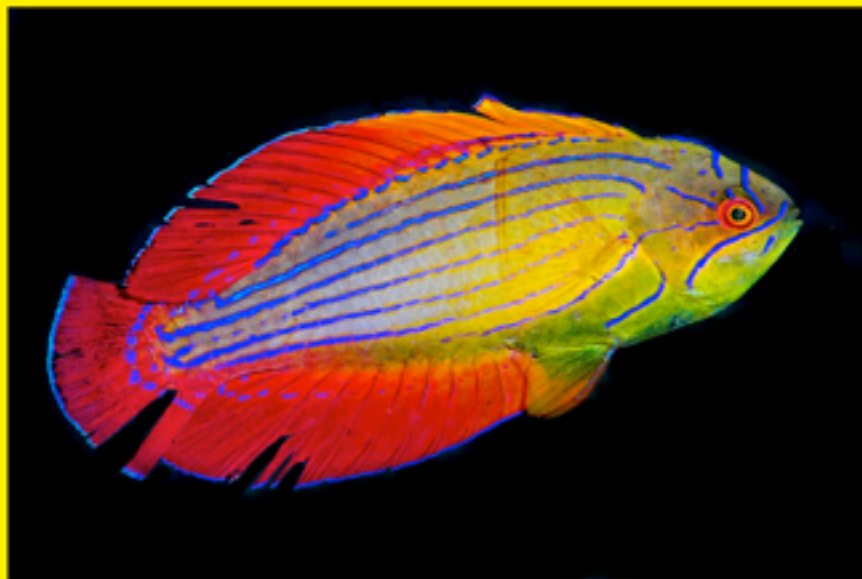


# RED SEA MARINE LIFE



*Reef ID Books*



**Andrey Ryanskiy**

# **Red Sea Marine Life**



**Photographic guide with 2100+ species**

**Andrey Ryanskiy**



## INTRODUCTION

**Basics.** The Red Sea is a semi-enclosed young ocean basin between Asia and Africa, about 2000 km long with a maximum width of 355 km, with unique environment and biology. The Red Sea is bordered on its western shore by Egypt, Sudan, Eritrea and Djibouti and on its eastern shore by Israel, Jordan, Saudi Arabia and Yemen.



### 10 facts to know about the Red Sea:

- The Red Sea is a rich and diverse ecosystem that harbours over 1200 species of fish and 360 species of scleractinian coral.
- Of these, 15% of the fish species, 17% of ascidians and 7% of the coral species are endemic. Peripheral regions, such as the Red Sea, are extremely important as “evolutionary incubators” that contribute unique genetic lineages to other regions of the Indo-West Pacific.
- It is the northernmost tropical sea in the world.
- The extremely low rainfall over the Red Sea and its coasts and high surface temperatures make it one of the warmest and saltiest saltwater bodies in the world.
- No significant rivers or streams drain into the sea. This results in much better visibility than in other seas, including South-East Asia.
- It has an average depth of 490 m, and in the central Suakin Trough it reaches its maximum depth of 3,040 m.
- The name of the sea may signify the seasonal blooms of the red colored algae near the water's surface. Some scholars think that the name red is referring to the direction south, just as the Black Sea's name may refer to north.
- The 101-mile-long Suez Canal links the Mediterranean Sea to the Red Sea. It resulted in the migration of marine species across the Suez Canal, usually from the Red Sea to the Mediterranean Sea, and more rarely in the opposite direction. More than 300 species native to the Red Sea have been identified in the Mediterranean Sea.
- The Red Sea is one of the most popular dive destinations in the world with crystal clear water, the world's most beautiful coral reefs, plentiful marine life, and highly diverse sites to dive.
- Marine Protected Areas are very important in protecting Red Sea natural resources and marine biodiversity. Ras Mohammed, Nabq, Abu Galum, Gebel Elba, Wadi El Gemal in Egypt, Sanganeb and Dungonab Bay in Sudan - all of them are impressive reef formations and areas of great natural beauty. Diving centers in the area operate under environmental-friendly procedures.

### 10 facts to know about the Red Sea Marine Life Book

- Two hundred years ago, in 1822, Dr. Eduard Rüppell of the Senckenberg Museum in Frankfurt collected fishes in the Red Sea for his book, “Fishes des rothen Meeres”, featuring 161 species. This book continues the tradition, at the modern technical level.
- A comprehensive pictorial guide: 2900 full color photographs of 2100+ species, including 810+ fish species, 250 cnidarians (corals and relatives) and near 350 species of nudibranchs and sea slugs.
- New species of fish, nudibranchs, sea slugs and other invertebrates were discovered by the author during the work on this book.
- Several well-known Western Pacific species have been recorded for the first time in the Red Sea. Some important and interesting species were photographed for the first time in their natural environment.
- Important discoveries were made by the author's colleagues and friends, many of whom contributed wonderful and unique photographs to this book.
- Live photo of hundreds of species have never before appeared in field guides or popular books.
- The book covers the region from the Aqaba and Eilat to Farasan Islands, South Sudan and Eritrea.
- Red Sea Marine Life serves to fill a gap in the general public's understanding of Red Sea marine life in the two decades since the previous guides were published.
- This book does provides its readers with basic information about the biology and taxonomy, serving mainly as a visual guide to their identification. Validity of the species names was checked with the help of the World Register of Marine Species (WoRMS).
- Convenient pictorial guide at the beginning will help readers navigate through the book.

**ACKNOWLEDGMENTS**

**Diving and Logistic.** First and foremost the author thanks the management and owners of Red Sea Diving Safari for the opportunity to spend many weeks exploring the rich biodiversity of Southern Egypt. Marsa Shagra, Marsa Nakari, Wadi Lahami - each of these locations was unique both in terms of reef life and hospitality of the staff. Great food and excellent rooms also contributed to the success. Sarah O'Gorman not only smoothly coordinated the program, but also proved to be an excellent underwater photographer and macro spotter.

Work in Dahab was greatly aided by Scuba Seekers and Sameh Sokar. Great dive center and superb location. The author felt himself caught in a time loop - since the dive center was located here earlier, where he took the Advanced Trimix course way back in 2004.

Ducks Diving Quesier in Mangrove Bay is famous for its relaxed family atmosphere and the author thanks Essam Hasan for the invitation and great days at this place.

Yara El Zemaity (CDWS) unselfishly gave her time and provided invaluable support in the final stages of the author's work on the book since 2021.

The author is also extremely grateful for the hospitality of the following Red Sea diving centers: Subex Red Sea in Maritim Jollie Ville Resort, Dolphin Diving Center, Diving Vision in Tropitel Naama Bay Hotel, Sinai Blues in Four Seasons Resort, Diving & Discovery in Al Fanar Area Sharm El Sheikh, Black Rock in Panda Resort, Dahab, Cinderella El Dawley in Shores Amphoras Resort, Dive for Life in Hyatt Regency Sharm El Sheikh, Blue Planet Diving in Barcelo Tiran Sharm. Xperience Resorts management kindly assisted in exploring Sharm El Maya Bay.

**Scientific Acknowledgments.** Special recognition must be given to the scientists who shared with readers their expertise in species identification. Arthur Anker, Frederic Ducarme, Christopher L. Mah, Charles G. Messing, Leslie Harris, Sergey Bogorodsky, Stefano Draisma, David Greenfield, Andrey Ostrovsky, Ondrej Radosta, Joe Rowlett, Jake Adams, Zdenec Duris, you helped to identify many species from this photo guide.

**Photos.** The majority of the species images were taken by the author, which amounted to 1400 of more than 2100 species. However, about a hundred underwater photographers have added their work to this collection. The author appreciate their efforts and assistance in making this book as comprehensive as possible.

The author is especially indebted to two people who contributed greatly to the collection of photographs for this book: Sven Kalbrock and Rafi Amar. Their thirst for discovery added unique images of fish and invertebrates, many of which were new to science.

The author cannot fail to mention separately and with gratitude the following wonderful photographers and experts in the underwater world: Arthur Anker, Svetlana Biger, S.V. Bogorodsky, Elke Bojanowski, Itai Grisaru, Roman Leleka aka Roman Hurghada, Nicole Lindegger, Sarah O'Gorman, Yury Perevoznicov, Irina Sevriuk, Inna Sverdlova, Keith D. P. Wilson (in alphabetical order)

The author thanks and acknowledges the following underwater photographers for their generosity in contributing beautiful photographs: Amir Abramovich, Kadir Suat Akca, Jim Anderson, Dani Barchana, Silke Baron, Yves Benisty, Moises Bernal, Philippe Bourjon, Joe Boyd, Flavia Brandi, Ivan Buhvalov, Sandra Caramelle, Pierre de Chabannes, Chih-Wei Chen, Adam Chrzuszczyk aka Adam Nugus, Stewart Clarke, Mark Conlin, Ellen Cuylaerts, Val. Darkin, Jan Derk, Arik Diamant, Chaloklum Diving, Izuzuki Diving, Pascal Dupuy, Brindusa Eisele, Bob Fenner, Kenneth Foster, Christian Frey & Dr. Cordula Ullrich, Nir Friedman, Dawn Goebbels, Natalia Grabovskaja, Brian Gratwicke, Gennadiy Grishin, Daniele Heitz, Anne Hoggett, Bernd Hoppe, Wen-Chien Huang, Tamer Hussien, Yehia Ibrahim, Chiharu Ichimura, Gunther Indra, Stan Jazwinski, Scott Johnson, Jeanette Johnson, Vitalii Kalutskyi, Derek Keats, Alexandr Knahovskiy aka Alexandr Krasnomorskiy, Robert Koch, Albert Kok, Noam Kortler, Rainer Kretzberg, Maria Lagendijk, Francois Libert, Richard Ling, Sergey Lisitsyn, Jay Lord, Jenny Lord, Christian von Mach, Tatyana Malkerova, Marinnina Marina, Nigel Marsh, Colin Marshall, Sergio Massaro, Brian Mayes, Al McGlashan, Nico Michiels, Alexandr Nikolaev, Sonja Ooms, Aneta Pawska, Roberto Pillon, Matthew D. Potenski, Kyle Power, Olga Romanchuk, Shevy Rothman, Alex Rush, Yoichi Sato, Sam Scalz, Gomen See, Barney Seier, Sumit Sen, Tamar Shabi, Dr. Kwang-Tsao Shao, Nimrod Shay, David Sheni, Shohei Shigeta, Hans Sjoeholm, Christian Skauge, Kira Snorkel, Ria Tan, Steven Van Tendeloo, Utsusemi-gai, Petr Vorotnikov, Niki Weidinger, Prof. Dr. Peter Wirtz, Wesley Wong, Nayer Youakim, Rickard Zerpe, Dov Zingerman, Eitan Ben Zvi (in alphabetical order)

The authors are acknowledged individually under each photograph, and the copyright for these pictures remains with them.

