Zootaxa 4359 (1): 001–133
http://www.mapress.com/j/zt/

Monograph

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

https://doi.org/10.11646/zootaxa.4359.1.1
http://zoobank.org/urn:lsid:zoobank.org:pub:8D06174D-B19F-4B5C-B9B0-DA74E6D43C75

ZOOTAXA

4359

Astonishing diversity revealed: an annotated and illustrated inventory of Nudipleura (Gastropoda: Heterobranchia) from Mozambique

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Magnolia Press
Auckland, New Zealand

Accepted by M. Schroedl: 19 Sept. 2017; published: 1 Dec. 2017

YARA TIBIRIÇÁ, MARTA POLA & JUAN LUCAS CERVERA
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(*Zootaxa* 4359)

133 pp.; 30 cm.

1 Dec. 2017

ISBN 978-1-77670-278-7 (paperback)

ISBN 978-1-77670-279-4 (Online edition)

FIRST PUBLISHED IN 2017 BY
Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: magnolia@mapress.com

http://www.mapress.com/j/zt

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

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Abstract

This paper provides the first comprehensive annotated and illustrated inventory of Nudipleura from Mozambique. A total of 267 species are recorded, including 61 putative new species, documented over a period of seven years from several localities along the coast. At least 20 species need further investigation through molecular and taxomic analysis. Of the 186 confirmed described species, 118 are new records for the Mozambican fauna. Sampling was carried in tidal reefs and depths up to 60m on the subtropical and tropical coast of Mozambique. The most representative families were Chromodorididae (69 species), Discodorididae (30 species), Facelinidae (23 species) and Phyllididae (16 species). Nevertheless, a vast area of Mozambique remains unexplored, thus it is likely that the species documented here represent only a fraction of the true Nudipleura diversity of the country.

Key words: taxonomy, new records, western Indian Ocean, marine biodiversity, benthic fauna

Introduction

It is estimated that 70–80% of marine species in the world remain unknown (Costello *et al.* 2010). Moreover, in some countries, where there may be few experts (or none) and research stations are scarce, there is reduced effort to assess marine biodiversity (Nimbs *et al*. 2016). The marine biodiversity of many East African countries is far less studied than other regions of the Indo-Pacific (Tibiriçá & Malaquias 2017). With regard to the Nudipleura fauna of the western Indian Ocean, two countries have been the focus of most studies: Tanzania (e.g. Edmunds 1971; Edmunds & Thompson 1972; Eliot 1904a, b; 1905; Rudman 1973, 1978, 1980, 1984) and South Africa (Barnard 1927; Gosliner 1981, 1984, 1987; Macnae 1954; Zsilavecz 2007). Additionally, Madagascar, Réunion Islandand Seychelles have also received some attention (e.g. Risbec 1929; Edmunds 1972; Fahey & Gosliner 1999, 2004; Camacho-García & Gosliner 2008; Gosliner & Fahey 2011; Manson-Parker 2015).

Unfortunately, during the peak of nudibranch research in the western Indian Ocean during the 1970s and 1980s Mozambique was at civil war, so until recently very few studies of the Nudipleura fauna have been conducted. Tibiriçá & Malaquias (2017) summarize the few studies undertaken in Mozambique for heterobranch gastropods. With nearly 2500 km of coast, spanning both subtropical and tropical areas, which support complex environments, Mozambique provides an ideal location to study the marine diversity of the western Indian Ocean (Pereira *et al.* 2014). In spite of this, there are only about 50 species of Nudipleura recorded in the literature from Mozambique (Martens 1879; Macnae & Kalk 1958; Gosliner *et al.* 2008, 2015; Pola *et al.* 2008; King & Fraser 2014; Lima *et al.* 2016; Matsuda & Gosliner 2017)

The documentation of Mozambican Nudipleura fauna is relevant with regards to wider questions about biogeography and phylogenetics, as these questions can only be answered based on robust species assessment

(Briggs & Bowen 2012). Moreover, knowledge of the biodiversity is the first step towards the discovery of products for the benefit of society (Fautin 1988; Flam 1994; Avila *et al.* 2000; Fusetani 2000; Benkendorff 2010). In addition, baseline studies are critical for monitoring and management of natural resources and may reveal information that helps to understand natural patterns and inform the scientific criteria used to design protected areas (Edmunds *et al.* 2013).

This paper represents the first comprehensive illustrated inventory of the Nudipleura of Mozambique. The objective of this study is to reveal the diversity of Nudipleura in Mozambique, as well as to provide additional information on distributional data. Moreover, this paper aims to elucidade putative undescribed species, potential colour variations and species complex to foment further studies.

Material and methods

Sampling. The first author collected most of the specimens, with exceptions outlined in the descriptions of material examined. Sampling was conducted over 1200 dives between May 2010 to May 2017. Specimens were collected directly by SCUBA diving or snorkelling. Indirect sampling, through collection of substrates such as sponges and hydroids, was also carried out occasionally. After collection, specimens were relaxed in 7% $MgCl_2$ or by freezing. All specimens were measured in the laboratory while crawling in the tank, photographed individually using digital single-lens reflex camera (SRL) or mirrorless cameras with macro lens (from 60–120mm) and allocated a number. Photographs of each specimen were organized by number and taxonomy. In most cases, specimens were preserved in 96% ethanol, however when ethanol was not available, they were preserved in 4% formalin.

Australian Museum (AM), Museo Nacional de Ciencias Naturales (MNCN), the California Academy of Science (CASIZ), Coleção de História Natural da Faculdade de Ciências da Universidade do Lúrio (UL) and the Museu de História Natural de Maputo (MHN). For the specimens deposited in Mozambique, the collector codes (YT) were used to identify specimens because voucher numbers are not yet available.

For each species the section "Material examined" followed the format: Number of specimens. Voucher number (when available), location, date collected, depth of observation, specimen crawl length and collector name(s) (when applied). For example: three specimens. MB28-004603, ZA51, 13 Jul. 2012, 14m, 22mm; MHN-YT1030, VILV 12 Dec. 2013, 4m, 30mm; ZMBN105112, VIAIR, 16 May 2015, 3m, 19mm, collected by Y. Tibiriçá & M. Malaquias.

Sampling was conducted along the southern and northern coasts of Mozambique, covering both subtropical and tropical regions. A total of 12 localities and 57 dive sites were sampled. Specific sample sites were idenfitied by a code formed by the initials of the locality and dive sites (Figure 1, Table 1). Sampling effort was higher in the Zavora area, followed by Nuarro area due to the availability of facilities. Localities of species on the section "occurences" are based on photography records by the authors and material collected.

Identification and classification. The identification and classification of the material is based on observations of external anatomy with reference to previous literature referred to Mozambique and the western Indian Ocean literature (e.g. Eliot 1904a, b, 1905; Rudman 1977; Fahey & Gosliner 1999; Yonow 2012), original descriptions (e.g. Eliot 1902, 1905, 1910; Bergh 1907; Barnard 1927; Macnae 1954; Macnae & Kalk 1958; Baba 1955; Baba & Abe 1970; Edmunds 1970, 1971, 1972; Carmona *et al.* 2015) and field guides (e.g. Gosliner 1987; Coleman 2008; Gosliner *et al.* 2008, 2015; King & Fraser 2014). Because the objective of this paper is also to elucidate issues regarding unknown and ambiguous species from the western Indian Ocean, those species unable to be identified from external characteristics were investigated further in an attempt to resolve their identification, thus we include additional comments about their possible identification, relevant information about variations and field observations.

In a few cases, dissections of the reproductive system and/or radula were carried out to assist in the identification. Scanning electron micrographs (SEM) were taken on a Quanta 200 scanning electron microscope with a maximum magnification of 3000X. Species of doubtful identification are marked with "cf." meaning "likely to be", but because of the reasons explained in "remarks" we are not confident to confirm their identification without further taxonomical and molecular analyses. Species with "sp." are putative undescribed species.

We follow Wägele & Willan (2000) and Bouchet & Rocroi (2005) for the nomenclature of higher taxa and the

World Register of Marine Species (WoRMS) database for species. The higher taxa are organized following Bouchet & Rocroi (2005), within families, the genera and species are ordered alphabetically.

Geographic distribution. The distribution data for each species is not exhaustive for every country of occurrence, but rather is included to illustrate the broad geographic distribution of each species per region: Circumtropical, Mediterranean, east Pacific (west coast of America), Indo-west Pacific (from Indian Ocean to west of the International Date Line (IDL), central Pacific (east of the IDL including Hawaii and French Polynesia), Indian Ocean (from Indonesia and west Australia to east coast of Africa) and western Indian Ocean (from Kenya to South Africa as far east as Mauritius). Records are mainly based on published literature (peer-review articles, books and field guides), nevertheless remarkable records (e.g. first sight for a region) from online resources are also included.

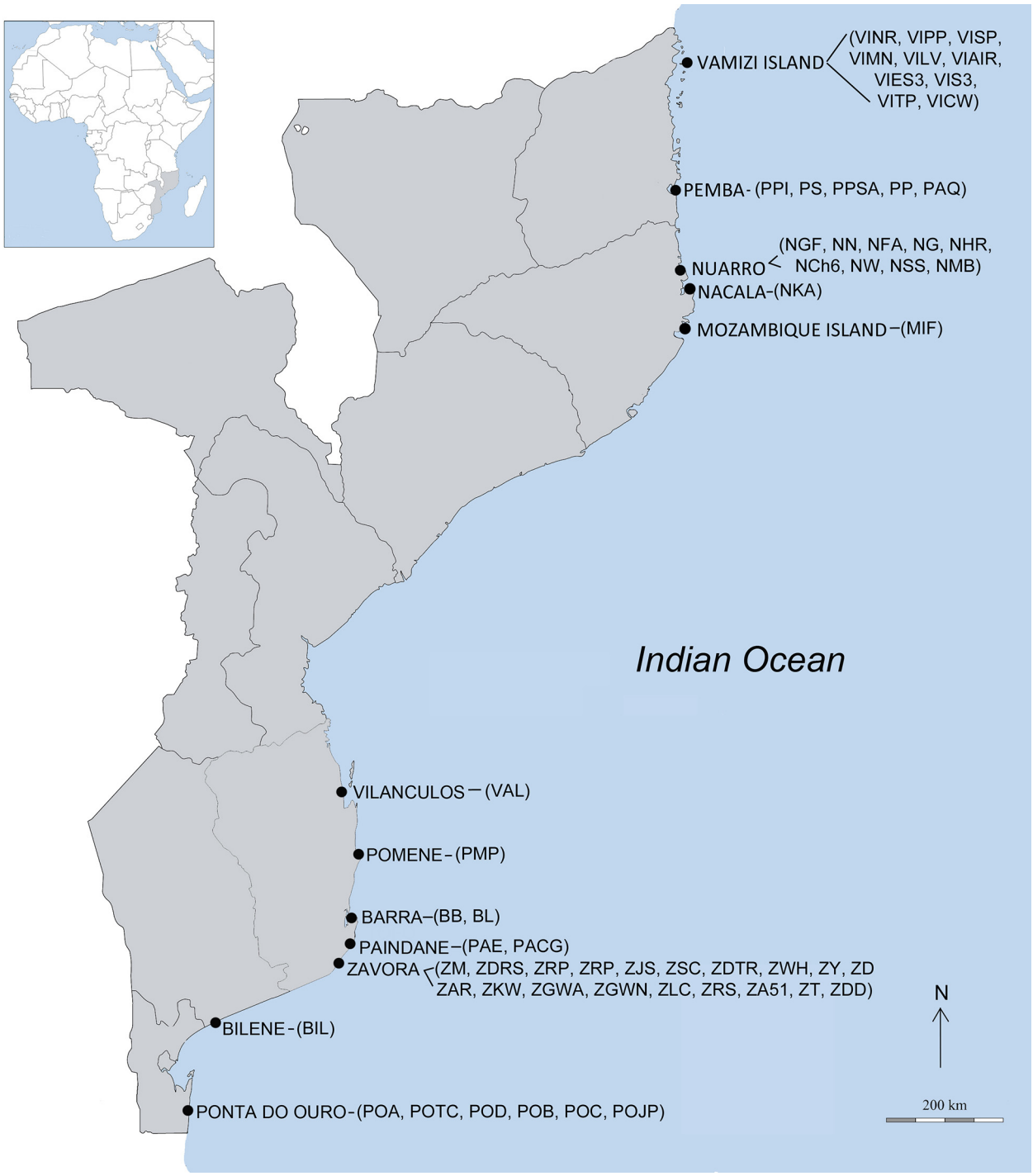

FIGURE 1. Sampling sites in Mozambique.

TABLE 1. Locations and sampling sites with acronyms and geographical coordinates, organized from north to the south of Mozambique.

Location, sampling sites	Code	Coordinates (approx.)	Depth
Vamizi Island, The Point	VITP	10°59'58"S , 40°43'12"E	7–30m
Vamizi Island, north coast S3	VIS3	11°00'18"S , 40°36'55"E	4–10m
Vamizi Island, Erwan S3	VIES3	11°00'19"S , 40°36'92"E	7–20m
Vamizi Island, off airport	VIAIR	11°00'19"S , 40°35'44"E	2–5m
Vamizi Island, Lance village	VILV	11°00'47"S , 40°35'35"E	2–5m
Vamizi Island, Muntu Nkulu	VIMN	11°01'28"S , 40°36'07"E	2–7m
Vamizi Island, snorkel place	VISP	11°00'75"S , 40°40'65"E	2–5m
Vamizi Island, Ponta do Papagaio	VIPP	11°01'37"S , 40°42'66"E	4–30m
Vamizi Island, Neptuno Reef	VINR	11°05'56"S , 40°04'07"E	12–30m
Vamizi Island, Cave Wall	VICW	10°59'47"S , 40°43'12"E	6–26m
Pemba, Aquapemba Aquac. nets	PAQ	12°58'08"S , 40°29'27"E	6–10m
Pemba, “Playground”	PP	12°55'56"S , 40°30'83"E	8–30m
Pemba, Ponta Sali Ali	PPSA	12°58'08"S , 40°29'26"E	7–20m
Pemba, Shallows	PS	12°57'67"S , 40°33'61"E	7–13m
Pemba, Pieter´s CI Divers	PPI	12°55'43"S , 40°30'24"E	9–20m
Nuarro, Mangrove Bush	NMB	14°12'44"S , 40°38'16"E	12–40m
Nuarro, Sacred Sands	NSS	14°11'48"S , 40°59'18"E	8–30m
Nuarro, Nuarro Wall	NW	14°11'51"S , 40°40'20"E	10–40m
Nuarro, Chalet 6	NCh6	14°12'03"S , 40°40'30"E	0–9m
Nuarro, House Reef	NHR	14°12'00"S , 40°40'39"E	0–10m
Nuarro, Guardians	NG	14°11'54"S , 40°40'40"E	16–38m
Nuarro, Fish Alley	NFA	14°11'39"S , 40°41'16"E	8–30m
Nuarro, Nzizi	NN	14°11'15"S, 40°41'20"E	10–30m
Nuarro, Gorgonia Forest	NGF	14°11'08"S, 40°41'56"E	6–50m
Nacala, Kwalala Activity Centre	NKA	14°29'25"S , 40°40'48"E	0–40m
Mozambique Island, Forte	MIF	15°01'44"S , 40°44'30"E	0–6m
Vilanculos, Allan’s Reef	VAL	22°02'41"S , 35°19'24"E	2–5m
Pomene, Playstation	PMP	22°54'53"S , 35°35'23"E	12–25m
Barra, Barra Lagoon	BL	23°56'51"S , 35°28'22"E	0.5–6m
Barra, Buddys	BB	23°47'11"S , 35°31'05"E	8–15m
Paindane, Coral Garden	PACG	24°13'41"S , 35°25'24"E	2–8m
Paindane, Paindane Express	PAE	24°13'27"S , 35°25'42"E	18–32m
Zavora, Deans	ZD	24°33'50"S , 35°16'92"E	28–36m
Zavora, Yogis	ZY	24°33'52"S , 35°17'27"E	28–45m
Zavora, Witch’s Hat	ZWH	24°28'70"S , 35°14'33"E	12–18m
Zavora, Doxa Tidal Reef	ZDTR	24°30'20"S , 35°12'03"E	0.2–1m
Zavora, Sponge City	ZSC	24°30'56"S , 35°12'38"E	18–25m
Zavora, Juans Surprise	ZJS	24°31'02"S , 35°12'22"E	8–15m
Zavora, Rock Pool	ZRP	24°31'09"S , 35°12'25"E	0.2–3m
Zavora, Deep Reef South	ZDRS	24°36'52"S , 35°15'77"E	28–35m
Zavora, Dunes de Dovela	ZDD	24°26'10"S , 35°15'25"E	0.2–1m

.....continued on the next page

TABLE 1. (Continued)

Location, sampling sites	Code	Coordinates (approx.)	Depth
Zavora, Tentação	ZT	24°26'40"S , 35°21'32"E	38–48m
Zavora, Area 51	ZA51	24°26'28"S , 35°16'15"E	6–24m
Zavora, Rio Saiñas	ZRS	24°27'59"S , 35°15'12"E	18–34m
Zavora, La Cuesta	ZLC	24°28'16"S , 35°14'92"E	16–28m
Zavora, Great Wall North	ZGWN	22°28'24"S , 35°16'20"E	20–30m
Zavora, Great Wall South	ZGWS	24°28'32"S , 35°14'65"E	16–24m
Zavora, Klipfontein Wreck	ZKW	24°32'20"S , 35°16'07"E	48–53m
Zavora, Macanza	ZM	24°33'00"S , 25°10'35"E	5–14m
Zavora, Arcadia	ZAR	24°33'54"S , 35°16'88"E	28–36m
Bilene, Lagoon	BIL	25°18'51"S , 33°15'05"E	0–5m
Ponta do Ouro, Jenny's Paradise	POJP	26°47'22"S , 32°53'40"E	12–16m
Ponta do Ouro, Checkers	POC	26°48'43"S , 32°53'34"E	15–18m
Ponta do Ouro, Blacks	POB	26°50'09"S , 32°53'27"E	15–18m
Ponta do Ouro, Doodles	POD	26°50'20"S , 32°53'30"E	15–17m
Ponta do Ouro, The Cake	POTC	26°50'22"S , 32°54'39"E	38–45m
Ponta do Ouro, Atlantis	POA	26°50'58"S , 32°44'54"E	36–45m

Results

Class Gastropoda Cuvier, 1795

Subclass Heterobranchia Burmeister, 1837

Clade Nudipleura Wägele and Willan, 2000

Order Pleurobranchomorpha Pelseneer, 1906

Family Pleurobranchidae Gray, 1827

Genus *Berthella* Blainville, 1824

***Berthella martensi* (Pilsbry, 1896)**
(Figure 2 A)

Material examined. One specimen. MB28-004607, VIPP, 13 Dec. 2013, 9m, 14mm.

Habitats. Tropical coral reefs, under rubble coral.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west, central Pacific and east Pacific. Pacific coast of Mexico, Hawaii, Taiwan, Solomon Islands, Papua New Guinea, Australia, Philippines, Indonesia, Thailand, Réunion Island, Mauritius, Tanzania (Gosliner *et al*. 2008), India (Sreeraj *et al.* 2012) and Mozambique.

Genus *Berthellina* Gardiner, 1936

***Berthellina delicata* (Pease, 1861) species complex**
(Figures 2 B–D)

Material examined. Twelve specimens. MB28-005057, ZWH, 5 Dec. 2011, 16m, 40mm; MB28-005058, ZRP, 07 Jun. 2012, 2m, 30mm; MB28-005059, ZRP, 07 Jun. 2012, 1m, 28mm; MB28-005060, ZRP, 07 Jun. 2012, 2m, 30mm; MB28-005061, ZRP, 26 May 2013, 1m, 30mm; MB28-005062, ZAR, 35m, 20mm; MHN-YT1013, VIS3, 12 Nov. 2013, 5m, 18mm; MB28-005063, VIS3, 12 Nov. 2013, 5m, 14mm; MB28-005064, POA, 08 May 2014, 41m, 18mm; MB28-005065, NCh6, 05 Jun. 2014, 3m, 21mm; ZMBN105155, 21 May 2015, VIAIR, 2spcs., 4m, 12–26mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs and bommies.

Occurrences. Ponta do Ouro, Zavora, Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii, Midway Atoll (Gosliner *et al*. 2008), Japan (Baba 1949), Papua New Guinea, Seychelles, Réunion Island (Gosliner *et al*. 2008) and Mozambique (Martens 1879).

Remarks. Three-colour morphotypes were found: yellowish with a delicate reticulated pattern on the dorsum (Fig. 2 B); a translucent yellow body with low yellow tubercles (Fig. 2 C); and an orange body with white specks (Fig. 2 D). The variety of habitats, depths and specimen colours suggest that the animals collected here probably represent a complex of species. The systematics of *Berthellina* from the Indo-Pacific are in need of a comprehensive review (Cervera *et al.* 1999; Moustafa *et al.* 2016), because this taxon is indistinguishable by external characteristics alone (Gardiner 1936; Gosliner *et al.* 2008; Alvim & Pimenta 2015).

***Berthellina* sp.**
(Figure 2 E)

Material examined. Ten specimens. MHN-YT282, ZRP, 21 Feb. 2012, 2m, 22mm; MB28-005093, ZRP, 21 Feb. 2012, 2m, 25mm; MB28-005094, ZRP, 21 Feb. 2012, 2m, 40mm; MB28-005095, ZRP, 21 Feb. 2012, 2m, 32mm; MB28-005066, ZRP, 25 May 2013, 1m, 22mm; MB28-005067, 2spcs., ZRP, 03 Feb. 2014, 1m, 6 and 22mm; MB28-005068, ZRP, 15 Feb. 2014, 0.5m, 45mm; MB28-005069, NKA, 10 Jun. 2014, 4m, 32mm; MB28-005070, MIF, 11 Jun. 2014, 3m, 42mm. MB28-005016, ZRP, 03 Aug. 2015, 0.5m, 18mm.

Habitats. Subtropical tidal reefs and tropical coral reefs, bommies and seagrass, active at night and under rocks during the day, always in shallow waters.

Occurrences. Zavora and Nuarro.

Geographic distribution. Western Indian Ocean (Gosliner *et al*. 2015) and likely India (Bhave & Apte 2011). Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987; Gosliner*et al*. 2008) and Mozambique.

Remarks. This species is similar to the one listed in Gosliner *et al*. (2015) as *Berthellina* sp. (p. 107, right bottom photo) from the western Indian Ocean. Externally, it differs from *B. delicata* reviewed by Moustafa *et al*. (2016) by the dense white spots on the dorsum.

Genus *Pleurobranchaea* Leue, 1813

***Pleurobranchaea brockii* Bergh, 1897**
(Figure 2 F)

Material examined. Photographic record only (not collected), BL, 25 Jan. 2013, 3m, approx. 150mm, photo by Juan Vega.

Habitats. Seagrass in the subtropics.

Occurrences. Barra.

Geographic distribution. Indo-west Pacific. Japan, Australia, Maldives, Mauritius (Debelius 1996), Indonesia, South Africa (Gosliner *et al*. 2008) and Mozambique.

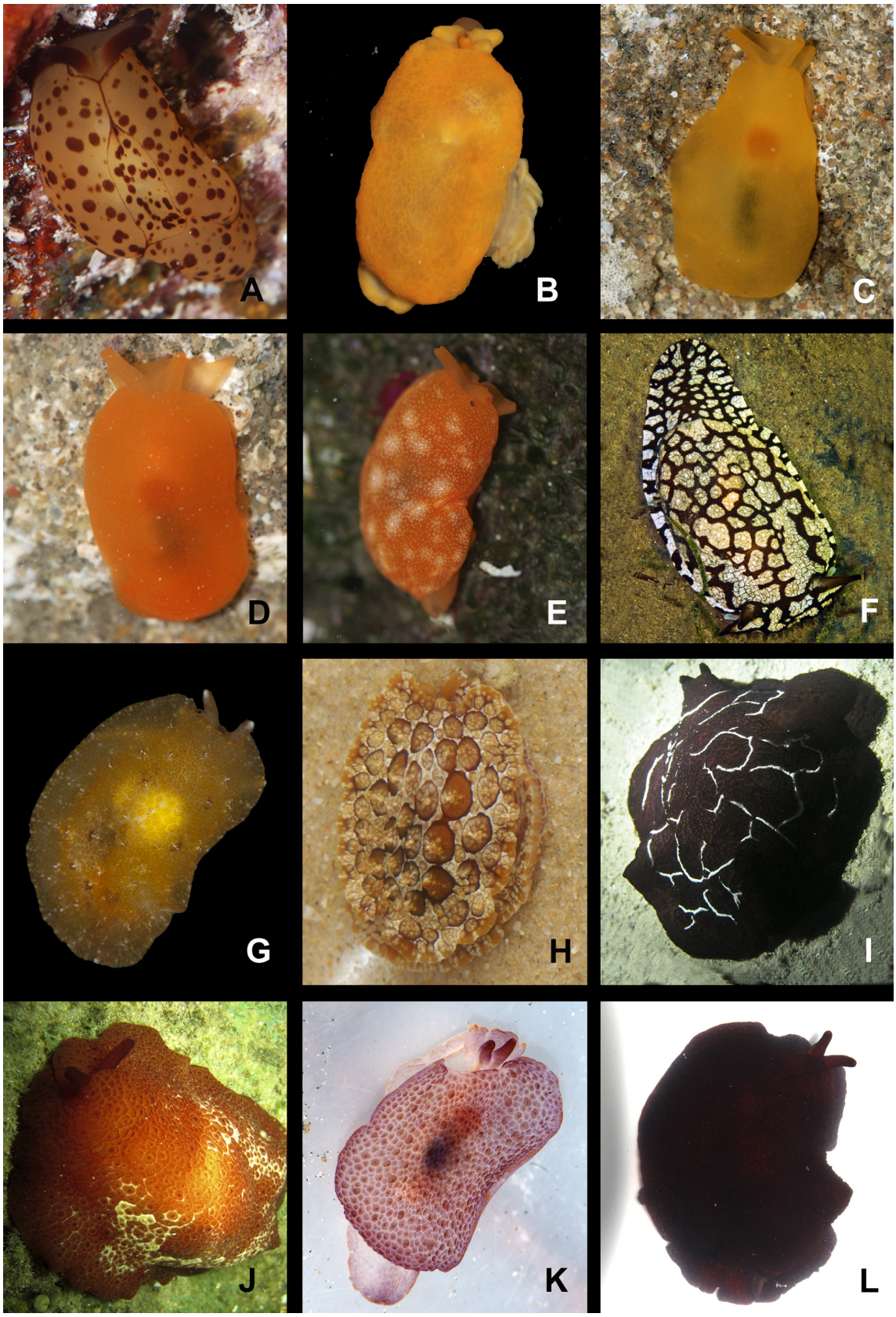

FIGURE 2. A, *Berthella martensi* (MB28-004607). B–D, *Berthellina delicata* species complex (MB28-005057, MB28-004578, MB28-005060, respectively). E, *Berthellina* sp. (MB28-005016). F, *Pleurobranchaea brockii* (*in situ*). G, *Pleurobranchus albiguttatus* (MB28-004603). H–I, *Pleurobranchus forskalii* (MB28-004434 and MHN-YT1655, respectively). J, *Pleurobranchus grandis* (*in situ*). K–L, *Pleurobranchus peronii* (MHN-YT276 and MB28-005042, respectively).

Genus *Pleurobranchus* Cuvier, 1804

***Pleurobranchus albiguttatus* (Bergh, 1905)**
(Figure 2 G)

Material examined. Three specimens. MB28-004603, ZA51, 13 Jul. 2012, 14m, 22mm; MHN-YT1030, VILV, 12 Dec. 2013, 4m, 30mm; ZMBN105112, VIAIR, 16 May 2015, 3m, 19mm, collected by Y. Tibiriçá & M. Malaquias. **Occurences:** Zavora and Vamizi Island.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Geographic distribution. Indo-west, central Pacific. Hawaii, New Caledonia, Papua New Guinea, Australia, Philippines, Indonesia, Red Sea, Comoros Islands, Réunion Island, Tanzania, Madagascar (Gosliner *et al.* 2008; Goodheart *et al.* 2015) and Mozambique.

***Pleurobranchus forskalii* Rüppel & Leuckart, 1828**
(Figure 2 H–I)

Material examined. Four specimens. MB28-004434, ZRP, 10 Dec. 2011, 1m, 35mm; MHN-YT596, BL, 12 Oct. 2012, 2m, 120mm; MB28-004904, MIF, 11 Jun. 2016, 3m, 88mm; MHN-YT1655, NHR, 23 Oct. 2016, 8m, 200mm (crawling on sand).

Habitats. Subtropical tidal reefs, rocky reefs and seagrass and tropical coral bommies and seagrass.

Occurrences. Zavora, Barra, Mozambique Island and Nuarro.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Australia, Fiji, Indonesia, Philippines (Gosliner *et al.* 2008; Goodheart *et al.* 2015), Gulf of Oman (Fatemi & Attaran-Fariman 2015), Thailand (Mehrota & Scott 2015), Red Sea, Tanzania (Gosliner *et al.* 2008; Goodheart *et al.* 2015) and Mozambique.

Remarks. Goodheart *et al*. (2015) reviewed the genus *Pleurobranchus* based on molecular and morphology and observed that colour variation in this species is related to the ontogeny, where juveniles are lighter in colour than adults. Small specimens from Mozambique show complex colouration with several hues of brown mixed with small amounts of grey and white. The large and small tubercles often have a reddish dot at the top. A dark brown ring subtended by a whitish semi ring surrounds each large compound tubercle (Fig. 2 G). The base of the foot is translucent light-brown spotted with dark-brown, irregular marks. The larger specimen had a dark-purple mantle with partly open white rings surrounding each cluster of tubercles (Fig. 2 H). In this morphotype, the base of the foot is the same colour as the rest of the mantle.

***Pleurobranchus grandis* Pease, 1868**
(Figure 2 J)

Material examined. Photographic record only (not collected), ZRP, 19 Nov. 2010, 0.5m, 100mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. French Polynesia, Papua New Guinea, Fiji, Philippines (Gosliner *et al.* 2008; Goodheart *et al.* 2015), New Caledonia, Australia, Indonesia (Goodheart *et al.* 2015), Red Sea (De Loose 2001), Réunion Island (Flodrops 2008) and Mozambique.

***Pleurobranchus peronii* Cuvier, 1804**
(Figure 2 K–L)

Material examined. Three specimens. MHN-YT276, ZRP, 21 Feb. 2014, 2m, 12mm; MB28-004753, ZRS, 24m, 22mm; MB28-005042, 20 Aug. 2016,8m, 15mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Hawaii (Gosliner *et al.* 2008; Goodheart *et al.* 2015), Japan,

Korea, Papua New Guinea, Indonesia, Malaysia (Gosliner *et al*. 2008), Philippines (Goodheart *et al.* 2015), India (Apte 2009), Madagascar, Tanzania, South Africa (Gosliner *et al.* 2008; Goodheart *et al.* 2015) and Mozambique (Macnae 1962).

Remarks. Found active at night, one specimen in association with the commensal cleaner shrimp *Hyppolyte* sp.

Order Nudibranchia Cuvier, 1817

Suborder Euctenidiacea Tardy, 1970

Infraorder Doridacea Thiele, 1931

Superfamily Doridoidea Rafinesque, 1815

Family Dorididae Rafinesque, 1815

Genus *Doris* Linnaeus, 1758

***Doris ananas* Lima, Tibiriçá & Simone, 2016**
(Figure 3 A)

Material examined. see Lima *et al*. (2016) for material studied.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. Kenya (Gosliner *et al*. 2008), South Africa (Gosliner 1987; Gosliner *et al*. 2008) and Mozambique (Lima *et al.* 2016).

Remarks. This species was recently described based on material from Mozambique collected during this study. See Lima *et al*. (2016) for material examined and full morphological details.

***Doris* sp.**
(Figure 3 B)

Material examined. One specimen. MB28-004569, ZSC, 07 Jun. 2012, 22m, 8mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. So far only recorded to Mozambique.

Remarks. This species resembles *Doris cameroni* (Allan, 1947) from New South Wales, Australia, but lacks the typical black dots on the top of the tubercles. Additional individuals are needed for further investigation, however it is likely to be an undescribed species.

Family Actinocyclidae O'Donoghue, 1929

Genus *Hallaxa* Eliot, 1909

***Hallaxa cryptica* Gosliner & S. Johnson, 1994**
(Figure 3 C)

Material examined. One specimen. ZMBN105074, PS, 12 May 2012, 7–13m, 15mm.

Habitats. Tropical coral reefs.

Occurrences. Pemba.

Geographic distribution. Indo-west Pacific. Japan (Gosliner *et al*. 2008), Philippines, Australia (Cobb 2004), Marshall Islands (Gosliner & Johnson 1994), Madagascar (Gosliner *et al*. 2008) and Mozambique.

FIGURE 3. A, *Doris ananas* (MUZSP109884). B, *Doris* sp. (MB28-004569). C, *Hallaxa cryptica* (ZMBN105074). D, *Hallaxa elongata* (MB28-004552). E, *Ardeadoris angustolutea* (MB28-004705). F, *Ardeadoris symmetrica* (MB28-004611). G, *Ardeadoris undaurum* (MB28-004937). H, *Cadlinella ornatissima* (MB28-004754). I–J, *Ceratosoma tenue* (MB28-004837 and MB28-004535, respectively). K, *Ceratosoma trilobatum* (ZMBN117034). L, *Ceratosoma* sp. (MB28-005074).

***Hallaxa elongata* Gosliner & S. Johnson, 1994**
(Figure 3 D)

Material examined. Two specimens. MB28-004552, ZA51, 27 May 2012, 12m, 10mm; MB28-004906, MIF, 11 Jun. 2014, 3m, 7mm.

Habitats. Subtropical rocky reefs and tropical coral bommies.

Occurrences. Zavora and Mozambique Island.

Geographic distribution. Western Indian Ocean. Seychelles (Gosliner & Johnson 1994) and Mozambique. Online records of specimens of similar appearance exist for Marshall Islands, suggesting a range extention and Indo-Pacific distribution (In-Depth Images Kwajalein 2013).

Family Chromodorididae Bergh, 1891

Genus *Ardeadoris* Rudman, 1984

***Ardeadoris angustolutea* (Rudman, 1990)**
(Figure 3 E)

Material examined. Three specimens. MB28-004705, ZDRS, 06 Aug. 2013, 32m, 12mm; MB28-004877, NHR, 29 May 2014, 7m, 10mm; MHN-YT1310, NFA, 22 Jun. 2014, 20m, 6mm.

Habitats. Subtropical rocky reefs tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west Pacific. Marshall Islands, Samoa, Japan, Papua New Guinea (Gosliner *et al*. 2008), Philippines, Australia (Rudman 1990), Thailand (Gosliner *et al*. 2008), Réunion (Oulia 2010), Mauritius (Darnis 2009), Madagascar (Rassat 2014) and Mozambique.

Remarks. Species shows rhythmic movement of the gill branches.

***Ardeadoris symmetrica* (Rudman, 1990)**
(Figure 3 F)

Material examined. One specimen. MB28-004611, ZAR, 22 Aug. 2012, 31m, 38mm, collected by A. Pouris.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Marshall Islands, Papua New Guinea (Rudman 1990), Japan, (Gosliner *et al.* 2008), British Indian Ocean Territory (Yonow *et al*. 2002), Réunion Island (Rudman 1990), South Africa (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

***Ardeadoris undaurum* (Rudman, 1985)**
(Figure 3 G)

Material examined. Seven specimens. MB28-004526, ZAR, 14 Mar. 2012, 32m, 11mm; MB28-004641, ZD, 04 Dec. 2012, 30m, 55mm; MB28-004703, ZGWS, 03 Aug. 2013, 16m, 42mm; MB28-004713, ZWH, 12 Aug. 2013, 16m, 38mm; MHN-YT872, ZDRS, 12 Aug. 2013, 31m, 46mm; MB28-004937, ZGWS, 11 Oct. 2014, 19m, 28mm; MB28-004985, ZA51, 25 Apr. 2015, 15m, 14mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west Pacific. Indonesia (Katiandago 2017), Gulf of Oman (Debelius 1996; Fatemi & Attaran-Fariman 2015), Australia (Rudman 1985), South Africa (Gosliner 1987) and Mozambique.

Genus *Cadlinella* Thiele, 1931

***Cadlinella ornatissima* (Risbec, 1928)**
(Figure 3 H)

Material examined. Four specimens. MB28-004754, PPI, 01 Dec. 2013, 1m, 12mm; MB28-004900, NKA, 10 Jun. 2014, 30m, 14mm; MHN-YT1339, NKA, 10 Jun. 2014, 30m, 17mm; ZMBN105566, VIPP, 23 May 2015, 10m, 13mm.

Habitats. Tropical coral reefs, sometimes under rocks.

Occurrences. Nacala, Nuarro, Pemba.

Geographic distribution. Indo-west Pacific. New Zealand (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Japan (Baba 1949), Taiwan, Hong Kong, Fiji (Gosliner *et al*. 2008), New Caledonia (Risbec 1928), Australia (Nimbs & Smith 2017), Thailand (Mehrota & Scott 2015), India (Remakrishna *et al.* 2010), British Indian Ocean Territory (Yonow *et al*. 2002), Sri Lanka, Gulf of Oman, Réunion Island and Mayotte (Yonow 2012), Tanzania (Rudman 1984) and Mozambique.

Genus *Ceratosoma* A. Adams & Reeve, 1850

***Ceratosoma tenue* Bergh, 1874**
(Figure 3 I–J)

Material examined. Eight specimens. MB28-004535, ZSC, 14 May 2012, 22m, 34mm; MB28-004606, 15 Aug. 2012, ZWH, 18m, 62mm; MHN-YT1066, ZWH, 11 Jan. 2014, 17m, 49mm; MHN-YT801, ZM, 13 Jun. 2013, 8m, 22mm; MB28-004738, ZRP, 19 Sep. 2013, 1m, 22mm; MB28-004837, POB, 09 May 2014, 18m, 27mm; ZMBN119699, ZRP, 17 Jul. 2015, 0.5m, 18mm; MB28-004610, ZY, 19 Aug. 2012, 34m, 30mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurences: Ponta do Ouro and Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008), Japan (Baba 1949), Korea, Papua New Guinea, New Caledonia, Australia, Malaysia (Gosliner *et al*. 2008), Indonesia (Debelius 1996), Tanzania, South Africa and Mozambique (Gosliner *et al*. 2008).

Remarks. The bathymetric distribution of this species ranged from 1 to 50m. We found two morphotypes: one found in shallow water was smaller and similar to specimens from Tanzania (Rudman 1988) with a bright yellow background and lateral lobes of different sizes (Fig. 3 I); the second morphotype found in deeper water was much larger and predominantly reddish. In this morphotype the anterior lobes are slightly smaller than the posterior lobes (Fig. 3 J). Additional molecular and morphological studies are needed to test the co-specificity of both morphotypes.

***Ceratosoma trilobatum* (J.E. Gray, 1827)**
(Figure 3 K)

Material examined. One specimen. ZMBN117034, ZKW, 11 Dec. 2012, 50m, 92mm.

Habitats. Wreck in the subtropical region.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Taiwan, New Caledonia, Indonesia (Gosliner *et al*. 2008), Philippines, Australia, Malaysia, Vietnam (Coleman 2008), Red Sea, Madagascar (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

***Ceratosoma* sp.**
(Figure 3 L)

Material examined. Five specimens. MB28-005071, ZAR, 09 Aug. 2011, 30m, 12mm; MHN-YT415, ZD, 03 Jun. 2012, 32m, 3mm; MB28-005072, POR, 07 May 2014, 15m, 10mm; MB28-005073, POC, 08 May 2014, 18m, 21mm; MB28-005074, ZY, 24 Feb. 2015, 31m, 7mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, Papua New Guinea, Guam, Philippines, Indonesia, Seychelles, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Genus *Chromodoris* Alder & Hancock, 1855

***Chromodoris aspersa* (Gould, 1852)**
(Figure 4 A)

Material examined. Four specimens. MB28-004432, ZA51, 15 Nov. 2011, 4m, 24mm; MB28-004722, ZDRS, 12 Aug. 2013, 32m, 10mm; MHN-YT1276, NHR, 29 May 2014, 10m, 18mm; MB28-004952, ZA51, 30 Dec. 2014, 12m, 14mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, Marshall Islands, Papua New Guinea (Gosliner *et al*. 2008), Australia (Debelius 1996), Philippines, Réunion Island, Seychelles (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species typically has an orange or yellow edge around the mantle (Kay & Young 1969; Rudman 1983). Rudman (1993) reviewed the anatomy of specimens of *C. aspersa* with and without the yellow/orange border and concluded that they all belong to the same species. Nevertheless, this hypothesis has never been tested using molecular techniques, which may clarify the identity of this taxon.

***Chromodoris africana* Eliot, 1904**
(Figure 4 B)

Material examined. Ten specimens. UL-YT70, TO, 18 Nov. 2011, 30m, 68mm; MB28-004443, ZWH, 02 Feb. 2012, 18m, 50mm, collected by S. Bruck; MHN-YT132, ZWH, 05 Feb. 2012, 17m, 24mm, collected by P. Velho; MB28-004472, ZRP, 07 Feb. 2012, 2m, 35mm; MB28-004492, ZGWS, 20 Feb. 2012, 20m, 62mm; MB28-004554, ZGWS, 02 Jun. 2012, 20m, 62mm; MB28-004793, ZWH, 11 Jan. 2014, 17m, 25mm; ZMBN94234, ZRP, 03 Feb. 2014, 1m, 60mm; MB28-004970, ZY, 27 Feb. 2015, 60m, 70mm, collected by J. Wright; MB28-004971, ZY, 27 Feb. 2015, 60m, 62mm, collected by J. Wright.

Habitats. Subtropical tidal reefs, rocky reefs, wrecks and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Nuarro and Vamizi Island.

Geographic distribution. Indian Ocean. Gulf of Oman (Fatemi & Attaran-Fariman 2015), Red Sea (Yonow 1989; Debelius 1996), Tanzania (Eliot 1905; Rudman 1977), South Africa (Gosliner 1987; King & Fraser 2014), Madagascar and Comoros Islands (Gosliner *et al.* 2008) and Mozambique (King & Fraser 2014).

***Chromodoris* cf. *boucheti* Rudman, 1982**
(Figure 4 C)

Material examined. Fifteen specimens. MHN-YT1005, VINR, 12 Aug. 2013, 15m, 34mm; MB28-004633, VINR, 12 Aug. 2013, 16m, 38mm; MB28-004632, VINR, 12 Aug. 2013, 16m, 40mm; MB28-004929, VINR, 12 Aug.

2013, 16m, 37mm; MB28-005051, VINR, 12 Aug. 2013, 16m, 36mm; MB28-005052, 2spcs., NGF, 29 Jun. 2014, 37m, 25 and 32mm; MB28-005053, NHR, 01 Jun. 2014, 9m, 20mm; MB28-005054, NSS, 02 Jun. 2014, 18m, 42mm; MB28-005055, NFA, 03 Jun. 2014, 22m, 34mm; ZMBN105085, 4spcs., VIPP, 15 May 2015, 20-30m, 20-32mm, collected by M. Malaquias and Y. Tibiriçá; MHN-YT1551, VIPP, 19 May 2015, 12m, 38mm, collected by M. Malaquias and Y. Tibiriçá; MB28-005056, NGU, 24 Apr. 2016, 22m, 32mm; UL-YT1609, NGU, 29 Apr. 2016, 24m, 31mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. French Polynesia, New Zealand, Solomon Islands (Gosliner *et al*. 2008), Papua New Guinea, Fiji, Vanuatu, Australia (Rudman 1982), New Caledonia, Philippines, Indonesia, Singapore, Maldives, Comoro Islands, South Africa, Madagascar (Gosliner *et al*. 2008), Tanzania (Debelius 1996) and Mozambique.

Remarks. *Chromodoris boucheti* is the accepted name for this species in the Indian Ocean. However, our preliminary analyses of the COI region showed genetic distance (*p*-distance) of only 0.5% between sequences of specimens of *C. lochi* Rudman, 1982 from the Pacific Ocean retrived from Genbank and specimens of *C. boucheti* from this study, suggesting that they might belong to the same species.

Chromodoris hamiltoni Rudman, 1977

(Figure 4 D)

Material examined. Eight specimens. MB28-004646, 09 Dec. 2010, 12m, 28mm; MB28-004769, VIP, 12 Aug. 2013, 3m, 25mm; MB28-004922, ZGWS, 05 Jul. 2014, 17m, 25mm; MHN-YT1429, ZA51, 27 Oct. 2014, 13m, 34mm; MB28-004941, ZA51, 27 Oct. 2014, 13m, 24mm; MB28-005005, ZA51, 12 Jun. 2015, 11m, 22mm; MB28-005010, ZA51, 12 Jun. 2015, 11m, 35mm; MB28-005015, ZWH, 12 Aug. 2015, 14m, 34mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Barra and Vilanculos.

