B – Colony, C – Sclerites from the surface, tentacle and polyp



Genus *Echinogorgia* Kolliker, 1865
34. *Echinogorgia flora* Nutting, 1910

Plate – 34

Material Examined: ZSI/ANRC: 5422, Havelock, Ritchie's Archipelago, South Andaman, 20 m depth, specimen height 20 cm and width 13 cm.



Description: In both, living and dry persevered conditions, the colony was yellow in colour. The axis is dark brown in older parts, while pale

brown in the terminal parts. Colonies are bushy and branched in one plane; division of branches is often in an irregularly dichotomous pattern. Branches were circular in outline, diameter may vary from 2-3 mm tips blunt stalk, branches and branchlets may have more or less the same diameter. Calyces distributed all over, contiguous and flush with the surface and polyps retractile.

Sclerites: Colourless and less than 0.5 mm in size. The surface contains leaf like expansion, oval, orbicular and transparent and in some case the expansion may bear tubercles or striations ornamenting it. The spindles are angulated or not.

Depth range and Habitat: 5-10 m; reef flat and rubble area. It was observed mostly found in fast flowing turbid water, below depths of high irradiance.

Distribution: New Caledonia, Australia, Papua New Guinea, Indonesia, Singapore, Philippines, Sri Lanka, Madagascar, Red Sea and India: Vizhinjam, South Kerala and Andaman Islands.

Remarks: New to Andaman and Nicobar Islands.

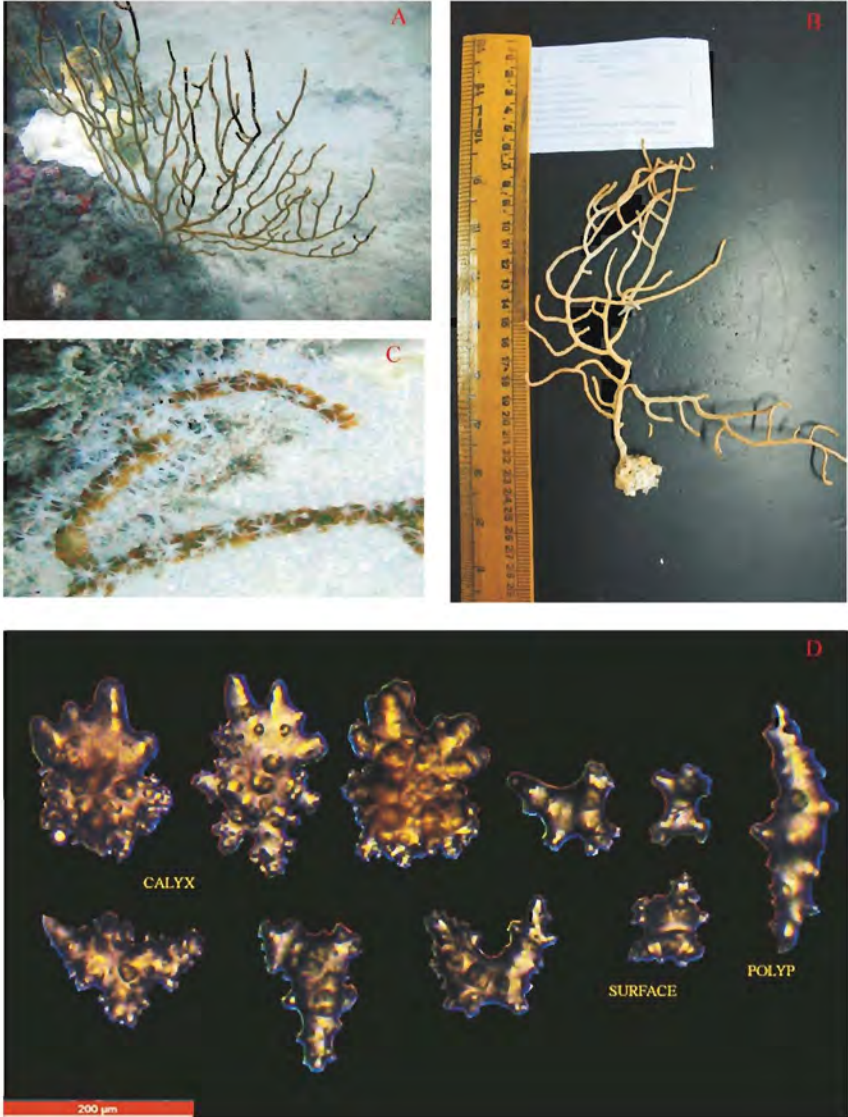
Taxonomic references

Thomas, P.A. 1996. The Gorgonid resources and their conservation in India. *Marine Biodiv. Conser. and Manag.* (edt.) N.G. Menon and C.S.G. Pillai, IV – 32-40.

Nutting, C.C. 1910. The Gorgonacea of the Siboga Expedition. VIII. The Gorgonidae. *Siboga-Expedite Monograph* 13b5, (Livr.57), 1-60.

PLATE – 34 *Echinogorgia flora* Nutting, 1910

A&B – Colony, C – Branch and polyp, D – Sclerites from the surface, Calyx and polyp



35. *Echinogorgia toombo* (Grasshoff, 1999)

Plate - 35

Material Examined: ZSI/ANRC: 6078, Outram Island, Ritchie's Archipelago, South Andaman, 20 m depth, 12 cm in height and 8 cm width.

Description: Colony is red in colour, when live and dried. Size of the colony is 25 cm and fan shape with anastomoses forming long meshes in the more central parts, the outer branches free and ascending. The main branches are 3 mm in diameter, its sub branches 1.5 mm, mostly cylindrical, some flattened at a right angle to the plane of the fan. Polyps scattered all around the branches, calyces low.



Sclerites: Pink colour and less than 0.25 mm in size. The surface sclerites of the coenenchyme are flattened, the middle lobe is rounded and smooth with at most some small prickles, forming an almost flat leaf; the two lateral lobes are small and are not directed upward. Tentacle bases with a ring of slender bows, three, one above the other and with strongly flattened sclerites in each tentacle; a transverse one, the central part of which may have a short thorn and above it two or three bent rods with blunt apical ends, followed by one or two slender rods above them.

Depth range and Habitat: 20 to 60 m; reef slope and bottom. It was observed mostly in current and turbid environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

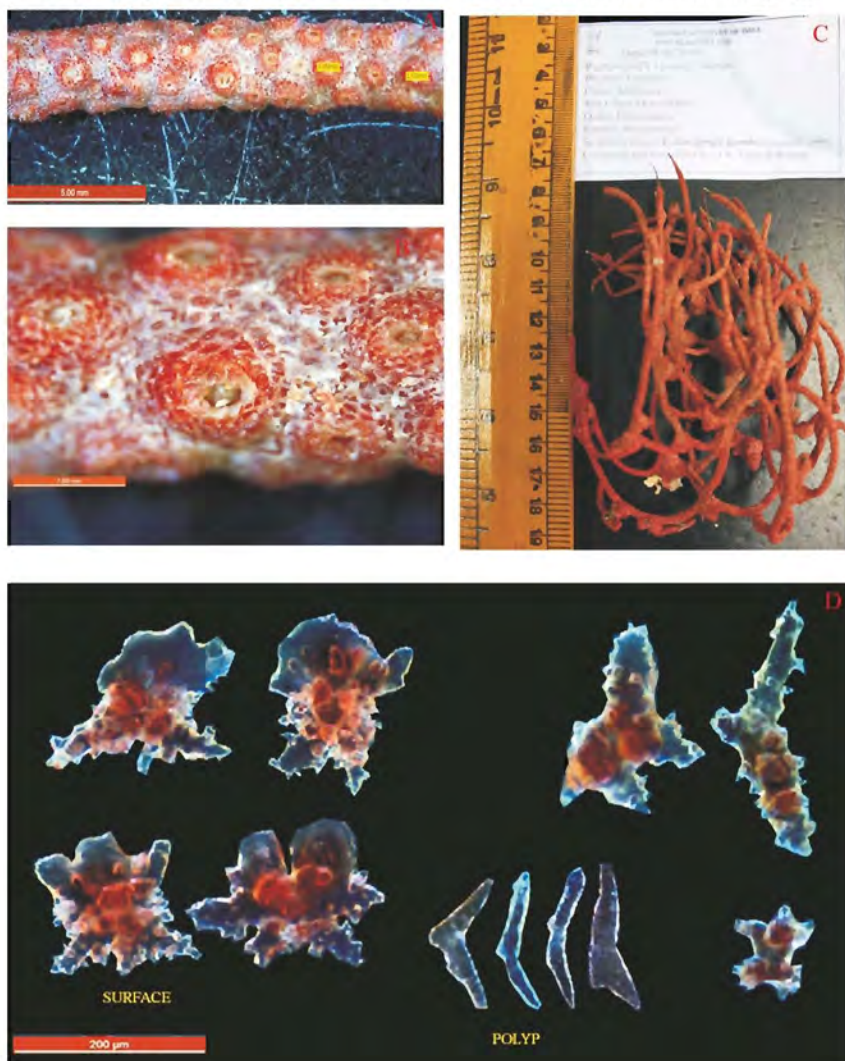
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 35 *Echinogorgia toombo* (Grasshoff, 1999)

A&B – Polyps arrangement, C – Colony, D – Sclerites from the surface and polyp



Genus *Echinomuricea* Verrill, 1869

36. *Echinomuricea indica* Thomson & Simpson, 1909

Plate – 36

Material Examined: ZSI/ANRC: 6057, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, specimen 14 cm in height and 9 cm in width.