I would like to thank my wife Irina Khlopunova for patient support during the work on this book.

**ABBREVIATIONS** IP: Indo-Pacific, IWP: Indo-West Pacific, IO: Indian Ocean, WIO: Western Indian Ocean, PO: Pacific Ocean. MF: Marine Flatworms, reference in species descriptions with Marine Flatworms of the Tropical Indo-Pacific book (Andrey Ryanskiy, 2021); Photo contributors: ©AR: ©Andrey Ryanskiy

IT - Identification Tentative; sp. - used when the actual specific name cannot or need not be specified

**COPYRIGHT** First Edition COPYRIGHT ©2022 Andrey Ryanskiy. All rights reserved.

Front cover photos: upper right: ©Roman Hurghada, bottom right: ©Rafi Amar, others: ©AR. Preface photo: ©AR. Map on the previous page ©Eric Gaba-CC-BY-SA-4.0-SS.



# PICTORIAL INDEX



**SHARKS - 6**



**RAYS - 8**



**EELS - 12**



**LIZARDFISHES - 19**



**FROGFISHES - 21**



**SOLDIERFISHES - 25**



**PIPEFISHES & SEAHORSES - 28**



**SCORPIONFISHES - 32**



**STONEFISHES - 35**



**FAIRY BASSLETS - 36**



**GROUPERS - 37**



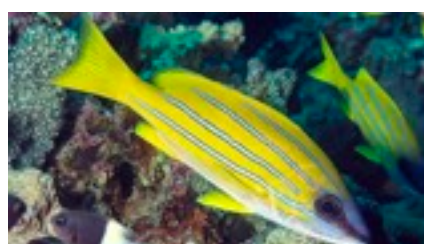
**DOTTYBACKS - 41**



**CARDINALFISHES - 44**



**JACKS - 52**



**SNAPPERS - 55**



**FUSILIERS - 58**



**THICKLIPS - 59**



**EMPERORS - 61**



**MULLET - 63**



**BUTTERFLYFISHES - 66**



**ANGELFISHES - 67**



**DAMSELFISHES - 69**



**WRASSES - 75**



**PARROTFISHES - 87**



**BLENNIES - 93**



**GOBIES - 99**



**SURGEONFISHES - 115**



**BARRACUDAS - 117**



**SOLES - 120**



**TRIGGERFISHES - 121**



**FILEFISHES - 123**



**PUFFERS - 125**



# PICTORIAL INDEX



**DOLPHINS, WHALES - 128**



**TURTLES - 130**



**DUGONS - 130**



**NUDIBRANCHS: DORIDINA - 132**



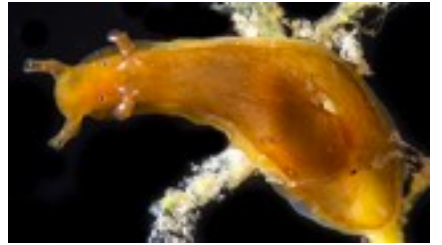
**NUDIBRANCHS:  
CLADOBRANCHIA - 154**



**SEA SLUGS: ACTEONOIDEA,  
CEPHALASPIDEA - 169**



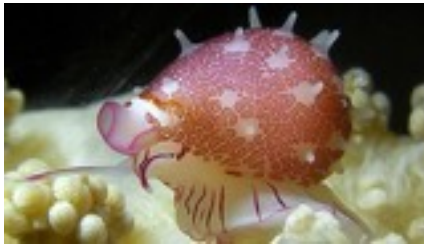
**SEA SLUGS: SACOGLOSSA - 174**



**SEA SLUGS: SEA HARES - 179**



**SEA SLUGS: NOTASPIDEA - 181**



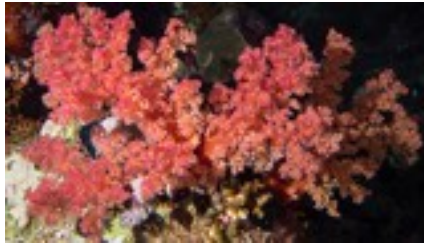
**GASTROPODS, CHITONS - 184**



**BIVALVS - 204**



**OCTOPUSES, SQUID,  
CUTTLEFISH - 206**



**OCTOCORALS - 208**



**SEA ANEMONES - 217**



**BLACK CORALS - 221**



**STONY CORALS - 223**



**HYDROZOANS,  
SCYPHOZOANS - 239**



**SHRIMPS - 242**



**LOBSTERS - 250**



**ANOMURANS - 253**



**BRACHURA - TRUE CRABS - 256**



**STARFISHES - 267**



**BRITTLE STARS - 269**



**SEA URCHINS - 272**



**SEA CUCUMBERS - 274**



**TUNICATES - 278**



**SPONGES - 282**



**FLATWORMS, ACOEL  
WORMS - 285**



**RIBBON WORMS, PEANUT  
WORMS - 290**



**SEGMENTED WORMS - 290**



**BRYOZOA, FORAMINEFERA,  
CTENOPHORA - 296**



**MARINE PLANTS - 298**





**Cocotropus steinitzi** Steinitz' Velvetfish, IWP, 5 cm. 5 distinct spines on preopercle ©Sven Kahlbrock, Sataya



**Ptarmus gallus** Crested Velvetfish, Red Sea, 10 cm. Imitates sunken leaf with swaying movements. ©AR



**Plectranthias nanus** Dwarf Perchlet, IP: Red Sea to Hawaii, 3.5 cm. ©Stan Jazwinski, Marshall Islands.



**Plectranthias winniensis** Redblotched Perchlet, IP: Red Sea to Hawaii, 5 cm. ©AR, Mangrove Bay



**Pseudanthias gibbosus** Redstripe Anthias, IWP: Red Sea to Tonga, 20 cm. Locally common at 60-90 m. ©AR



**Pseudanthias lunulatus** Lunate Anthias, IO: Red Sea to Maldives and Bali, 10 cm. Female. ©AR



**Pseudanthias lunulatus** (continued) Usually in small groups, one male and several females, below 60 m. Male with distinct Y-shaped yellow-orange bar below dorsal fin. ©AR, Ras Mohammed



**Pseudanthias heemstrai** Orangehead Anthias, Red Sea endemic, 13 cm. Found in large aggregations near deep drop-offs, usually below 35 m. Photo on the left - female, right - male. ©AR







***Pseudanthias squamipinnis*** Scalefin Anthias, IWP: from Red Sea to Fiji and Japan, 15 cm. Male with red spot on pectoral fin (left photo), female with blue and orange stripe behind eye. ©AR



***Pseudanthias taeniatus*** Broadstriped Anthias, Red Sea endemic, 13 cm. Males with two broad red stripes. Usually in aggregations near drop-offs, 10-65 m depth. ©AR, Sinai



***Pseudanthias taeniatus*** (continued) Females orange dorsally and lavender-pinkish or red ventrally. ©AR, Sharm El Sheikh



***Cephalopholis rogae*** Redmouth Grouper, IWP: Red Sea, East Africa to Fiji, 60 cm. Former *Aethaloperca rogae*. Common near caves, overhangs with aggregations of small fish. Photo on the right subadult. ©AR, Marsa Alam



***Cephalopholis oligosticta*** Fewspot Hind, Red Sea endemic, 30 cm. Orange with blue spots. ©M. Bernal



***Cephalopholis argus*** Peacock Grouper, IP: Red Sea to F. Polynesia, 55 cm. Hunts at night, common. ©AR





***Cephalopholis hemistiktos*** Halfspotted Hind, WIO, Red Sea to Socotra and Pakistan, 35 cm. Brown or reddish with dark-edged blue spots. Common but shy and hard to photograph. ©AR, Marsa Shagra



***Cephalopholis miniata*** Coral Hind, IP: Red Sea to South Africa and French Polynesia, 50 cm. Reddish with numerous blue spots, juveniles (photo on the right) orange. ©AR, Marsa Nakari



***Cephalopholis sexmaculata*** Sixblotch Grouper, IP: Red Sea and South Africa to Japan and French Polynesia, 50 cm. Usually near drop offs, in shallow caves and overhangs. ©AR, South Egypt



***Epinephelus leucogrammicus*** Slender Grouper, IWP: Red Sea to Samoa, 65 cm. ©Sven Kahlbrock



***Epinephelus coioides*** Orange-Spotted Grouper, IWP, 95 cm. H-shaped marks on sides. ©Keith D. P. Wilson



***Epinephelus areolatus*** Areolate Grouper, IWP: Red Sea to Japan, New Caledonia and Fiji, 40 cm. White with numerous polygonal rounded orange-yellow spots. Tail with narrow white margin. ©AR, Dahab







***Epinephelus fasciatus*** Blacktip Grouper, IP from Red Sea to Western Pacific, 40 cm. Probably a species complex. Dorsal fin rays with black white tips. Common. Shown here are two color morphs. ©AR, Dahab