Geographic distribution. Indian Ocean. Red Sea (Yonow 2012), Tanzania, Kenya (Rudman 1977; Gosliner 1987; King & Fraser 2014), South Africa and Madagascar (Gosliner 1987; Gosliner et al. 2008; King & Fraser 2014) and Mozambique (Rudman 1982; King & Fraser 2014).

Chromodoris mandapamensis Valdés, Mollo & Ortea, 1999

(Figure 4 E)

Material examined. Two specimens. MHN-YT220, ZGWS, 19 Feb. 2012, 28m, 24mm, collected by P. Velho; MB28-004931, ZSC, 08 Oct. 2014, 16m, 20mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Solomon Islands, Papua New Guinea, Myanmar (Gosliner *et al*. 2008), Thailand (Gosliner *et al*. 2008; Mehrotra & Scott 2015), India (Valdés *et al*. 1999), South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. See remarks under *Goniobranchus pruna* (Gosliner 1994).

Chromodoris quadricolor (Rüppell & Leuckart, 1830)

(Figure 4 F)

Material examined. One specimen. MB28-005040, NSS, 23 Jul. 2016, 25m, 36mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro.

Geographic distribution. Indian Ocean. Red Sea, Tanzania (Rudman 1982) and Mozambique.

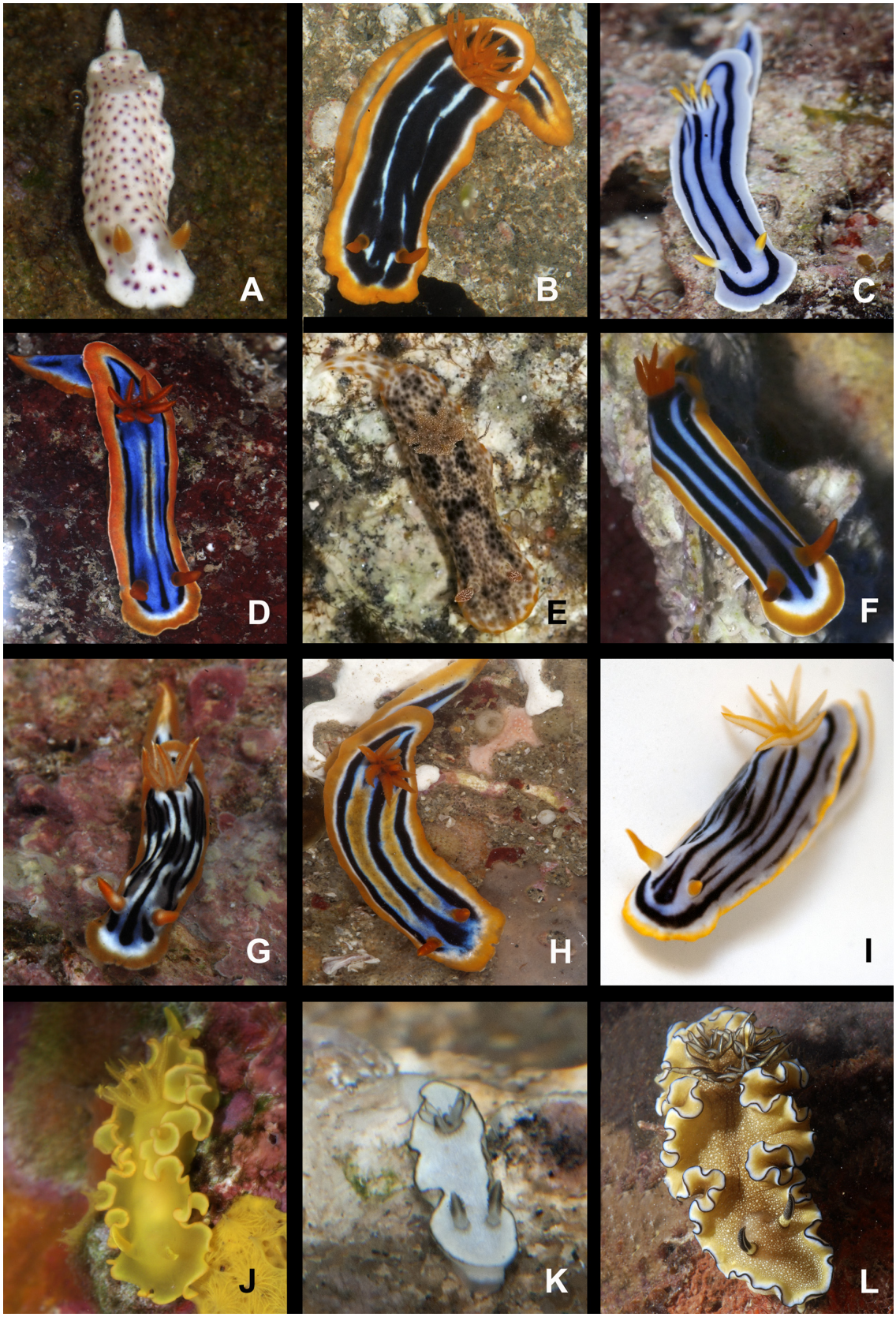

FIGURE 4. A, *Chromodoris aspera* (MB28-004952). B, *Chromodoris africana* (MB28-004554). C, *Chromodoris* cf. *boucheti* (MB28-004929). D, *Chromodoris hamiltoni* (MB28-004769). E, *Chromodoris mandapamensis* (MB28-004931). F, *Chromodoris quadricolor* (MB28-005040). G, *Chromodoris strigata* (MB28-004884). H, *Chromodoris* sp. 1 (MB28-004644). I, *Chromodoris* sp. 2 (MB28-004845). J, *Diversidoris crocea* (MB28-005024). K–L, *Doriprismatica* cf. *atromarginata* (MB28-004575 and MB28-004908, respectively).

***Chromodoris strigata* Rudman, 1982**
(Figure 4 G)

Material examined. Three specimens. MHN-YT1287, NHR, 01 Jun. 2014, 9m, 8mm; MB28-004884, NSS, 02 Jun. 2014, 15m, 12mm; MB28-004915, NKA, 15 Jun. 2014, 12m, 11mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Japan, Palau, New Caledonia, Solomon Islands (Gosliner *et al*. 2008), Australia (Rudman 1982; Nimbs & Smith 2016), Philippines, Madagascar, South Africa (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

***Chromodoris* sp. 1**
(Figure 4 H)

Material examined. Six specimens. MB28-004648, ZA51, 09 Dec. 2012, 12m, 34mm; MB28-004644, ZDR, 6 Dec. 2012, 32m, 56mm; MB28-004645, ZA51, 09 Dec. 2012, 12m, 36mm; MB28-004942, ZA51, 27 Oct. 2014, 13m, 30mm; MB28-004947, ZJS, 13 Dec. 2014, 12m, 32mm; MHN-YT896, PE, 15 Aug. 2013, 0.5m, 34mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Paindane and Vamizi Island.

Geographic distribution. Western Indian Ocean. South Africa (Coleman 2008; Gosliner *et al*. 2008), Madagascar (Johnson & Gosliner 2012) and Mozambique.

Remarks. This species has been often misidentified as *Chromodoris hamiltoni* as they are externally and internally similar. Nevertheless, they differ externally by the presence of orange bands posterior to each rhinophore. Moreover, our preliminary molecular analyses based on mtDNA COI showed a minmum genetic difference of around 6% between this morphotype and a morphotype of *Chromodoris hamiltoni* as described by Rudman (1977).

***Chromodoris* sp. 2**
(Figure 4 I)

Material examined. One specimen. MB28-004845, ZDN, 18 May 2011, 60m, 29mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. South Africa (V. Fraser & J. Toms, pers. communication) and Mozambique.

Remarks. This species is externally similar to *Chromodoris strigata* but it differs by the presence of an oval black band surrounding the rhinophores and gills. The preliminary analyses of the genetic distance of the gene COI revealed a *p*-distance of 7% between this specimen and exemplars of *C. strigata.*

Genus *Diversidoris* Rudman, 1987

***Diversidoris crocea* (Rudman, 1986)**
(Figure 4 J)

Material examined. One specimen. MB28-005024, NG, 29 Apr. 2016, 19m, 32mm.

Habitats. Tropical coral reef.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Marshall Islands (Gosliner *et al*. 2008), Guam (Carlson & Hoff

2003), Japan, Papua New Guinea (Gosliner *et al*. 2008), Solomon Islands, Australia (Rudman 1986a), Indonesia, Philippines (Gosliner *et al*. 2008), Mayotte (Deuss 2012) and Mozambique.

Remarks. Found feeding on yellow sponge *Darwinella* sp.

Genus *Doriprismatica* d'Orbigny, 1839

Doriprismatica cf. *atromarginata* (Cuvier, 1804)

(Figures 4 K–L)

Material examined. Four specimens. MB28-004575, ZY, 17 Jun. 2012, 34m, 9mm; MB28-004899, NKA, 10 Jun. 2014, 30m, 24mm, collected by J. Wright; MB28-004908, NKA, 13 Jun. 2014, 17m, 70mm; MHN-YT1357, NKA, 13 Jun. 2014, 17m, 52mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora and Nuarro.

Geographic distribution. Indo-west, central Pacific. French Polynesia (Gosliner 1987), Japan (Baba 1949), China, Solomon Islands (Gosliner 1987), Papua New Guinea, Australia (Rudman 1986b), Sumatra, Indonesia (Debelius 1996), Thailand (Mehrotra & Scott 2015), Philippines, Red Sea, South Africa (Gosliner 1987), Tanzania (Rudman 1986b) and Mozambique (King & Fraser 2014).

Remarks. Two distinct morphotypes were found. The smaller specimen (Fig. 4 K) is white with a thin black edge to the mantle, as well as on the gill and rhinophoral pockets. This colour pattern is similar to the juvenile form of *Doriprismatica atromarginata* described by Rudman (1986b) or may represent *Doriprismatica paladentata* (Rudman, 1986). Because *D. paladentata* is so far only recorded to the western Pacific Ocean (Gosliner *et al*. 2015) and these two species are externally similar, further analyses are needed to confirm its identification. All other specimens are similar to that described by Rudman (1986) from Tanzania with slight differences in the hue of the mantle and marginal bands (Fig. 4 L); More significantly, specimens examined by Rudman (1986) had only a few scattered spots on the dorsum, while in the Mozambican specimens the dorsum and the foot are covered by gold spots. The specimen illustrated in Gosliner (1987, p. 83) from South Africa is identical to those from Mozambique. Specimens from the Pacific often lack spots (e.g. Gosliner *et al*. 2008, Matsuda & Gosliner 2017) Thus, additional studies are needed to compare the different morphotypes and verify their correct distribution.

Genus *Glossodoris* Ehrenberg, 1831

Glossodoris cincta (Bergh, 1888)

(Figure 5 A)

Material examined. One specimen. MB28-004774, VIS3, 12 Nov. 2013, 4m, 30mm.

Habitats. Tropical coral reefs.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Palau, Papua New Guinea, Marshall Islands, Guam, Australia (Rudman 1986b, Gosliner *et al*. 2008), Philippines, Thailand (Mehrotra & Scott 2015), British Indian Ocean Territory (Yonow *et al*. 2002), Maldives, Red Sea (Debelius 1996), Madagascar, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Glossodoris gregorius Rudman, 1986

(Figure 5 B)

Material examined. One specimen. MB28-004428, VAL, 09 Oct. 2011, 8m, 65mm.

Habitats. Tropical artificial reef on seagrass.

Occurrences. Vilanculos.

Geographic distribution. Indian Ocean. India (Apte 2009), Tanzania (Rudman 1986b) and Mozambique.

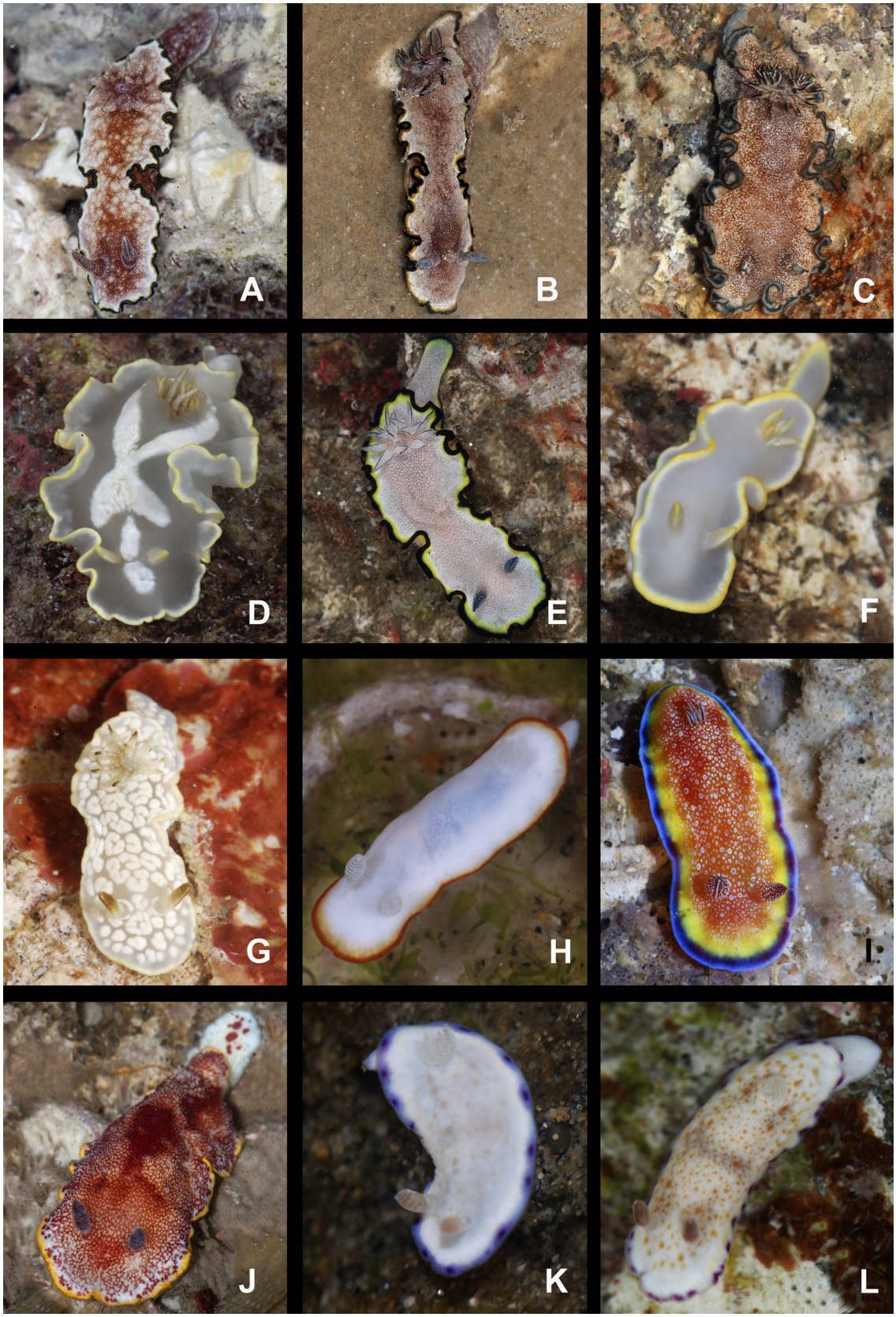

FIGURE 5. A, *Glossodoris cincta* (MB28-004774). B, *Glossodoris gregorius* (MB28-004428). C, *Glossodoris hikuerensis* (MB28-004853). D. *Glossodoris pallida* (MB28-004885). E. *Glossodoris* sp. 1 (MB28-004642). F, *Glossodoris* sp. 2 (MB28-004943). G, Glossodoris sp. 3 (MB28-004861). H, *Goniobranchus albonares* (MB28-004789). I, *Goniobranchus albopunctatus* (MB28-004819). J, *Goniobranchus* cf. *alderi* (MB28-004446). K–L, *Goniobranchus alius* (MB28-004540 and MB28-005018, respectively).

***Glossodoris hikuerensis* (Pruvot-Fol, 1954)**
(Figure 5 C)

Material examined. Three specimens. MB28-004853, POD, 11 May 2014, 16m, 36mm; MB28-005001, VIPP, 23 May 2015, 8m, 32mm; MHN-YT1660, NHR, 2 Oct. 2016, 8m, 75mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Vamizi Island and Nuarro.

Geographic distribution. Indo-west, central Pacific. Marshall Islands (Matsuda & Gosliner 2008), Guam (Carlson & Hoff 2003), French Polynesia, Papua New Guinea, Indonesia (Gosliner *et al*. 2008), Philippines (Matsuda & Gosliner 2008), Australia (Johnson 2009), Fiji, Christmas Island, Maldives, Red Sea, Kenya, Seychelles (Debelius 1996), South Africa (Gosliner 1987), Madagascar (Gosliner *et al*. 2008) and Mozambique.

***Glossodoris pallida* (Rüppell & Leuckart, 1830)**
(Figure 5 D)

Material examined. Eight specimens. MHN-YT1199, POC, 08 May 2014, 18m, 16mm, collected by J. Wright; MB28-004836, POC, 08 May 2014, POC, 17m, 31mm; MB28-004854, 2 spcs., POD, 11 May 2014, 15m, 27 and 30mm; MB28-004878, NHR, 29 May 2014, 7m, 8mm; MB28-004881, NHR, 01 Jun. 2014, 9m, 18mm; MB28-004885 & MB28-004886, NFA, 02 Jun. 2014, 12m, 29mm and 14mm, respectively.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Inhaca Island, Zavora and Nuarro.

Geographic distribution. Indian Ocean. Red Sea (Debelius 1996), Gulf of Oman (Fatemi & Attaran-Fariman 2015), South Africa (Gosliner *et al*. 2008), Madagascar and Mozambique (Matsuda & Gosliner 2017).

Remarks: Matsuda & Gosliner (2017) presented a molecular review of several *Glossodoris* from the Indo-Pacific and show that the species from the western Pacific Ocean differs genetically and internally from *G. pallida*.

***Glossodoris* sp. 1**
(Figure 5 E)

Material examined. Ten specimens. MB28-004464, ZRP, 06 Feb. 2012, 1m, 37 and 42mm, respectively; MB28-004508, ZRP, 21 Feb. 2012, 2m, 18mm; MB28-004614, 23 Aug. 2012, ZRP, 1m, 12mm, collected by A. Pouris; MB28-004619, ZJS, 29 Mar. 2012, 12m, 24mm; MB28-004642, ZD, 06 Dec. 2012, 32m, 47mm; MHN-YT769, ZJS, 24 May 2013, 12m, 34mm; UL-YT1078, BB, 23 Oct. 2014, 9m, 42mm; MB28-004862, POB, 12 May 2014, 16m, 48mm; MB28-004932, ZDRS, 08 Oct. 2014, 31m, 26mm; MB28-004975, ZRP, 21 Mar. 2015, 0.5m, 32mm.

Habitats. Subtropical tidal reefs, rocky reefs and seagrass.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. Tanzania (Gosliner *et al*. 2008), Mozambique and South Africa (Gosliner *et al*. 2008; King & Fraser 2014).

Remarks. Matsuda & Gosliner (2017) confirmed that this is an undescribed species (*Glossodoris* sp. B in their work).

***Glossodoris* sp. 2**
(Figure 5 F)

Material examined. Fifteen specimens. MB28-004414 & MB28-004415, ZA51, 13 Jun. 2010, 12m, 13mm and 18mm, respectively; MHN-YT77, ZA51, 15 Nov. 2011, 12m, 22mm; MB28-004444, ZWH, 02 Feb. 2012, 17m, 33mm; ZMBN117019, ZWH, 05 Feb. 2012, 18m, 27mm; ZMBN117023, ZY, 13 May 2012, 36m, 32mm; MB28-004615 & MB28-004616, ZA51, 23 Aug. 2012, 13m, 12mm and 11mm, respectively, collected by S. Brumme; MB28-004618, ZRP, 23 Aug. 2012, 1m, 14mm; UL-YT655, ZWH, 23 Nov. 2012, 16m, 28mm; MB28-004676, ZRP, 25 May 2013, 1m, 14mm; MB28-004794, BB, 23 Jan. 2014, 10m, 24mm; MB28-004938, ZRP, 10 Oct. 2014, 0.5m, 20mm; MB28-004943, ZA51, 27 Oct. 2014, 13m, 16mm; ZMBN119696, ZJS, 28 Jan. 2015, 12m, 20mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner 1987) and Mozambique (King & Fraser 2014).

Remarks. This species differs externally from Matsuda & Gosliner (2017) *Glossodoris* sp. A and *Glossodoris pallida* by the absence of opaque white marks on the dorsum and is likely to be undescribed (Gosliner *et al*. 2008, 2015).

***Glossodoris* sp. 3**
(Figure 5 G)

Material examined. Four specimens. MHN-YT1237, 2 spcs., POD,11 May 2014, 14m, 14 and 4mm; MB28-004861, POB, 12 May 2014, 15m, 12mm; MB28-004898, NKA, 10 Jun. 2014, 30m, 24mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro and Nuarro.

Geographic distribution. Indo-west Pacific. Japan (Gosliner *et al.* 2008), South Africa (Rudman 2000) and Mozambique.

Remarks. This species appears to be undescribed (Gosliner *et al*. 2008) and has not been included in the work of Matsuda & Gosliner (2017).

Genus *Goniobranchus* Pease, 1866

***Goniobranchus albonares* (Rudman, 1990)**
(Figure 5 H)

Material examined. Seven specimens. MB28-004503, ZRP, 21 Feb. 2012, 2m, 5mm; MB28-004551, ZRP, 21 May 2012, 2m, 5mm; MB28-004624, ZGWS, 08 Oct. 2012, 16m, 25mm; ZMBN117045, PACG, 0.5m, 22mm; MHN-YT1052, ZRP, 18 Dec. 2013, 0.5m, 6mm; MB28-004789, ZRP, 05 Jan. 2014, 0.3m, 9mm; ZMBN119693, 10 Oct. 2014, ZRP, 1m, 5mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora and Paindane.

Geographic distribution. Indo-west Pacific. Japan (Gosliner *et al*. 2008), New Caledonia, Australia (Rudman 1990), Réunion (Bidgrain 2006a), Madagascar (Rassat, 2016a), Mayotte (Schubert 2010) and Mozambique.

***Goniobranchus albopunctatus* Garrett, 1879**
(Figure 5 I)

Material examined. One specimen. MB28-004819, 07 May 2014, POA, 15m, 24mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west, central Pacific. Society Islands (Garret 1879), Hawaii, Japan, Marshall Islands, Australia, Indonesia, Philippines, Seychelles, Tanzania, South Africa (Gosliner *et al.* 2008) and Mozambique.

***Goniobranchus* cf. *alderi* (Collingwood, 1881)**
(Figure 5 J)

Material examined. Eight specimens. MHN-YT87, ZGWS, 10 Dec. 2011, 20m, 25mm; MB28-004446, ZWH, 02 Feb. 2012, 20m, 44mm, collected by S. Bruck; MB28-004620, ZJS, 29 Aug. 2012, 12m, 28mm, collected by J.

Bergman; MB28-004685, ZM, 29 Aug. 2012, 8m, 44mm; MB28-004730, ZD, 18 Aug. 2013, 32m, 20mm; ZMBN117052, 06 Jan. 2014, 51m, 26mm; ZMBN119694, ZGWS, 11 Oct. 2014, 19m, 34mm; ZMBN119695, ZA51, 12m, 38mm.

Habitats. Subtropical rocky reefs and wreck.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Seychelles, Madagascar, South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. This morphotype is part of the *Chromodoris tinctorius* complex, which needs to be reviewed (Gosliner *et al*. 2008, 2015). All the specimens examined have identical colour patterns and appear to be the same species. The dorsal colour is white with a red reticulate pattern. The mantle margin is yellow. The rhinophores stalk is white and the lamellae are red-purple, lined in white. The ventral part of the foot is solid white. The dorsal part of the foot is white with red dots. This morphotype appears to be typical of western Indian Ocean specimens (Gosliner *et al*. 2008).

Goniobranchus alius (Rudman, 1987)

(Figure 5 K–L)

Material examined. Ten specimens. MHN-YT10, ZRP, 17 Jun. 2011, 1m, 14mm; MB28-004539, ZRP, 06 May 2012, 2m, 14mm, collected by S. Bruck; MB28-004540, ZRP, 06 May 2012, 2m, 9mm, collected by S. Bruck; ZMBN117024, ZRP, 06 May 2012, 2m, 8mm; ZMBN117058, ZRP, 16 Apr. 2014, 0.5m, 16mm; ZMBN117063, POD, 11 May 2014, 15m, 16mm; MB28-004864, 2 spcs., POB, 16m, 6-8mm; MB28-004983, ZSC, 25 Apr. 2015, 20m, 15mm; MB28-005018, ZRP, 04 Aug. 2015, 1m, 16mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indian Ocean. Sri Lanka (Yonow 1984), Tanzania, Réunion Island (Rudman 1987), Madagascar, South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. Specimens show colour variation ranging from a white dorsum with purple mantle edge to a brownish dorsum with light yellow spots inside the purple margin. The latter pattern resembles *Goniobranchus aureopurpurus* from the West Pacific. Rudman (2005b) suggests that "*G. alius*, *G. aureopurpureus*, *G. rufomaculatus* and *G. albopustulosus"* may be the same species with wide geographic distribution and colour variations.

Goniobranchus annulatus (Eliot, 1904)

(Figure 6 A)

Material examined. Six specimens. MHN-YT290, ZDD, 23 Feb. 2012, 1m, 9mm; MB28-004538, ZRP, 06 May 2012, 1m, 30mm, collected by S. Bruck; MB28-004549, ZRP, 20 May 2012, 2m, 30mm, collected by S. Bruck; MB28-004560, ZRP, 04 Jun. 2012, 1m, 28mm, collected by A. Roseblum; MB28-004608, ZRP, 17 Aug. 2012, 1m, 34mm, collected by A. Pouris; MB28-004681, BL, 14 May 2012, 0.5m, 14mm.

Habitats. Subtropical tidal reefs, rocky reefs and seagrass.

Occurrences. Zavora and Barra.

Geographic distribution. Indian Ocean. Introduced in the Mediterranean Sea (Mytilineou *et al.* 2016) Thailand (Debelius 1996), Gulf of Oman (Debelius 1996; Fatemi & Attaran-Fariman 2015), Madagascar (Gosliner *et al.* 2008), Tanzania (Eliot 1904c), South Africa (Gosliner 1987) and Mozambique.

Goniobranchus cavae (Eliot, 1904) species complex

(Figures 6 B–G)

Material examined. Eleven specimens. MB28-004546, ZRP, 20 May 2012, 2m, 26mm; MB28-004562, ZRP, 04 Jun. 2012; MB28-004946, ZJS, 13 Dec. 2014, 14m, 32mm; MB28-004869, VAL, 23 May 2014, 3m, 78mm;

MB28-004871, VAL, 24 May 2014, 3m, 72mm; MHN-YT1266, VAL, 23 May 2014, 3m, 81mm; MB28-004873, VAL, 23 May 2014, 3m, 82mm; MB28-004924, ZRP, 19 Aug. 2014, 0.5m, 28mm. MB28-004612, ZWH, 22 Aug. 2012, 18m, 32mm; ZMBN117046, ZGWS, 13 Sep. 2013, 21m, 47mm; MB28-004969, ZY, 27 Feb. 2015 60m, 60mm.

Habitats. Subtropical tidal reefs, rocky reefs, seagrass and artificial reefs.

Occurrences. Zavora and Vilanculos.

Geographic distribution. Indian Ocean. Gulf of Oman (Fatemi & Attaran-Fariman 2015), Tanzania (Eliot 1904c), South Africa (Gosliner 1987; Coleman 2008), Réunion (Yonow 2012) and Mozambique (King & Fraser 2014).

Remarks. *Goniobranchus cavae* is highly variable in colour and at least three species have similar colour pattern: *G. tennentanus*, *G. cavae* and *G. leopardus*. Yonow (2012) provides morphological differences between them and gives details on *G. cavae* colour variations. Both morphotypes illustrated by Yonow (2012; pg. 105, plate 37 and pg.106, plate 38) were found in Mozambique. Gosliner *et al*. (2015) show a third morphotype of *G. cavae* (pag. 228, bottom right), which is also similar to one of the specimens collected by us (Fig. 6 D). Contradictorily, Gosliner *et al*. (2015) consider one of the morphotypes illustrated in Yonow under the name *G. cavae* (2012, pg. 105, plate 37) as an undescribed species (*Goniobranchus* sp. 19, pg. 220, bottom left). This last morphotype differs from others by the orange background instead of orange spots and is potentially a different species.

Goniobranchus conchyliatus **(Yonow, 1984)**
(Figure 6 H)

Material examined. Nine specimens. MHN-YT11, ZWH, 24 May 2010, 16m, 20mm; MB28-004469, ZRP, 07 Feb. 2012, 2m, 17mm; MB28-004507, ZRP, 21 Feb. 2012, 1m, 27mm, collected by L. Robisson; MB28-004529, ZRP, 22 Apr. 2012, ZRP, 2, 11mm; MB28-004541, ZRP, 06 May 2012, 2m, 9mm, collected by S. Bruck; MB28-004586, ZDRS, 21 Jun. 2012, 30m, 5mm; ZMBN117041, ZGWS, 25 Jun. 2013, 20m, 24mm; ZMBN117042, ZRP, 12 Jul. 2013, 0.5m, 18mm; ZMBN117043, ZGWS, 03 Aug. 2013, 16m, 24mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indian Ocean. Sri Lanka (Yonow 1984), Thailand, Maldives (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Goniobranchus decorus **(Pease, 1860)**
(Figure 6 I)

Material examined. One specimen. MB28-004594, ZDRS, 21 Jun. 2012, 30m, 9mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Marshall Islands, Papua New Guinea, Australia, Philippines, Christmas Island (Gosliner *et al*. 2008), Réunion, Mayotte (Bidgrain 2005b), and Mozambique.

Remarks. This species is very similar to *G. setoensis* (Baba, 1938) but has purple spots on the white midline, which is not mentioned in Baba's description (1938). Gosliner *et al*. (2015) cite that *G. setoensis* and *G. decorus* might (or not) represent the same specie.

Goniobranchus fidelis **(Kelaart, 1858)**
(Figure 6 J)

Material examined. One specimen. MB28-005039, NGF, 21 Jul. 2016, 15m, 10mm, collected by J. Wright.

Habitats. Subtropical rocky reef and tropical coral reefs.

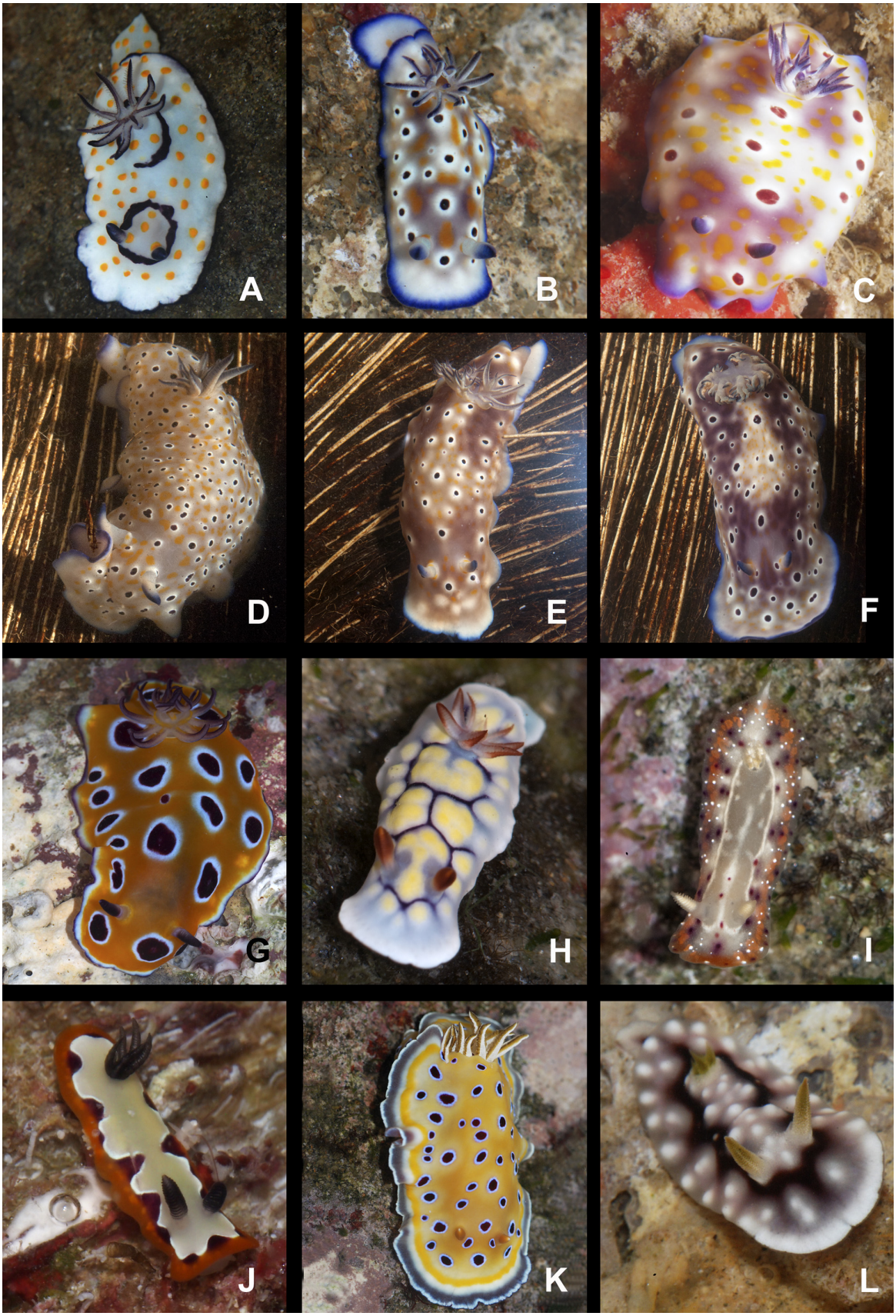

FIGURE 6. A, *Goniobranchus annulatus* (MB28-004538). B–G, *Goniobranchus cavae* species complex (MB28-004546, MB28-004946, MB28-004871, MHN-YT1266, MB28-004873 and MB28-004969, respectively). H, *Goniobranchus conchyliatus* (MB28-004469). I, *Goniobranchus decorus* (MB28-004594). J, *Goniobranchus fidelis* (MB28-005039). K, *Goniobranchus geminus* (MB28-004718). I, *Goniobranchus geometricus* (MB28-004849).

Occurrences. Ponta do Ouro and Nuarro.

Geographic distribution. Indo-west Pacific. Guam (Carlson & Hoff 2003), Japan, New Caledonia, Australia (Gosliner *et al*. 2008), Thailand (Mehrotra & Scott 2015), Philippines, Maldives (Gosliner *et al*. 2008), India (Remakrishna *et al.* 2010), Red Sea, Madagascar (Gosliner *et al*. 2008) and Mozambique.

***Goniobranchus geminus* (Rudman, 1987)**
(Figure 6 K)

Material examined. Eight specimens. MB28-004711, ZT, 11 Aug. 2013, 45m, 50mm; MB28-004718, ZT, 11 Aug. 2013, 45m, 49mm; MB28-004742, ZA51, 26 Sep. 2013, 12m, 28mm; MB28-004829, 4 spcs., POA, 08 May 2014, 40m, 28–50mmm; MHN-YT1606, NW, 11 Apr 2016, 20m, 32mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora and Nuarro.

Geographic distribution. Indian Ocean.Thailand (Gosliner *et al*. 2008), Christmas Island (Rudman 1987), India (Remakrishna *et al.* 2010), Red Sea (Debelius 1996), Tanzania, Réunion Island (Rudman 1987), Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

***Goniobranchus geometricus* (Risbec, 1928)**
(Figure 6 L)

Material examined. Nine specimens. MB28-004555, ZGWS, 02 Jun. 2012, 21m, 22mm; MB28-004689, ZGWS, 25 Jun. 2013, 19m, 22mm; MB28-004699, ZGWS, 26 Jul. 2013, 18m, 20mm; MB28-004700, 02 Aug. 2013, ZWH, 16m, 22mm; MB28-004835, 08 May 2014, POC, 18m, 5mm, collected by J. Stromvoll; MB28-004847, 10 May 2014, POD, 15m, 21mm; MB28-004849, POB, 12 May 204, 13m, 14mm; ZMBN117070, 01 Jan. 2014, NHR, 9m, 16mm; ZMBN105130, VIPP, 19 May 2015, 6m, 14mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Marshall Islands, Palau, Guam, Japan, Fiji, Papua New Guinea, (Gosliner *et al*. 2008), New Caledonia (Risbec 1928), Australia (Nimbs & Smith 2016), Thailand (Mehrotra & Scott 2015), Indonesia, Philippines, Maldives (Debelius 1996), Madagascar, Tanzania (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

***Goniobranchus kitae* (Gosliner, 1994)**
(Figure 7 A)

Material examined. One specimen. MB28-004868, BIL, 14 May 2014, 0.5m, 13mm.

Habitats. Rock and sand area in a lagoon connected to the sea.

Occurrences. Bilene.

Geographic distribution. Western Indian Ocean. Madagascar, South Africa (Gosliner *et al.* 2015) and Mozambique.

***Goniobranchus lekker* (Gosliner, 1994)**
(Figure 7 B)

Material examined. Three specimens. MB28-004435, ZRP, 10 Dec. 20111, 2m, 17mm; MHN-YT793, ZA51, 12 Jun. 2014, 13m, 7mm; ZMBN105150, VIPP, 19 May 2015, 8m, 8mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Zavora and Vamizi Island.

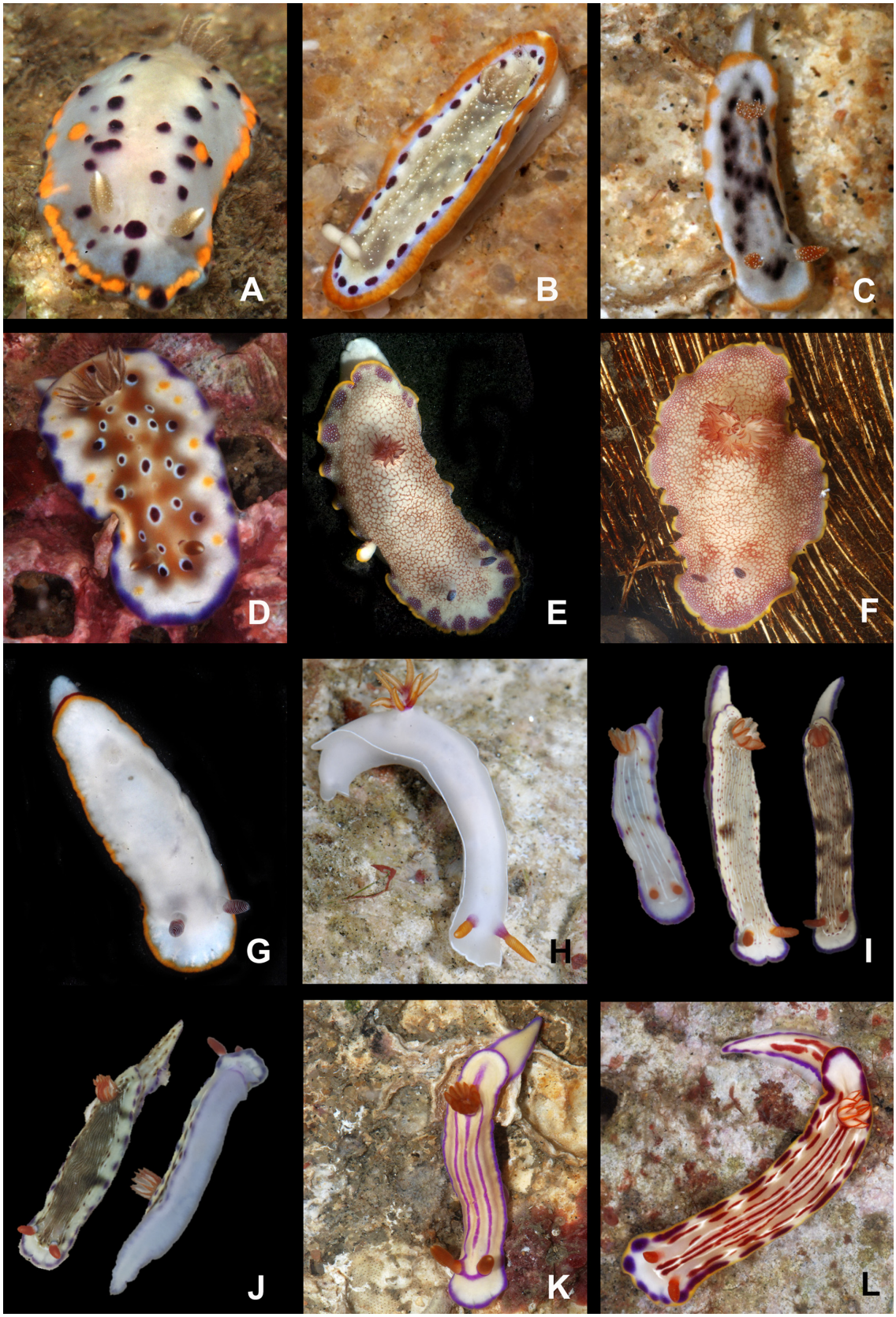

FIGURE 7. A, *Goniobranchus kitae* (MB28-004868). B, *Goniobranchus lekker* (MB28-004435). C, *Goniobranchus pruna* (MB28-004571). D, *Goniobranchus tennentanus* (MB28-004664). E–F *Goniobranchus* cf. *tinctorius* (MB28-004870 and MB28-004872, respectively). G, *Goniobranchus verrieri* (MB28-004657). H, *Hypselodoris bullockii* (MB28-004828). I–J, *Hypselodoris carnea* (MHN-YT358, MB28-004477, ZMBN117032 and MHN-YT471, respectively). K, *Hypselodoris emma* (MB28-004548). L, *Hypselodoris fucata* (MB28-004791).

Geographic distribution. Western Indian Ocean. Madagascar (Gosliner 1994), Seychelles, Réunion Island (Gosliner *et al*. 2008), South Africa (1987) and Mozambique.

***Goniobranchus pruna* (Gosliner, 1994)**
(Figure 7 C)

Material examined. Two specimens. MB28-004425, ZKW, 13 Jun. 2010, 50m, 6mm; MB28-004571, ZGWS, 13 Jun. 2012, 22m, 8mm.

Habitats. Subtropical rocky reefs and on a wreck.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. New Caledonia (Thévenet 2010), Madagascar (Gosliner 1994), South Africa (Gosliner 1987; Gosliner 1994) and Mozambique.

Remarks. *Goniobranchus pruna* was described based on two immature specimens of 4 and 6mm from South Africa (Gosliner 1994). Despite the immaturity of the specimens, Gosliner (1994) considered his description valid because no other "*Chromodoris"* had orange rhinophores and gills ornamented with white dots. Later, Valdés *et al*. (1999) described a similar species, *Chromodoris mandapamensis*. The external differences between these two species, mainly concern to the colour of the rhinophores and gills, the number of spots on the dorsum and the number of rhinophoral lamellae, which may vary ontogenically. Internally, it is not possible to compare the reproductive systems based on original descriptions as data are absent and there are no clear differences in the morphology of the radula or jaw rodlets of these two species (see Gosliner 1994 and Valdés *et al*. 1999). Thus, it is possible that *C. mandapanensis* is a junior synonym of *G. pruna*, however, molecular analyses using material from the type localities are needed to clarify this hypothesis, and whether this species belongs to the genus *Chromodoris* or *Goniobranchus*.

***Goniobranchus tennentanus* (Kelaart, 1859)**
(Figure 7 D)

Material examined. Six specimens. MB28-004664, ZWH, 08 Mar. 2013, 16m, 15mm; MB28-004809, PAE, 03 Apr. 2014, 21m, 24mm; MB28-004848, POD, 10 May 2014, 14m, 22mm; MB28-004855, 11 May 2014, POD, 14m, 24mm; MB28-004903, 11 Jun. 2014, MIF, 3m, 6mm. MHN-YT1407, ZWH, 15 Aug. 2014, 15m, 22mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Paindane and Mozambique Island.

Geographic distribution. Indian Ocean. Sri Lanka (Kelaart 1859), British Indian Ocean Territory (Yonow *et al*. 2002), Tanzania (Rudman 1987), Seychelles, Madagascar (Yonow 2012) and Mozambique.