Description: Colony is red and brown. Size of the colony is up to 16 cm in height and 10 cm width. Branches are confined strictly to one plane, but owing to the sinuous nature of the branches the whole presents a characteristic appearance. The branches generally arise at right angles and though maintaining their original direction curve and flex so as to be almost semicircular or S- shaped. The axis is horny, slender and black. The surface is very smooth and glistening. The polyps are disposed over the whole surface in some places apparently in spirals, but in others quite irregularly.

Sclerites: The characteristic sclerites are thornscales of the calyces, which have a single, long spine arising from a spreading warty base. Modified forms of these with a large base or a couple of spines, can also be found in the calyces and in the colony surface along with warty spindles and branched forms. The spine on a thornscales can be very smooth or it may be modified with smaller spines. The polyp head contains large spindles and rods in a collaret and points arrangement.

Depth range and Habitat: 15m; uncommon and widely distributed in both clear and turbid coastal waters.

Distribution: Central Indo-Pacific, New Caledonia, Arakan and India: Gulf of Mannar and Andaman Islands.

Remark: New to Andaman and Nicobar Islands.

Taxonomic references

Thomson, J.A. and Simpson, J.J. 1909. An account of the Alcyonarians collected by the Royal Indian Marine Survey Ship investigator in the Indian Ocean. II. The Alcyonarians of littoral area, The Indian Museum, Calcutta, 1-18+ 1-319.

Thomas, P.A., Rani Mary George and Lazarus, S. 1995. Distribution of Gorgonids in the northeast coast of India with particular reference to *Heterogorgia Flabellum*. *J.Mar.Biol.Ass. India*, **37**: 134-142.

PLATE – 36 *Echinomuricea indica* Thomson & Simpson, 1909
A – Branch, B – Colony, C – Sclerites from the calyx, surface and polyp



37. *Echinomuricea indomalaccensis* Ridley, 1884

Plate – 37

Material Examined: ZSI/ANRC: 6118, Pongibalu, South Andaman, 20 m depth, specimen is 25 cm in height and 4 cm in width.

Description: Colony is yellow in colour, when live and brown in dried. Size of the colony is 35 cm and irregular bushes in structure. Branches are ascending, long and slender, whip like.



Sclerites: Colourless and less than 0.4mm in size. The calyces are low and have fewer thorn scales than other species. The irregular sclerites of the coenenchyme are mostly so tangled with large tubercles and in some places they are almost inseparable. The adaxial layer contains small six radiates. Flattened rods are arranged transversely and in short oblique rows at the tentacle bases.

Depth range and Habitat: Found in 15 to 30 m; reef slope and bottom. It was observed mostly in channel and current water environment.

Distribution: Torres Straits, Northern Great Barrier Reef, New Caledonia, and India: Andaman and Nicobar Islands.

Remark: New to Andaman and Nicobar Islands.

Taxonomic references

Ridley, S.O. 1884. Alcyonaria. In: Report on the Zoological Collections made in the Indo Pacific Ocean during the Voyage of H.M.S. "Alert" British Museum, London. 1881 – 2; 327-365.

Thomas, P.A., Rani Mary George and Lazarus, S. 1995. Distribution of Gorgonids in the northeast coast of India with particular reference to *Heterogorgia flabellum*. *J. Mar. Biol. Ass. India*, **37**: 134-142.

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

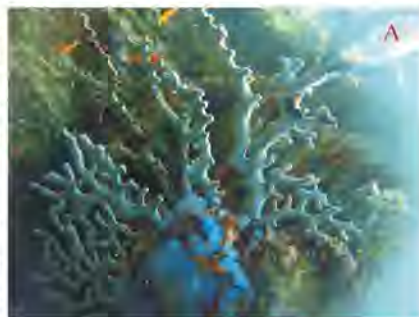
PLATE – 37 *Echinomuricea indomalaccensis* Ridley, 1884
A&B – Colony, C – Polyp, D – Sclerites from the surface, polyp and calyx



Genus *Euplexaura* Verrill, 1869
38. *Euplexaura amerea* (Grasshoff, 1999)

Plate – 38

Material Examined: ZSI/ANRC: 6113, Munak Gate, Nancowry groups, Nicobar, 20 m depth, specimen 16 cm in height with 7 cm width.



Description: Colony is yellow in colour, when live and brownish white colour in dried. Size of the colony is 60 cm and fan shape structure. Fans densely branched almost exactly in one plane, the end branches also in the general plan; if a main branch diverges from the primary plane it subsequently branches as another flat fan. Branches cylindrical, mostly free, but some anastomoses may occur.

Sclerites: Colourless and less than 0.25 mm in size. Coenenchymal sclerites blunt ellipsoids, almost spherical in shape, small and relatively uniform in size, from 0.25 to 0.12 mm, irregularly arranged, giving the surface a granular appearance. A few elongate sclerites around the polyp margins.

Depth range and Habitat: Found in 15 to 35 m at reef bottom. It was observed mostly in channels with strong current environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

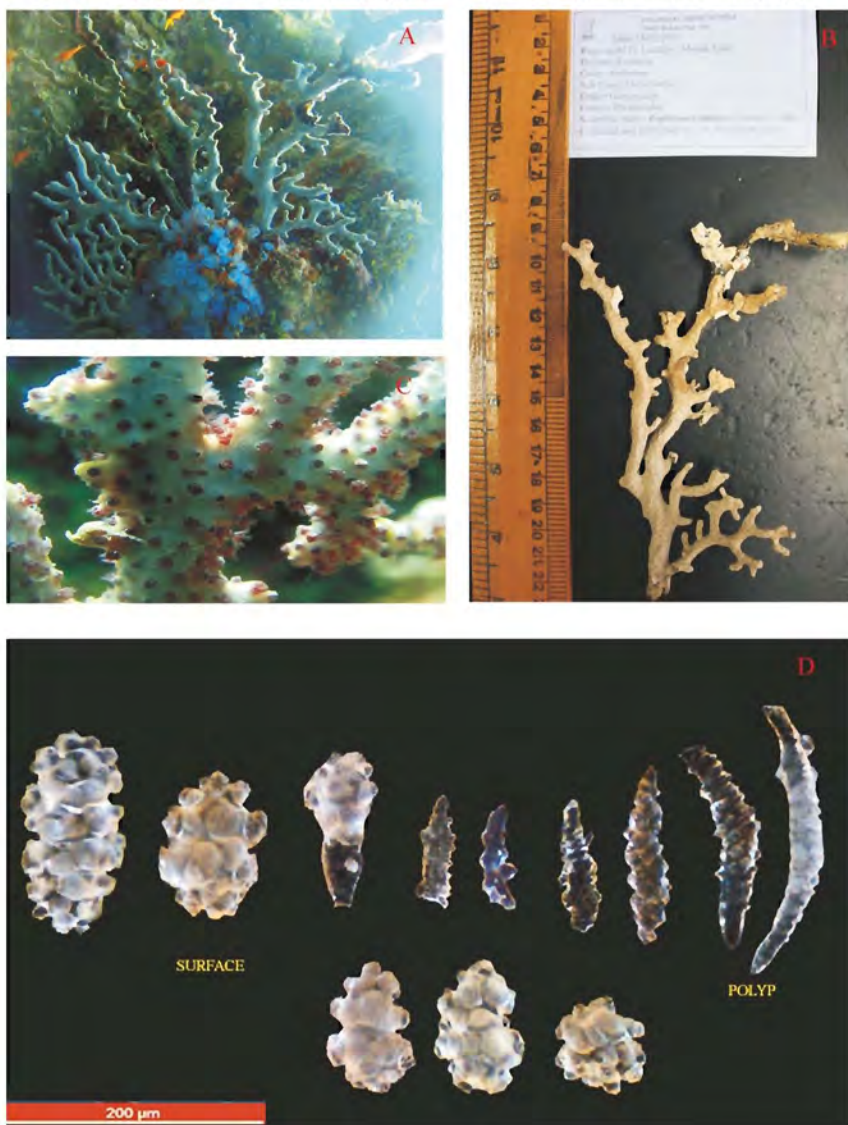
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 38 *Euplexaura amerea* (Grasshoff, 1999)

A&B – Colony, C – Branch and polyp, D – Sclerites from the surface and polyp



39. *Euplexaura rhipidalis* Studer, 1895

Plate – 39

Material Examined: ZSI/ANRC: 6095, Guitor Island, Middle Andaman, 20 m depth, specimen height is 5 cm and 4 cm width.



Description: Colony is maroon in colour when live and brown in dried. Size of the colony is 40 cm and fan bent to one side, branches flattened in the plane of the fan. Branches mostly free, but some anastomoses may occur in the older part of the fans. Coenenchyme around the polyps elevated.

Sclerites: Colourless and less than 0.28 mm in size. The coenenchymal sclerites are elongate ellipsoids, many attaining the shape of thick spindles with a wide range of size from 0.1 mm to 0.25 mm, regularly arranged to form a smooth, pavement like surface.