***Epinephelus fasciatus*** (continued) Juveniles are red-brown with a darker head. ©AR



***Epinephelus fuscoguttatus*** Tiger Grouper, IP, 95 cm. Brown spots, dark saddle above tail base. ©AR



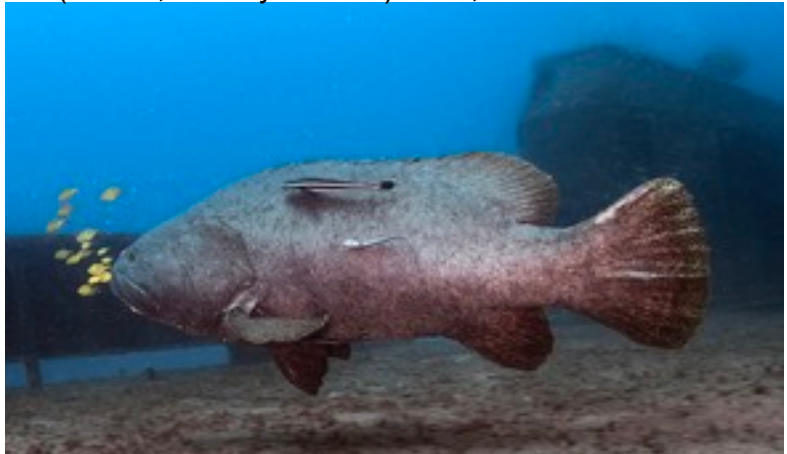
***Epinephelus geoffroyi*** Brownspotted Grouper, Red Sea endemic, 75 cm. ©S. Bogorodsky, Ras Mohammed



***Epinephelus malabaricus*** Malabar Grouper, IP, 234 cm (record, usually smaller) ©AR, Ras Mohammed



***Epinephelus lanceolatus*** Giant Grouper, Red Sea to Hawaii and Australia, reported to 270 cm, 300 kg. Often near caves and wrecks. Feeds on fishes, crabs, lobsters. ©AR, left, N. Caledonia, ©Rafi Amar, Tanzania, right



***Mycteroperca morrhua*** Comet Grouper, IWP, 90 cm. Deep water species. ©Chiharu Ichimura, Indonesia

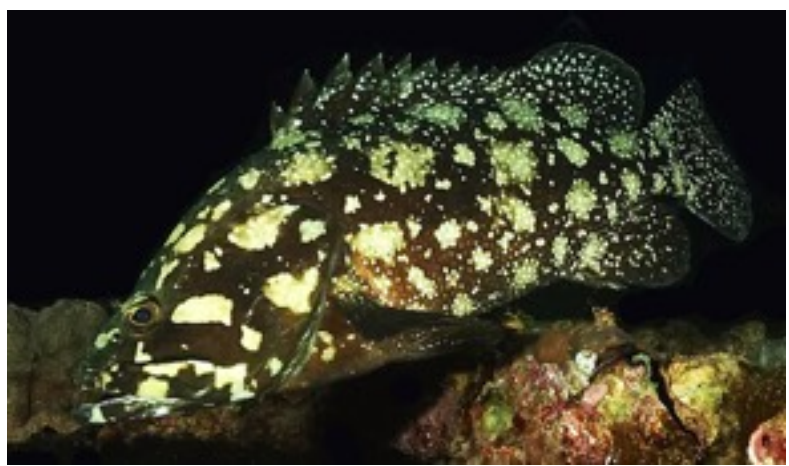


***Epinephelus polyphekadion*** Camouflage Grouper, IP, 75 cm. Head and body with dark-brown spots. ©AR





***Epinephelus stoliczkae*** Epaulet Grouper, WIO: Red Sea to Pakistan, 35 cm. ©Keith D. P. Wilson, Gulf



***Epinephelus summana*** Summan Grouper, Red Sea, Gulf of Aden, 52 cm. ©Sven Kahlbrock, Sudan



***Epinephelus tauvina*** Greasy Grouper, IP, 75 cm. Shallow reefs, night hunter. Orange-brown spots. ©AR



***Epinephelus tukula*** Potato Grouper, IWP: Red Sea to Australia, 140 cm. ©Derek Keats-SA-CC BY 2.0



***Plectropomus marisrubri*** Roving Coralgrouper, Red Sea endemic, 90 cm. Close to *P. pessuliferus*, was treated as a subspecies before. Grey-brown to red with pale bars. ©Nicole Lindegger (left), ©Keith D. P. Wilson (right)



***Plectropomus marisrubri*** (continued) Found on rocky reefs, usually hides in caves and overhangs during the day. ©AR, subadult 35 cm, left, juvenile, 20 cm, right. Wadi Lahami



***Plectropomus areolatus*** Squaretail Coralgrouper, Red Sea to Marshall Islands, 75 cm ©S. Biger, Egypt



***Variola louti*** Lyretail Grouper, Red Sea to Japan, 90 cm. Lunate tail with a bright yellow margin ©AR, adult





***Pseudochromis dixurus*** Lyretail Dottyback, Red Sea endemic, 8 cm. Silty reefs, in caves and overhangs. Dark grey-brown color phase and (younger specimens) yellow caudal fin phase with dark stripe. ©AR, Dahab



***Pseudochromis sankeyi*** Striped Dottyback, Red Sea to Socotra, 8 cm. ©S. Bogorodsky, Farasan Isl.



***Pseudochromis pesi*** Pale Dottyback, Red Sea endemic, 10 cm. ©AR, Marsa Nakari



***Pseudochromis olivaceus*** Olive Dottyback, Red Sea endemic, 8 cm. Shallow reefs, hides in the branching corals, usually *Pocillopora*. Dark olive dorsally and yellow ventrally or drab brown. ©AR, Wadi Lahami



***Pseudochromis springeri*** Bluestriped Dottyback, Red Sea endemic, on branching corals, 5.5 cm. ©AR



***Chlidichthys rubiceps*** Redhead Dottyback, Red Sea endemic, 4.5 cm. ©S. Bogorodsky, Saudi Arabia



***Chlidichthys auratus*** Golden Dottyback, Red Sea endemic, 4.5 cm. Usually on the roof of small caves, inverted. Shy but curious and returns to look at the photographer. ©AR, Marsa Shagra







***Paracaesio sordida*** Fusilier Snapper, IWP, 48 cm. Dorsal and caudal fins reddish. Solitary but often in big schools near deep reef slopes. ©AR, Sudan



***Lutjanus argentimaculatus*** Mangrove Snapper, IWP: Red Sea to Samoa, 100 cm. Subadults with curved blue line on the snout (photo on the right, in mangroves!) Feeds on fishes and crabs. ©AR, Mangrove Bay.



***Lutjanus bohar*** Twinspot Snapper, IWP: Red Sea to South Africa and Australia, 80 cm. Adults with yellow eyes. Photo on the right - subadult. ©AR, Wadi Lahami



***Lutjanus bohar*** (continued) Juveniles with two white spots on the back. ©AR, Marsa Shagra



***Lutjanus coeruleolineatus*** Bluelined Snapper, Red Sea to Oman and Socotra, 35 cm ©Daniele Heitz



***Lutjanus ehrenbergii*** Ehrenberg's Snapper IWP, 35 cm. Five yellow stripes below lateral line. ©AR, Sinai



***Lutjanus fulviflamma*** Dory Snapper, IWP: Red Sea to Samoa and Japan, 35 cm. ©AR, Wadi Lahami





***Lutjanus gibbus*** Humpback Snapper, IP: Red Sea to Hawaii, 50 cm. Red-brown fins. Usually in small schools near coral reefs, juveniles (right) in the bays and lagoons. ©AR, Sudan, Wadi Lahmi.



***Lutjanus kasmira*** Bluestriped Snapper IP 35 cm. Four blue stripes, faint greyish stripes on lower side. ©AR



***Lutjanus lutjanus*** Bigeye Snapper IP, 30 cm. Silvery with bright yellow midlateral stripe. ©AR



***Lutjanus monostigma*** Onespot Snapper, IP, 60 cm. Red eyes, yellow fins, black spot on back. ©AR



***Lutjanus rivulatus*** Speckled Snapper IP, 80 cm. Yellow fins and edge of tail. ©AR



***Lutjanus sebae*** Emperor Snapper, IWP: Red Sea to Japan, 80 cm, three dark red bands, red eyes. ©AR



***Macolor niger*** Black Snapper, IWP, 60 cm. Adults dark grey, in small aggregations at daytime. ©AR



***Macolor niger*** (continued) Juveniles with rounded tail, black and white (left.) Sub-adults (right) with white round spots under the dorsal fin. ©AR, Hurghada







***Caesio caerulaurea*** Scissortail Fusilier, IWP, 30 cm. Yellow stripe just above midlateral line. Occurs in aggregations near deep reef slopes, feeding on zooplankton. Photo on the left - subadult. ©AR, Wadi Lahami



***Caesio lunaris*** Lunar Fusilier, IWP: Red Sea to Solomons and Japan, 30 cm. Greenish-blue, caudal fin blue with black tips. Sub-adults with yellow caudal fin base (photo on the left). ©AR, Sharm El Sheikh.



***Caesio suevica*** Red Sea Fusilier, Red Sea endemic, 35 cm. Easily recognized by white bands on the caudal fin, before dark tips. Photo on the right - subadult. ©AR, Marsa Shagra.



***Caesio striata*** Striped Fusilier, Red Sea endemic, 25 cm. Dark stripes dorsally. ©AR



***Caesio varilineata*** Yellowlined Fusilier, Red Sea to Andaman Sea, 28 cm. ©Keith D. P. Wilson



***Caesio xanthonota*** Yellowback Fusilier, IO: Red Sea to Indonesia, 32 cm. ©AR, Similan Islands.



***Pterocaesio chrysozona*** Goldband Fusilier, Red Sea to Japan, 21 cm. ©AR, Naama Bay.





***Chaetodon auriga*** Threadfin Butterflyfish, IP, 23 cm. Two-ways diagonal stripes on sides ©AR, Tiran Straits



***Chaetodon austriacus*** Exquisite Butterflyfish, WIO: Red Sea to Oman, 14 cm. Yellow body with 14 dark stripes, oval spot on the 4th line. Feeds on coral polyps. Photo on the right - juvenile. ©AR, Marsa Shagra.



