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On a collection of crabs (Crustacea: Decapoda: Brachyura) from Mozambique, Africa

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Abstract

This monograph focuses on a collection of previously unidentified brachyuran crabs (Crustacea: Decapoda: Brachyura), present in the Naturalis Biodiversity Center (formerly Rijksmuseum van Natuurlijke Historie), Leiden, the Netherlands. All the examined material was collected between 1982 and 1987 from the mangroves and the littoral zone around Inhaca Island, Mozambique, Africa. A total of 1162 specimens are identified. The specimens belong to 90 different species of crabs from 26 families. Five new records of crab species for Mozambican waters are found: *Hiplyra elegans* (Gravier, 1920), *Hiplyra variegata* (Rüppell, 1830), *Pseudomicippe tenuipes* A. Milne-Edwards, 1865, *Medaeops neglectus* (Balss, 1922) and *Chaenostoma crassimanus* Stimpson, 1858.

Keywords: Biodiversity, crabs, Inhaca Island, taxonomy

Introduction

A collection of brachyuran crabs from Mozambique, Africa is reported. The specimens were collected between 1982 and 1987 by Prof. Dr. J.H.C. Walenkamp, aided by staff and students from the Faculty of Biology in Maputo, Mozambique. During their visits to Inhaca Island, extensive collections of littoral and infralittoral invertebrates were made (Walenkamp 1990). Prof. Dr. Walenkamp published a comprehensive work on the echinoderms collected during these visits. The collection was donated to Naturalis Biodiversity Center (formerly Rijksmuseum van Natuurlijke Historie, RMNH), Leiden, The Netherlands. Among the decapods, caridean shrimps were found and are discussed in Fransen & Willems (2024). The brachyuran crabs are treated in this monograph.

Previous work on invertebrates in the area was done by MacNae & Kalk (1958). Both Barnard (1950, 1955) and Kensley (1970, 1981) conducted studies of decapods in South African waters, and also included southern Mozambican waters. In 2016, an extensive catalogue and checklist was published on decapods of Namibia, South Africa and Mozambique (Emmerson 2016a–c). Recently, a checklist was published by Muñoz *et al.* (2021) on brachyurans in Mozambican waters, compiled using literature research, molecular work and morphology of freshly collected specimens.

Materials and methods

Measurements given are of maximum carapace width (CW) and carapace length, measured along the midline (CL). All given measurements are in millimetres (mm). The taxa are treated in alphabetical order within subfamilies. Photographs of larger crabs are taken using a Nikon D.610 camera with a 24/70 mm lens. Photographs of smaller crabs are taken using a Leica M165C stereo microscope with a camera add-on. Editing of the photographs was done using Adobe Photoshop 2023. Field collection numbers are abbreviated as fcn. Specimens are deposited in the Naturalis Biodiversity Center (formerly Rijksmuseum van Natuurlijke Historie, RMNH), Leiden, The Netherlands. The specimens examined were all donated by Prof. Dr. J.H.C. Walenkamp to the Naturalis Biodiversity Center, Leiden, the Netherlands. All comparative material (specimens from outside of the study area) used belongs to the Naturalis Biodiversity Center (RMNH) collection and the former Zoological Museum Amsterdam (ZMA), now incorporated as part of RMNH.

Results

A total of 1162 brachyuran specimens are identified. The specimens are assigned to 90 species from 26 families. Five species are new records for Mozambican waters: *Hiplyra elegans* (Gravier, 1920), *Hiplyra variegata* (Rüppell, 1830), *Pseudomicippe tenuipes* A. Milne-Edwards, 1865, *Medaeops neglectus* (Balss, 1922) and *Chaenostoma crassimanus* Stimpson, 1858. New records for the area are indicated with an asterisk (*). Measurements of the carapace, sex and details of collecting are given of each studied specimen and also of comparative material. Of each recorded species, systematic remarks and distributions are provided. The given synonymy is as comprehensive as possible, but the focus is on regional works. Furthermore, it is supplemented with checklists from other areas.

Systematics

Infraorder Brachyura Latreille, 1802

Section Dromiacea De Haan, 1833

Superfamily Dromioidea De Haan, 1833

Family Dromiidae De Haan, 1833

Subfamily Dromiinae De Haan, 1833

1. *Conchoecetes avikele* McLay & Naruse, 2019
(Fig. 1A)

Conchoecetes artificiosus.—Stebbing 1902: 19; 1910: 346; 1920: 253.—Barnard 1950: 308, figs. 58A, B.—Emmerson 2016b: 208, two unnumbered colour figures. [Not *Conchoecetes artificiosus* (Fabricius, 1798].
Conchoecetes avikele McLay & Naruse, 2019: 15, figs. 7, 8.

Material examined. RMNH.CRUS.D.58332, 1 ovigerous female (23.0 × 22.0 mm), in front of Marine Biology Station (EBM), 12–14 m depth, fcn. X4305, 18 January 1987, leg. J.H.C. Walenkamp.

Remarks. Muñoz *et al.* (2021) listed *Conchoecetes artificiosus* (Fabricius, 1798) as the only species of *Conchoecetes* Stimpson, 1858 in Mozambican waters. In their revision of *Conchoecetes*, McLay & Naruse (2019) restricted *C. artificiosus* to India, Sri Lanka, Pakistan, Persian Gulf and Madagascar. McLay & Naruse (2019) described a new species, *C. avikele*, from the South African coast and Mozambique, and listed how it differed from *C. artificiosus*. *Conchoecetes avikele* has prominent, acute rostral and supraorbital teeth on its carapace, which are blunt in *C. artificiosus*. The cheliped carpus and propodus of *C. avikele* have prominent sub-acute distal tubercles, which are blunt in *C. artificiosus*. The seven or eight sub-hepatic tubercles on *C. avikele* are arranged in a curved, comb-like row, whereas on *C. artificiosus* they are scattered more randomly (McLay & Naruse 2019). The characters typical of *C. avikele* can also be seen in the examined material, confirming the second record of *C. avikele* in Mozambican waters, with the first being the damaged reference material collected during the Mortensen Expedition from 1929–1930 and examined by McLay & Naruse (2019).

Distribution. South Africa (Barnard 1950; Emmerson 2016b; McLay & Naruse 2019; Stebbing 1902, 1910, 1920) and Mozambique (McLay & Naruse 2019).