Remarks. *Goniobranchus cavae* was synonymised with *G. tennentanus* by Rudman (1987). Later, Yonow (2012) reassessed both and considered them to be two different species. The colour patterns of the Mozambique specimens are the same as those found in Tanzania (Rudman 1987), Seychelles and Madagascar (Yonow 2012). However, it differs from the specimen illustrated by Gosliner *et al*. (2008, 2015) due the presence of submarginal yellow spots on the mantle. This species shows variation in spots on the dorsum, which can either be solid circles or rings.

***Goniobranchus* cf. *tinctorius* (Rüppell & Leuckart, 1830)**
(Figures 7 E–F)

Material examined. Four specimens. MB28-004870, VAR, 23 May 2014, 3m, 62mm, collected at night; MB28-004872, VAR, 23 May 2014, 3m, 84mm, collected at night; ZMBN94194, 2 spcs., VAR, 28 Jan. 2014, 4m, 50mm and 70mm.

Habitats. Artificial reef on seagrass bank in the transitional zone between the tropics and subtropics.

Occurences. Vilanculos.

Geographic distribution. Indian Ocean. Oman (Gosliner *et al*. 2008), India (Remakrishna *et al.* 2010), Red Sea, South Africa (Gosliner 1987) and Mozambique.

Remarks. There was a slight colour variation between the specimens mainly on the submarginal region of the mantle. The specimen MB28-004870 has a submarginal band formed by pinkish oval markings with white spots (Fig. 7 E); whereas, in specimen MB28-004872 the submarginal band lacks oval markings (Fig. 7 F). Both specimens were found together, therefore the difference is likely to be simply intraspecific variation. This species matches most of the original description of *Goniobranchus tinctorius* (Rüppel & Leuckart 1828), except by the dorsal part of the foot; which in the specimens from Mozambique is white with a purple-white edge, but in original description shows irregular colour with red spots. Our specimens, as with many of the red reticulate *Goniobranchus,* belong to a potential *Goniobranchus tinctorius* complex, which is in need of further studies (Gosliner *et al*. 2008, 2015).

***Goniobranchus verrieri* (Crosse, 1875)**
(Figures 7 G, 8 A–D)

Material examined. Two specimens. MB28-004596, ZJS, 23 Jun. 2012, 8m, 8mm; MB28-004657, ZWH, 17 Mar. 2013, 19m, 15mm.

Habitats. Subtropical rocky reefs.

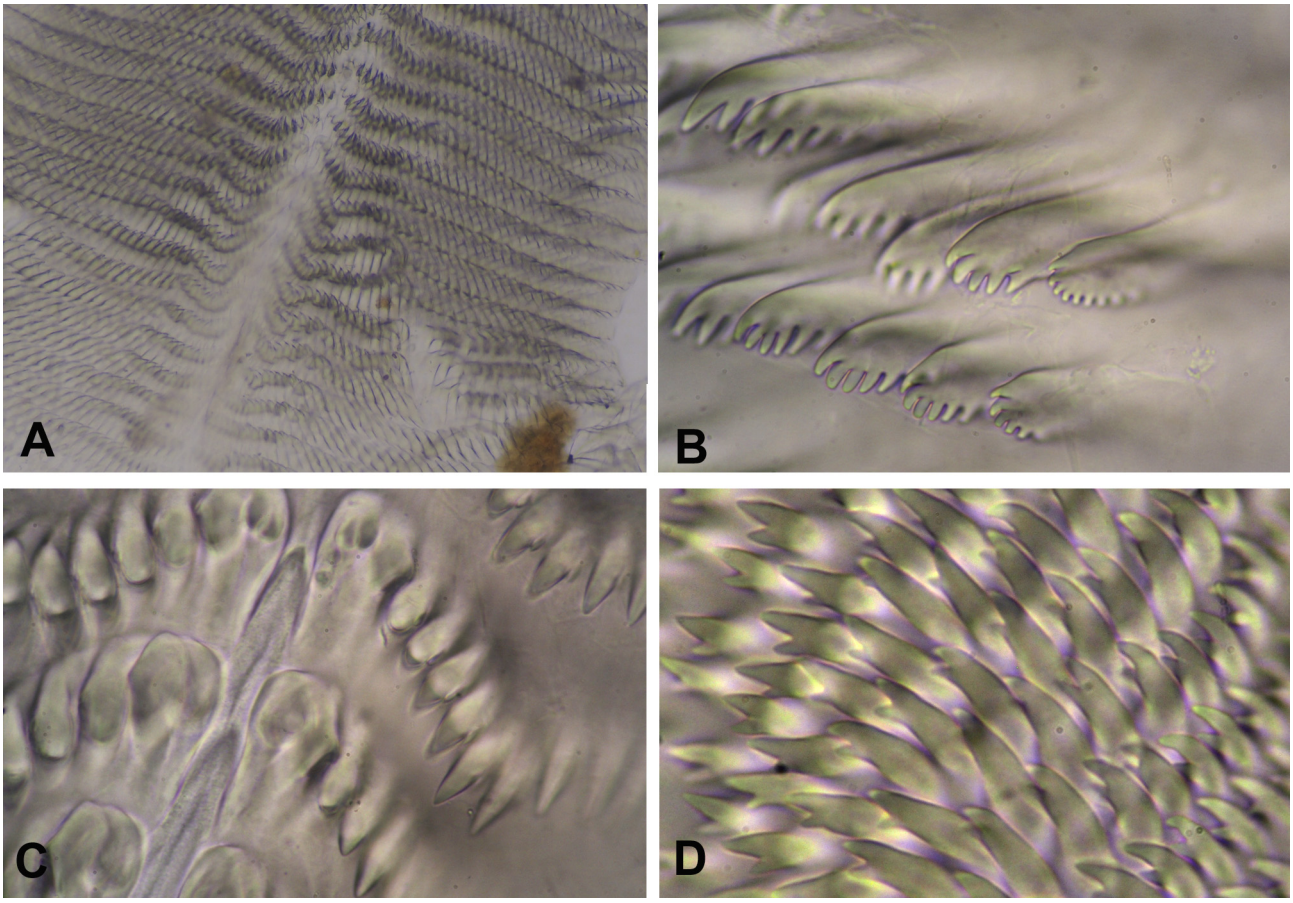

FIGURE 8. *Goniobranchus verrieri* (MB28-004657), radula from optical microscope. A, central region (magnification 40X). B, outermost teeth of anterior region (magnification 100X). C, innermost teeth of central region (magnification 100X). D, bifid jaw rodlets (magnification 100X).

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Philippines, Papua New Guinea, Indonesia (Gosliner *et al*. 2008), Marshal Islands, New Caledonia, Tanzania (Rudman 1985), South Africa, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species is externally similar to *Verconia subnivalis* Baba, 1987 from Japan. Thus, the confirmation of its identity was done through examination of the radula in optical microscope. The radula formula of the specimen MB28-004657 was 40X34.0.34 (+2). The radula matches the description of *Goniobranchus verrieri* provided by Rudman (1985) and it clearly differs from *Verconia subnivalis* by a distinctive central tickeness, which is absent in *V. subnivalis* (Baba 1987a).

Genus *Hypselodoris* Stimpson, 1855

***Hypselodoris bullockii* (Collingwood, 1881)**
(Figures 7 H, 9 A–D)

Material examined. Six specimens. MB28-004828, 5 spcs., POA, 08 May 2014, 40m, 34mm; MHN-YT1671, NSS, 16 Feb. 2017, 25m, 49mm.

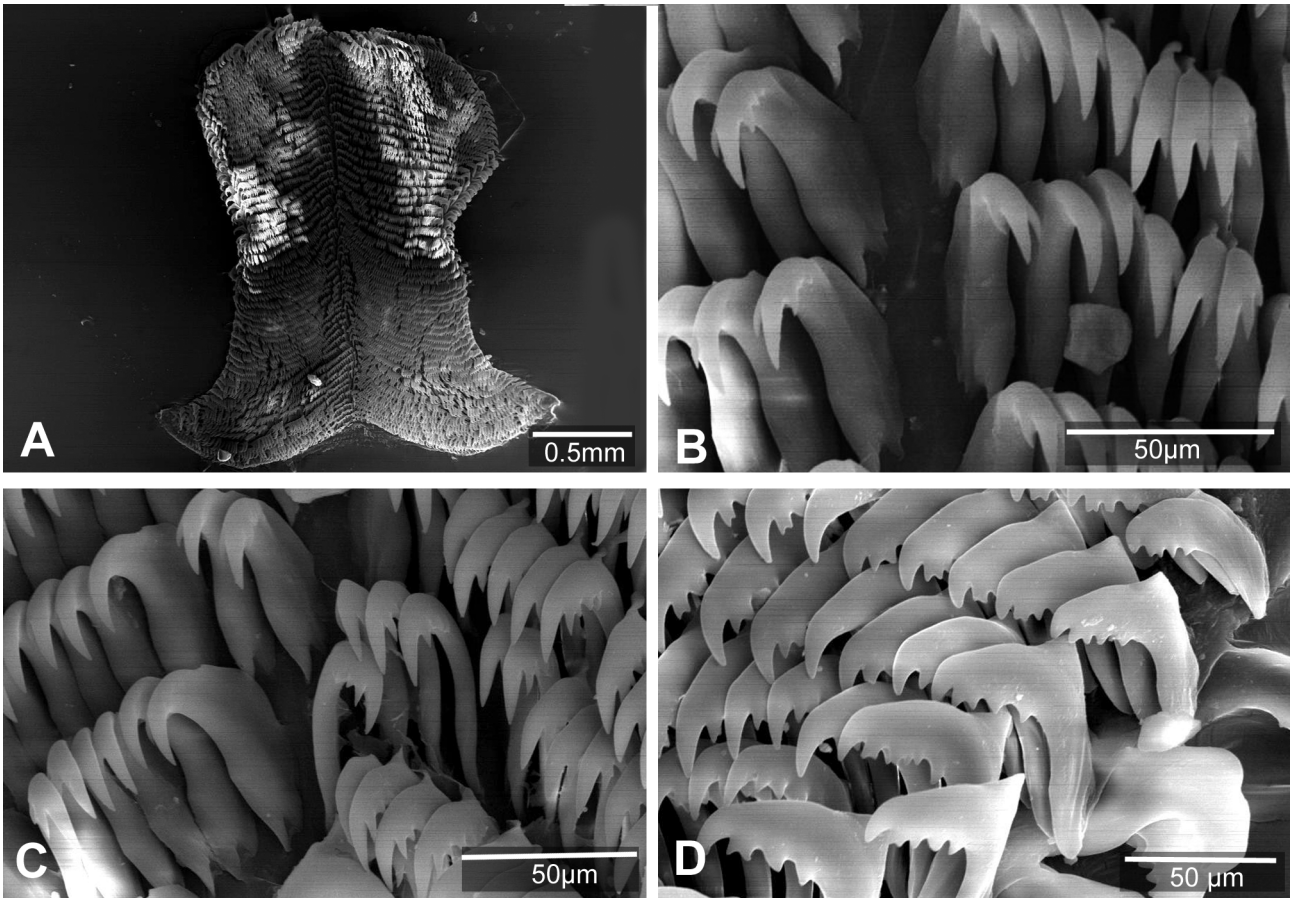

FIGURE 9. *Hypselodoris bullockii* (MB28-004828), SEMs of radula. A, general view of the radula. B, innermost teeth of anterior region. C, innermost teeth of posterior region showing inner part of the tooth. D, outermost teeth.

Habitats. Subtropical tidal reefs and tropical coral reefs.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west, central Pacific. Marshall Islands, Japan, New Caledonia (Gosliner *et al*. 2008), Australia (Debelius 1996; Gosliner *et al*. 2008), Taiwan, Indonesia, the Philippines (Gosliner *et al*. 2008), Thailand (Mehrotra & Scott 2015), Christmas Island, Indonesia, Maldives (Debelius 1996) and Mozambique (King & Fraser 2014).

Remarks. Published details of the morphology of *H. bullockii* are relatively poor and in need of further study (Gosliner & Johnson 1999). Gosliner *et al*. (2015) consider *H. bullockii* to be restricted to the Pacific Ocean and note that records from the Indian Ocean refer to *Thorunna punicea* (Rudman, 1995). Thus, to confirm the generic

placement of our material, we examined the radula of one specimen (MB28-004828, Fig. 9). Despite some external similarities between *Thorunna* and *Hypselodoris,* the radular teeth of these two genera are distinctive (Rudman 1990). The radula formula of the examined specimen was 57x47.0.47 (Fig. 9 A). Central teeth are absent (Fig. 9 B), the innermost teeth bear two to three pointed denticles of different size on the inner and four on the outer sides (Fig. 9 C). The median lateral teeth bear 3-5 denticles including one that is bicuspid (Fig. 9 D). This confirms that this species belongs to the genus *Hypselodoris*. Nevertheless, additional studies are needed to verify the intraspecific variability of this species.

***Hypselodoris carnea* (Bergh, 1889)**
(Figures 7 I–J)

Material examined. Twelve specimens. MB28-004477, ZWH, 08 Feb. 2012, 18m, 25mm, collected by S. Bruck; MB28-004478, ZWH, 08 Feb. 2012, 16m, 26mm, collected by S. Bruck; MB28-004487, ZGWN, 23 Feb. 2012, 25m, 22mm, collected by S. Bruck; MB28-004516, ZDD, 23 Feb. 2012, 1m, 31mm; MHN-YT358, ZSC, 14 May 2012, 22, 10mm; MB28-004570, ZSC, 08 Jun. 2012, 22m, 15mm; ZMBN117029, ZWH, 13 Jun. 2012, 17m, 8mm; MHN-YT471, ZWH, 17 Jun. 2012, 18m, 32mm; ZMBN117032, ZAR, 22 Aug. 2012, 30m, 32mm, collected by J. Bergman; ZMBN117039, ZJS, 13 Jun. 2013, 8m, 10mm; MB28-004688, ZM, 13 Jun. 2013, 8m, 16mm; MB28-004865, POB, 12 May 2014, 15m, 23mm.

Habitats. Subtropical tidal reef and rocky reef.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indian Ocean. Arabian Sea (Debelius 1996), Yemen, Oman, Réunion Island (Gosliner *et al*. 2008), Mauritius, South Africa (Gosliner 1987) and Mozambique.

Remarks. This species shows a gradual variation in colour from light-creamy with several red spots to dark-brown with fewer spots (Figs. 7 I–J). *H. carnea* is externally similar to *H. capensis* (Barnard 1927), but *H. capensis* seems to be restricted to the temperate waters of South Africa (Gosliner & Johnson 1999).

***Hypselodoris emma* Rudman, 1977**
(Figure 7 K)

Material examined. Three specimens. MB28-004548, ZRP, 20 May 2012, 1m, 30mm; MHN-YT747, ZWH, 08 Mar. 2013, 16m, 28mm; MB28-004989, ZRP, 05 May 2015, 0.3m, 24mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Australia, Philippines (Gosliner *et al*. 2008), Indonesia, Maldives, Vietnam (Debelius 1996), India (Remakrishna *et al.* 2010), Comoros Islands, Madagascar (Gosliner *et al*. 2008), Kenya Tanzania (Rudman 1977) and Mozambique.

***Hypselodoris fucata* Gosliner & Johnson, 1999**
(Figures 7 L, 10 A)

Material examined. Five specimens. MB28-004602, ZAR, 12 Jul. 2016, 32m, 32mm; MB28-004684, ZMC, 13 Jun. 2014, 8m, 82mm; MB28-004791, ZKW, 06 Jan. 2014, 48m, 40mm; MB28-004792, ZKW, 06 Jan. 2014, 48m, 29mm; MHN-YT1221, 10 May 2014, POD, 18m, 21mm.

Habitats. Subtropical rocky reefs and wreck.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. Kenya (Gosliner *et al*. 2008), South Africa (Gosliner & Johnson 1999) and Mozambique.

Remarks. This species is closely related to *H. kaname* from the Pacific Ocean, differing externally by the presence of longitudinal white lines and internally by details of the radula and jaw rodlets (Johnson & Gosliner 1999). In one of the specimens collected by us the white lines running from the back of each rhinophore were

reduced (Fig. 10 A). This species was found mating with a second morphotype with obvious white lines (Fig. 7 L). Thus, caution is required when using such characteristics as a diagnostic feature.

Hypselodoris ghardaqana (Gohar & Aboul-Ela, 1957)

(Figure 10 B)

Material examined. One specimen. MB28-004944, 04 Nov. 2014, ZA51, 16m, 16mm, collected by J. Wright.

Habitats. Subtropical rocky reef.

Occorrence: Zavora.

Geographic distribution. Indo-west Pacific. Indonesia (Belle 2007), Thailand, Myanmar (Gosliner *et al*. 2008), India (Remakrishna *et al.* 2010), Oman (Gosliner *et al*. 2008), Red Sea (Gohar & Aboul-Ela 1957) and Mozambique.

Hypselodoris infucata (Rüppell & Leuckart, 1830)

(Figure 10 C–D)

Material examined. Eight specimens. MHN-YT89, 10 Dec. 2011, ZRP, 1m, 22mm; MB28-004462, 06 Feb. 2012, ZRP, 1m, 27mm; MB28-004470, 07 Feb. 2012, ZRP, 2m, 20mm; ZMBN117030, ZRP, 18 Jun. 2012, 1m, 20mm; ZMBN119698, ZRP, 05 May 2012, 0.3m, 14mm; MB28-004463, ZRP, 06 Feb. 2012, 2m, 19mm; MB28-004486, ZGWN, 19 Feb. 2012, 25m, 16mm; ZMBN117021, ZGWN, 18 Feb. 2012, 25m, 24mm; MB28-005084, ZRP, 07 Feb. 2012, 2m, 34mm.

Habitats. Subtropical tidal reefs, rocky reefs and topical coral reefs.

Occurrences. Ponto do Ouro, Zavora and Nuarro.

Geographic distribution. Indo-west, central Pacific. Introduced in the Mediterranean via Suez Canal (Gosliner *et al*. 2008). Hawaii (Gosliner & Johnson 1999; Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Japan, Papua New Guinea, Indonesia (Gosliner *et al*. 2008), Australia, Philippines, Oman (Debelius 1996), Thailand (Mehrotra & Scott 2015), India (Apte 2009), Red Sea, Madagascar (Gosliner *et al*. 2008), Tanzania (Edmunds 1971), South Africa (Gosliner 1987; Debelius 1996) and Mozambique.

Remarks. In all the specimens found in Mozambique the middle dorsum was yellowish/blue. Gosliner *et al*. 2008 considered a specimen with a dark blue dorsum as *H. infucata* (pg. 264), but in Gosliner *et al*. (2015) a similar specimen is cited as undescribed (pg. 258 as *Hypselodoris* sp. 7).

Hypselodoris kanga Rudman, 1977

(Figure 10 E)

Material examined. Five specimens. MHN-YT01, ZSC, 29 Jan. 2011, 18m, 23mm; MB28-004423, ZGWS, 04 Jun. 2011, 21mm; MB28-004536, ZSC, 14 May 2012, 22m, 30mm, collected by S. Bruck; MB28-004621, ZWH, 30 Aug. 2012, 18m, 12mm; MB28-004672, ZSC, 13 May 2013, 22m, 17mm.

Habitats. Subtropical rocky reefs.

Occourrences. Ponta do Ouro and Zavora.

Geographic distribution. Indian Ocean. Thailand, India, Pakistan (Gosliner *et al*. 2008), Oman (Debelius 1996), Tanzania (Rudman, 1977) and Mozambique.

Remarks. The specimens examined here were similar to the type material from Tanzania (Rudman 1977). The gill colouration matches the description provided by Rudman (1977). Gosliner *et al*. (2015) suggest that the distribution of this species is restricted to the Indian Ocean, nevertheless there are on-line records from species of similar appearance identified as *H. kanga* from the Pacific Ocean (e.g. Kodiat 2005 and Zylberman 2007), which is externally more similar to *Hypselodoris* sp. 7 in Gosliner *et al*. 2015. Thus, further studies are needed to better understand the geographic distribution of this species and identity of the Pacific morphotype.

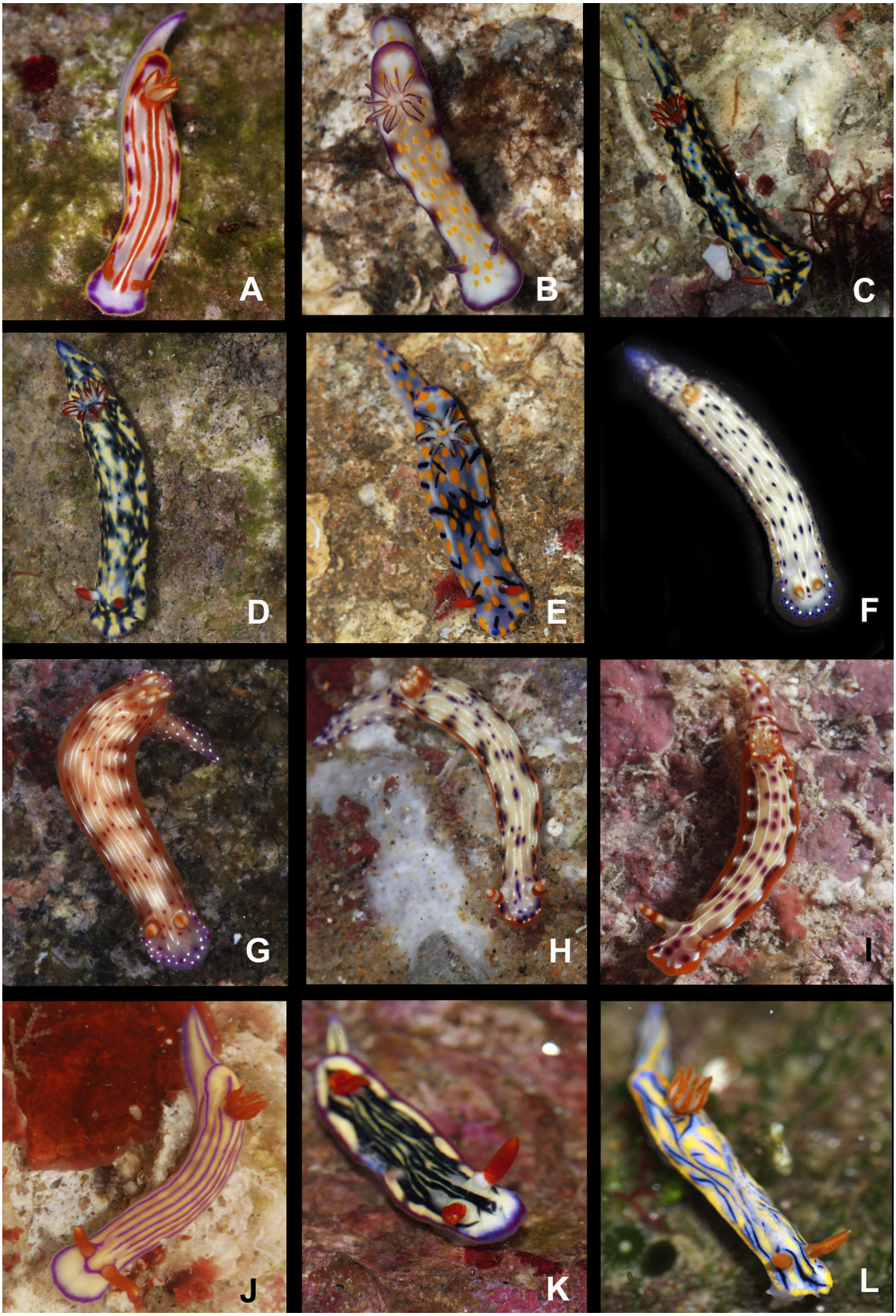

FIGURE 10. A, *Hypselodoris fucata* (MB28-004792). B, *Hypselodoris ghardaqana* (MB28-004944). C–D, *Hypselodoris infucata* (MB28-004470 and MB28-005084). E, *Hypselodoris kanga* (MB28-004536). F–I, *Hypselodoris maculosa* (MB28-004714, MB28-005022, MHN-YT1054 and MB28-004902, respectively). J, *Hypselodoris maridadilus* (MB28-004860). K, *Hypselodoris nigrolineata* (MB28-005007). L, *Hypselodoris nigrostriata* (MB28-005085).

***Hypselodoris maculosa* (Pease, 1871)**
(Figure 10 F–I)

Material examined. Twenty specimens. MB28-004433, ZRP, 26 May 2010, 2m, 21mm; MB28-004567, ZRP, 07 Jun. 2012, 2m, 21mm; MB28-004714, ZT, 43m, 16mm; MB28-005022, ZRP, 04 Aug. 2015, 1m, 9mm; MB28-004419, ZA51, 26 May 2010, 10m, 22mm; MB28-004670, ZWH, 10 May 2013, ZWH, 16m, 11mm; MB28-004671, ZWH, 13 May 2013, 16m, 13mm; CASIZ 223316, POD, 11 May 2014, 17mm, 16m; MHN-YT1254, 12 May 2014, POB, 16m, 7mm; CASIZ 223317, NKA, 09 Jun. 2014, 12m, 26mm; MB28-004897, 3spcs., NKA, 09 Jun. 2014, 12m, 12–24mm; MB28-004902, NKA, 20 Jun 2014, 20m, 28mm; MB28-004733, ZRP, 08 Sept. 2013, 0.5m, 28mm; MB28-004786, ZRP, 18 Dec. 2013, 0.5m, 19mm; MHN-YT1054, ZRP, 18 Dec. 2013, 0.5m, 22mm; MB28-004790, ZRP, 05 Jan. 2014, 0.3m, 23mm; MB28-004842, POB, 09 May 2014, 8mm, 18m; MB28-004914, NK, 15 Jun. 2014, 12m, 14mm; MB28-004953, ZA51, 04 Apr. 2015, 10m, 24mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Nacala, Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. French Polynesia (Pease 1871), Guam (Carlson & Hoff 2003), Japan, Palau, Marshall Islands, New Zealand (Gosliner *et al*. 2008), Australia (Nimbs & Smith 2016), Philippines (Debelius 1996), Thailand (Mehrotra & Scott 2015), India (Apte 2009; Bhave & Apte 2013), British Indian Ocean Territory (Yonow *et al.* 2002), Red Sea, Tanzania, South Africa (Debelius 1996), Mauritius (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

Remarks. We found three-colour morphs in Mozambique. Morphotype 1 (Fig. 10 F–G) had a distinctive purple-blue margin on the head and posterior end of the mantle with several white and dark bluish spots. The background colour varied from light-cream (Fig. 10 F) to almost orange (Fig. 10 G). Morphotype 2 (Fig. 10 H) had an orange margin around the whole mantle edge, as well as white and purple spots. Morphotype 3 (Fig. 10 I) lacked purple spots on the anterior mantle margin. The orange outer band is wider than morphotype 2. The evenly-spaced purple dots on the dorsum are larger than the other morphotypes. It is not clear if these morphotypes are mere colour variations or form part of a species complex. Gosliner *et al*. (2015) suggest that the morphotype 3 is a separate species.

***Hypselodoris maridadilus* Rudman, 1977**
(Figure 10 J)

Material examined. Seven specimens. MB28-004457, ZWH, 05 Feb 2012, 19m, 42mm; MHN-YT141, ZWH, 05 Feb 2012, 17m, 36mm; MB28-004533, ZSC, 14 May 2012, 21m, 49mm; MB28-004578, ZRP, 18 Jun 2012, 1m, 18mm; MB28-004647, ZA51, 09 Dec 2012, 14mm, 12m; MB28-004860, 2 specs., POB, 12 May 2014, 15m, 13 and 14mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Midway Atoll (Gosliner *et al*. 2008), Japan (Gosliner 1987), India (Apte 2009), Red Sea (Gosliner *et al*. 2008), Tanzania (Rudman 1977), South Africa (Gosliner 1987; Gosliner *et al*. 2008) and Mozambique.

***Hypselodoris nigrolineata* (Eliot, 1904)**
(Figure 10 K)

Material examined. Three specimens. MB28-004530, ZGWS, 27 Apr. 2012, 20m, 9mm; MB28-004665, ZWH, 08 Mar. 2013, 15m, 22mm; MB28-005007, ZA51, 12 Jun. 2015, 11m, 18mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. Kenya, Tanzania (Rudman 1977), Réunion Island, South Africa (Gosliner *et al*. 2008) and Mozambique.

***Hypselodoris nigrostriata* (Eliot, 1904)**
(Figure 10 L)

Material examined. Eight specimens. MB28-004841, POB, 09 May 2014, 18m, 14mm, collected by J. Stromvoll; MHN-YT1559, ZA51, 12 Jun. 2015, 11m, 9mm; ZMBN117017, ZRP, 20 Apr. 2011, 1m, 20mm; ZMBN117028, ZWH, 09 Jun. 2012, 17m, 32mm, collected by A. Roseblum; ZMBN117059, POA, 07 May 2014, 15m, 14mm; MB28-004939, ZA51, 27 Oct. 2014, 13m, 22mm; MB28-004959, ZJS, 28 Jan. 2015, 12m, 16mm. MB28-005085, ZRP, 26 Sep. 2015, 0.5m, 25mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indian Ocean. India (Ramakrishna *et al.* 2010), British Indian Ocean Territory (Debelius 1996; Yonow *et al*. 2002), Gulf of Oman (Fatemi & Attaran-Fariman 2015), Red Sea (Gosliner *et al*. 2008), Tanzania (Rudman 1977) and Mozambique.

Remarks. Gosliner *et al*. (2015) suggest an Indian Ocean distribution, however there are photographic records of specimens of similar appearance from Taiwan (Huang *et al*. 2015) and other locations in the Pacific (e.g. Rudman 2009a). Because *H. nigrostriata* is externally very similar to *H. zephyra* Gosliner & R. Jonson, 1999, the correct distribution of this species can only be confirmed with additional examination of specimens from the Pacific.

***Hypselodoris pulchella* (Rüppell & Leuckart, 1828)**
(Figure 11 A)

Material examined. Seven specimens. MB28-004553, ZGWS, 27 May 2012, 21m, 60mm; MB28-004658, ZD, 16 Mar. 2013, 31m, 50mm; MB28-004659, ZD, 26 Mar. 2013, 31m, 48mm; MHN-YT826, ZGWS, 26 Jul. 2013, 18m, 63mm; MB28-004702, ZY, 03 Aug. 2013, 33m, 48mm; MB28-004704, ZGWS, 03 Aug. 2013; MB28-004736, ZGWS, 13 Sep. 2013, 21m, 42mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora and Nuarro.

Geographic distribution. Indo-west Pacific. Indonesia, Malaysia, Myanmar, Thailand, Oman (Gosliner *et al*. 2008), India (Prasade *et al.* 2012), Red Sea, Madagascar, Seychelles, Tanzania (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

***Hypselodoris regina* Marcus & Marcus, 1970**
(Figure 11 B)

Material examined. Fourteen specimens. MHN-YT114, ZWH, 02 Feb. 2012, 18m, 37mm; MB28-004447, ZGWS, 02 Feb. 2012, 20m, 42mm; UL-YT118, ZWH, 02 Feb. 2012, 23mm, 16m; MB28-004449, ZGWS, 02 Feb. 2012, 22m, 18mm; MB28-004454, ZWH, 05 Feb. 2012, 20m, 31mm, collected by L. Robisson; MB28-004455, ZWH, 05 Feb. 2012, 18m, 41mm, collected by L. Robisson; MB28-004456, ZWH, 05 Feb. 2012, 18m, 38mm, collected by P. Velho; MB28-004544, ZSC, 14 May 2012, 22m, 10mm; ZMBN117025, ZA51, 27 May 2012, 13m, 32mm; ZMBN117037, ZSC, 13 May 2013, 22m, 30mm; ZMBN117064, POD, 11 May, 2014, 15m, 27mm; MB28-004859, POA, 10 May 2014, 42m, 32mm; MB28-004910, NKA, 13 Jun. 2014, 20m, 37mm; MB28-004950, ZLC, 27 Dec. 2014, 15m, 33mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora and Nacala.

Geographic distribution. Western Indian Ocean. Tanzania (Rudman 1977), Madagascar (Marcus & Marcus 1970), South Africa (Gosliner *et al*. 2008) and Mozambique (Gosliner *et al*. 2008).

Remarks. This species presents some colour variation, predominantly the thickness of the orange bands and the shape of the black lines.

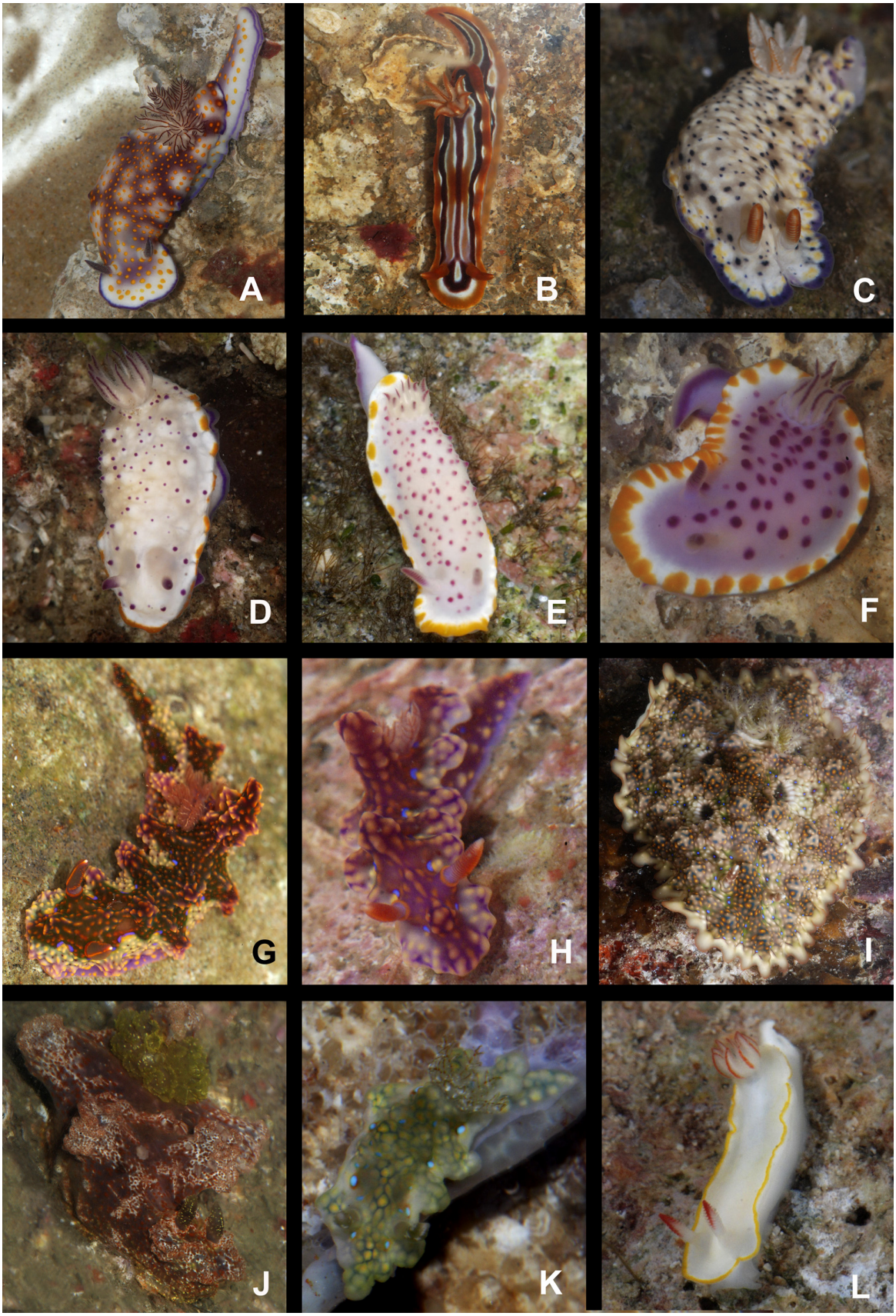

FIGURE 11. A, *Hypselodoris pulchella* (MB28-004553). B, *Hypselodoris regina* (ZMBN117025). C, *Hypselodoris rudmani* (MB28-004471). D, *Mexichromis* cf. *katalexis* (MHN-YT672). E–F, *Mexichromis* sp. (MB28-004587 and MB28-004850, respectively). G–H. *Miamira magnifica* (MB28-004948 and MB28-004986, respectively). I, *Miamira miamirana* (MB28-004907). J, *Miamira moloch* (MB28-004921). K, *Miamira sinuata* (MB28-005102). L, *Thorunna africana* (MB28-004889).

***Hypselodoris rudmani* Gosliner & Johnson, 1999**
(Figure 11 C)

Material examined. Nine specimens. MHN-YT152, ZRP, 06 Feb. 2012, 1m, 24mm, collected by L. Robisson; MB28-004471, ZRP, 07 Feb. 2012, 2m, 25mm; MB28-004501, ZRP, 21 Feb. 2012, 1m, 20mm, collected by S. Bruck; MB28-004502, ZRP, 21 Feb. 2012, 1m, 16mm, collected by S. Bruck; MB28-004521, ZRP, 09 Mar. 2012, 2m, 13mm; MB28-004543, ZSC, 14 May 2012, 22m, 12mm; MB28-004637, ZRP, 1m, 20mm; MB28-004926, ZRP, 26 Sep. 2015, 0.5m, 13mm; MB28-004954, ZRP, 7 Jan. 2015, 0.5m, 19mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Oman, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner & Johnson 1999) and Mozambique.

Genus M*exichromis* Bertsch, 1977

***Mexichromis* cf. *katalexis* Yonow, 2001**
(Figure 11 D)

Material examined. Three specimens. MB28-004640, ZD, 04 Dec. 2012, 31m, 26mm; MHN-YT672, ZD, 04 Dec. 2012, 31m, 21mm; MB28-004712, ZDRS, 12 Aug. 2013, 31m, 21mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Indonesia (Yonow 2001), Red Sea, Réunion Island (2008) and Mozambique.

Remarks. The identification of this species was based on the external similarity and geographic proximity with the species described by Yonow (2001). However, WoRMS lists *M. katalexis* as an unreviewed entry. It is not clear if *M. katalexis*is is a valid species, a junior synonym of *M. multituberculata* (Baba, 1953) (Rudman 2006; WoRMS 2010) or *M. mariei* (Crosse, 1872).

***Mexichromis* sp.**
(Figure 11 E–F, 12 A–D)

Material examined. Seven specimens. MB28-004587, ZDRS, 21 Jun. 2012, 30m, 18mm; MHN-YT1223 3spcs., POD, 11 May 2014, 15m, 11–14mm; MB28-004850, 3 spcs., POD, 11 May 2914, 15m, 11–22mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Rudman 1999a) and Mozambique.

Remarks. *Mexichromis* sp. is externally similar to *M. mariei* (Crosse, 1872). Based on external morphology, Rudman (1999a) was unsure if this species was *M. mariei* or a different species because of inconsistencies in colour pattern between *M. mariei* from the Pacific and *M*. cf. *mariei* from the western Indian Ocean. Therefore, we examined the radula of one specimen and confirmed Rudman's (1999a) belief that this species is different from *M. mariei*. While the radula formula for *M. mariei* is 55x27.0.27 (+3) (Rudman 1983), in the specimen examined it is 22x15.0.15 (+3) (Fig. 12 A). Moreover, the very long lateral teeth clearly distinguish these species. The cusp of the lateral tooth is round and the number of denticles varies from two to four (Fig. 12 B). The innermost tooth has a wider base and four denticles on the outer side; these denticles gradually reduce in size from the cusp to the base (Fig. 12 C–D). In the inner side of the innermost teeth there are one or two denticles (Fig. 12 C).

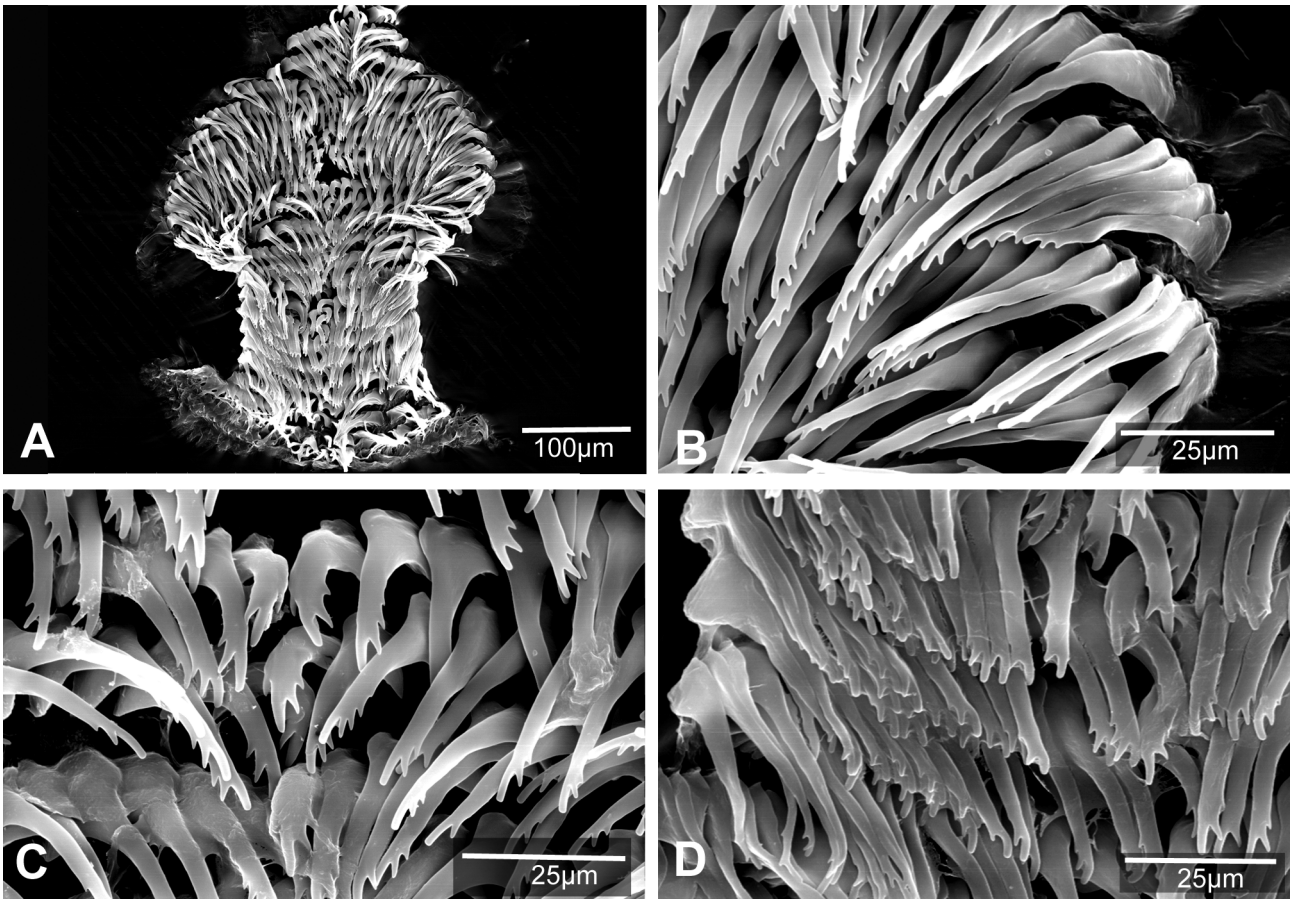

FIGURE 12. Radula *Mexichromis* sp. (MB28-004850), SEMs of radula. A, General view of the radula. B, Left outermost teeth from the anterior part. C, Innermost teeth. D, Central right lateral and outermost teeth.

Genus *Miamira* Bergh, 1874

***Miamira magnifica* Eliot, 1904**
(Figure 11 G–H)

Material examined. Three specimens. MB28-004662, ZWH, 08 Mar. 2013, 17m, 38mm. MB28-004948, ZWH, 14 Dec. 2014, 16m, 72mm, collected by J. Wright; MB28-004986, ZSC, 25 Apr. 2015, 21m, 16mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan (Baba 1949), Papua New Guinea (Gosliner *et al*. 2008), Australia (Nimbs & Smith 2016), Red Sea (Debelius 1996), South Africa (Gosliner *et al*. 2008) and Mozambique.

***Miamira miamirana* (Bergh, 1875)**
(Fig. 11 I)

Material examined. One specimen. MB28-004907, NKA, 12 Jun. 2014, 11m, 70mm.

Habitats. Tropical coral reef.

Occurrences. Nacala.

Geographic distribution. Indo-west Pacific. Guam (Carlson & Hoff 2003), Japan, Papua New Guinea, Philippines (Valdés & Gosliner 1999), Maldives (Debelius & Kuiter 2007), Red Sea (Yonow 2008), Réunion Island, Tanzania (Yonow 2012) and Mozambique.

