

CUBA'S MESOPHOTIC CORAL REEFS
Sponge Photo Identification Guide
1st Edition



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Cuba's Mesophotic Coral Reefs



USA - Cuba Research Partnership

Edited by:

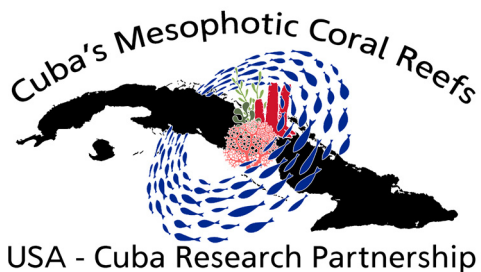
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ACKNOWLEDGMENTS

This research was supported by the NOAA Office of Ocean Exploration and Research under award number NA14OAR4320260 to the Cooperative Institute for Ocean Exploration, Research and Technology (CIOERT) at Harbor Branch Oceanographic Institute-Florida Atlantic University (HBOI-FAU), and by the NOAA Pacific Marine Environmental Laboratory under award number NA15OAR4320064 to the Cooperative Institute for Marine and Atmospheric Studies (CIMAS) at the University of Miami. This expedition was conducted in support of the Joint Statement between the United States of America and the Republic of Cuba on Cooperation on Environmental Protection (November 24, 2015) and the Memorandum of Understanding between the United States National Oceanic and Atmospheric Administration, the U.S. National Park Service, and Cuba's National Center for Protected Areas. We give special thanks to Carlos Díaz Maza (Director of the National Center of Protected Areas) and Ulises Fernández Gomez (International Relations Officer, Ministry of Science, Technology and Environment; CITMA) for assistance in securing the necessary permits to conduct the expedition and for their tremendous hospitality and logistical support in Cuba. We thank the Captain and crew of the University of Miami R/V *F.G. Walton Smith* and ROV operators Lance Horn and Jason White, University of North Carolina at Wilmington (UNCW-CIOERT), Undersea Vehicle Program for their excellent work at sea during the expedition. The Mohawk ROV is owned by the NOAA National Marine Sanctuaries Foundation. We also thank John Reed and Patricia González Díaz for the scientific leadership of this study. We thank Dr. Rob Van Soest for identification suggestions for some species that could not be identified farther than class level, and on *Oceanapia* species. The identifications some Tetractinellida was done by Dr. Paco Cardenas, Homosclerophorida by Dr. Thierry Perez, and Calcareia by Dr. Baslavi Condor-Lujan. This booklet is Contribution Number 2256

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Citation:

María Cristina Díaz, Linnet Busutil, María Rosa García-Hernández, and Shirley A. Pomponi. 2019. Cuba's Mesophotic Coral Reefs- Sponge Photo Identification Guide, Edition 1; Editors- John K. Reed, Stephanie Farrington. Cooperative Institute for Ocean Exploration, Research, and Technology

(CIOERT) at Harbor Branch Oceanographic Institute, Florida Atlantic University (HBOI-FAU). First Edition: June 2019. Harbor Branch Oceanographic Institute Contribution Number 2256. <http://www.cioert.org/cuba>.

Credits:

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Front Cover:

Photograph from the deep mesophotic (95 m deep) in the Marine Protected Area of Los Pretilles, at station C-06 on NW Cuba. A ramose branching sponge, *Agelas* sp. Cu-01, with long smooth branches, yellow-brown in color, and white tips (1.5-5 cm in diameter, 6-60 cm long). Round oscules (3-6 mm wide with white rims), that dip slightly into the body. On the lower left, a cup shaped specimen of *Agelas dilatata* Duchassaing and Michellotti, 1864, light brown in color with the outer surface covered by zoanthids.

INTRODUCTION

Mesophotic coral reef ecosystems (MCEs) are light-dependent benthic communities that occur deeper than shallow reefs and typically range from depths of 30 m to the bottom of the photic zone, which may extend to >150 m in some regions. MCEs represent in part an extension of shallow-water coral reef ecosystems and support a diverse assemblages of habitat-building taxa, including corals, sponges and algae, and associated fish (Reed et al., 2018).

Many MCEs worldwide appear to be thriving compared to shallow reefs. The deep reef refugia hypothesis suggests that

MCEs may be less impacted from natural and anthropogenic impacts than shallow coral reefs, and may be more stable and resilient than shallow reefs. MCEs may also act as refugia for shallow reef species through the export of fish and coral larvae. However, it is now apparent that MCEs are also vulnerable to disturbances from all facets of perturbations including climate change, bottom trawling, invasive species, and pollution.

Whereas considerable data have been reported regarding the distribution, ecology, and health of Cuba's shallow reefs, relatively little is known about the distribution, community structure and health of Cuba's deep mesophotic reefs. Cuba's strong marine policies and legislation has already resulted in 105 MPAs, covering nearly 25% of its insular shelf, yet overfishing, poaching, pollution and global warming are threats to these vulnerable ecosystems, as reefs worldwide are threatened.

This photo album of selected sponges associated with Cuba's mesophotic reefs resulted from a recent joint Cuba-U.S. expedition that was conducted from May 14 to June 13, 2017 to map and document the extent and health of MCEs along the entire coastline of Cuba. Total ship transit around the island covered ~2,778 km (~1,500 nmi). Forty-three Remotely Operated Vehicle (ROV) dives at 36 stations confirmed the presence of MCEs habitat on all coasts of Cuba (Reed et al. 2018; Figure 1, Table 1).

ROV dives surveyed reefs from depths of 188 m to 18 m, covered 27 km, totaled 99 hours of bottom time, and resulted in 110 hours of high-definition video. A total of 21,146 digital still images documented habitat and species. The primary geomorphological features were the Deep Island Slope (125- >150 m), Deep Fore-Reef Escarpment (the 'Wall', 50-125 m), and Deep Fore-Reef Slope (30-50 m). Most vertical surfaces of the Wall were covered with dense sponges, algae, octocorals, and black corals. *Agaricia*

was the most abundant scleractinian genus on the Wall at depths of 50-75 m, and was observed to 122 m.

Cuban MCEs have proved to be a very favorable habitat for marine sponges in both species richness and abundance. Our initial estimate of 296 morphospecies from our first video and photographic analysis during the 2017 cruise (Reed et al., 2018) was indicative of the potential high sponge diversity we were finding in Cuban mesophotic reefs. Particularly considering the fact that, the total sponge diversity currently reported from the Tropical Western Atlantic mesophotic reefs is of 241 species (Pomponi et al., 2019). As we have started curating the visual material and comparing to the present literature we have reinterpreted some morphospecies, and determine that some morphotypes are variants of one species. This sponge book represents a total of 230 species of Porifera that are distinguished by their external appearance (morphospecies), and characterized with respect to their shape, surface, and oscule attributes (excurrent apertures). An identification page was created for each morphospecies, which includes a synoptic description, a photograph, its taxonomic classification, data of its depth, and locality. Some features for each morphospecies was measured to facilitate the identification process. Some photographs show two laser dots that are 10 cm apart; however, in some cases the image has been cropped to show the species with more clarity. The species are organized taxonomically, and their classification is listed with each photograph. Six species belong to the class Calcarea, eight to the class Homoscleromorpha, and the rest belong to the class Demospongiae. Sixteen morphospecies could only be recognized to the class level of Demospongiae. The most diversified genera were: *Agelas* (Order Agelasida), *Aplysina* (Order Verongiida); *Callyspongia*, *Xestospongia* and *Niphates* (Order Haplosclerida. Of the total 230 morphospecies, 117 were identified to species level, the rest were tentatively assigned to genera, families, orders, or classes, and are the subject of ongoing taxonomic research.

Sponges colonized all depths and substrates surveyed. The deepest records were a bright yellow Verongiida sp. Cu-01 encrusting on rock (183 m deep), *Xestospongia* sp. Cu-01 (168 m), *Ceratoporella nicholsoni* (159 m), *X. muta* (134 m), and *Leucetta* sp. (124 m). Peak diversity started at depths of 100-125 m in which sponge morphologies (crusts, plates, tubes, spherical, vases, and branches) and multicolor patterns abounded. From the collections, there are at least 10 sponge species that are new to science within the genera of *Aplysina* and *Verongula* (Verongiida); *Amphimedon*, *Callyspongia*, and *Xestospongia* (Haplosclerida); *Clathria* (Poecilosclerida); *Cinachyrella* (Tetractinellida); *Aptos* (Suberitida); *Erylus* (Tetractinellida) and *Plakortis* (Homosclerophorida). Two new species of *Callyspongia*, *C. pedroi* and *C. alcoladoi* were recently described, and a key to distinguish the eight ramose thin branching *Callyspongia* species from the Caribbean was created (Busutil et al., 2018).

Only two sponge species were present at all sites (Reed et al., 2018). The first, *Xestospongia* sp. Cu-01, may be a new species and resembles *X. muta*, but with thicker walls and is relatively shorter and chubby in appearance. The second, as yet unknown, is a thick bright yellow verongioid crust (Verongiida sp. Cu-01) that lacks any fiber skeleton. Three species were found at 33 sites (*Agelas sceptrum*, *Aiolochoxia crassa*, and *X. muta*). The most species-rich sites for sponges were found at Site C-07 (Archipelago Colorados) on the northwest coast with 72 taxa and, on the south coast, C-28 (Archipiélago Los Canarreos) with 68 taxa and C-50 (Chivirico) with 66 taxa. However, overall the most species-rich region for sponges was the northeastern region (153 taxa), followed by the southeastern region (148 taxa) and western region (142 taxa). The fewest taxa were found in the northwest region (113 taxa) and southwest (131 taxa). By station, the fewest sponges were found at Site C-52 (33 taxa) and C-52A (37 taxa) at

Punta Imías on the southeast coast, and C-58A (36 taxa) at Archipiélago Sabana-Camagüey on the northeast coast.

It is important to note that the sponge species included in this guide represent our first attempt to characterize the diversity for this conspicuous component of the mesophotic coral reef benthos from image data (videos and photographs) during the expedition in 2017. Some taxa originally identified as distinct morphospecies have been recognized as variants of the same species, once they were carefully studied and compared to published descriptions of those species (e.g., three different morphologies of *Agelas sceptrum*). However, as photographic material is curated to extract ecological data, we are finding more morphospecies that we have not characterized, therefore we do not consider that this first attempt represents the total Porifera diversity from Cuban mesophotic reefs.

Currently, one hundred of the morphospecies in this sponge book are represented from our 2017 ROV collections (115 samples collected), leaving an important portion of the morphospecies, shown here, to be collected, curated and taxonomically determined. We will approach the integrative study (morphology and genetics) of the unknown species in our collection, and we are developing collaborative projects to study some of the rarest species of this fauna. Sponge taxa were identified using the World Porifera database (Van Soest et al., 2019), a various sources of Caribbean literature, and “The Sponge Guide” (Zea et al., 2014). The present guide constitutes the most extensive representation of mesophotic Caribbean sponge fauna and will facilitate the interpretation of the regional and local patterns of mesophotic reef sponge diversity in Cuba and elsewhere on the Greater Caribbean.

The study of the Porifera in Cuba owes its important advance to the work done by Dr. Pedro M. Alcolado (1948-2017), a researcher who devoted his 46 years of scientific life to

oceanological research and was one of the first Cuban marine ecologists. A significant part of his extensive work was dedicated to the ecology and taxonomy of the sponges, reporting around 280 species for Cuba, including 19 new species for science (Alcolado, 2002, 2007), as well as a number of contributions related to the ecology of this group. Dr. Alcolado was also mentor and master tutor of the coauthor, who describes in 2018 the first two new recognized species for the Cuban mesophotic reef (Busutil et al., 2018).

In this book, each species is presented with the following data: an in situ image, the lowest available scientific name, species author/date, higher taxonomy, depth and location of the specimen, description of the specimen, and the image name. In some cases if the specimen was collected, there are lab images and some microscopic images of the fibers. A brief synoptic description of diagnostic features such as shape, color, surface, and oscule morphology is given. Most descriptions include the measurement of the oscules, or of a surface feature such as conules, fistules, and/or body size. Also there is an Identifier field and an Identification Qualifier field. All identifications were made by M.C. Diaz and L. Busutil unless otherwise noted. *= ID from image only; **= ID from image and specimen collected in the region, and ***= ID specifically from the specimen in the image.

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Figure 1. Map of Cuba showing ROV dive sites (red stars) on mesophotic reef sites (30-150 m depths) during the *F.G. Walton Smith* cruise, May 14 to June 12, 2017. Pink polygons- marine protected areas. (from REVISTA DE INVESTIGACIONES MARINAS Vol. 38(1):56-125).

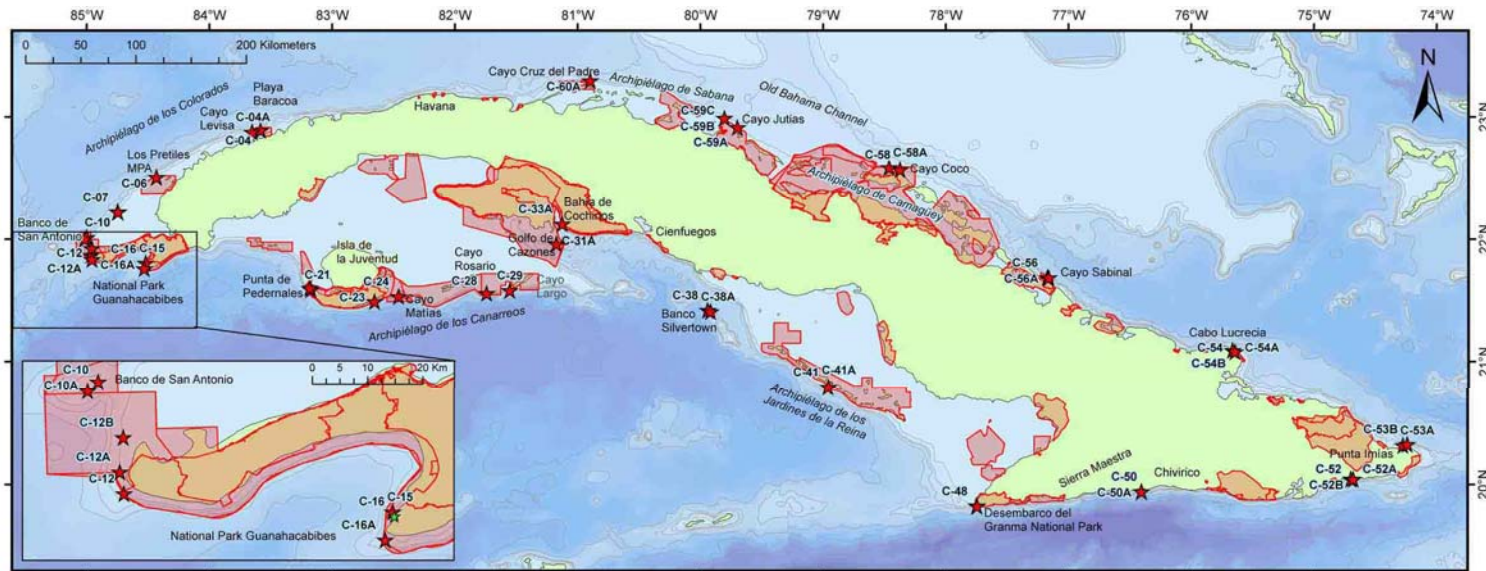


Table 1. ROV dive sites on Cuba's mesophotic reefs during the *F.G. Walton Smith* cruise, May 14 to June 12, 2017. (from REVISTA DE INVESTIGACIONES MARINAS Vol. 38(1):56-125).

Station	Dive No.	Location	Latitude	Longitude	Depth Range (m)
C-04	1	Cuba, NW coast, Cayo Levisa MPA	22°53.483'N	83°34.969'W	25-188
C-04A	2,3	Cuba, NW coast, 2 nmi north of Cayo Arenas, Cayo Levisa MPA	22°52.638'N	83°39.103'W	49-172
C-06	4,5	Cuba, NW coast, Norte de Los Pretiles MPA	22°30.487'N	84°25.907'W	43-170
C-07	6,7	Cuba, NW coast, Archipiélago de Los Colorados, No MPA	22°13.405'N	84°44.837'W	45-178
C-10	8	Cuba, W coast, Banco de San Antonio MPA, east wall	22°00.901'N	84°59.947'W	25-183
C-10A	9	Cuba, W coast, Banco de San Antonio MPA, south wall	22°00.017'N	85°00.977'W	30-150
C-12	10	Cuba, W coast, Los Cayuelos, Guanahacabibes National Park	21°50.005'N	84°57.426'W	149
C-12A	11	Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park	21°52.111'N	84°57.824'W	45-156
C-12B	12	Cuba, W coast, Las Tumbas, Guanahacabibes National Park	21°55.477'N	84°57.494'W	38-148
C-15	13	Cuba, W coast, El Almirante, Punto de Buceo, Cabo Corrientes, Guanahacabibes National Park	21°48.224'N	84°31.137'W	25-145
C-16A	14	Cuba, W coast, Cabo Corrientes, Guanahacabibes National Park	21°45.512'N	84°31.874'W	28-150
C-21	15	Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA	21°35.263'N	83°10.325'W	25-158
C-21A	16	Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA	21°36.010'N	83°10.943'W	28-150
C-23	17	Cuba, S coast, SE Isla de la Juventud, Punta Brava MPA	21°29.419'N	82°39.228'W	37-150
C-24	18	Cuba, S coast, E of Isla de la Juventud, Archipiélago de Los Canarreos, Cayo Matías MPA	21°31.924'N	82°27.480'W	40-150
C-28	19	Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA	21°33.469'N	81°44.401'W	29-150
C-29	20	Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA	21°34.854'N	81°33.130'W	26-157
C-31A	21	Cuba, S coast, Golfo de Cazones, Punta Brava, Sur Ciénaga de Zapata, no MPA	21°57.650'N	81°10.355'W	18-150
C-33A	22	Cuba, S coast, Bahía de Cochinos, east wall, Zapata National Park	22°07.444'N	81°07.518'W	30-150
C-38	23,24	Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA	21°25.180'N	79°56.377'W	24-150

C-38A	25	Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA	21°24.470'N	79°54.942'W	40-153
C-41	26	Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA	20°47.495'N	78°57.323'W	30-150
C-48	27,28	Cuba, S coast, Cabo Cruz, Desembarco del Granma National Park	19°49.600'N	77°44.551'W	40-154
C-50	29,30	Cuba, S coast, Sierra Maestra, Chivirico Proposed MPA	19°56.551'N	76°23.937'W	27-155
C-52	31	Cuba, S coast, Sierra Purial, Punta Imías, no MPA	20°02.601'N	74°41.498'W	60-161
C-52A	32	Cuba, S coast, Sierra Purial, east tip of Punta Imías, 1 nmi east of ROV 31, no MPA	20°02.513'N	74°40.345'W	43-156
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C-53B	34	Cuba, eastern tip of Cuba, NW Punta Maisí, Punta del Fraile, no MPA	20°19.482'N	74°13.940'W	50-142
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<i>Topsentia</i> sp. Cu-01	128
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<i>Timea</i> sp. Cu-01	130
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<i>Leucetta</i> sp. Cu-02	169
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Leucosolenida	170
Grantiidae	170
<i>Leucandra</i> sp. Cu-01	170

Demospongiae Cu-02



CLASS:

Demospongiae

DEPTH:

-144 m

LOCATION:

Cuba, S coast, Golfo de Cazones, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

201705281_T-08-56-25_020_POR.jpg

* M.C. Díaz & L. Busutil

Tube(s), 7 cm wide, 12 cm high; vent 4 cm wide; smooth to rugose, light brown, white internally; Oscules: not visible.