2. *Baccadromia bullifera* (Alcock, 1900)

Dromia (*Cryptodromia*) *bullifera* Alcock, 1900: 143.—Bakus 1994: 188 (list).—Venkataraman *et al.* 2004: 313 (list).
Cryptodromia bullifera.—Alcock 1901: 51, pl. 2, fig. 9.—Borradaile 1903b: 577.—Laurie 1906: 352.—Lenz 1910: 562.—Ihle 1913: 40.—Sakai 1936b: 23, pl. 7, fig. 3; 1976: 16, fig. 8.—Gordon 1950: 206.—Dawydoff 1952: 138.—Miyake *et al.* 1962: 126 (list).—Guinot 1967a: 240 (list).—Kensley 1970: 107, figs. 4A–C; 1981: 36 (list).—Zarenkov 1971: 169.—Lewinsohn 1977: 15, fig. 3; 1984: 111.—McLay & Ng 2005: 3 (list).—Dev Roy 2008: 7.—Ng *et al.* 2008: 33 (list).—Poupin 2010: 40 (list).—Emmerson 2016c: 450 (list).—Trivedi *et al*. 2018: 35 (list).—Muñoz *et al.* 2021: 49 (list).
Cryptodromiopsis bullifera.—McLay 1993: 189, fig. 17E.—Ng & Richer de Forges 2007: 322 (list).
Baccadromia bullifera.—McLay & Hosie 2022: 316, figs. 8, 9.

Material examined. RMNH.CRUS.D.58902, 1 male (17.0 × 16.0 mm), south of Ponta Punduini, 3 m depth, fcn. X4232, 3 November 1986, leg. J.H.C. Walenkamp.

Remarks. The examined specimen matches well with the original description for *Dromia (Cryptodromia) bullifera* in Alcock (1900) and figure of *Cryptodromia bullifera* in Alcock (1901). The specimen also matches the more recent description by McLay & Hosie (2022) for material from Australia. The crab has the characteristic rounded pearl-like tubercles on the sub-hepatic area.

Distribution. Red Sea (Gordon 1950; Guinot 1967a; Lewinsohn 1977; Zarenkov 1971), Mozambique

(Emmerson 2016c; Kensley 1970; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Madagascar (Lewinsohn 1984), India (Alcock 1900, 1901; Dev Roy 2008; Trivedi *et al*. 2018; Venkataraman *et al*. 2004), The Maldives (Borradaile 1903b), Sri Lanka (Laurie 1906; Lenz 1910), Nicobar Islands (Bakus 1994), Indonesia (Ihle 1913), Philippines (McLay & Ng 2005), Japan (Miyake *et al*. 1962; Sakai 1936b, 1976), Australia (McLay & Hosie 2022) and New Caledonia (McLay 1993; Ng & Richer de Forges 2007; Poupin 2010).

3. *Hemisphaerodromia monodous* (Stebbing, 1918)

Cryptodromia monodus Stebbing, 1918: 58, pl. 8.—Barnard 1950: 328, figs. 62G, 62H.—Guinot 1967a: 240 (list).—Serène 1968: 35 (list).—Kensley 1981: 36 (list).
Hemisphaerodromia abellana Barnard, 1954: 101, fig. 3.
Petalomera laevis Kensley, 1970: 111, figs. 6A–H.
Hemisphaerodromia monodus.—McLay 1993: 159.—Guinot & Tavares 2003: 67, fig. 7B.—Ng *et al.* 2008: 34 (list).—Poupin 2010: 47 (list).
Hemisphaerodromia monodous.—Emmerson 2016b: 217; 2016c: 451 (list).

Material examined. RMNH.CRUS.D.58900, 1 male (12.0 × 11.0 mm), Barreira Vermelha, fcn. unknown, 12 June 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58901, 1 male (7.5 × 6.0 mm), tidal flat off Barreira Vermelha, zone 1, fcn. X3949, 7 August 1983, leg. J.H.C. Walenkamp.

Remarks. *Hemisphaerodromia monodous* was not listed in the checklist by Muñoz *et al.* (2021) for Mozambican waters, although Kensley (1970) listed it from Mozambique under its synonym *Petalomera laevis* Kensley, 1970. McLay (1993) examined the type specimens of the various synonyms and noted that the carapace of *H. monodous* is wider than long, as opposed to as wide as long, as described by other authors. The examined material matches well with the remarks from McLay (1993) for *H. monodous*. The carapace of the examined specimens from Inhaca Island is also wider than long, evenly rounded and the surface is smooth. The frontal margin is continuous to the suborbital lobe. One examined specimen carried an ascidian camouflage cap.

Distribution. South Africa (Barnard 1950; Kensley 1981; Stebbing 1918), Mozambique (Kensley 1970), Madagascar (Barnard 1954) and New Caledonia (Poupin 2010).

4. *Lewindromia unidentata* (Rüppell, 1830)