***Chaetodon larvatus*** Orangeface Butterflyfish, Red Sea to Oman, 12 cm. ©AR, Wadi Lahami.



***Chaetodon lineolatus*** Lined Butterflyfish, IWP, 30 cm (the largest butterflyfish!) Feeds on coral polyps. ©AR



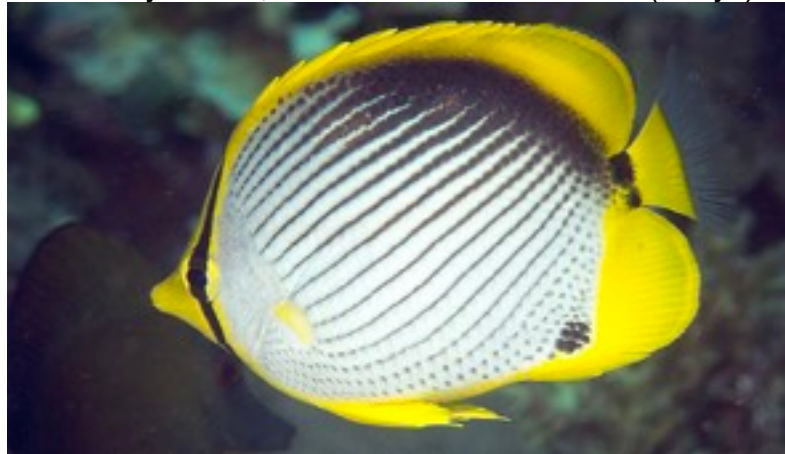
***Chaetodon melapterus*** Arabian Butterflyfish, Red Sea to Persian Gulf, 12 cm ©Keith D. P. Wilson, Oman



***Chaetodon fasciatus*** Diagonal Butterflyfish, Red Sea endemic, 25 cm. Feeds on coral polyps, algae ©AR



***Chaetodon leucopleura*** Somali Butterflyfish, S. Red Sea to Seychelles, 18 cm. ©Dawn Goebbels (Kenya)



***Chaetodon melannotus*** Blackback Butterflyfish, Red Sea to Japan, 15 cm. Tail base with black saddle ©AR



***Chaetodon mesoleucos*** Paleface Butterflyfish, Red Sea endemic, 12 cm ©Danielle Heitz, Saudi Arabia

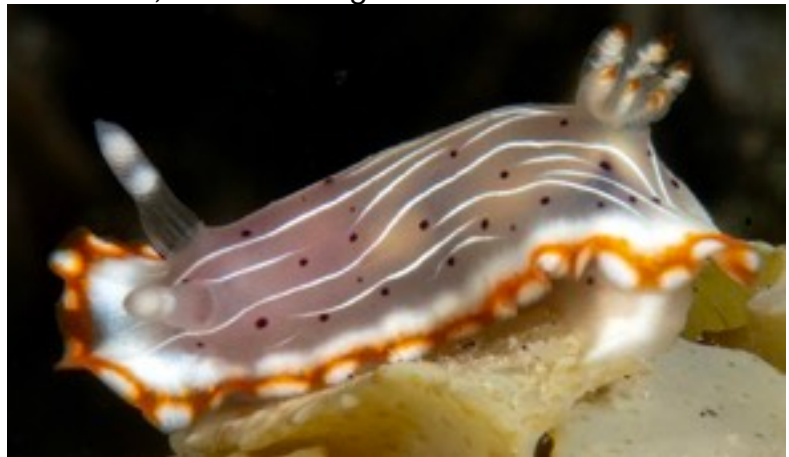




***Glossodoris kahlbrocki*** Red Sea, 60 mm. Milky-white with dark blue marginal band and sky blue submarginal band. It feeds on a mustard-colored sponge, photo on the left. ©AR, Sharm El Naga



***Glossodoris pallida*** WIO, 40 mm. Yellow marginal band, central opaque white markings ©AR, Dahab



***Goniobranchus pseudodecorus*** Red Sea, 16 mm. Orange margin with white patches. ©AR, Sinai



***Goniobranchus annulatus*** IWP, 100 mm. White with orange spots and two large purple circles surrounding the gills and the rhinophores. ©AR, Naama Bay



***Goniobranchus charlottae*** Red Sea, 60 mm. Reddish-brown with scattered circles and three marginal bands. ©Sarah O'Gorman (photo on the left), ©Sven Kahlbrock (upper right), ©Rafi Amar (bottom right, juvenile)







***Goniobranchus fidelis*** IP, 30 mm. Cream with undulated red marginal band. Rhinophores and gills black. Toxic glands are distributed in body tissues, coloration warns potential predators. ©Rafi Amar (left), ©Sven Kahlbrock



***Goniobranchus geminus*** IO, 35 mm. Yellowish with dark blue round spots. Feeds on sponges, often found in shadow in caves and overhangs. ©Sven Kahlbrock



***Goniobranchus obsoletus*** Red Sea, Persian Gulf, 40 mm. White with elevated tubercles and brown reticulation between them. Purple and orange marginal bands. ©S. Kahlbrock, photo on the left, ©Y. Perevoznikov, right



***Goniobranchus collingwoodi*** IWP, 44 mm. Central area red-brown with bluish tubercles ©Sven Kahlbrock



***Goniobranchus tinctorius*** Oman, Red Sea, 95 mm. White with red reticulation ©Sven Kahlbrock



***Goniobranchus verrieri*** IP, 17 mm. White, 2 marginal bands: outer red, inner orange. ©Sven Kahlbrock



***Hypselodoris dollfusi*** IO to Bali, 50 mm. Large rounded purplish spots. ©Stewart Clarke, UAE





***Hypselodoris ghardaqana*** WIO, 50 mm. Close to *H. pulchella* but has fewer spots on mantle ©S.Kahlbrock



***Hypselodoris infucata*** IWP, 50 mm. Body with yellow and dark blue spots. ©AR, Dahab



***Hypselodoris maculosa*** IP, 40 mm. Rhinophores with two orange bands. Mantle with brown or purple spots between thin white lines. ©Sarah O'Gorman, photo on the left, Marsa Shagra ©Eitan Ben Zvi, right, Eilat



***Hypselodoris alburtugali*** Red Sea, 30 mm. Brown dots, purple marking absent ©Nicole Lindegger Makadi



***Hypselodoris maridadillus*** IP, 35 mm. Mantle with 5 purple stripes and purple margin. ©Sven Kahlbrock



***Hypselodoris pulchella*** IO, 110 mm. White with yellow spots and purplish patches. Photo on the right shows "train behaviour" ©AR, Straits of Tiran



***Hypselodoris nigrostriata*** IO, 40 mm. Bluish with black zigzag lines and yellow spots ©Dov Zingerman



***Mexichromis katalexis*** Red Sea, Reunion, WP, 30 mm. Purple conical tubercles ©N. Lindegger, Makadi





***Costasiella kuroshimae*** IWP, 7 mm. Colors variable. Translucent, rhinophores with red-brown tips. Sandglass-shaped brownish patch behind the eyes. ©AR, Abu Dabab



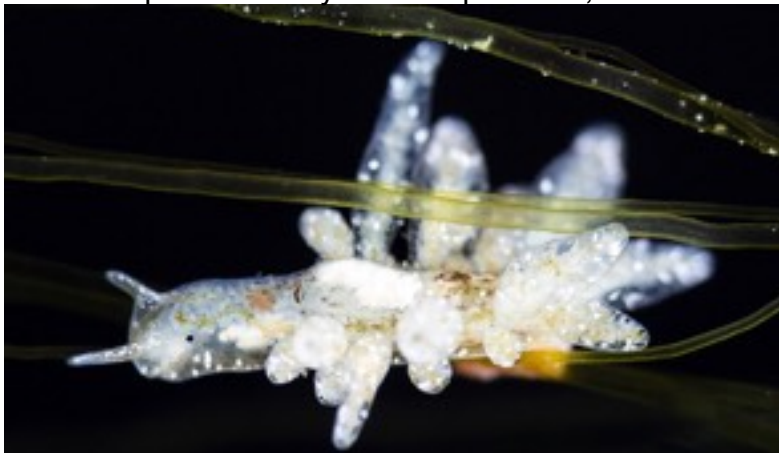
***Costasiella kuroshimae*** (continued) Found on *Avrainvillea* sp. green alga, like other *Costasiella*. Protected bays and lagoons, seagrass and sand areas, 2-30 m. ©AR, Abu Dabab



***Costasiella* sp. 3** IWP, 10 mm. Closely set eyes, dark blue rhinophores with yellow stripe. ©AR, Abu Dabab



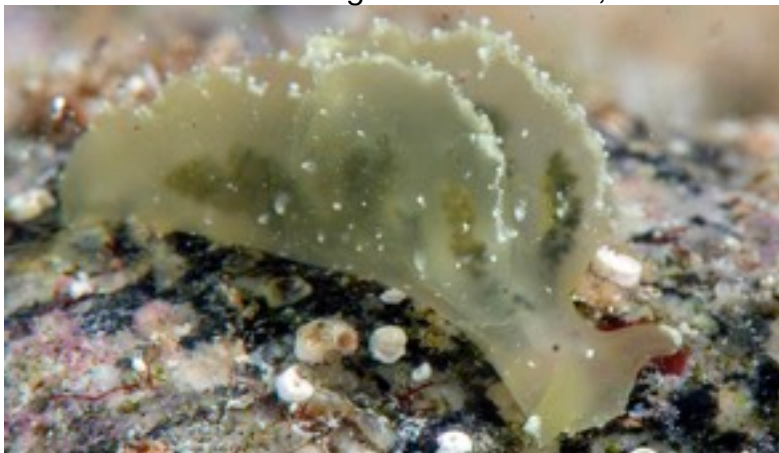
***Costasiella* cf. *usagi*** Red Sea, 8 mm. Dark patch behind the head, striped cerata ©AR Wadi Lahami