***Miamira moloch* (Rudman, 1988)**
(Figure 11 J)

Material examined. One specimen. MB28-004921, ZGWS, 05 Jul. 2014, 11m, 70mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Solomon Islands (Gosliner *et al*. 2008), Australia (Rudman 1988), Indonesia (Gosliner *et al*. 2008), Myanmar (Tibboel 2006), Kenya (Faveri 2009a) and Mozambique.

***Miamira sinuata* (van Hasselt, 1824)**
(Figure 11 K)

Material examined. One specimen. MB28-005102, NFA, 29 May 2016, 10m, 10mm.

Habitats. Tropical coral reef.

Occurrences. Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii, Marshall Islands, Japan, Papua New Guinea (Gosliner *et al*. 2008) Solomon Islands, Australia (Nimbs & Smith 2017), Maldives (Debelius 1996), Red Sea, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Genus *Thorunna* Bergh 1878

***Thorunna africana* Rudman, 1984**
(Figure 11 L)

Material examined. Six specimens. MB28-004772, VIS, 12 Nov. 2013, 5m, 11mm, under rubble coral; MB28-004880, 2 spcs., NHR, 30 May 2014, 9m, 12 and 14mm; MB28-004889, NHR, 05 Jun 2016, 7m, 14mm; MHN-YT1647, NHR, 31 Jul. 2016, 15m, 17mm. ZMBN105164, VIS, 22 May 2015, 3m, 16mm, collected by M. Malaquias and Y. Tibiriçá.

Habitats. Tropical coral reefs, sometimes under coral rubble.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indian Ocean. India (Bhave 2010), Red Sea, Tanzania (Rudman 1984) and Mozambique.

***Thorunna australis* (Risbec, 1928)**
(Figure 13 A)

Material examined. One specimen. MB28-004823, POR, 07 May 2014, 15m, 13mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west Pacific. Marshall Islands, Japan (Gosliner *et al*. 2008), New Caledonia (Risbec 1928), Papua New Guinea, Indonesia, Christmas Island, South Africa (Gosliner *et al*. 2008), Mayotte (Deuss 2010) and Mozambique.

***Thorunna horologia* Rudman, 1984**
(Figure 13 B)

Material examined. Six specimens. MB28-004609, ZRP, 17 Aug. 2012, 1m, 9mm (no photo); MB28-004686, ZM, 16 Jun 2013, 8m, 12mm; MB28-004982, ZRP, 24 Apr. 2015, 1m, 7mm; MB28-005006, ZA51, 12 Jun. 2015, 11m, 8mm; MHN-YT1569, ZA51, 12 Jun. 2015, 11m, 8mm; ZMBN119700, ZRP, 04 Aug. 2015, 1m, 14mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. India (Sreeraj 2011), Réunion Island, Madagascar (Gosliner *et al*. 2008), Tanzania (Rudman 1984), South Africa (Gosliner 1987) and Mozambique.

Remarks. Photographic records of specimens of a similar appeareance exist for India (Sreeraj 2011) and Thailand (Chatcharkorn 2011) suggesting a broader distribution. Nevertheless, Gosliner *et al*. (2015) consider *T. horologia* to be restricted to the western Indian Ocean and illustrate a similar species considered undescribed for the western Pacific Ocean (*Thoruna* sp. 1, left bottom picture, pg. 249). Thus, the correct distribution of this species can only be confirmed after examination of similar specimens from the Pacific Ocean.

Thorunna punicea (Rudman, 1995)

(Figure 13 C)

Material examined. One specimen. MB28-004404, ZA51, 11 Mar. 2011, 10m, 22mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. New Caledonia (Rudman 1995), Papua New Guinea, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Genus *Verconia* Pruvot-Fol, 1931

Verconia norba (Marcus &Marcus, 1970)

(Figure 13 D)

Material examined. Four specimens. MHN-YT548, ZRP, 17 Aug. 2012, 1m, 16mm, collected by A. Pouris (no photo); MB28-004715, ZT, 11 Aug. 2013, 43m, 16mm; MB28-004811, PAE, 04 Apr. 2014, 43m, 16mm; ZMBN105694, PPSA, 28 May 2015, 16m, 14mm collected by M. Malaquias & Y. Tibiriçá.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora, Paindane and Pemba.

Geographic distribution. Indo-west Pacific. Marshall Islands (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Japan, Solomon Islands, Papua New Guinea, Australia (Nimbs & Smith 2017), Philippines, Réunion Island, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Verconia simplex (Pease, 1871)

(Figure 13 E)

Material examined. Two specimens. MB28-004927, ZRP, 19 Aug. 2014, 1m, 3mm; MB28-005013, ZWH, 28 Jun. 2015, 14m, 8mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. French Polynesia (Pease 1871), Marshall Islands, Samoa, Papua New Guinea, Australia, Philippines, Christmas Island, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Verconia sp.

(Figures 13 F, 14 A–D)

Material examined. Seven specimens. MB28-004412, ZRP, 18 Jul. 2011, 1m, 7mm; MB28-004436, ZRP, 10 Dec. 2011, 2m, 6mm; MB28-004504, ZRP, 21 Feb. 2012, 1m, 4mm; MB28-004956, 07 Jan. 2015, 0.5m, 10mm; MHN-

YT1493, ZRP, 21 Mar. 2015, 0.5m, 12mm; MB28-005012, ZRP, 0.5m, 14mm; ZMBN119701, ZRP, 04 Aug. 2015, 1m, 12mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Madagascar (Gosliner *et al*. 2008) and Mozambique.

Remarks. The generic placement of this species was verified through internal examination. The radula is small and typical of the genus: with no central tooth, very long outer and triangular innermost teeth (Rudman 1984). The radula formula of a 14mm specimen (MB28-005012) is 30x21.0.21 (Fig. 14 A). The lateral teeth have 2 to 6 denticles (Fig. 14 B), the innermost teeth 2 to 4 denticles on the outer side and one denticle on the inner side, which may be bifid (Fig. 14 C–D). This species appears to be undescribed (Gosliner *et al*. 2008, 2015).

Family Cadlinidae Bergh, 1893

Genus *Aldisa* Bergh, 1878

Aldisa cf. *pikokai* Bertsch & S. Johnson, 1982

(Figure 13 G)

Material examined. Two specimens. MB28-004928, ZRP, 19 Aug. 2015, 0.5m, 7mm. MHN-YT1554, ZRP, 25 May 2016, 0.5m, 12mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Marshall Islands (Gosliner *et al*. 2008), British Indian Ocean Territory (Yonow *et al*. 2002) and Mozambique.

Remarks. The specimens examined match the external morphological description of *A. pikokai* (Bertsch & Johnson 1982). Rudman (2005a) identified a species of *Aldisa* from South Africa as potentially *A. pikokai*, but mentioned that due to the geographic distance from the type locality (Hawaii) further anatomical studies and additional material from the Indo-Pacific were needed to be able to confirm such identification. Gosliner *et al*. (2008) refer to Rudman's specimen as *Aldisa* sp. (p. 160, lower photo). This specimen has a cream-yellow depression, while the specimen found in Mozambique has a red depression as originally described for *A. pikokai*. However, we agree with Rudman (2005a) that due to the geographic distance, additional investigations are needed to confirm this identification.

Aldisa fragaria Tibiriçá, Pola & Cervera, 2017

(Figure 13 H)

Material examined. Five specimens. MB28-004392, ZRP, 22 Apr. 2015, 1m, 37mm; MB28-004393, ZRP, 05 Jan. 2014, 0.3m, 34mm; MB28-004394, ZRP, 05 Nov. 2010, 1m, 25mm; MB28-004395, ZRP, 26 May 2013, 1m, 24mm; MB28-004396, ZRP, 26 May 2014, 1m, 33mm. MHN-YT84, ZRP, 2m, 36mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique (Gosliner *et al*. 2015; Tibiriçá, Pola & Cervera, 2017).

Remarks. This species was described based on material from Mozambique, see Tibiriçá *et al*. 2017 for remarks on geographic distribution and comparasion with *A. zavorensis* Tibriçá, Pola & Cervera, 2017.

Aldisa zavorensis Tibiriçá, Pola & Cervera, 2017

(Figure 13 I)

Material examined. Two specimens. MB28-004397, ZRP, 16 Apr. 2014, 1m, 19mm; MB28-004398, ZRP, 08 Feb. 2013, 1m, 22mm.

FIGURE 13. A, *Thorunna australis* (MB28-004823). B, *Thorunna horologia* (MB28-005006). C, *Thorunna punicea* (MB28-004404). D, *Verconia norba* (MB28-004715). E. *Verconia simplex* (MB28-005013). F, *Verconia* sp. (MB28-005012). G, *Aldisa* cf. *pikokai* (MHN-YT1554). H, *Aldisa fragaria* (MB28-004395). I, *Aldisa zavorensis* (MB28-004398). J–K, *Asteronotus cespitosus* (ZMBN105161), dorsal and ventral view. L, *Asteronotus* sp. (MB28-004911).

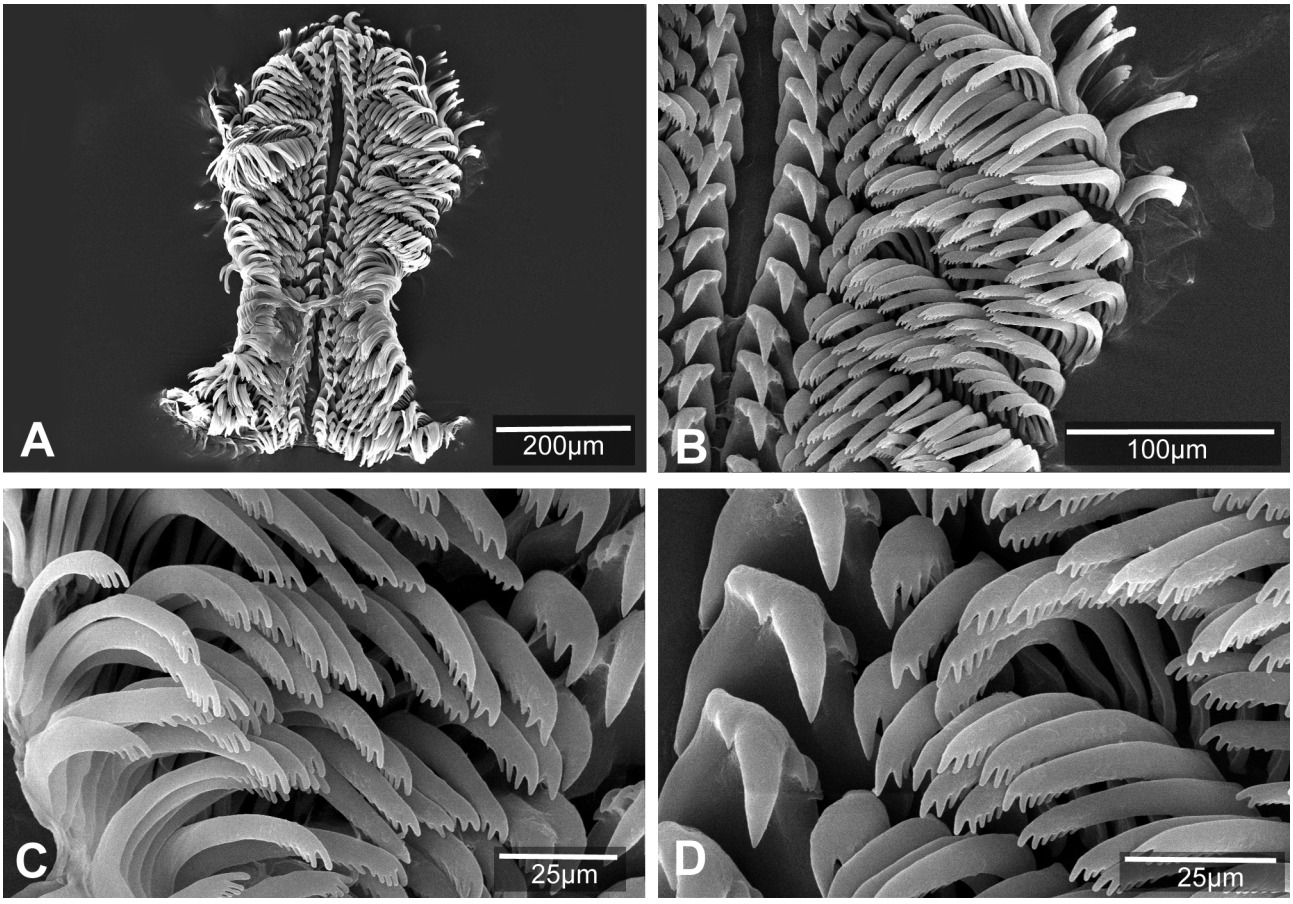

FIGURE 14. A–D Radula *Verconia* sp. (MB28-005012), SEMs of radula. A, General view of the radula. B, Anterior lateral view. C, Outermost teeth. D, Innermost and lateral teeth.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This species was described based on material from this project, see Tibiriçá *et al*. 2017 for remarks on geographic distribution.

Family Discodorididae Bergh, 1891

"Non caryophyllidia-bearing"

Genus *Asteronotus* Ehrenberg, 1831

***Asteronotus cespitosus* (van Hasselt, 1824)**
(Figure 13 J–K)

Material examined. Six specimens. MHN-YT992, 12 Aug. 2013, VISP, 2m, 29mm; ZMBN105161, VISP, 22 May 2015, 3m, 44mm; ZMBN105162, 2spcs., 22 May 2015, VISP, 3m, 22 and 32mm; ZMBN105163, 2 spcs., VISP, 22 May 2015, 3m, 14 and 16mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii (Kay & Young 1969),Guam (Carlson & Hoff 2003), Japan, Papua New Guinea, Australia (Gosliner *et al*. 2008), Indonesia (Gosliner *et al*. 2008; Yonow 2011),

Gulf of Oman (Fatemi & Attaran-Fariman 2015), Red Sea (Debelius 1996), Madagascar (Marcus & Marcus 1970), Tanzania, Seychelles, Mauritius (Gosliner *et al*. 2008) and Mozambique.

***Asteronotus* sp.**
(Figures 13 L, 15)

Material examined. Two specimens. MB28-004911, NKA, 13 Jun. 2014, 6m, 92mm; MB28-005043, NFA, 9m, 23 Aug. 2016, 9m, 150mm.

Habitats. Tropical coral reefs and areas with coral bommies and seagrass, often crawling on sand.

Occurrences. Nacala and Nuarro.

Geographic distribution. Western Indian Ocean. Tanzania (Alfred 2011 as *Dendrodoris* sp.), Seychelles (Debelius & Kuiter 2007 as *Dendrodoris tuberculosa* (Quoy & Gaimard, 1832) and Mozambique.

Remarks. Both specimens were found crawling on the sand. This species bears lateral teeth with an elevated base giving a convex appearance (Fig.15), which is typical of the genus (Dayrat 2010).

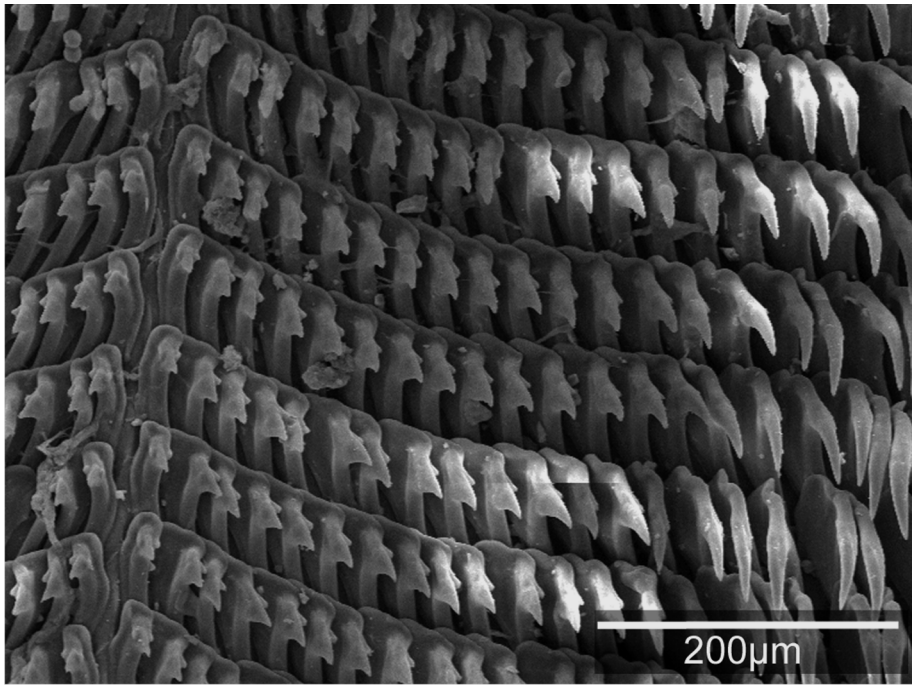

FIGURE 15. *Asteronotus* sp. (MB28-004911), SEM of radula, anterior lateral teeth.

Genus *Carminodoris* Bergh, 1889

***Carminodoris bifurcata* Baba, 1993**
(Figure 16 A)

Material examined. One specimen. MB28-004766, VISP, 12 Aug. 2013, 2m, 14mm.

Habitats. Tropical coral reefs.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008), Micronesia (Carlson & Hoff 2003), Japan (Baba 1993), Korea (Koh 2006), Indonesia, Philippines (Gosliner *et al*. 2008), Red Sea (Yonow 2008) and Mozambique.

Genus *Discodoris* Bergh, 1877

Discodoris coerulescens Bergh, 1888
(Figure 16 B–C)

Material examined. One specimen. ZMBN105166, VISP, 22 May 2015, 3m, 24mm.

Habitats. Tropical coral reef.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Philippines, Madagascar, Seychelles (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species is similar to *Tayuva lilacina* (Gould, 1852) but differs externally by a thin white line running along the margin of the notum and a withish ventral surface without spots (Dayrat 2010).

Genus *Halgerda* Bergh, 1880

Remarks. We are currently conducting molecular and anatomical analyses of *Halgerda* spp. from Mozambique, which will be published in a separate manuscript. The identifications here are based on preliminary results of this work.

Halgerda cf. *bacalusia* Fahey & Gosliner, 1999
(Figure 16 D)

Material examined. One specimen. MB28-004874, NGF, 29 May 2014, 26m, 34mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Thailand (Fahey & Gosliner 1999), Myanmar (Gosliner *et al*. 2008), Taiwan (Huang 2015), Madagascar (Bachel 2008), Mayotte (Boeye 2007) and Mozambique.

Remarks. This species belongs to the complex *H. carlsoni-diaphana-strinclandi-malesso-brycei* (Fahey & Gosliner 1999) and might represent a variation of *H. bacalusia*.

Halgerda dalanghita Fahey and Gosliner, 1999
(Figure 16 E)

Material examined. One specimen. MB28-004815, ZRP, 16 Apr. 2014, 0.5m, 17mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, Solomon Islands (Gosliner *et al*. 2008), Mariana Islands (Carlson & Hoff 2003), Guam (Carlson & Hoff 2003), Australia (Fahey & Gosliner 2001), Papua New Guinea, Philippines, South Africa (Fahey & Gosliner 1999) and Mozambique.

Halgerda toliara Fahey & Gosliner, 1999
(Figure 16 F)

Material examined. Two specimens. MB28-004783, VIPP, 13 Dec. 2013, 11m, 10mm; MB28-004800, ZRP, 03 Feb. 2014, 1m, 32mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Zavora and Vamizi Island.

Geographic distribution. Western Indian Ocean. Comoros Islands, South Africa (Gosliner *et al*. 2008), Madagascar (Fahey & Gosliner 1999) and Mozambique.

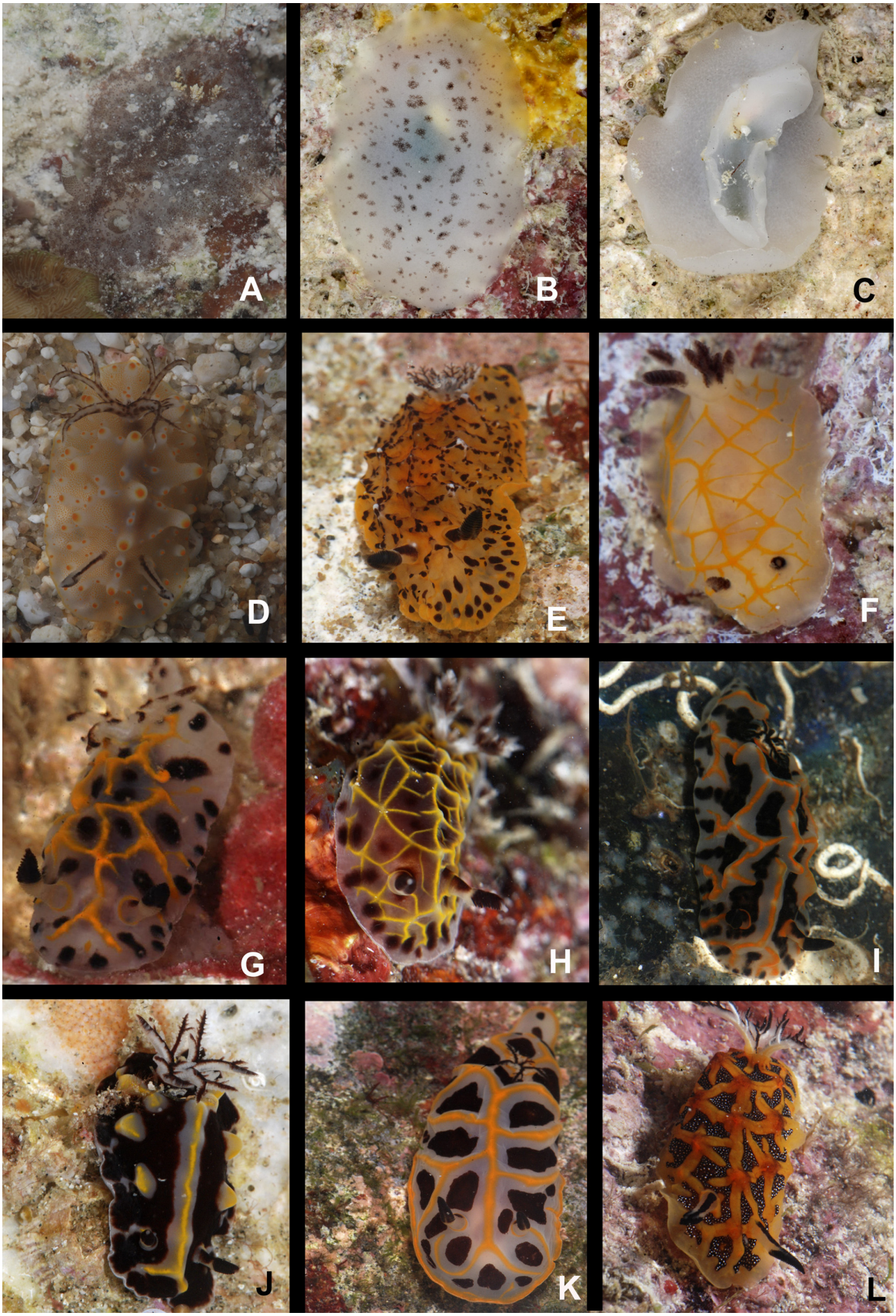

FIGURE 16. A, *Carminodoris bifurcata* (MB28-004766). B–C, *Discodoris coerulescens* (ZMBN105166), dorsal and ventral view. D, *Halgerda* cf. *bacalusia* (MB28-004874). E, *Halgerda dalanghita* (MB28-004815). F, *Halgera toliara* (MB28-004783). G–I, *Halgerda wasiniensis* (MB28-004440, MB28-004779 and MB28-004918, respectively). J. *Halgerda* cf. *wasinensis* (MB28-005077). K, *Halgerda* sp. 1 (MB28-004721). L, *Halgerda* sp. 2 (MB28-004901).

***Halgerda wasinensis* Eliot, 1904**
(Figure 16 G–I)

Material examined. Sixty-one specimens. MB28-004416, ZKW, 06 Jun. 2010, 50m, 16mm; MB28-004439, MB28-004440, MB28-004441, MB28-004442, MHN-YT105, MHN-YT106, ZGWS, 02 Feb. 2012, 17–22m, 14–42mm; UL-YT136, ZWH, 05 Feb. 2012, 18m, 41mm; MHN-YT146, MB28-004460, MB28-004461, ZWH, 05 Feb. 2012, 16–18m, 12–40mm; MB28-004566, ZRP, 07 Jun. 2012, 2m, 19mm; MB28-004655, ZDN, 08 Mar. 2013, 60m, 17mm; MB28-004678, ZRP, 25 May 2013, 0.5m, 48mm; MB28-004696, ZY, 18 Aug. 2013, 33m, 38mm; MB28-004701, ZWH, 2 Aug. 2013, 15m, 39mm; MB28-005075, ZAR, 02 Aug. 2013, 33m, 39m; MB28-004709, ZRP, 08 Aug. 2013, 0.5m, 24mm; MB28-004717, MB28-004720, ZT, 11 Aug. 2013, 33–45mm, 22 and 44mm; MB28-004749, PA, 12 Oct. 2013, 25m, 38mm; MB28-004751, ZRP, 19 Oct. 2013, 0.5m, 34mm; MB28-004770, VISP, 12 Aug. 2013, 4m, 11mm; MB28-004779, VPP, 13 Dec. 2013, 10m, 19mm; ZMBN117053, ZWH, 11 Jan. 2014, 18m, 30mm; ZMBN117053, ZMBN117055, BB, 23 Jan. 2014, 10m, 35 and 38mm, respectively; MB28-004795, 3spcs. BB, 23 Jan. 2014, 10m, 28–32mm; MB28-004797, MB28-004798, PAE, 01 Feb. 2014, 0.3m, 20–22mm; MB28-004805, 2 spcs., ZWH, 08 Mar. 2014, 16m, 36–38mm; MB28-004808, 28 Mar. 2014, ZWH, 16m, 25mm; MB28-004810, 4 Apr. 2014, PAE, 23m, 44mm; MB28-004826, POA, 07 May 2014, 15m, 24mm; MB28-004851, 2 spcs., POD, 11 May 2014, 15m, 42–43mm; MB28-004918, 3 spcs., PMP, 23 Jun. 2014, 20m, 20–28mm; MB28-004951, ZLC, 27 Dec. 2014, 15m, 30mm; MB28-004963, ZSC, 28 Jan. 2015, 21m, 35mm; MB28-004968, ZY, 24 Feb. 2015, 31m, 32mm; MB28-004972, ZAR, 08 Mar. 2015, 32m, 21mm; MB28-004973, ZRP, 21 Mar. 2015, 0.5m, 30mm; MHN-YT1501, ZDN, 25 Mar. 2015, 60m, 10mm, collected by J. Wright; MB28-005002, MHN-YT1551, VPP, 18 May 2015, 8–12m, 19–38mm; MB28-005008, ZA51, 12 Jun. 2015, 11m, 32mm; MB28-005023, NGF, 24 Feb. 2016, 32mm, 32m; ZMBN105600, PP, 28 May 2015, 12m, 14mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Pomene, Nuarro, Pemba and Vamizi Island.

Geographic distribution. Indian Ocean. Maldives (Yonow 1994), Christmas Island, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987), Kenya, Tanzania (Rudman 1978) and Mozambique.

Remarks. The base colour of this species varies from light, translucent-white to dark brown.

***Halgerda* cf. *wasinensis* Eliot, 1904**
(Figure 16 J)

Material examined. Nine specimens. MB28-005076, POA, 10 May 2014, 41m, 29mm; MB28-005077, POA, 08 May 2014, 41m, 19mm; MB28-005078, POA, 08 May 2014, 41m, 29mm. MB28-005079, POA, 08 May 2014, 41m, 18mm; MB28-005080, 5 spcs., POA, 10May 2014, 40m, 16–45mm.

Habitats. Subtropical rocky reefs bellow 40m.

Occurrences. Ponta do Ouro.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This morphotype differs from the other *H. wasiniensis* morphotypes by the presence of a midline on the dorsum rather than the typical network, as well as by large dark spots under the mantle. Moreover, they are found only bellow 38m and on a particular reef in the extreme south of Mozambique. No clear internal differences could be found between this morphotype and the other *H. wasinensis* and our prelimary molecular analyses do not clearly distinguish these morphotypes. Thus, until additional molecular analyses are completed we cannot know if this morphotype is a variation of *H. wasinensis* or a recently diverged species.

***Halgerda* sp. 1**
(Figure 16 K)

Material examined. Two specimens. MB28-004661, ZD, 26 Mar. 2013, 32m, 16mm. MB28-004721, ZT, 11 Aug. 2013, 42m, 42mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Coleman 2008) and Mozambique.

Remarks. This species is similar to *H. maricola* (Fahey & Gosliner 2001) from Western Australia; it differs externally by the presence of much larger spots between the ridges and linned as opposed to spotted gills. Debelius and Kuiter (2007, pg. 235) illustrate a photograph of a *Halgerda* from western Australia which is externally more similar to this species than to the description of *H. maricola*, nevertheless without further examination of such a specimen is not possible to confirm its identity.

Halgerda sp. 2

(Figure 16 L)

Material examined. Eight specimens. MB28-004417, ZRP, 05 May 2011, 1m, 15mm (preserved); MB28-004565, ZRP, 07 Jun. 2012, 2m, 9mm; MB28-004679, ZRP, 25 May 2013, 1m, 20mm; MB28-004731, ZRP, 22 Aug. 2013, 2m, 27mm; MHN-YT903, ZRP, 07 Sep. 2013, 0.5m, 30mm; MB28-004807, ZRP, 17 Mar. 2014, 0.5m, 42mm; MB28-004901, NKA, 10 Jun. 2014, 18m, 27mm; ZMBN94225, PAE, 2 Feb. 2014, 20–25m, 20mm.

Habitats. Subtropical tidal reefs, rocky reefs and topical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Paindane, Nacala, Nuarro and Pemba.

Geographic distribution. Indian Ocean. British Indian Ocean Territory, Maldives (Yonow *et al*. 2002), Kenya (Rudman 1978), Madagascar (Eliot 1905), Tanzania (Gosliner *et al*. 2008) and Mozambique (Gosliner *et al*. 2008; King and Fraser 2014).

Remarks. This species has been thought to be an Indian Ocean variation of *Halgerda tessellata* (Bergh, 1880). However, it differs genetically and anatomically. The principle of the external difference is the absence of the submarginal band formed by white spots present in the Pacific specimens.

Halgerda sp. 3

(Figure 17 A)

Material examined. Four specimens. MB28-005031, 3 spcs., POB, 26 Dec. 2014, 40–50mm, 15m, collected by Jenny Strömvoll; MB28-005032, PO, 3 Dec. 2014, 40mm, 17m, collected by Jenny Strömvoll.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro.

Geographic distribution. Western Indian Ocean. Réunion (Bidgrain 2006b) and Mozambique.

Remarks. This species belong to the *Halgerda willey* Eliot, 1904 complex but appears undescribed.

Halgerda sp. 4

(Figure 17 B)

Material examined. Six specimens. MB28-004459, ZWH, 05 Feb. 2012, 17m, 25mm, collected by L. Robisson; MB28-004527, ZGWS, 23 Mar. 2012, 22m, 25mm; MHN-YT567, ZA51, 23 Aug. 2012, 12m, 24mm; MB28-004698, ZGWS, 26 Jul. 213, 18m, 29mm; MB28-004716, ZT, 11 Aug. 2013, 33m, 20mm; MB28-004802, ZY, 04 Feb. 2014, 33m, 24mm.

Habitats. Subtropical rocky reefs.

Occuurences: Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This species resemble *H. toliara* but differs externally by the lack of secondary lines between the ridges and small tubercles surround the mantle.

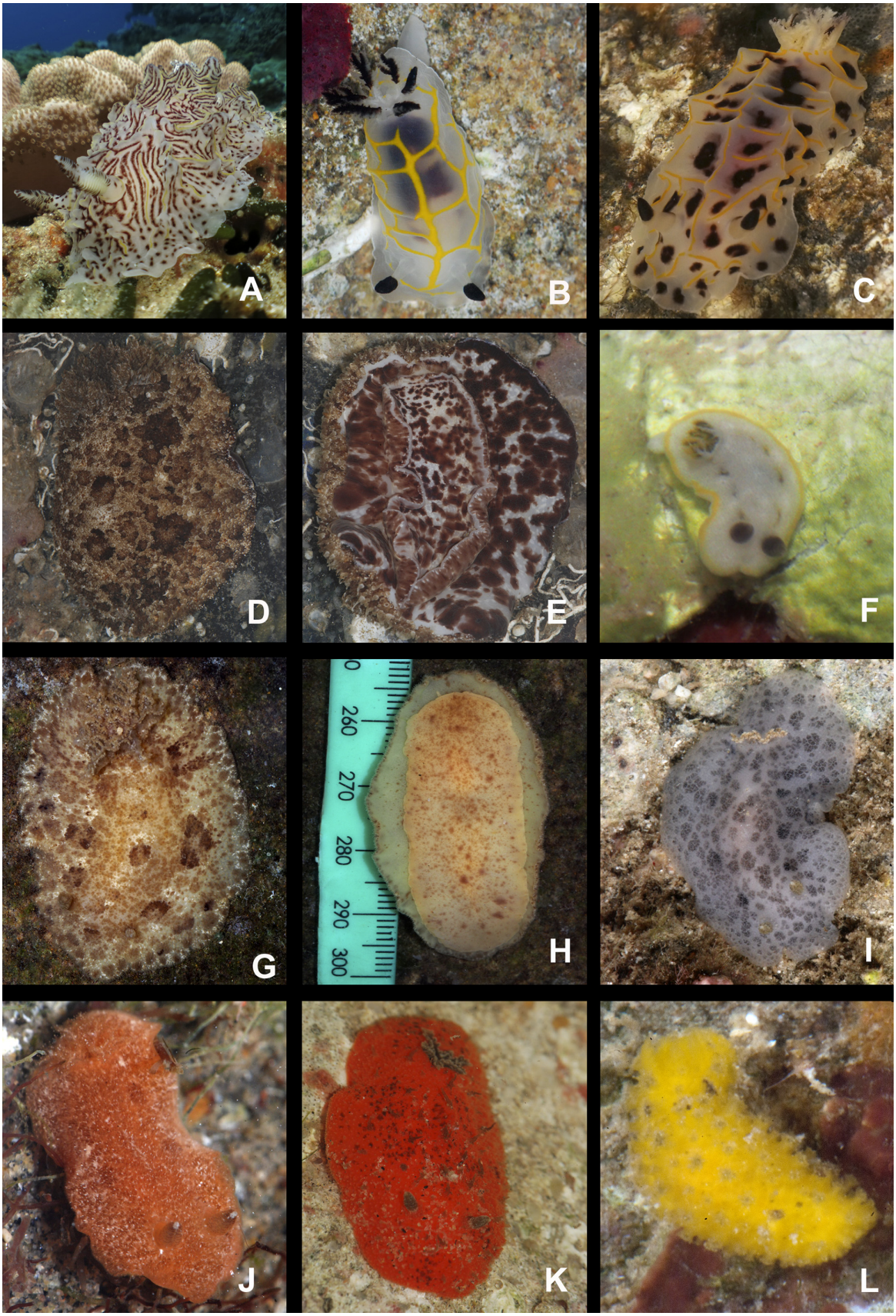

FIGURE 17. A, *Halgerda* sp. 3 (MB28-005031). B, *Halgerda* sp. 4 (MB28-004527). C, *Halgerda* sp. 5 (MB28-004933). D–E, *Sebadoris nubilosa* (MHN-YT1377). F, *Taringa caudata* (MB28-005045). G–H, *Tayuva lilacina* (MB28-004964), dorsal and ventral view. I, *Tayuva lilacina* (MHN-YT1278b). J, *Thordisa* cf. *sanguinea* (MB28-004806). K, *Thordisa* sp. (MB28-004473). L, *Atagema echinata* (MB28-004879).

***Halgerda* sp. 5**
(Figure 17 C)

Material examined. One specimen. MB28-004933, ZSC, 08 May 2014, 16m, 31mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This species is externally similar to *H. wasinensis*, but lacks yellow margins on the rhinophoral sheaths.

Genus *Sebadoris* Er Marcus& Ev Marcus, 1960

***Sebadoris nubilosa* (Pease, 1871)**
(Figure 17 D–E)

Material examined. Two specimens. MB28-004888, NHR, 05 Jun. 2016, 5m, 180mm; MHN-YT1377, NKA, 16 Jun. 2014, 15m, 112mm.

Habitats. Tropical coral reefs.

Occurrences. Nacala and Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008), Marianas (Pease 1871), Fiji (Brodie & Brodie 1990), Australia, Maldives, Red Sea, Réunion Island, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Genus *Taringa* Er. Marcus, 1955

***Taringa caudata* (Farran, 1905)**
(Figure 17 F)

Material examined. One specimen. MB28-005045, NHR, 15 Oct. 2016, 7m, 4mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro.

Geographic distribution. Indian Ocean. Sri Lanka (Farran 1905), Oman, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Genus *Tayuva* Er. Marcus & Ev. Marcus, 1967

***Tayuva lilacina* (Gould, 1852)**
(Figure 17 G–I)

Material examined. Three specimens. MB28-004964, ZRS, 02 Feb. 2015, 27m, 50mm. MB28-004803, ZRP, 0.5m, 7mm; MHN-YT1278b, NHR, 2m, 30mm.

Habitats. Subtropical rocky reefs, wreck and tropical coral reefs, under rocks.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008; Dayrat 2010), Japan, Indonesia, Philippines (Dayrat 2010), Papua New Guinea, Australia, Singapore (Coleman 2008), Guam (Carlson & Hoff 2003), South Africa, Tanzania, Madagascar (Dayrat 2010) and Mozambique.

Remarks. *Tauyuva lilacina* and *Sebadoris fragilis* Alder & Hancock, 1864 are two externally similar species. Externally they can be distinguished by the ventral surface, which in *S. fragilis* is pigmented by dark larger spots and in *Tayuva lilacina* covered by small brown dots (Dayrat 2010). Nevertheless, young *S. fragilis* could be misidentified as *T. lilacina*, thus we examined the reproductive system of the 50mm specimen (MB28-004964) and

confirmed the presence of a distancial muscular wall in the deferent duct, which is characterictic of *T. lilacina* (Dayrat 2010). Valdés (2002a) proposed that *Tayuva* is a junior synonym of *Discodoris*. Nevertheless, Dayrat (2010) considered this species as a *Tayuva*.

Genus *Thordisa* Bergh, 1877

***Thordisa* cf. *sanguinea* Baba, 1955**
(Figure 17 J)

Material examined. One specimen. MB28-004806, ZRP, 17 Mar. 2014, 0.5m, 19mm.

Habitats. Subtropical tidal reef, under rock.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan (Baba 1955), Philippines (Gosliner *et al*. 2015) and Mozambique.

Remarks. This specimen is similar to Baba's description (1955) of *Thordisa sanguinea* and is very similar to *T. sanguinea* from the Pacific (illustrated in Gosliner *et al*. (2015), pag.178). The only difference is that the three or four darker areas mentioned by Baba (1955) are not clearly visible in the specimen collected by us. Therefore, additional material from the western Indian Ocean and further anatomical and/or molecular examination is needed in order to confirm the identification of this species.

***Thordisa* sp.**
(Figure 17 K)

Material examined. Three specimens. MB28-004473, 07 Feb. 2013, ZRP, 2m, 39mm; MB28-004564, 07 Jun. 2012, ZRP, 0.3m, 28mm; MB28-004584, 20 Jun. 2012, ZRP, 1m, 22mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. A similar morphotype has been recorded to Philippines (Gosliner *et al*. 2015) but lacks the dark spots on the dorsum.

"Caryophyllidia-bearing"

Genus *Atagema* Gray, 1850

***Atagema echinata* (Pease, 1860)**
(Figure 17 L)

Material examined. One specimen. MB28-004879, NHR, 29 May 2016, 9m, 7mm.

Habitats. Tropical seagrass mixed with coral bommies.

Occurrences. Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii (Pease 1860), Papua New Guinea, Indonesia (Gosliner *et al.* 2015) and Mozambique.

Remarks. First record for the western Indian Ocean.

***Atagema intecta* (Kelaart, 1858)**
(Figure 18 A)

Material examined. One specimen. MB28-004680, 25 May 2013, ZRP, 0.5m, 24mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Midway Atoll, Japan, Papua New Guinea (Gosliner *et al*. 2008), Australia (Nimbs & Smith 2016), Indonesia (Debelius 1996), Sri Lanka (Kelaart 1858b), Seychelles, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Genus *Jorunna* Bergh, 1876

Jorunna funebris (Kelaart, 1858)

(Figure 18 B)

Material examined. Five specimens. MB28-004974, ZRP, 21 Mar. 2015, 0.5m, 32mm; MB28-004561, ZRP, 04 Jun. 2012, 1m, 28mm; MB28-004579, ZRP, 18 Jun. 2012, 1m, 52mm; MB28-004693, ZRP, 12 Jul. 2013, 0.5m, 54mm; MHN-YT917, ZRP, 19 Sep. 2013, 1m, 32mm.

Habitats. Subtropical tidal reefs and topical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Paindaine and Nacala.

Geographic distribution. Indo-west Pacific. Marshall Islands, Guam (Gosliner *et al*. 2008), Japan, Palau, New Caledonia (Camacho-García & Gosliner 2008), Australia (Debelius 1996), Indonesia (Yonow 2011), Philippines (Camacho-García & Gosliner 2008; Gosliner *et al*. 2008), Sri Lanka (Kelaart 1858b), Thailand (Camacho-García & Gosliner 2008; Mehrotra & Scott 2015), India (Apte 2009, Remakrishna *et al.* 2010), Maldives, Red Sea (Debelius 1996), Seychelles, Mauritius, Tanzania, Madagascar (Camacho-García & Gosliner 2008), South Africa (Gosliner 1987) and Mozambique (King & Valda 2014).

Remarks. The maximum size found in Mozambique was 52mm. Pacific specimens can attain sizes up to 150mm (Gosliner *et al*. 2015).

Jorunna parva Baba, 1938

(Figure 18 C)

Material examined. Three specimens. MHN-YT321, ZGWS, 27 Apr. 2012, 20m, 6mm; MB28-004833, POC, 18m, 9mm; MB28-004984, ZRP, 24 Apr. 2015, 1m, 17mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west Pacific. Japan (Baba 1938), Papua New Guinea (Camacho-García & Gosliner 2008), Palau (Gosliner *et al*. 2008), Australia (Debelius 1996), Indonesia, Philippines, Seychelles, Tanzania (Camacho-García & Gosliner 2008; Gosliner *et al*. 2008), South Africa (Gosliner *et al*. 2008) and Mozambique.

Jorunna ramicola Miller, 1996

(Figure 18 D)

Material examined. Two specimens. MB28-004591, 23 Jun. 2012, ZWH, 17m, 12mm; ZMBN105605, PP, 28 May 2015, 12m, 14mm

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Pemba.

Geographic distribution. Indo-west Pacific. Japan, (Gosliner *et al*. 2008), New Zealand (Miller 1996), Papua New Guinea, Indonesia, Philippines (Camacho-García & Gosliner 2008), Australia (Nimbs *et al*. 2016, Nimbs & Smith 2016), Madagascar (Camacho-García & Gosliner 2008) and Mozambique.