Dromia unidentata Rüppell, 1830: 16, pl. 4, fig. 2.—H. Milne-Edwards 1837a: 178.—Heller 1861b: 21 (list).—A. Milne-Edwards 1868: 72 (list).—Hilgendorf 1879: 813.—Müller 1887: 472 (list).—Alcock 1900: 139; 1901: 47, pl. 2, fig. 6.—Chilton 1911: 554.—Bakus 1994: 188 (list).—Venkataraman *et al*. 2004: 313 (list).
Dromidia unidentata.—Kossmann 1880: 67.—De Man 1888: 207, pl. 14 figs. 4, 5.—Cano 1889a: 95.—Henderson 1893: 405.—Ortmann 1894: 34.—Nobili 1906a: 145; 1906b: 92.—Ihle 1913: 31.—Laurie 1915: 409 (list), 426.—Calman 1927: 211.—Balss 1934: 502.—Sakai 1936b: 13, pl. 6, fig. 2; 1976: 11, pl. 2, fig. 2.—Stephensen 1946: 63.—Barnard 1950: 323, figs. 61H, I.—Gordon 1950: 206.—Dawydoff 1952: 138.—MacNae & Kalk 1958: 71.—Guinot 1967a: 240 (list).—Serène 1968: 34 (list).—Lewinsohn 1977: 9, fig. 1; 1984: 107.—Kensley 1981: 36 (list).—Titgen 1982: 111.—Tirmizi & Kazmi 1986: 28, fig. 8.—Naiyanetr 2007: 62 (list).
Dromidia unidentata hawaiiensis Edmondson, 1922: 6, pl. 2D, figs. 1A–J.
Cryptodromia incisa.—Zarenkov 1971: 169. [Not *Cryptodromia incisa* Henderson, 1888].
Cryptodromiopsis unidentata.—McLay 1993: 192, figs. 7A–K, 18A.—Apel 2001: 44.—Davie 2002: 161.—Paulay *et al*. 2003: 38 (list).—Ng & Richer de Forges 2007: 322 (list).
Lewindromia unidentata.—Guinot & Tavares 2003: 74, fig. 11.—McLay & Ng 2005: 3 (list), 11.—Ng & Richer de Forges 2007: 322 (list).—Dev Roy 2008: 9.—Ng *et al.* 2008: 35 (list).—Poupin 2010: 50 (list).—Castro 2011: 32.—Emmerson 2016c: 451 (list).—Naderloo 2017: 25, figs. 2.7, 2.8D, 2.9.—Ng & Boyko 2017: 199, fig. 1A.—Trivedi *et al*. 2018: 36 (list).—Al-Hindi *et al.* 2020: 196, fig. 4A.—Lee *et al.* 2021: S3 (list).—Muñoz *et al.* 2021: 49 (list).—McLay & Hosie 2022: 342, fig. 28.—Poore & Ahyong 2023: 446, fig. 14.8G.

Material examined. RMNH.CRUS.D.58899, 1 male (12.0 × 11.0 mm), Cabo da Inhaca, "altitude 1 m, distance from coast 18 m", fcn. X3913, 11 August 1983, leg. Paula, Isabel & Alberto.

Remarks. The examined specimen matches with the concise description and drawing in Rüppell (1830) of *Dromia unidentata*. McLay (1993) provided a more detailed description of *C. unidentata* with clear figures, which were helpful for confirming the identification.

Distribution. South Africa (Kensley 1981), Mozambique (Barnard 1950; Hilgendorf 1879; MacNae & Kalk 1958; Muñoz *et al.* 2021), East Africa (Barnard 1950; Emmerson 2016c), Madagascar (Balss 1934; Lewinsohn 1984), Tanzania (Ortmann 1894), Red Sea (Al-Hindi *et al.* 2020; Calman 1927; Gordon 1950; Heller 1861b; Kossmann 1880; Laurie 1915; Lewinsohn 1977; Nobili 1906a, b; Rüppell 1830; Zarenkov 1971), Persian Gulf (Apel 2001; Naderloo 2017; Stephensen 1946; Titgen 1982), Pakistan (Tirmizi & Kazmi 1986), India (Alcock 1900, 1901; Dev Roy 2008; Henderson 1893; McLay 1993; Trivedi *et al*. 2018; Venkataraman *et al.* 2004), Sri Lanka (Henderson 1893; Müller 1887), Myanmar (De Man 1888), Nicobar Islands (Bakus 1994), Thailand (Naiyanetr 2007), Indonesia (Ihle 1913), Philippines (McLay & Ng 2005), Korea (Lee *et al.* 2021), Japan (Sakai 1936b, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; McLay & Hosie 2022), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), New Zealand (Chilton 1911), Hawai'i (Castro 2011; Edmondson 1922) and Easter Island (Ng & Boyko 2017).

Section Raninoida Ahyong, Lai, Sharkey, Colgan & Ng, 2007

Superfamily Raninoidea De Haan, 1839

Family Raninidae De Haan, 1839

Subfamily Raninae De Haan, 1839

5. *Ranina ranina* (Linnaeus, 1758)
(Fig. 1B)

Cancer Raniformis Rumphius, 1705: 13, pl. 7.
Cancer raninus Linnaeus, 1758: 625.—Fabricius 1775: 400.—Dixon 1789: 353, unnumbered plate.—Herbst 1796: 3, pl. 22 fig. 1.
Hippa scabra Fabricius, 1787: 330; 1793: 476.
Albunea scabra.—Weber 1795: 94 (nomen nudum).
Ranina serrata Lamarck, 1801: 156.—Latreille 1803: 133.—Desmarest 1825: 140.—Guérin-Méneville 1832: Crustacés, pl. 14 fig. 3.—Randall 1840: 130.—Ortmann 1892: 575, pl. 26 fig. 11G.—De Man 1902: 685.
Ranina dentata Latreille, 1825: 268.—De Haan 1841: 139, pls. 34, 35, figs. 1–4.—H. Milne-Edwards 1837b: pl. 41.—Bianconi 1851: 110.—A. Milne-Edwards 1862: 10.—Hoffmann 1874: 28.—Hilgendorf 1879: 814.—Nauck 1880: 47.—Estampador 1959: 60.
Ranina cristata Desjardins, 1835: 111.
Ranina scabra.—Stebbing 1893: 140, fig. 11; 1908: 16; 1910: 339.—Bouvier 1915: 225.—Ihle 1918: 295.—Boone 1934: 43, pls. 13, 14.
Ranina ranina.—Rathbun 1900: 299; 1902: 31.—Parisi 1914: 312.—Balss 1922b: 122.—Barnard 1950: 397, figs. 75A–D.—MacNae & Kalk 1958: 71, fig. 17D.—Miyake *et al.* 1962: 127 (list).—Tyndale-Biscoe & George 1962: 90.—Michel 1964: 37.—Guinot 1967a: 251 (list).—Serène 1968: 38 (list).—Sakai 1976: 48, pl. 19 fig. 1.—Kensley 1981: 35 (list).—Dai & Yang 1991: 42, fig. 17, pl. 4(2).—Poupin 1996: 24; 2010: 70 (list).—Ng *et al.* 2000: 165, figs. 5A, B.—Ng *et al.* 2001: 6 (list); 2017: 30 (list), fig. 2A.—Davie 2002: 490, unnumbered figure.—Ng & Davie 2002: 370 (list).—Poore 2004: 322, fig. 94C.—Naiyanetr 2007: 63 (list).—Ng & Richer de Forges 2007: 328 (list).—Ng *et al.* 2008: 42 (list).—Castro 2011: 37.—Emmerson 2016b: 257; 2016c: 454.—Bento & Paula 2018: 32 (list).—Trivedi *et al*. 2018: 70 (list).—Lee *et al.* 2021: S3 (list).—Muñoz *et al.* 2021: 50 (list).—Solanki *et al.* 2023: 2.—Poore & Ahyong 2023: 468, fig. 14.18F.