Demospongiae Cu-05



CLASS:

Demospongiae

DEPTH:

-105 m

LOCATION:

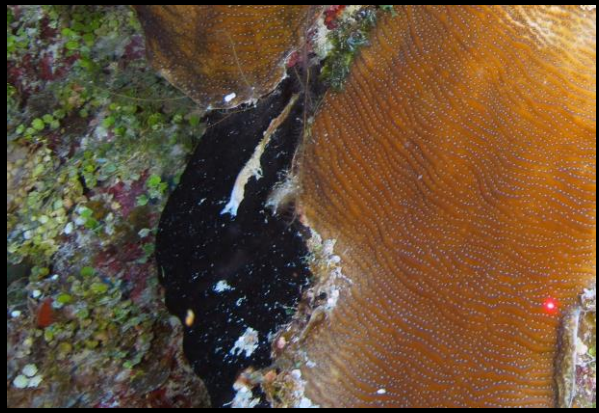
Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

201705213_T-14-39-24_026_POR1.jpg

* M.C. Díaz & L. Busutil

Spherical, tuberculate, tubercules 1-2 cm apart; gray, Oscules: round, apical/clustered, 4-6 mm wide, might be porocalices.

Demospongiae Cu-06



CLASS:

Demospongiae

DEPTH:

-35 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

201705251_T-11-10-29_154_POR.jpg

* M.C. Díaz & L. Busutil

Encrusting, smooth, black, Oscules: not visible.

Demospongiae Cu-10



CLASS:

Demospongiae

DEPTH:

-34 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-15-48-38_248_POR.jpg

* M.C. Díaz & L. Busutil

Thin encrusting, smooth/papillated, papillae 1-1.5 mm wide; pink, Oscules: round/sparse, with membrane, 2 mm wide.

Demospongiae Cu-14



CLASS:

Demospongiae

DEPTH:

-116 m

LOCATION:

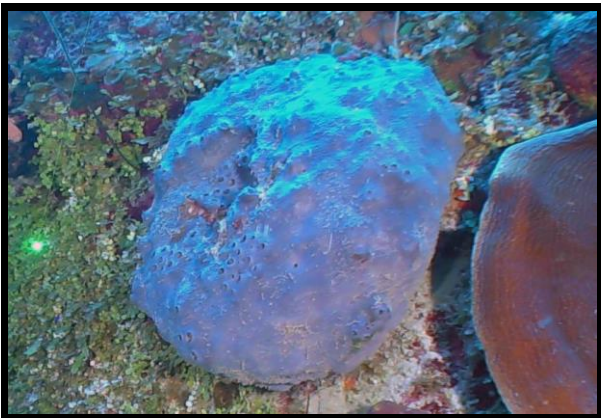
Cuba, NW coast, 2 nmi north of Cayo Arenas, Cayo Levisa MPA, Station C-04A

201705183_T-16-00-07_055_POR.jpg

* M.C. Diaz & L. Busutil

Massive, smooth, white, oscular chimneys (1-2 cm wide, 3 cm high).

Demospongiae Cu-17



CLASS:

Demospongiae

DEPTH:

-33 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

201705251_T-10-59-22_073_POR.jpg

* M.C. Diaz & L. Busutil

Massive, 50-60 cm in diameter; smooth to lumpy, gray, Oscules: clumps, 10-15 mm wide.

Demospongiae Cu-18



CLASS:

Demospongiae

DEPTH:

-126 m

LOCATION:

Cuba, S coast, Cabo Cruz,
Desembarco del Gramma
National Park, Station C-48

201706021_T-10-29-21_045_POR1.jpg

* M.C. Diaz & L. Busutil

Thick folded plate, 3-4 cm thick; smooth, white, Oscules: abundant, 3 mm wide.

Demospongiae Cu-20



CLASS:

Demospongiae

DEPTH:

-104 m

LOCATION:

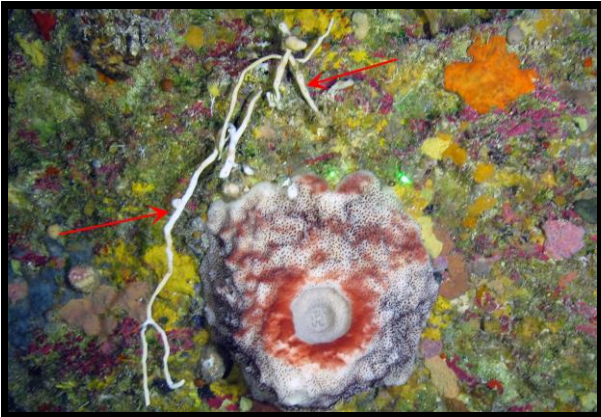
Cuba, NW coast, Los
Pretilos MPA, Station C-06

201705193_T-14-15-41_031_POR2.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, rugose, orange, Oscules: not visible.

Demospongiae Cu-21



CLASS:

Demospongiae

DEPTH:

-112 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

201705271_T-09-05-51_057_POR.jpg

* M.C. Diaz & L. Busutil

Branching/rope, 5-10 mm wide, 10-55 cm long; smooth, white, Oscules: sparse, with membrane, 2 mm wide.

Demospongiae Cu-23



CLASS:

Demospongiae

DEPTH:

-109 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

201705224_T-15-38-10_028_POR1.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, smooth to rugose/velvety, orange, Oscules: sparse, 1-2 mm wide.

Demospongiae Cu-24



CLASS:

Demospongiae

DEPTH:

-73 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

201705213_T-14-59-04_058_POR.jpg

* M.C. Diaz

Thick encrusting, rugose, brown/black, Oscules: volcano shaped, abundant, 30-80 mm wide.

Demospongiae Cu-25



CLASS:

Demospongiae

DEPTH:

-79 m

LOCATION:

Cuba, S coast, Golfo de Cazones, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

201705281_T-09-42-00_151_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, pink, Oscules: round/abundant, elevated, 1-2 mm wide, oscules: 1-1.5 cm apart.

Demospongiae Cu-26



CLASS:

Demospongiae

DEPTH:

-79 m

LOCATION:

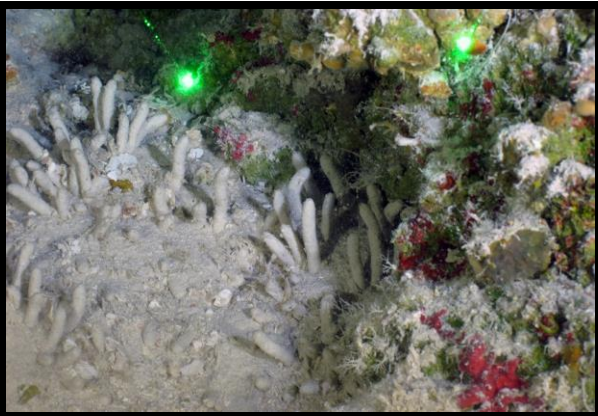
Cuba, S coast, Golfo de Cazones, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

201705281_T-09-42-00_151_POR1.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, porous, red, Oscules: round/abundant, elevated, 6-8 mm wide, oscules: 1.5-3 cm apart.

Demospongiae Cu-27



CLASS:

Demospongiae

DEPTH:

-129 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

201705273_T-15-08-27_049_POR.jpg

* M.C. Diaz & L. Busutil

Finger(s), 5 mm wide, 2-3 cm high; porous, white, Oscules: not visible, 1 mm wide.

Demospongiae Cu-28



CLASS:

Demospongiae

DEPTH:

-134 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

201705271_T-08-52-27_012_POR1.jpg

* M.C. Diaz & L. Busutil

Massive/lobate, 25-35 cm diameter, 5-10 cm high; brown, Oscules: round, on lobes, 5-10 mm wide, oscular membranes: dark.

Demospongiae Cu-29



CLASS:

Demospongiae

DEPTH:

-130 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-11-01-31_043_POR.jpg

* M.C. Diaz & L. Busutil

Massive with round lobes, smooth, white, Oscules: round/clumped, on lobes, 3-6 mm wide.

Agelas cerebrum

Assmann, van Soest & Köck, 2001



201705271_T-10-48-19_304_POR.jpg

* M.C. Diaz & L. Busutil

Barrel, 25 cm high and wide; brain-like surface, brown, Oscules: not visible, vent: 20 cm maximum width.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-33 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Agelas cervicornis

(Schmidt, 1870)



201705312_T-10-22-12_078_POR1.jpg

* M.C. Diaz & L. Busutil

Branching/ flat/ stalked, with zoanthids; brown, Oscules: round/abundant, 2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

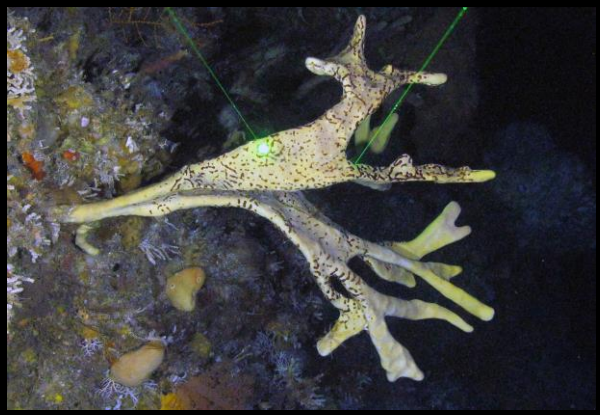
-57 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Agelas cervicornis

(Schmidt, 1870)



201705222_T-11-19-56_087_POR.jpg

* M.C. Diaz & L. Busutil

Branching/ flat/ stalked, up to 60 cm high, 1-1.5 cm thick; with zoanthids; yellow/brown, Oscules: round, 2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-109 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

Agelas cervicornis

(Schmidt, 1870)



201705273_T-15-36-34_128_POR.jpg

* M.C. Diaz & L. Busutil

Club, 40 cm high and 3-6 cm wide; rugose, pink/tan, Oscules: abundant, 2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-70 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Agelas citrina

Gotera & Alcolado, 1987



201706071_T-10-26-18_146_POR.jpg

* M.C. Diaz & L. Busutil

Thick folded plate, > 10 cm thick; rugose, yellow/orange, Oscules: round, on one side, 4-12 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-61 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

Agelas clathrodes

(Schmidt, 1870)



201705222_T-11-36-53_128_POR.jpg

* M.C. Diaz & L. Busutil

Fan, >1 m in diameter, 6-30 cm thick; rugose, orange, Oscules: round/keyholed, on one side, oscule size: round (1-10 mm wide) and key-hole (1-4 cm long).

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-85 m

LOCATION:

Cuba, W coast, Faro
Roncali, off lighthouse,
Guanahacabibes National
Park, Station C-12A

Agelas conifera

(Schmidt, 1870)



201706094_T-16-54-28_140_POR.jpg

* M.C. Diaz & L. Busutil

Massive, with conical projection(s), 25 cm high, 10 cm wide; rugose, brown/yellow, oscules on top of cone(s), 10-20 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-51 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Jutía, no MPA, Station C-59C

Agelas conifera

(Schmidt, 1870)



201706011_T-09-01-04_080_POR.jpg

* M.C. Diaz & L. Busutil

Branching, > 1 m long, 5- 10 cm thick; conical projections, brown/red, oscules on top of cone(s), 5-10 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-76 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Agelas dilatata

Duchassaing & Michelotti, 1864



201705222_T-11-12-21_071_POR.jpg

* M.C. Diaz & L. Busutil

Fan, 20-100 cm diameter, 2-3 cm thick; smooth, brown, Oscules: round, on one side, 1-5 cm apart, 4-10 mm wide, oscular membranes: tan.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-115 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

Agelas dilatata

Duchassaing & Michelotti, 1864



201705251_T-10-30-51_057_POR1.jpg

* M.C. Diaz & L. Busutil

Fan, 20-100 cm in diameter, 2-3 cm thick; smooth, brown, Oscules: round, on one side, 4-10 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-90 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

Agelas cf. flabelliformis

(Carter, 1883)



201706081_T-11-05-12_034_POR.jpg

* M.C. Diaz & L. Busutil

Fan, < 1 cm thick, 25 cm high; subdermal canals visible, light yellow, Oscules: regularly distributed, on one side, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-137 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

Agelas repens

Lehnert & van Soest, 1998



201705213_T-14-39-24_026_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Erect branch/repent, 2-5 mm wide, up to 50 cm long; smooth, orange, Oscules: abundant, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-105 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

Agelas sceptrum

(Lamarck, 1815)



201705273_T-15-21-14_086_POR.jpg

* M.C. Diaz & L. Busutil

Branching, smooth, brown/orange, Oscules: round/abundant, 3-6 mm wide, oscular membranes: tan.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-94 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Agelas sceptrum

(Lamarck, 1815)



201705273_T-15-30-30_109_POR1.jpg

* M.C. Diaz & L. Busutil

Flabellate, smooth, orange/brown, Oscules: round/abundant, 3-6 mm wide, oscular membranes: tan; oscules 1.5-3 cm apart.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-78 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Agelas sceptrum

(Lamarck, 1815)



201705273_T-15-30-30_109_POR.jpg

* M.C. Diaz & L. Busutil

Erect rods/fans, smooth, brown/orange, Oscules: round/abundant, 1.5-3 cm apart, 3-6 mm wide, oscular membranes: tan.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-78 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Agelas sceptrum

(Lamarck, 1815)



201705251_T-10-49-09_110_POR.jpg

* M.C. Diaz & L. Busutil

Branching, bent, smooth, brown/orange, Oscules: round, on one side, 3-4 mm wide, oscules 6- 15 mm apart.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-45 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

Agelas schmidtii

Wilson, 1902



201705281_T-09-27-45_103_POR.jpg

* M.C. Diaz & L. Busutil

Repent hollow tubes, smooth, orange, Oscules: round/abundant, 3-6 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-88 m

LOCATION:

Cuba, S coast, Golfo de Cazonos, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

Agelas sp. Cu-01



201705191_T-09-08-44_153_POR.jpg

* M.C. Diaz & L. Busutil

Branching, 1.5- 3 cm diameter, 6- 60 cm long; smooth, yellow/white tips, Oscules: round/in dips, 3-6 mm wide, oscular membranes: white.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-95 m

LOCATION:

Cuba, NW coast, Los Pretilos MPA, Station C-06

Agelas sp. Cu-02



201706101_T-09-06-44_047_POR.jpg

* M.C. Diaz & L. Busutil

Branching/ deformed, 1-2 cm wide 20-40 cm high; rugose, encrusted; tan, Oscules: round, sparse, 3-4 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-101 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

Agelas sp. Cu-04



201706031_T-09-24-07_079_POR.jpg

* M.C. Diaz & L. Busutil

Cup, smooth, white, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-125 m

LOCATION:

Cuba, S coast, Sierra
Maestra, Chivirico
Proposed MPA, Station C-
50

Agelas sp. Cu-06



201706083_T-15-30-33_054_POR.jpg

* M.C. Diaz & L. Busutil

Fan, 2-5 cm thick, 30-50 cm in diameter; irregular, orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-91 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Coco,
proposed MPA, Station C-
58A

Agelas sp. Cu-07



201705251_T-10-29-22_269_POR.jpg

* M.C. Diaz & L. Busutil

Fan, 5-10 mm thick, 25 cm high, and 50 cm wide; smooth, yellow, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-97 m

LOCATION:

Cuba, S coast, SW tip of
Isla de la Juventud, Punta
de Pedernales MPA,
Station C-21

Agelas sp. Cu-08



201705261_T-09-49-51_081_POR.jpg

* M.C. Diaz & L. Busutil

Branching, 1-2 cm thick; smooth, brown, Oscules: round, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-70 m

LOCATION:

Cuba, S coast, SE Isla de la Juventud, Punta Brava MPA, Station C-23

Agelas sp. Cu-09



201706051_T-10-22-01_135_POR.jpg

* M.C. Diaz & L. Busutil

Fan, 20-33 cm in diameter; ribbed, orange, Oscules: round, on one side, 2 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

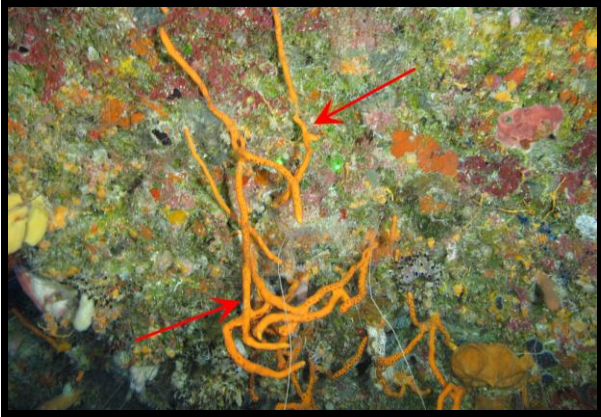
DEPTH:

-66 m

LOCATION:

Cuba, eastern tip of Cuba, NW Punta Maisí, Punta Silencio, no MPA, Station C-53A

Agelas sp. Cu-10



201705273_T-15-43-00_143_POR.jpg

* M.C. Diaz & L. Busutil

Branching, 1-1.5 cm wide, 20-40 cm long; Oscules: abundant, 1-2 mm wide, 2-3 cm apart.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-69 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Agelas sventres

Lehnert & van Soest, 1996



201705224_T-17-04-52_322_POR.jpg

* M.C. Diaz & L. Busutil

Massive, subspherical, 10-60 cm in diameter; smooth/riddled by oscules, red/orange, Oscules: round/keyholed, 2-30 mm wide, oscules round (2-10 mm wide) and key holed (1-3 cm long).

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-43 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

Agelas tubulata

Lehnert & van Soest, 1996



201705314_T-16-14-15_222_POR.jpg

* M.C. Diaz & L. Busutil

Cluster of fat/ hollow tubes, 20-60 cm high, 3-10 cm wide; smooth, occasionally folded, brown, Oscules: not visible, vent: 2-8 cm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-39 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Agelas wiedenmayeri

Alcolado, 1984



201705273_T-15-32-36_117_POR1.jpg

* M.C. Diaz & L. Busutil

Cluster of hollow tubes, individual finger tubes: 1-2 cm wide and 2-13 cm long; smooth/riddled by oscules, brown, Oscules: round/keyholed, oscules on top of tube(s), 1-10 mm wide.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Agelasidae

DEPTH:

-72 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Ceratoporella nicholsoni

(Hickson, 1911)



201706083_T-15-15-42_020_POR.jpg

* M.C. Diaz & L. Busutil

Massive, 25- 30 cm of diameter; mammilate, brown/orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Astroscleridae

DEPTH:

-117 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Coco,
proposed MPA, Station C-
58A

Ceratoporella nicholsoni

(Hickson, 1911)



201705224_T-15-38-10_028_POR2.jpg

* M.C. Diaz & L. Busutil

Massive, smooth, mammilate, brown/orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Astroscleridae

DEPTH:

-109 m

LOCATION:

Cuba, W coast, Las
Tumbas, Guanahacabibes
National Park, Station C-
12B

Stromatospongia cf. norae

Hartman, 1969



201705273_T-15-12-23_060_POR.jpg

* M.C. Diaz

Massive, rugose, orange/tan, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Agelasida

FAMILY:

Astroscleridae

DEPTH:

-123 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Auletta sp. Cu-01



201705201_T-10-52-25_205_POR1.jpg

* M.C. Diaz & L. Busutil

Cluster of hollow tubes, 5-10 cm high, 2-3 cm wide; porous, orange, Oscules: on top, 5-10 mm wide, oscular membranes: transparent.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-51 m

LOCATION:

Cuba, NW coast, Archipiélago de Los Colorados, No MPA, Station C-07

Auletta syncynularia

Schmidt, 1870



201706101_T-09-35-20_107_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Cluster of tubes/stalked, 6 cm long and 1-2 cm wide; smooth, orange, oscules on top of tube(s), 10 mm wide.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

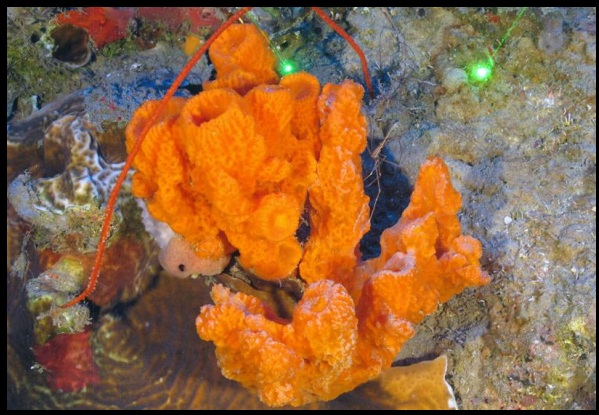
-54 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

Auletta cf. tuberosa

Alvarez, van Soest & Rützler, 1998



201706041_T-10-48-03_126_POR.jpg

4-VI-17-1-007

* M.C. Diaz & L. Busutil

Cluster of cone shaped tubes, 5-10 cm high, 2-3 cm wide; rugose/ridged, orange, oscules on top of tube(s).