Depth range and Habitat: Found in 20 to 30 m at reef slope and bottom. It was observed mostly in turbid environments.

Distribution: Singapore: Bintan Islands, New Caledonia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

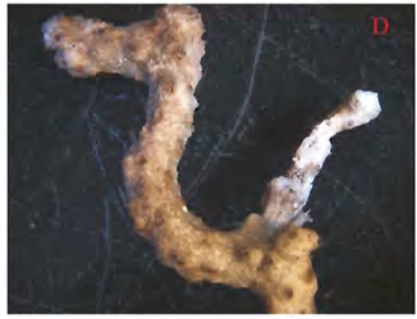
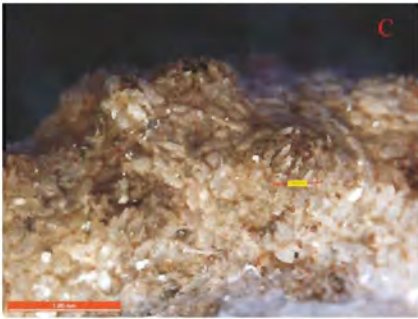
Taxonomic references

Studer, Th. 1895. Alcyonarien aus der Sammlung des Naturhistorischen Museum in Libeck. *Mitt. Geogr. Ges. Nat. Mus. Lubeck*, (2) (7-8): 103-128.

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 39 *Euplexaura rhipidalis* Studer, 1895

A&B – Colony, C&D – Polyps and branch, D – Sclerites from the surface and polyp



Genus *Trimuricea* Gordon, 1926
40. *Trimuricea caledonica* (Grasshoff, 1999)

Plate – 40

Material Examined: ZSI/ANRC: 6102, Munak Gate, Nancowry groups, Nicobar, 20 m depth, specimen 7 cm in height and 8 cm in width.



Description: Fans up to 50cm tall with many anastomoses forming nets. The axis of the main branches is flattened at a right angle to the plane of the fan, but the end branches are cylindrical. The polyps are situated all around the branches, densely, but little free coenenchyme between them. Colony is red in colour, when live and in dried condition dark brown.

Sclerites: Colourless; 0.06 mm to 0.26 mm in size. The calyx contains thorn scale, coenenchyme have spindle. The tentacles have T bow, thorn scale and rods.

Depth range and Habitat: 15 to 30 m; flat reef with strong current environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

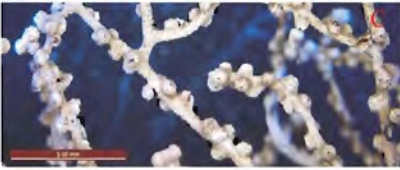
Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 40 *Trimuricea caledonica* (Grasshoff, 1999)

A&B – Colony, C – Branch and polyps, D – Sclerites from the surface, calyx and polyp



Genus *Villogorgia* Duchassaing & Michelloti, 1860
41. *Villogorgia tenuis* (Nutting, 1908)

Plate – 41

Material Examined:

ZSI/ANRC: 6096, Guitor Island, Middle Andaman, 15 m depth, specimen is 12 cm in height and 5 cm in width.



Description: Colony is yellow in colour, when live and brown in dried. Size of the colony is 20 cm and delicate fan in structure. Colonies are branched in one

plane forming large fans. Polyps are distributed all around the branches.

Sclerites: Colourless and less than 0.35 mm in size. The characteristic sclerites are the calicular thorn scale. They have a broad, flat, multi – armed base from which arises a short, globular, spiny or leafy projection. The polyps head has large sclerites in a collaret and point arrangement. The collaret sclerites are bow shaped spindles and the points are formed from hockey stick shaped sclerites with a thorny extremity. The tentacles contain curved dragon wing like scales.

Depth range and Habitat: Found in 15 to 35 m at reef slope and flat reef. It was observed mostly in strong current and turbid environments.

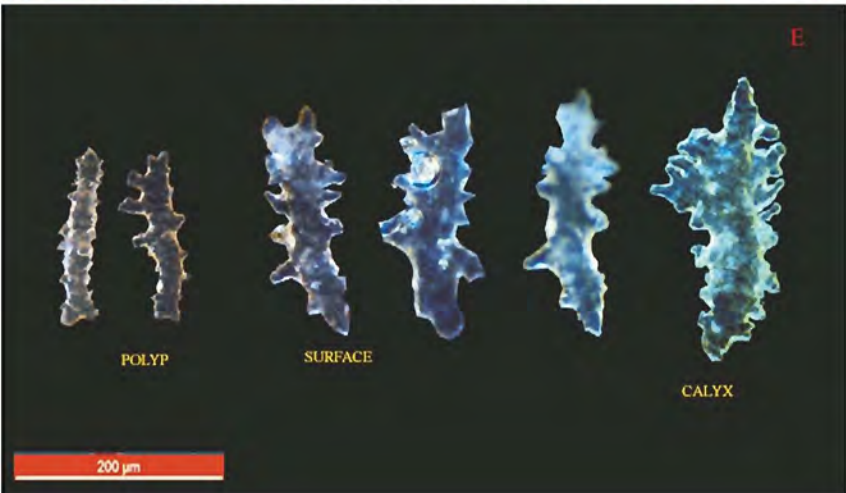
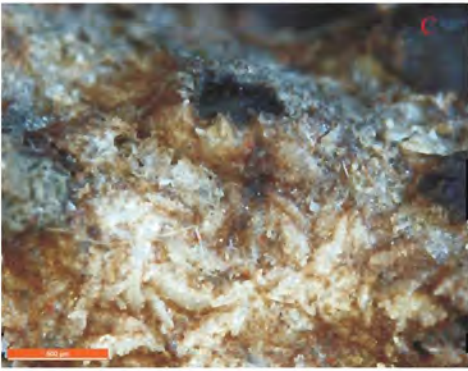
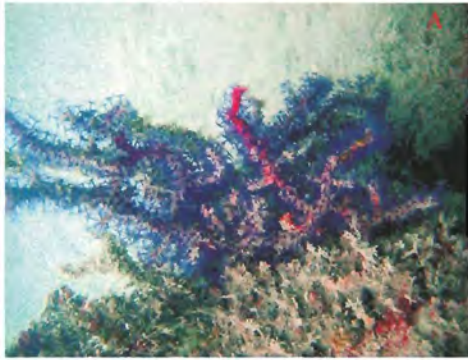
Distribution: Ambon Island, Banda Island, Ceram Island - Indonesia, Singapore, Philippines and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Thomson, J.A. and Henderson, W.D. 1906. An account of the Alcyonarians collected by the Royal Indian Marine Survey Ship Investigator in the Indian Ocean. The Alcyonarians of deep sea, The Indian Museum, Calcutta, 1-132.

PLATE – 41 *Villogorgia tenuis* (Nutting, 1908)
A&B – Colony, C&D – Polyps, D – Sclerites from the polyp, surface and calyx



Sub Order SCLERAXONIA Studer, 1887
Family MELITHAEIDAE Gray, 1870
Genus *Acabaria* Gray, 1859
42. *Acabaria cinquemiglia* (Grasshoff, 1999)

Plate – 42

Material Examined: ZSI/ANRC: 6124, Pongibalu, South Andaman, 20 m depth, specimen is 5 cm height and 3 cm width specimen.

Description: Colony is red in colour, when live and dried. Size of the colony is 20 cm and bushy in structure. Branches are relatively equal diameter throughout, main branches above the holdfast 2.8 mm in diameters, others 2.5–2.7 mm; anastomoses present only in central parts, not forming a regular net. Nodes only slightly thickened, inconspicuous. Polyps arranged all around the branches, elevated as rounded hills.



Sclerites: Red in colour and less than 0.12 mm in size. Spindles at the surface of the coenenchyme is long and slender, attaining a length of 0.12 mm with high tubercles and flat processes, many are curious looking caterpillar shapes. In the anthocodiae the transversely placed bows and the large flat sclerites above them attain a length of 0.09 mm; the flat dentate platelets in the tentacles are 0.1 mm to 0.02 mm.

Depth range and Habitat: Found in 15 to 45 m; it was observed mostly in turbid and high current water and reef slope.