***Stiliger* sp. 1** Red Sea to the Philippines, 5 mm. Found on filamentous algae. ©Itai Grisaru, Eilat



***Placida kevinleei*** IP, 10 mm. Yellow-orange, distal half of cerata black. ©Nicole Lindegger, Makadi



***Elysia obtusa*** IP, 20 mm. Translucent with green internal pigmentation and white margin. ©AR, Dahab



***Elysia* cf. *obtusa*** Red Sea, 8 mm. Close to previous species, parapodia margin not white. ©AR, Dahab

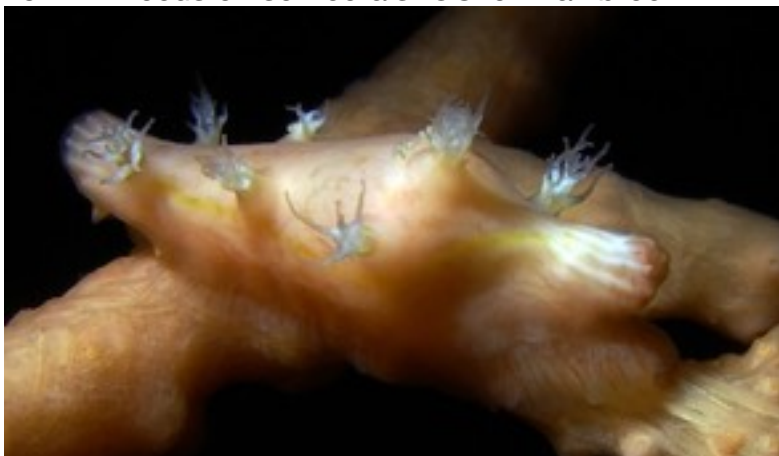




***Diminovula concinna*** IWP: Red Sea to Philippines, 18 mm. Feeds on soft corals. ©Sven Kahlbrock



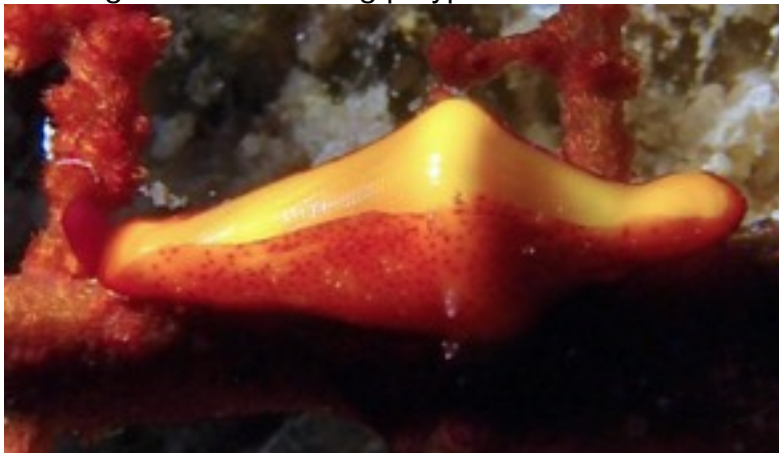
***Diminovula fainzilberi*** Red Sea, 8 mm. Found on soft corals. ©Sven Kahlbrock



***Archivolva alexbrownii*** Red Sea, 16 mm. Light brown with large white branching polyps. ©Sven Kahlbrock



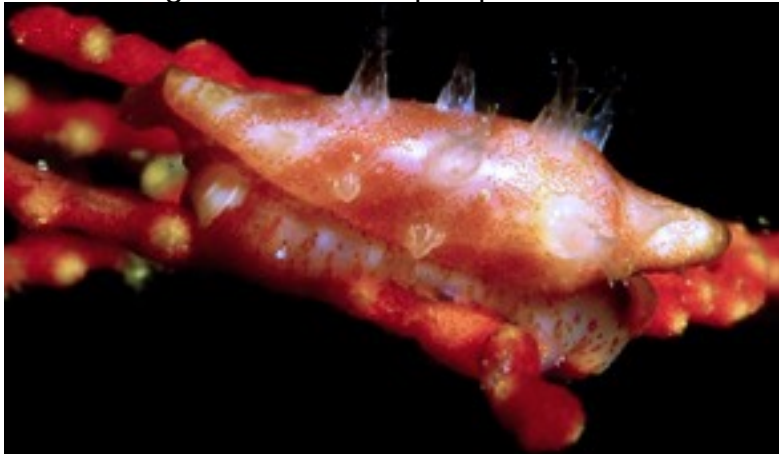
***Archivolva kahlbrocki*** Red Sea, 15 mm. Pinkish with red streaks and large white polyps. ©Sven Kahlbrock



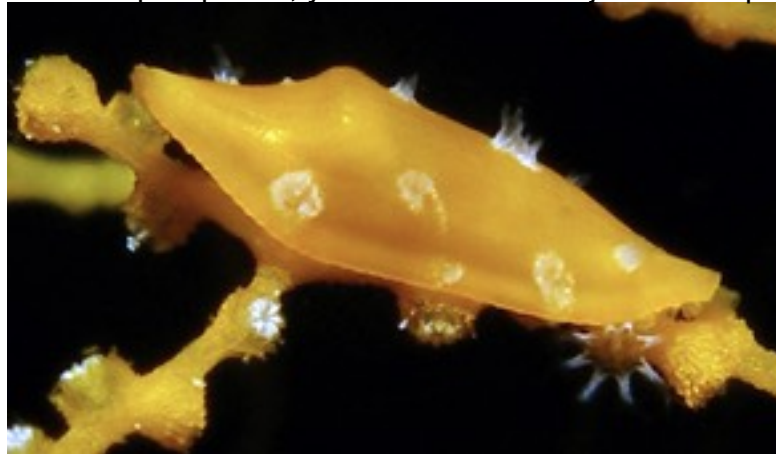
***Crenavolva martini*** IO: Red Sea, E. Africa, 14 mm. Yellow-orange shell with humped profile ©S. Kahlbrock



***Dentiovula colobica*** Red Sea to Japan, 11 mm. Shell with humped profile, yellow mantle ©Johji Nishio Japan



***Prosimnia hepcae*** Red Sea, 6 mm. Occurs in red and yellow color forms. Found on *Melithaea sinaica* sea fan. Papillae mimic the polyps of host sea fan. ©Sven Kahlbrock



***Prosimnia korkosi*** Red Sea, 13 mm. Greenish to light-brown mantle with darker dots ©Sven Kahlbrock



***Rotaovula septemmacula*** IWP, 10 mm. Shell with humped profile and seven brown spots ©S. Kahlbrock



# EGG SHELLS - OVULIDAE



**Naviculavolva debelius** Red Sea, 15 mm. Yellow or white shell, translucent-whitish mantle ©S. Kahlbrock



**Calpurnus verrucosus** IWP, 40 mm. Feeds on leather corals *Sarcophyton* sp. ©Sven Kahlbrock



**Ovula ovum** IP, 120 mm. White shell, black mantle with white or yellow papillae. On leather corals. ©AR



**Procalpurnus lacteus** IP, 24 mm. White shell, mantle with brown network pattern. ©S. Kahlbrock, Sudan

# TRIVIA SHELLS



**Purpurcapsula exigua** IP, 5 mm. Shell with transverse ridges. Mantle with yellowish papillae ©Rafi Amar Eilat



**Trivirostra sp. 1** Red Sea, 5 mm. White shell. Red-brown mantle, elongated papillae. ©AR, Marsa Nakari

# VELUTINIDAE



**Coriocella nigra** IP, 120 mm (shell 40 mm.) Small shell is completely covered by the mantle ©Rafi Amar, Eilat



**Lamellaria sp. 1** Red Sea, 15 mm. Shell is covered by the red mantle. Imitates its sponge prey ©AR, Nabq

# MOON SNAILS



**Notocochlis gualtieriana** IWP, 30 mm. Creamy shell with a pattern of axial brown lines. ©Rafi Amar, Eilat



**Natica sp. 1** Red Sea, 25 mm. Pale yellow shell with rows of darker spots. ©Rafi Amar, Eilat

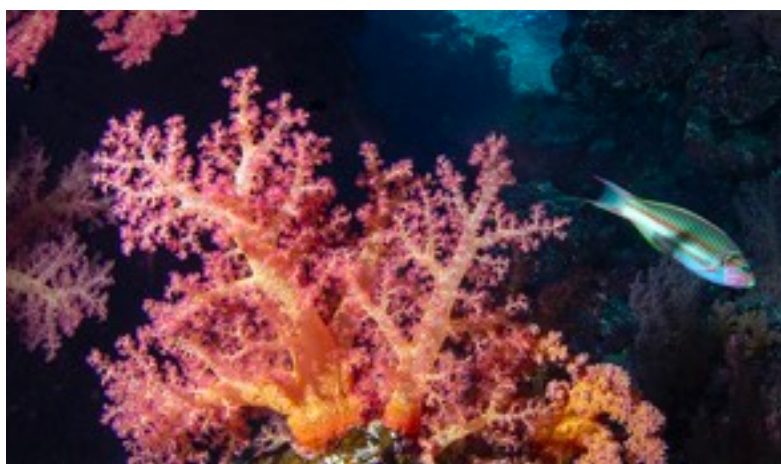
# EGG SHELLS - OVULIDAE

# TRIVIIDAE

# VELUTINIDAE

# NATICIDAE





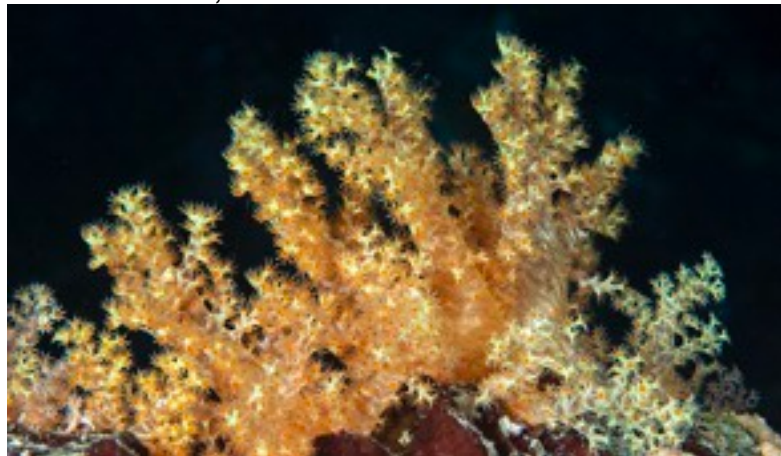
***Dendronephthya hemprichi*** Red Sea endemic, 70 cm. Coloration variable: pink, red, orange, maroon. The most common shallow water soft coral in the Red Sea. ©AR, Marsa Shagra



***Dendronephthya hemprichi*** (continued) Feeds on phytoplankton. Azooxanthellate, can exist without photosynthesis. *Dendronephthya klunzingeri* is a junior synonym. ©AR, Straits of Tiran



***Litophyton arboreum*** IWP, 70-80 cm. Coloration variable, usually pale olive or grey. Smooth stalks with clusters of branches and densely arranged polyps. Zooxanthellate. ©AR, Wadi Lahami



***Scleronephthya* sp. 1** IWP, 25 cm. Widely distributed species with marbled pale orange or yellowish stem and distinct yellow polyps with orange centers. ©AR, Wadi Lahami, Straits of Tiran.