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-66 m

LOCATION:

Cuba, S coast, Sierra
Purial, Punta Imías, no MPA,
Station C-52

Axinella corrugata

(George & Wilson, 1919)



201706101_T-09-19-27_077_POR.jpg

* M.C. Diaz & L. Busutil

Branching, 8 cm high, branch diameter: 2.5 cm; corrugated, orange/tan, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-61 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

***Axinella* sp. Cu-01**



201706101_T-09-15-18_071_POR.jpg

* M.C. Diaz & L. Busutil

Branching, 12 cm high, 2 cm wide; grooved, orange/tan, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-77 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

***Axinella* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-65 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo La Vela
MPA, Station C-59A

201706091_T-09-48-51_141_POR.jpg

* M.C. Díaz & L. Busutil

Branching, 10-13 cm high, 1.5-2 cm wide; grooved, orange/tan, Oscules: not visible.

Dragmacidon alvarezae

Zea & Pulido, 2016



CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-65 m

LOCATION:

Cuba, NW coast, Los
Pretilos MPA, Station C-06

201705191_T-09-30-18_005_POR.jpg

* M.C. Díaz & L. Busutil

Erect rod, 10-60 cm high, 2-5 cm wide; microconulose, red/orange, Oscules: round, elevated, 5 mm wide.

Phakellia folium

Schmidt, 1870



201706101_T-09-29-55_095_POR.jpg

* M.C. Diaz & L. Busutil

Fan/stalked, 5-10 cm high, 1-2 mm thick; smooth, orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-54 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

Ptilocaulis walpersii

(Duchassaing & Michelotti, 1864)



201706081_T-12-15-51_259_POR.jpg

* M.C. Diaz & L. Busutil

Erect rods/branching, 1-3 mm wide; spatulate, red/orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Axinellidae

DEPTH:

-42 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Coco,
proposed MPA, Station C-
58

Myrmekioderma gyroderma

(Alcolado, 1984)



201705211_T-10-38-46_275_POR.jpg

* M.C. Diaz & L. Busutil

Massive, meandering grooves, yellow/orange/green, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Heteroxyidae

DEPTH:

-51 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, east wall, Station C-10

Myrmekioderma rea

(Laubenfels, 1934)



201705213010_Deck1.JPG

21-V-17-3-010

*** M.C. Diaz

Massive, rugose, brown/orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Heteroxyidae

DEPTH:

-40 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

Ectyoplasia ferox

(Duchassaing & Michelotti, 1864)



201705213_T-15-25-06_113_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth to microhispid, brown, Oscules: round/abundant, elevated, 5-10 mm wide, oscular membranes: tan.

CLASS:

Demospongiae

ORDER:

Axinellida

FAMILY:

Raspailiidae

DEPTH:

-46 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

Neofibularia nolitangere

(Duchassaing & Michelotti, 1864)



201705312_T-11-04-42_152_POR.jpg

* M.C. Diaz & L. Busutil

Cluster of hollow tubes, vent, rugose, brown.

CLASS:

Demospongiae

ORDER:

Biemnida

FAMILY:

Biemnidae

DEPTH:

-29 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Halisarca caerulea

Vacelet & Donadey, 1987



201706034_T-16-19-28_050_POR.jpg

3-VI-17-4-002

* M.C. Diaz & L. Busutil

Thin encrusting, smooth, blue, Oscules: round/abundant, star shaped canals, 1-3 mm wide.

CLASS:

Demospongiae

ORDER:

Chondrillida

FAMILY:

Halisarcidae

DEPTH:

-105 m

LOCATION:

Cuba, S coast, Sierra Maestra, Chivirico Proposed MPA, Station C-50

***Halisarca* sp. Cu-01**



201706021_T-10-29-21_045_POR.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, smooth, gray, Oscules: star-shaped, abundant, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Chondrillida

FAMILY:

Halisarcidae

DEPTH:

-126 m

LOCATION:

Cuba, S coast, Cabo Cruz, Desembarco del Gramma National Park, Station C-48

Chondrosia sp. Cu-01



201705253_T-14-36-04_025_POR.jpg

* M.C. Díaz & L. Busutil

Thick encrusting, smooth, black/brown/gray, Oscules: round/abundant, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Chondrosiida

FAMILY:

Chondrosiidae

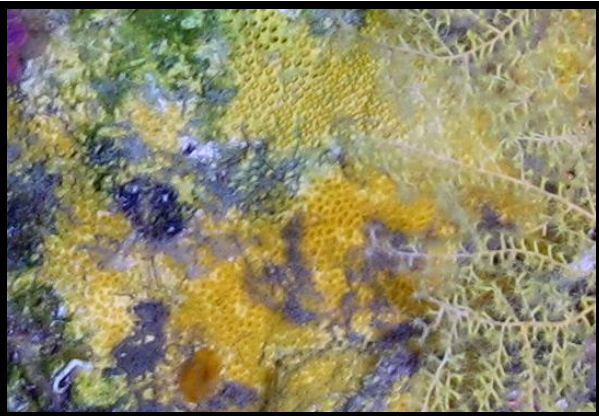
DEPTH:

-123 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

Clionaida Cu-01



201705271_T-09-16-21_090_POR.jpg

* M.C. Díaz & L. Busutil

Encrusting/boring, papillate, light yellow, papillae 2 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

DEPTH:

-101 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Cliona cf. aprica

Pang, 1973



201706071_T-08-55-15_033_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Boring, papillate, brown, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Clionaidae

DEPTH:

-124 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

Cliona caribbaea

Carter, 1882



201705281_T-10-03-46_188_POR2.jpg

* M.C. Diaz & L. Busutil

Encrusting/boring, smooth, brown, Oscules: abundant, 1-3 mm wide, oscular membranes: tan.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Clionaidae

DEPTH:

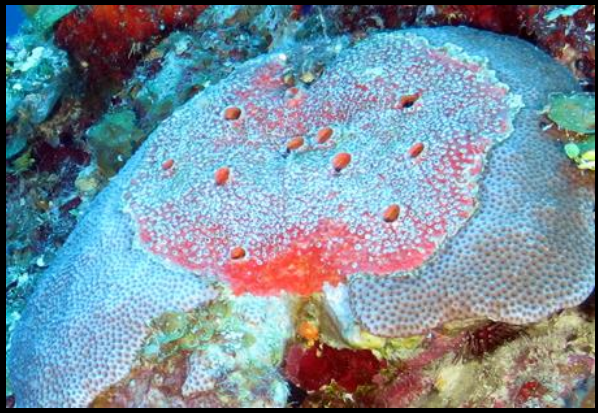
-46 m

LOCATION:

Cuba, S coast, Golfo de
Cazones, Punta Brava, Sur
Ciénaga de Zapata, no
MPA, Station C-31A

Cliona delitrix

Pang, 1973



201705251_T-11-19-20_176_POR.jpg

* M.C. Diaz & L. Busutil

Encrusting/boring, papillate, with zoanths; orange, Oscules: volcano shaped, abundant, 15-30 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Clionaidae

DEPTH:

-33 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

Cliona delitrix

Pang, 1973



201705273_T-16-33-09_208_POR1.jpg

* M.C. Diaz & L. Busutil

Encrusting/boring, papillate, red/orange, Oscules: volcano shaped, abundant, 20-30 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Clionaidae

DEPTH:

-37 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

***Cliona* sp. Cu-01**



201705273_T-17-07-54_282_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Encrusting/boring, papillate, orange, Oscules: volcano shaped, abundant, 6-8 mm wide, papillae 2-3 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Clionaidae

DEPTH:

-41 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Cliona varians

(Duchassaing & Michelotti, 1864)



201706101_T-10-11-04_138_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, brown, Oscules: round, sparse, 3-5 mm wide, oscular membranes: tan.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Clionaidae

DEPTH:

-43 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Cruz del Padre, inside & outside MPA, C-60A

***Placosphaera* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Placospongiidae

DEPTH:

-71 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

201706011_T-09-03-59_092_POR1.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, meandering depressions, orange/red meanders, Oscules: round, sparse, 4 mm wide.

***Placosphaera* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Placospongiidae

DEPTH:

-74 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

201706011_T-09-01-29_081_POR.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, meandering depressions, orange/red meanders, Oscules: round, sparse, 4 mm wide.

***Placosphaera* sp. Cu-02**



CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Placospongiidae

DEPTH:

-76 m

LOCATION:

Cuba, S coast, Sierra Pural, Punta Imías, no MPA, Station C-52

201706041_T-10-20-46_090_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Thick encrusting, rugose, orange, Oscules: round, sparse, 2 mm wide.

***Diplastrella* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-72 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

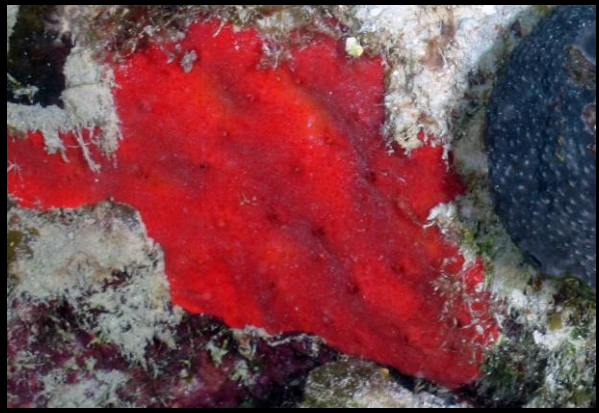
201706011_T-09-08-12_102_POR1.jpg

* M.C. Diaz & L. Busutil

Encrusting, orange, Oscules: round/sparse, 1-2 mm wide, radial canals.

Spirastrella coccinea

(Duchassaing & Michelotti, 1864)



201706011_T-09-45-16_153_POR1.jpg

1-VI-17-1-002

* M.C. Diaz & L. Busutil

Thin encrusting, smooth, red, Oscules: round, 5-10 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-44 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Spirastrella coccinea

(Duchassaing & Michelotti, 1864)



201705184_T-18-14-56_044_POR.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, smooth, red, Oscules: round/sparse, sparse, 5-10 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-49 m

LOCATION:

Cuba, NW coast, 2 nmi north of Cayo Arenas, Cayo Levisa MPA, Station C-04A

Spirastrella coccinea

(Duchassaing & Michelotti, 1864)



201705314_T-16-02-33_193_POR.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, smooth, red/pink, Oscules: round, 5-10 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-45 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Spirastrella hartmani

Boury-Esnault, Klautau, Bézac, Wulff & Solé-Cava, 1999



201705181_T-11-07-51_157_POR1.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, porous/radial subdermal canals, orange, Oscules: volcano shaped, abundant, 5-20 mm wide.

CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-53 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

***Spirastrella* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-100 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-14-43-42_046_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Thick encrusting, smooth, bright orange, Oscules: round/abundant, star shaped, 5-10 mm wide.

***Spirastrella* sp. Cu-02**



CLASS:

Demospongiae

ORDER:

Clionaida

FAMILY:

Spirastrellidae

DEPTH:

-50 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

201705314_T-16-00-30_187_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Thin encrusting, smooth/radial subdermal canals, branched; orange, Oscules: volcano shaped, abundant, 10-20 mm wide, oscular membranes: elevated; dermal canals 0.5-1 cm wide.

Igemella cf. notabilis

(Duchassaing & Michelotti, 1864)



201705191_T-09-30-10_118_POR.jpg

* M.C. Diaz & L. Busutil

Massive, conulose, red/pink, Oscules: volcano shaped, abundant, 3-5 mm wide.

CLASS:

Demospongiae

ORDER:

Dendroceratida

FAMILY:

Dictyodendrillidae

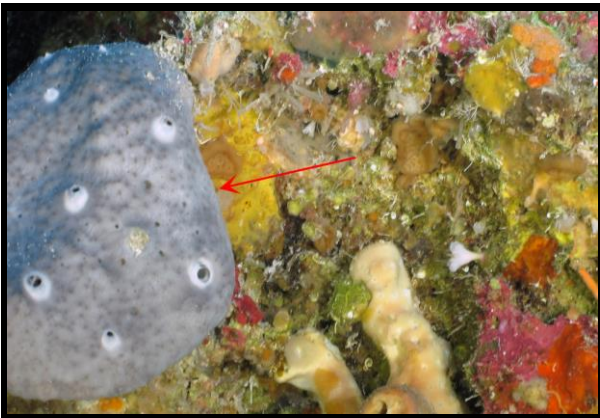
DEPTH:

-65 m

LOCATION:

Cuba, NW coast, Los
Pretilos MPA, Station C-06

Dictyoceratida Cu-02



201705253_T-14-50-23_065_POR1.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Massive, microconulose, gray/black, Oscules: round, abundant, 3-5 mm wide, oscular membranes: white; oscules 2-4 cm apart.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

DEPTH:

-86 m

LOCATION:

Cuba, S coast, SW Isla de
la Juventud, bay on west
side of point, Punta Francés
MPA, Station C-21A

Dysideidae Cu-01



CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Dysideidae

DEPTH:

-62 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

201705191_T-09-55-19_160_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, 4 x 14 cm in diameter, 2-3 cm high; spiky conulose, orange/tan, Oscules: not visible, spikes 1-2 cm high, 1 cm apart.

Dysidea cf. etheria

Laubenfels, 1936



CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Dysideidae

DEPTH:

-45 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

201706011_T-09-51-58_156_POR.jpg

1-VI-17-1-003

*** M.C. Diaz & L. Busutil

Erect massive, 21 cm high, 15 cm wide; conulose, violet, Oscules: round, sparse, 3-5 mm wide, oscular membranes: transparent.

Ircinia campana

(Lamarck, 1814)



201706071_T-08-43-45_018_POR.jpg

* M.C. Diaz & L. Busutil

Vase, with peduncle, body size 22 cm high, 16 cm wide on top; conulose, gray, Oscules: round, sparse to clumped, 2-4 mm wide, conules 1 mm high, 3-6 mm apart.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

DEPTH:

-140 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Sabinal MPA, Station C-56

Ircinia felix

(Duchassaing & Michelotti, 1864)



201705273_T-16-33-09_208_POR.jpg

** M.C. Diaz & L. Busutil

Massive/lobate, >10 cm high; conulose, gray, Oscules: round/sparse, 5-10 mm wide, oscular membranes: black; conules 1 mm high, 2-4 mm apart.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

DEPTH:

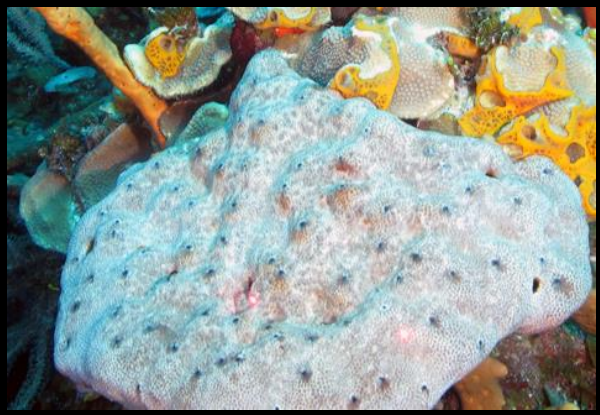
-37 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Ircinia felix

(Duchassaing & Michelotti, 1864)



201705281_T-10-27-30_233_POR.jpg

* M.C. Diaz & L. Busutil

Massive, microconulose, gray, Oscules: round/abundant, 5 mm wide, conules 1 mm high and 1-2 mm apart.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

DEPTH:

-24 m

LOCATION:

Cuba, S coast, Golfo de Cazonos, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

***Ircinia* sp. Cu-03**



201706101_T-09-35-40_108_POR.jpg

*** M.C. Diaz, L. Busutil & S. Pomponi

Cup, massive, 5-15 cm high, 15 cm wide; conulose, black, Oscules: clustered within cup, 5-8 mm wide.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

DEPTH:

-54 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Cruz del Padre, inside & outside MPA, C-60A

***Ircinia* sp. Cu-02**



201706064_T-16-20-48_025_POR.jpg

*** M.C. Diaz & L. Busutil

Thick folded plate, body 6-8 cm thick; microconulose, gray, Oscules: round, on one side, 8-20 mm wide.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

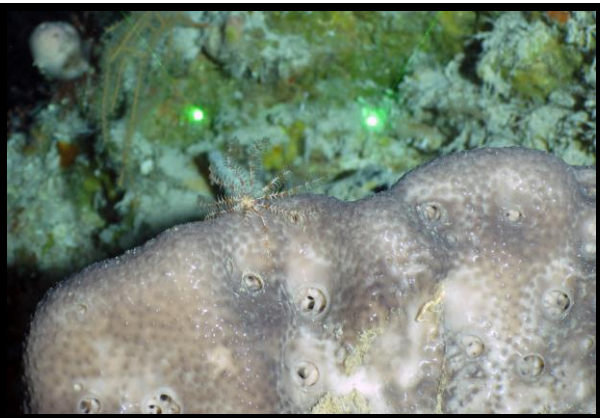
DEPTH:

-120 m

LOCATION:

Cuba, NE coast, Cabo Lucrecia, proposed MPA, Station C-54B

***Ircinia* sp. Cu-02**



201706064_T-16-21-57_028_POR.jpg

*** M.C. Diaz & L. Busutil

Thick folded plate, microconulose, gray, Oscules: round, on one side, 8-20 mm wide.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

DEPTH:

-120 m

LOCATION:

Cuba, NE coast, Cabo Lucrecia, proposed MPA, Station C-54B

Ircinia strobilina

(Lamarck, 1816)



201705253_T-16-26-16_314_POR.jpg

* M.C. Diaz & L. Busutil

Massive, subspherical, conulose, black, Oscules: round, oscules in clusters, 4-6 mm wide, conules 3-4 mm high, 1 cm apart.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Irciniidae

DEPTH:

-30 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

Spongia (Spongia) cf. obscura

Hyatt, 1877



201705271_T-10-55-02_318_POR.jpg

27-V-17-1-002

*** M.C. Diaz

Massive, subspherical, 5-7 cm wide; microconulose, black, Oscules: volcano shaped, sparse, 5-6 mm wide.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Spongiidae

DEPTH:

-34 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

***Spongia* sp. Cu-01**



201706031_T-09-59-52_132_POR.jpg

* M.C. Diaz & L. Busutil

Massive/lobate, 15-20 cm wide; microconulose, black/gray, Oscules: round, oscules on top of lobe(s), 10-20 mm wide, oscular membranes: dark.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Spongiidae

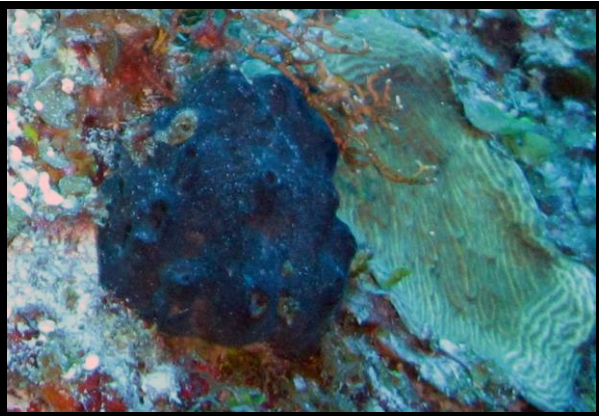
DEPTH:

-85 m

LOCATION:

Cuba, S coast, Sierra Maestra, Chivirico Proposed MPA, Station C-50

***Spongia* sp. Cu-02**



201705253_T-15-37-01_164_POR.jpg

*** M.C. Diaz & L. Busutil

Massive, subspherical, 15-20 cm in diameter; microconulose to lumpy, black, Oscules: volcano shaped, sparse, 10-15 mm wide.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Spongiidae

DEPTH:

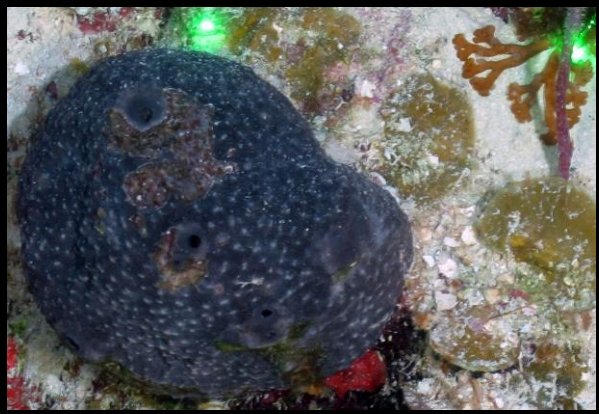
-35 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

Hyrtios cf. proteus

Duchassaing & Michelotti, 1864



201706011_T-09-45-16_153_POR.jpg

1-VI-17-1-002

** M.C. Diaz & L. Busutil

Massive, subspherical, conulose, conules 1 mm high, 1.5-2 mm apart; black, Oscles: round, sparse, 2-3 mm wide, oscular membranes: with diaphragm.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Thorectidae

DEPTH:

-44 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Smenospongia aurea

(Hyatt, 1875)



201705312_T-10-41-54_138_POR.jpg

** M.C. Diaz & L. Busutil

Massive/lobate, polygonal ridges, brown/red, oscles on top of lobe(s), 10-20 mm wide, oscular membranes: with diaphragm; copious mucus when broken.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Thorectidae

DEPTH:

-28 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Smenospongia conulosa

Pulitzer-Finali, 1986



201705273_T-17-07-33_237_POR.jpg

* M.C. Diaz & L. Busutil

Massive/lobate, conulose, green/black, oscules on top of lobe(s), 10-10 mm wide, conules 1-2 mm high, 2-4 mm apart; copious mucus when broken.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Thorectidae

DEPTH:

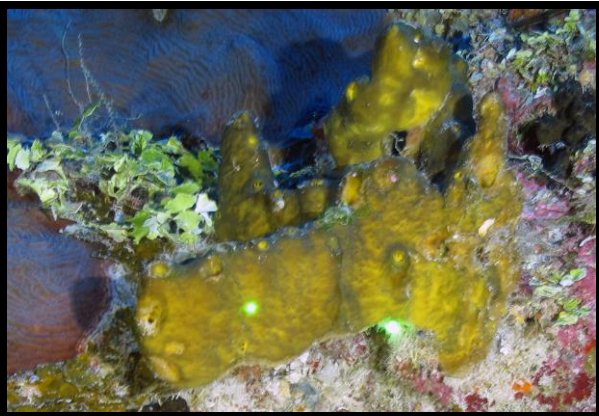
-42 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Smenospongia cf. echina

(Laubenfels, 1934)



201705261_T-10-10-31_137_POR.jpg

*** M.C. Diaz & L. Busutil

Massive/lobate, smooth to conulose, yellow green, Oscules: round, sparse, 4-20 mm wide, copious mucus when broken.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Thorectidae

DEPTH:

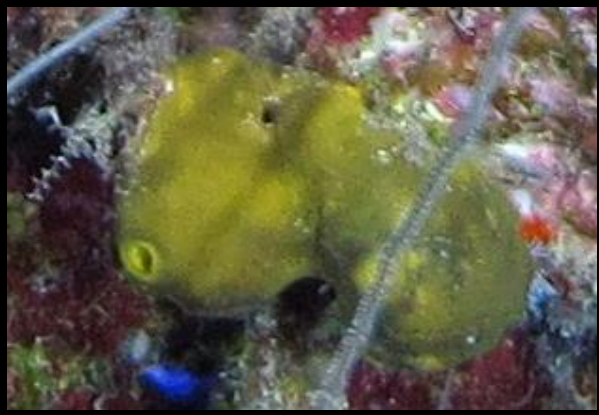
-59 m

LOCATION:

Cuba, S coast, SE Isla de la Juventud, Punta Brava MPA, Station C-23

Smenospongia cf. echina

(Laubenfels, 1934)



201705261_T-10-03-25_122_POR.jpg

*** M.C. Diaz & L. Busutil

Massive/lobate, conulose, yellow green, Oscules: round, sparse, 3-20 mm wide, oscular membranes: lighter; conules 1-2 mm wide, 2-3 mm apart; copious mucus when broken.

CLASS:

Demospongiae

ORDER:

Dictyoceratida

FAMILY:

Thorectidae

DEPTH:

-56 m

LOCATION:

Cuba, S coast, SE Isla de la Juventud, Punta Brava MPA, Station C-23

Calcifibrospongia cf. actinostromarioides

Hartman, 1979



201705311_T-08-55-17_018_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Massive/plate/hypocalcified, 4-7 cm wide; porous, orange, Oscules: round, on one side, 1-2 mm wide, 1-3 cm apart.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Calcifibrospongiidae

DEPTH:

-142 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Callyspongia (Cladochalina) alcoladoi

Busutil, García-Hernández, Díaz & Pomponi, 2018



201706053_T-15-15-29_160_POR.jpg

5-VI-17-3-004

*** M.C. Díaz & L. Busutil

Branching/ rope, profusely branching and anastomosing, 3–8 mm wide, 20–30 cm long; smooth, with few spiny projections (2–4 mm wide, 2–4 cm long); light purple/tan, Oscules: round, along branches, 1–2 mm wide, .2–2 cm apart.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

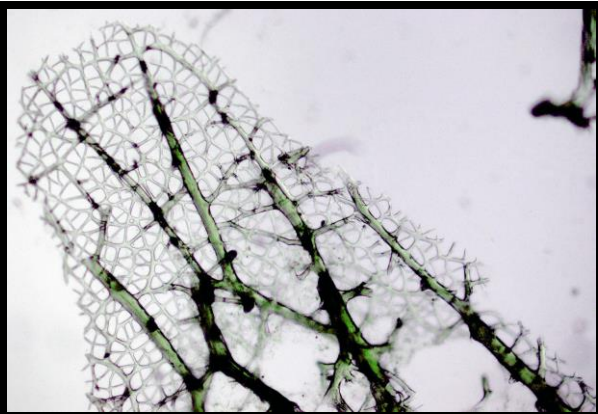
-52 m

LOCATION:

Cuba, eastern tip of Cuba, NW Punta Maisí, Punta del Fraile, no MPA, Station C-53B

Callyspongia (Cladochalina) alcoladoi

Busutil, García-Hernández, Díaz & Pomponi, 2018



201705053004_micro_tangential_section

5-VI-17-3-004

* M.C. Díaz & L. Busutil

primary fibers (30–150 µm in diameter), secondary fibers (15–30 µm) and tertiary fibers (8–16 µm), with primary meshes (80–250 µm), secondary meshes (70–210 µm) and tertiary meshes (30–70 µm) Skeleton: 1ry, 2ry, and 3ry fibers.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-52 m

LOCATION:

Cuba, eastern tip of Cuba, NW Punta Maisí, Punta del Fraile, no MPA, Station C-53B

Callyspongia (Cladochalina) armigera

(Duchassaing & Michelotti, 1864)



201706094_T-16-48-45_124_POR.jpg

* M.C. Diaz & L. Busutil

Branching/not anastomosing, 3-8 mm in diameter, 20-30 cm long; microconulose, pink/grayish, Oscules: oval/flush, 1-3 mm wide, 3-4 mm apart, flimsy Skeleton: non tertiary reticle.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-52 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Jutía, no MPA, Station C-59C

Callyspongia (Callyspongia) fallax

Duchassaing & Michelotti, 1864



201705213_T-15-18-22_099_POR.jpg

* M.C. Diaz & L. Busutil

Massive/lobate, 2-3 cm in diameter, and 2-7 cm high; smooth, violet, violet/tan internally; oscules on top of lobe(s), 8-20 mm wide, oscular membranes: transparent.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-46 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

Callyspongia (Callyspongia) pedroi

Busutil, García-Hernández, Díaz & Pomponi, 2018



201706031_T-10-02-49_142_POR.jpg

*** Busutil et al.2018

Branching/not anastomosing, microconulose, pink/grayish, Oscules: oval/flush, 1-3 mm wide, flimsy.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

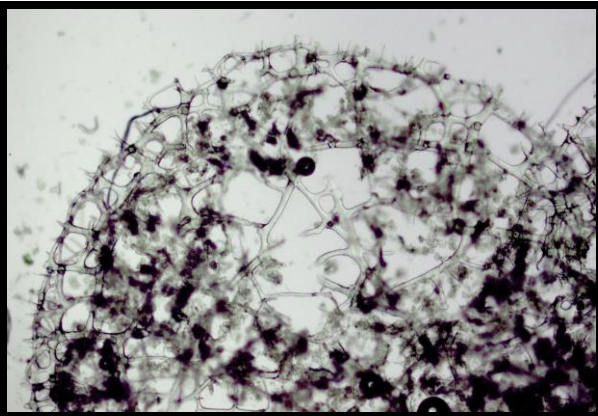
-81 m

LOCATION:

Cuba, S coast, Sierra Maestra, Chivirico Proposed MPA, Station C-50

Callyspongia (Callyspongia) pedroi

Busutil, García-Hernández, Díaz & Pomponi, 2018



201705222002_micro_X_section_in_4x.j

22-V-17-2-002

*** Busutil et al.2018

Branching/not anastomosing, pink/grayish, brittle; cross section showing skeletal organization. Primary fibers (20–40 µm in diameter); secondary fibers (10–15 µm in diameter); no tertiary fibers Skeleton: non tertiary reticle.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-62 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

Callyspongia (Cladochalina) plicifera

(Lamarck, 1814)



201705273_T-15-53-45_170_POR.jpg

* M.C. Diaz & L. Busutil

Vase, up to 40 cm high and 6-20 cm wide; grooved/conulose, gray/pink, Oscules: inner vase, vent: 20 cm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-48 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Callyspongia (Cladochalina) plicifera

(Lamarck, 1814)



201706011_T-09-03-59_092_POR.jpg

* M.C. Diaz & L. Busutil

Vase, 40 cm high and 5-12 cm wide; grooved/conulose, violet, Oscules: inner vase, vent: 12 cm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-71 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Callyspongia (Cladochalina) plicifera

(Lamarck, 1814)



201705271_T-11-44-49_372_POR.jpg

* M.C. Diaz & L. Busutil

Vase, 40 cm high and 10-40 cm wide; grooved/conulose, pink/grayish, Oscules: inside of tube, upper vent 10-40 cm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-36 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Callyspongia sp. Cu-01



201706101_T-09-29-26_094_POR.jpg

* M.C. Diaz & L. Busutil

Fan, smooth, gray, Oscules: abundant, on one side, 2-3 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-54 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Cruz del Padre, inside & outside MPA, C-60A

***Callyspongia* sp. Cu-01**



201706101_T-09-35-02_106_POR.jpg

* M.C. Diaz & L. Busutil

Fan, concentric growth on edge, < 1 cm thick, 15-40 cm high, up to almost 1 m wide; smooth, gray, Oscules: abundant, on one side, 5 mm wide, oscules 1-2 cm apart.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

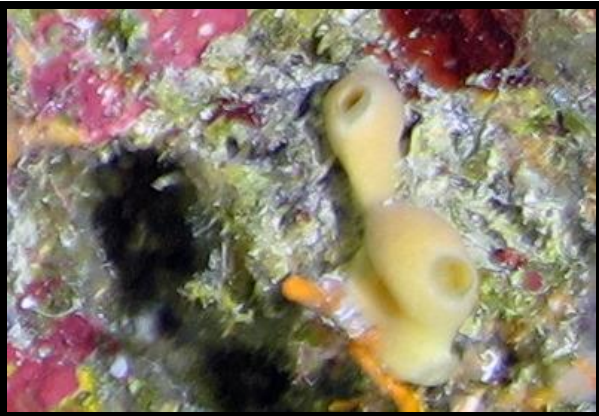
-54 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Cruz del Padre, inside & outside MPA, C-60A

Callyspongia (Callyspongia) cf. pallida

Hechtel, 1965



201705271_T-09-10-18_070_POR.jpg

* M.C. Diaz & L. Busutil

Massive/lobate, 1-2 cm wide and high; smooth, tan, oscules on top of lobe(s), 5-5 mm wide, oscular membranes: transparent.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Callyspongiidae

DEPTH:

-104 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Amphimedon caribica

(Pulitzer-Finali, 1986)



201705193_T-15-36-01_108_POR.jpg

* M.C. Diaz & L. Busutil

Fan/stalked, 20 x 12 cm in diameter, 5-6 mm thick; microconulose, pink/violet/gray, Oscules: abundant, 1 mm wide, oscules 2 mm apart.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-58 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

Amphimedon compressa

Duchassaing & Michelotti, 1864



201706011_T-09-32-23_144_POR.jpg

* M.C. Diaz & L. Busutil

Branching, 2-3 cm wide, 30-90 cm long; smooth, red/orange, Oscules: round, 4-5 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-50 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

***Amphimedon* sp. Cu-01**



201705193_T-15-01-08_096_POR1.jpg

* M.C. Diaz & L. Busutil

Erect branch, convoluted, brown, Oscules: round, on one side, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

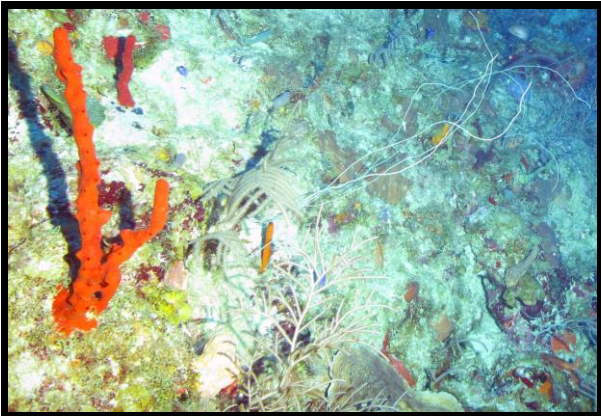
DEPTH:

-58 m

LOCATION:

Cuba, NW coast, Los
Pretilos MPA, Station C-06

***Amphimedon* sp. Cu-02**



201705181_T-11-13-51_172_POR1.jpg

* M.C. Diaz & L. Busutil

Erect branch, smooth, orange, Oscules: volcano shaped, abundant, 4-6 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-48 m

LOCATION:

Cuba, NW coast, Cayo
Levisa MPA, Station C-04

***Amphimedon* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-74 m

LOCATION:

Cuba, S coast, Cabo Cruz, Desembarco del Gramma National Park, Station C-48

201706021_T-11-28-45_132_POR1.jpg

* M.C. Diaz & L. Busutil

Erect branch/repent, smooth, white, Oscules: round, 5-10 mm wide.

***Amphimedon* sp. Cu-05**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-98 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

201705271_T-09-19-07_095_POR.jpg

* M.C. Diaz

Erect branch, smooth, yellow/tan, Oscules: round, on one side, 2-3 mm wide.

***Amphimedon* sp. Cu-06**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-122 m

LOCATION:

Cuba, S coast, Cabo Cruz,
Desembarco del Gramma
National Park, Station C-48

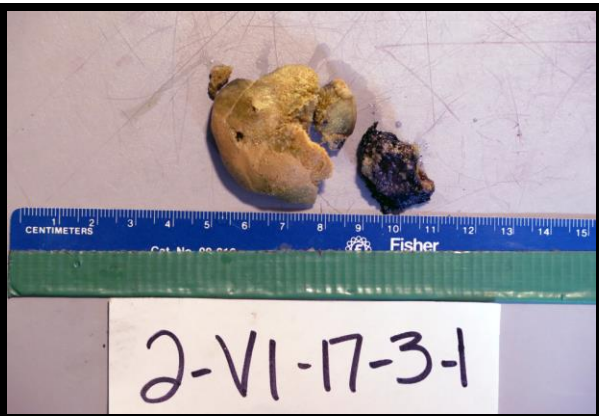
201706023_T-15-10-36_017_POR.jpg

2-VI-17-3-001

* M.C. Diaz & L. Busutil

Massive, smooth, yellow/tan, Oscules: round, sparse, 1-2 mm wide.

***Amphimedon* sp. Cu-06**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-122 m

LOCATION:

Cuba, S coast, Cabo Cruz,
Desembarco del Gramma
National Park, Station C-48

201706023001_deck2.JPG

2-VI-17-3-001

* M.C. Diaz & L. Busutil

Massive, smooth, yellow/tan, Oscules: round, sparse, 1-2 mm wide.

Cribrochalina vasculum

(Lamarck, 1814)



201705273_T-15-45-48_150_POR.jpg

* M.C. Diaz & L. Busutil

Thin plate, smooth, red, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-69 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Cribrochalina vasculum

(Lamarck, 1814)



201705253_T-15-21-37_134_POR.jpg

* M.C. Diaz & L. Busutil

Thin plate, smooth, brown/red, Oscules: round, sparse, 2-2 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-58 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

Niphatidae Cu-01



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-103 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

201705213_T-14-41-51_027_POR1.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, < 1 cm thick; porous, yellow/orange, Oscules: round, abundant, 2-4 mm wide.

Niphates alba

van Soest, 1980



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-94 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

201705273_T-15-21-30_088_POR.jpg

* M.C. Diaz & L. Busutil

Erect branch, smooth to conulose, gray, Oscules: abundant, 2-5 mm wide.

Niphates arenata

Rützler, Piantoni, van Soest & Díaz, 2014



201705213_T-14-41-12_024_POR.jpg

* M.C. Díaz & L. Busutil

Thick encrusting, porous, gray/pink, Oscules: round, 3-8 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-103 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

Niphates digitalis

(Lamarck, 1814)



201705181_T-11-08-48_161_POR.jpg

* M.C. Díaz & L. Busutil

Cup, with peduncle, 12-14 cm high, 10-12 cm wide, 5-7 mm thick; microconulose, gray, Oscules: round, on one side, 1 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-50 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

Niphates erecta

Duchassaing & Michelotti, 1864



201706101_T-10-11-04_138_POR1.jpg

* M.C. Diaz & L. Busutil

Erect branch, 10 cm high, 2-3 cm wide; microconulose, gray/pink, Oscules: round, sparse, 3-5 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-43 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

Niphates cf. erecta

Duchassaing & Michelotti, 1864



201706101_T-09-46-08_119_POR.jpg

* M.C. Diaz & L. Busutil

Erect branch, hispid, pink, Oscules: round, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-50 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

***Niphates* sp. Cu-01**



201705181_T-11-05-56_149_POR.jpg

* M.C. Diaz & L. Busutil

Cup, with peduncle, 10-12 cm high, 10 cm wide, peduncle is 2-3 cm wide; porous, gray/pink, Oscules: round, on one side, 1 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-61 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

***Niphates* sp. Cu-02**



201706041_T-10-44-23_124_POR.jpg

4-VI-17-1-006

*** M.C. Diaz

Erect branch, 11 cm high, 3-5 cm wide; porous, gray, Oscules: round, sparse, 5-10 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-66 m

LOCATION:

Cuba, S coast, Sierra Purial, Punta Imías, no MPA, Station C-52

***Niphates* sp. Cu-03**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Niphatidae

DEPTH:

-47 m

LOCATION:

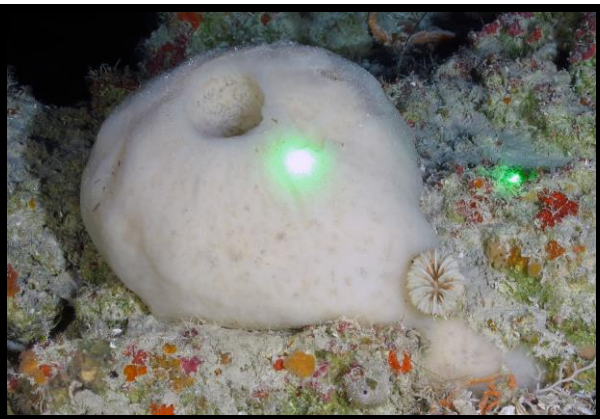
Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

201705213_T-15-29-02_121_POR.jpg

* M.C. Diaz & L. Busutil

Cluster of fat/ hollow tubes, 6-8 cm high; pitted depressions, gray, Oscules: abundant inside tubes, 10-20 mm wide.

***Petrosiidae* Cu-02**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-124 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

201705273_T-15-11-36_059_POR.jpg

* M.C. Diaz & L. Busutil

Massive/subspherical, 5-10 cm high, 10-20 cm wide; smooth/porous, white, vent: 2 cm wide, 2-3 cm deep.