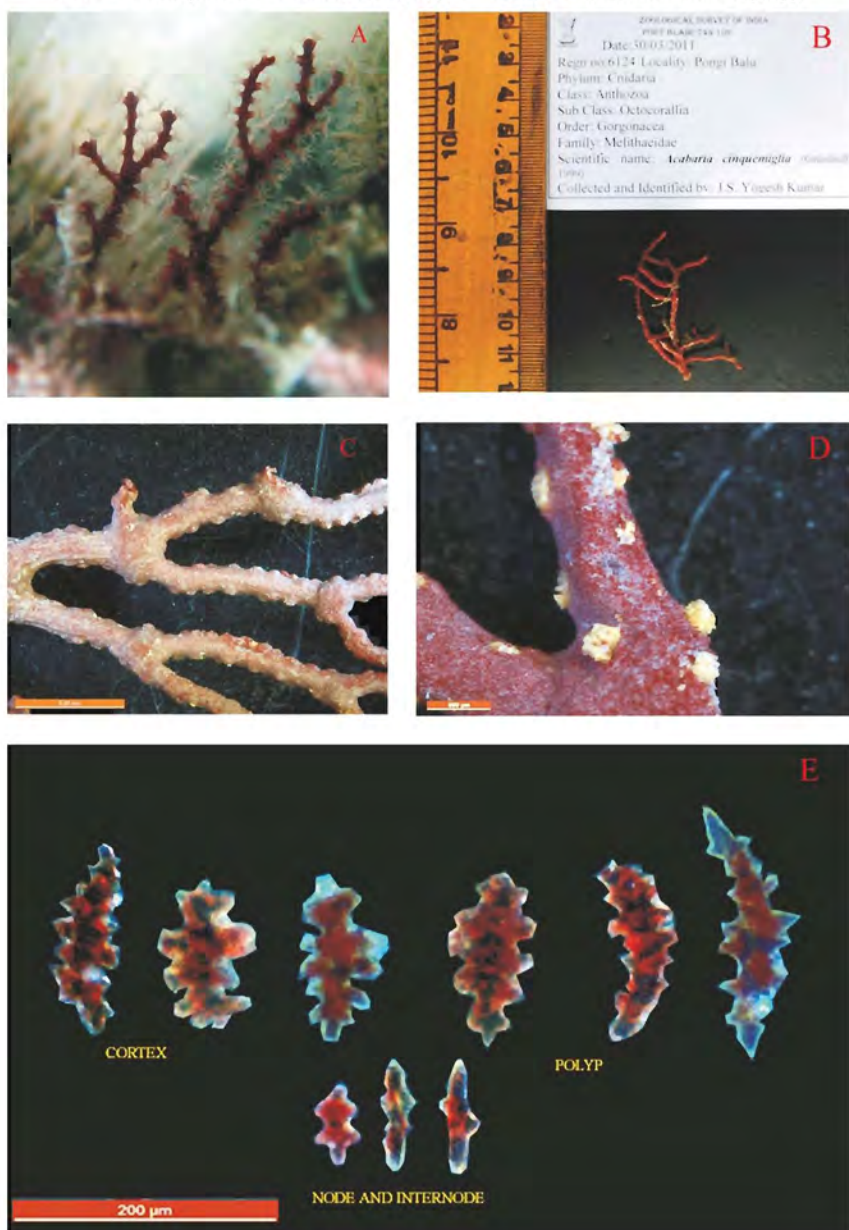
Distribution: New Caledonia, Aru Island – Islands of Maluku, Indonesia and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 42 *Acabaria cinquemiglia* (Grasshoff, 1999)
A&B – Colony, C&D – Branch and polyp, E – Sclerites from the cortex, polyp



43. *Acabaria ouvea* (Grasshoff, 1999)

Plate - 43

Material Examined: ZSI/ANRC: 6088, Guitor Island, Middle Andaman, 15 m depth, specimen height 7 cm with the width 3 cm.

Description: Colony is white with red colour dots and red colour polyps when dried and reddish white in underwater. Size of the colony is 30 cm and free branches. Nodes not thickened; branches gradually tapering. Polyps crowded on one side of the fan, leaving the opposite side free; polyps are little or not at all elevated.



Sclerites: Red colour and less than 0.16 mm in size. Coenenchymal sclerites are spindles and clubs with densely crowded tubercles. The nodes and internodes have flattened rods.

Depth range and Habitat: Found in 10 to 30 m at reef slope and bottom. It was observed mostly in turbid environments.

Distribution: New Caledonia and India: Andaman and Nicobar Islands.

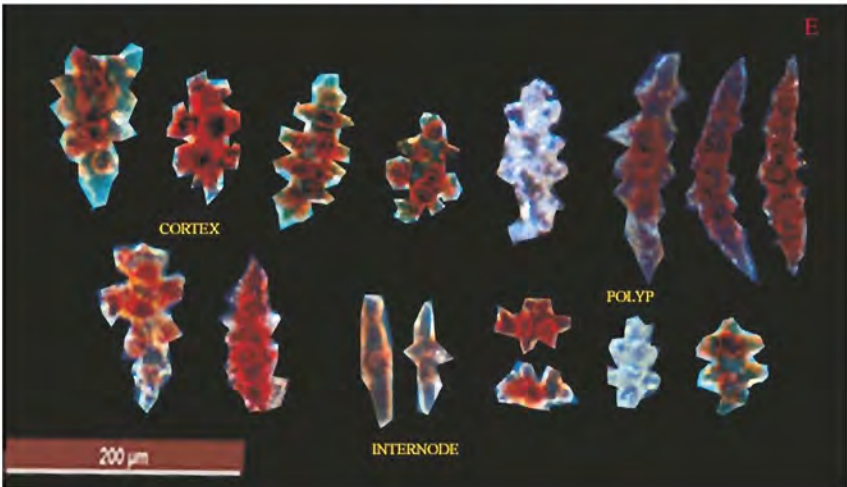
Remark: New to Indian waters.

Taxonomic references

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 43 *Acabaria ouvea* (Grasshoff, 1999)

A&B – Colony, C&D – Branch and polyp, D – Sclerites from the cortex, poly and internode



Genus *Melithaea* Milne-Edwards, 1857
44. *Melithaea caledonica* (Grasshoff, 1999)

Plate - 44

Material Examined: ZSI/ANRC: 6101, Munak Gate, Nancowry groups, Nicobar, 20 m depth, specimen height 22 cm and 8 cm width; ZSI/ANRC: 6120, Pongi Balu, South Andaman, 5 m depth, 13 cm height, 21 cm height, rose specimen.



Description: Colony is red and orange in colour, when live and dried. Size of the colony is up to one meter and densely branched large fans or bushes of multiple parallel fans. Colonies are densely branched in one plane forming large fans. Branchlets within a fan may sometimes fuse, net like.

Sclerites: Colour of the sclerites are yellow to orange, in tentacles pale yellow to colourless. The surface cortex contains longest clubs are slenderer spindles may be present. Coenenchyme are irregularly tuberculated spindles and plates; many irregular plates like sclerites also present in the cortex. The large curved sclerites above them are 0.15 mm long; the flat platelets in the tentacles are dentate, the largest was 0.1 mm long.

Depth range and Habitat: Found in 5 to 35 m at channels, reef slope with turbid water environment.

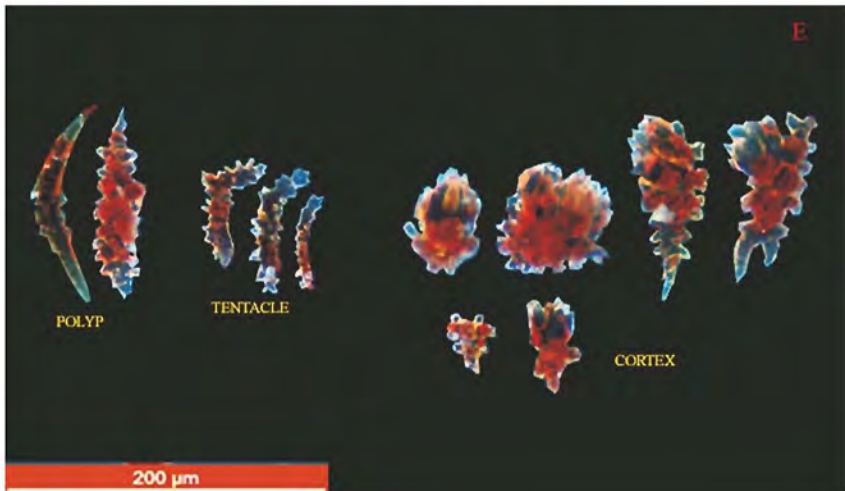
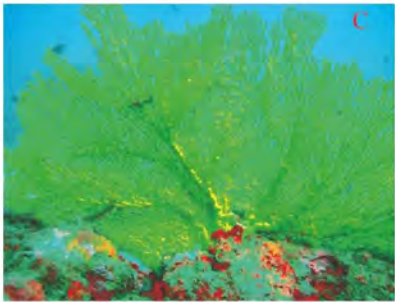
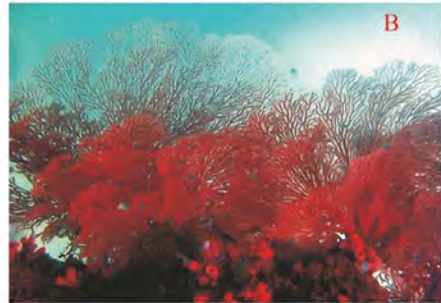
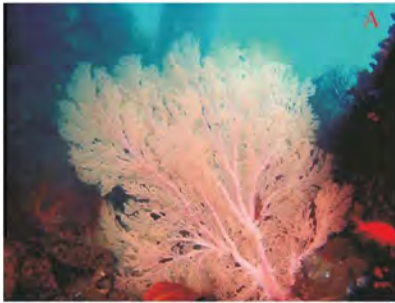
Distribution: New Caledonia: Woodin, and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.

PLATE – 44 *Melithaea caledonica* (Grasshoff, 1999)
A, B, C&D – Colony, E – Sclerites from the cortex, polyp and tentacle



45. *Melithaea ochracea* (Linnaeus, 1785)

Plate - 45

Material Examined: ZSI/ANRC: 5420, Havelock, Ritchie's Archipelago, South Andaman, 20 m depth, 14 cm specimen height and 10 cm width.