***Siphonogorgia variabilis*** WIO, 40 cm. Yellow branches shading into pink, crown and points purple. ©AR, Egypt



***Siphonogorgia* cf. *variabilis*** Red Sea, 35-40 cm. Pink branches, yellow polyps. ©AR, Ras Mohammed





***Siphonogorgia godeffroyi*** IWP, 60 cm. Widely distributed species. Variable coloration, usually with pink-red branches and lighter polyps. ©AR, Sudan. *Siphonogorgia* & *Chironephthya* genera are *Incertae sedis* today.



***Siphonogorgia mirabilis*** IWP, 45 cm, 45-65 m. Smooth maroon branches, yellow polyps ©AR, Ras Mohammed



***Siphonogorgia* sp. 1** Red Sea, 25 cm. Small colonies with white polyps largely on the sides ©AR, Nabq



***Paralemnalia thyrsoides*** IWP, 20 cm colony. Colony of short, weekly branched stalks ©AR Ras Mohammed



***Chironephthya* sp. 1** Red Sea, 30-40 cm, 25-40 m depth. Hides in the overhangs. ©AR, Ras Mohammed



***Stereonephthya* sp. 1** Red Sea, 20 cm, several similar shallow water species in the Indo-Pacific, with large surface sclerites (white streaks under the surface of the translucent stem). ©AR, Straits of Tiran



***Cladiella pachyclados*** IWP, 20-30 cm colony. Finger leather coral with fully retractable polyps ©AR El Quseir



***Parasphaerasclera* sp. 1** Red Sea, 12 cm. Occurs on steep reef slopes. ©AR, Ras Mohammed







***Klyxum cf. utinomii*** IWP, 25 cm colony. *Kluxum* species are similar to *Cladiella*, but polyps are not fully retractile (photo on the left with contracted polyps) ©AR, Ras Mohammed.



***Alcyonium verseveldti*** IWP, 15-20 cm (colony) Steep reef slopes, 12-40 m. Rare blue coral with unresolved identity, enough to mention that all members of *Alcyonium* are temperate Atlantic species ©AR, Ras Mohammed



***Lobophytum* sp. 1** Red Sea, 40 cm. Identification to species level in situ is not possible. ©AR, Sudan



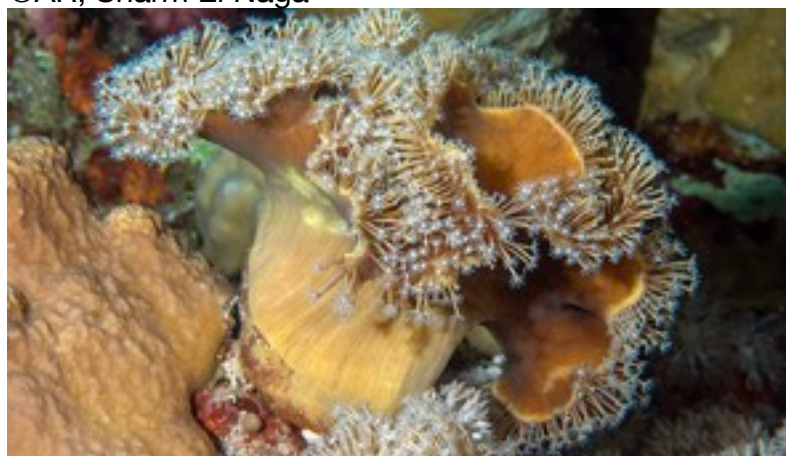
***Lobophytum* sp. 2** Red Sea, 30 cm. Shallow protected bays, isolated pinnacles ©AR, Straits of Tiran



***Rhytisma fulvum*** IP, usually colony reaches 40-50 cm. Encrusting, variable colors from yellow to olive and brown. Photo on the right - a colony with planulae (larva). ©AR, Sharm El Naga



***Sarcophyton* sp. 1** Red Sea, 15 cm. Identification to species level in situ is not possible ©AR, Nabq



***Sarcophyton* sp. 2** Red Sea, 40 cm. Mushroom-shaped brown species. ©AR, Marsa Shagra





***Sarcophyton* sp. 3** Red Sea, 10 cm. Elongated base, small greenish polyps. ©AR, Ras Mohammed



***Sinularia* sp. 1, *Sinularia* sp. 2**, Red Sea, 30-40 cm. Similar to *S. polydactyla*, but ID to species level is challenging. Differences in sclerite and colony morphology are unreliable according to genomic research. ©AR



***Sinularia* sp. 3** Red Sea, 25 cm. Medium sized coral with unbranched “fingers” ©AR, Marsa Nakari



***Sinularia* cf. *brassica*** Red Sea, 30 cm. Flat brown species with visible sclerites. ©AR, Sinai



***Sinularia* sp. 4** Red Sea, 30 cm. Olive-brown coral with short “fingers” ©AR, Marsa Shagra



***Anthelia glauca*** WIO, possibly Red Sea endemic, colony reaches 25 cm. Polyps with pinnate non-pulsating tentacles, grow from an encrusting mat. ©AR, Straits of Tiran



***Heteroxenia fuscescens*** IWP, 25 cm. Pulsating polyps grow from dome-shaped base. ©AR, Sinai



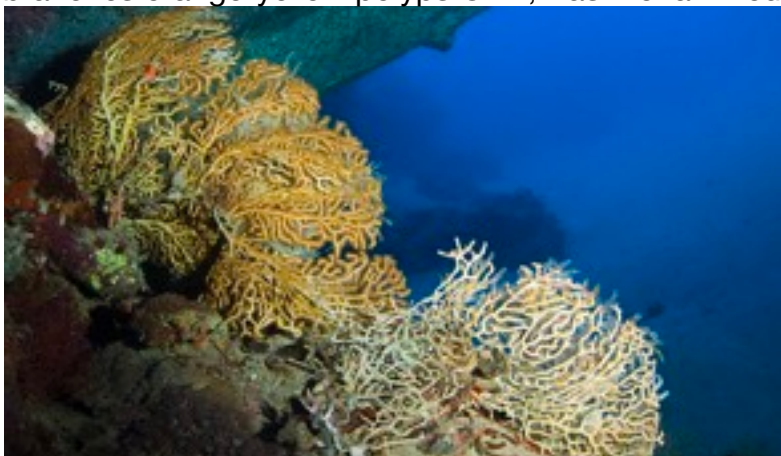
***Xenia* sp. 1** Red Sea, stalked colonies. ID tentative, poss. *Ovabunda* sp., indistinguishable in situ. ©AR



# PLEXAURIDAE



***Astrogorgia* sp. 2** Red Sea, 30 cm. Intertwined purple branches orange-yellow polyps ©AR, Ras Mohammed



**Plexaurid 1** Red Sea, 50-70 cm. Common on deep reef slopes, 60-90 m. ©AR, Ras Mohammed



**Plexaurid 3** Red Sea, 30 cm. Intertwined brown branches with orange-yellow polyps ©AR, Safaga



***Echinomuricea* sp. 1** Red Sea, 60 cm. Unbranched red colonies with purple polyps, 60-70 m. ©AR, Sinai



**Plexaurid 2** Red Sea, 24 cm. Compact red colonies with visible sclerites, yellow polyps. ©AR, Safaga

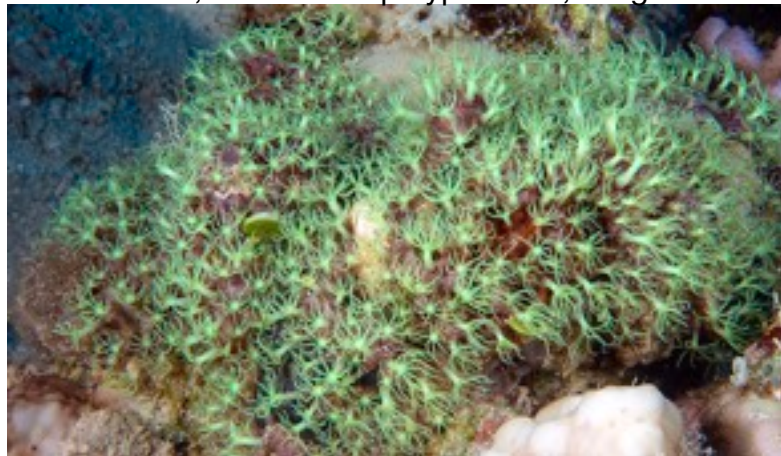


***Plexaura* cf. *debora*** Red Sea, 45-60 cm. Network of red branches, white small polyps. ©AR, Hurghada

# BRIAREIDAE



***Briareum hamrum*** Red Sea, 40 cm colony. Dozens of greenish polyps grow from two-layer mat, often invisible. Like other genus members absolutely tasteless for predators due to internal chemistry ©AR Marsa Nakari



# MELITHAEIDAE



***Melithaea erythraea*** Red Sea endemic, 5-12 cm. Recently introduced into the Mediterranean Sea. Found inside small shallow crevices, 1-5 m depth. Flattened branches, polyps arranged on the narrow sides. ©AR, El Quseir