Petrosiidae Cu-04



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-92 m

LOCATION:

Cuba, S coast, Sierra Pural, east tip of Punta Imías, 1 nmi east of ROV 31, no MPA, Station C-52A

201706043_T-13-37-10_050_POR.jpg

* M.C. Diaz & L. Busutil

Erect branch, 2-7 cm wide, up to 20 cm high; rugose, red, Oscules: round, sparse, 2-4 mm wide.

Petrosiidae Cu-05



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-88 m

LOCATION:

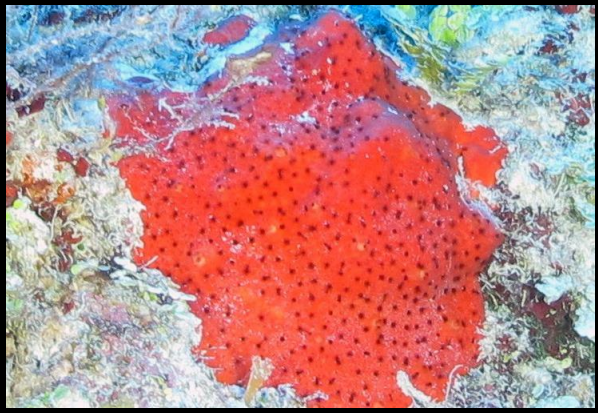
Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

201705224_T-15-45-52_055_POR.jpg

* M.C. Diaz & L. Busutil

Cone/lobe, 17 cm high, 5-12 cm wide; porous, white, vent: 2-3 cm wide.

Petrosiidae Cu-06



201705273_T-15-50-58_163_POR2.jpg

* M.C. Diaz & L. Busutil

Encrusting, red, Oscules: round/abundant, white rim, 2-4 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-58 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Petrosiidae Cu-06



201705273_T-15-50-58_163_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, with zoanthids; red, Oscules: round, abundant, 2-4 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-58 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Petrosiidae Cu-07



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-111 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-11-16-54_153_POR.jpg

* M.C. Diaz & L. Busutil

Cup, with projection, smooth, with zoanthids; white, Oscules: not visible.

Petrosiidae Cu-08



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-136 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-10-55-13_023_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, >1 cm thick, 10-30 cm in diameter; irregular, white/purple, Oscules: round, abundant, 1-2 mm wide, 2-3 cm apart.

Petrosiidae Cu-09



201705253_T-14-44-02_064_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, gray, Oscules: round/sparse, white rim, 4-6 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-99 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

Petrosiidae Cu-11



201705193_T-16-49-13_164_POR.jpg

* M.C. Diaz & L. Busutil

Branching/not anastomosing, 1.5-2.5 cm wide and 60-80 cm long; smooth, red wine, Oscules: round, abundant, 3-4 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-45 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

Petrosiidae Cu-12



201705314_T-15-45-44_138_POR.jpg

* M.C. Diaz & L. Busutil

Hanging branches, 5-10 cm wide and 100-150 cm long; irregular/cone projections, gray/black, Oscules: round, oscules on top of cone(s), 10 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

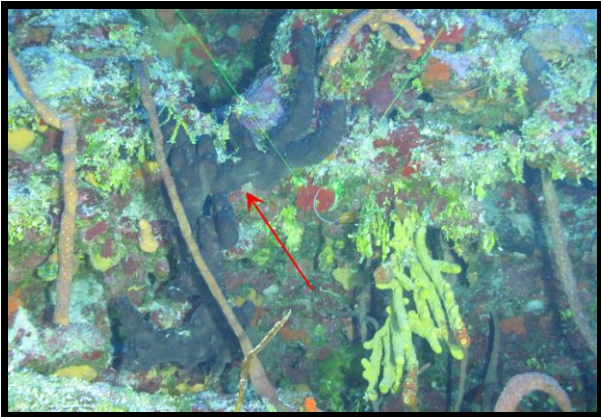
DEPTH:

-70 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Petrosiidae Cu-12



201705314_T-15-49-21_149_POR.jpg

* M.C. Diaz & L. Busutil

Repent/ erect branches, 5-10 cm wide and 100-120 cm long; irregular/cone projections, gray/black, oscules on top of cone(s), 10 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-69 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Petrosiidae Cu-14



201706091_T-10-03-44_169_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, with zoanths; tan/pink, Oscules: round/abundant, on volcano elevations, 6-10 mm wide, 2-5 cm apart.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-55 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo La Vela
MPA, Station C-59A

Petrosiidae Cu-16



201705251_T-10-52-22_119_POR.jpg

* M.C. Diaz & L. Busutil

Thick folded plate, smooth, with zoanths; red wine, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-45 m

LOCATION:

Cuba, S coast, SW tip of
Isla de la Juventud, Punta
de Pedernales MPA,
Station C-21

Petrosiidae Cu-17



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-61 m

LOCATION:

Cuba, NW coast, Los
Pretils MPA, Station C-06

201705191_T-09-54-23_157_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, red/pink, Oscules: round/abundant, elevated, 2-5 mm wide, 1-3 cm apart.

Petrosiidae Cu-20



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-106 m

LOCATION:

Cuba, S coast, SE Isla de la
Juventud, Punta Brava
MPA, Station C-23

201705261_T-09-31-18_039_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, > 1 cm thick, 30-40 cm in diameter; smooth, with zoanthids; tan, Oscules: on top of nipple-like projections, 6-10 mm wide, oscular chimneys are 0.6-1 cm wide and 1.5 to 2 cm high.

Neopetrosia cf. dutchi

Van Soest, Meesters & Becking, 2014



201706034_T-16-02-06_030_POR.jpg

* M.C. Diaz & L. Busutil

Massive, volcano projections, 10-20 cm high; smooth, white, oscules on top of projections, 10-15 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

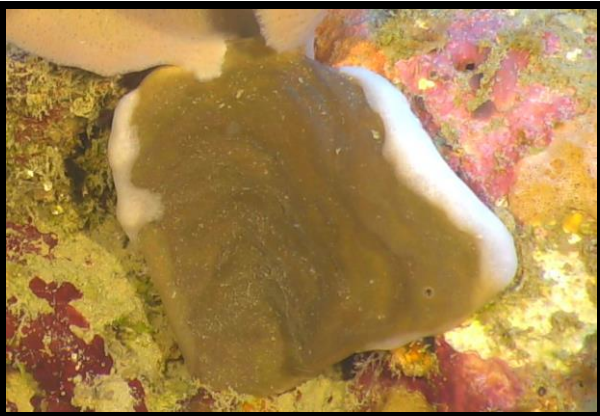
-124 m

LOCATION:

Cuba, S coast, Sierra Maestra, Chivirico
Proposed MPA, Station C-50

Petrosia (Petrosia) pellasarca

(Laubenfels, 1934)



201706041_T-10-35-26_097_POR.jpg

* M.C. Diaz & L. Busutil

Fan, smooth, brown/red, Oscules: round, sparse, 2 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-66 m

LOCATION:

Cuba, S coast, Sierra Purial, Punta Imías, no MPA,
Station C-52

Petrosia (Petrosia) weinbergi

van Soest, 1980



201705211_T-09-59-37_141_POR1.jpg

** M.C. Diaz & L. Busutil

Thick encrusting, 5-40 cm wide, 1 cm thick; smooth, dark green, Oscules: round/abundant, white rim, 2-5 mm wide, oscules 1-3 cm apart.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-75 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, east wall, Station C-10

Xestospongia deweerdtae

Lehnert & van Soest, 1999



201706081_T-11-22-06_068_POR.jpg

* M.C. Diaz & L. Busutil

Massive/lobate, growing chimeric with a dark brown Plakortis cf. species, irregular, with zoanthids; gray/pink, Oscules: round, oscules on top of lobe(s).

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-116 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

Xestospongia muta

(Schmidt, 1870)



201706071_T-10-26-37_147_POR.jpg

** M.C. Diaz & L. Busutil

Barrel, up to 1.5 m high, wall at rim < 3 cm wide; rugose/ridged,

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

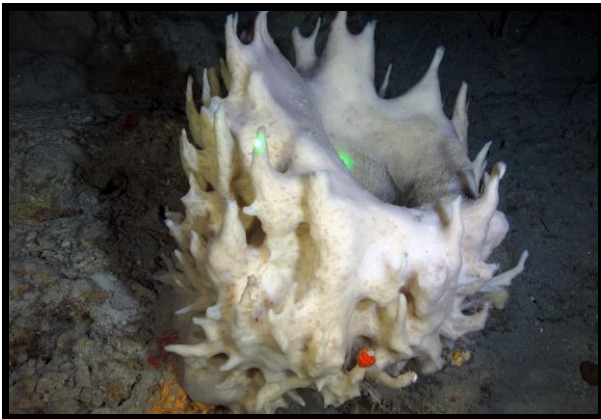
DEPTH:

-60 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

***Xestospongia* sp. Cu-01**



201706091_T-08-51-46_034_POR.jpg

** M.C. Diaz & L. Busutil

Barrel, 50 cm high, 40 cm wide; spiky, white, Oscules: not visible, spikes are 5-10 cm long.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-122 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo La Vela
MPA, Station C-59A

***Xestospongia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-139 m

LOCATION:

Cuba, S coast, Sierra Pural, Punta Imías, no MPA, Station C-52

201706041_T-09-23-11_014_POR.jpg

*** M.C. Diaz & L. Busutil

Barrel, 20 cm high, 25 cm wide; smooth to spiky, white, Oscules: vent, 8-10 cm wide.

***Xestospongia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-61 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

201705273_T-15-49-30_159_POR.jpg

** M.C. Diaz & L. Busutil

Barrel, upper rim (5-10 cm wide); rugose, red/brown, Oscules: vent.

***Xestospongia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-142 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

201706071_T-08-43-08_016_POR.jpg

** M.C. Diaz & L. Busutil

Barrel, 20 cm high and 10 cm wide; smooth to rugose, white, Oscules: vent, 5-6 cm wide.

***Xestospongia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-73 m

LOCATION:

Cuba, W coast, Faro
Roncali, off lighthouse,
Guanahacabibes National
Park, Station C-12A

201705222_T-11-53-28_154_POR.jpg

*** M.C. Diaz & L. Busutil

Barrel, up to 60 cm high; rounded projections, red/pink, Oscules: vent, 15-40 cm wide.

***Xestospongia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-60 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-15-04-32_101_POR.jpg

** M.C. Diaz & L. Busutil

Barrel, vent, rugose, with zoanthids; red/brown, Oscules: not visible, vent: 10-20 cm wide.

***Xestospongia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Petrosiidae

DEPTH:

-128 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

201705181_T-10-08-14_080_POR.jpg

*** M.C. Diaz & L. Busutil

Barrel, vent, (<60 cm high), upper rim of barrel usually as thick as the mid wall (5-10 cm wide); rugose, with zoanthids; white/brown, Oscules: not visible, vent: 15 cm wide Skeleton:

Oceanapia bartschi

(Laubenfels, 1934)



201705181_T-09-49-25_072_POR.jpg

18-V-17-1-001

*** R.Van Soest, M.C. Diaz & L. Busutil

Subspherical, 5-12 cm in diameter; fistulose, black, Oscules: inner wall, vent: 2-3 cm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-133 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

Oceanapia bartschi

(Laubenfels, 1934)



201705181001_Deck.JPG

18-V-17-1-001

*** R.Van Soest, M.C. Diaz

Subspherical, vent, 5-12 cm in diameter; fistulose, black, Oscules: inner wall, vent: 2-3 cm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-133 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

Oceanapia bartschi

(Laubenfels, 1934)



201705312_T-10-37-33_124_POR.jpg

** R.Van Soest, M.C. Diaz & L. Busutil

Tube(s), 25 cm high, 10-12 cm wide; fistulose, black, Oscules: inner vase, vent: 5 cm wide, fistules (1-3 cm) and thin (3-6 mm wide).

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

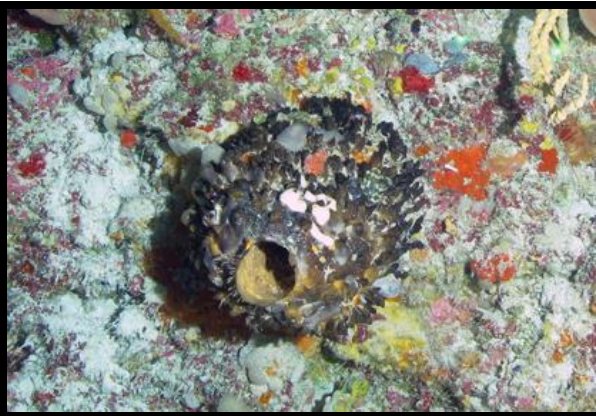
-28 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Oceanapia bartschi

(Laubenfels, 1934)



201705193_T-14-34-18_062_POR1.jpg

** R.Van Soest, M.C. Diaz & L. Busutil

Subspherical, 40 cm wide; fistulose, brown/yellow, Oscules: inner vase, fistules (1-3 cm high, 0.5 cm wide).

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-76 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

Oceanapia bartschi

(Laubenfels, 1934)



201705263_T-15-19-00_037_POR.jpg

**R.Van Soest, M.C. Diaz & L. Busutil

Subspherical, 40 cm wide, high; fistulose, brown/yellow, Oscules: inner vase, vent: 15 cm wide, fistules (1-3 cm high, 0.5 cm wide).

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-112 m

LOCATION:

Cuba, S coast, E of Isla de la Juventud, Archipiélago de Los Canarreos, Cayo Matías MPA, C-24

Oceanapia cf. oleracea

(Schmidt, 1870)



201705222001_Deck1.JPG

22-V-17-2-001

*R.Van Soest, M.C. Diaz, L. Busutil & S. Pomponi

Subspherical, fistulose, tan/pink, Oscules: not visible, fistules 20-25 cm long, 1-2 cm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-62 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

Oceanapia peltata

(Schmidt, 1870)



201705203_T-15-04-11_047_POR.jpg

* R. Van Soest, M.C. Diaz, L. Bustil & S. Pomponi

Subspherical, smooth/fistulose, brown/tan, Oscules: not visible, fistules 1 cm wide, 3-10 cm.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-49 m

LOCATION:

Cuba, NW coast,
Archipiélago de Los
Colorados, No MPA,
Station C-07

***Oceanapia* sp. Cu-04**



201705231_T-08-57-43_068_POR.jpg

** R. Van Soest, M.C. Diaz & L. Busutil

Beet, 10-16 cm wide, with unbranched fistules, with pointed tips, smooth, encrusted; white, Oscules: not visible, 1-1.5 cm wide and 6-16 cm high.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-100 m

LOCATION:

Cuba, W coast, El
Almirante, Punto de Buceo,
Cabo Corrientes,
Guanahacabibes National
Park, Station C-15

***Oceanapia* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-123 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-11-09-21_065_POR.jpg

**R.Van Soest, M.C. Diaz & L. Busutil

Beet with unbranched fistules, pointed fistule tips, 10 cm in diameter; smooth, encrusted; white, Oscules: not visible, fistules 10-15 cm, 1.4-1.6 cm wide.

***Oceanapia* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-85 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-11-36-53_128_POR1.jpg

**R.Van Soest, M.C. Diaz & L. Busutil

Beet with unbranched fistules, pointed fistule tips, 10 cm wide; smooth, encrusted; pink, Oscules: not visible, fistules 12-18 high, 2 cm wide.

***Oceanapia* sp. Cu-04**



201705231_T-08-47-34_042_POR.jpg

**R.Van Soest, M.C. Diaz & L. Busutil

Beet, 10-16 cm wide, with unbranched fistules, with pointed tips, smooth, encrusted; white, Oscules: not visible, fistules: 1-1.5 cm wide and 6-16 cm high.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-120 m

LOCATION:

Cuba, W coast, El Almirante, Punto de Buceo, Cabo Corrientes, Guanahacabibes National Park, Station C-15

***Oceanapia* sp. Cu-05**



201706041_T-10-03-05_072_POR.jpg

*R.Van Soest, M.C. Diaz & L. Busutil

Subspherical, 5-10 cm in diameter; smooth/fistulose, with zoanthids; yellow, 8-10 mm wide, fistules (2.5-5 cm high, 5-7 mm wide), Oscules: 0.8-1 cm wide on top of projections (1-1.5 cm wide 4-5 cm long).

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-95 m

LOCATION:

Cuba, S coast, Sierra Purial, Punta Imías, no MPA, Station C-52

***Oceanapia* sp. Cu-06**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-88 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo La Vela
MPA, Station C-59A

201706091_T-09-13-03_078_POR1.jpg

* R.Van Soest, M.C. Diaz & L. Busutil

Digitate, smooth, white, Oscules: not visible, fistules (5 mm wide, 1-2 cm high).

***Oceanapia* sp. Cu-07**



CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-92 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

201706071007_T-09-39-16_078_POR1

7-VI-17-1-007

*** R.Van Soest, M.C. Diaz, L. Busutil & S. Pomponi

Massive with fistules, smooth, encrusted; light yellow, Oscules: not visible, fistules (6-10 mm wide, 7-8 cm high)

Oceanapia cf. stalagmitica

(Wiedenmayer, 1977)



201706083_T-15-15-42_020_POR1.jpg

*R.Van Soest, M.C. Diaz & L. Busutil

Subspherical, 10 cm wide; fistulose, brown/yellow, Oscules: one on top, 14 mm wide, fistules 1-3 cm high, 6-8 mm wide.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

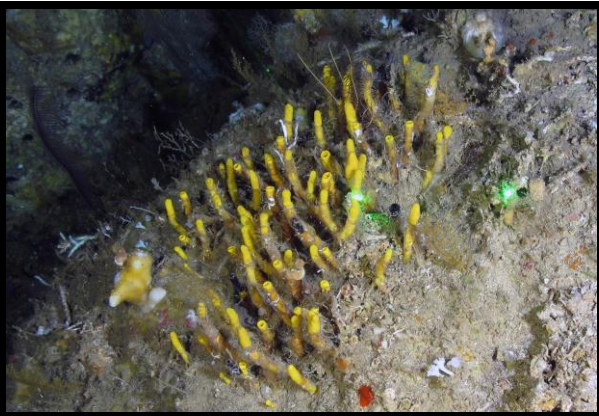
-117 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Coco,
proposed MPA, Station C-
58A

Siphonodictyon brevitubulatum

Pang, 1973



201706034_T-15-55-14_013_POR.jpg

*R.Van Soest, M.C. Diaz, L. Busutil & S. Pomponi

Tubular fistules, smooth, bright yellow, Oscules: apical, 2-5 mm wide, fistules 2.5-5 mm wide, 1-4 cm high.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

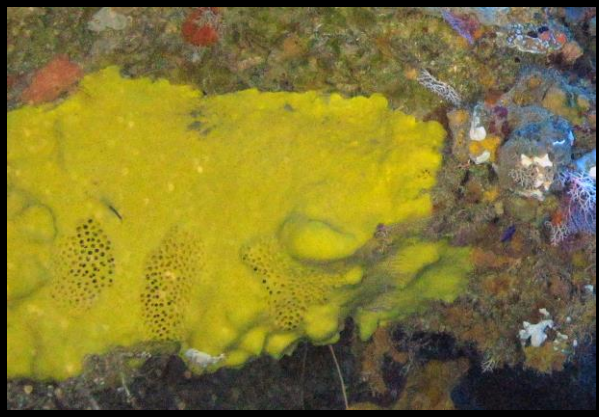
-135 m

LOCATION:

Cuba, S coast, Sierra
Maestra, Chivirico
Proposed MPA, Station C-
50

Siphonodictyon coralliphagum

Rützler, 1971



201705224_T-15-47-47_065_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, smooth, yellow, Oscules: round, in clusters, 3-5 mm wide, mucus released when cut.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-82 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

Siphonodictyon coralliphagum

Rützler, 1971



201705231_T-09-36-46_160_POR.jpg

* M.C. Diaz & L. Busutil

Tube(s), 3-6 cm high, 3-5 cm wide, < 5 cm apart; smooth, yellow, Oscules: one on top, 30 mm wide, mucus released when cut.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-39 m

LOCATION:

Cuba, W coast, El Almirante, Punto de Buceo, Cabo Corrientes, Guanahacabibes National Park, Station C-15

Siphonodictyon xamaycaense

Pulitzer-Finali, 1986



201705281_T-09-29-26_109_POR.jpg

* M.C. Diaz & L. Busutil

Finger(s), 1-1.5 cm wide and 4-6 cm high; smooth, white, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

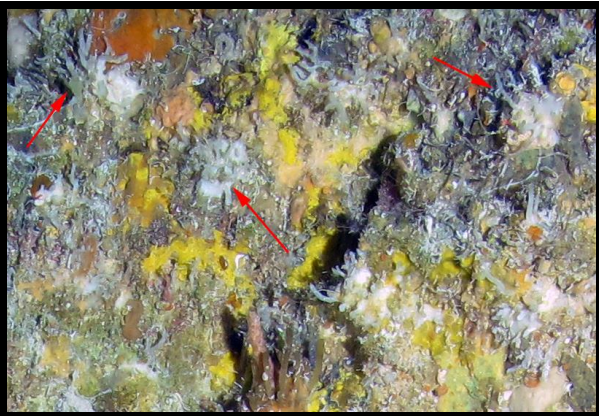
-85 m

LOCATION:

Cuba, S coast, Golfo de Cazonos, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

Siphonodictyon cf. xamaycaense

Pulitzer-Finali, 1986



201705224_T-15-38-10_028_POR3.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Fistulose/encrusting, smooth, white, Oscules: sparse, 3 mm wide, fistules (2-3 mm wide, and 1-2 cm high).