Description: Colony is red in colour, when live and dried. Size of the colony is up to one meter and bushy in structure. Colonies are densely branched in one plane forming large fans. Branchlets within a fan may sometimes fuse, netlike. Calyces dome like, placed on three sides of the branches.



Sclerites: Colourless and less than 0.1mm in size. The surface cortex contains clubs, capstans and double discs. The polyp contains disc-spindles and unilateral spinose spindles. The nodes and internodes have flattened rods.

Depth range and Habitat: Found in 5 to 30 m at reef slope and bottom. It was observed mostly in turbid environments.

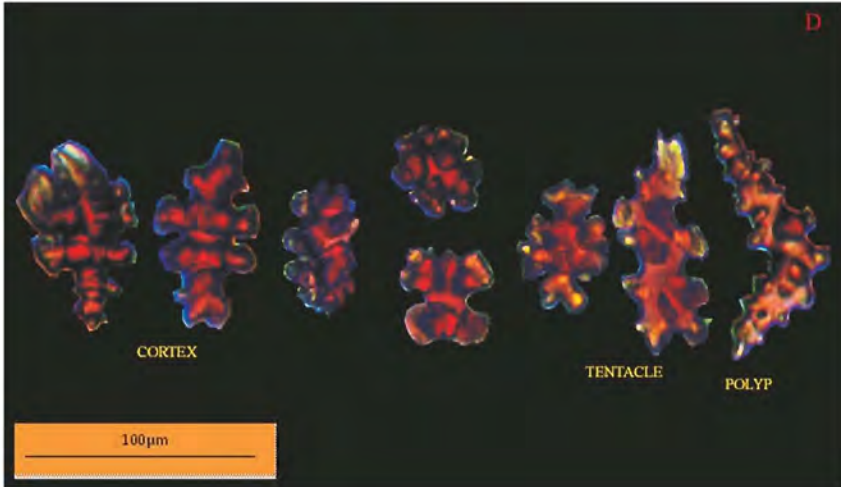
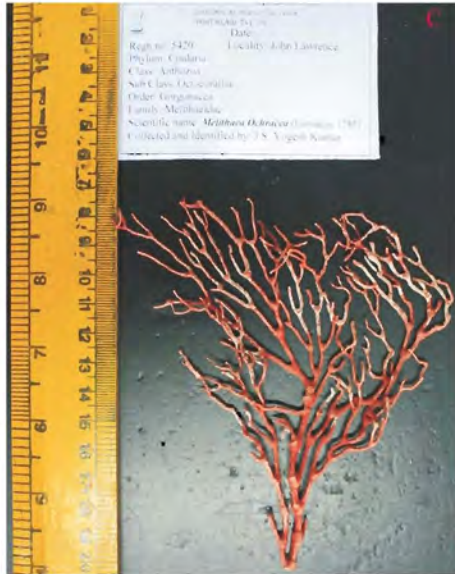
Distribution: Ambon Island, Banda Island, Ceram Island, Indonesia, Singapore, Philippines and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic references

- Goh, N.K.C., Chou, L.M. 1996. An annotated checklist of the gorgonians of Singapore, with a discussion of gorgonian diversity in the Indo- West Pacific. *Raff. Bull. Zool.*, **44**:435-459.
- Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.
- Ofwegen, L.P., Van, Goh, N.K.C., Chou, L.M. 2000. The Melithaeidae of Singapore. *Zool. Med. Lediden.* **73**:285-304.

PLATE – 45 *Melithaea ochracea* (Linnaeus, 1785)
A, B&C – Colony, D – Sclerites from the cortex, tentacle and polyp



Genus *Mopsella* Gray, 1857
46. *Mopsella rubeola* (Wright & Studer, 1889)

Plate - 46

Material Examined: ZSI/ANRC: 5421, John Lawrence Islands, Ritchie's Archipelago, South Andaman, 15 m depth, 15 cm height and 3 cm width.



Description: Colony is orange in colour when live and dried. Size of the colony is up to one meter and bushy in structure, branched in one plane, forming large fans. Calyces dome like, placed on three sides of the branches.

Sclerites: The most characteristic sclerites are leaf-clubs, capstans, foliate capstans, unilaterally foliate spheroids, leaf-spindles, rods and spindles. Leaves often narrow, spine-like. Largest unilaterally foliate spheroid 0.18 mm long and 0.10 mm wide. Spindles up to about 0.20 mm long. Calyces with leaf-clubs up to 0.20 mm long and 0.10 mm wide.

Depth range and Habitat: 5-10 m; lower reef slope and bottom. It was observed mostly in turbid environments.

Distribution: Midway reef, Alaska, and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic references

Goh, N.K.C., Chou, L.M. 1996. An annotated checklist of the gorgonians of Singapore, with a discussion of gorgonian diversity in the Indo-West Pacific. *Raff. Bull. Zool.*, **44**:435-459.

Ofwegen, L.P., Van, Goh, N.K.C., Chou, L.M. 2000. The Melithaeidae of Singapore. *Zool. Med. Lediden*, **73**:285-304.

Genus *Wrightella* Gray, 1870
47. *Wrightella braueri* Kukenthal, 1919

Plate – 47

Material Examined: ZSI/ANRC: 6117, Karthip, Nancowry Island, Nicobar, 5 m depth, specimen is 6 cm height and 4 cm width.



Description: Colony is mostly small fans and red in colour, when live and dried. Size of the colony is 15 cm specimen height and 15 cm width. Branchlets within a fan may sometimes fuse, net like and 2.7 mm average inter branching, polyps are distinct and occur all around the branches.

Sclerites: Red in colour and 0.19 mm in average sclerites size. The clubs (0.18mm) are found in surface calyx, cortex contains 0.1 mm sclerites, Polyps (0.18 mm), tentacles (0.1 mm). The nodes and internodes have flattened rods.

Depth range and Habitat: Found in 5 to 20 m at shallow reef and reef slope environments.

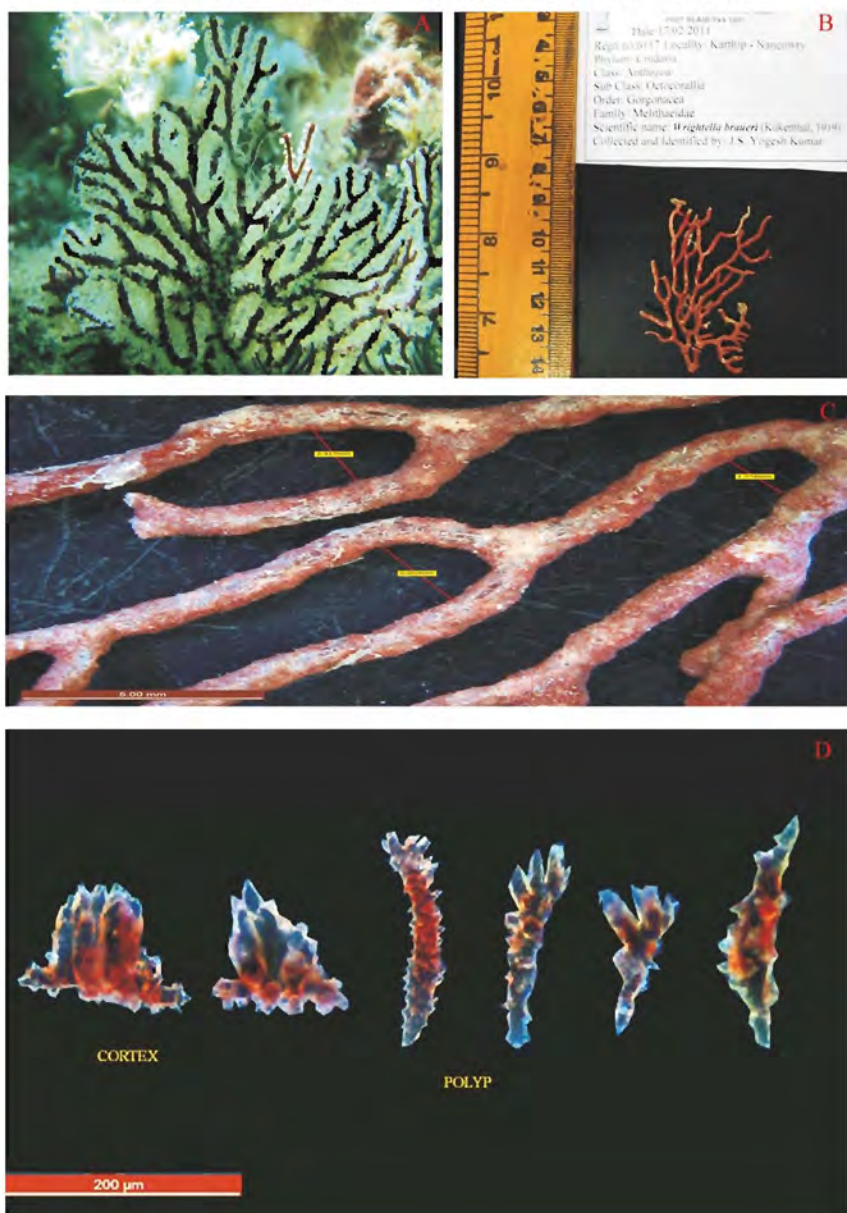
Distribution: Seychelles, Indian Ocean and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic reference

Thomson, J.A. and Henderson, W.D. 1906. An account of the Alcyonarians collected by the Royal Indian Marine Survey Ship Investigator in the Indian Ocean. The Alcyonarians of deep sea, The Indian Museum, Calcutta, 1-132.