# PLEXAURIDAE

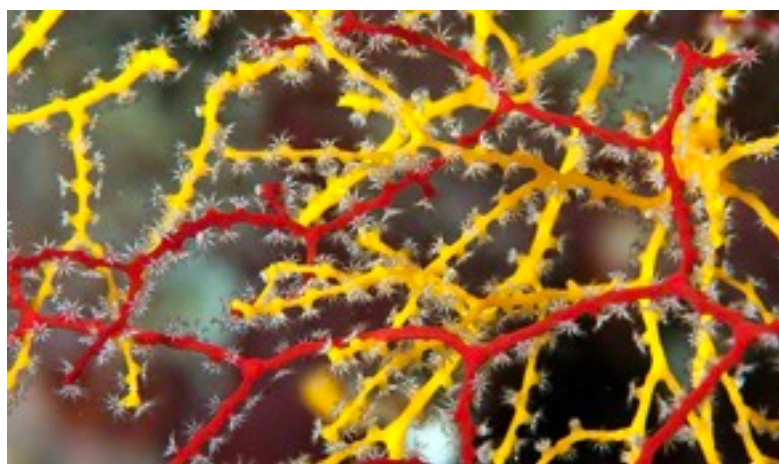
# BRIAREIDAE

# MELITHAEIDAE

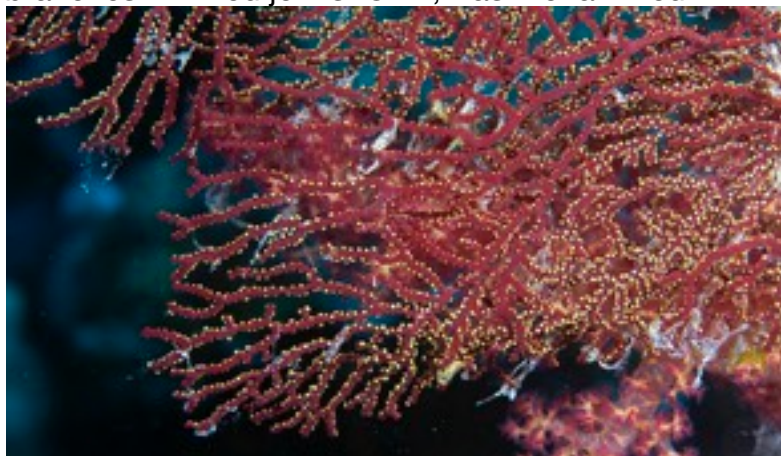




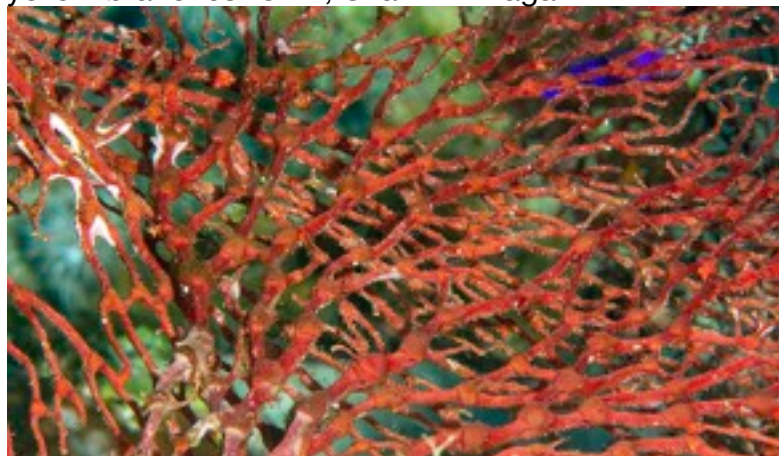
***Melithaea delicata*** WIO, 35 cm. Network of white branches with red joints. ©AR, Ras Mohammed



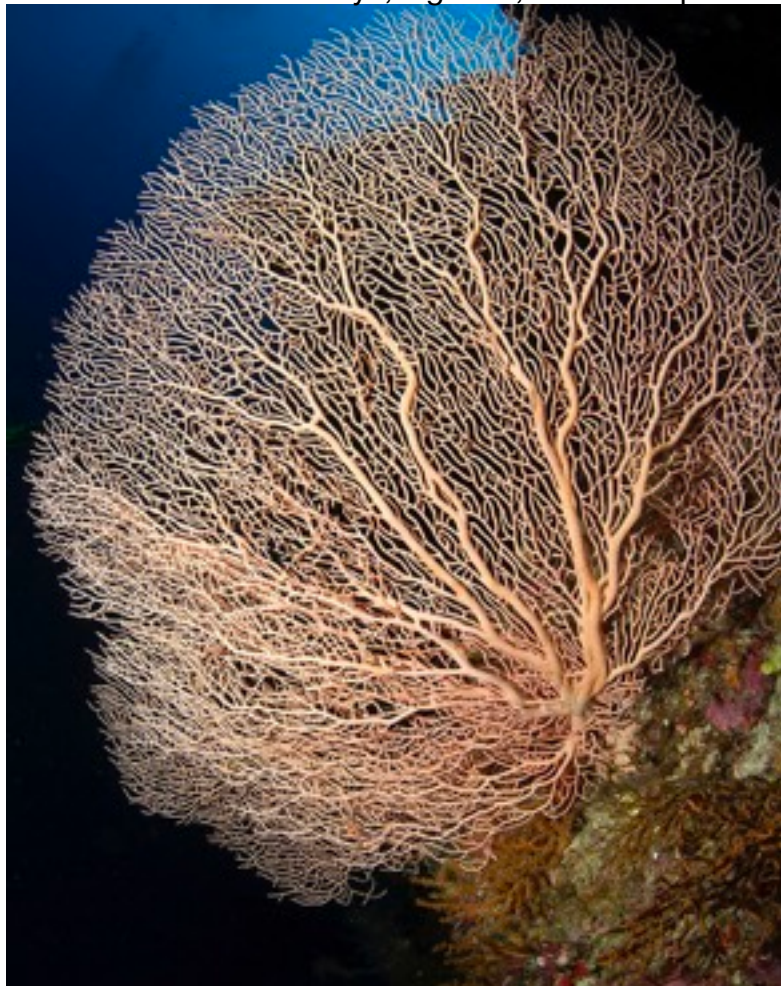
***Melithaea sinaica*** Red Sea, 15 cm. Red, orange or yellow branches. ©AR, Sharm El Naga



***Melithaea splendens*** Red Sea, 60 cm, 15-30 m depth. Red or violet red branches, rarely pale violet. Polyps biserially arranged or leaving one side free on larger branches. ©AR, Ras Mohammed



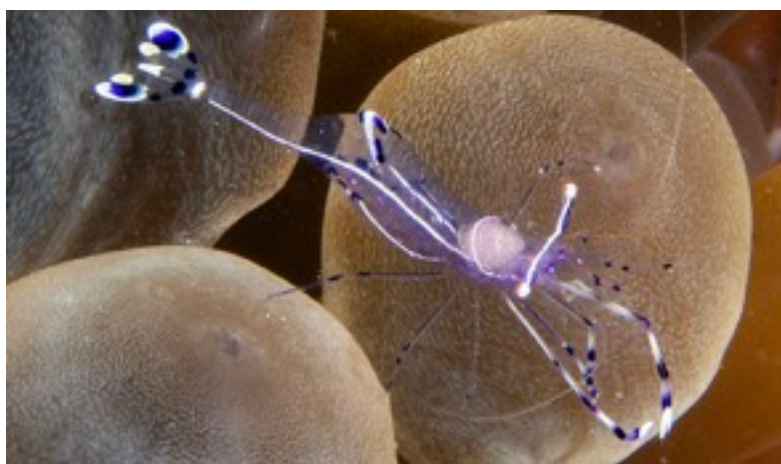
***Melithaea rubrinodis*** Red Sea, 60 cm. Bushy bifurcated branches, pale brown or grayish. The red nodes are not visible. Protected bays, lagoons, 5-35 m depth. ©AR, Marsa Shagra



***Annella mollis*** IWP, 200+ cm. Common species on outer reef slopes with moderate current, 5-55 m depth. Home to commensal seashells (check Ovulidae pages), small gobies, Longnose Hawksfish ©AR, Sudan



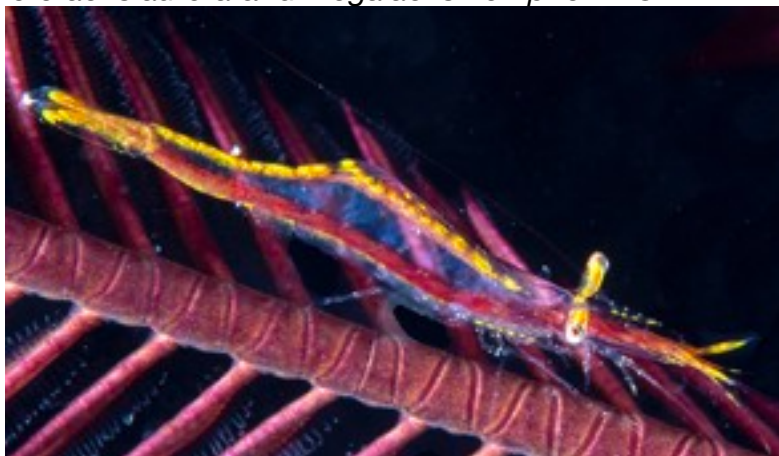




***Ancylomenes longicarpus***, Red Sea endemic, 2.5 cm. Translucent with white-purple spots on tail and saddle. Associated with sea anemones, *Entacmaea quadricolor*, *Heteractis aurora* and *Megalactis hemprichii*. ©AR



***Brucecaris tenuis*** IP, 1 cm. Translucent with two wide stripes, upper one is shorter. Associated with several species of crinoids. Nocturnal. ©AR, Marsa Shagra



***Ancylocaris brevicarpalis*** IP, 4 cm, on sea anemones. Tail with 5 large purple spots. ©AR, Wadi Lahami



***Coralliocaris superba*** IP, 1.5 cm, on branching corals. Distinctive white carapace. ©Rafi Amar, Eilat



***Harpiliopsis depressa*** IP, 1.2 cm. Flattened carapace with fine red-brown lines. ©AR, Dahab



***Lipkemenes lanipes*** IP, 1 cm. On basket stars. Brownish with light bands. ©AR, Marsa Shagra



***Pontonides ankeri*** IP, 1.5 cm. Associated with wire corals. Species group needs revision. ©Itai Grisaru



## ACANTHASTERIDAE



**Acanthaster sp. 1** Crown-of-Thorns Sea Star - part of the *Acanthaster planci* species complex, occurs in the Red Sea and, according to recent studies, has not been described. Up to 14 arms, less toxic spines, 80 cm ©AR



## ACANTHASTERIDAE



**Fromia ghardaqana** Ghardaqa Sea Star, WIO, Red Sea to Mauritius, 8 cm. Red with scattered bluish spots, nocturnal. Photo on the right - oral view. ©AR, Naama Bay, Marsa Nakari