CLASS:

Demospongiae

ORDER:

Haplosclerida

FAMILY:

Phloeodictyidae

DEPTH:

-109 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

Merlia deficiens

Vacelet, 1980



201705203013_Deck2.JPG

20-V-17-3-013

* M.C. Diaz

Thin encrusting, smooth, orange, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Merliida

FAMILY:

Merliidae

DEPTH:

-48 m

LOCATION:

Cuba, NW coast,
Archipiélago de Los
Colorados, No MPA,
Station C-07

Monanchora arbuscula

(Duchassaing & Michelotti, 1864)



201706071_T-10-11-25_120_POR.jpg

* M.C. Diaz & L. Busutil

Bush, 10 cm high; white dermal veil, red, Oscules: round, star shaped/branched canals, 3-10 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Crambeidae

DEPTH:

-66 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

Desmampsamma anchorata

(Carter, 1882)



201706094_T-17-00-04_155_POR.jpg

* M.C. Díaz & L. Busutil

Thick encrusting, leathery, red/pink, Oscules: round/sparse, dermal canals, 5-10 mm wide, oscular membranes: elevated.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Desmacididae

DEPTH:

-50 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Jutía, no MPA, Station C-59C

Phorbas amaranthus

Duchassaing & Michelotti, 1864



201705191_T-09-31-40_124_POR1.jpg

* M.C. Díaz & L. Busutil

Thin encrusting, papillate, red, Oscules: round, sparse, 5-20 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Hymedesmiidae

DEPTH:

-64 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

Phorbas sp. Cu-01



CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Hymedesmiidae

DEPTH:

-64 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo La Vela
MPA, Station C-59A

201706091_T-09-48-34_140_POR.jpg

* John Reed

Thin encrusting, papillate, orange/tan, Oscules: round, sparse.

Phorbas sp. Cu-02



CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Hymedesmiidae

DEPTH:

-104 m

LOCATION:

Cuba, W coast, Banco de
San Antonio MPA, south
wall, Station C-10A

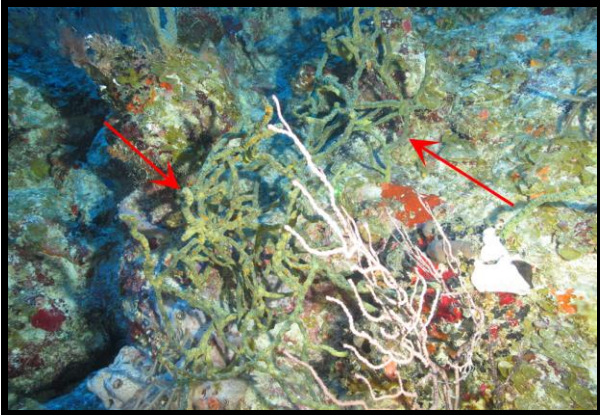
201705213_T-14-40-06_020_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Thick encrusting, papillate, orange, Oscules: round, 10 mm wide, oscular membranes: elevated.

Iotrochota birotulata

(Higgin, 1877)



201705201_T-11-01-13_222_POR.jpg

** M.C. Diaz & L. Busutil

Branching, 1-2 cm in diameter, 50-60 cm high; conulose, with zoanths; green/black, Oscules: round, on one side, mucus released when cut.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Iotrochotidae

DEPTH:

-55 m

LOCATION:

Cuba, NW coast, Archipiélago de Los Colorados, No MPA, Station C-07

Iotrochota birotulata

(Higgin, 1877)



201706081_T-11-33-32_123_POR.jpg

** M.C. Diaz & L. Busutil

Branching, 5-25 cm long, 1-4 cm wide; conulose, black, Oscules: round, mucus released when cut.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Iotrochotidae

DEPTH:

-91 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

***Iotrochota* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Iotrochotidae

DEPTH:

-92 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

201706071007_T-09-39-16_078_POR2

7-VI-17-1-007

*** M.C. Diaz, L. Busutil & S. Pomponi

Thin encrusting, conulose, pink, Oscules: round, 2-3 mm wide.

Clathria (Microciona) echinata

(Alcolado, 1984)



CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Microcionidae

DEPTH:

-62 m

LOCATION:

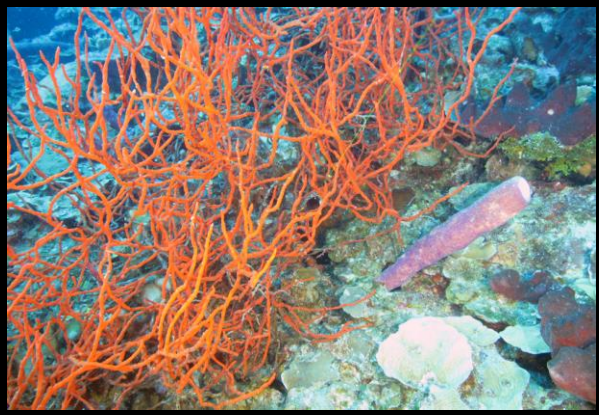
Cuba, S coast, south of
Cienfuegos, Banco
Silvertown, south wall,
proposed MPA, Station C-
38A

201705314_T-15-53-15_161_POR1.jpg

* M.C. Diaz & L. Busutil

Tube(s), 6 cm wide, 10 cm high; conulose, red/orange, Oscules: vent, 6 cm wide, non mucosy.

***Clathria* sp. Cu-02**



201705283_T-16-32-27_208_POR.jpg

*** M.C. Diaz

Branching/anastomosing, 3-4 mm in diameter, 1-1.5 m high; microconulose, red, Oscules: round, 1 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Microcionidae

DEPTH:

-28 m

LOCATION:

Cuba, S coast, Bahía de Cochinos, east wall, Zapata National Park, Station C-33A

***Clathria* sp. Cu-03**



201705251_T-10-45-20_099_POR1.jpg

** M.C. Diaz & L. Busutil

Thin encrusting, radial canals, red, Oscules: round, 3-6 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Microcionidae

DEPTH:

-47 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

***Clathria* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Microcionidae

DEPTH:

-96 m

LOCATION:

Cuba, S coast, Sierra Pural, east tip of Punta Imías, 1 nmi east of ROV 31, no MPA, Station C-52A

201706043_T-13-36-04_045_POR1.jpg

* M.C. Diaz & L. Busutil

Creeping/branching, subdermal canals visible, orange/white, Oscules: round, 3-6 mm wide, oscular membranes: elevated.

Clathria (Thalysias) venosa

(Alcolado, 1984)



CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Microcionidae

DEPTH:

-62 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

201705181_T-11-05-43_148_POR.jpg

* M.C. Diaz & L. Busutil

Thin encrusting, subdermal canals visible, brown/orange, Oscules: round, 2-3 mm wide.

Mycale (Mycale) laevis

(Carter, 1882)



201705191_T-09-31-40_124_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, porous, patched coloration; orange/white, Oscules: round, 10-20 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Mycalidae

DEPTH:

-64 m

LOCATION:

Cuba, NW coast, Los
Pretilos MPA, Station C-06

Mycale (Mycale) cf. laevis

(Carter, 1882)



201705253_T-15-45-44_177_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, porous, subdermal canals; white, Oscules: round, 10-20 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Mycalidae

DEPTH:

-37 m

LOCATION:

Cuba, S coast, SW Isla de
la Juventud, bay on west
side of point, Punta Francés
MPA, Station C-21A

Mycale (Arenochalina) laxissima

(Duchassaing & Michelotti, 1864)



201705224_T-18-14-50_323_POR1.jpg

* M.C. Diaz & L. Busutil

Cluster of hollow tubes, 10-20 cm high, 5-15 cm wide; spiky conulose, red, Oscules: vent, 5-10 mm wide, mucus released when cut.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Mycalidae

DEPTH:

-40 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

Mycale (Carmia) cf. magnirhaphidifera

van Soest, 1984



201705201_T-10-52-25_205_POR2.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Thin encrusting, radiating canals, brown purple, Oscules: round, 2-4 mm wide.

CLASS:

Demospongiae

ORDER:

Poecilosclerida

FAMILY:

Mycalidae

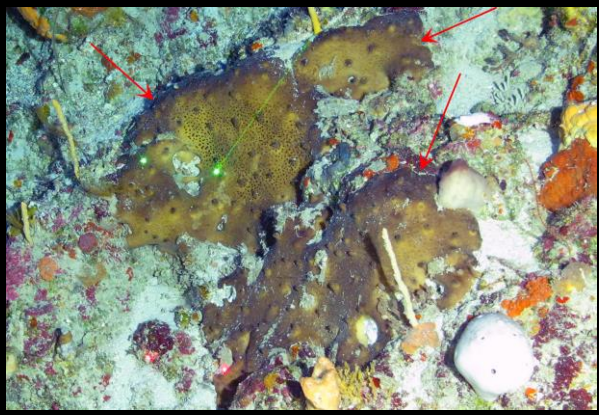
DEPTH:

-51 m

LOCATION:

Cuba, NW coast, Archipiélago de Los Colorados, No MPA, Station C-07

***Polymastia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Polymastiida

FAMILY:

Polymastiidae

DEPTH:

-103 m

LOCATION:

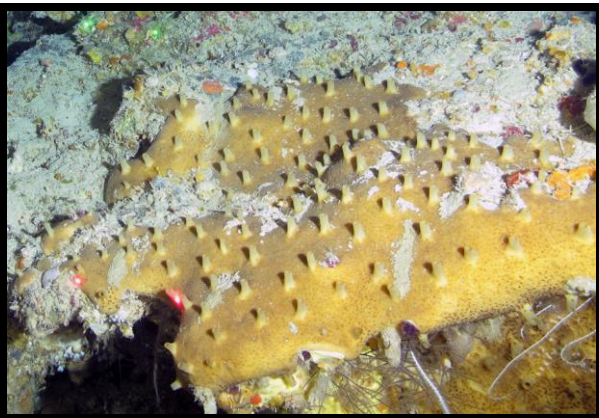
Cuba, NW coast, Cayo Levisa MPA, Station C-04

201705181_T-10-57-24_115_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, oscular papillae (0.5-1 cm wide, 1-3 cm high, 4-5 cm apart); with zoanths; brown, Oscules: abundant, 5-10 mm wide.

***Polymastia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Polymastiida

FAMILY:

Polymastiidae

DEPTH:

-115 m

LOCATION:

Cuba, NW coast, 2 nmi north of Cayo Arenas, Cayo Levisa MPA, Station C-04A

201705183_T-16-00-33_058_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, oscular papillae (1.5-3 cm high, 1.5-4 cm apart); brown, Oscules: abundant, 5-10 mm wide.

***Polymastia* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Polymastiida

FAMILY:

Polymastiidae

DEPTH:

-68 m

LOCATION:

Cuba, NW coast,
Archipiélago de Los
Colorados, No MPA,
Station C-07

201705201_T-10-21-18_167_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, oscular papillae (1-2 cm high and wide); nipples, white, Oscules: round, 3-5 mm wide.

Scopalina ruetzleri

(Wiedenmayer, 1977)



CLASS:

Demospongiae

ORDER:

Scopalinida

FAMILY:

Scopalinidae

DEPTH:

-146 m

LOCATION:

Cuba, NW coast, Los
Pretilos MPA, Station C-06

201705191_T-08-49-51_015_POR.jpg

*** M.C. Diaz & L. Busutil

Massive/lobate, lobes 3-8 cm wide, 7-11 cm high; conules 0.5-1 cm high, 1 cm apart; conulose, orange, Oscules: round, sparse, 15-20 mm wide.

***Scopalina* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Scopalinida

FAMILY:

Scopalinidae

DEPTH:

-43 m

LOCATION:

Cuba, NW coast, Los
Pretils MPA, Station C-06

201705193012_Deck1.JPG

19-V-17-3-012

*** M.C. Diaz

Thin encrusting, spiky conulose, red/orange, Oscules: not visible.

Stylissa caribica

Lehnert & van Soest, 1998



CLASS:

Demospongiae

ORDER:

Scopalinida

FAMILY:

Scopalinidae

DEPTH:

-46 m

LOCATION:

Cuba, W coast, Banco de
San Antonio MPA, south
wall, Station C-10A

201705213_T-15-26-37_115_POR.jpg

* M.C. Diaz & L. Busutil

Flabellate, body size 10-15 cm high, 4-5 cm wide; corrugated, orange, Oscules: round, sparse, 5 mm wide.

Svenzea zeai

(Alvarez, van Soest & Rützler, 1998)



201706011_T-10-17-02_177_POR.jpg

** M.C. Diaz & L. Busutil

Massive, smooth, brown/red, Oscules: round, elevated, 5-15 mm wide.

CLASS:

Demospongiae

ORDER:

Scopalinida

FAMILY:

Scopalinidae

DEPTH:

-30 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Svenzea zeai

(Alvarez, van Soest & Rützler, 1998)



201706011_T-09-28-03_137_POR.jpg

** M.C. Diaz & L. Busutil

Branching, massive (5-10 cm high, variable diameter) to branching rods (5-10 wide to 20-30 cm long); smooth, red, Oscules: round, on one side, 5-15 mm wide.

CLASS:

Demospongiae

ORDER:

Scopalinida

FAMILY:

Scopalinidae

DEPTH:

-58 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Axinyssa ambrosia

(Laubenfels, 1936)



201705314_T-15-21-14_103_POR.jpg

31-V-17-4-002

* M.C. Diaz, L. Busutil & S. Pomponi

Massive/lobate, rugose, orange, oscules on top of lobe(s), 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

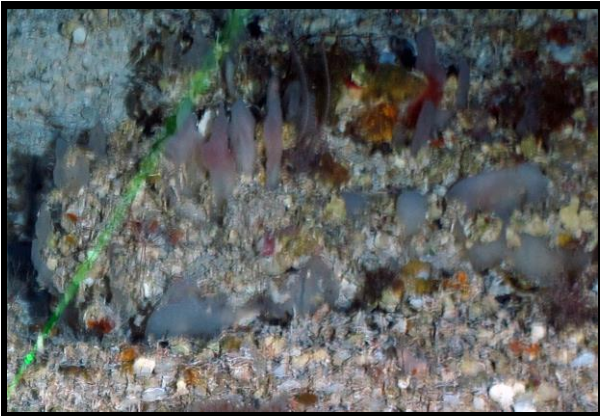
-82 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Ciocalypta aff. porrecta

(Topsent, 1928)



201706081_T-11-29-55_101_POR.jpg

* M.C. Diaz & L. Busutil

Massive, fistules 2-4 cm high, and 5-10 mm wide; fistulose, white/gray, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

-107 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

Halichondria (Halichondria) sp. Cu-01



CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

m

LOCATION:

Cuba, S coast, Sierra Pural, Punta Imías, no MPA, Station C-52

201706041004_deck2_POR.jpg

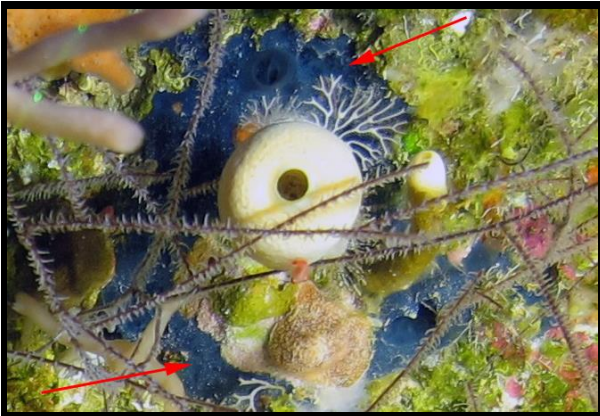
4-VI-17-1-004

*** M.C. Diaz, L. Busutil & S. Pomponi

Massive, irregular, detachable skin; orange/yellow, Oscules: not visible.

Hymeniacion caerulea

Pulitzer-Finali, 1986



CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

-69 m

LOCATION:

Cuba, NE coast, Cabo Lucrecia, no MPA, Station C-54

201706061_T-09-50-44_101_POR.jpg

* M.C. Diaz & L. Busutil

Thick encrusting, rugose, blue, Oscules: sparse, 3-5 mm wide.

Topsentia cf. ophiraphidites

(Laubenfels, 1934)



CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

-152 m

LOCATION:

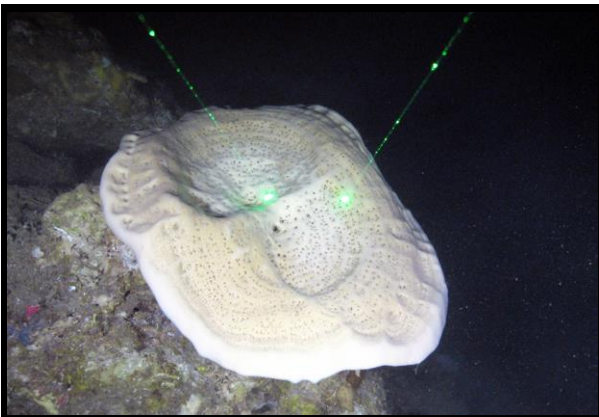
Cuba, S coast, Sierra Maestra, Chivirico Proposed MPA, Station C-50

201706031_T-08-47-30_019_POR.jpg

*** M.C. Diaz, L. Busutil & S. Pomponi

Cup, massive, rugose, with zoanthsids; white, Oscules: not visible.

Topsentia sp. Cu-01



CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

-153 m

LOCATION:

Cuba, S coast, Sierra Maestra, Chivirico Proposed MPA, Station C-50

201706031001_T-08-45-25_018.jpg

3-VI-17-1-001

* M.C. Diaz & L. Busutil

Plate, 21 cm high, 46-66 cm wide on the top, with wall 3.5-5 cm thick; riddle by apertures, white, 4-5 mm wide, dipped top.

***Topsentia* sp. Cu-02**



CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Halichondriidae

DEPTH:

-142 m

LOCATION:

Cuba, NE coast, Cabo Lucrecia, no MPA, Station C-54

201706061_T-08-53-34_013_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Cup, massive, 40-44 cm in upper diameter, wall 12 cm thick; smooth, tan/white, Oscules: not visible.

***Aaptos* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Suberitidae

DEPTH:

-137 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

201706081_T-10-48-53_019_POR.jpg

8-VI-17-1-002

*** M.C. Diaz & L. Busutil

Subspherical, 10-12 cm in diameter; smooth, neon yellow, Oscules: round, sparse, 10 mm wide.

Suberitidae Cu-01



201705211_T-10-02-20_143_POR.jpg

** M.C. Diaz & L. Busutil

Thick encrusting, (5-10 mm thick); corrugated, orange, Oscules: round, on one side, 3-5 mm wide, conules are 1 mm high and 2 mm apart.