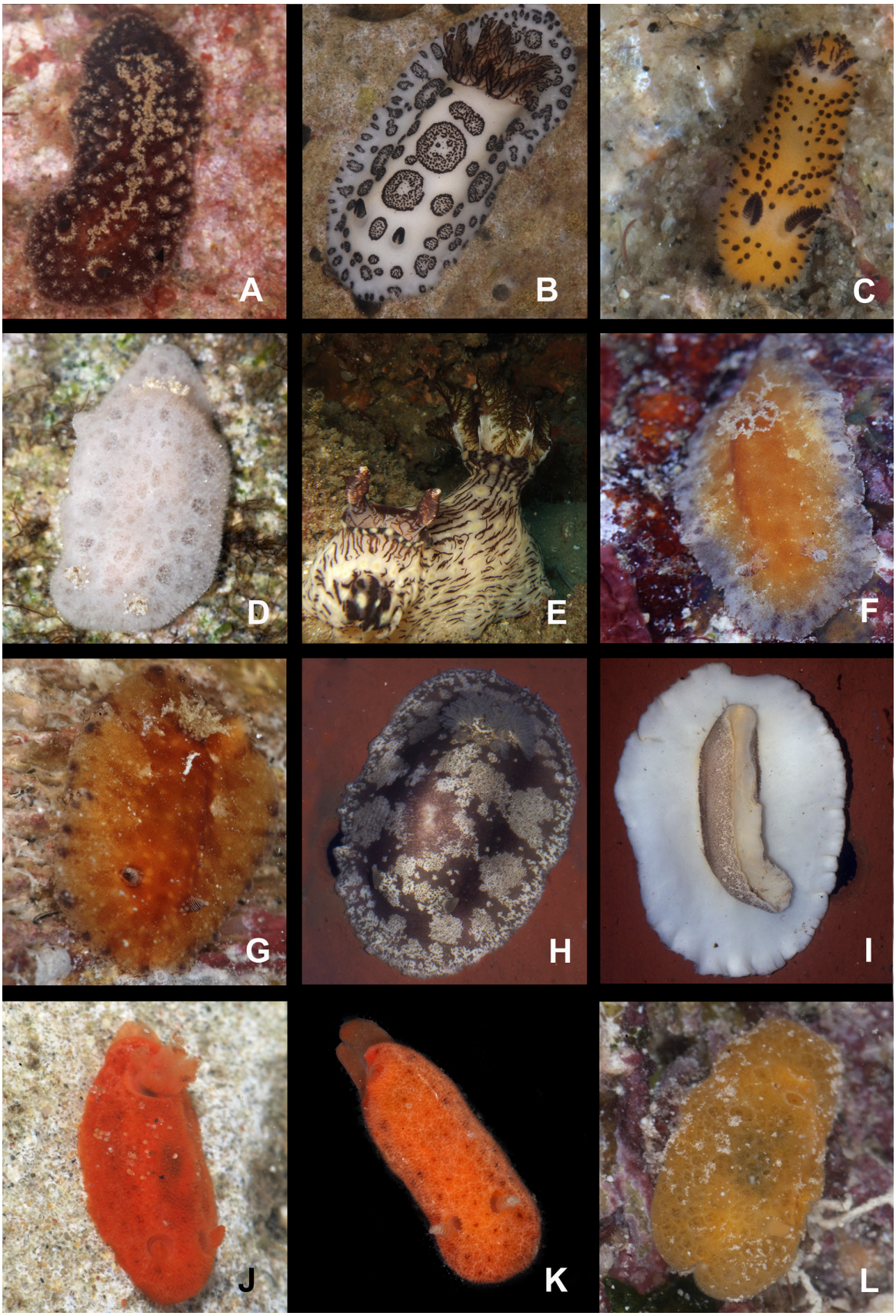

FIGURE 18. A, *Atagema intecta* (MB28-004680). B, *Jorunna funebris* (MB28-004693). C, *Jorunna parva* (MB28-004833). D, *Jorunna ramicola* (MB28-004591). E, *Jorunna rubescens* (*in situ*). F–G, *Platydoris pulchra* (MB28-004782 and MB28-004759, respectively). H–I, *Platydoris scabra* (MB28-005081), dorsal and ventral view. J, *Rostanga bifurcata* (MHN-YT631). K, *Rostanga* sp. (MB28-004617). L, *Sclerodoris tuberculata* (MB28-004760).

***Jorunna rubescens* (Bergh, 1876)**
(Figure 18 E)

Material examined. One specimen. Not collected, PACG, 27 Jan. 2013, unknown size, 2m deep.

Habitats. Subtropical tidal reef, on sand.

Occurrences. Paindaine.

Geographic distribution. Indo-west Pacific. Marshall Islands, Japan, Papua New Guinea, Phillipines (Camacho-García & Gosliner 2008), Indonesia (Debelius 1996; Yonow 2011), India (Apte 2009, Remakrishna *et al.* 2010), Sri Lanka, Seychelles, Mauritius, Réunion Island (Camacho-García & Gosliner 2008) and Mozambique.

Genus *Platydoris* Bergh, 1877

***Platydoris pulchra* Eliot, 1904**
(Figure 18 F–G)

Material examined. Five specimens. MB28-004656, ZWH, 17 Mar. 2013, 18m, 42mm; MB28-004759, 12 Jun. 013, VISP, 5m, 20mm; MHN-YT973b, 12 Jun. 013, VISP, 5m, 7mm; MB28-004782, VIPP, 13 Dec. 2014, 11m, 20mm; ZMBN105604, PP, 28 May 2015, 12m, 40mm.

Habitats. Subtropical tidal reefs and tropical coral reefs.

Occurrences. Zavora, Pemba and Vamizi Island.

Geographic distribution. Indian Ocean. Sri Lanka, Kenya, Madagascar (Gosliner *et al*. 2015), Tanzania (Eliot 1904a), South Africa (Gosliner *et al*. 2015) and Mozambique.

***Platydoris scabra* (Cuvier, 1804)**
(Figure 18 H–I)

Material examined. Two specimens. MB28-005081, 2 spcs., NHR, 19 Mar. 2017, 1m, 80mm, 110mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Marshall Islands, Japan, Fiji, Vanuatu (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), New Caledonia, Australia, Philippines (Dorgan *et al*. 2002), Red Sea (Yonow 2008), Seychelles (Dorgan *et al*. 2002), Tanzania, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Genus *Rostanga* Bergh, 1879

***Rostanga bifurcata* Rudman & Avern, 1989**
(Figure 18 J)

Material examined. Five specimens. MB28-004636, ZDTR, 14 Oct. 2012, 0.3m, 12mm; MB28-004515, ZDD, 23 Feb. 2012, 1m, 11mm; MB28-004634, ZDTR, 14 Oct. 2012, 0.5m, 11mm; MHN-YT631, 14 Oct. 2010, 0.3m, 12mm; MB28-004723, 15 Aug. 2013, 0.5m, 5mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan (Gosliner *et al*. 2008), Australia (Rudman & Avern 1898), Singapore (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

***Rostanga* sp.**
(Figure 18 K)

Material examined. One specimen. MB28-004617, BL, 26 Aug. 2012, 3m, 13mm.

Habitats. Subtropical tidal reef and seagrass.

Occurrences. Barra and Zavora.

Geographic distribution. Indo-west Pacific. Indonesia (Gosliner *et al*. 2015) and Mozambique.

Remarks. This specimen is externally similar to *Rostanga elandisa* Garovoy, Valdés & Gosliner 2001, which has been previously found in the cold Atlantic coast of South Africa and to *R. aureamala* Garovoy, Valdés & Gosliner (2001), which was described based on material from South Africa collected in the Indian Ocean coast. The radula of the specimen from Mozambique differs from both species by the wider shape of the inner lateral teeth that contains at least 5 well-defined denticles. This specimen is externally similar to a putative undescribed species from Indonesia illustrated in Gosliner *et al*. (2015, pg. 198, bottom right).

Genus *Sclerodoris* Eliot, 1904

***Sclerodoris tuberculata* Eliot, 1904**
(Figure 18 L, 19 A)

Material examined. Two specimens. MB28-004760, VISP, 12 Jun. 2013, 5m, 12mm; MB28-005086, NHR, 05 Jun. 2016, 2m, 46mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Philippines, Indonesia (Gosliner *et al*. 2008), Tanzania (Eliot 1904a), South Africa, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species is characterized by the presence of circular depressions on the dorsum and variable colouration, which seems to be related to the food source (Gosliner *et al*. 2008). The smaller specimen was yellow (Fig. 18 L) while the larger was red (Fig. 19 A).

Superfamily Phyllidioidea Rafinesque, 1814

Family Phyllidiidae Rafinesque, 1814

Genus *Phyllidia* Cuvier, 1797

***Phyllidia alyta* Yonow, 1996**
(Figs. Figure 19 B–C)

Material examined. Seven specimens. MHN-YT996, VISP, 12 Aug. 2013, 2m, 12mm; MB28-004883, 01 Jun. 2014, NHR, 9m, 43mm; ZMBN105097, VIPP, 15 May 2015, 10–20m, 24mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105101, VIES3, 16 May 2015, 7m, 25mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105142, VIPP, 19 May 2015, 7–12m, 42mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105576 VINR, 24 May 2015, 15m, 23mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105593, PP, 28 May 2015, 12m, 30mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indian Ocean. Myanmar (Gosliner *et al*. 2008), India (Apte 2009; Remakrishna *et al.* 2010), Maldives, Mauritius (Yonow 1996) and Mozambique.

***Phyllidia coelestis* Bergh, 1905**
(Figure 19 D–E)

Material examined. Eleven specimens. MB28-004781, VIPP, 13 Dec. 2013, 8m, 36mm; MHN-YT1317, NHR, 05 Jun. 2016, 7m, 28mm; MB28-004896, NKA, 09 Jun. 2014, 10m, 39mm; ZMBN117080, 13 Jun. 2014, NKA, 13m, 69mm; ZMBN117081 & ZMBN119689, NKA, 15 Jun. 2014, 20m, 25mm and 13mm, respectively; ZMBN105089, VIPP, 15 May 2015, 10–20m, 30mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105131 and ZMBN105149,

VIPP, 19 May 2015, 7m, 38mm and 12 mm, 20 and 27mm, respectively, collected by Y. Tibiriçá & M. Malaquias; ZMBN105578, 2 spcs. VICW, 24 May 2015, 6–12m, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Tropical coral reefs.

Occurrences. Nacala, Nuarro, Pemba and Vamizi Island.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea (Gosliner *et al*. 2008), China Sea, Timor Sea (Brunckhorst 1993), Philippines (Gosliner *et al*. 2008), Indonesia (Yonow 2011), Thailand (Mehrotra & Scott 2015), India (Apte 2009, Remakrishna *et al.* 2010), British Indian Ocean Territory (Yonow *et al*. 2002), Sri Lanka, Comoros Islands, Réunion Island (Gosliner *et al*. 2008), Tanzania (Edmunds 1972), South Africa (Brunckhorst 1993) and Mozambique (Macnae & Kalk 1958).

Remarks. This species shows a colour variation mainly confined to the thickness of the black bands. The distribution of the tubercles, ground colouration, number of lamellae in the rhinophores and the tubercles are very similar to Eliot's (1905) illustration and Brunckhorst's (1993) description. However, none of the specimens examined here had the typical black "Y" mark in front of the rhinophores (Gosliner *et al*. 2015). Instead, the lateral black bands run parallel to each rhinophore and the black midline forms a discontinued line. This pattern is similar to the photograph of *P. coelestis* in Yonow (2012). An examination of the photographs of this species from the Indian Ocean reveals that this might be the colour pattern for this species in the region. Nevertheless, further molecular analyses may prove otherwise.

Phyllidia cf. *haegeli* (Fahrner & Beck, 2000)

(Figure 19 F–G)

Material examined. One specimen. ZMBN117018, ZGWS, 02 Feb. 2012, 21m, 49mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Indonesia (Fahrner & Beck 2000) and potentially Mozambique.

Remarks. This specimen shares features with *P. varicosa*, *P. coelestis*, *P. marindica* and particularly *P. haegeli* (Fahrner & Beck, 2000). All have rhinotubercles, a greyish background, ridges formed by yellow-capped tubercles, black bands and golden-yellow rhinophores (Brunckhorst 1993; Fahrner & Beck 2000). *Phyllidia coelestis* differs by having a middle longitudinal black band and *Phyllidia marindica* by a single median ridge. *Phyllidia varicosa* resembles *Phyllidia haegeli* dorsally, but living specimens have a distinctive line on the sole of the foot and they are usually larger, lighter in colour and less flattened (Fahrner & Beck 2000, Fahrner & Schrödl 2000). Few differences exist between our specimen and *Phyllidia haegeli*. The collected specimen has outer black bands that unite anterior to the rhinophores, while in *P. haegeli* they converge but do not merge. Furthermore, the specimen exhibits inner longitudinal bands that unite posteriorly but in *P. haegeli* they are shorter and do not merge. The main distinction is associated with the outer longitudinal black bands: in the collected specimen, these bands are shorter and connect with the radial lines to create an inverted "V". As *Phyllidia* can be highly variable (Stoffels *et al.* 2016), it is not possible to confirm the taxonomic status without further molecular or anatomical review.

Phyllidia marindica (Yonow & Hayward, 1991)

(Figure 19 H–I)

Material examined. Eleven specimens. MHN-YT175, ZRP, 07 Feb. 2012, 2m, 11mm; ZMBN117026, ZGWS, 27 May 2012, 22m, 29mm; ZMBN117033, ZWH, 30 Aug. 2012, 17m, 29mm; ZMBN117047, VITP, 12 Aug. 2013, 17m, 22mm; ZMBN117049, VISP, 12 Nov. 2013, 3m, 18mm; MB28-004780, VIPP, 13 Dec. 2013, 6m, 30mm; ZMBN117056, BB, 23 Jan. 2014, 10m, 19mm; MB28-004834, POC, 08 May 2014, 18m, 50mm; ZMBN117069, NHR, 30 May 2014, 9m, 26mm; ZMBN117075, NFA, 02 Jun. 2014, 20m, 15mm; ZMBN119697, ZDN, 25 Mar. 2015, 60m, 28mm, collected by J. Wright.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora, Barra, Nuarro and Vamizi Island.

Geographic distribution. India Ocean. Thailand (Gosliner *et al*. 2008), India (Apte 2009; Remakrishna *et al.* 2010), British Indian Ocean Territory (Yonow *et al*. 2002), Australia, Thailand, Myanmar, Seychelles, Réunion Island, Mauritius, Madagascar, Tanzania (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

FIGURE 19. A, *Sclerodoris tuberculata* (MB28-005086). B–C, *Phyllidia alyta* (MB28-004883) dorsal and ventral view. D–E, *Phyllidia coelestis* (MB28-004781 and MB28-004896, respectively). F–G *Phyllidia* cf. *haegeli* (ZMBN117018) dorsal and ventral view. H–I, *Phyllidia marindica* (MB28-004780) dorsal and ventral view. J, *Phyllidia ocellata* (MB28-005092). K–L, *Phyllidia varicosa* (MB28-004450) dorsal and ventral view.

***Phyllidia ocellata* Cuvier, 1804**
(Figure 19 J)

Material examined. Seven specimens. ZMBN117022, ZAR, 20 Feb. 2012, 32m, 25mm; MB28-005092, ZSC, 14 May 2012, 22m, 39mm; ZMBN117035, ZWH, 08 Mar. 2013, 15m, 13mm; MB28-004667, ZY, 26 Apr. 2013, 33m, 25mm; ZMBN117060, POA, 08 May 2014, 41m, 4–9mm; ZMBN117078, NKA, 13 Jun. 2014, 20m, 45mm; ZMBN105569, VPP, 23 May 2015, 34m, 44mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Nacala, Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Marshall Islands, Guam, Japan, Fiji, Papua New Guinea, Vanuatu, Australia (Gosliner *et al*. 2008), Indonesia (Yonow 1996), India (Remakrishna *et al.* 2010), Thailand, Philippines, Sri Lanka, Oman (Debelius 1996), Mauritius, Seychelles, Madagascar, Tanzania, South Africa (Gosliner *et al*. 2008) and Mozambique.

***Phyllidia varicosa* Lamarck, 1801**
(Figure 19 K–L)

Material examined. Thirteen specimens. MB28-004450, ZGWS, 02 Feb. 2012, 21m, 48mm, collected by S. Bruck; MB28-004476, ZAR, 08 Feb. 2012, 32m, 30mm, collected by S. Bruck; MB28-004599, ZWH, 26 Jun. 2012, 16m, 71mm, collected by A. Roseblum; MB28-004660, ZD, 26 Mar. 2013, 30m, 42mm; ZMBN117038, ZY, 07 Jun. 2013, 33m, 14mm; ZMBN117068, NGR, 29 May 2014, 20m, 12mm; ZMBN119706, NHR, 25 Jul. 2016, 14m, 85mm, collected by J. Wright; MHN-YT1647b, NHR, 27 Jul. 2016, 12m, 22mm; ZMBN105165, VISP, 22 May 2015, 3m, 40mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105590, VISP, 25 May 2015, 3m, 38mm; ZMBN105599, 2 spcs., PP, 28 May 2015, 12m, 43 and 45mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105602, PP, 28 May 2015, 12m, 9mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reefs and tropical coral reefs often crawling on sand.

Occurrences. Ponta do Ouro, Zavora, Paindane, Nuarro, Pemba and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii (Debelius 1996), French Polynesia, Papua New Guinea, Palau, Japan (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Australia (Cheney *et al.* 2014), Indonesia (Yonow 2011), Thailand (Mehrotra & Scott 2015), Philippines, Vietnam (Brunckhorst 1993), India (Apte 2009; Remakrishna *et al.* 2010), Sri Lanka, Red Sea (Debelius 1996), Réunion Island (Cuvier 1804), Madagascar (Risbec 1929), Seychelles (Edmunds 1972), Tanzania (Edmunds 1971), South Africa (Gosliner 1987) and Mozambique (King & Fraser 2014).

Genus *Phyllidiella* Bergh, 1869

***Phyllidiella meandrina* (Pruvot-Fol, 1957)**
(Figure 20 A–B)

Material examined. Thirteen specimens. ZMBN117048, VIPP, 12 Aug. 2013, 14m, 21mm; ZMBN117050, VIPP, 13 Dec. 2013, 11m, 27mm; ZMBN117072, 2 spcs., NHR, 01 Jun. 2014, 9m, 26mm and 28mm; MB28-004892, NFA, 06 Jun. 2014, 20m, 29mm; MHN,-YT1644, NHR, 25 Jul. 2016, 12m, 18mm; ZMBN119708, NHR, 27 Jul. 2016, 10m, 30mm; ZMBN105095, VIPP, 15 May 2015, 10–29m, 40mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105102, VIES3, 16 May 2015, 7m, 15mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105568, VIPP, 23 May 2015, 25m, 35mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105575, 2 spcs., VINR, 24 May 2015, 12–20m, 14 and 26mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105587, VISP, 25 May 2015, 3m, 42mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Indonesia (Gosliner *et al*. 2008), British Indian Ocean Territory (Yonow *et al*. 2002), Red Sea, Mauritius (Gosliner *et al*. 2008), Kenya, Tanzania, Madagascar, Réunion Island (Yonow 2012), South Africa (Gosliner 1987) and Mozambique.

***Phyllidiella* cf. *pustulosa* (Cuvier, 1804)**
(Figures 20 C–D)

Material examined. Five specimens. ZMBN117079, NKA, 13 Jun. 2014, 20m, 24mm; MB28-004913, NKA, 13 Jun. 2014, 21m, 22mm; MHN-YT1364, NKA, 15 Jun. 2014, 19m, 22mm; ZMBN117084, NKA, 15 Jun. 2014, 18m, 25mm; ZMBN119690, NKA, 15 Jun. 2014m 19m, 13mm.

Habitats. coral reefs.

Occurrences. Nacala and Nuarro.

Geographic distribution. Indo-west, central Pacific. *Phyllidiella pustulosa* (Cuvier, 1804) is widely spread in the Indo-Pacific (Brunckhorst 1993). It has been recorded from Hawaii, Society Island to the Western Pacific and Indian Ocean (Gosliner *et al*. 2008).

Remarks. This morphotype resembles the photograph of *Phyllidiella pustulosa* in Brunckhorst (1993, second specimen on the left, Plate 5, fig. E). Brunckhorst (1993) stated that ontogenetic variation introduced much confusion in the literature. As a result, there are currently eight synonyms for this species (Rosenberg & Bouchet 2012). However, recent molecular studies showed that *P. pustulosa* is likely to be a species complex with up to four molecular operational taxonomic units (Stoffels *et al*. 2016). Therefore, this putative species complex and its geographic distribution needs further investigation.

***Phyllidiella rosans* (Bergh, 1873)**
(Figure 20 E–F)

Material examined. One specimen. ZMBN117065, POD, 11 May 2014, 16m, 32mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west, central Pacific. Hawaii (Brunckhorst 1993; Gosliner *et al*. 2008), French Polynesia (Brunckhorst 1993), Japan, Papua New Guinea, Malaysia, Indonesia, Vietnam, Marshall Islands, Oman, Maldives (Gosliner *et al*. 2008), British Indian Ocean Territory (Yonow *et al*. 2002), India (Apte 2009; Remakrishna *et al.* 2010), Mauritius, Réunion Island (Brunckhorst 1993) and Mozambique.

Remarks. This species has several pink longitudinal ridges formed by rounded tubercles. The foot sole is grey and the oral tentacles are pale grey (Brunckhorst 1993). This species resembles *P. zeylanica* but it can be distinguished in the field by its ventral colouration and smooth tubercles. This species is likely to be part of a species complex as the ridges are more frequently interrupted in Pacific Ocean specimens than in Indian Ocean animals (Gosliner *et al*. 2008). The collected specimen exhibited two mid-dorsal ridge interruptions posterior to the rhinophores.

***Phyllidiella striata* (Bergh, 1889)**
(Figures 20 G–H)

Material examined. Ten specimens. MB28-004875, 3 spcs., NGF, 29 May 2014, 25m, 6, 9 and 20mm; ZMBN117071, 01 Jun. 2014, NHR, 9m, 28mm; MHN-YT1300, 02 Jun. 2014, NHR, 9m, 21mm; MB28-004891, NHR, 05 Jun. 2014, 22m, 14mm; ZMBN117074, NFA, 02 Jun. 2014, 18m, 23mm; ZMBN117076, NFA, 06 Jun. 2014, 18m, 34mm; ZMBN117085, NKA, 15 Jun. 2014, 20m, 22mm; ZMBN119705, NHR, 25 Jul. 2016, 15m, 22mm.

Habitats. Tropical coral reefs

Occurrences. Nacala and Nuarro.

Geographic distribution. Indian Ocean. Maldives, Christmas Island (Yonow 2012) and Mozambique.

Remarks. First record for the western Indian Ocean.

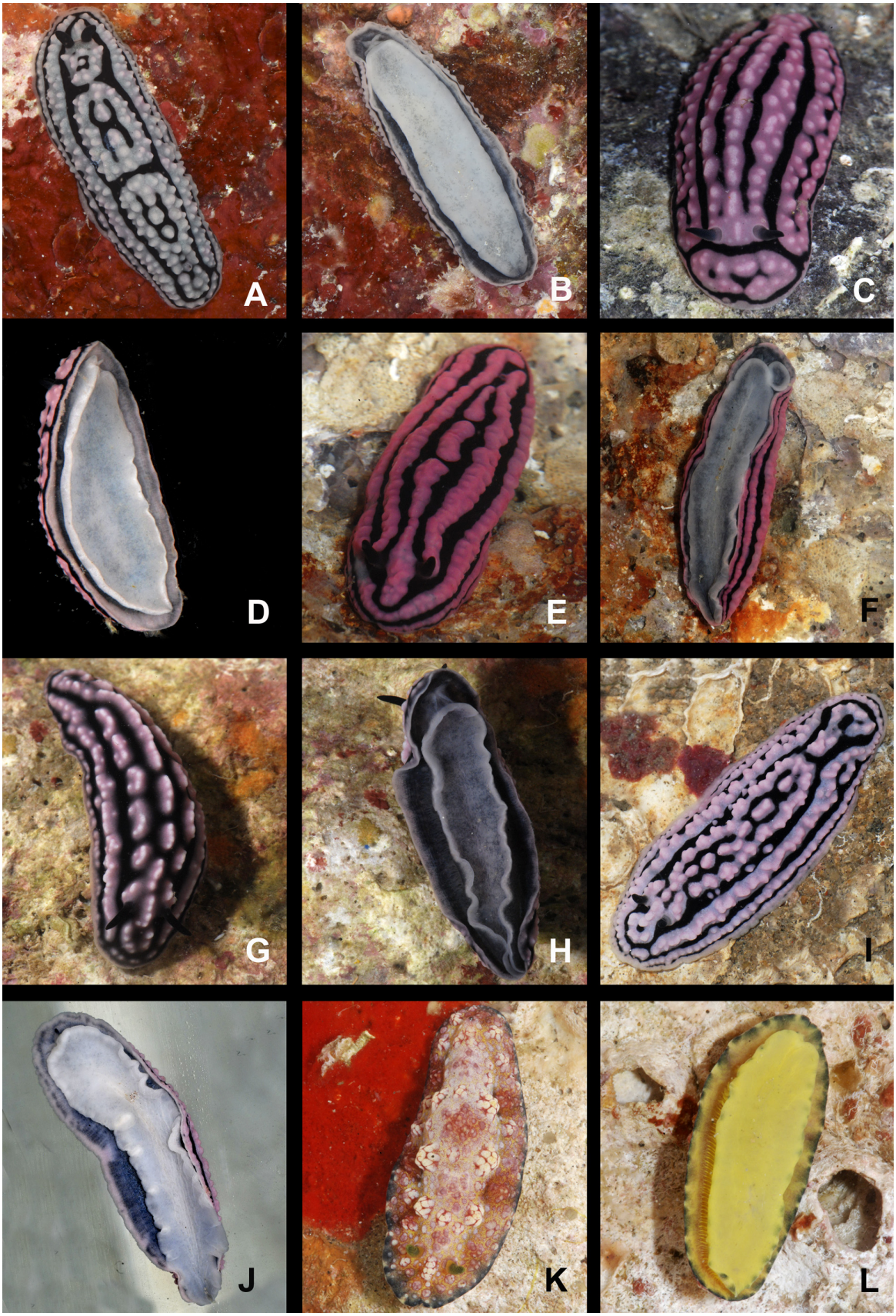

FIGURE 20. A–B, *Phyllidiella meandrina* (ZMBN105095) dorsal and ventral view. C–D, *Phyllidiella pustulosa* (ZMBN117079) dorsal and ventral view. E–F, *Phyllidiella rosans* (ZMBN117065). G–H, *Phyllidiella striata* (ZMBN117076) dorsal and ventral view. I–J, *Phyllidiella zeylanica* (ZMBN117027) dorsal and ventral view. K–L, *Phyllidiopsis cardinalis* (ZMBN117066) dorsal and ventral view.

***Phyllidiella zeylanica* Kelaart, 1859**
(Figure 20 I–J)

Material examined. Five specimens. ZMBN117027, ZSC, 08 Jun. 2012, 22m, 48mm; ZMBN117031, ZJS, 26 Jun. 2016, 9m, 38mm; MB28-004817, ZRP, 16 Apr. 2014, 0.5m, 38mm; MHN-YT1272, NGF, 25m, 29mm; ZMBN119704, NMB, 23 Jul. 2016, 25m, 18mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west Pacific. Papua New Guinea (Gosliner *et al.* 2008), Indonesia (Kelaart 1859), Thailand, Sri Lanka (Brunckhorst 1993), India (Apte 2009), Christmas Island, Maldives, Seychelles, (Yonow 1996, 2012), British Indian Ocean Territory (Yonow *et al*. 2002), Mauritius (Yonow & Hayward 1991), Comoros Islands, Tanzania, Réunion Island (Gosliner *et al.* 2008), South Africa (Gosliner 1987) and Mozambique (King & Fraser 2014).

Genus *Phyllidiopsis* Bergh, 1876

***Phyllidiopsis cardinalis* Bergh, 1876**
(Figure 20 K–L)

Material examined. Three specimens. MHN-YT902, ZRP, 07 Sep. 2013, 0.4m, 30mm; ZMBN117066, POJP, 11 May 2014, 15m, 27mm; ZMBN119703, NSS, 26 Apr. 2016, 12m, 19mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora and Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, New Caledonia, Fiji, Papua New Guinea, Australia (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), British Indian Ocean Territory (Yonow *et al*. 2002), Réunion Island, Tanzania, South Africa and Mozambique (Gosliner *et al*. 2008).

***Phyllidiopsis gemmata* (Pruvot-Fol, 1957)**
(Figure 21 A–C)

Material examined. Three specimens. MHN-YT1325, NFA, 06 Jun. 2014, 19m, 32mm; ZMBN117082, NKA, 25 Jun. 2014, 15m, 26mm; ZMBN119691, NKA, 15m, 31mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Indonesia, Thailand (Brunckhorst 1993), India (Apte 2009), British Indian Ocean Territory (Yonow *et al*. 2002), Ari Atoll (Yonow 2012), Réunion Island (Brunckhorst 1993), Mauritius, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species is characterized by its elongated body, low compound conical tubercles which form three central ridges in the dorsum, four narrow black longitudinal lines on the dorsum, an anal opening within a pink tubercle and black rhinophores with a pink-grey base (Brunckhorst 1993). Rudman (1999b) notes that although the original illustration of *P. gemmata* exhibited radial lines on the mantle margin, these were not mentioned in the description or later by Brunckhorst (1993). Radial lines were observed in all Mozambican specimens and in Gosliner *et al*. (2008, 2015). These are not apparent in photographs of *P. gemmata* in Yonow (2012), however this author suggested these lines may be present only in large individuals.

***Phyllidiopsis krempfi* Pruvot-Fol, 1957**
(Figures 21 D–I)

Material examined. Three specimens. ZMBN117040, ZGWS, 25 Jun. 2013, 20m, 80mm; MHN-YT1320, NHR, 05 Jun. 2014, 7m, 22mm; ZMBN119707, NFA, 27 Jul. 2016, 20m, 22mm, collected by J. Wright.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west Pacific. Japan, Solomon Islands, Fiji, (Gosliner *et al*. 2008), Papua New Guinea (Domínguez *et al.* 2007), Vietnam (Gosliner *et al*. 2008), Indonesia, Thailand, Andaman Sea (Brunckhorst 1993), Sri Lanka,Maldives (Yonow 2012), Comoros Islands, South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. *Phyllidiopsis krempfi* is characterized by having at least two black lines on the dorsum extending around the rhinophores and meeting in front of them. However, it may have additional black lines resembling *P. gemmata*. Nevertheless, these two species differ in rhinophoral morphology. *P. krempfi* has pink rhinophores with only the dorsal part and the anterior top black, while *P. gemmata* has the base of the rhinophores pinkish but they are mostly black (Brunckhorst 1993). Moreover, *P. gemmata* is more elongate than *P. krempfi* and the tubercles are simple compound while in *P. krempfi* the tubercles are multicompound (Brunckhorst 1993). Based on these external characteristics, these specimens are likely to be *P. krempfi*. Only one specimen (Fig. 21 D–F) exhibits a solid light pink foot, which according to Brunckhorst (1993) is characteristic of *P. krempfi*. The remaining specimens had a whitish foot similar to the specimen found in Papua New Guinea by Domínguez *et al*. (2007) (Fig. 21 H). The specimen with the pink foot was the only one found in the subtropical region and it was much bigger than the other specimens. Thus, it is possible that the foot colour is an ontogenetic variation, or alternatively these morphotypes may represent a species complex which needs further morphological and molecular analyses.

Phyllidiopsis shireenae Brunckhorst, 1993

(Figures 21 J–L)

Material examined. One specimen. ZMBN119709, NFA, 30 Aug. 2016, 25m, 54mm.

Habitats. Tropical coral reef.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Marshall Islands, Palau (Gosliner *et al*. 2008), Taiwan (Brunckhorst 1993), Papua New Guinea (Brunckhorst 1993; Domínguez *et al.* 2007), the Solomon Islands, Australia (Brunckhorst 1990, 1993), Philippines (Gosliner *et al.* 2008), Indonesia (Yonow 2011), India (Remakrishna *et al.* 2010), Maldives (Yonow 2012), Tanzania (Gosliner *et al*. 2008) and Mozambique.

Phyllidiopsis cf. *xishaensis* (Lin, 1983)

(Figures 22 A–B)

Material examined. Six specimens. MHN-YT990, VISP, 12 Sep. 2013, 2m, 10mm; ZMBN117067, POB, 15m, 12mm; MB28-004882, 01 Jun. 2014, NHR, 9m, 7mm; ZMBN119692, 2 spcs., 23 Jun. 2014, PMP, 20m, 9 and 11mm; ZMBN105123, VIES3, 18 May 2015, 7m, 10mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105603, PP, 28 May 2015, 12m, 16mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Paindane, Pomene, Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Marshall Islands, Guam (Gosliner *et al*. 2008), China (Lin 1983), Australia, Thailand, Maldives (Yonow 2012), British Indian Ocean Territory (Yonow *et al*. 2002), Mauritius Islands, Réunion Island, Mayotte (Yonow 2012), Seychelles (Gosliner *et al*. 2008; Yonow 2012), Madagascar, South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species is identical to the description and photograph of of *P. xishaensis* from the British Indian Ocean Territory (Yonow *et al*. 2002). Yonow (2012) noticed that in several books, articles and website (e.g. Brunckhorst 1993, Gosliner *et al*. 2008) *P. xishaensis* had been wrongly identified as *P. striata*. After examination of the original illustration of *P. striata* on Bergh's (1905, pag. 181), we agree that this morphotype is not *P. striata*. However, it also differs from the original description of *P. xishaensis* (Lin 1983) because the presence of black spots on the sub-margin of the mantle, and black lines on the margin of the secondary gill.

FIGURE 21. A–C, *Phyllidiopsis gemmata* (ZMBN117082), dorsal, ventral view and detail of the rhinophores. D–F, *Phyllidiopsis krempfi* (ZMBN117040) dorsal, ventral view and detail of the rhinophores. G–I, *Phyllidiopsis krempfi* (ZMBN105093) dorsal, ventral view and detail of the rhinophores. J–L, *Phyllidiopsis shireenae* (ZMBN119709) dorsal, ventral view and detail of the rhinophores.

***Phyllidiopsis* sp.**
(Figure 22 C–D)

Material examined. Six specimens. ZMBN117020, ZWH, 05 Feb. 2012, 17m, 11mm; MB28-004719, ZT, 11 Aug. 2013, 45mm, 22m; MHN-YT1291, NHR, 9m, 9mm; ZMBN117073, NSS, 02 Jun. 2014, 20m, 12mm; MB28-004890, NHR, 9m, 17mm; ZMBN105132, VIPP, 19 May 2015, 12m, 11mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora, Nuarro and Vamizi Island.

Geographic distribution. Western Indian Ocean. Madagascar (Gosliner *et al.* 2008), Mayotte (Rudman 2009c) and Mozambique.

Remarks. This species appears undescribed. A similar species with three black longitudinal lines is *Phyllidiopsis phiphiensis* Brunckhorst, 1993, however this differs from *Phyllidiopsis* sp. by the presence of black spots on the margin, an absence of radial marginal lines, and white rhinophores.

Genus *Reticulidia* Brunckhorst, 1990

***Reticulidia suzanneae* Valdés & Behrens, 2002**
(Figure 22 E)

Material examined. Two specimens. ZMBN119702, NGF, 24 Feb. 2016, 26m, 39mm; ZMBN105087, PP, 15 May 2015, 22m, 26mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Pemba.

Geographic distribution. Indo-west Pacific. Indonesia (Yonow 2011), Thailand (Valdés & Behrens 2002), India (Remakrishna *et al.* 2010), Comoros Islands, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Family Dendrodorididae O'Donoghue, 1924 (1864)

Genus *Dendrodoris* Ehrenberg, 1831

***Dendrodoris carbunculosa* (Kelaart, 1858)**
(Figure 22 F–G)

Material examined. Two specimens. MB28-005034, 12 Dec. 2015, POC, 17m, TL=15mm, collected by J. Strömvoll; (one specimen not collected, photo only), 12 Nov. 2011, ZRP, 0.5m, 110mm;

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west Pacific, central Pacific and east Pacific. Pacific Costa Rica, Hawaii, Futuna Island, Guam, Japan, Papua New Guinea, Solomon Islands, New Caledonia, Australia, Philippines, Indonesia (Gosliner *et al*. 2008), Sri Lanka (Kelaart 1858b), Red Sea, Seychelles, Réunion Island, Tanzania (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Remarks. This species is characterized by brown, high, multi-compound tubercles on the dorsum and the absence of white spots under the mantle (Fig. 22 G). The specimen illustrated in Fig. 22 F is likely to be a juvenile (15mm), however the colours differ and the tubercles are less developed. Additional molecular studies are needed to confirm if the juvenile is in fact *D. carbunculosa.*

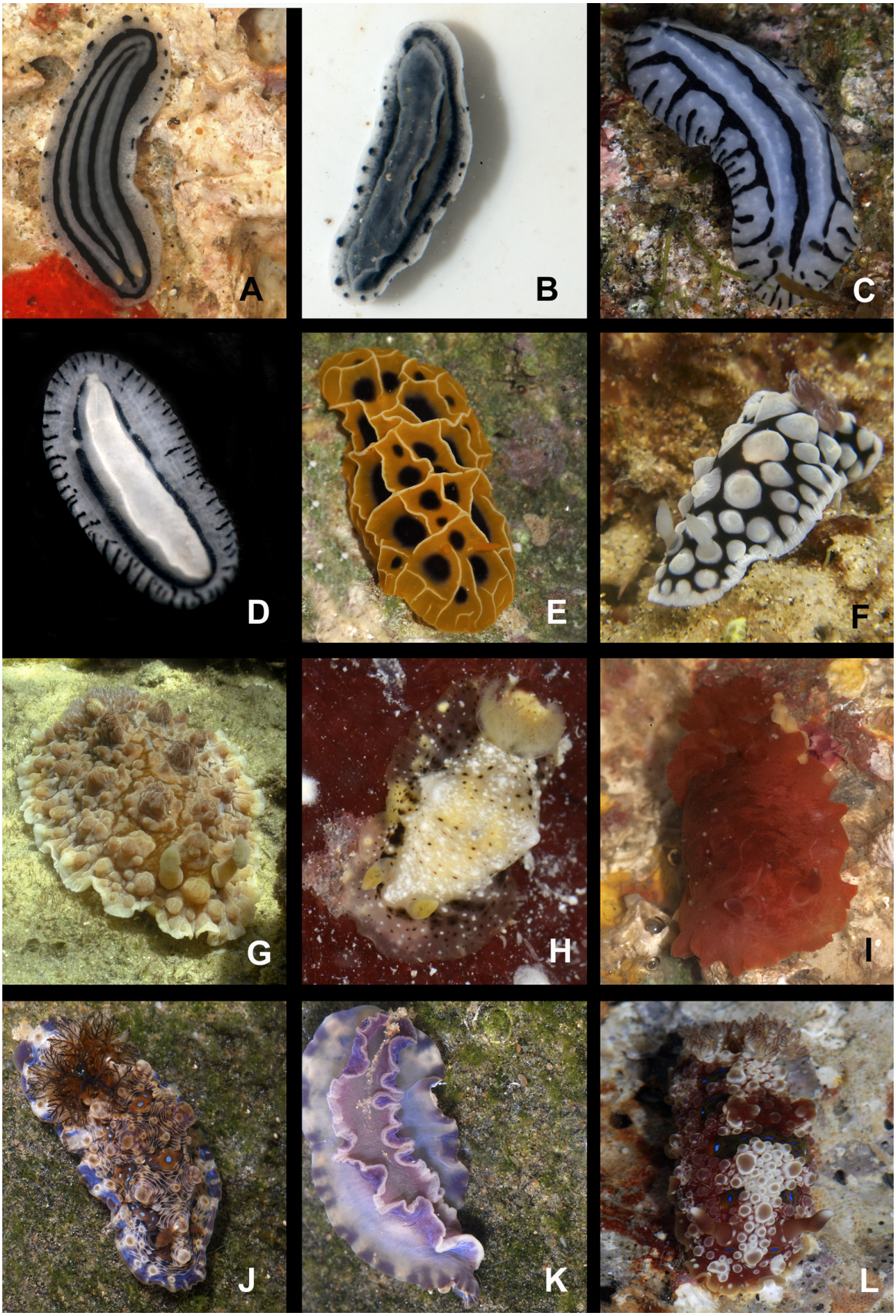

FIGURE 22. A–B, *Phyllidiopsis* cf. *xishaensis* (ZMNB117067), dorsal and ventral view. C–D, *Phyllidiopsis* sp. (MB28-004719). E, *Reticulidia suzanneae* (ZMBN119702). F, *Dendrodoris carbunculosa* (MB28-005034) juvenile. G, *Dendrodoris carbunculosa* (*in situ*). H, *Dendrodoris coronata* (ZMBN105084). I, *Dendrodoris fumata* (MB28-004511). J–K, *Dendrodoris krusensternii* (MB28-004728) dorsal and ventral view. L, *Dendrodoris krusensternii* (MB28-004839).

***Dendrodoris coronata* Kay & Young, 1969**
(Figure 22 H)

Material examined. One specimen. ZMBN105084, VIRW, 14 May 2015, 7m, 46mm.

Habitats. Tropical coral reefs.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii (Kay & Young 1969), Guam (Carlson & Hoff 2003), Palmyra Atoll, Marshall Islands, Palau, Japan, Papua New Guinea, New Caledonia, Australia (Gosliner *et al.* 2008), Réunion (Cadet 2005) and Mozambique.

***Dendrodoris fumata* (Rüppell & Leuckart, 1830)**
(Figure 22 I)

Material examined. One specimen. MB28-004511, ZRP, 21 Feb. 2012, 2m, 39mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008), Hong Kong, Papua New Guinea, Fiji, Australia (Brodie *et al.* 1997), Palau, New Caledonia, Vanuatu, Malaysia (Gosliner *et al*. 2008), Christmas Island (Brodie *et al.* 1997), Gulf of Oman (Fatemi & Attaran-Fariman 2015), Red Sea, Mauritius, Réunion Island (Yonow 2012), Tanzania, Madagascar, South Africa (Gosliner *et al*. 2008) and Mozambique (Macnae 1958).

Remarks. This species is externally similar to *D. nigra*, nevertheless the mantle is broader and wavy (Brodie *et al*. 1997).

***Dendrodoris krusensternii* (Gray, 1850)**
(Figure 22 J–L, 23 A)

Material examined. Four specimens. MHN-YT83, ZRP, 10 Dec. 2011, 2m, 35mm; MB28-004727, PCR, 15 Aug. 2013, 0.5m, 41mm; MB28-004728, PACG, 15 Aug. 2013, 0.5m, 36mm; MB28-004839, POB, 09 May 2014, 18m, 35mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro, Zavora and Paindane.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner 1987), Midway Atoll (Gosliner *et al*. 2008), Japan (Baba 1949), Australia (Angas 1864), Korea, Papua New Guinea, New Caledonia, New Zealand, Philippines, Indonesia, Singapore, Thailand, Réunion Island (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique (Macnae &Kalk 1958; King & Fraser 2014).

Remarks. Two distinguished morphotypes were found in Mozambique and require further investigation. One morphotype has a purple dorsum with elevated tubercles (Fig. 22 J) and a purple foot (Fig. 21K) whereas the second is brown with a white patch on the dorsum (Fig. 22 L) and a brown ventral surface with a yellow margin (Fig. 23 A). According to Valdés & Fahey (2006) it is not clear if *D. krusensternii* is a senior synonym of *Dendrodoris denisoni* (Angas, 1864).

***Dendrodoris nigra* (Stimpson, 1855)**
(Figure 23 B–D)

Material examined. Eleven specimens. MB28-004411, ZRP, 20 Apr. 2010, 1m, 20mm; MB28-004635, ZRP, 14 Oct. 2012, 0.5m, 32mmn; MB28-004694, 12 Jul. 2013, ZRP, 0.5m, 21mm; MHN-YT818, ZRP, 12 Jul. 2013, 0.5m, 20mm; MB28-004697, ZRP, 12 Jun. 2013, 0.5m, 15mm; MB28-004726, PACG, 15 Aug. 2013, 0.5m, 10mm; MB28-004773, VISP, 12 Nov. 2013, 5m, 6mm; MB28-004775, VISP, 11 Dec. 2013, 4m, 20mm; MB28-004949,

ZRP, 23 Dec. 2014, 0.5m, 12mm; UL-YT1554, PACG, 08 May 2015, 0.3m, 21mm; ZMBN105139, VIPP, 19 May 2015, 14mm, 15m.

Habitats. Subtropical tidal reefs, tropical coral reefs and seagrass.

Occurrences. Zavora, Paindane, Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii (Kay & Young 1969), Guam (Carlson & Hoff 2003), Japan (Stimpson 1855), Australia (O'Donoghue 1924; Burn 2006), Thailand (Mehrotra & Scott 2015), India (Apte 2009), Gulf of Oman (Fatemi &Attaran-Fariman 2015), Red Sea (Debelius 1996), South Africa (Gosliner 1987) and Mozambique (Macnae & Kalk 1958).

Remarks. Preliminary molecular analysis (Deneb Ortigosa, pers. communication) suggests that this taxon is a complex of species. Three colour-morphotypes were found: (1) a black dorsum with white spots and bluish foot edge (Fig. 22 B), (2) a black dorsum with yellow submarginal spots (Fig. 22 C), (3) a reddish mantle and foot (Fig. 22 D). All specimens exhibited white-tipped rhinophores.

Dendrodoris tuberculosa (Quoy & Gaimard, 1832)

(Figure 23 E–F)

Material examined. One specimen. MB28-004692, ZRP, 12 Jun. 2013, 0.5m, 80mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Kay & Young 1969), Marshall Islands (Gosliner *et al*. 2008), Japan (Baba 1949), Korea, Papua New Guinea, Australia, Solomon Islands, Philippines, Malaysia, Maldives (Gosliner *et al*. 2008), Thailand (Mehrotra & Scott 2015), India (Apte 2009), British Indian Ocean Territory (Yonow *et al*. 2002), Réunion Island, Red Sea, Tanzania, South Africa (Gosliner *et al.* 2008) and Mozambique.