PLATE – 47 *Wrightella braueri* Kukenthal, 1919
A&B – Colony, C – Branch, D – Sclerites from the cortex and polyp



Family SUBERGORGIIIDAE Gray, 1859
Genus *Annella* Gray, 1858
48. *Annella mollis*, Nutting, 1910

Plate – 48

Material Examined: ZSI/ANRC:5427, John Lawrence Island, Ritchie's Archipelago, South Andaman, 28 m depth, specimen is 20 cm height and 4 cm width; ZSI/ANRC:6107, Munak Gate, Nancowry group, Nicobar, 15 m depth, 6 cm specimen height and 5 cm width.



Description: Colony is dirty yellow in colour, when live and brown when dried. Size of the colony is up to 2 meter and densely reticulated fans. The axis consists of horny material with long, smooth, partially fused sclerites embedded in it. The meshes are generally elongate. The colourless polyps are slightly flattened spindles arranged and monomorphic and retractile, and arranged on all sides of the branchlets. The species appears to be quite common throughout the coral reefs.

Sclerites: Colourless and more than 0.1mm in size. The surface cortex contains warty spindles along with numerous, characteristics, small double heads. The polyps have slightly flattened spindles arranged as collaret and points.

Depth range and Habitat: Found in 20 m depth at reef edge or reef end. It was observed mostly in channels and turbid environment.

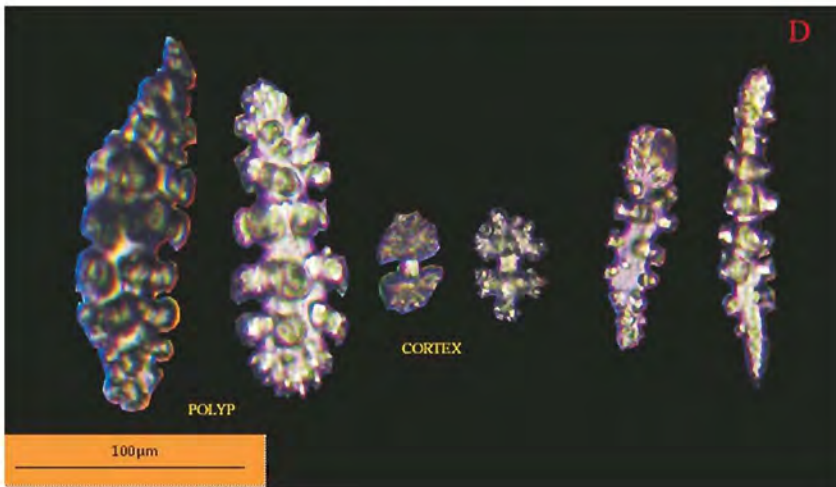
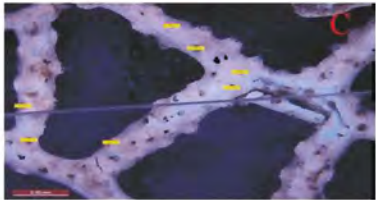
Distribution: Pacific Ocean, Red Sea, Madagascar and India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

Taxonomic references

- Nutting, C.C. 1910. The Gorgonacea of the Siboga Expedition. IV. The isidae. *Siboga-Expedite Monograph* 13b1, (Livr.48), 1-20.
- Grasshoff, M. 1999. The shallow water gorgonians of New Caledonia and adjacent islands. *Senckenbergiana Biol.*, **78**(1/2): 1-121.
- Grasshoff, M. 2000. The gorgonians of the Sinai Coast and the Strait of Gubal, Red Sea (Coelenterata, Octocorallia). *Cour.Forsch – Inst. Senckenberg*, 1- 224.

PLATE – 48 *Annella mollis*, Nutting, 1910
A&B – Colony, C – branch, D – Sclerites from the polyp and cortex



49. *Annella reticulata* (Ellis & Solander, 1786)

Plate – 49

Material Examined: ZSI/ANRC: 6071, Jolly Bouy, South Andaman, 18 m depth, 24 cm height, 9 cm width; ZSI/ANRC: 6105, Munak Gate, Nancowry group, Nicobar, 15 m depth, the specimen height is 8 cm and 4 cm width.



Description: Colony is yellow in colour, when live and brown in colour when dried. Size of the colony is 20 cm and fan like structure. Most of their meshes form polygons as wide as long; even if the form of the meshes is more elongate, the small size and the thin branches distinguish the species from *mollis*. Polyars are in dried or fluid preserved material slightly elevated.

Sclerites: Colourless and less than 0.12 mm in size. The surface contains double heads sclerites and spindles from coenenchyme.

Depth range and Habitat: found in 15–40 m at reef bottom. It was observed mostly in channels and turbid environment.

Distribution: Indo – Pacific, North Red Sea and New Caledonia, India: Andaman and Nicobar Islands.

Remark: New to Indian waters.

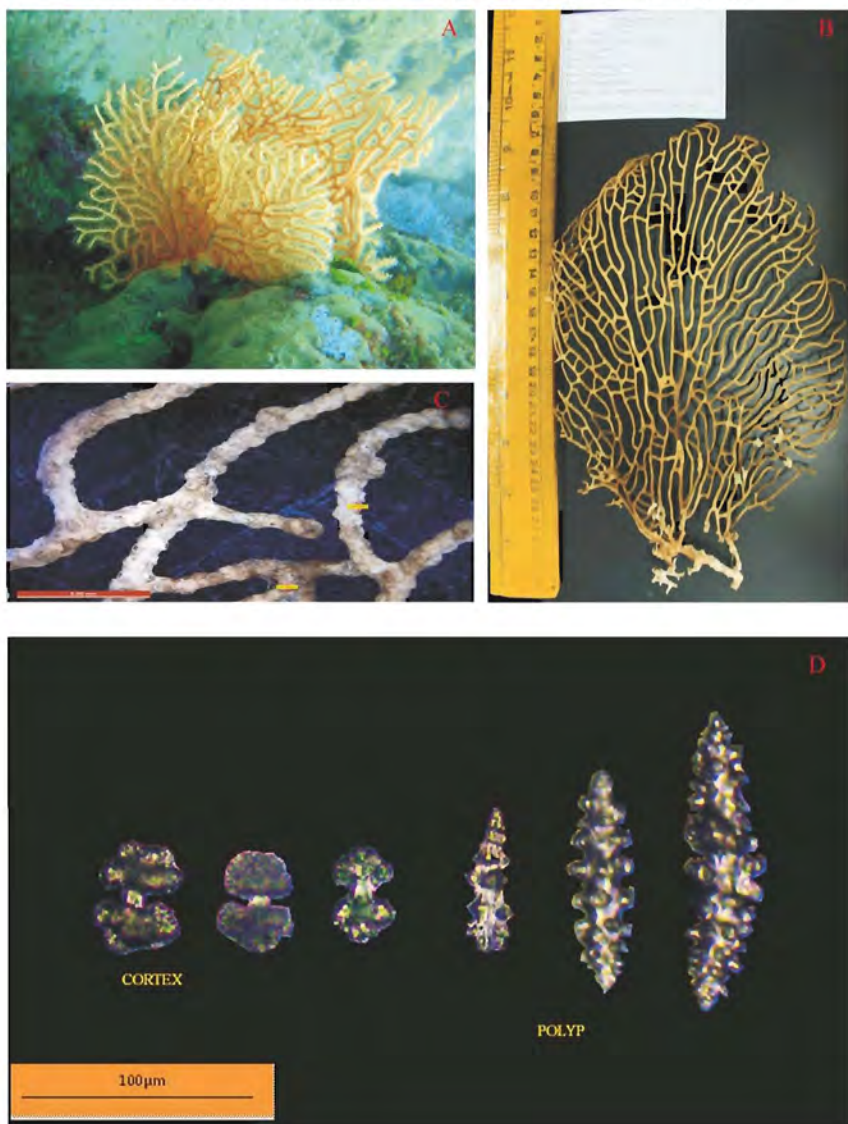
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PLATE – 49 *Annella reticulata* (Ellis & Solander, 1786)
A&B – Colony, C – Branch, D – Sclerites from the cortex and polyp



Genus *Subergorgia* Gray, 1857
50. *Subergorgia rubra* Thomson, 1905

Plate - 50

Material Examined: ZSI/ANRC: 6094, Havelock, Ritchie's Archipelago, South Andaman, 25 m depth, specimen height 24 cm and 9 cm width.



Description: Colony is brownish red in colour, when live and dried. Size of the colony is up to one meter and growing in one plane. Colonies are laterally to dichotomously branched but not

forming nets. The polyps are monomorphic, medium in size and arranged down only two sides of the branches.

Sclerites: Brownish in colour and less than 0.11 mm in size. In the outer cortex, the sclerites occur as warty spindles or ovals. The polyps have flattened spindles arranged in 8 point.