## GONIASTERIDAE

## GONIASTERIDAE



**Fromia ghardaqana** (continued) Spawning. ©AR, Dahab



**Fromia cf. nodosa** Red Sea, 10 cm, undescribed. Pale orange with white spots. ©AR, Marsa Shagra



**Fromia sp. 1** Red Sea, 10 cm. Undescribed. Red with numerous white spots. ©AR, Dahab



**Dactylosaster cylindricus** Cylindrical Sea Star, IO: Red Sea to Andaman Isl, 20 cm. ©P. Bourjon, Reunion

## OPHIDIASTERIDAE

## OPHIDIASTERIDAE



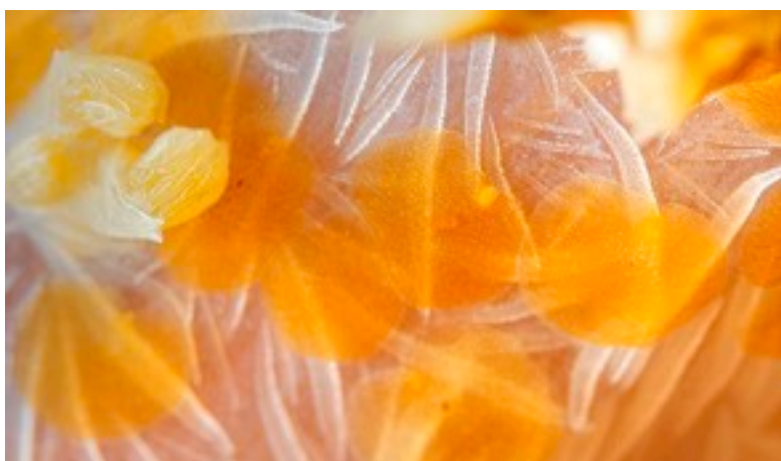
**Gomophia egyptiaca** Egyptian Sea Star IWP, 10 cm. Conical sharp tubercles on tubular tapering arms, several color morphotypes - reddish, purplish, brownish. ©AR, Wadi Lahami, Sharm El Naga







**Waminoa sp. 1** IP, up to 6 mm. Translucent orange with pale spot near the edge. Occurs on soft corals. Feeds on tiny crustaceans, mostly copepods. Asexual, reproduce mostly by fragmentation. ©Rafi Amar, Eilat



**Acanthozoon fuscobulbosum** IO, 15 mm. Bulbous papillae, margin w/transverse white lines. ©I. Sverdlova



**Thysanozoon nigropapillosum** IP, 30 mm. White outer margin, yellow-tipped papillae. ©I. Khlopunova



**Acanthozoon or Thysanozoon sp. 1** IWP, red with black tips, white outer margin. ©S. O'Gorman (sp.14 MF)



**Acanthozoon or Thysanozoon sp. 1** IWP, 2.5 cm. Red with white dots, round papillae ©I. Sverdlova (sp.14 MF)



**Bulaceros porcellanus** IP, 2.2 cm. White with orange outer margin and black spots. ©Brindusa Eisele



**Pseudobiceros damawan** IWP, 3 cm. Mottled cream with widely scattered black spots. ©Rafi Amar, Eilat



**Pseudobiceros fulgor** IWP, 7 cm. Orange to brown with fine white broken lines, black margin. ©AR Dahab



**Pseudobiceros gratus** IP, 5 cm. Transparent brownish with 3-4 dark stripes, dark margin ©Rafi Amar, Eilat



## FIRE WORMS



***Chloeia bistriata*** IWP, 8 cm. Two distinct red-brown stripes dorsally. ©Nicole Lindegger, Makadi



***Eurythoe complanata*** IP, reaches 24 cm. Described from the Red Sea, a species complex. Red-brown, often with bluish iridescence, white tufts of bristles. ©AR, Dahab



***Hermodice carunculata*** West Atlantic, Red Sea, 15 cm, red gills, white tufts of bristles. Carnivores. ©AR



## IPHIONIDAE



***Iphione muricata*** IWP, 3 cm. 13 pairs of brown to red elytra (scales) covers the dorsum. ©AR, Marsa Nakari



**Polynoidae 1** Red Sea, 1.5 cm. Red-brown pattern on white elytra. ©Inna Sverdlova

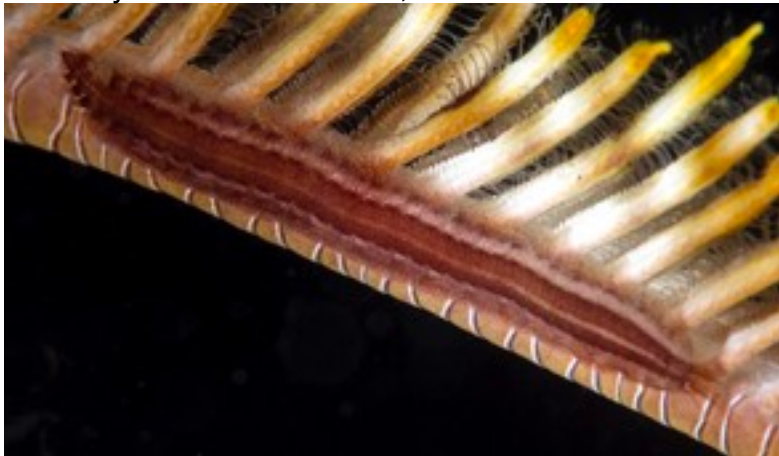


**Polynoidae 2** Red Sea, 1.8 cm. 15 pairs of elytra, tufts of yellow bristles. ©AR, Marsa Nakari



**Polynoidae 3** Red Sea, 1.2 cm. 13 pairs of elytra, grey with darker blotches. ©Rafi Amar, Eilat

## SCALE WORMS



**Polynoidae 4** Red Sea, 2 cm. Red-brown with 10 rows of conical tubercles. Occurs on crinoids ©AR, Tiran

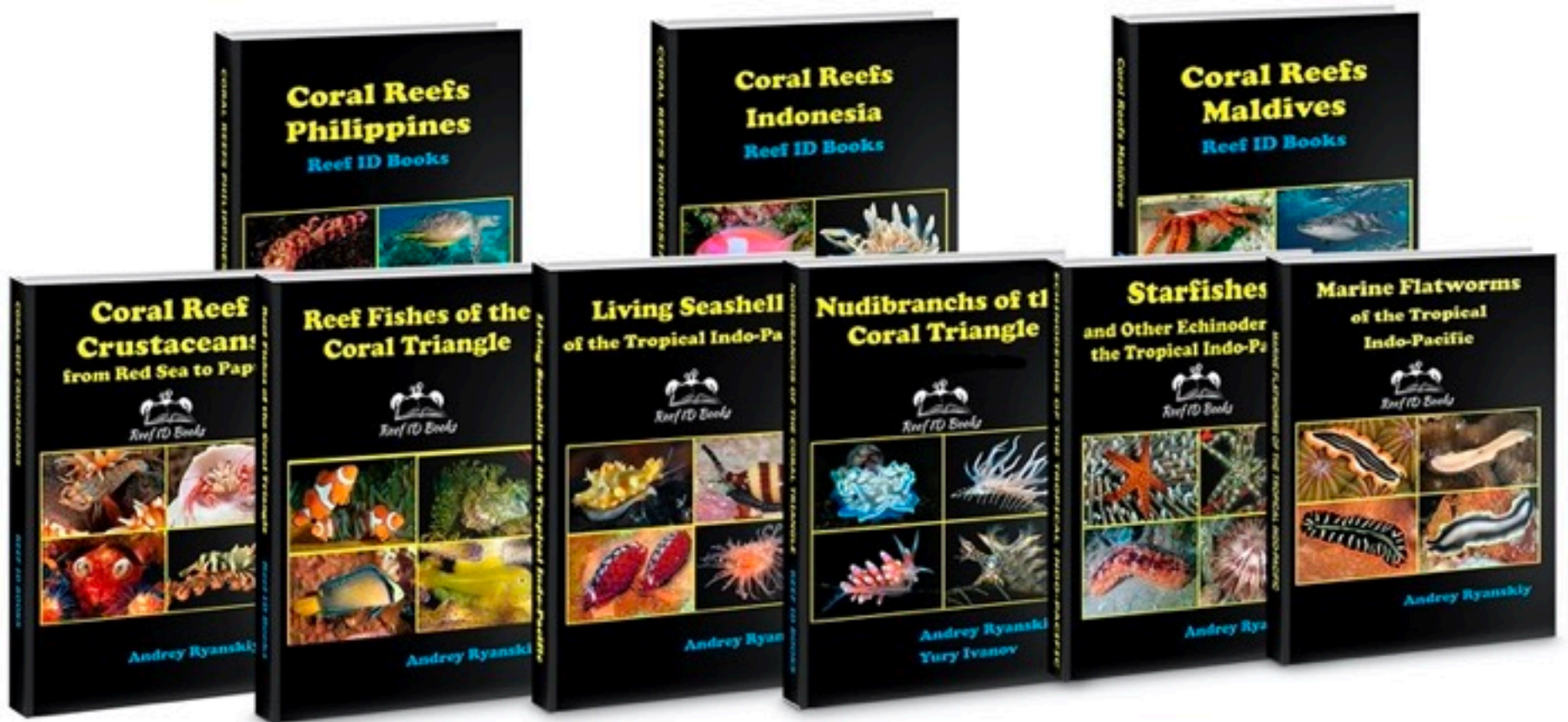


***Paradyte crinoidicola*** IWP, 1.4 cm. Associated with crinoids, imitates their arms. ©AR, Marsa Shagra

## AMPHINOMIDAE

## POLYNOIDAE





**Andrey Ryanskiy**, a resident of Sharm El Sheikh (South Sinai) can usually be found diving or snorkeling in the Red Sea. After years of travelling in Southeast Asia and publishing a unique series of books on the marine life of the region, he returned to where it all began in 2000 when he first dived into the tropical sea.

He has achieved the highest levels of diver certification in scuba, trimix, caves, won international photography competitions, but a deep interest in marine life won and he dedicates his dives to the search for rare marine life, then creating photo guides with a unique quality of content and scientific expertise.

His photo guides on fish, nudibranchs, crustaceans, sea shells, echinoderms and flatworms have been highly acclaimed by the diving and scientific communities, but he has always dreamed of making a truly comprehensive book of Red Sea marine life. He reads all your awesome Amazon reviews and likes to know about your experience with Red Sea Marine Life in the FB group of the same name.