Remarks. Despite its size, this species is well camouflaged among rocks covered with brown algae. The large white spots under the mantle are diagnostic (Yonow *et al*. 2002).

Genus *Doriopsilla* Bergh, 1880

Doriopsilla sp. 1

(Figure 23 G)

Material examined. One specimen. MB28-004804, ZRP, 15 Feb. 2014, 0.5m, 19mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner *et al*. 2015) and Mozambique.

Remarks. The generic placement of this specimen was based on external morphology and the absence of the radula. Additionally, Gosliner *et al*. (2015) suggest that this is an undescribed species.

? *Doriopsilla* sp. 2

(Figure 23 H)

Material examined. One specimen. ZMBN105124, VIE3, 18 May 2015, 7m, 18mm.

Habitats. Tropical coral reef.

Occurrences. Vamizi Island.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This species was tentatively identified as belonging to the *Doriopsilla* genus, but additional morphological and molecular analyses are needed to confirm its taxonomical status.

FIGURE 23. A, *Dendrodoris krusensternii* (MB28-004839), ventro-lateral view. B–D, *Dendrodoris nigra* (MB28-004635, MHN-YT818 and MB28-004949, respectively). E–F, *Dendrodoris tuberculosa* (MB28-004692), dorsal and ventral view. G, *Doriopsilla* sp. 1 (MB28-004804). H, *Doriopsilla* sp. 2 (ZMBN105124). I–J, *Thecacera pacifica* (MB28-004909 and MB28-004962, respectively). K, *Thecacera* cf. *picta* (MB28-004858). L, *Nembrotha aurea* (MB28-004863).

Superfamily Polyceroidea Alder & Hancock, 1855

Family Polyceridae Alder & Hancock, 1845

Subfamily Polycerinae Alder & Hancock, 1845

Genus *Thecacera* Fleming, 1828

***Thecacera pacifica* (Bergh, 1884)**
(Figure 23 I–J)

Material examined. Three specimens. MHN-YT1349, NKA, 13 Jun. 2014, 19m, 15mm; MB28-004909, NKA, 13 Jun. 2014, 18m, 9mm; MB28-004962, ZSC, 28 Jan. 2015, 21m, 18mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora, Nacala and Nuarro.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, Vanuatu, Philippines, Indonesia (Gosliner *et al*. 2008), Australia (Nimbs *et al.* 2016), Red Sea (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique (Macnae & Kalk 1958 as *T. inhacae*).

Remarks. The two specimens found in northern Mozambique exhibit additional bluish-black stripes posterior to the gill and on the lateral dorsum (Fig. 22 D). The other specimen from the south lacks these stripes, and matches Bergh's description (1883). Additional stripes appear to be merely a colour variation, but further studies are needed to confirm this hypothesis.

***Thecacera* cf. *picta* Baba, 1972**
(Figure 22 K)

Material examined. One specimen. MB28-004858, POJP, 11 May 2014, 17m, 5mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Pomene.

Geographic distribution. Indo-west Pacific. Japan, Philippines, Solomon Islands, Vanuatu, Australia (Gosliner *et al*. 2008), Maldives (Yonow 1994), Tanzania (Gosliner *et al*. 2008), Mozambique (Fraser 2007).

Remarks. This specimen is likely to be a heavily spotted form of *Thecacera picta* Baba, 1972. Another similar species is *Thecacera vittata* Yonow, 1994 that is probably a synonym of *T. picta* (Rudman 2001). Nevertheless an integrative review of the colour variations of *T. picta* still needs to be done.

Subfamily Nembrothinae Burn, 1967

Genus *Nembrotha* Bergh, 1877

***Nembrotha aurea* Pola, Cervera & Gosliner, 2008**
(Figure 23 L)

Material examined. Eight specimens. MB28-004448, ZGWS, 02 Feb. 2012, 22m, 37mm; MB28-004458, ZWH, 05 Feb. 2012, 18m, 43mm, collected by L. Robisson; MB28-004467, ZRP, 07 Feb. 2012, 1m, 18mm, collected by P. Velho; MB28-004479, 11 Feb. 2012, BL, 32m, 50mm, collected by S. Bruck; MB28-004491, 20 Feb. 2012, ZAR, 32m, 39mm; MHN-YT347, 06 May 2012, ZRP, 2m, 28mm; MB28-004863, POB, 12 May 2014, 16m, 21mm; MB28-004912, 13 Jun. 2014, NKA, 20m, 34mm.

Habitats. Subtropical tidal reefs, seagrass, rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora, Barra and Nacala.

Geographic distribution. Western Indian Ocean. Tanzania, Comoros Islands (Pola *et al.* 2008), South Africa (Gosliner 1987; Pola *et al.* 2008) and Mozambique (Pola *et al.* 2008).

***Nembrotha kubaryana* Bergh, 1877**
(Figure 24 A)

Material examined. One specimen. MB28-005087, VISP, 12 Aug. 2013, 2m, 52mm.

Habitats. Tropical coral reef, under rock.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Marshall Islands, Guam (Gosliner *et al*. 2008), Japan, Palau, Papua New Guinea, Indonesia, Philippines (Pola *et al.* 2008), Solomon Islands, Malaysia, Mauritius (Gosliner *et al*. 2008) and Mozambique.

***Nembrotha lineolata* Bergh, 1905**
(Figure 24 B)

Material examined. Nine specimens. MB28-004453, ZWH, 05 Feb. 2012, ZWH, 17m, 47mm; MB28-004525, ZWH, 14 Mar. 2012, 17m, 24mm; MHN-YT405, ZGWS, 02 Jun. 2012, 21m, 38mm; MB28-004639, ZA51, 23 Nov. 2012, 18m, 60mm; MB28-004919, ZWH, 04 Jul. 2014, 15m, 34mm; ZMBN105092, VIPP, 15 May 2015, 6m, 30mm, collected by Y. Tibiriçá and M. Malaquias; ZMBN105148, VIPP, 19 May 2015, 7–10m, 33mm, collected by Y. Tibiriçá and M. Malaquias; ZMBN105565, VIES3, 22 May 2015, 7m, 34mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105581, NCW, 24 May 2015, 25m, 24mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reefs and tropical coral reef.

Occurrences. Zavora, Nuarro, Vamizi Island.

Geographic distribution. Indo-west Pacific. Japan, Palau (Gosliner *et al.* 2008), Papua New Guinea, Philippines, Indonesia (Pola *et al.* 2008), Australia (Willan & Coleman 1984), British Indian Ocean Territory (Yonow *et al*. 2002), Comoros Islands, Tanzania (Pola *et al.* 2008), Seychelles (Debelius 1996), Madagascar (Gosliner *et al.* 2008) and Mozambique.

***Nembrotha livingstonei* Allan, 1933**
(Figure 24 C)

Material examined. Two specimens. MB28-004737, ZRP, 19 Sep. 2013, 1m, 50mm; MB28-005019, ZWH, 04 Aug. 2015, 17m, 17mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Philippines (Pola *et al*. 2008), Australia (Willan & Coleman 1984), Indonesia (Gosliner *et al*. 2008), Mayotte (Deuss 2011) and Mozambique.

Remarks. A specimen (MB28-005019) has been observed feeding on the ascidian *Eudistoma* sp. and collected together with the specimen here identified as *Nembrotha* cf. *yonowae*.

***Nembrotha milleri* Gosliner and Behrens, 1997**
(Figure 24 D)

Material examined. One specimen. MB28-005049, NSS, 21 Apr. 2017, 8m, 39mm.

Habitats. Tropical coral reef crawling on sand.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Japan (Pola *et al*. 2008), Indonesia, Philippines (Gosliner & Behrens 1997), Australia (Pola *et al*. 2008), Tanzania (Debelius & Kuiter 2007) and Mozambique.

FIGURE 24. A, *Nembrotha kubaryana* (MB28-005087). B, *Nembrotha lineolata* (MB28-004525). C, *Nembrotha livingstonei* (MB28-004737). D, *Nembrotha milleri* (MB28-005049). E, *Nembrotha purpureolineata* (MB28-004488). F, *Nembrotha* cf. *yonowae* (MB28-004707). G, *Roboastra gracilis* (MB28-004593). H, *Roboastra luteolineata* (MB28-004846). I, *Tambja affinis* (MB28-004750). J, *Tambja amakusana* (MB28-004497). K, *Tambja morosa* (MB28-004437). L, *Tambja zulu* (MB28-004748).

***Nembrotha purpureolineata* O'Donoghue, 1924**
(Figure 24 E)

Material examined. Five specimens. MB28-004445, ZGWS, 02 Feb. 2012, 17m, 51mm; MHN-YT145, ZWH, 05 Feb. 2012, 17, 57mm; MB28-004488, ZGWN, 19 Feb. 2012, 28m, 71mm, collected by P. Velho; MB28-004489, ZGWN, 19 Feb. 2012, 27m, 62mm, collected by S. Bruck; MB28-004490, ZGWN, 19 Feb. 2012, 27m, 58mm, collected by S. Bruck.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro, Zavora and Paindane.

Geographic distribution. Indo-west Pacific. Australia (Pola *et al.* 2008; Nimbs & Smith 2016), Indonesia (Yonow 2011) and Mozambique (Gosliner *et al.* 2008, 2015).

Remarks. This species has been observed feeding on the ascidian *Clavelina* spp.

***Nembrotha* cf. *yonowae* Goethel & Debelius, 1992**
(Figure 24 F)

Material examined. Eleven specimens. MB28-004421, ZWH, 31 May 2010, 16m, 42mm; MB28-004422, ZWH, 07 Jun. 2010, ZWH, 18m, 25mm; MB28-004424, ZWH, 27 May 2010, 18m, 18mm; MB28-004547, ZRP, 20 May 2012, 2m, 38mm, collected by S. Bruck; MB28-004707, ZRP, 06 Aug. 2013, 0.5m, 16mm; MHN-YT1506, ZWH, 02 Apr. 2015, 15m, 21mm; MB28-004980, ZWH, 03 Apr. 2015, 17m, 16mm; MB28-005003, ZWH, 27 May 2015, 15m, 22mm, collected by M. Andskog; MB28-005004, ZWH, 27 May 2015, 15m, 28mm, collected by M. Andskog; MB28-005020, ZWH; 04 Aug. 2015, 17m, 28mm; MB28-005021, ZWH, 04 Aug. 2015, 17m, 42mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan (Gosliner *et al*. 2008), Papua New Guinea, Philippines (Pola *et al.* 2008), South Africa (Gosliner 1987) and Mozambique.

Remarks. Often found feeding on the ascidian *Eudistoma caeruleum* (Sluiter, 1909), this species is very similar to the description of *N. yonowae*, although it was only based on external morphology and no type material exists (Goethel & Debelius 1992). Since species of the genus *Nembrotha* can be highly variable in colour, it is difficult to confirm this identification. Moreover, Pola *et al*. (2008) note that, so far, there are no clear differences between *N. nigerrima, N. cristata and N. yonowae*. Therefore additional studies are needed to clarify this potential complex.

Genus *Roboastra* Bergh, 1877

***Roboastra* gracilis (Bergh, 1877)**
(Figure 24 G)

Material examined. Eight specimens. MB28-004556, ZRP, 03 Jun. 2012, 2m, 22mm; MB28-004557, ZRP, 03 Jun. 2012, 2m, 18mm, collected by A. Roseblum; MB28-004593, ZJS, 23 Jun. 2012, 8m, 12mm, collected by A. Roseblum; MB28-004762, VISP, 12 Aug. 2013, 2m, 12mm; MB28-004763, VISP, 12 Aug. 2013, 2m, 14mm; MB28-004764, VISP, 12 Aug. 2013, 2m, 13mm; MHN-YT987, VISP, 12 Aug. 2013, 2m, 5mm; MB28-004876, NHR, 29 May 2014, 6m, 19mm.

Habitats. Subtropical tidal reefs, rocky reefs and tropical coral reefs. Often found under rocks.

Occurrences. Zavora, Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii, Marshall Islands, Palau (Pola *et al*. 2005b), Guam (Carlson & Hoff 2003), Japan (Baba 1949), Solomon Islands, Thailand (Debelius 1996), Papua New Guinea, Australia (Pola *et al*. 2005b), Indonesia (Debelius 1996; Yonow 2011), Philippines (Pola *et al*. 2005b), Maldives (Yonow 2012), Réunion Island, Tanzania (Yonow 2012), South Africa (Gosliner 1987) and Mozambique (Gosliner *et al*. 2008).

***Roboastra luteolineata* (Baba, 1936)**
(Figure 24 H)

Material examined. Two specimens. MB28-004801, ZRP, 03 Feb. 2014, 1m, 24mm; MB28-004846, POD, 10 May 2014, 16m, 42mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west Pacific. Japan, New Zealand (Gosliner *et al*. 2008), Papua New Guinea, Australia (Pola *et al*. 2005b), Philippines, Indonesia, Malaysia (Gosliner *et al*. 2008), Maldives, Réunion Island (Yonow 2012), Saudi Arabia (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique (Gosliner *et al*. 2008).

Genus *Tambja* Burn, 1962

***Tambja affinis* (Eliot, 1904)**
(Figure 24 I)

Material examined. One specimen. MB28-004750, PAE, 12 Oct. 2013, 25m, 38mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro and Paindane.

Geographic distribution. Indian Ocean. Thailand, Sri Lanka, Maldives, Red Sea, Sudan, South Africa (Gosliner *et al*. 2008), Comoros Islands, Mayotte, Tanzania (Pola *et al*. 2006) and Mozambique.

***Tambja amakusana* Baba, 1987**
(Figure 24 J)

Material examined. One specimen. MB28-004497, ZRP, 21 Feb. 2012, 2m, 12mm, collected by L. Robisson.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008), Japan (Baba 1987b), Guam (Carlson & Hoff 2003), Vanuatu (Gosliner *et al*. 2008), Australia (Marshall & Willan 1999), Papua New Guinea (Pola *et al.* 2006), Thailand (Mehrotra & Scott 2015), Maldives (Yonow 2012), Kenya (Ponti 2010c) and Mozambique.

***Tambja morosa* (Bergh, 1877)**
(Figure 24 K)

Material examined. Two specimens. MHN-YT58, ZWH, 07 May 2010, 19m, 22mm; MB28-004437, ZRP, 11 Jan. 2012, 2m, 35mm, collected by S. Bruck.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Debelius 1996), Guam (Carlson & Hoff 2003), Taiwan, Vanuatu, New Zealand (Gosliner *et al*. 2008), Japan, Papua New Guinea, Australia, (Pola *et al*. 2006), Philippines (Bergh 1877; Pola *et al*. 2006), Indonesia, Thailand (Gosliner *et al*. 2008), Mauritius (Yonow & Hayward 1991), South Africa (Gosliner 1987), Tanzania (Pola *et al.* 2006) and Mozambique.

***Tambja zulu* Pola, Cervera & Gosliner, 2005**
(Figure 24 L)

Material examined. Two specimens. MB28-004747, PAE, 12 Oct. 2013, 25m, 62mm; MB28-004748, PAE, 12 Oct. 2013, 25m, 68mm.

Habitats. Subtropical rocky reefs.

Occurrences. Paindane and Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner 1987; Pola *et al.* 2005a) and Mozambique (King & Fraser 2014).

Subfamily Triophinae Odhner, 1941

Genus *Kaloplocamus* Bergh, 1880

Kaloplocamus acutus Baba, 1955

(Figure 25 A–B)

Material examined. Three specimens. MB28-004683, ZM, 13 Jun. 2013, 8m, 20mm; MB28-004741, ZA51, 26 Sep. 2013, 10m, 8mm; 1665, NN, 19 Oct. 2016, 12m, 4mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Western Indian Ocean. Madagascar (Gosliner *et al*. 2008) and Mozambique.

Remarks. No clear differences can be seen between the specimens from Mozambique and the original description of *K. acutus* (Baba 1955). Nevertheless, the colour varied slightly between specimens. Valdés & Gosliner (2008) reviewed specimens of *K. acutus* from the Pacific Ocean and in the same year suggested in their field guide that the photographic record of a specimen from Madagascar is likely to represent a different undescribed species (Gosliner *et al*. 2008). One of the specimens (Fig. 25B) found in Mozambique bears the same colour pattern than the specimen from Madagascar and differs from Baba's description in colouration details. In order to be certain that they are the same species, molecular and anatomical analyses comparing both morphotypes are necessary.

Genus *Limacia* O. F. Müller, 1781

Limacia sp.

(Figure 25 C)

Material examined. Three specimens. MB28-004598, ZJS, 26 Jun. 2012, 10m, 7mm, collected by A. Roseblum; MB28-004674, ZJS, 24 May 2013, 12m, 4mm; MHN-YT1125, ZRP, 03 Feb. 2014, 1m, 6mm; MB28-005069, ZRP, 03 Feb. 2014, 1m, 4mm.

Habitats. Subtropical tidal reef and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indian Ocean. Australia, Arabian Sea, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Genus *Plocamopherus* Rüppell & Leuckart, 1828

Plocamopherus ceylonicus (Kelaart, 1858)

(Figure 25 D)

Material examined. One specimen. MB28-004631, BL, 12 Oct. 2012, 4m, 22mm.

Habitats. Subtropical seagrass.

Occurrences. Barra.

Geographic distribution. Indo-west, central Pacific. Hawaii, Hong Kong, Papua New Guinea, Australia, Philippines, Indonesia (Gosliner *et al*. 2008), Sri Lanka (Kelaart 1858a), India (Remakrishna *et al.* 2010), Tanzania (Gosliner *et al*. 2008) and Mozambique.

FIGURE 25. A–B, *Kaloplocamus acutus* (MB28-004683 and MB28-004741, respectively). C, *Limacia* sp. (MB28-004598). D, *Plocamopherus ceylonicus* (MB28-004631). E, *Plocamopherus margaritae* (YTMB28-005088). F, *Plocamopherus* sp. (MB28-004856). G, *Aegires pruvotfolae* (MB28-004537). H, *Aegires villosus* (MB28-004592). I, *Aegires* sp. (MB28-004729). I, *Gymnodoris ceylonica* (MHN-YT1038). K–L, *Gymnodoris citrina* (MB28-004967 and MB28-004830, respectively).

***Plocamopherus margaritae* Vallès & Gosliner, 2006**
(Figure 25 E)

Material examined. Two specimens. MB28-005088, PORA, 07 May 2014, 15m, 14mm; MB28-005089, POD, 11 May 2014, 17m, 11mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west Pacific. Papua New Guinea, Indonesia, Thailand (Gosliner *et al*. 2008), United Arab Emirates, Myanmar (Vallès & Gosliner), Mauritius (Arnim 2014) and Mozambique.

Remarks. Both specimens examined here had an atypical colour patter very similar to a specimen found in Mauritius by Arnim (2014) and identified by T. Gosliner, A. Valdès and N. Yonow as *P. margaritae*. Despite several external similarities between different colour morphotypes (e.g. 3 pairs of lateral appendages, black spots on the dorsum and flattened and fringed oral veil), such variations still need to be confirmed through molecular analyses.

***Plocamopherus* sp.**
(Figure 25 F)

Material examined. One specimen. MB28-004856, POD, 11 May 2014, 17m, 10mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner *et al*. 2008, 2015) and Mozambique.

Remarks. This species appears to be undescribed (Gosliner *et al*. 2008, 2015).

Family Aegiridae P. Fischer, 1883

Genus *Aegires* Lovén, 1844

***Aegires pruvotfolae* Fahey & Gosliner, 2004**
(Figure 25 G)

Material examined. Two specimens. MB28-004537, ZRP, 06 May 2012, 1m, 5mm; ZMBN105115, VIMK, 17 May 2015, 0.5m, 6mm.

Habitats. Subtropical rocky reef and tropical seagrass.

Occurrences. Zavora and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii (Fahey &Gosliner 2004; Gosliner *et al*. 2008), Midway Atoll (Gosliner *et al*. 2008), Palau (Fahey &Gosliner 2004; Gosliner *et al*. 2008), New Caledonia (Pruvot-Fol 1930), Australia, Philippines, Madagascar, Tanzania (Fahey & Gosliner 2004) and Mozambique.

Remarks. This species was originally described as *Aegires citrinus* Pruvot-Fol, 1930 and was renamed by Fahey and Gosliner (2004) as *A. pruvotfolae* to separate from *Aegires citrinus* (Bergh 1875), which was reassigned from *Notodoris* to *Aegires* to maintain the monophyly of the genus *Aegires*. Bouchet (2015a) considers *A. pruvotfolae* as an "unnecessary nom. nov" in the database WoRMS; however, as this species is different from *A. citrinus* we consider *A. pruvotfolae* to be the correct name for the Mozambican specimens.

***Aegires villosus* Farran, 1905**
(Figure 25 H)

Material examined. Four specimens. MB28-004592, ZWH, 23 Jun. 2012, 15m, 8mm; MB28-004638, ZWH, 23 Nov. 2012, 16m, 12mm; MB28-004812, PAE, 04 Apr. 2014, 24m, 6mm. MHN-YT1251, POB, 12 May 2014, 17m, 8mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro, Zavora and Paindane.

Geographic distribution. Indo-West Pacific. Japan (Baba 1955), Papua New Guinea (Fahey & Gosliner 2004), New Caledonia (Ribec 1928), Australia (Nimbs & Smith 2016), Samoa, Philippines, Indonesia, Malaysia, Thailand (Gosliner *et al*. 2008), Arabian Sea (Debelius 1996), Sri Lanka (Farran 1905), Gulf of Oman (Fatemi & Attaran-Fariman 2015), Tanzania (Edmunds 1971) and Mozambique.

***Aegires* sp.**
(Figure 25 I)

Material examined. One specimen. MB28-004729, ZDR, 18 Aug. 2013, 32m, 12mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This species appears to be undescribed. The distinctive blue spots on this specimen are also present in *Aegeris exeches* Fahey & Gosliner, 2004 and *A. punctilucens* (D'Orbigny, 1837). However, the tubercles in *A. exeches* are flat on top and denser. The Mozambican speciemen is darker than *A. punctilucens* and differs by the presence of bifid rhinophores (Fahey & Gosliner 2004).

Family Gymnodorididae Odhner, 1941

Genus *Gymnodoris* Stimpson, 1855

***Gymnodoris ceylonica* (Kelaart, 1858)**
(Figure 25 J)

Material examined. Four specimens. MB28-004413, BL, 25 Nov. 2010, 2m, 35mm; MB28-004429, BL, 17 Nov. 2011, 4m, 30mm; MB28-004430, BL, 17 Nov. 2011, 4m, 30mm; MHN-YT1038, VIAIR, 12 Dec. 2013, 4m, 33mm.

Habitats. Subtropical and tropical seagrass.

Occurrences. Barra, Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. French Polynesia, Marshall Islands, Tonga, Guam, Japan, Solomon Islands (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Taiwan (Huang *et al.* 2015), Sri Lanka (Kelaart 1858), Australia, Thailand (Mehrotra & Scott 2015), India (Apte 2009), Indonesia, Red Sea (Debelius 1996), Réunion Island, Seychelles (Gosliner *et al*. 2008) and Mozambique (Macnae & Kalk 1958).

Remarks. A mating aggregation with several individuals laying eggs was observed in November 2011 during the austral summer. A similar aggregation was previously observed Taiwan (Huang *et al.* 2015).

***Gymnodoris citrina* (Bergh, 1877)**
(Figure 25 K–L)

Material examined. Six specimens. MHN-YT333, ZDTR, 05 May 2012, 1m, 12mm; MB28-004765, VISP, 12 Aug. 2013, 2m, 19mm; MB28-004830, POC, 2 specs., 08 May 2014, 18m, 12 and 15mm; MB28-004967, ZRP, 21 Feb. 2015, 0.5m, 17m; MB28-005028, 20 Jun. 2016, NHR, 0.2m, 24mm.

Habitats. Subtropical tidal reefs, rocky reefs, tropical tidal reefs and coral reefs.

Occurrences. Ponta do Ouro, Zavora, Paindane, Nuarro and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii, Marshall Islands, Samoa (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Japan (Baba 1949), Papua New Guinea, Australia, Philippines, Madagascar (Gosliner *et al*. 2008) and Mozambique (Macnae & Kalk 1958).

Remarks. This species is characterized by the presence of pointed papillae on the velum and a lobed foot (Gosliner *et al*. 2008). The colouration may vary considerably (Yonow 2008). We found morphotypes from orange to white.

***Gymnodoris impudica* (Rüppell & Leuckart, 1830)**
(Figure 26 A)

Material examined. One specimen. ZMBN105086, VIPP, 15 May 2015, 7m, 28mm.

Habitats. Tropical coral reef.

Occurrences. Vamizi Island.

Geographic distribution. Indo-West Pacific. Japan, Indonesia, Philippines (Yonow 2011), Thailand (Mehrotra & Scott 2015), Red Sea, South Africa (Yonow 2011) and Mozambique (King & Fraser 2014).

***Gymnodoris inornata* (Bergh, 1880)**
(Figure 26 B)

Material examined. One specimen. MB28-004799, ZRP, 03 Feb. 2014, 1m, 25mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner *et al*. 2008), Japan (Baba 1949), New Caledonia, Philippines, Indonesia, Red Sea, Tanzania, South Africa (Gosliner *et al*. 2008) and Mozambique (Macnae & Kalk 1958).

***Gymnodoris okinawae* Baba, 1936**
(Figure 26 C)

Material examined. Two specimens. MB28-004519, ZRP, 09 Mar. 2012, 2m, 6mm. MHN-YT1585, ZRP, 17 Jun. 2015, 0.5m, 15mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Kay & Young 1969), Midway Atoll (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Japan (Gosliner 1987), Papua New Guinea, Australia (Nimbs & Smith, 2016), Philippines, Seychelles, Réunion Island (Gosliner *et al*. 2008), Tanzania, South Africa (Gosliner 1987) and Mozambique.

***Gymnodoris* sp. 1**
(Figure 26 D)

Material examined. Two specimens. MB28-004867, POB, 12 May 2014, 16m, 40mm; MB28-005036, POB, 16 Aug. 2014, 18m, 35mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west Pacific. Marshall Islands, Japan, New Caledonia, Australia, Philippines, Tanzania, South Africa and Mozambique (Gosliner *et al*. 2008).

Remarks. This species appears undescribed (Gosliner *et al*. 2008, 2015).

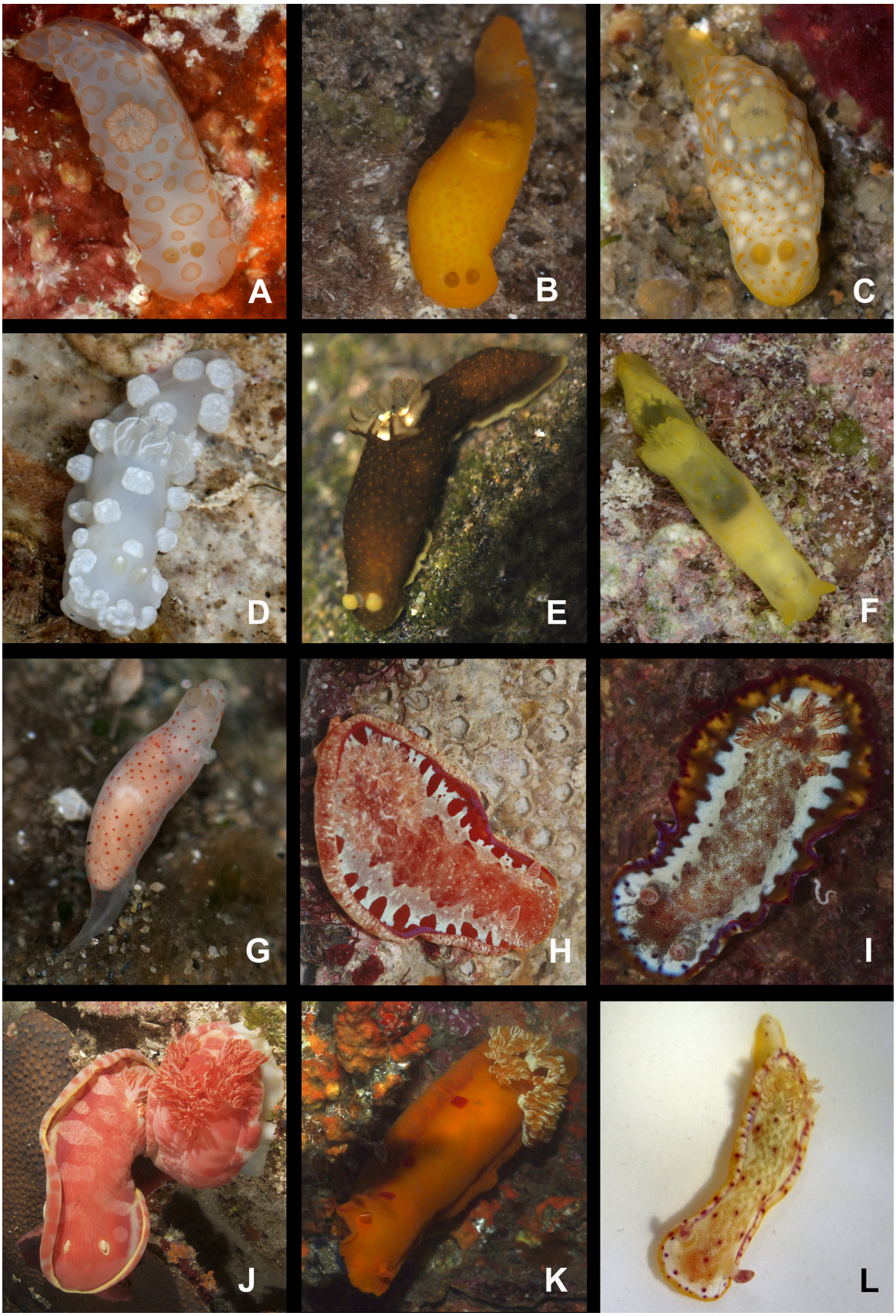

FIGURE 26. A, *Gymnodoris impudica* (ZMBN105086). B, *Gymnodoris inornata* (MB28-004799). C, *Gymnodoris okinawae* (MB28-004519). D, *Gymnodoris* sp. 1 (MB28-004867). E, *Gymnodoris* sp. 2 (MB28-004724). F, *Gymnodoris* sp. 3 (ZMBN105116). G, *Gymnodoris* sp. 4 (MB28-004542). H–L, *Hexabranchus sanguineus* (MB28-004474, MB28-005009, MB28-005044, MB28-005033 and MUZSP111017, respectively).

***Gymnodoris* sp. 2**
(Figure 26 E)

Material examined. One specimen. MB28-004724, PACG, 15 Aug. 2013, 0.5m, 30mm.

Habitats. Subtropical tidal reef.

Occurrences. Paindane.

Geographic distribution. Western Indian Ocean. So far only recorded in Mozambique.

Remarks. This species is distinguished from all others species by the dark brown colouration of the mantle with light yellow spots. The large gill branches form a complete circle around the anus and the foot is lobed. Other records of a *Gymnodoris* with similar colouration could not be found.

***Gymnodoris* sp. 3**
(Figure 26 F)

Material examined. One specimen. ZMBN105116, VIMN, 17 May 2015, 0.2m, 19mm, collected by Y. Tibiriçá and M. Malaquias.

Habitats. Tropical tidal reef.

Occurrences. Vamizi Island.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. The anterior part of the head is ovate. The gill branches are large and form a completed circle around the anus, located on the posterior one third of the body. The mantle is translucent yellow with darker yellow spots. The visceral content and the eye spots are visible through the mantle. The rhinophores are yellow and bear eight lamellae. The anterior end of the foot is lobed. This species appears undescribed and it is externally similar to *Gymnodoris* sp. 4 and *Gymnodoris* sp. 5 in Gosliner *et al*. (2015, pg. 153), but anatomical and molecular analyses are needed to confirm this hypothesis and the correct distribution of this species.

***Gymnodoris* sp. 4**
(Figure 26 G)

Material examined. Two specimens. MB28-004505, ZRP, 21 Feb. 2012, 1m, 4mm, collected by S. Bruck; MB28-004542, ZRP, 06 May 2012, 1m, 6mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Indonesia (Yonow 2011) and Mozambique.

Remarks. The small gill branches form a line, the mantle is translucent white with red spots and the internal organs are visible through the mantle. This species appears to be undescribed.

Family Hexabranchidae Bergh, 1891

Genus *Hexabranchus* Ehrenbergh, 1828

***Hexabranchus sanguineus* Rüppel & Leuckart, 1828**
(Figure 26 H–L)

Material examined. Nine specimens. MUZSP111017, ZA51, 13 May 2010, 12m, 15mm; MB28-004474, ZRP, 07 Feb. 2012, 2m, 67mm, collected by P. Velho; MB28-004509, ZRP, 21 Feb. 2012, 1m, 85mm; MB28-005009, ZA51, 12 Jun. 2015, 11m, 14mm; MB28-005033, POA, 18 Jul. 2016, 39m, 250mm; MB28-005035, POA, 16 Jul. 2014, 40m, 110mm, collected by J. Stromvoll; MB28-005037, POA, 16 Jul. 2014, 40m, 80mm; MB28-005044, NSS, 04 Sep. 2016, 33m, 430mm; ZMBN105585, VIAIR, 25 May 2015, 3m, 30mm.

Habitats. Subtropical seagrass, tidal reefs (juveniles), rocky reefs and tropical seagrass and coral reefs.

Occurrences. Ponta do Ouro, Zavora, Paindane, Barra, Nuarro, Pemba and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. French Polynesia (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), India (Narayanan 1968), Hawaii (Kay & Young 1969), Christmas Island (Rudman 1986a), Maldives, Red Sea (Yonow 2012), Tanzania (Edmunds 1971; Rudman 1986a), Madagascar (Risbec 1929), Kenya, Mayotte, Réunion Island, Mauritius (Yonow 2012), South Africa (Gosliner 1987) and Mozambique (Macnae & Kalk 1958; Valdés 2002b).

Remarks. This species was found in several sizes and colours. Valdés (2002b) reviewed several specimens of *H. sanguineus* from different locations worldwide and concluded that all the morphotypes of *H. sanguineus* from the Indo-Pacific belong to the same species. However, Valdés' (2002b) review was only based on morphological characters and large specimens were not examined (Yonow 2012). Our preliminary molecular analyses reveal that this taxon is likely to represent a complex of species. Further studies are being carried out to clarify the identity of specimens from Mozambique.

Subfamily Onchidoridoidea Gray, 1827

Family Goniodorididae H. Adams & A. Adams, 1854

Genus *Goniodoris* Forbes & Goodsir, 1839

Goniodoris sp.

(Figure 27 A)

Material examined. Two specimens. ZMBN105601, 2 spcs., PP, 28 May 2015, 12m, 6 and 8 mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Tropical coral reefs.

Occurences: Pemba.

Geographic distribution. Indo-west Pacific. Japan, Palau, Malaysia, Papua New Guinea, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Remarks. The reduced mantle margin, a flat tentaculiform oral veil (Thompson & Brown 1984) and a mid-dorsal crest (Baba 1937b) are distinctive for the genus. This species appears undescribed (Gosliner *et al*. 2008; 2015).

Genus *Okenia* Menke, 1830

Okenia virginiae Gosliner, 2004

(Figure 27 B)

Material examined. One specimen. MHN-YT1679, ZRP, 17 Nov. 2016, approx. 0.5m, 7mm, collected and photographed by N. Cullain.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-West Pacific. Australia (Gosliner *et al*. 2008), Gulf of Oman (Debelius 1996), South Africa (Gosliner 2004) and Mozambique.

Okenia sp. 1

(Figure 27 C)

Material examined. One specimen. MB28-004930, ZDTR, 07 Oct. 2014, 0.2m, 8mm.

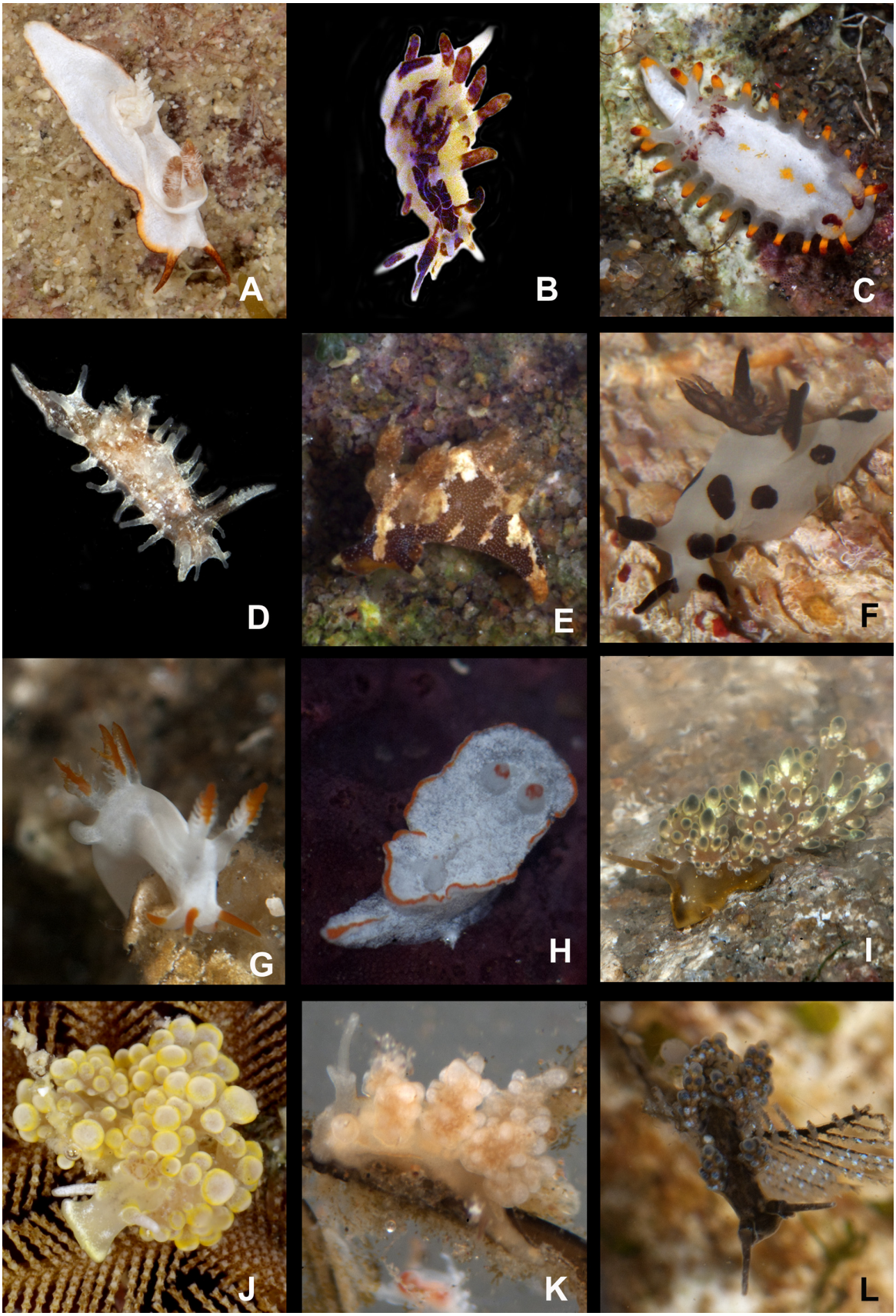

FIGURE 27. A, *Goniodoris* sp. (ZMBN105601). B, *Okenia virginiae* (MHN-YT1679). C, *Okenia* sp. 1 (MB28-004930). D, *Okenia* sp. 2 (MB28-004628). E, *Trapania euryeia* (MB28-004955). F, *Trapania naeva* (MB28-005038). G, *Trapania vitta* (MB28-004816). H, *Diaphorodoris mitsuii* (MB28-004524). I, *Doto racemosa* (MB28-004568). J, *Doto ussi* (ZMBN105080). K, *Doto* sp. 1 (MB28-004623). L, *Doto* sp. 2 (MB28-004991).

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Madagascar, South Africa (Gosliner *et al*. 2015) and Mozambique.

Remarks. This species resembles *Okenia amoenula* (Bergh, 1907) from Cape Province in South Africa, however, the colour and shape of the papillae differ. In the specimens from Mozambique the elongate papillae are translucent at the base, orange at the middle and red at the tip with this colour pattern also present on the tail. In *O. amoenula* the papillae lack a red tip and are longer. Moreover, Mozambican specimens also have triangular yellow dorsal spots, which are absent in Bergh's (1907, pl. XIII, fig.6) illustration of *O. amoenula.* Rather there is a pink line posterior to each rhinophore and another line extending from between the rhinophores terminating at the mid-body. A similar line is present on the tail. Nevertheless the collected specimens, as with *O. amoenula,* exhibit simple dorsal papillae, except for the most posterior, which are bifurcate at the top. Thus, based on external morphology, this species appears undescribed, and additional anatomical and molecular analyses are needed to confirm this.

Okenia sp. 2

(Figure 27 D)

Material examined. Nine specimens. MB28-004625, BL, 12 Oct. 2012, 3m, 7mm; MB28-004626, BL, 12 Oct. 2012, 3m, 8mm; MB28-004627, 12 Oct. 2012, BL, 3m, 9mm; MB28-004628, BL, 12 Oct. 2012, 3m, 8mm; MB28-004629, BL, 12 Oct. 2012, 3m, 10mm; MB28-005000, 4scps., BL, 01 Jun. 2015, 1.5m, 3–5mm.

Habitats. Seagrass in the subtropical region.

Occurrences. Barra.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This species is similar to *Okenia pellucida* Burn, 1967 and *Okenia harastii* Pola, Roldán & Padilla, 2014. However, it externally differs on details of colouration and number of papillae. This species appears undescribed.

Genus *Trapania* Pruvot-Fol, 1931

Trapania euryeia Gosliner & Fahey, 2008

(Figure 27 E)

Material examined. One specimen. MB28-004955, GWS, 10 Jan. 2015, 19m, 6mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Papua New Guinea, Australia, Indonesia, Réunion Island (Gosliner & Fahey 2008) and Mozambique.

Trapania naeva Gosliner & Fahey, 2008

(Figure 27 F)

Material examined. One specimen. MB28-005038, NGF, 21 Jul. 2016, 2m, 12mm.

Habitats. Tropical coral reef.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Japan, Australia (Gosliner & Fahey 2008), Mauritius (Millar 2007), Rodrigues (Eby 2004), Kenya (Besnard 2005) and Mozambique.

Trapania vitta Gosliner & Fahey, 2008

(Figure 27 G)

Material examined. One specimen. MB28-004816, ZRP, 16 Apr. 2014, 0.5m, 4mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Philippines, Indonesia (Gosliner & Fahey 2008), Thailand (Chatcharkorn 2012), Madagascar (Rassat 2016b) and Mozambique.

Family Calycidorididae Roginskaya, 1972

Genus *Diaphorodoris* Iredale & O'Donoghue, 1923

***Diaphorodoris mitsuii* (Baba, 1938)**
(Figure 27 H)

Material examined. One specimen. MB28-004524, ZWH, 14 Mar. 2012, 16m, 4mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan (Baba 1938), Papua New Guinea, Australia, Hong Kong, Korea, Philippines, Indonesia (Gosliner *et al*. 2008), South Africa (1987) and Mozambique.

Suborder Cladobranchia Willan & Morton, 1984

Family Dotidae Gray 1853

Genus *Doto* Oken, 1815

***Doto racemosa* Risbec, 1928**
(Figure 27 I)

Material examined. One specimen. MB28-004568, ZSC, 08 Jun. 2012, 22m, 16mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. New Caledonia (Risbec 1928), Papua New Guinea (Gosliner *et al*. 2008) and Mozambique. Photographic records of a specimen of similar appearance are available from Kenya (Ponti 2010a).

***Doto ussi* Ortea, 1982**
(Figure 27 J)

Material examined. Three specimens. MB28-005041, NHR, 04 Aug. 2016, 5m, 18mm; ZMBN105080, VIRW, 14 May 2015m 7m, 8mm; ZMBN105145, VIPP, 19 May 2015, 7m, 6mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Papua New Guinea, Australia, Philippines, Indonesia (Gosliner *et al*. 2008), Comoros Islands (Ortea 1982), Madagascar (Gosliner *et al*. 2008) and Mozambique.

***Doto* sp. 1**
(Figure 27 K)

Material examined. One specimen. MB28-004623, ZRP, 05 Oct. 2012, 2m, 3mm.

Habitats. Subtropical tidal reef.
Occurrences. Zavora.
Geographic distribution. Western Indian Ocean. Mozambique.
Remarks. This species appears undescribed.