Depth range and Habitat: Found in 10 to 30 m at reef area of shallow water environment.

Distribution: Tropical Indo-Pacific from the Red Sea to the central Pacific, and India: Andaman and Nicobar Islands.

Remark: New to Andaman and Nicobar Islands.

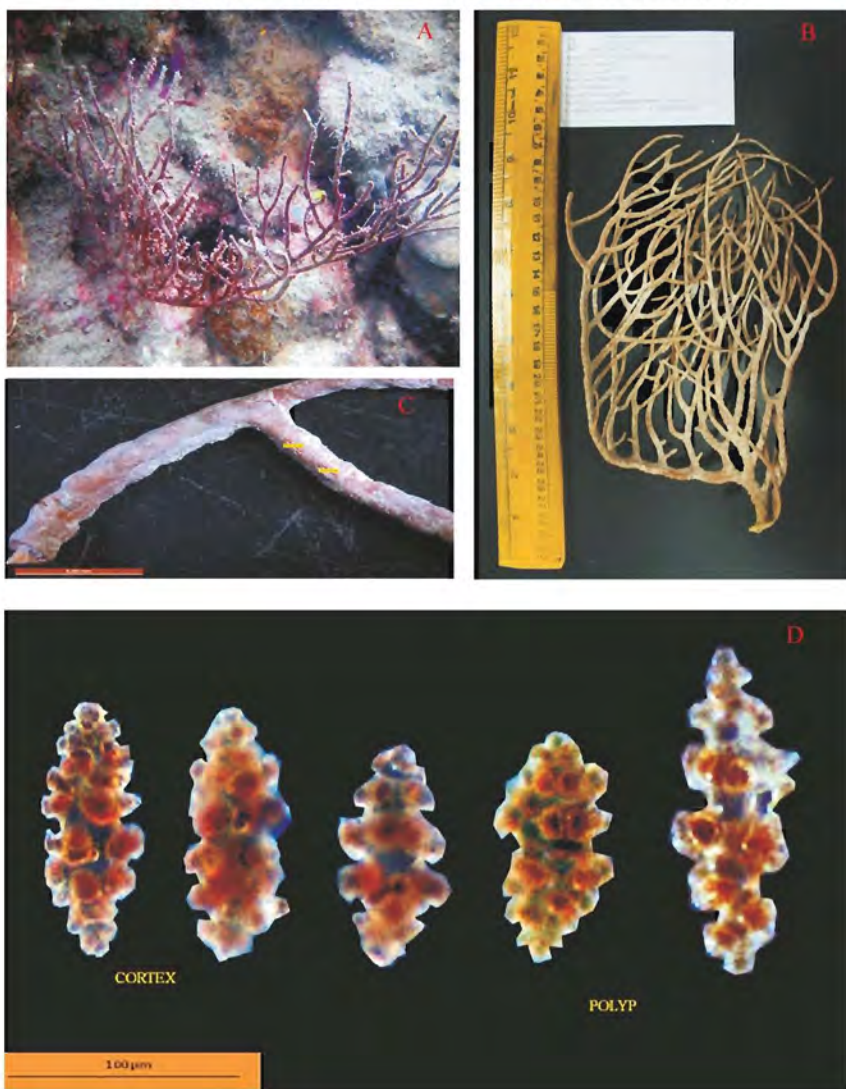
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PLATE – 50 *Subergorgia rubra* Thomson, 1905
A&B – Colony, C – Branch, D – Sclerites from the cortex and polyp



51. *Subergorgia suberosa* (Pallas, 1766)

Plate – 51

Material Examined: ZSI/ANRC: 6058, Havelock, 25 m depth, specimen height 31 cm; ZSI/ANRC: 6076, John Lawrence Island, Ritchie's Archipelago, South Andaman, 28 m depth, specimen height 15 cm; ZSI/ANRC: 6093, Gutor Island, Middle Andaman, 15 m depth, specimen height 12 cm; ZSI/ANRC: 6106, Munak Gate, Nancowry group, Nicobar, 15 m depth, specimen height 8 cm.



Description: Colony is brown in colour, when live and dried. Size of the colony is up to one meter. The colony is densely branched, developing a few long slender branches, but not forming nets. The polyps are monomorphic, medium in size and arranged down only two sides of the branches.

Sclerites: Brownish in colour and less than 0.15 mm in size. In the outer cortex the sclerites occur as warty spindles or ovals. The polyps have flattened spindles.

Depth range and Habitat: Found in 10 to 30 m at shallow to reef slope environment.

Distribution: Tropical Indo Pacific, Northern Red Sea, Central Pacific, and India: Andaman and Nicobar Islands.

Remark: New to Andaman and Nicobar Islands.

Taxonomic references

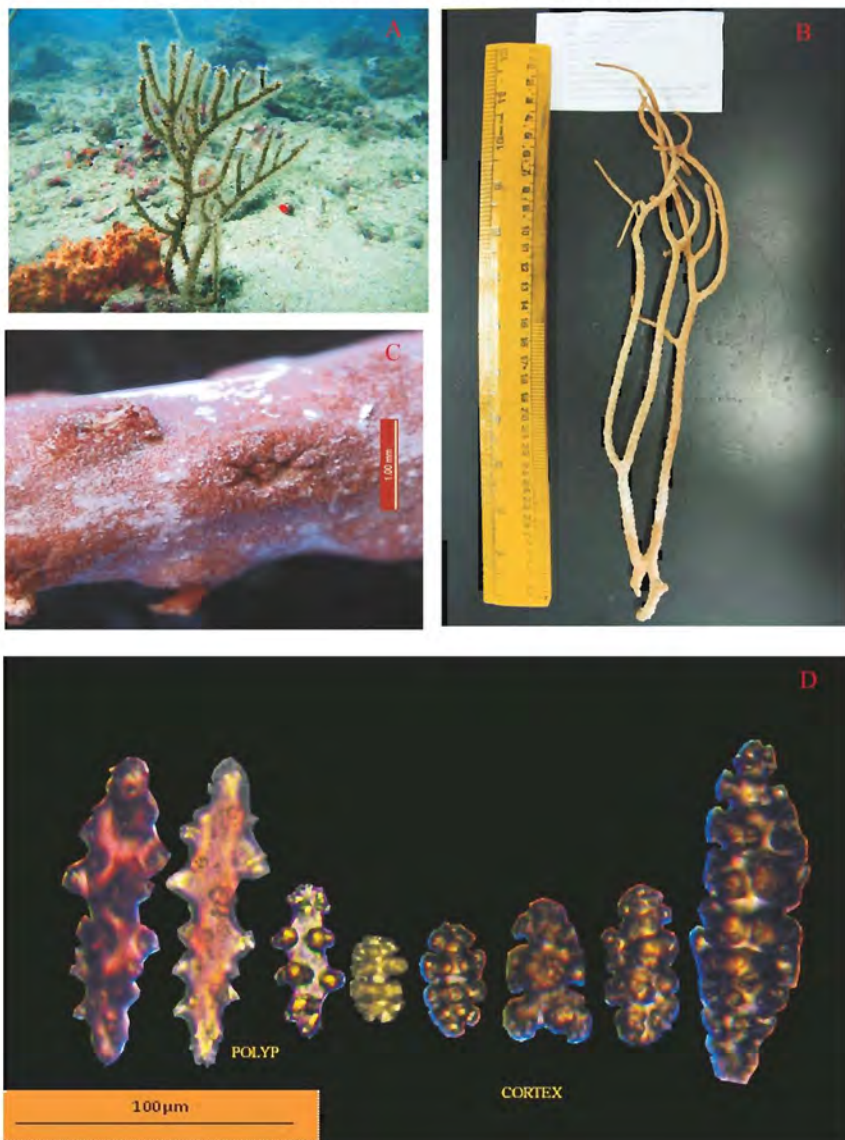
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PLATE – 51 *Subergorgia suberosa* (Pallas, 1766)
A&B – Colony, C – Polyp, D – Sclerites from the polyp and cortex



**CHECKLIST OF GORGONIANS FROM
ANDAMAN AND NICOBAR ISLANDS**

Subclass OCTOCORALLIA

Order GORGONACEA

Sub Order CALCAXONIA Grasshoff, 2000

Family ELLISELLIADAE Gray, 1859

Genus **Dichotella** Gray, 1870

1. *Dichotella gemmacea* (Milne Edwards & Haime, 1857)

Genus **Ellisella** Gray, 1858

2. *Ellisella azilia* (Grasshoff, 1999)
3. *Ellisella andamanensis* (Stimpson, 1986)
4. *Ellisella cercidia* (Grasshoff, 1999)
5. *Ellisella eustala* (Grasshoff, 1999)
6. *Ellisella marisrubri* (Stiasny, 1938)
7. *Ellisella nuctenea* (Grasshoff, 1999)

Genus **Junceella** Valenciennes, 1855

8. *Junceella delicata* (Grasshoff, 1999)
9. *Junceella eunicelloides* (Grasshoff, 1999)
10. *Junceella juncea* (Pallas, 1766)
11. *Junceella miniacea* (Thompson & Henderson, 1906)

Genus **Viminella** Gray, 1870

12. *Viminella crassa* (Grasshoff, 1999)
13. *Viminella junceelloides* (Stiasny, 1938)