CLASS:

Demospongiae

ORDER:

Suberitida

FAMILY:

Suberitidae

DEPTH:

-75 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, east wall, Station C-10

***Timea* Sp. Cu-01**

Gray, 1867



201705211015_Deck1.JPG

21-V-17-1-015

*** M.C. Diaz

Thin encrusting, smooth, orange/brown, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Tethyida

FAMILY:

Timeidae

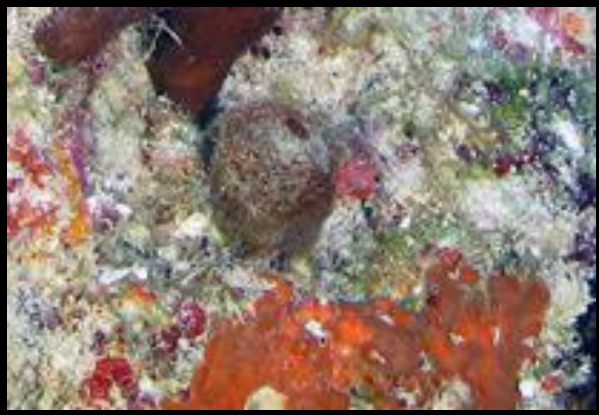
DEPTH:

-40 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, east wall, Station C-10

Tetractinellida Cu-01



201706101_T-10-11-04_138_POR2.jpg

* M.C. Díaz & L. Busutil

Subspherical, 3 cm in diameter; hispid, brown, Oscules: round, apical, 6 mm wide.

CLASS:

Demospongiae

ORDER:

Tetractinellida

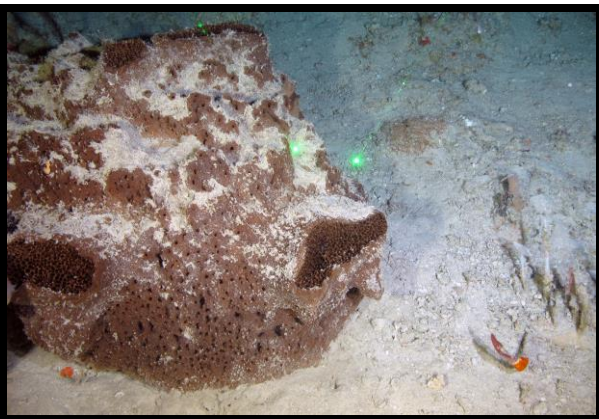
DEPTH:

-43 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

Tetractinellida Cu-02



201706101_T-09-09-30_054_POR.jpg

* M.C. Díaz & L. Busutil

Massive, 85 cm wide, 80 cm high; rugose/stipitate, brown, oscules in clusters, 2-4 mm wide, stipitate projections (2-4 mm high, 1-3 cm apart).

CLASS:

Demospongiae

ORDER:

Tetractinellida

DEPTH:

-96 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Cruz del
Padre, inside & outside
MPA, C-60A

***Asteropus* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Ancorinidae

DEPTH:

-142 m

LOCATION:

Cuba, NE coast, Cabo Lucrecia, no MPA, Station C-54

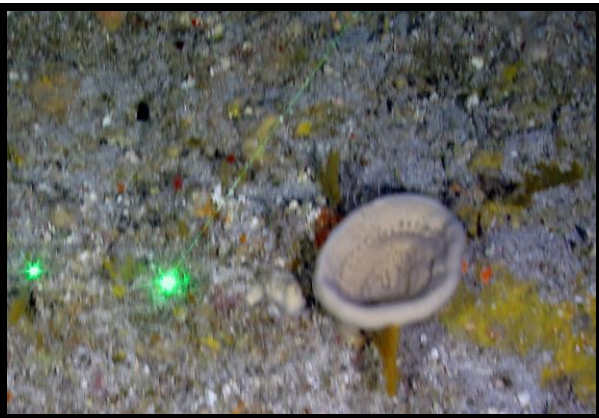
201706061_T-08-52-25_010_POR.jpg

6-VI-17-1-002

* M.C. Diaz & L. Busutil

Massive, 11 cm in diameter; rugose, black, oscules in clusters, 2-4 mm wide.

***Corallistes* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Corallistidae

DEPTH:

-139 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-10-54-02_019_POR.jpg

* M.C. Diaz & L. Busutil

Cup, 12 cm in diameter; smooth, tan, Oscules: round, in concentric rows, 1 mm wide.

Corallistes sp. Cu-02



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Corallistidae

DEPTH:

-134 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

201705271_T-08-52-27_012_POR.jpg

* M.C. Díaz & L. Busutil

Round/thick cup, pedunculated, smooth, encrusted; tan, Oscules: not visible.

Corallistes sp. Cu-03



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Corallistidae

DEPTH:

-86 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-14-50-39_066_POR.jpg

* M.C. Díaz & L. Busutil

Peanut shaped cup, 3-5 cm in diameter; smooth, riddled by apertures on inner wall; tan, 1 mm wide.

***Caminus* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-100 m

LOCATION:

Cuba, NE coast, Cabo Lucrecia, proposed MPA, Station C-54B

201706064_T-16-39-50_058_POR.jpg

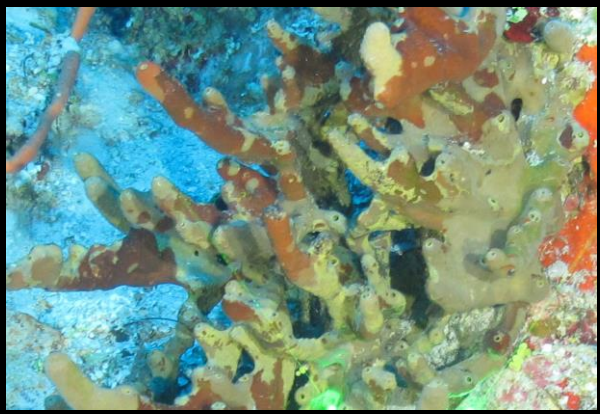
6-VI-17-4-005

*** P. Cárdenas & L. Busutil

Spherical, vent, 12 cm in diameter; smooth, black, Oscules: vent, vent: 2 cm wide.

Erylus* cf. *formosus

Sollas, 1886



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-57 m

LOCATION:

Cuba, S coast, Bahía de Cochinos, east wall, Zapata National Park, Station C-33A

201705283_T-16-05-56_131_POR.jpg

* M.C. Diaz, L. Busutil & S. Pomponi

Massive/lobate, erect branches, smooth, encrusted; gray/green/brown, Oscules: round, oscules on top of lobe(s), 2-5 mm wide.

***Erylus* sp. Cu-01**



201705181_T-10-40-21_093_POR.jpg

18-V-17-1-005

*** M.C. Díaz, L. Busutil & P. Cárdenas

Branching, staghorn branches, branches 1-2 cm wide, 6-12 cm high; smooth, tan, Oscules: round, sparse, 1-3 mm wide.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-124 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

Erylus trisphaerus

(de Laubenfels, 1953)



201706101_T-09-58-47_126_POR.jpg

10-VI-17-1-005

*** M.C. Díaz, L. Busutil & S. Pomponi

Massive, smooth/rugose, brown/green/reddish, Oscules: round, 3-6 mm wide, oscular membranes: white.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-50 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Cruz del Padre, inside & outside MPA, C-60A

Geodia cribrata

Rützler, Piantoni, van Soest & Díaz, 2014



201705273_T-15-25-16_097_POR.jpg

* M.C. Díaz & L. Busutil

Subspherical, body 12 cm in diameter; Smooth/ribbed, brown/tan, Oscules: cribporal plate, cribporal plate 7 cm in diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-85 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Largo del Sur MPA, Station C-29

Geodia neptuni

(Sollas, 1886)



201705191_T-11-05-03_210_POR.jpg

* M.C. Díaz & L. Busutil

Vase, 65 cm wide, 42.5 cm high; irregular, encrusted; brown, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-50 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

Geodia neptuni

(Sollas, 1886)



201706071_T-11-13-33_170_POR.jpg

* M.C. Diaz & L. Busutil

Subspherical, 23 cm wide, 12.5 cm high; smooth, pitted; brown, Oscules: round, on inner wall, 1-3 mm wide.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-33 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

Geodia neptuni

(Sollas, 1886)



201705312_T-10-17-36_060_POR.jpg

* M.C. Diaz & L. Busutil

Subspherical, vent, 8-19 cm wide, 12-15 cm high; variously shaped pits, brown, Oscules: not visible, vent: 2-4 cm wide.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-74 m

LOCATION:

Cuba, S coast, south of
Cienfuegos, Banco
Silvertown, west wall,
proposed MPA, Station C-
38

Geodia cf. neptuni

(Sollas, 1886)



201705271_T-09-22-20_104_POR.jpg

* M.C. Díaz & L. Busutil

Massive, massive body 3-16.5 cm wide, 18-30 cm high; variously shaped pits, brown/red, Oscules: not visible, pits are elongated, 0.5-4 mm in diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-94 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Geodia sp. Cu-01



201705281_T-09-01-57_030_POR.jpg

* P. Cárdenas & M.C. Díaz

Subspherical, body 15 cm in diameter; small dark round pits, brown/yellow, Oscules: apical, pore sieve, 7.5 cm wide.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-128 m

LOCATION:

Cuba, S coast, Golfo de Cazones, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

***Geodia* sp. Cu-01**



201705281_T-09-27-56_122_POR.jpg

* P. Cárdenas & M.C. Díaz

Subspherical, apical depression, 28 cm in diameter; smooth, pink/grayish, on apical depression, apical depression 13 cm in maximum diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-88 m

LOCATION:

Cuba, S coast, Golfo de Cazones, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

***Geodia* sp. Cu-01**



201705314_T-15-16-03_080_POR.jpg

* P. Cárdenas, M.C. Díaz & L. Busutil

Subspherical, apical depression, 27 cm in diameter; smooth, brown/red, Oscules: pore sieve, apical, pore sieve 8 cm in diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-99 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

***Geodia* sp. Cu-02**



201705314_T-15-15-15_074_POR.jpg

* P. Cárdenas, M.C. Díaz & L. Busutil

Subspherical, apical depression, 18 cm in diameter; smooth, yellow/brown, Oscules: apical, 1 mm wide, pore sieve: 7 cm in diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

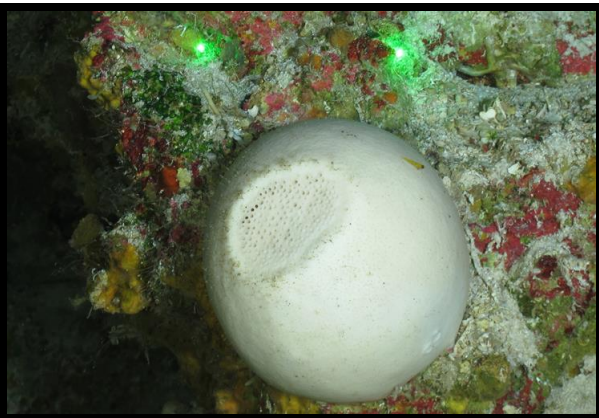
DEPTH:

-101 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

***Geodia* sp. Cu-03**



201705281_T-09-02-41_032_POR.jpg

* P. Cárdenas, M.C. Díaz & L. Busutil

Subspherical, 14 cm in diameter; smooth, white, Oscules: apical, 1 mm wide, pore sieve depression: 7 cm in diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Geodiidae

DEPTH:

-128 m

LOCATION:

Cuba, S coast, Golfo de Cazonos, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

Cinachyrella cf. alloclada

(Uliczka, 1929)



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Tetillidae

DEPTH:

-136 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-10-55-13_023_POR1.jpg

* M.C. Díaz & L. Busutil

Subspherical, 8.5 cm in diameter; hispid, yellow, Oscules: one on top, apical, 6 mm wide.

Cinachyrella cf. alloclada

(Uliczka, 1929)



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Tetillidae

DEPTH:

-92 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Sabinal MPA, Station C-56

201706071_T-09-17-31_076_POR.jpg

* P. Cárdenas, M.C. Díaz & L. Busutil

Subspherical, 8 cm in diameter; hispid, yellow, Oscules: one on top, apical, 20 mm wide, Porocalices (1.3-1.5 cm in diameter).

***Cinachyrella kuekenthali* complex**

(Uliczka, 1929)



201706011_T-09-30-55_140_POR.jpg

* M.C. Diaz & L. Busutil

Subspherical, apical depression, 7 cm in diameter; irregular, yellow, apical depression 4 cm in diameter.

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Tetillidae

DEPTH:

-54 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

***Cinachyrella cf. kuekenthali* complex**

(Uliczka, 1929)



201705211_T-09-38-20_171_POR.jpg

** M.C. Diaz & L. Busutil

Subspherical, 12 cm in diameter; smooth, orange, Oscules: sparse, 15 mm wide, holes (3-6 mm in diameter).

CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Tetillidae

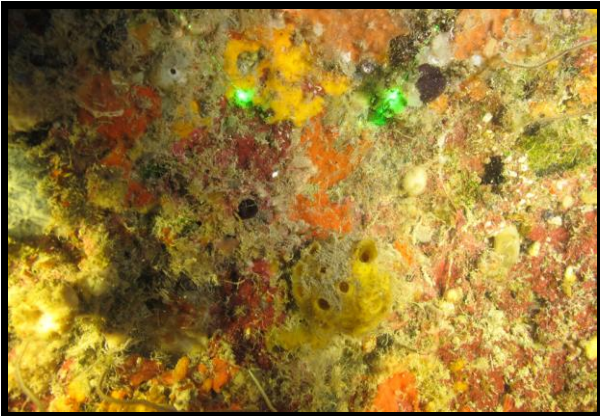
DEPTH:

-102 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, east wall, Station C-10

***Cinachyrella* sp. Cu-02**



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Tetillidae

DEPTH:

-62 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo La Vela
MPA, Station C-59A

201706091_T-09-56-20_155_POR.jpg

* M.C. Díaz & L. Busutil

Subspherical, 6.5 cm in diameter; hispid, yellow, Apertures: round, sparse, 6-13 mm wide.

***Discodermia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Tetractinellida

FAMILY:

Theonellidae

DEPTH:

-128 m

LOCATION:

Cuba, NW coast, Cayo
Levisa MPA, Station C-04

201705181_T-10-09-00_082_POR.jpg

*** M.C. Díaz & L. Busutil

Cluster of hollow tubes, clump (21 cm high, 25 cm wide) deformed tubes (4-6 cm in diameter, 3-12 cm long); smooth, tan, oscules on top of tube(s), 3-6 mm wide.

Verongiida Cu-01



CLASS:

Demospongiae

ORDER:

Verongiida

DEPTH:

-140 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, east wall, Station C-10

201705211_T-09-14-07_058_POR.jpg

*** M.C. Diaz & L. Busutil

Thick encrusting, smooth to rugose, yellow, Oscules: not visible, skeletal-less.

Aiolochoxia crassa

(Hyatt, 1875)



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-28 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-15-31-36_158_POR.jpg

* M.C. Diaz & L. Busutil

Massive, (35-40 cm in diameter); low conules, irregular; orange, Oscules: clustered, on apical depression, 20 mm wide, oscular membranes: with diaphragm.

Aiolochoxia crassa

(Hyatt, 1875)



201706071_T-10-11-39_121_POR.jpg

** M.C. Diaz & L. Busutil

Cluster of lobes, (5-10 high, 5-8 wide); tuberculate, dark blue/gray, Oscules: on top of lobe(s), 8-10 mm wide, tubercles 1-2 mm high, 3-5 mm apart.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-66 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

Aiolochoxia crassa

(Hyatt, 1875)



201705222_T-11-32-02_121_POR.jpg

* M.C. Diaz & L. Busutil

Cluster of lobes, lobes 10-25 cm high, 5-10 cm wide; tuberculate, yellow, Oscules: on top of lobe(s), 10-20 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-94 m

LOCATION:

Cuba, W coast, Faro
Roncali, off lighthouse,
Guanahacabibes National
Park, Station C-12A

Aiolochoia sp. Cu-01



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-83 m

LOCATION:

Cuba, S coast, SE Isla de la Juventud, Punta Brava MPA, Station C-23

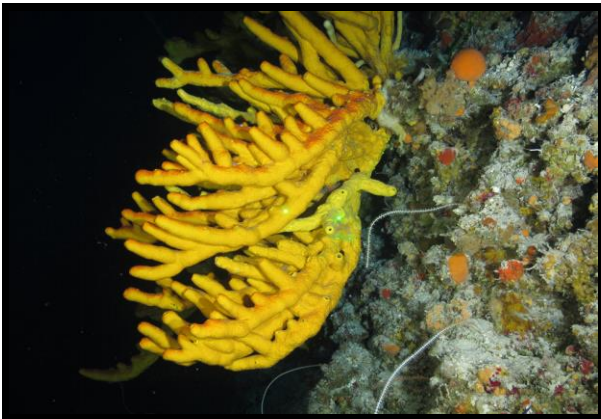
201705261001_Deck4_fibers_in_conules

26-V-17-1-001

*** M.C. Diaz

Branching lobes, tuberculate, yellow/orange, Oscules: tubercles, 4-5 mm apart, 1 mm high, carnose.

Aiolochoia sp. Cu-01



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-94 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

201705251_T-10-29-48_053_POR.jpg

*** M.C. Diaz & L. Busutil

Branching lobes, long hanging branches (50-70 cm long, 3-8 cm wide), projecting tubes (6-10 cm long, 3-4 cm wide); tuberculate, yellow/orange, oscules on top of lobe(s), 3-5 mm wide, oscular membranes: collar; carnose; small round conules (0.5 mm high, 3-5 mm apart).

***Aiolochroia* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-60 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-15-04-32_101_POR1.jpg

** M.C. Diaz & L. Busutil

Branching lobes, branches (50-70 cm long, 3-8 cm wide) and projecting lobes (6-10 cm long, 3-4 cm wide); tuberculate, yellow/orange, oscules on top of lobe(s), 3-5 mm wide.

Aplysina archeri

(Higgin, 1875)



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-58 m

LOCATION:

Cuba, NW coast, Los Pretiles MPA, Station C-06

201705193_T-15-01-08_096_POR2.jpg

19-V-17-3-001

*** M.C. Diaz

Tube(s), 10-50 cm high, 4-6 cm wide; microconulose, lilac, Oscules: on top of lobe(s), 25-40 mm wide, no oxidation.

Aplysina archeri

(Higgin, 1875)



201705312_T-10-15-28_053_POR.jpg

** M.C. Diaz & L. Busutil

Tube(s), 10-50 cm high, 4-8 cm wide; microconulose, lilac, Oscules: on top of lobe(s), 10-70 mm wide, no oxidation.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-80 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Aplysina bathyphila

Maldonado & Young, 1998



201706083_T-15-11-22_005_POR.jpg

** M.C. Diaz & L. Busutil

Goblet, 3-5 cups fused together (10-15 cm high, 15-20 cm wide); smooth, gray/pinkish, Oscules: apical, 8-10 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-132 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58A

Aplysina bathyphila

Maldonado & Young, 1998



201705181_T-10-59-31_126_POR.jpg

** M.C. Diaz & L. Busutil

Goblet, pedunculated, cups: 10-13 cm high, 4-7 cm wide, peduncle 4-10 mm wide; smooth, gray/pinkish, Oscules: not visible.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-98 m

LOCATION:

Cuba, NW coast, Cayo Levisa MPA, Station C-04

Aplysina cauliformis

(Carter, 1882)



201705213_T-15-08-07_085_POR.jpg

** M.C. Diaz & L. Busutil

Erect branch/repent, branches, 1-3 cm in diameter; microconulose, lilac, Oscules: round, on one side, 2-3 mm wide, not oxidize.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-61 m

LOCATION:

Cuba, W coast, Banco de San Antonio MPA, south wall, Station C-10A

Aplysina cf. cauliformis

(Carter, 1882)



201706021_T-11-48-35_177_POR.jpg

** M.C. Diaz & L. Busutil

Erect branch/repent, (1-2 cm thick, and 30-50 cm long); smooth, yellow/red, Oscules: round, on one side, 2 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-72 m

LOCATION:

Cuba, S coast, Cabo Cruz, Desembarco del Gramma National Park, Station C-48

Aplysina fistularis

(Pallas, 1766)



201706021_T-12-37-36_234_POR.jpg

** M.C. Diaz & L. Busutil

Tube(s), 35-70 cm high, 7-12 cm wide; corrugated, neon yellow, oscules on top of tube(s), 50-100 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-45 m

LOCATION:

Cuba, S coast, Cabo Cruz, Desembarco del Gramma National Park, Station C-48

Aplysina fulva

(Pallas, 1766)



201706071_T-09-04-26_049_POR.jpg

*** M.C. Diaz & L. Busutil

Erect branch/repent, branches (1-3 cm thick and 14-100 cm long); conulose, yellow, Oscules: round, on one side, 1-3 mm wide, conules (0.5 mm x 1mm).