Material examined. RMNH.CRUS.D.58333, 1 male (51.0 × 64.0 mm), Ilha Santa Carolina, supra-littoral, towards the coast, in front of hotel, fcn. X4025, 20 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.12844, 1 female (45.0 × 56.0 mm), Nederlands Nieuw Guinea [= Indonesian Papua, Western New Guinea], Indonesia, 1954, leg. J.C. Bauwens; RMNH.CRUS.D.7290, 1 female (55.0 × 68.0 mm), Poeloe Weh [= Pulau Weh], Sumatra, Indonesia, 1913, leg. P. Buitendijk; RMNH.CRUS.D.53417, 1 female (63.0 × 75.0 mm), north Sulawesi, Selat Lembeh, bay south of Pulau Putus, 01°31'N 125°16'E, rocky shore and small sandy beach, coral cover from shore to more than 20 m, seagrass on north side, diving, snorkelling, Indonesia, 14–27 October 1994, collected during Sulawesi Expedition, 1994.

Remarks. The specimen examined matches well with existing description by Barnard (1950), figures provided

by previous workers, and comparative material. The subfamily Ranininae De Haan, 1839 is monogeneric and monospecific, with *Ranina ranina* as only extant species (Ng *et al.* 2008).

Distribution. West Africa (Rathbun 1900), South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1908, 1910), Mozambique (Barnard 1950; Bianconi 1851; Emmerson 2016c; Hilgendorf 1879; MacNae & Kalk 1958; Muñoz *et al.* 2021), La Réunion (Hoffmann 1874; A. Milne-Edwards 1862; Poupin 2010), Mauritius (Bouvier 1915; Michel 1964), India (Solanki *et al.* 2023; Trivedi *et al.* 2018), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1902; Herbst 1796; Ihle 1918; Rumphius 1705), China (Dai & Yang 1991), Taiwan (Balss 1922b; Ng *et al.* 2000, 2001, 2017), Philippines (Estampador 1959), Korea (Lee *et al.* 2021), Japan (De Haan 1839, 1841; Miyake *et al.* 1962; Ortmann 1892; Rathbun 1902; Sakai 1976), Australia (Davie 2002; Poore 2004; Tyndale-Biscoe & George 1962), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), Hawai'i (Castro 2011), French Polynesia (Poupin 1996, 2010) and Sandwich Islands (Dixon 1789; Randall 1840).

Section Eubrachyura De Saint Laurent, 1980

Subsection Heterotremata Guinot, 1977

Superfamily Calappoidea De Haan, 1833

Family Calappidae De Haan, 1833

6. *Calappa hepatica* (Linnaeus, 1758)

(Fig. 1C)

Cancer hepaticus Linnaeus, 1758: 630.

Cancer tuberculatus Fabricius, 1787: 321; 1793: 454.—Herbst 1782: 204, fig. 78, pl. 13.

Calappa tuberculata.—Weber 1795: 92 (list).—Fabricius 1798: 345.—Bosc 1802: 183.—Desmarest 1825: 109, pl. 10, fig. 1.—Krauss 1843: 52.—Bianconi 1851: 110.—Heller 1865: 69.—A. Milne-Edwards 1872: 55.—Paulson 1875: 74, pl. 9, fig. 5.—Kossmann 1877: 63.—Hilgendorf 1879: 809.—Nauck 1880: 46.—Lenz & Richters 1881: 425.—Pfeffer 1889: 33.

Calappa tuberculosa Guérin-Méneville, 1832: Crustacés, pl. 12, fig. 2.

Calappa (*Calappa*) *hepatica.*—De Haan 1837: 70 (list).

Calappa spinosissima H. Milne-Edwards 1837a: 106.—A. Milne-Edwards 1872: 55.—Alcock 1896: 144.—Edmondson 1923: 24.—Vatova 1943: 17.

Calappa tuberculata var. *sandwichien* Eydoux & Souleyet, 1842: 245, pl. 3, figs. 9, 10.

Calappa hepatica.—White 1847: 44.—Miers 1876: 55; 1877a: 238 (list); 1884a: 257; 1886: 285.—Haswell 1882: 136.—Cano 1889a: 94.—Ortmann 1892: 568; 1894: 35.—Alcock & Anderson 1894: 203 (list).—Alcock 1896: 142.—De Man 1895: 360; 1902: 687.—Whitelegge 1897: 139.—Nobili 1899: 249; 1900: 496; 1906a: 148; 1907: 378.—Borradaile 1900: 572; 1903a: 436, pl. 22 fig. 6.—Calman 1900: 25.—Schenkel 1902: 574.—Lenz 1905: 346; 1910: 544.—Grant & McCulloch 1906: 24.—Klunzinger 1906: 60.—Rathbun 1906: 887; 1907: 67; 1911: 197.—Stebbing 1908: 17; 1910: 333.—Parisi 1914: 285.—Balss 1915: 13; 1922b: 123; 1938: 8.—Bouvier 1915: 215.—Laurie 1915: 409 (list), 427.—Ihle 1918: 162, fig. 80.—Gravier 1920: 379.—McNeill 1926: 206; 1968: 43.—McNeill & Ward 1930: 373.—Boone 1934: 32, pls. 8–10.—Sakai 1936a: 157; 1976: 128, pl. 38 figs. 1, 3.—Chopra & Das 1937: 382.—Serène 1937: 78 (list); 1968: 41 (list).—Monod 1938: 96.—Buitendijk 1939: 230.—Ward 1942: 69.—Stephensen 1946: 65.—Barnard 1950: 348, figs. 66A–D.—Tweedie 1950: 106.—Dawydoff 1952: 139.—Holthuis 1953: 3.—Fourmanoir 1954: 15.—MacNae & Kalk 1958: figs. 17B, C.—Estampador 1959: 66.—Forest & Guinot 1961: 11, figs. 1A, B, 2.—Sankarankutty 1961: 135; 1962: 152.—Miyake *et al.* 1962: 126 (list).—Tyndale-Biscoe & George 1962: 69.—Michel 1964: 37.—Garth 1965: 7, figs. 9, 10.—Derijard 1966: 162.—Guinot 1967a: 245 (list).—Romimohtarto 1967: 4.—Zarenkov 1971: 170.—Kensley 1981: 38 (list).—Garth *et al.* 1987: 241 (list).—Takeda & Shikatani 1990: 478.—Dai & Yang 1991: 102, fig. 49, pl. 11(3).—Chen 1993: 677.—Bakus 1994: 171 (list), 188 (list).—Poupin 1996: 25; 2010: 36 (list).—Galil 1997: 296, figs. 10E, F, 13E, F, 14, 31.—Apel 2001: 47.—Ng *et al.* 2001: 10 (list); 2017: 30.—Davie 2002: 126.—Ng & Davie 2002: 371 (list).—Paulay *et al.* 2003: 37 (list).—Poore 2004: 327, figs. 96A, 97C.—Venkataraman *et al*. 2004: 311 (list).—Naiyanetr 2007: 65 (list).—Ng & Richer de Forges 2007: 320 (list).—Dev Roy 2008: 14.—Ng *et al.* 2008: 48 (list).—Castro 2011: 39.—Emmerson 2016b: 285; 2016c: 456 (list).—Naderloo 2017: 33, figs. 3.3C, 3.4, 3.9, 3.10.—Bento & Paula 2018: 32 (list).—Trivedi *et al*. 2018: 31 (list).—Suvarna Devi *et al.* 2019: 479.—Lee *et al.* 2021: S3 (list).—Muñoz *et al.* 2021: 50 (list).—Poore & Ahyong 2023: 483, fig. 14.24B.