***Doto* sp. 2**
(Figure 27 L)

Material examined. Seven specimens. MB28-004673, ZSC, 13 May 2013, 17m, 6mm; MB28-004734, ZRP, 08 Sep. 2013, 0.5m, 3mm; UL-YT921, ZRP, 19 Sep. 2013, 0.5m, 4mm; MB28-004745, ZRP, 09 Oct. 2013, 0.5m, 4mm; MB28-004990, ZRP, 05 May 2015, 0.3m, 8mm; MB28-004991, ZRP, 05 May 2015, 0.3m, 6mm; MB28-004993, ZRP, 05 May 2015, 0.3m, 5mm; MHN-YT1532, ZRP, 05 May 2015, 0.3m, 5mm.
Habitats. Subtropical tidal reefs and rocky reefs.
Occurrences. Zavora.
Geographic distribution. Indo-West Pacific. Papua New Guinea, Philippines and Indian Ocean (Gosliner *et al*. 2008) including Mozambique.
Remarks. This species appears undescribed (Gosliner *et al*. 2008, 2015).

Genus *Kabeiro* Shipman & Gosliner, 2015

***Kabeiro* sp.**
(Figure 28 A)

Material examined. One specimen. MB28-004550, ZRP, 21 May 2012, 1m, 3mm.
Habitats. Subtropical tidal reef.
Occurrences. Zavora.
Geographic distribution. Western Indian Ocean. No other record could be found, thus so far only recorded to Mozambique.
Remarks. Based on the external morphology this species appears to be an undescribed species in the genus *Kabeiro* with an elongate body and evenly dispersed cerata (Shipman & Gosliner 2015).

Family Madrellidae Preston, 1911

Genus *Madrella* Alder & Hancock, 1864

***Madrella ferruginosa* Alder and Hancok, 1864**
(Figure 28 B)

Material examined. Four specimens. MHN-YT59, ZRP, 04 May 2011, 1m, 8mm; MB28-004732, ZRP, 08 Sep. 2013, 0.5m, 12mm; MB28-004785, ZRP, 18 Dec. 2013, 0.5m, 7mm; MB28-004838, POB, 09 May 2014, 18m, 15mm, collected by J. Strömvoll.
Habitats. Subtropical tidal reefs and rocky reefs.
Occurrences. Ponta do Ouro and Zavora.
Geographic distribution. Indo-west Pacific. Marshall Islands, Japan (Gosliner & Fahey 2011), Australia (Nimbs & Smith 2016), India (Alder & Hancock 1864), Tanzania (Eliot 1904d), Madagascar (Gosliner & Fahey 2011), South Africa (Fraser 2001; Gosliner *et al*. 2008) and Mozambique.

Family Proctonotidae Gray, 1853

Genus *Janolus* Bergh, 1884

***Janolus mirabilis* Baba & Abe, 1970**
(Figure 28 C)

Material examined. One specimen. MB28-004573, ZWH, 13 Jun. 2012, 20m, 3mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Midway Atoll (Gosliner *et al.* 2008), Japan (Baba & Abe 1970), Australia, Tanzania (Gosliner *et al.* 2008) and Mozambique.

***Janolus* sp. 1**
(Figure 28 D)

Material examined. Four specimens. MB28-005030, 3spcs., POB, 17 Jul. 2016, 17m, 18–25mm; MB28-005047, NGF, 21 Oct. 2016, 28m, 20mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro and Nuarro.

Geographic distribution. Indo-west Pacific. Japan, Philippines, Indonesia (Gosliner *et al.* 2008), Mauritius (Armin 2010a), Madagascar (Rassat 2012) and Mozambique.

***Janolus* sp. 2**
(Figure 28 E)

Material examined. One specimen. MB28-005029, POB, 18m, 18mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro.

Geographic distribution. Western Indian Ocean. Mauritius (Armin 2010b) and Mozambique.

Remarks. This species appears to be undescribed. It resembles the illustration of the species identified as *Janolus toyamensis* Baba & Abe, 1970 in Gosliner et al. 2015 (pag. 305, top two photos). However, the specimen examined here and in Gosliner *et al*. (2015) has a long pointed tail, while the type material of *J. toyamensis* has a broad rounded foot with no tail crest (Baba & Abe 1970). Moreover this specimen lacks the dark brown spots on the foot cited in the first description of *J. toyamensis* and has a subapical blue ring in the cerata and a blue edge on the tail, which is not mentioned by Baba & Abe (1970).

Infraorder Arminida Odhner, 1934

Superfamily Euarminoidea Iredale & O'Donoghue, 1923

Family Arminidae Iredale & O'Donoghue, 1923

Genus *Armina* Rafinesque, 1814

***Armina* sp. 1**
(Figure 28 F)

Material examined. One specimen. MB28-004743, BL, 30 Sep. 2013, 2m, TL=55mm (preserved).

Habitats. Seagrass in the subtropical region.

Occurrences. Barra.

Geographic distribution. Indo-west Pacific. Only recorded from Indonesia (Gosliner *et al*. 2008) and Mozambique. A photographic record of a specimen potentially from this taxon exists from South Africa (Zsilavecs 2006).

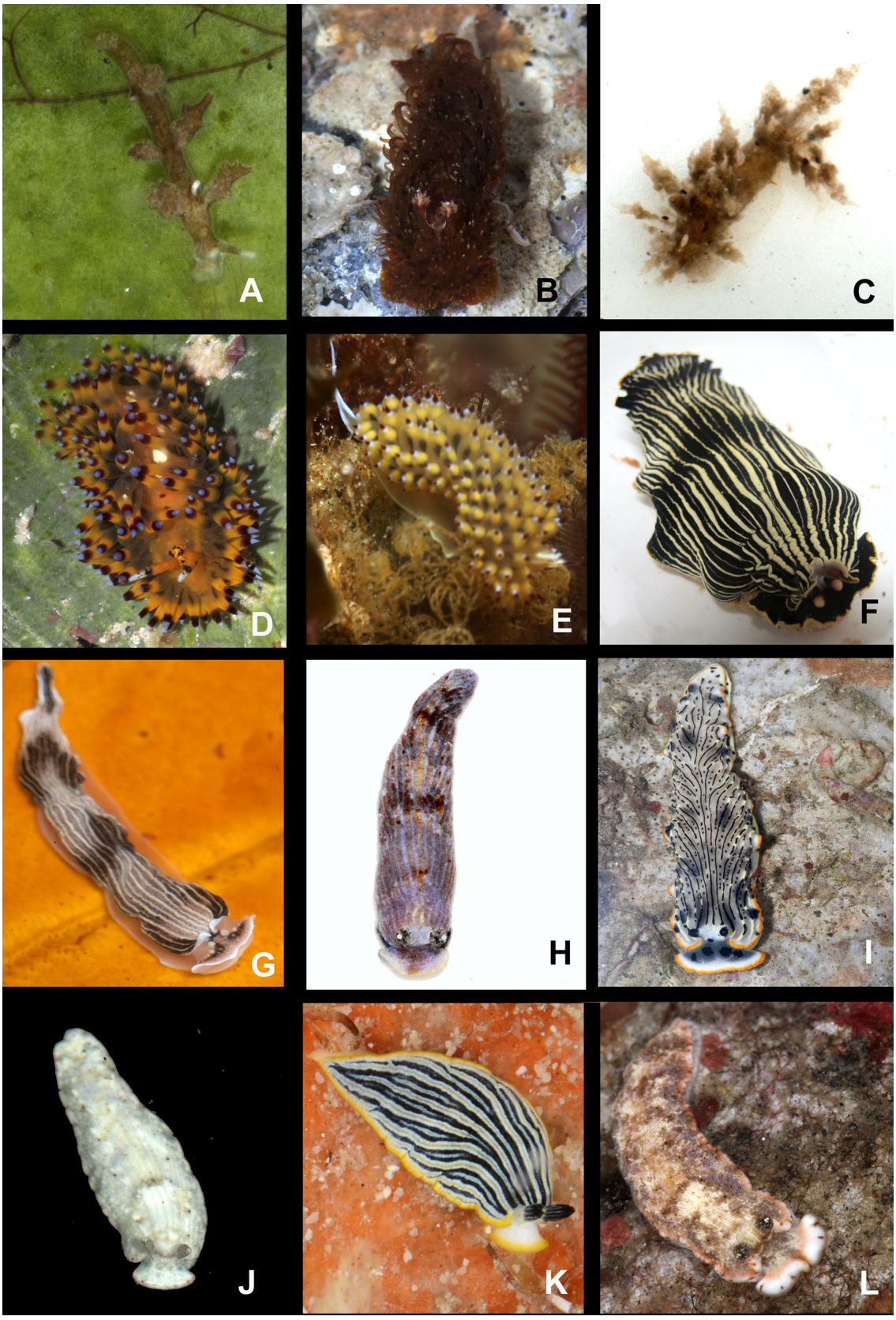

FIGURE 28. A, *Kabeiro* sp. (MB28-004550). B, *Madrella ferruginosa* (MB28-004838). C, *Janolus mirabilis* (MB28-004573). D, *Janolus* sp. 1 (MB28-005047). E, *Janolus* sp. 2 (MB28-005030). F, *Armina* sp. (MB28-004743). G, *Armina* sp. 2 (MB28-004787). H, *Dermatobranchus* cf. *earlei* (MB28-004420). I, *Dermatobranchus* cf. *gonatophorus* (MB28-004827). J, *Dermatobranchus* cf. *rodmani* (MB28-004866). K, *Dermatobranchus* sp. 1 (ZMBN105608). L, *Dermatobranchus* sp. 2 (MB28-004682).

***Armina* sp. 2**
(Figure 28 G)

Material examined. One specimen. MB28-004787, BL, 22 Dec. 2013, 1m, 10mm.
Habitats. Seagrass in the subtropical region.
Occurrences. Barra.
Geographic distribution. Indo-west Pacific. Australia (Debelius 1996) and Mozambique.

Genus *Dermatobranchus* van Hasselt, 1824

Remarks. There are many cryptic species of *Dermatobranchus* (Gosliner & Fahey 2011) including several that are undescribed (Gosliner *et al*. 2015). Therefore, species here are tentatively identified; additional material and further anatomical and molecular analyses are needed in order to confirm these species.

***Dermatobranchus* cf. *earlei* Gosliner & Fahey, 2011**
(Figure 28 H)

Material examined. One specimen. MB28-004420, ZA51, 17 Jun. 2010, 10m, 11mm.
Habitats. Subtropical rocky reef.
Occurrences. Zavora.
Geographic distribution. Indian Ocean. Oman (Gosliner & Fahey 2011) and Mozambique.

***Dermatobranchus* cf. *gonatophorus* van Hasselt, 1824**
(Figure 28 I)

Material examined. One specimen. MB28-004827, POA, 08 May 2014, 41m, 52mm.
Habitats. Subtropical rocky reef.
Occurrences. Ponta do Ouro.
Geographic distribution. Indo-west Pacific.

***Dermatobranchus* cf. *rodmani* Gosliner & Fahey, 2011**
(Figure 28 J)

Material examined. Four specimens. MHN-YT15, ZA51, 17 Jun. 2010, 10m, 11mm; MB28-004407, ZWH, 28 May 2010, 15m, 15mm; MB28-004408, ZWH, 01 Sep. 2010, 15m, 6mm; MB28-004866, POB, 12 May 2014, 15m, 11mm.
Habitats. Subtropical rocky reefs.
Occurences: Ponta do Ouro and Zavora.
Geographic distribution. Indo-west Pacific. Papua New Guinea, Malaysia, Madagascar (Gosliner & Fahey 2011) and Mozambique.

***Dermatobranchus* sp. 1**
(Figure 28 K)

Material examined. Seven specimens. ZMBN105608, 7 spcs., PPSA, 28 may 2015, 15–22m, 6–12mm, collected by Y. Tibiriçá & M. Malaquias.
Habitats. Tropical coral reef.
Occurrences. Pemba.

Geographic distribution. Indo-west Pacific. Philippines (Gosliner *et al*. 2015) and Mozambique.

Remarks. This undescribed species is externally similar to *Dermatobranchus* sp. 11 in Gosliner *et al*. (2015, pag. 303) and is likely to represent the first record to the Indian Ocean. Nevertheless, the specimens from Mozambique lack the yellow line on the rhinophores and the dorsal lines are ticker. Another similar species is *Demartobranchus albus* (Eliot, 1904) but the specimens from Mozambique lack the prominent orange ridges typical of *D. albus*.

***Dermatobranchus* sp. 2**
(Figure 28 L)

Material examined. One specimen. MB28-004682, ZA51, 12 Jun. 2015, 13m, 18mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This specimen has some similarities to *Dermatobranchus semilunus* Gosliner & Fahey, 2011, however the oral veil has a distinctive median notch, which is not mentioned to *D. semilunus*. Another similar species is *Dermatobranchus phyllodes* Gosliner & Fahey, 2011 which does have a clear median notch, but is paler in colour and presents a much more prominent diagonal ridges (Gosliner & Fahey 2011).

***Dermatobranchus* sp. 3**
(Figure 29 A)

Material examined. One specimen. MB28-004590, ZDRS, 21 Jun. 2012, 30m, 8mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

***Dermatobranchus* sp. 4**
(Figure 29 B)

Material examined. Three specimens. MB28-004410, ZRP, 17 Jun. 2011, 1m, 8mm; MB28-004468, ZRP, 07 Feb. 2012, 2m, 10mm; MB28-004604, ZRP, 23 Jul. 2012, 1m, 9mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner 1987) and Mozambique.

***Dermatobranchus* sp. 5**
(Figure 29 C)

Material examined. One specimen. MB28-004409, ZY, 30 Aug. 2010, 35m, 5mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Infraorder Dendronotida Odhner, 1934

Family Tritoniidae Lamarck, 1809

Genus *Marionia* Vayssière, 1977

***Marionia arborescens* Bergh, 1890**
(Figure 29 D)

Material examined. Six specimens. MHN-YT278b, ZRP, 21 Feb. 2012, 2m, 18mm; MB28-004512, ZRP, 21 Feb. 2012, 2m, 20mm; MB28-004513, 21 Feb. 2012, 2m; MB28-004514, ZRP, 21 Feb. 2012, 2m, 36mm; MB28-004788, ZRP, 05 Jan. 2014, 0.3m, 44mm; MB28-005027, NHR, 25 May 2016, 8m, 38mm.

Habitats. Subtropical tidal reefs and tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west Pacific. Philippines, Indonesia, Tanzania, South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. Active at night on soft corals.

***Marionia elongoreticulata* Smith & Gosliner, 2007**
(Figure 29 E)

Material examined. Three specimens. MB28-005025, NHR, 24 May 2016, 7m, 53mm; MB28-005026, NHR, 25 May 2016, 7m, 50mm; ZMBN105586, VISN, 25 May 2915, 3m, 42mm.

Habitats. Tropical coral reefs.

Occurrences. Nuarro and Vamizi Island.

Geographic distribution. Indo-west Pacific. Philippines, Indonesia (Smith & Gosliner 2005), Mayotte (Gildas 2008) and Mozambique.

***Marionia levis* Eliot, 1904**
(Figure 29 F)

Material examined. One specimen. MB28-004895, NKA, 07 Jun. 2016, 10m, 39mm.

Habitats. Tropical coral reef.

Occurrences. Nacala.

Geographic distribution. Indo-west Pacific. Philippines, Red Sea, Comoros Islands, Madagascar, Mauritius, Kenya, Tanzania (Gosliner *et al*. 2008) and Mozambique.

***Marionia rubra* (Rüppell & Leuckart, 1828)**
(Figure 29 G)

Material examined. One specimen. ZMBN105607, PP, 28 May 2015, 12m, 110mm.

Habitats. Tropical coral reef.

Occurrences. Pemba.

Geographic distribution. Indo-west Pacific. Japan, Philippines, Australia (Gosliner *et al*. 2008), Red Sea (Debelius 1996), Tanzania (Gosliner *et al*. 2008) and Mozambique.

***Marionia* sp.**
(Figure 29 H)

Material examined. One specimen. MB28-004784, ZRP, 18 Dec. 2013, 0.5m, 46mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner *et al*. 2008, 2015) and Mozambique.

FIGURE 29. A, *Dermatobranchus* sp. 3 (MB28-004590). B, *Dermatobranchus* sp. 4 (MB28-004604). C, *Dermatobranchus* sp. 5 (MB28-004409). D, *Marionia arborescens* (MB28-004514). E, *Marionia elongoreticulata* (MB28-005026). F, *Marionia levis* (MB28-004895). G, *Marionia rubra* (ZMBN105607). H, *Marionia* sp. (MB28-004784). I–J, *Tritoniopsis elegans* (MB28-004510 and MB28-004691, respectively). K, *Bornella anguilla* (MB28-004426). L, *Bornella stellifera* (MB28-004958).

Genus *Tritoniopsis* Eliot, 1905

***Tritoniopsis elegans* Audouin, 1826**
(Figure 29 I–J)

Material examined. Seven specimens. MB28-004506, ZRP, 21 Feb. 2012, 2m, 27mm; MB28-004677, ZRP, 25 May 2013, 0.5m, 44mm; MB28-004691, ZRP, 12 Jul. 2013, 0.5m, 45mm; MHN-YT904, ZRP, 08 Sep. 2013, 0.5m, 45mm; MB28-004965, ZRP, 06 Feb. 2015, 0.5m, 50mm; MB28-005017, ZRP, 04 Aug. 2015, 1m, 42mm; MB28-004510, ZRP, 21 Feb. 2012, 1m, 33mm.

Habitats. Subtropical tidal reef.

Occurrencces. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Philippines (Gosliner *et al*. 2008), Indonesia (Yonow 2011), Thailand (Gosliner *et al*. 2008), Australia, Red Sea (Audouin 1826), Kenya, South Africa (Gosliner *et al*. 2008) and Mozambique.

Remarks. This species appears to be variable in colour (29 I–J). Two morphotypes were found: morphotype 1 which is completely white with longitudinal opaque white lines (Fig. 29 I) and morphotype 2 which has a reticulate pattern of white and orange on the dorsum (Fig. 29 J). Additional studies are needed to verify if they are the same species.

Family Bornellidae Bergh, 1874

Genus *Bornella* Gray, 1850

***Bornella anguilla* Johnson, 1984**
(Figure 29 K)

Material examined. Two specimens. MB28-004426, ZGWS, 10 Nov. 2011, 20m, 68mm; MB28-004613, ZA51, 22 Aug. 2012, 12m, 74mm, collected by J. Bergman.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Marshall Islands (Debelius 1996; Pola *et al*. 2009), Guam (Carlson & Hoff 2003), Fiji, Vanuatu (Gosliner *et al*. 2008), Japan, Papua New Guinea, Malaysia, Australia, Philippines (Pola *et al*. 2009), Indonesia (Debelius 1996), Thailand, Myanmar, Madagascar, Réunion Island (Gosliner *et al*. 2008), Mauritius (Debelius 1996), Madagascar (Pola *et al*. 2009), South Africa (Gosliner 1987) and Mozambique (King & Fraser 2014).

***Bornella stellifera* (A. Adams & Reeve [in A. Adams], 1848)**
(Figure 29 L)

Material examined. One specimen. MB28-004958, ZSC, 28 Jan. 2015, 22m, 28mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii (Pola *et al*. 2009), American Samoa (Gosliner *et al*. 2008), Japan (Baba 1949), Guam (Carlson & Hoff 2003), Fiji, Papua New Guinea (Pola *et al*. 2009), New Caledonia, Taiwan, Indonesia (Gosliner *et al.* 2008), Philippines, Australia (Debelius 1996; Pola *et al*. 2009), Malaysia, Thailand, India, Madagascar (Pola *et al*. 2009), South Africa (Gosliner 1987) and Mozambique.

***Bornella valdae* Pola, Rudman & Gosliner, 2009**
(Figure 30 A)

Material examined. Two specimens. MB28-004695, ZAR, 17 Jul. 2013, 30m, 60mm; MHN-YT824, ZY, 21 Jul. 2013, 30m, 45mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro, Zavora and Paindane.

Geographic distribution. Western Indian Ocean. South Africa (Pola *et al.* 2009) and Mozambique (King & Fraser 2014).

Family Scyllaeidae Alder & Hancock, 1855

Genus *Crosslandia* Eliot, 1902

***Crosslandia* sp.**
(Figure 30 B)

Material examined. One specimen. MB28-004406, ZWH, 07 May 2010, 15m, 20mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indian Ocean. Red Sea (Gosliner *et al*. 2015) and Mozambique.

Remarks: This species ressembles *Crosslandia viridis* Eliot, 1902 but differs from the original description in colouration and shape of the parapodial lobes.

Genus *Notobryon* Odhner, 1936

***Notobryon wardi* Odhner, 1936**
(Figure 30 C)

Material examined. Five specimens. MB28-004666, MB28-004668, MB28-004669, MHN-YT758, ZMBN117036, ZRS, 26 Apr. 2013, 28m, 24–45mm.

Habitats. Specimens were found on a wreck.

Occurrences. Zavora.

Geographic distribution. Indo-west and central Pacific. Hawaii, Marshall Islands, Papua New Guinea, Australia, Philippines (Pola *et al*. 2012), Kenya (Faveri 2009b) and Mozambique.

Remarks. The specimens were observed once in a large mating aggregation on a recently sunk wreck, all were gone after two weeks.

Genus *Scyllaea* Linnaeus, 1758

***Scyllaea fulva* Quoy & Gaimard, 1824**
(Figure 30 D)

Material examined. Three specimens. MB28-004431, BL, 17 Nov. 2011, 4m, 24mm; MB28-004755, PAQ, 03 Dec. 2013, 1m, 13mm. MHN-YT959, PAN, 03 Dec. 2013, 1m, 12mm.

Habitats. Seagrass in the subtropical region and on aquaculture fishing net in the tropical region.

Occurrences. Barra and Pemba.

Geographic distribution. Indo-west Pacific. Japan (Baba 1949), Papua New Guinea, Philippines (Pola *et al.* 2012), Réunion (Cadet 2012) and Mozambique.

Remarks. This species was previously synonymized as *Schyllaea pelagica* Linnaeus, 1758, however, recent

molecular studies demonstrated that Indo-Pacific animals are genetically distinct from *S. pelagica* and therefore the name *S. fulva* was re-erected (Pola *et al*. 2012). There are records of *S. fulva* from the Mediterranean (Petrusek 2002; Yokes 2002), but, as mentioned by Pola *et al*. (2012), further studies are needed to confirm if the Mediterranean specimens are *S. fulva* or a different species.

Family Tethydidae Rafinesque, 1815

Genus *Melibe* Rang, 1829

***Melibe engeli* Risbec, 1937**
(Figure 30 E)

Material examined. Seven specimens. MB28-004649, MB28-004650, MHN-YT729, MB28-004651, MB28-004652, MB28-004653, MB28-004654, BL, 16 Dec. 2012, 2m, 75–100mm.

Habitats. Subtropical seagrass.

Occurrences. Barra.

Geographic distribution. Indo-west, central Pacific. Hawaii (Gosliner & Smith 2003), New Caledonia (Risbec 1937), Japan, Philippines (Gosliner & Smith 2003), Red Sea (Burghardt &Wägele 2014) and Mozambique.

Remarks. Burghardt & Wägele (2014) followed the growth of *M. engeli* in a controlled environment noticing changes in the cerata shape and colouration. The specimens examined here are identical to the adult morphotype in Burghardt & Wägele (2014). This is the first record of this species in the western Indian Ocean.

***Melibe papillosa* (de Filippi, 1867)**
(Figure 30 F)

Material examined. One specimen. MB28-004725, PACG, 15 Aug. 2013, 0.5m, 48mm.

Habitats. Subtropical tidal reef.

Occurrences. Paindane.

Geographic distribution. Indo-west Pacific. Japan, Okinawa (Gosliner *et al.* 2003), Indonesia (Debelius 1996) and Mozambique. Additionally, there is photography record of a similar specimen from Kenya (Ponti 2012).

***Melibe viridis* (Kelaart, 1858)**
(Figure 30 G)

Material examined. Five specimens. MB28-004481, MB28-004482, MHN-YT207, 11 Feb. 2012, BL, 3m, all approx. 80mm; MB28-004517, BL, 29 Feb. 2012, 3m, 75mm; MB28-004518, BL, 29 Feb. 2012, 3m, 50mm, collected by S. Bruck.

Habitats. Seagrass in the subtropical region.

Occurrences. Barra.

Geographic distribution. Indo-west Pacific. Japan (Baba 1949), Australia (Gosliner *et al*. 2008), Philippines (Gosliner & Smith 2003), Tanzania (Eliot 1902) and Mozambique (Gosliner & Smith 2003; Gosliner & Pola 2012).

Family Lomanotidae Bergh, 1890

Genus *Lomanotus* Vérany, 1844

***Lomanotus* sp.**
(Figure 30 H)

Material examined. Three specimens. MB28-004706, MB28-004708 & MHN-YT849, ZRP, 06 Aug. 2013, 0.5m, 5mm and 6mm, respectively.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Philippines (Gosliner *et al*. 2015) and Mozambique.

Remarks. First record for the Indian Ocean. Found on the stinging hydroid *Macrorhynchia* sp.

Infraorder Aeolidida Odhner, 1934

Superfamily Flabellinoidea Bergh, 1889

Family Flabellinidae Bergh, 1892

Genus *Flabellina* Gray, 1833

***Flabellina bicolor* (Kelaart, 1858)**
(Figure 30 I)

Material examined. Ten specimens. MHN-YT30, ZA51, 16 Mar. 2010, 14m, 12mm; MB28-004465, ZRP, 06. Feb. 2012, 1m, 10mm, collected by L. Robinson; MB28-004495, MB28-004496 & MB28-004498, MB28-004499, ZRP, 21 Feb. 2012, 2m, 5–8mm, collected by L. Robinson & S. Bruck; ZMBN117044, ZRP, 06 Aug. 2013, 0.5m, 4mm; ZMBN117051, ZRP, 18 Dec. 2013, 0.5m, 12mm; ZMBN117057, ZRP, 17 Mar. 2014, 0.5m, 6mm; MB28-004825, POA, 07 May 2014, 15m, 10mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, Korea, Hong Kong (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Papua New Guinea, Australia, Philippines, Malaysia (Gosliner *et al*. 2008), Thailand (Mehrotra & Scott 2015), India (Apte 2009), British Indian Ocean Territory (Yonow *et al*. 2002), Seychelles, Tanzania, Madagascar, South Africa (Gosliner *et al*. 2008) and Mozambique.

***Flabellina bilas* Gosliner & Willan, 1991**
(Figure 30 J)

Material examined. One specimen. ZMBN105571, VINR, 24 May 2015, 15m, 18mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Tropical coral reef.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Marshall Islands (Debelius 1996), Papua New Guinea (Gosliner & Willan 1991), Philippines, Indonesia (Gosliner *et al*. 2008), Red Sea (Debelius 1996), Madagascar, Tanzania (Gosliner *et al*. 2008) and Mozambique.

***Flabellina exoptata* Gosliner & Willan, 1991**
(Figure 30 K)

Material examined. One specimen. MB28-004981, ZA51, 24 Apr. 2015, 12m, 14mm, collected by M. Andskog.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

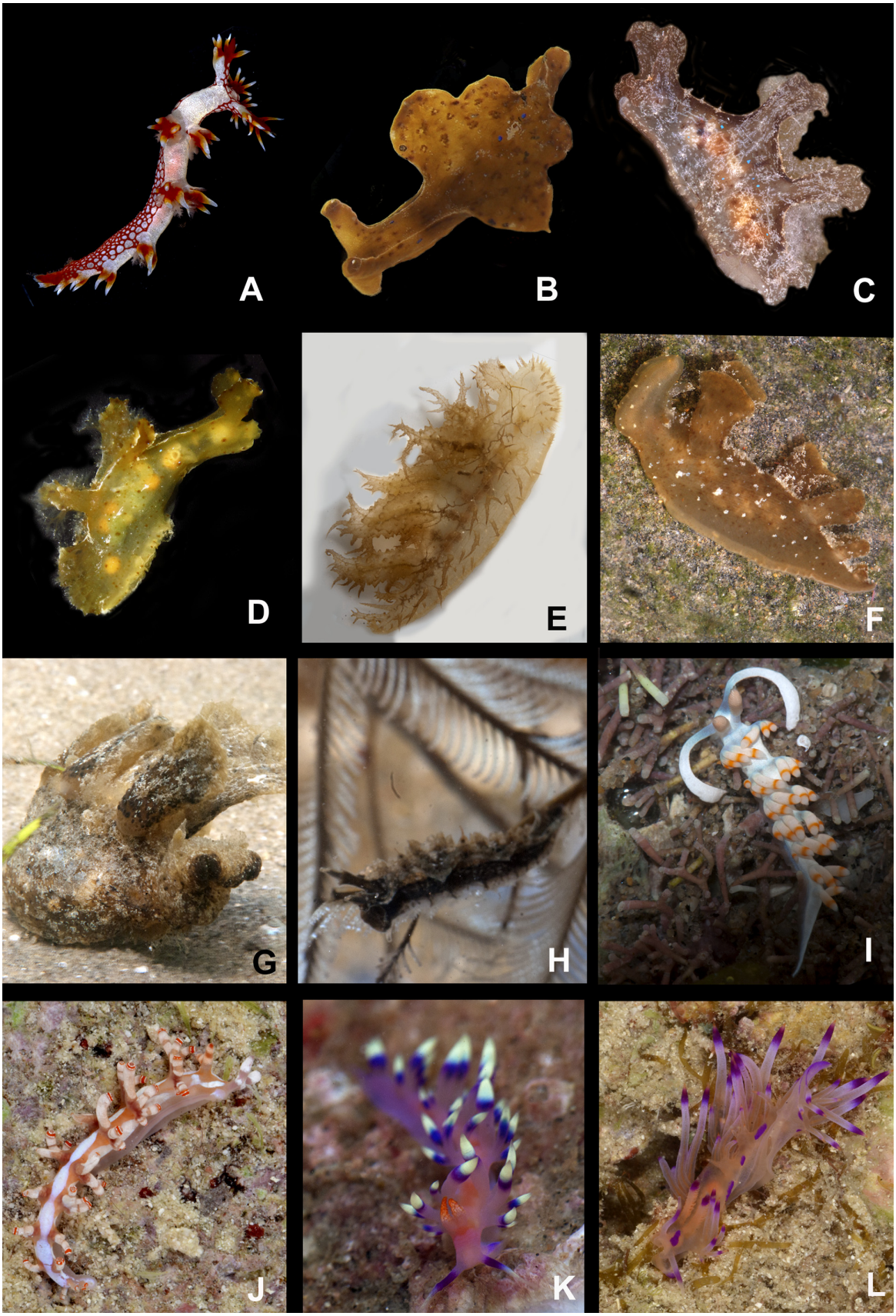

FIGURE 30. A, *Bornella valdae* (MB28-004695). B, *Crosslandia* sp. (MB28-004406). C, *Notobryon wardi* (MB28-004668). D, *Scyllaea fulva* (MB28-004755). E, *Melibe engeli* (MB28-004654). F, *Melibe papillosa* (MB28-004725). G, *Melibe viridis* (MB28-004517). H, *Lomanotus* sp. 1 (MB28-004708). I, *Flabellina bicolor* (MB28-004465). J, *Flabellina bilas (*ZMBN105571). K, *Flabellina exoptata* (MB28-004981). L, *Flabellina rubrolineata* (ZMBN105609).

Geographic distribution. Indo-west, central Pacific. Hawaii, Guam, Japan (Gosliner & Willan 1991), Philippines, Indonesia, (Debelius 1996), India (Remakrishna *et al.* 2010), Thailand (Mehrotra & Scott 2015), Christmas Island, Seychelles, Réunion Island, South Africa (Gosliner *et al*. 2008) and Mozambique.

Flabellina rubrolineata O'Donoghue 1929

(Figure 30 L)

Material examined. Three specimens. MB28-004403, ZSC, 27 Jan. 2011, 18m, 11mm; ZMBN105609, 2 spcs., PP, 28 May 2015, 12m, 43 and 45mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reef.

Occurrences. Paindane, Barra and Vilanculos.

Geographic distribution. Indo-west, central Pacific. Also recorded in the Mediterranean (Gosliner *et al*. 2008). Hawaii, Japan, Fiji, Papua New Guinea (Gosliner *et al*. 2008), Australia (Debelius 1996; Burn 2006), Philippines, Malaysia (Gosliner *et al*. 2008), Indonesia (Debelius 1996), Thailand (Mehrotra & Scott 2015), Red Sea, Seychelles, South Africa (Gosliner *et al*. 2008) and Mozambique (King & Fraser 2014).

Superfamily Fionoidea Gray, 1857

Family Fionidae Gray, 1857

Genus *Cuthona* Alder & Hancock, 1855

Remarks. A phylogenetic review of the aeolid family Tergipedidae by Cella *et al.* (2016) found that this family was not monophyletic. In order to keep the monophyly of the group, the authors established a new classification uniting the Tergipedidae, Eubranchidae and Calmidae under the older family name Fionidae. Additionally, they re-classified many species to recover the phylogeny of the genera within this family. For instance, several species that before were classified as *Cuthona*, including many undescribed species, were found to be monophyletic within all the members of *Tenellia* and thus, transferred to the genus *Tenellia*. It is likely, therefore, that some of the species listed here as *Cuthona* are actually *Tenellia*.

Cuthona cf. *kanga* (Edmunds, 1970)

(Figures 31 A–B)

Material examined. Four specimens. MB28-004622, ZDRS, 23 Sep. 2012, 30m, 4mm; MHN-YT1522, ZRP, 06 May 2015, 0.3m, 12mm. MB28-004997 & MB28-004999, ZRP, 06 May 2015, 0.3m, 10mm.

Habitats. Subtropical tidal reefs and rocky reefs, often on hydroids.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Australia, Indonesia (Debelius 1996), Tanzania (Edmunds 1970), South Africa (Debelius 1996) and Mozambique.

Remarks. *Cuthona kanga* was described based on material from Tanzania (Edmunds 1970). In Edmunds' (1970) description the species has a bluish-white band across the head, the oral tentacles are gold or orange-yellow at the base and whitish-cream posteriorly. In the specimens examined by us the colour of the oral tentacle, rhinophores and cerata varied. Two morphotypes were collected together indicating that they are likely to belong to the same species (Fig. 31 A–B). However, in Gosliner *et al.* (2015) they are cited as different species. Thus, additional integrative analyses are needed to clarify if *C. kanga* is a highly variable species or if it represents a species complex.

FIGURE 31. A–B, *Cuthona kanga* (MB28-004999 and MHN-YT1522, respectively). C, *Cuthona* sp. 1 (MB28-004601). D, *Cuthona* sp. 2 (MB28-004844). E, *Cuthona* sp. 3 (MB28-004935). F, *Cuthona* sp. 4 (MB28-005048). G, *Eubranchus* sp. 1 (MB28-004595). H, *Eubranchus* sp. 2 (MB28-005090). I, *Fiona pinnata* (MB28-004484). J, *Tenellia acinosa* (MB28-004776). K, *Tenellia lugubris* (MB28-004893). L, *Tenellia melanobrachia* (MB28-004945).

***Cuthona* sp. 1**
(Figure 31 C)

Material examined. One specimen. MB28-004601, ZDRS, 28 Jun. 2012, 28m, 3mm.

Habitats. Subtropical rocky reef, on hydroid.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. So far only recorded to Mozambique.

Remarks. This species appears undescribed. Further studies are needed to confirm the generic placement of this species.

***Cuthona* sp. 2**
(Figure 31 D)

Material examined. One specimen. MB28-004844, POB, 09 May 2014, 18m, 3mm.

Habitats. Subtropical rocky reef, on hydroid.

Occurrences. Ponta do Ouro.

Geographic distribution. Western Indian Ocean. South Africa (Gosliner 1987) and Mozambique.

***Cuthona* sp. 3**
(Figure 31 E)

Material examined. One specimen. MB28-004935, ZRP, 10 Oct. 2014, 2m, 5mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Mozambique and potentially Phillipines.

Remarks. This species appears to be undescribed and is very similar to a specimen illustrated in Gosliner *et al.* (2015, pg. 354, *Cuthona* sp. 65) from Phillipines suggesting an Indo west-Pacific distribution.

***Cuthona* sp. 4**
(Figure 31 F)

Material examined. One specimen. MB28-005048, NS, 14m, 14mm.

Habitats. Seagrass patch with sand and coral bommies in the tropical region.

Occurrences. Nuarro.

Geographic distribution. Western Indian Ocean. Kenya (Faveri 2010) and Mozambique.

Remarks. Gosliner *et al*. (2015) illustrate a similar undescribed species from the Pacific (*Cuthona* sp. 18, pg. 346), suggesting a potential Indo-west Pacific distribution.

Genus *Eubranchus* Forbes, 1838

***Eubranchus* sp. 1**
(Figure 31 G)

Material examined. One specimen. MB28-004595, ZJS, 23 Jun. 2012, 8m, 5mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Marshall Islands (In-Depth Images Kwajalein 2010), Papua New Guinea (Gosliner *et al*. 2015) and Mozambique.

Remarks. This species appears undescribed and this record represents the first for the Indian Ocean.

***Eubranchus* sp. 2**
(Figures 31 H, 32)

Material examined. Three specimens. MB28-005090, MB28-005091, MHN-YT1505, BL, 09 Apr. 2015, 2m, 7–8mm.

Habitats. Subtropical seagrass.

Occurrences. Barra.

Geographic distribution. So far only seen in Mozambique.

Remarks. The radula of this species is typical of the genus with the central tooth cusped and lateral teeth plate-like (Fig. 31).

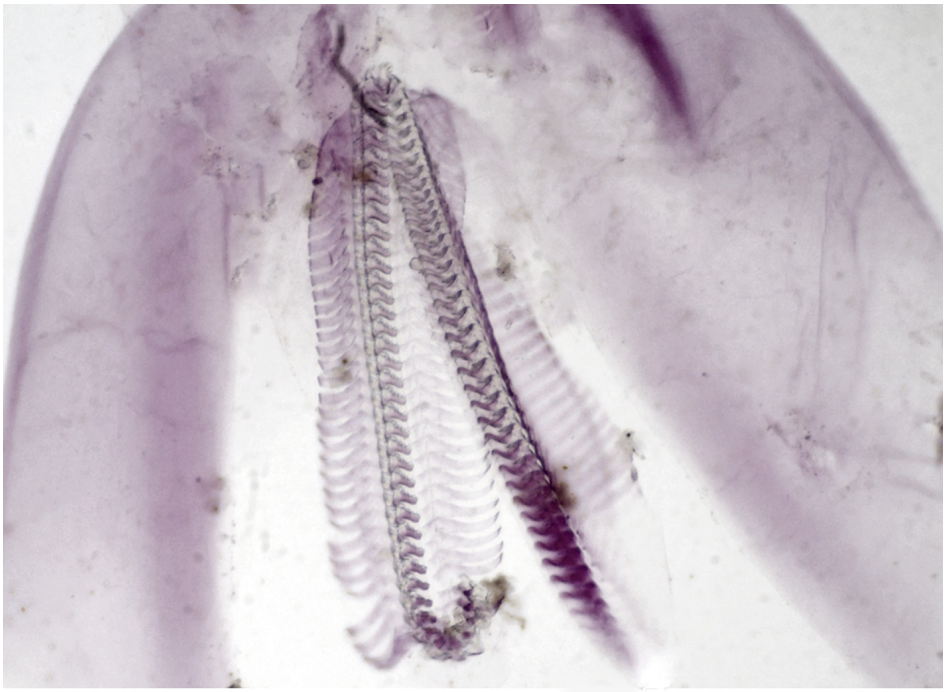

FIGURE 32. Radula *Eubranchus* sp. 2 connected to the jaws (MB28-005090), magnification 100X.

Genus *Fiona* Alder & Hancock [in Forbes & Hanley], 1853

***Fiona pinnata* (Eschscholtz, 1831)**
(Figure 31 I)

Material examined. Thirteen specimens. MB28-004483, 7spcs., 18 Feb. 2012, 10–20mm; MHN-YT211, 19 Feb. 2012, 19mm; MB28-004484, 19 Feb. 2012, 12mm; MB28-004485, 4 spcs, 19 Deb. 2012, 11–20mm all found floating on driftwood in Zavora. AMC.476792, 19 Feb. 2012, 19mm, on floating wood in Zavora.

Habitats. Drifting wood.

Occurrences. Zavora.

Geographic distribution. Globally distributed in tropical and subtropical regions (Tickey *et al*. 2016) Japan (Baba 1949), Korea, Vanuatu (Gosliner *et al*. 2008), Australia (Burn 2006), Tanzania (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique (Macnae & Kalk 1958; Tickey *et al*. 2016)

Remarks. In Tickey *et al*. (2016), molecular analyses revealed that *Fiona pinnata* is a cryptic species complex. The species from Mozambique belong to the "Lineage B" from that study.

Genus *Tenellia* A. Costa, 1866

***Tenellia acinosa* (Risbec, 1928)**
(Figure 31 J)

Material examined. One specimen. MB28-004776, VIAIR, 12 Dec. 2013, 4m, 11mm.

Habitats. Seagrass in the tropics.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Australia (Nimbs & Smith 2016) and Mozambique.

Remarks. First record for the Indian Ocean.

***Tenellia lugubris* (Bergh, 1870)**
(Figure 31 K)

Material examined. Three specimens. MHN-YT1050, ZRP, 18 Dec. 2013, 0.5m, 12mm; MB28-004893 & MB28-004894, NKA, 07 Jun. 2014, 12m, 16mm and 27mm, respectively.

Habitats. Subtropical tidal reefs and tropical coral reefs.

Occurrences. Zavora and Nuarro.

Geographic distribution. Indo-west, central and eastern Pacific. Pacific coast of North America, Hawaii, Japan, Papua New Guinea, New Caledonia, Australia, Philippines, Christmas Island, Seychelles, Madagascar, Tanzania (Gosliner *et al*. 2008) and Mozambique.

***Tenellia melanobrachia* (Bergh, 1874)**
(Figure 31 L)

Material examined. Two specimens. MB28-004945, ZRP, 09 Nov. 2014, 0.5m, 29mm; MB28-004977, ZRP, 23 Feb. 2015, 0.5m, 20mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central and eastern Pacific. Pacific coast of Mexico, Hawaii, Japan, Hong Kong, Papua New Guinea, Solomon Islands, New Caledonia, Australia, Philippines, Indonesia, Malaysia, Thailand (Gosliner *et al*. 2008), British Indian Ocean Territory (Yonow *et al*. 2002), Réunion Island, South Africa (Gosliner *et al*. 2008) and Mozambique.

***Tenellia ornata* Baba, 1937**
(Figure 33 A)

Material examined. Two specimens. MB28-004605, ZRP, 06 Aug. 2012, 2m, 3mm; MB28-005014, ZRP, 17 Jul. 2015, 0.5m, 5m.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west, central and eastern Pacific. Japan (Baba 1937a), Hong Kong, Korea (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Thailand (Mehrotra & Scott 2015), Tanzania, South Africa (Gosliner 1987) and Mozambique.

***Tenellia sibogae* (Bergh, 1905)**
(Figure 33 B)

Material examined. Three specimens. MB28-004405, PAE, 20 Jul. 2011, 25m, 13mm; MB28-004831, POC, 08 May 2014, 18m, 26mm; MB28-004843, POB, 09 Sep. 2014, 18m, 32mm.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Paindane.

Geographic distribution. Indo-west, central and eastern Pacific. Marshall Islands, Japan, Fiji, Papua New Guinea (Gosliner *et al*. 2008), Australia (Nimbs *et al.* 2016), Indonesia, Red Sea, South Africa and Mozambique (Gosliner *et al*. 2008).

***Tenellia* sp.**
(Figure 33 C)

Material examined. Two specimens. MB28-004905, MIF, 3m, 29mm (dissected); ZMBN105111, VIAIR, 16 May 2015, 3m, 24mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Tropical seagrass and coral bommies.

Occurrences. Mozambique Island and Vamizi Island

Geographic distribution. Indo-west Pacific. Japan, Philippines, Indonesia, Australia, Oman, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Remarks. The radula is typical of the genus. This species appears to be undescribed and it is illustrated by Gosliner *et al*. (2015) and sequenced by Cella *et al*. (2016). Nevertheless, further studies are needed to confirm its identification and geographic range.

Superfamily Aeolidioidea Gray, 1827

Family Unidentiidae Millen & Hermosillo, 2012

Genus *Unidentia* Millen & Hermosillo, 2012

***Unidentia angelvaldesi* Millen & Hermosillo, 2012**
(Figure 33 D)

Material examined. Two specimens. MB28-004814, ZRP, 16 Apr. 2014, 0.5m, 12mm; MB28-004987, ZGWS, 28 Apr. 2015, 18m, 7mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurreces: Zavora.

Geographic distribution. Indo-west, central and eastern Pacific. Panama, Mexico, Japan, Philippines, Indonesia, (Millen & Hermosillo 2012), Réunion (Bachel 2012) and Mozambique.

Remarks. The monospecific family Unidentiidae and the genus *Unidentia* was created based on morphological phylogenetic analysis (Millen & Hermosillo 2012). Thus, the validity of this family and genus still needs to be tested using molecular techniques.