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-108 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Sabinal MPA, Station C-56

Aplysina lacunosa

(Lamarck, 1814)



201705271_T-09-15-10_086_POR.jpg

* M.C. Diaz & L. Busutil

Tube(s), (120 high, 15-40 cm wide), with two smaller tubes (5-7 cm wide and 30-40 cm long); convoluted/pitted, white/gray, pits 1-5 cm wide, vent 5-40 cm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-102 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Aplysina cf. lacunosa

(Lamarck, 1814)



201706071_T-08-41-55_013_POR.jpg

*** M.C. Díaz & L. Busutil

Tube(s), tube 10 cm high, 4 cm wide; pitted depressions, yellow/tan, Oscules: with membrane, oscules on top of tube(s), 13-25 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

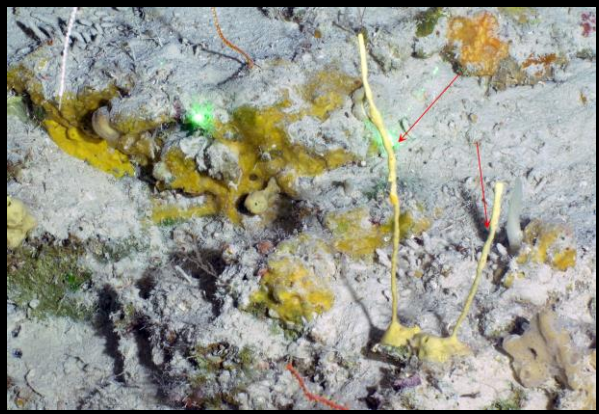
-144 m

LOCATION:

Cuba, NE coast,
Archipiélago Sabana-
Camagüey, Cayo Sabinal
MPA, Station C-56

Aplysina sciophila

Rützler, Piantoni, van Soest & Díaz, 2014



201705201_T-09-29-47_112_POR.jpg

20-V-17-1-001

*** M.C. Díaz & L. Busutil

Massive base with erect branch, (2 mm wide and 5-10 cm high) that departs from a small (1-2 cm wide) cushion base; microconulose, yellow/tan, Oscules: one at base, 2-3 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-115 m

LOCATION:

Cuba, NW coast,
Archipiélago de Los
Colorados, No MPA,
Station C-07

***Aplysina* sp. Cu-01**



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-84 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

201705253_T-14-52-49_072_POR.jpg

* M.C. Diaz & L. Busutil

Subspherical, 6-8 cm in diameter; pitted depressions, yellow/brown, apical, 15-17 mm wide, pits 4-10 mm in diameter.

***Aplysina* sp. Cu-02**



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-31 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

201705251_T-11-38-54_223_POR.jpg

* M.C. Diaz & L. Busutil

Erect branch/repent, branches 3-4 mm wide, 10-30 cm long; microconulose, red/pink, Oscules: round.

***Aplysina* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-97 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

201705224_T-15-42-25_041_POR.jpg

** M.C. Diaz & L. Busutil

Tube(s), 10-20 cm wide and 70 cm high; rugose, white, Oscules: round, inside of tube, vent: 10-20 cm in diameter.

***Aplysina* sp. Cu-04**



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-88 m

LOCATION:

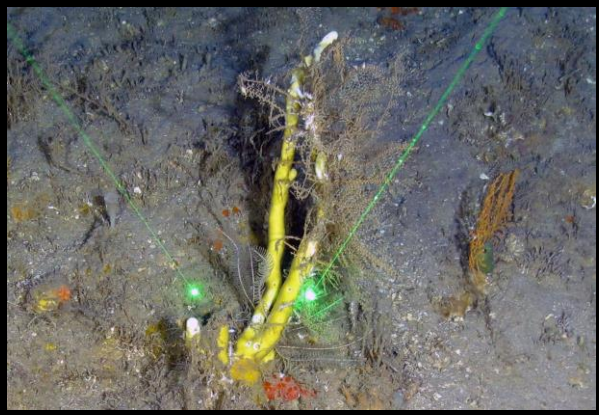
Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo La Vela MPA, Station C-59A

201706091_T-09-13-03_078_POR.jpg

*** M.C. Diaz & L. Busutil

Tube(s), vent, tube 5-8 cm wide, 12-24 long; rugose, encrusted; white, Oscules: not visible, vent: 5-8 cm in diameter.

***Aplysina* sp. Cu-05**



201706051_T-09-28-07_036_POR.jpg

5-VI-17-1-001

** M.C. Diaz, L. Busutil & S. Pomponi

Erect branch/repent, microconulose, light yellow, Oscules: round, sparse, 2-4 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-124 m

LOCATION:

Cuba, eastern tip of Cuba, NW Punta Maisí, Punta Silencio, no MPA, Station C-53A

***Aplysina* sp. Cu-05**



201706051002_deck2.JPG

5-VI-17-1-002

*** M.C. Diaz, L. Busutil & S. Pomponi

Erect branch/repent, microconulose, light yellow, Oscules: round, sparse, 2-4 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-124 m

LOCATION:

Cuba, eastern tip of Cuba, NW Punta Maisí, Punta Silencio, no MPA, Station C-53A

***Aplysina* sp. Cu-05**



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-126 m

LOCATION:

Cuba, eastern tip of Cuba, NW Punta Maisí, Punta Silencio, no MPA, Station C-53A

201706051_T-09-27-11_034_POR.jpg

*** M.C. Diaz & L. Busutil

Erect branch/repent, branches 1-2 cm thick and 30-35 cm high; microconulose, bumpy; light yellow, Oscules: round, sparse, 2-4 mm wide, hard; very different skeleton from a similar species *Aplysina fulva*.

Verongula gigantea

(Hyatt, 1875)



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-100 m

LOCATION:

Cuba, W coast, Faro Roncali, off lighthouse, Guanahacabibes National Park, Station C-12A

201705222_T-11-26-46_110_POR.jpg

** M.C. Diaz & L. Busutil

Fan, fan 140 cm x 40 cm in diameter, 1 cm thick; rugose, bright yellow, Oscules: abundant, on one side, 1-2 mm wide.

Verongula gigantea

(Hyatt, 1875)



201705314_T-16-44-55_288_POR.jpg

*** M.C. Diaz & L. Busutil

Cup, with peduncle, cup 50-60 cm high, 10-50 cm wide; rugose, brown/yellow, on inner side of cup, 1-2 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-35 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Verongula reisiwigi

Alcolado, 1984



201706071_T-10-27-46_152_POR.jpg

*** M.C. Diaz & L. Busutil

Tube(s), 8x10 cm, wide and 13 cm tall; rugose/ridged, light yellow, oscules on top of tube(s), 50 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-56 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Sabinal MPA, Station C-56

Verongula reiswigi

Alcolado, 1984



201705312_T-10-46-36_147_POR1.jpg

** M.C. Diaz & L. Busutil

Tube(s), 26-30 cm wide, 50 cm high; rugose/ridged, yellow/red, oscules on top of tube(s), 100-200 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-27 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, west wall, proposed MPA, Station C-38

Verongula rigida

(Esper, 1794)



201705253_T-15-10-21_116_POR.jpg

** M.C. Diaz & L. Busutil

Cluster of lobes, lobes 5-10 cm wide, 10 cm high; rugose/ridged, green/yellow, oscules on top of lobe(s), 20-30 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-59 m

LOCATION:

Cuba, S coast, SW Isla de la Juventud, bay on west side of point, Punta Francés MPA, Station C-21A

Verongula rigida

(Esper, 1794)



201705281_T-09-09-59_051_POR.jpg

** M.C. Diaz

Cluster of lobes, rugose/ridged, light yellow, oscules on top of lobe(s), 10-15 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-108 m

LOCATION:

Cuba, S coast, Golfo de Cazonos, Punta Brava, Sur Ciénaga de Zapata, no MPA, Station C-31A

Verongula cf. rigida

(Esper, 1794)



201706081_T-11-33-32_123_POR2.jpg

* M.C. Diaz & L. Busutil

Cluster of lobes, Lobes 10-25 cm in diameter; microconulose, light yellow, oscules on top of lobe(s), 10 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

-91 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

***Verongula* sp. Cu-01**



201705224_T-16-48-48_189_POR.jpg

22-V-17-4-003

* M.C. Díaz & L. Busutil

Barrel, 17-20 wide, with a wall 5-7 cm thick; honeycombed, convoluted; gray/pinkish, oscules on top of barrel, 50 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Aplysinidae

DEPTH:

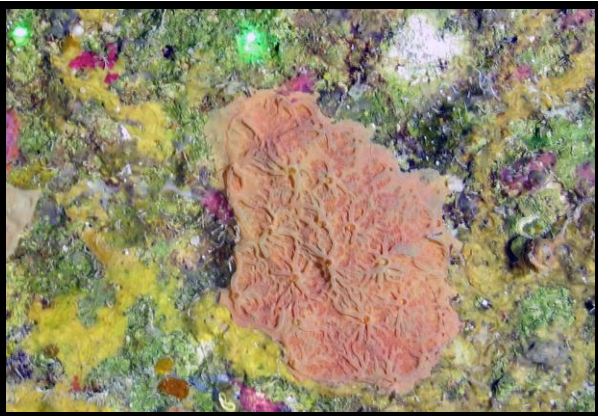
-45 m

LOCATION:

Cuba, W coast, Las Tumbas, Guanahacabibes National Park, Station C-12B

Vansoestia caribensis

Díaz, Thacker, Redmond, Pérez & Collins, 2015



201705271_T-08-57-39_033_POR.jpg

* M.C. Díaz & L. Busutil

Thin encrusting, radial canals, pink/yellow, Oscules: round, 1-3 mm wide, oscular membranes: elevated; radial canals 1-3 mm wide.

CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Ianthellidae

DEPTH:

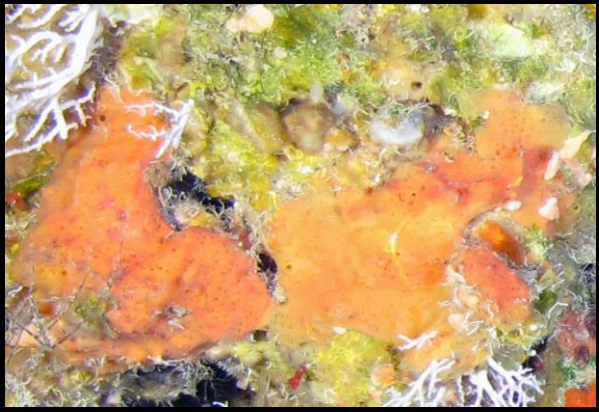
-128 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Vansoestia cf. caribensis

Díaz, Thacker, Redmond, Pérez & Collins, 2015



CLASS:

Demospongiae

ORDER:

Verongiida

FAMILY:

Ianthellidae

DEPTH:

-95 m

LOCATION:

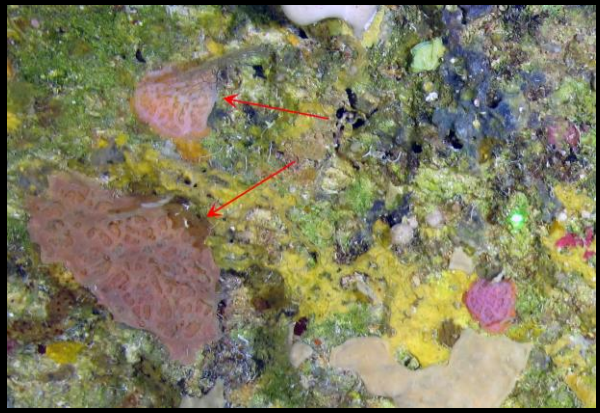
Cuba, S coast, Cabo Cruz,
Desembarco del Gramma
National Park, Station C-48

201706021_T-11-16-57_104_POR1.jpg

* M.C. Díaz, L. Busutil & S. Pomponi

Thin encrusting, smooth, red/orange, Oscules: round, sparse, 1-2 mm wide, similar to *V. caribensis* when relaxed.

Oscarella sp. Cu-01



201705271_T-08-57-39_033_POR1.jpg

* M.C. Diaz & T.Perez

Thin encrusting, clathrate canals, pink, Oscules: round, sparse, 4 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Oscarellidae

DEPTH:

-128 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Oscarella sp. Cu-02



201706083_T-15-27-38_046_POR.jpg

* M.C. Diaz, L. Busutil & T. Perez

Cone/lobe, smooth convoluted, tan, oscules on top of lobe(s), 2 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Oscarellidae

DEPTH:

-91 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58A

***Oscarella* sp. Cu-02**



201706011_T-08-49-01_048_POR.jpg

* M.C. Diaz, L. Busutil & T. Perez

Thick encrusting, smooth convoluted, tan, Oscules: round, sparse, 3-7 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Oscarellidae

DEPTH:

-109 m

LOCATION:

Cuba, S coast, Cayo Caballones, south slope, Jardines de La Reina MPA, Station C-41

Plakinidae Cu-01



201705271_T-08-57-39_033_POR2.jpg

* M.C. Diaz & T.Perez

Thin encrusting, smooth, tan, Oscules: round, sparse, 1 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

-128 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Plakinidae Cu-02



201705271_T-09-04-46_054_POR.jpg

* M.C. Diaz & T.Perez

Massive, smooth, deep purple/red, Oscules: round, sparse, 0-1 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

-113 m

LOCATION:

Cuba, S coast, Archipiélago de Los Canarreos, Cayo Rosario MPA, Station C-28

Plakinastrella onkodes

Uliczka, 1929



201706081_T-11-47-38_201_POR1.jpg

* M.C. Diaz, L. Busutil & T. Perez

Tube(s), smooth, gray/brown, oscules on top of tube(s), 20-40 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

-60 m

LOCATION:

Cuba, NE coast, Archipiélago Sabana-Camagüey, Cayo Coco, proposed MPA, Station C-58

Plakinastrella onkodes

Uliczka, 1929



201706023_T-16-35-30_131_POR.jpg

* M.C. Diaz, L. Busutil & T. Perez

Tube(s), smooth, gray/brown, oscules on top of tube(s), 20-40 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

-41 m

LOCATION:

Cuba, S coast, Cabo Cruz,
Desembarco del Gramma
National Park, Station C-48

Plakortis dariae

Ereskovsky, Lavrov & Willenz, 2014



201706011_T-08-54-54_060_POR1.jpg

** M.C. Diaz & L. Busutil

Thick encrusting, smooth, green, Oscules: round, sparse, 10 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

-97 m

LOCATION:

Cuba, S coast, Cayo
Caballones, south slope,
Jardines de La Reina MPA,
Station C-41

Plakortis deweerdtaphila

Vicente, Zea & Hill, 2016



201706041_T-10-29-50_105_POR.jpg

* M.C. Diaz, L. Busutil & T. Perez

Massive, smooth, brown, Oscules: round, on volcano elevations, 5-10 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

-76 m

LOCATION:

Cuba, S coast, Sierra Pural, Punta Imías, no MPA, Station C-52

***Plakortis* sp. Cu-03**



201705231_T-08-52-22_054_POR.jpg

* M.C. Diaz, L. Busutil & T. Perez

Thick encrusting, smooth, brown, Oscules: round, sparse, 2-3 mm wide.

CLASS:

Homoscleromorpha

ORDER:

Homosclerophorida

FAMILY:

Plakinidae

DEPTH:

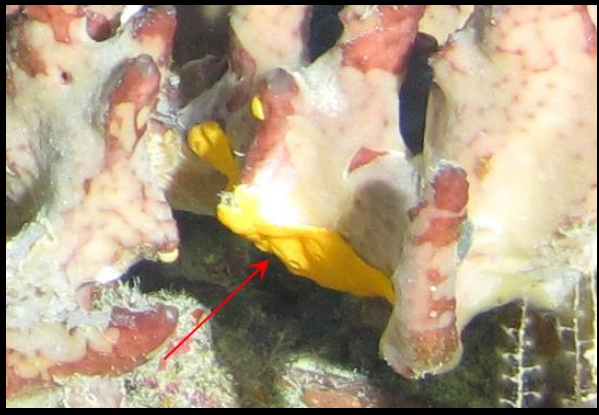
-110 m

LOCATION:

Cuba, W coast, El Almirante, Punto de Buceo, Cabo Corrientes, Guanahacabibes National Park, Station C-15

Clathrina lutea

Azevedo, Padua, Moraes, Rossi, Muricy & Klautau, 2017



CLASS:
Calcarea
ORDER:
Clathrinida
FAMILY:
Clathrinidae
DEPTH:
-65 m
LOCATION:
Cuba, NW coast, Los
Pretilos MPA, Station C-06

201705191_T-09-28-41_117_POR1.jpg

* B. Condor-Lujan, M.C. Diaz & L. Busutil

Thick encrusting, smooth, yellow, Oscules: round, on one side, 2-4 mm wide.

Leucetta floridana

(Haeckel, 1872)



CLASS:
Calcarea
ORDER:
Clathrinida
FAMILY:
Leucettidae
DEPTH:
-104 m
LOCATION:
Cuba, S coast, south of
Cienfuegos, Banco
Silvertown, west wall,
proposed MPA, Station C-
38

201705312_T-10-06-03_018_POR.jpg

* M.C. Diaz, L. Busutil & B. Condor-Lujan

Hanging tube(s), rugose, pink/white, oscules on top of tube(s), 5-15 mm wide.

Leucetta sp. Cu-01



201705314_T-15-30-23_106_POR.jpg

* M.C. Diaz, L. Busutil & B. Condor-Lujan

Ovate, hollow, (10-20 cm in diameter); rugose, pink/white, oscules on mid body, 30-50 mm wide.

CLASS:

Calcarea

ORDER:

Clathrinida

FAMILY:

Leucettidae

DEPTH:

-78 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

Leucetta sp. Cu-01



201705314_T-15-34-05_117_POR.jpg

* M.C. Diaz & L. Busutil

Ovate, rugose, pink/white, oscules on mid body, 50 mm wide.

CLASS:

Calcarea

ORDER:

Clathrinida

FAMILY:

Leucettidae

DEPTH:

-72 m

LOCATION:

Cuba, S coast, south of Cienfuegos, Banco Silvertown, south wall, proposed MPA, Station C-38A

***Leucetta* sp. Cu-02**



CLASS:

Calcarea

ORDER:

Clathrinida

FAMILY:

Leucettidae

DEPTH:

-85 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

201705251_T-10-32-43_063_POR.jpg

* M.C. Diaz, L. Busutil & B. Condor-Lujan

Hanging tube(s), folded, brown/tan, Oscules: one close to the tube's tip, 3-4 mm wide.

***Leucetta* sp. Cu-03**



CLASS:

Calcarea

ORDER:

Clathrinida

FAMILY:

Leucettidae

DEPTH:

-75 m

LOCATION:

Cuba, S coast, SW tip of Isla de la Juventud, Punta de Pedernales MPA, Station C-21

201705251_T-10-35-58_073_POR.jpg

* M.C. Diaz, L. Busutil & B. Condor-Lujan

Hanging tube(s), tube 50 cm long, 5-10 cm wide; smooth, gray/pinkish, oscules on top of tube(s), 30 mm wide.

***Leucandra* sp. Cu-01**



CLASS:

Calcarea

ORDER:

Leucosolenida

FAMILY:

Grantiidae

DEPTH:

-83 m

LOCATION:

Cuba, S coast, SE Isla de la Juventud, Punta Brava MPA, Station C-23

201705261_T-09-39-24_063_POR.jpg

* M.C. Diaz, L. Busutil & B. Condor-Lujan

Subspherical, body 2 cm in diameter; hispid, white, Oscules: round, apical, 5-5 mm wide.