Cancer afata Curtiss, 1938: 170.

Material examined. RMNH.CRUS.D.58334, 1 male (51.0 × 38.0 mm), littoral in front of Barreira Vermelha, fcn. X4055, 13 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58335, 1 male (44.0 × 29.0 mm), intertidal in front of Barreira Vermelha, fcn. X4219, 17 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58336, 3 males (61.0 × 39.0 mm, 58.0 × 32.0 mm, 45.0 × 28.0 mm), Saco da Inhaca, north of Ponta Torres, fcn. X4024, 12 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58337, 1 male (63.0 × 41.0 mm), Plato, north of Pontes Torres, between seagrass of *Thalassodendron*, fcn. X4119, 2 September 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58338, 2 males (62.0 × 37.0 mm, 46.0 × 28.0 mm), Saco da Inhaca, north of Ponta Ioue, fcn. X4039, 12 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.4222, 2 males (34.0 × 24.0 mm, 25.0 × 13.0 mm), 1 female (40.0 × 27.0 mm), Timor, Kera, Indonesia, 22 November 1929, collected during Snellius expedition; RMNH.CRUS.D.778, 2 males (42.0 × 27.0 mm, 38.0 × 28.0 mm), 5 females (45.0 × 30.0 mm, 44.0 × 28.0 mm, 44.0 × 28.0 mm, 41.0 × 30.0 mm, 35.0 × 23.0 mm), Timor, Indonesia, 1863, leg. G.F. Wienecke; RMNH.CRUS.D.3106, 2 females (37.0 × 25.0 mm, 37.0 × 25.0 mm), Tjilowong [= Cilowong], north west coast of Java, 1906, leg. P. Buitendijk; RMNH.CRUS.D.46725, 1 male (41.0 × 26.0 mm), Mahé, northwest coast, Beau Vallon near Mare Anglaise, Seychelles, 04°37'S 55°26'E, littoral to shallow sublittoral, sandy shore with beachrock and rockpools, snorkelling and scuba diving, 12 December 1992, collected during NIOP-E, 'Tyro' Seychelles Expedition 1992/1993; RMNH.CRUS.D.46726, 1 male (54.0 × 32.0 mm), St. Joseph Atoll, Seychelles, north rim, 5°24'S 53°20'E, reef flat, snorkelling & shore-collecting, 27 December 1992, collected during NIOP-E, 'Tyro' Seychelles Expedition 1992/1993.

Remarks. Measurements given for CW include the clypeiform expansions of the carapace. *Calappa hepatica* can be distinguished from congeners in Africa by the convex carapace, which is 1.6–1.7 times as wide as it is long (Galil 1997). The carapace also has three rows of transverse granulate rows, and has the clypeiform expansions characteristically developed, each bearing four teeth (Galil 1997). The present specimens agree well with drawings and description given in Barnard (1950), Galil (1997), the extensive description in Emmerson (2016b), and with comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1908, 1910), Mozambique (Barnard 1950; Bianconi 1851; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Fourmanoir 1954; Gravier 1920; Lenz 1910; Lenz & Richters 1881), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Michel 1964; Ward 1942; White 1847), Seychelles (Rathbun 1911), Tanzania (Lenz 1905; Ortmann 1894; Pfeffer 1889), Somalia (Vatova 1943), Red Sea (Balss 1915; Klunzinger 1906; Kossmann 1877; Laurie 1915; Nobili 1906a; Paulson 1875; Zarenkov 1971), Djibouti (Monod 1938), Gulf of Oman (Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Stephensen 1946), India (Alcock 1896; Alcock & Anderson 1894; Bakus 1994; Dev Roy 2008; Heller 1865; Sankarankutty 1961, 1962; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1903a), Myanmar (Chopra & Das 1937), Cocos (Keeling) Islands (Tweedie 1950), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (Buitendijk 1939; De Man 1895, 1902; Ihle 1918; Miers 1886; Nobili 1899; Ortmann 1894; Romimohtarto 1967; Schenkel 1902), China (Chen 1993; Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Korea (Lee *et al.* 2021), Japan (Balss 1922b; De Haan 1837; Miyake *et al.* 1962; Sakai 1936a, 1976; Takeda & Shikatani 1990), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Grant & McCulloch 1906; Haswell 1882; McNeill 1926, 1968; McNeill & Ward 1930; Poore 2004; Tyndale-Biscoe & George 1962), Torres Strait (Calman 1900), Micronesia (Balss 1938), Marshall Islands (Garth *et al.* 1987; Holthuis 1953), Gilbert Islands (Balss 1938; Holthuis 1953), Melanesia (Miers 1884a), New Caledonia (A. Milne-Edwards 1872; Ng & Richer de Forges 2007; Poupin 2010), Fiji (Balss 1938; Borradaile 1900), Wallis & Futuna (Poupin 2010), Tonga Islands (Miers 1886), Tahiti (Curtiss 1938; Heller 1865), Tuvalu (Borradaile 1900; Whitelegge 1897), New Zealand (Heller 1865; Miers 1876), Hawai'i (Castro 2011; Miers 1886; Rathbun 1906), Polynesia (Edmondson 1923; Nobili 1907), French Polynesia (Poupin 1996, 2010; Rathbun 1907) and Clipperton Island (Garth 1965; Poupin 2010).