Genus **Nicella** Gray, 1870

14. *Nicella dichotoma* (Gray 1860)
15. *Nicella flabellata* (Whitelegge, 1897)
16. *Nicella laxa* Whitelegge, 1897

Genus **Verrucella** Milne Edwards & Haime, 1858

17. *Verrucella cerasina* (Grasshoff, 1999)
18. *Verrucella corona* (Grasshoff, 1999)
19. *Verrucella diadema* (Grasshoff, 1999)
20. *Verrucella gubalensis* Grasshoff, 2000
21. *Verrucella klunzingeri* Grasshoff, 2000

Family ISIDIDAE Lamouroux, 1812

Genus **Isis** Linnaeus, 1758

22. *Isis hippuris* Linnaeus, 1758
- Sub Order HOLAXONIA Gray, 1859
Family ACANTHOGORGIIDAE Gray, 1859
Genus **Muricella** Verrill, 1868
23. *Muricella paraplectana* (Grasshoff, 1999)
24. *Muricella ramosa* (Thompson & Henderson, 1906)
25. *Muricella rubra* (Thompson & Henderson, 1906)
- Genus **Acanthogorgia** Gray, 1857
26. *Acanthogorgia breviflora* Whitelegge, 1897
27. *Acanthogorgia spinosa* Hiles, 1899
- Genus **Anthogorgia** Verrill, 1868
28. *Anthogorgia ochracea* (Grasshoff, 1999)
- Family GORGONIIDAE Lamouroux, 1812
Genus **Rumphella** Bayer, 1955
29. *Rumphella aggregate* (Nutting, 1910)
30. *Rumphella torta* Klunzinger, 1877
- Genus **Hicksonella** Nutting, 1910
31. *Hicksonella princeps* Nutting, 1910
- Genus **Lophogorgia**
32. *Lophogorgia lutkeni* (Wright & Studer, 1889)
- Family PLEXAURIDAE Gray, 1859
Genus **Menella** Gray, 1870
33. *Menella indica* Gray, 1870
34. *Menella kanisa* (Grasshoff, 2000)
35. *Menella kouare* Grasshoff, 1999
36. *Menella woodin* Grasshoff, 1999
- Genus **Bebryce** Philippi, 1841
37. *Bebryce sirene* (Grasshoff, 1999)
38. *Bebryce studeri* Whitelegge, 1897
- Genus **Echinogorgia** Kolliker, 1865
39. *Echinogorgia flora* Nutting, 1910
40. *Echinogorgia toombo* (Grasshoff, 1999)
- Genus **Echinomuricea** Verrill, 1869

41. *Echinomuricea indica* Thomson & Simpson, 1909
 42. *Echinomuricea indomalaccensis* Ridley, 1884
 43. *Echinomuricea uliginosa* (Thompson & Henderson, 1909)
- Genus ***Euplexaura*** Verrill, 1869
44. *Euplexaura amerea* (Grasshoff, 1999)
 45. *Euplexaura rhipidalis* Studer, 1895
- Genus ***Trimuricea*** Gordon, 1926
46. *Trimuricea caledonica* (Grasshoff, 1999)
 Genus ***Villogorgia*** Duchassaing & Michelloti, 1862
47. *Villogorgia tenuis* (Nutting, 1908)
- Sub Order SCLERAXONIA Studer, 1887
 Family MELITHAEIDAE Gray, 1870
 Genus ***Acabaria*** Gray, 1859
48. *Acabaria cinquemiglia* (Grasshoff, 1999)
 49. *Acabaria ouvea* (Grasshoff, 1999)
- Genus ***Melithaea*** Milne-Edwards, 1857
50. *Melithaea caledonica* (Grasshoff, 1999)
 51. *Melithaea ochracea* (Linnaeus, 1785)
- Genus ***Mopsella*** Gray, 1857
52. *Mopsella rubeola* (Wright & Studer, 1889)
- Genus ***Wrightella*** Gray, 1870
53. *Wrightella braueri* Kükenthal, 1919
- Family SUBERGORGIIIDAE Gray, 1859
 Genus ***Annella*** Gray, 1858
54. *Annella mollis*, Nutting, 1910
 55. *Annella reticulata* (Ellis & Solander, 1786)
- Genus ***Subergorgia*** Gray, 1857
56. *Subergorgia reticulata* (Ellis & Solander, 1786)
 57. *Subergorgia rubra* Thomson, 1905
 58. *Subergorgia suberosa* (Pallas, 1766)
- Genus ***Cactogorgia***
59. *Cactogorgia alciformis* (Thompson, Simpson & Henderson, 1909)

SUMMARY

The first comprehensive taxonomic evaluation of Gorgonians of shallow water habitats around Andaman and Nicobar Islands is presented here with 51 species belonging to 25 genera, 8 families and 3 sub orders. Among them 44 species belonging to 24 genus 7 families are new distributional records to India. 17 genera (*Dichotella*, *Viminella*, *Verrucella*, *Acanthogorgia*, *Anthogorgia*, *Rumphella*, *Hicksonella*, *Menella*, *Bebryce*, *Euplexaura*, *Trimuricea*, *Villogorgia*, *Acabaria*, *Melithaea*, *Mopsella*, *Wrightella* and *Annella*) are new addition to Indian Gorgonians fauna. This paper gives an updated list of all known Gorgonian species found in Andaman and Nicobar Islands.

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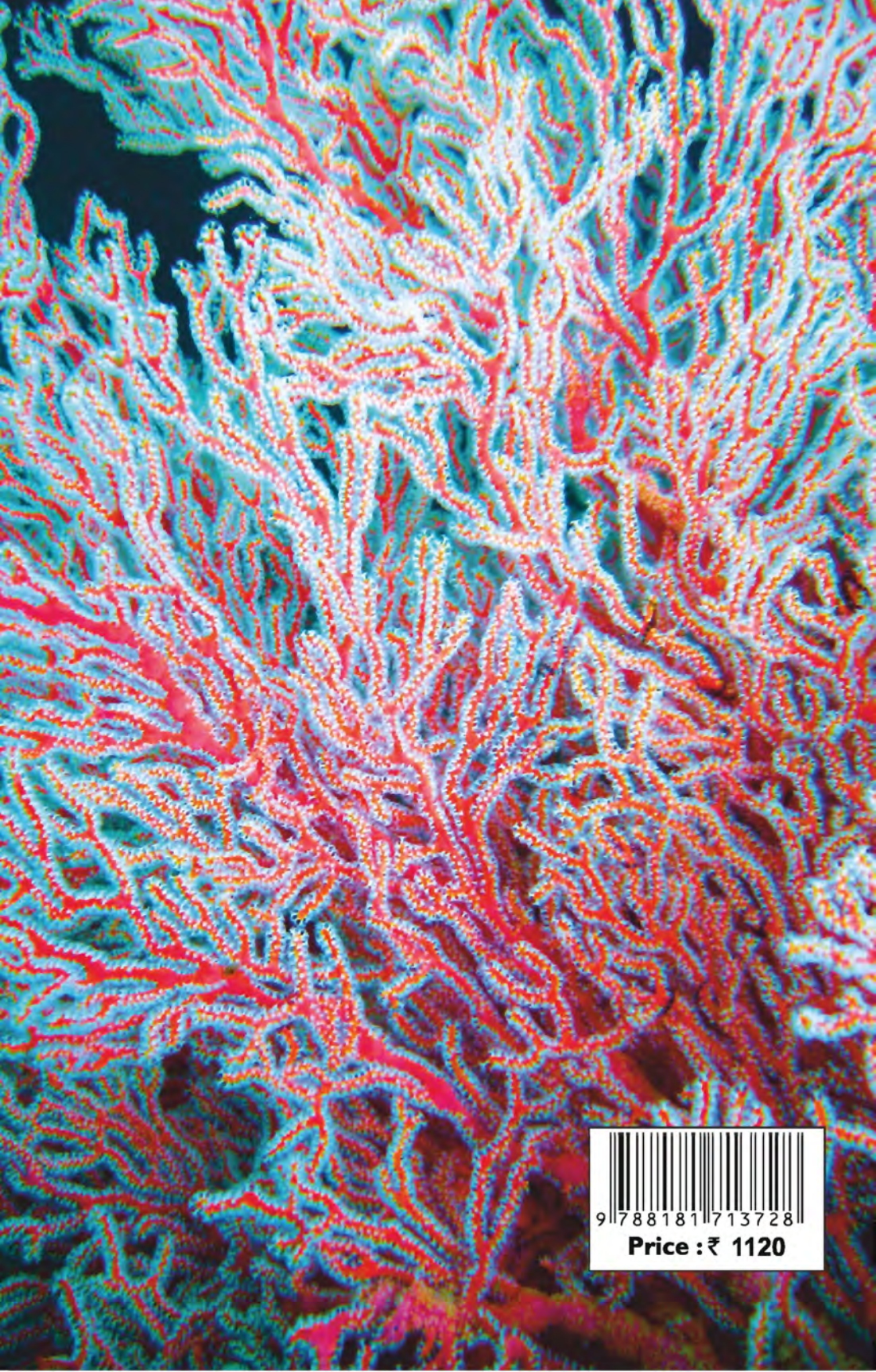
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