Family Aeolidiidae Gray, 1827

Genus *Anteaeolidiella* Miller, 2001

***Anteaeolidiella* cf. *fijensis* Carmona, Bhave, Salunkhe, Pola, Gosliner & Cervera, 2014**
(Figure 33 E)

Material examined. One specimen. MB28-004746, ZRP, 09 Oct. 2013, 0.5m, 18mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

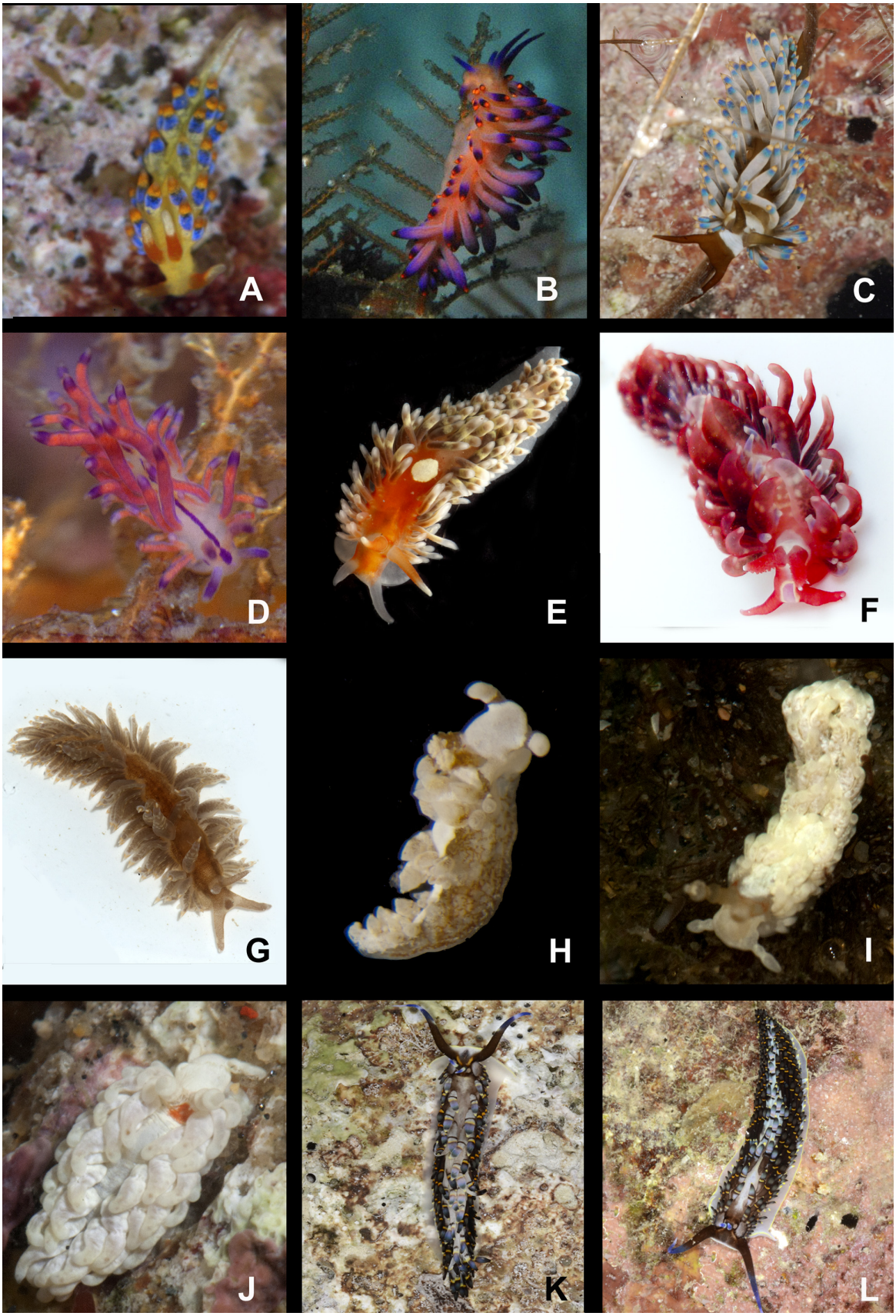

FIGURE 33. A, *Tenellia ornata* (MB28-005014). B, *Tenellia sibogae* (MB28-004405). C, *Tenellia* sp. (MB28-004905). D, *Unidentia angelvaldesi* (MB28-004987). E, *Anteaeolidiella* cf. *fijensis* (MB28-004746). F–G, *Baeolidia moebii* (MNCN15.05/63447 and MB28-004756, respectively). H, *Baeolidia variabilis* (MB28-004739). I–J *Bulbaeolidia alba* (MB28-004466 and MB28-004744, respectively). K, *Cerberilla affinis* (ZMBN105582). L, *Cerberilla africana* (ZMBN105109).

Geographic distribution. Indo-west Pacific. Fiji (Carmona *et al.* 2014a), India (Carmona *et al*. 2017a) and Mozambique.

Remarks. The genus *Anteaeolidiella* was reviewed by Carmona *et al*. (2014a) and none of the specimens illustrated have the same colour pattern as the Mozambican specimen. The holotype of *Anteaeolidiella fijensis* from Fiji has a similar colour pattern on the head, rhinophores and oral tentacles, however the white dorsal mark differs: in the Mozambican specimen it is further posterior, around the fifth ceratal row. As a result it is likely that this specimen is a variation of *A. fijensis*. However, this needs to be tested using molecular analysis.

Genus *Baeolidia* Bergh, 1888

Baeolidia moebii Bergh, 1888
(Figure 33 F–G)

Material examined. Five specimens. MNCN15.05/63447 (neotype), ZRP, 11 Jan. 2012, 1m, 18mm preserved; MHN-YT604, BL, 12 Oct. 2012, 3m, 35mm; MB28-004756 & MB28-004757, PAQ, 03 Dec. 2013, 1m, 19mm and 29mm, respectively; MB28-004796, PACG, 26 Jan. 2014, 0.5m, 50mm.

Habitats. Subtropical tidal reefs and seagrass and on top of encrusting substrate on aquaculture nets in the tropics.

Occurrences. Zavora, Paindane, Barra and Pemba.

Geographic distribution. Indo-west, central and eastern Pacific. Pacific side of Mexico, Hawaii, Marshall Islands (Carmona *et al.* 2014b), Japan (Baba 1955), Indonesia (Gosliner *et al*. 2008), Philippines (Carmona *et al.* 2014b), Mauritius (Bergh 1888), Seychelles (Gosliner *et al.* 2008), Réunion Island (Bidgrain 2013), Tanzania (Edmunds 1970) and Mozambique (Carmona *et al.* 2014b).

Remarks. Two colour forms have been observed in Mozambican specimens: dark pink (Fig. 33 F), and greenish (Fig. 33 G). Carmona *et al*. (2014b) reviewed both morphotypes and concluded that they are the same species. One of the pink specimens from the Mozambican collection is now the neotype species (Carmona *et al.* 2014b).

Baeolidia variabilis Carmona, Pola, Gosliner & Cervera, 2014
(Figure 33 H)

Material examined. One specimen. MB28-004739, ZRP, 19 Sep. 2013, 0.5m, 5m.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central Pacific. Marshall Islands, Papua New Guinea, Philippines (Carmona *et al.* 2014b) and Mozambique.

Remarks. This species is highly variable in colour, nevertheless the external morphology matches one of the morphotypes described by Carmona *et al.* (2014b) with ochre reticulation on the side and a white patch on the head. This is the first record of this species to the Indian Ocean. However due to its variability and distribution, future studies would be relevant to confirm the identification of this specimen.

Genus *Bulbaeolidia* Carmona, Pola, Gosliner & Cervera, 2013

Bulbaeolidia alba (Risbec, 1928)
(Figure 33 I–J)

Material examined. Eleven specimens. MB28-004466 & MHN-YT186, ZRP, 07 Feb. 2012, 2m, 10mm and 4mm, respectively; MB28-004520, ZRP, 09 Mar. 2012, 2m, 3mm; MB28-004522, ZWH, 15 Mar. 2012, 18m, 4mm; MB28-004675, ZJS, 24 May 2013, 12m, 4mm; MB28-004735, ZRP, 08 Sep. 2013, 0.5m, 5mm; MB28-004744, ZRP, 09 Oct. 2013, 0.5m, 5mm; MB28-004758, 3 spcs. PAQ, 03, Dec. 2013, 1m, 9–12mm; MB28-004934, ZRP,

10 Oct. 2014, 1m, 10mm; MB28-004940, ZRP, 26 Oct. 2014, 0.3m, 6mm; MB28-004998, ZRP, 06 May 2015, 0.3m, 6mm.

Habitats. Subtropical tidal reefs and on aquaculture nets in the tropics.

Occurrences. Zavora and Pemba.

Geographic distribution. Indo-west, central Pacific. French Polynesia (Boserelle *et al*. 2013), Hawaii, Midway Atoll (Gosliner *et al*. 2008), Guam (Carlson & Hoff 2003), Japan (Nakano 2004), Philippines, Malaysia (Carmona *et al.* 2013), New Caledonia (Risbec 1928), Malasya (Carmona *et al*. 2017b), Tanzania, Seychelles (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Remarks. Two morphotypes were found in Mozambique: (1) cream-white with an orange line surrounding the base of the rhinophores (Fig. 33 I) and (2) white with an orange dorsal patch posterior to the rhinophores (Fig. 33 J). Carmona *et al*. (2017) investigated several morphotypes from the Indo-Pacific with different orange patterns and found that they were variations of *B*. *alba*. Nevertheless, they enphasise that they did not have material from East Africa and that further investigation including specimens from this region was needed because peripherical regions such as Mozambique and South Africa are likely to have endemic species for this genus.

Genus *Cerberilla* Bergh, 1873

Cerberilla affinis Bergh, 1888

(Figure 33 K)

Material examined. Four specimens. ZMBN105158, VIAIR, 21 May 2015, 2m, 11mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105582, 3 spcs., VIAIR, 25 May 2015, 3m, 12, 17, and 23mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Seagrass in the subtropical and tropical regions.

Ocurrences: Barra, Vamizi Island and Palma.

Geographic distribution. Indo-west, central Pacific. Hawaii, Midway Atoll, Japan, Australia, Philippines, Indonesia, Réunion Island (Gosliner *et al*. 2008) and Mozambique.

Cerberilla africana Eliot, 1903

(Figure 33 L)

Material examined. One specimen. ZMBN105109, VIAIR, 16 May 2015, 3m, 38mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Seagrass in the tropical region.

Occurrences. Vamizi Island.

Geographic distribution. Western Indian Ocean. Tanzania (Eliot 1903) and Mozambique.

Cerberilla ambonensis Bergh, 1905

(Figure 34 A)

Material examined. One specimen. ZMBN105583, VIAIR, 25 May 2015, 3m, 14mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Seagrass in the tropical region.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Solomon Islands, Australia, Indonesia (Gosliner e*t al*. 2008), India (Remakrishna *et al.* 2010) and Mozambique.

Remarks. First record for the western Indian Ocean.

***Cerberilla* sp.**
(Figure 34 B)

Material examined. One specimen. ZMBN105157, VIAIR, 21 May 2015, 4m, 13mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Seagrass in the tropical region.

Occurrences. Vamizi Island.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. Photographic records of a similar species exist from Egypt (Morisod 2008) and Malasya (Mayes 2012), suggesting a wider distribution.

Genus *Limenandra* Haefelfinger & Stamm, 1958

***Limenandra confusa* Carmona, Pola, Gosliner & Cervera, 2014**
(Figure 34 C)

Material examined. One specimen. MB28-004710, ZRP, 08 Aug. 2013, 0.5m, 14mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west, central and eastern Pacific. Costa Rica (Camacho-García *et al*. 2005), Gulf of California (Bertsch 1972), Hawaii (Kay 1979), Midway Islands (Carmona *et al.* 2014c), Philippines, Mexico (Gosliner *et al*. 2008) and Mozambique.

Remarks. The Mozambican specimen exhibited a synchronised movement of its longer mid-dorsal cerata whilst crawling, behaviour not previously reported. Carmona *et al*. (2014b) recently reviewed this genus. *Limenadra nodosa* occurs in the Mediterranean and Atlantic whilst *L. confusa* is distributed in the Pacific (Carmona *et al.* 2014c). As a result it is likely that this specimen represents the first record of *L. confusa* from the Indian Ocean.

Family Facelinidae Bergh, 1889

Genus *Caloria* Trinchese 1888

***Caloria indica* (Bergh, 1896)**
(Figure 34 D–E)

Material examined. Ten specimens. MB28-004534, ZSC, 14 May 2012, 22m, 10mm; MB28-004581, ZRP, 19 Jun. 2012, 1m, 20mm, collected by A. Roseblum; MB28-004583, ZRP, 20 Jun. 2012, 1m, 14mm; MB28-004585, ZRP, 20 Jun. 2012, 1m, 29mm; MB28-004690, ZGWS, 25 Jun. 2013, 20m, 12mm. MHN-YT1175, POA, 07 May 2014, 15m, 7mm; MB28-004832, POB, 08 May 2014, 18m, 17mm; MB28-004976 & MB28-004978, 23 Feb. 2015, ZRP, 0.5m, both 7mm; MB28-004994, ZRP, 05 May 2015, 0.3m, 12mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west, central Pacific. Hawaii, Japan, Australia, Indonesia (Gosliner 1987), Fiji, Solomon Islands, New Caledonia, Christmas Island, Oman, Seychelles (Gosliner *et al*. 2008), Tanzania, South Africa (Gosliner 1987) and Mozambique.

Remarks. The colour is variable. The dorsum ranged from translucent white to dark orange. The rhinophores in one morphotype have an orange base, yellow middle and orange top and in another, orange base bluish middle and yellow top.

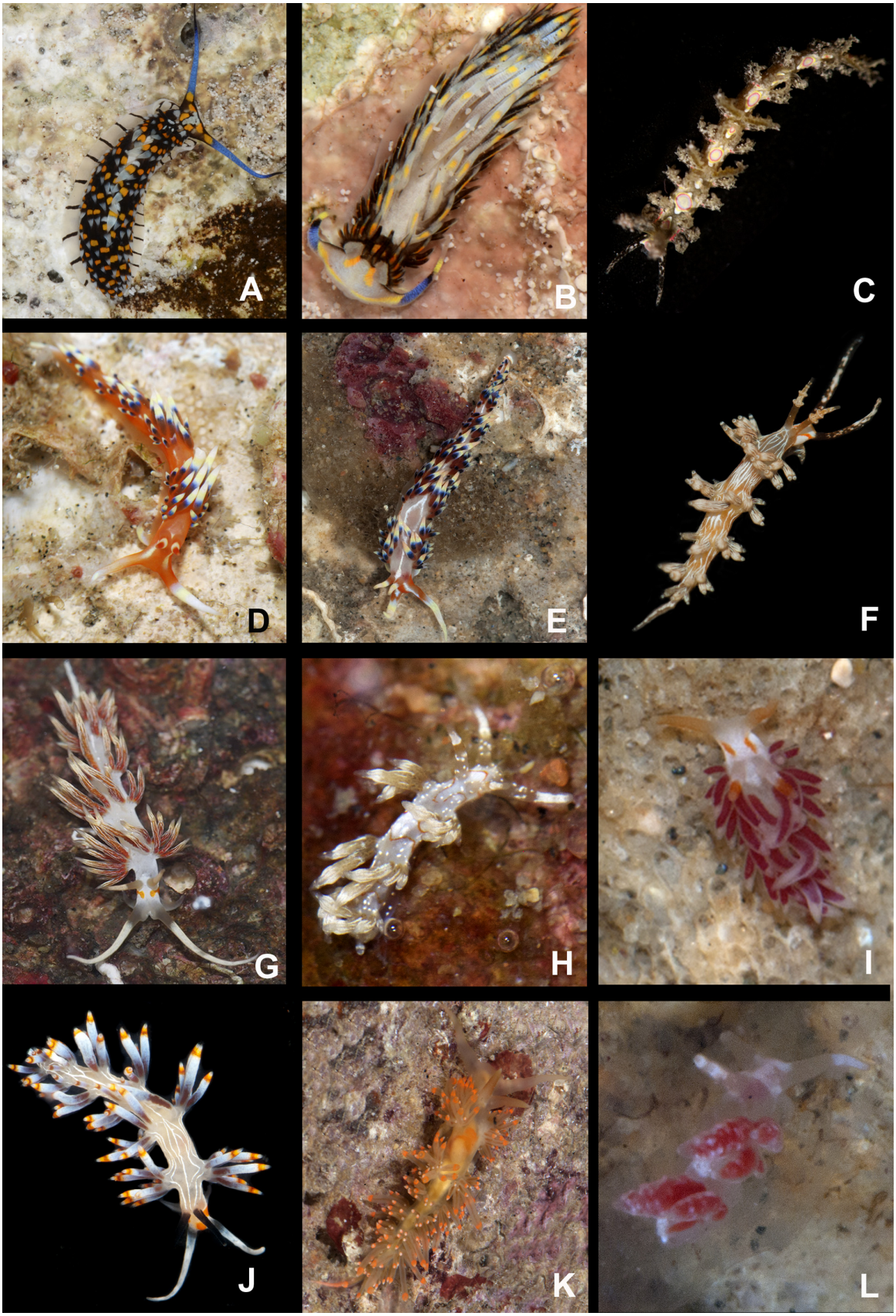

FIGURE 34. A, *Cerberilla ambonensis* (ZMBN105583). B, *Cerberilla* sp. ZMBN105157. C, *Limenandra confusa* (MB28-004710). D–E, *Caloria indica* (MB28-004832 and MB28-004581, respectively). F, *Cratena* cf. *affinis* (MB28-004427). G. *Cratena* cf. *lineata* (MB28-004438). H. *Cratena simba* (MB28-004600). I, *Cratena* sp. (MB28-004572). J, *Facelina lineata* (MB28-004752). K, *Facelina rhodopos* (MB28-004887). L, *Favorinus japonicas* (MB28-004824).

Genus *Cratena* Bergh, 1864

***Cratena* cf. *affinis* Baba, 1949**
(Figure 34 F)

Material examined. One specimen. MB28-004427, ZRP, 30 Oct. 2011, 1m, 10mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan (Baba 1949), Philippines, Malaysia, Indonesia (Gosliner *et al.* 2008) and Mozambique.

Remarks. First record for the western Indian Ocean. This specimen is very similar to *Cratena affinis*, except that it has lines on the dorsum rather than spots. Further investigation and additional material are needed to confirm its identity and geographical range.

***Cratena* cf. *lineata* (Eliot, 1905)**
(Figure 34 G)

Material examined. Nine specimens. MB28-004493, ZRP, 21 Feb. 2012, 1m, 4mm; MB28-004577, ZRP, 18 Jun. 2012, 1m, 7mm, collected by A. Roseblum; MB28-004580, ZRP. 19 Jun. 2012, 1m, 9mm, collected by A. Roseblum; MB28-004582, 20 Jun. 2012, ZRP, 1m, 7mm, collected by A. Roseblum; MB28-004597, ZWH, 23 Jun. 2012, 16m, 5mm; MHN-YT794, ZA51, 12 Jun. 2013, 13m, 6mm; MB28-004979, ZRP, 23 Mar. 2015, 0.5m, 6mm; MB28-004995, ZRP, 05 May 2015, 0.3m, 5mm; MB28-004438, ZRP, 20 Jun. 2015, 0.5m, 18mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Australia (Nimbs & Smith 2016), Tanzania (Eliot 1905) and Mozambique.

Remarks. *Cratena lineata* has lines on the dorsum (Eliot 1905) whereas specimens from Mozambique have spots. These might be a variation of *Cratena lineata* (Gosliner *et al*. 2015), which was originally described from Tanzania (Eliot 1905). Further studies are needed in order to confirm its identity.

***Cratena simba* Edmunds, 1970**
(Figure 34 H)

Material examined. Six specimens. MHN-YT414, ZRP, 03 Jun. 2012, 2m, 3mm; MB28-004574, ZWH, 17 Jun. 2012, 16m, 6mm; MB28-004600, ZWH, 26 Jun. 2012, 14m, 9mm, collected by A. Roseblum; MB28-004687, ZM, 12 Jun. 2013, 8m, 3mm; MB28-004923, GWS, 05 Jul. 2014, 18m, 6mm; MB28-004988, ZA51, 30 Apr. 2015, 11m, 6mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Papua New Guinea, Philippines, Madagascar, South Africa (Gosliner *et al*. 2008), Tanzania (Edmunds 1970) and Mozambique.

***Cratena* sp.**
(Figure 34 I)

Material examined. One specimen. MB28-004572, 31 Oct. 2012, ZGWS, 22m, 4mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. Found on hydroids. This species appears to be undescribed.

Genus *Facelina* Alder & Hancock, 1855

***Facelina lineata* Eliot, 1905**
(Figure 34 J)

Material examined. One specimen. MB28-004752, ZDTR, 20 Oct. 2013, 0.3m, 12mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Australia (Burn 2006), Tanzania (Eliot 1905), Mozambique.

Remarks. This specimen matches Eliot's (1904d) description of *Facelina lineata* with three orange marks on the head, black rhinophores and a subapical orange band on the cerata. The only differing feature is the shape of the rhinophores. Eliot's (1904d) description mentions rhinophores with annulae (pl. XVI, fig. 4 and Pl. XVII, fig.10) based on field notes from Crossland, however Eliot (1904d) notes that this characteristic could not be seen. In the Mozambican specimen the rhinophores exhibit small annulae, which can only be seen with careful examination. In the same plate, Crossland illustrated a second species described as *Hervia lineata*, which is now known as *Cuthona lineata*. Rudman (2009b) suggested that *Facelina lineata* was likely to belong to the genus *Cratena* and would need to be reviewed and renamed. Interestingly WoRMS (Bouchet 2015b) place *Facelina lineata* as synonym of *Cratena lineata* however no formal reference was provided. This has the potential to create confusion between the two species described by Eliot (1904d). Therefore, pending a review, we use the name *Facelina lineata* for this species.

***Facelina rhodopos* Yonow, 2000**
(Figure 34 K)

Material examined. One specimen. MB28-004887, NFA, 04 Jun. 2014, 14m, 25mm.

Habitats. Tropical coral reef.

Occurrences. Nuarro.

Geographic distribution. Indo-west, central Pacific. Marshall Islands, Japan, Papua New Guinea, Philippines, Malaysia (Gosliner *et al*. 2008), Australia (Nimbs *et al*. 2016), Red Sea (Yonow 2000), Réunion (Bidgrain 2005) and Mozambique.

Genus *Favorinus* Gray 1850

***Favorinus japonicus* Baba, 1949**
(Figure 34 L)

Material examined. One specimen. MB28-004824, 07 May 2014, POA, 15m, 4mm.

Habitats. Subtropical rocky reef.

Occurrences. Ponta do Ouro.

Geographic distribution. Indo-west, central Pacific. Hawaii, Midway Atoll (Gosliner *et al*. 2008), Japan (Baba 1949), Guam (Carlson & Hoff 2003), Korea, Papua New Guinea, Australia, Philippines, Indonesia, Seychelles, Réunion Island, Madagascar, Tanzania, South Africa (Gosliner *et al*. 2008) and Mozambique.

***Favorinus mirabilis* Baba, 1955**
(Figure 35 A)

Material examined. Five specimens. MB28-004771, VIPP, 12 Aug. 2013, 18m, 6mm; MB28-004818, MB28-004820, MB28-004822 and MHN-YT1182, POA, 07 May 2014, 15m, 3–11mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Ponta do Ouro and Vamizi Island.

FIGURE 35. A, *Favorinus mirabilis* (MB28-004820). B, *Favorinus tsuruganus* (MB28-004740). C, *Favorinus* sp. (MB28-005050). D–E, *Godiva quadricolor* (MB28-004589 and MB28-004917, respectively). F, *Moridilla brockii* (MB28-004500). G, *Phidiana bourailli* (MB28-004563). H, *Phyllodesmium acanthorhinum* (MB28-005083). I, *Phyllodesmium crypticum* (MB28-004778). J, *Phyllodesmium magnum* (ZMBN105099). K, *Phyllodesmium* sp. (MB28-005011). L, *Pleurolidia juliae* (MB28-004528).

Geographic distribution. Indo-west, central Pacific. Hawaii, French Polynesia, Marshall Islands, Guam (Gosliner *et al*. 2008), Japan (Baba 1955), Papua New Guinea, Philippines, Singapore, Comoros Islands, Tanzania (Gosliner *et al*. 2008) and Mozambique.

Remarks. All specimens were found on the spawn of *Hexabranchus sanguineus*.

Favorinus tsuruganus Baba & Abe, 1964

(Figure 35 B)

Material examined. Four specimens. MB28-004740, ZA51, 26 Sep. 2013, 10m, 15mm; MB28-004857, POA, 11 May 2014, 40m, 4mm; MHN-YT1172 & MB28-004821, POA, 07 May 2014, 15m, 6mm and 7mm, respectively.

Habitats. Subtropical rocky reefs.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Indo-west Pacific. New Zealand (Gosliner *et al*. 2008), Japan (Baba & Abe 1964), Australia (Willan 1983), Papua New Guinea, New Caledonia, Red Sea, Réunion Island (Gosliner *et al*. 2008) and Mozambique.

Remarks. Specimen MB28-004740 was found feeding on white nudibranch spawn, while MB28-004857 was feeding on the spawn of *Hexabranchus sanguineus*.

Favorinus sp.

(Figure 35 C)

Material examined. One specimen. MB28-005050, NGF, 2 July 2016, 30m, 17mm.

Habitats. Tropical coral reef on *Hexabranchus sanguineus* spawn.

Occurrences. Nuarro.

Geographic distribution. Indo-west Pacific. Philippines (Gosliner *et al*. 2015), Reunion (Bachel 2009), Mayotte, Mauritius (Poddubetskaia 2002) and Mozambique.

Genus *Godiva* Macnae, 1954

Godiva quadricolor (Barnard, 1927)

(Figure 35 D–E)

Material examined. Six specimens. MB28-004588 & MB28-004589, ZDRS, 21 Jun. 2012, 30m, 18 and 22mm, respectively; MB28-004630, BL, 12 Oct. 2012, 3m, 32mm; MHN-YT944, ZDTR, 0.3m, 12mm; MB28-004916 & MB28-004917, NKA, 5 and 14mm, respectively.

Habitats. Subtropical tidal reef, seagrass and rocky reefs and tropical coral reefs.

Occurrences. Zavora, Barra and Nuarro.

Geographic distribution. Indo-west, central Pacific. Introduced in the Mediterranean and Atlantic Oriental (Cervera *et al.* 2010). Marshall Islands, Southern Japan, Mariana Islands, Papua New Guinea (Cervera *et al.* 2010), South Africa (Barnard 1927), Tanzania (Gosliner *et al*. 2008) and Mozambique (Gosliner 1987; Fraser 2001).

Remarks. In the specimens found by us the intensity of the blue on the head varied. The type locality of *G. quadricolor* is St James, False Bay, South Africa, although the centre of natural dispersion is uncertain (Cervera *et al.* 2010). This species is likely to have spread to the Mediterranean and Atlantic most likely as a result of shipping movements (Cervera *et al*. 2010), although this needs to be verified using molecular techniques.

Genus *Moridilla* Bergh, 1888

***Moridilla brockii* Bergh, 1888**
(Figure 35 F)

Material examined. Five specimens. MB28-004500, ZRP, 21 Fev. 2012, 1m, 14mm. MHN-YT266, ZRP, 21 Feb. 2012, 2m, 31mm. MB28-004545, ZSC, 14 May 2012, 22m, 9mm. MB28-004559, ZRP, 04 Jun. 2012, 1m, 28mm. MB28-004925, ZRP, 19 Aug. 2014, 0.5m, 18mm.

Habitats. Subtropical tidal reefs and rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Solomon Islands, Papua New Guinea, Philippines, Malaysia (Gosliner *et al.* 2008), Australia (Nimbs & Smith 2016), India (Ramakrishna *et al*. 2010), Maldives, Seychelles (Yonow 1994), South Africa (Gosliner *et al.* 2008) and Mozambique.

Genus *Phidiana* Gray, 1850

***Phidiana bourailli* (Risbec, 1928)**
(Figure 35 G)

Material examined. Seven specimens. MB28-004494, ZRP, 21 Feb. 2012, 2mm, 12m; MHN-YT341, ZRP, 06 May 2012, 1m, 8mm; MB28-004563, ZRP, 06 Jun. 2012, 1m, 5mm; MB28-004576, ZRP, 18 Jun. 2012, 1m, 6mm; MB28-004966, ZRP, 21 Feb. 2015, 0.5m, 7mm; MB28-004992, 2 spcs., ZRP, 05 May 2015, 0.3m, 4mm.

Habitats. Subtropical tidal reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. New Caledonia, Papua New Guinea, Australia (Nimbs *et al*. 2015), Philippines, Madagascar (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

Genus *Phyllodesmium* Ehrenberg, 1831

***Phyllodesmium acanthorhinum* Moore & Gosliner, 2014**
(Figure 35 H)

Material examined. Two specimens. MB28-005082, ZWH, 23 Dec. 2011, 18m, 17mm, collected by S. Bruck; MB28-005083, ZWH, 25 Jan. 2015, 14m, 12mm.

Habitats. Subtropical rocky reefs.

Occurrences. Zavora.

Geographic distribution. Indo-west Pacific. Japan, Australia (Moore & Gosliner 2009), India (Patel 2012) and Mozambique.

Remarks. First record for the western Indian Ocean.

***Phyllodesmium crypticum* Rudman, 1981**
(Figure 35 I)

Material examined. Two specimens. MB28-004777 & MB28-004778, VIAIR, 12 Dec 2013, 4m, 18 and 17mm, respectively.

Habitats. Seagrass in the tropics.

Occurrences. Vamizi Island.

Geographic distribution. Indo-west Pacific. Japan, Australia, Philippines, Indonesia, Red Sea (Gosliner *et al*. 2008), South Africa (Gosliner 1987) and Mozambique.

***Phyllodesmium magnum* Rudman, 1991**
(Figure 35 J)

Material examined. Three specimens. MB28-004643, ZD, 06 Dec. 2012, 30m; ZMBN105099, VIES3, 16 May 2015, 7m, 36mm, collected by Y. Tibiriçá & M. Malaquias; ZMBN105143, VIPP, 19 May 2015, 7–10m, 22mm, collected by Y. Tibiriçá & M. Malaquias.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Vamizi Island.

Geographic distribution. Indo-west Pacific. Marshall Islands, Hong Kong, New Caledonia (Rudman 1991), Guam, Papua New Guinea (Gosliner *et al*. 2008) Australia (Rudman 1991), Philippines, Indonesia (Gosliner *et al*. 2008), Thailand (Mehrotra & Scott 2015), Red Sea (Koretz 2005), Tanzania (Gosliner *et al*. 2008), Madagascar (Rassat 2015), South Africa (Fraser 2001) and Mozambique.

***Phyllodesmium* sp.**
(Figure 35 K)

Material examined. One specimen. MB28-005011, ZRP, 20 Jun. 2015, 0.5m 16mm.

Habitats. Subtropical tidal reef.

Occurrences. Zavora.

Geographic distribution. Western Indian Ocean. So far only known for Mozambique.

Genus *Pleurolidia* Burn 1966

***Pleurolidia juliae* Burn, 1966**
(Figure 35 L)

Material examined. Six specimens. UL-YT110, ZWH, 02 Feb. 2012, 18m, 12mm; MB28-004451 and MB28-004452, ZWH, 05 Feb. 2012, 16m, 20 and 15mm, respectively; MB28-004528, ZGWS, 23 Mar. 2012, 22m, 7mm; MB28-004761, VISP, 12 Jun. 2013, 5m, 2mm; MHN-YT316, ZGWS, 23 Mar. 2012, 22m, 20mm.

Habitats. Subtropical rocky reefs and tropical coral reefs.

Occurrences. Zavora and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii, Papua New Guinea (Carmona *et al.* 2015), Australia (Burn 1966), Philippines, Indonesia, Madagascar (Gosliner *et al*. 2008) and Mozambique.

Remarks. A morphological and molecular review of *P. juliae* and *Protaeolidiella atra* Baba, 1955 confirmed that these two species do not belong to the same genus and that both genera are monotypic (Carmona et al. 2015). Analysis also confirmed the provisional placement of this species within the non-monophyletic family Facelinidae.

Genus *Pteraeolidia* Bergh, 1875

***Pteraeolidia semperi* (Bergh, 1870)**
(Figure 36 A–D)

Material examined. Twenty-one specimens. MB28-004475, ZWH, 08 Feb. 2012, 16m, 54mm; MB28-004531, ZKW, 51m, 12mm; MB28-004532, ZY, 13 May 2012, 37m, 32mm; MB28-004767 & MB28-004768, VISP, 2m, 30mm and 42mm, respectively; MB28-004840, POB, 09 May 2014, 18m, 45mm, collected by J. Strömvol; MB28-004852, 2 spcs., POD, 11 May 2014, 15m, 45 and 50mm; MB28-004920, ZWH, 26 Sep. 2015, 15m, 46mm; MB28-004936, ZGWS, 11 Oct. 2014, 19m, 60mm; MB28-004957, ZGWS, 17 Jan. 2015, 19m, 47mm; MB28-004960, ZSC, 28 Jan. 2015, 22m, 9mm; ZMBN105114, 5 spcs., VIAIR, 16 May 2015, 3m, 30, 35, 42, 60 and 68mm; ZMBN105156, 3 spcs., VIAIR, 21 May 2015, 4m, 74mm; ZMBN105160, VIAIR, 21 May 2915, 2m, 50, 61, 72mm, , collected by Y. Tibiriçá & M. Malaquias.

FIGURE 36. A–D, *Pteraeolidia semperi* (MB28-004475, MB28-004957, MB28-004840 and MB28-004531, respectively). E, *Sakuraeolis kirembosa* (MB28-004961). F, *Sakuraeolis* sp. (MB28-004523). G, *Sakuraeolis* sp. 2 (MB28-004813). H, *Glaucus atlanticus* (MB28-004558). I, *Glaucus marginatus* (MZUSP110979).

Habitats. Subtropical rocky reefs, wrecks and tropical coral reefs.

Occurrences. Ponta do Ouro, Zavora and Vamizi Island.

Geographic distribution. Indo-west, central Pacific. Hawaii, Guam (Gosliner *et al*. 2008), Japan (Baba 1949), Palau, Papua New Guinea, Australia, Philippines (Gosliner *et al*. 2008), India (Apte 2009; Remakrishna *et al.* 2010), Maldives (Marcus & Marcus 1960), Seychelles, Madagascar (Gosliner *et al*. 2008), Tanzania (Eliot 1903) and Mozambique (King & Fraser 2014).

Remarks. Molecular data indicates that *P. semperi* is likely to represent a complex of species (Wilson & Burghardt 2015). The morphotypes found in Mozambique were highly variable in colour with at least three

different foot colourations present in Mozambican specimens, suggesting that there may be a species complex. Specimen MB28-004852 bears the same foot pattern found in "Group B" specimens (Yorifuji, 2012) from north-western Pacific. Additional studies are underway to verify if this population group contains cryptic/pseudocryptic species (Yorifuji M., pers. communication).

Genus *Sakuraeolis* Baba, 1965

***Sakuraeolis kirembosa* Rudman, 1980**
(Figure 36 E)

Material examined. One specimen. MB28-004961, ZSC, 28 Jan. 2015, 22m, 25mm.

Habitats. Subtropical rocky reef.

Occurrences. Zavora.

Geographic distribution. Indian Ocean. India (Ramakrishna *et al.* 2010), United Arab Emirates (Gosliner *et al*. 2008), Tanzania (Rudman 1980) and Mozambique.

Remarks. In captivity, this specimen was observed to quickly move its oral tentacles from side-to-side, touching the substrate whilst crawling.

***Sakuraeolis* sp. 1**
(Figure 36 F)

Material examined. Six specimens. MHN-YT44, ZWH, 13 May 2010, 18m, 21mm; MB28-004418, ZGWS, 09 Aug. 2010, 20m, 13mm; MB28-004480, ZA51, 12m, 13mm; MB28-004523, ZWH, 14 Mar. 2012, 16m, 22mm–30mm; MB28-004663, ZWH, 08 Mar. 2013, 17m, 40mm; ZMBN117061, POB, 09 May 2014, 18m, 4mm.

Habitats. Subtropical rocky reef, often on hydroids *Eudendrium* sp.

Occurrences. Ponta do Ouro and Zavora.

Geographic distribution. Western Indian Ocean. Mozambique.

Remarks. This is one of the most common species on the subtropical Mozambican coast. Dawn Diamond from Queen's University of Belfast, N. Ireland, UK, has studied this species and is preparing a manuscript with a formal description (D. Diamond pers. communication).

***Sakuraeolis* sp. 2**
(Figure 36 G)

Material examined. One specimen. MB28-004813, PE, 04 April 2014, 25nm 10mm.

Habitats. Subtropical rocky reef.

Occurrences. Paindane.

Geographic distribution. Western Indian Ocean. Madagascar (Bazard 2017) and Mozambique.

Remarks. This species appears undescribed and is here tentatively identified in the genus *Sakuraeolis* until further studies are completed.

Family Glaucidae Gray, 1827

Genus *Glaucus* Forster, 1777

***Glaucus atlanticus* Forster, 1777**
(Figure 36 H)

Material examined. Seven specimens. All found washed up on the beach in Zavora. MHN-YT68, 09 Jun. 2011,

18mm; MB28-004558, 04 Jun. 2012, 15mm, collected by A. Roseblum; MB28-004996, 5 spcs., 05 May 2015, 4–12mm.

Habitats. Planktonic, in the subtropical zone. Found washed on the beach together with by-the-wind sailor (*Velella* sp.) and bluebottle (*Physalia* sp.).

Occurrences. Zavora.

Geographic distribution. Worldwide in subtropical regions (Churchill *et al.* 2013, 2014).

***Glaucus marginatus* Bergh, 1868**
(Figure 36 I)

Material examined. Four specimens. All found washed up on the beach in Zavora. MZUSP110979, MUZSP110856, MZUSP111008, 04 Jun. 2012, 6mm, 8mm and 10mm, respectively, collected by A. Roseblum; MHN-YT449, 07 Jun. 2012, 5mm.

Habitats. Planktonic, in the subtropical zone. Found washed on the beach together with by-the-wind sailor (*Velella* sp.) and bluebottle (*Physalia* sp.).

Occurrences. Zavora.

Geographic distribution. Indo-Pacific (Churchill *et al.* 2013, 2014).

Final Considerations

We found 267 species of Nudipleura in Mozambique, from those 8 species are Pleurobranchomorpha and the remaining species belong to Nudibranchia. From the material examined 151 species were found in the south, 49 in the north of Mozambique and 67 in both regions. There were 61 putative undescribed species and at least twenty species need further investigation through molecular and taxomic analysis. A total of 31 families are here represented. The most representative families were Chromodorididae (69 species), Discodorididae (30 species), Facelinidae (23 species) and Phyllidiidae (16 species).

The recent account published by Gosliner *et al*. (2015) indicates that 258 species of sea slugs have been recorded for Tanzania and 278 species for Madagascar. With this contribution Mozambique has now at least 316 species of sea slugs recorded in the literature for the country. This includes 268 species of Nudipleura (King & Fraser 2014; present study), 39 species of Acteonoidea and Cephalaspidea (Tibiriçá & Malaquias 2017), 4 species of Anaspidea (Martens 1879; Macnae & Kalk 1958), 4 species of Sacoglossa and 1 species of Umbraculida (Macnae & Kalk 1958). Nevertheless, given the limited literature, wide latitudes, complex of habitats and diversity among the sea slugs groups, the real diversity of the sea slugs, particularly from groups not recently studied (e.g. Sacoglossa) are likely much higher.

Of the 186 confirmed described species (excluding "cf." and putative new species) found in this study, 118 are new published records for Mozambique. The only species of Nudipleura previously found in the literature for Mozambique that has not been seen during this study is *Gymnodoris aurita* (Gould, 1852) (King & Fraser 2014). Moreover this seems the first time that *Tenellia acinosa*, *Baeolidia variabilis* and *Limeandra confusa* are recorded to the Indian Ocean. Nevertheless, because of the geographic distance and the colour variability of these species further integrative analyses may be necessary to confirm these range extensions.

The geographic distribution and endemism of species are useful tools to help us understand specialization patterns and, together with the phylogeny, to define biogeographic regions (Gosliner & Draheim 1996). Nevertheless, the lack of data for certain biological groups in a region may result in an incorrect biogeographic inference (Briggs & Bowen 2012). Thus, because the Nudipleura of the western Indian Ocean are poorly known, we conservatively used geographical regions rather than eco-region classifications (such as in Spalding *et al.* (2007) or Briggs & Bowen (2012)). Approximately 22.5% of the species we found are exclusively recorded from the western Indian Ocean. About 39.7% of the species are recorded in the Indian Ocean and west Pacific, 23.2% of the species are found in the Indo-west Pacific but also in the central Pacific region of Hawaii and French Polynesia and only 3.7% are distributed all the way to the eastern Pacific. However, further diversity surveys, a more exhaustive geographic distribution review and phylogenetic analyses are needed in order to make biogeographical inferences safely.

Recent studies have shown that several species previously treated as unique species represent a complex of cryptic species (e.g. Carmona *et al.* 2011; Ornelas-Gatdula *et al.* 2011; Pola *et al.* 2012; Pola *et al.* 2014; Matsuda & Gosliner 2017), whereas species treated earlier as different taxa are simply colour variants of the same species (e.g. Pola *et al.* 2006b; Padula *et al.* 2016). At least 14% of the described species inventoried in this manuscript need further integrative analysis. Since most of the species here were identified by external morphology only, it is likely that further molecular and taxonomic investigation will reveal cryptic/pseudocryptic species and some of the identifications may need revision. Moreover, whilst this inventory includes species from accessible tropical and subtropical coasts of Mozambique, the "swamp region" from north of the Bazaruto Archipelago (21°14'S) to Angoche (16°14'S) (Tibiriçá & Malaquias 2017) could not be sampled due to the logistic challenges, such as access and low visibility. This region is characterized by extensive mangrove and intertidal soft-sediment areas and has a unique fauna and flora (Pereira *et al.* 2014), which is likely to contain many species not included here.

Acknowledgements

This Project would not have been posible without the support and kindness of many people in Mozambique. We are particularly grateful to Jon Wright for his seven years of support during data collection and English review of this manuscript. We thank all the interns of Zavora Marine Laboratory who have participated in data collection; Sarah Bruck for her field assistance during a couple of years in Zavora; Annelies van der Vorm, Trienke Lodewijk and Peter de Wit (Nuarro Ecolodge) for their kind support during the last year and half to conduct research in Nuarro. We are very grateful for the people and organizations that have facilitated our fieldwork along the coast. From south to north, we thank Back to Basics Adventures (Rupert Cornelius and Jenny Stromvoll), Ponta do Ouro; Carioca Inn (Diana De Wet), Bilene; Mozdivers (Jon Wright) and Deon Kuhrau, Zavora; Paindane Dive Charter & Watersport Centre (Vossie Vosloo), Paidane; Barra Lodge & Dive Center, Barra (Richie O'Connell); Casa Babi & Odissea Dive Center, Vilanculos (Sabrina Rocco and Denis Dujardin); Kwalala Dive Center, Nacala (Mike Donald); Nuarro EcoLodge (Annelies van der Vorm, Trienke Lodewijk, Peter de Wit); Vamizi Island Lodge and Dive Center/IUCN Conservation project at Vamizi I., Quirimbas (Joana Trindade and Isabel Silva). We are grateful to the Peace Parks Foundation and Jenny Stromvoll (Ponta do Ouro Partial Reserve) for organizing collecting permits; and to. Isabel Silva (UniLúrio) for her support in organizing a fieldtrip to Vamizi Island. We are thankful and appreciate the support of the Instituto Universitario de Investigación Marina of the University of Cadiz to fund the "Open Access" of this publication. We thank Manuel Malaquias (Bergen University) for his participation and to make posible two extensive field trips, one in the south and another in the north of Mozambique. We credit and thank M. Malaquias for photographs of the following specimens: ZMBN105161, ZMBN105166, ZMBN195095, ZMBN105093, ZMBN105084, ZMBN105124, ZMBN105086, ZMBN105116, ZMBN10580, ZMBN105571, ZMBN105609, ZMBN105109, ZMBN105582, ZMBN105583, ZMBN105157 and ZMBN105099. The photography of the specimen ZMBN105607 was kindly provided by Gisela Caldeira, of the specimens MB28-005031 and MB28-005034 by Jenny Strömvoll and of the specimen MHN-YT1679 by Nakia Cullain. The authors are grateful to the two anonymons referees and Dr. Michael Schrödl (Mollusca: "Opisthobranchs" Editor) for their time and constructive comments, which significantly improved this manuscript.

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