Family Matutidae De Haan, 1835

7. *Ashtoret lunaris* (Forskål, 1775)
(Fig. 1D)

Cancer lunaris Forskål, 1775: 91 (in part).
Matuta Banksii Leach, 1817: 14.
Matuta banksii.—Miers 1877a: 245, pl. 40 figs. 1, 2; 1880: 315; 1886: 295.—Zehntner 1894: 277, pl. 13 fig. 13.—De Man 1895: 363.—Alcock 1896: 158.—Nobili 1899: 250; 1903: 23; 1906a: 149.—Lanchester 1900: 762; 1901: 552.—Rathbun 1902: 30; 1907: 68.—Parisi 1914: 291.—Balss 1915: 14; 1922b: 125; 1935: 116.—Laurie 1915: 409 (list).—Gravier 1920: 379.—Buitendijk 1939: 231.—Barnard 1950: 359, figs. 67H–K.—Fourmanoir 1954: 15.—Estampador 1959: 67.—Sankarankutty 1961: 134; 1962: 153.—Romimohtarto 1967: 4; 1972: 13, figs. 7, 10, 27–32, pls. 1C, 3C.—Dai & Yang 1991: 111, fig. 56(1), pl. 12(6).
Matuta victor.—Desmarest 1825: 101.—White 1847: 46.
Matuta Lessueri.—Rüppell 1830: 7 (in part).
Matuta lunaris.—White 1847: 46 (in part).—Kossmann 1877: 64.—Stebbing 1905: 54; 1910: 335.—Stimpson 1907: 166.—Rathbun 1910: 305.—Balss 1922b: 124.—Chopra & Das 1937: 383, fig. 1A.—Monod 1938: 96.—Barnard 1950: 358, fig. 67L.—Fourmanoir 1954: 14.—Chhapgar 1957: 6, pl. 2 figs. A–C.—MacNae & Kalk 1958: fig. 17A.—Estampador 1959: 67.—Miyake *et al.* 1962: 126 (list).—Tyndale-Biscoe & George 1962: 71.—Michel 1964: 37.—Derijard 1966: 162.—Guinot 1967a: 246 (list).—Romimohtarto 1967: 4, figs. 1B, 2B.—Serène 1968: 41 (list).—Sakai 1976: 140, pl. 44 fig. 1.—Kensley 1981: 38 (list).—Jones 1986: 156, pl. 45.—Hogarth 1989: 114 (list).—Chen 1993: 695, fig. 13.—Venkataraman *et al*. 2004: 311 (list).
Matuta banksi.—Ortmann 1892: 573.—Borradaile 1903a: 436, pl. 22, fig. 4.—Bouvier 1915: 216.—Ihle 1918: 185.—Dawydoff 1952: 139.—Holthuis 1953: 4.—Guinot 1967a: 246 (list).—Tyndale-Biscoe & George 1962: 71, fig. 4.1.—Kensley 1970: 104 (list).
Ashtoret lunaris.—Galil & Clark 1994: 5, figs. 1A, 1B, pl. 7.—Poupin 1996: 25; 2010: 35 (list).—Simões *et al.* 2001: 84 (list).—Davie 2002: 337.—Ng & Davie 2002: 371 (list).—Poore 2004: 345, figs. 102C, 102E, pl. 19F.—Naiyanetr 2007: 66 (list).—Ng & Richer de Forges 2007: 325 (list).—Dev Roy 2008: 16.—Ng *et al.* 2008: 50 (list).—Peer *et al.* 2014: 59, fig. 12.—Turan *et al.* 2015: 328, fig. 1.—Emmerson 2016b: 295; 2016c: 456 (list).—Ng *et al.* 2017: 32 (list).—Saher *et al.* 2017: 455.—Ammar & Arabia 2018: 65, figs. 2–4.—Bento & Paula 2018: 32 (list).—Trivedi *et al*. 2018: 52 (list).—Suvarna Devi *et al.* 2019: 479.—Muñoz *et al.* 2021: 50 (list).

Material examined. RMNH.CRUS.D.58339, 2 males (27.0 × 16.0 mm, 22.0 × 15.0 mm), Ponta Punduini, fcn. X3906, 27 July 1982, leg. Feliciano Micanto; RMNH.CRUS.D.58340, 1 male (44.0 × 27.0 mm), littoral north of Marine Biology Station (EBM), fcn. X4067, 24 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58341, 1 female (64.0 × 42.0 mm), Ilha dos Portugueses, fcn. X4310, 16 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58342, 1 male (21.0 × 14.0 mm), in front of Ponta Punduini, 3 m depth, fcn. X4269, 20 December 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58343, 1 male (17.0 × 12.0 mm), Ponta Punduini, fcn. X3926, 27 July 1982, leg. J. Baptista.

Comparative material. RMNH.CRUS.D.4244, 1 male (44.0 × 29.5 mm), Pankaja [= Southern Sulawesi], Indonesia, 3 March 1930, collected during Snellius Expedition; RMNH.CRUS.D.4241, 4 males (38.0 × 25.0 mm, 36.0 × 24.5 mm, 26.0 × 18.0 mm, 22.0 × 16.0 mm), 1 female (34.0 × 22.0 mm), Sulawesi, Paleleh, Indonesia, 22 August 1929, collected during Snellius Expedition; RMNH.CRUS.D.4247, 2 females (45.0 × 28.5 mm, 40.0 × 23.0 mm), Sulawesi, Paleleh, Indonesia, 22 August 1929, collected during Snellius Expedition; RMNH.CRUS.D.746, 2 males (43.0 × 29.0 mm, 41.5 × 29.5 mm), 2 females (33.5 × 23.0 mm, 33.0 × 23.0 mm), Sulu Sea, Sangihe Islands, Indonesia, 1867, leg. D.J. Hoedt; RMNH.CRUS.D.38208, 2 males (48.0 × 32.0 mm, 48.0 × 31.0 mm), Bay of Bangkok, Chonburi Province, ca. 100 km southeast of Bangkok, between Si Racha and Naklua, Thailand, trawled, from fishermen, 14 March 1985, leg. A.C.J. Burgers & L.B. Holthuis.

Remarks. According to Emmerson (2016c), *Ashtoret lunaris* is currently the only representative of the Matutidae in South African and Mozambican waters. In the revision of the genus *Matuta* Weber, 1795 by Galil & Clark (1994), the genus was split up into four genera, including *Ashtoret* Galil & Clark, 1994. Galil & Clark (1994) named both *A. picta* (Hess, 1865) and *A. lunaris* from East African waters (north of Mozambique). The examined specimens match the descriptions and comparative material of *A. lunaris*. On the cheliped palm of examined specimens is a ridge of five lobes, of which the second and fourth are most prominent, which is specific for this species. On *A. picta*, only the second lobe is prominent, the fourth is wide and obtuse (Galil & Clark 1994).

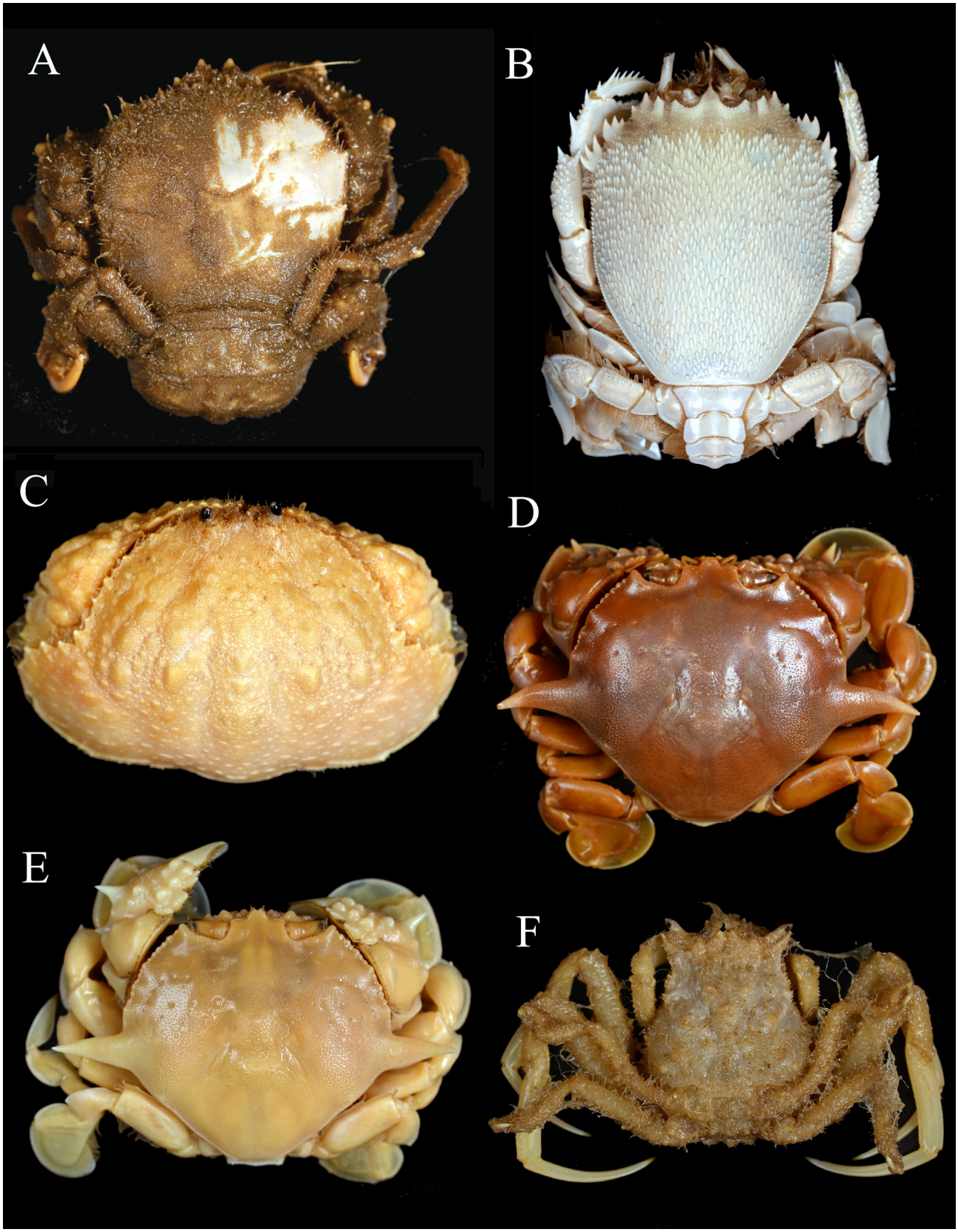

FIGURE 1. A, *Conchoecetes avikele* McLay & Naruse, 2019, ovigerous female, CW = 23.0 mm, RMNH.CRUS.D.58332; B, *Ranina ranina* (Linnaeus, 1758), male, CW = 51.0 mm, RMNH.CRUS.D.58333; C, *Calappa hepatica* (Linnaeus, 1758), male, CW = 44.0 mm, RMNH.CRUS.D.58335; D, *Ashtoret lunaris* (Forskål, 1775), female, CW = 64.0 mm, RMNH.CRUS.D.58341; E, *Matuta victor* (Fabricius, 1781), male, CW = 51.0 mm, RMNH.CRUS.D.58345; F, *Dorippe quadridens* (Fabricius, 1793), male, CW = 21.0 mm, RMNH.CRUS.D.58346.

Distribution. South Africa (Barnard 1950; Kensley 1981; Peer *et al.* 2014; Stebbing 1905, 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Madagascar (Fourmanoir 1954; Gravier 1920), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Michel 1964), Red Sea (Balss 1915; Kossmann 1877; Laurie 1915; Monod 1938; Nobili 1906a; Rüppell 1830), Yemen (Simões *et al.* 2001), Syria (Ammar & Arabia 2018), Turkey (Turan *et al.* 2015), Gulf of Oman (Hogarth 1989), Persian Gulf (Jones 1986), Pakistan (Saher *et al.* 2017), India (Alcock 1896; Chhapgar 1957; Dev Roy 2008; Sankarankutty 1961, 1962; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1903a), Myanmar (Chopra & Das 1937), Singapore (Nobili 1903), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Lanchester 1900, 1901; Miers 1880), Indonesia (Buitendijk 1939; De Man 1895; Ihle 1918; Rathbun 1910; Romimohtarto 1967), China (Chen 1993; Dai & Yang 1991), Taiwan (Balss 1922b; Ng *et al.* 2017), Philippines (Estampador 1959; Miers 1886), Japan (Balss 1922b; Miyake *et al.* 1962; Rathbun 1902; Sakai 1976; Stimpson 1907), Torres Strait (Miers 1877a), Australia (Balss 1935; Davie 2002; Poore 2004; Tyndale-Biscoe & George 1962), Papua New Guinea (Nobili 1899), Melanesia (Zehntner 1894), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Holthuis 1953) and French Polynesia (Poupin 2010; Rathbun 1907).

8. *Matuta victor* (Fabricius, 1781)

(Fig. 1E)

Cancer lunaris.—Forskål 1775: 91 (in part).

Cancer victor Fabricius, 1781: 502; 1793: 449.

Matuta victor.—Fabricius 1798: 369.—De Haan 1841.—H. Milne-Edwards 1837a: 115, pl. 20 figs. 3, 6.—Krauss 1843: 52.—White 1847: 46.—Dana 1852b: 395.—A. Milne-Edwards 1862: 10.—Heller 1865: 69.—Hilgendorf 1869: 93, pl. 3, fig. 2; 1879: 810.—Hoffmann 1874: 27, pl. 6, figs. 45–48.—Paulson 1875: 75.—Targioni Tozzetti 1877: 191, pl. 11, figs. A–C.—Richters 1880: 157.—Lenz & Richters 1881: 425.—Alcock 1896: 160.—Nobili 1899: 250; 1900: 497; 1903: 23; 1906a: 149.—Lenz 1905: 347; 1910: 544.—Stimpson 1907: 166.—Balss 1915: 14.—Kemp 1915: 209.—Serène 1937: 78 (list).—Galil & Clark 1994: 39, figs. 7A, B, pls. 13A, B.—Poupin 1996: 25; 2010: 52 (list).—Ng & Huang 1997: 264, figs. 1G, H, 2A, B.—Apel 2001: 48.—Ng *et al.* 2001: 11 (list), 2017: 32, fig. 2D.—Davie 2002: 339.—Ng & Davie 2002: 371 (list).—Naiyanetr 2007: 66 (list).—Dev Roy 2008: 16.—Ng *et al.* 2008: 50 (list).—Naderloo & Türkay 2012: 29.—Galil & Mendelson 2013: 69, figs. 1, 2.—Naderloo *et al.* 2013: 5 (table).—Naderloo 2017: 39, figs. 4.2D, 4.3, 4.4.—Behera *et al.* 2018: 1782, figs. 2, 3.—Kondylatos *et al.* 2018: 656, fig. 5.—Trivedi *et al*. 2018: 53 (list).—Suvarna Devi *et al.* 2019: 480.—Lee *et al.* 2021: S4 (list).—Pati *et al.* 2022: 506.—Poore & Ahyong 2023: 486, fig. 14.26A.

Matuta Lesueurii Leach, 1817: 14.

Matuta Peronii Leach, 1817: 13, pl. 127 figs. 1, 2.

Matuta Lessueri.—Rüppell 1830: 7 (in part), pl. 1 fig. 3.

Matuta lunaris.—Kossmann 1877: 64.—Stebbing 1905: 54.—Laurie 1915: 409 (list).—Ihle 1918: 185.—Chopra 1933: 31.—Buitendijk 1939: 231.—Sankarankutty 1962: 153, fig. 2.—Tyndale-Biscoe & George 1962: 71, fig. 2.—Romimohtarto 1972: 11, figs. 1–3, 5, 8, pls. 1A, 3A.—Dai & Yang 1991: 110, fig. 55, pl. 12(5).

Matuta victrix.—Miers 1877a: 243, pl. 39, figs. 1–3; 1880: 315; 1884a: 185 (list), 256; 1886: 295.—Haswell 1882: 133.—Müller 1887: 473 (list).—Cano 1889a: 94.—Whitelegge 1889: 230.—Ortmann 1892: 570.—Henderson 1893: 396.—De Man 1895: 360.—Lanchester 1900: 762; 1901: 551.—Doflein 1902: 654.—Klunzinger 1906: 67.—Parisi 1914: 291.—Estampador 1959: 66.—Serène 1968: 41 (list).

Matuta victrix var. crebrepunctata.—Miers 1877a: 244, pl. 39, fig. 4; 1884a: 256; 1886: 295.—Ortmann 1892: 572.—Zehntner 1894: 277.—Schenkel 1902: 573.

Material examined. RMNH.CRUS.D.58344, 1 male (23.0 × 14.0 mm), Maputo Bay, fcn. X4137, 7 August 1989, leg. Majun; RMNH.CRUS.D.58345, 1 male (51.0 × 31.0 mm), tidal flat off Barreira Vermelha, fcn. X4037, 7 August 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.29256, 1 male (44.0 × 26.5 mm), Comores Archipelago, Mayotte, The Comoros, July 1972, leg. R. van Hentig; RMNH.CRUS.D.3096, 1 male (56.0 × 34.0 mm), 1 female (45.0 × 27.0 mm), Sumatra, Poeloe Weh [= Pulau Weh], Indonesia, 1907, leg. P. Buitendijk; RMNH.CRUS.D.2761, 1 male (64.0 × 40.0 mm), Banda Sea, Indonesia, 1881, leg. J. Semmelinck; RMNH.CRUS.D.38198, 1 male (74.0 × 44.0 mm), Costa del Sol, intertidal beach, Mozambique, 22 May 1982, leg. J.H.C. Walenkamp, det. B. Galil.

Remarks. *Matuta victor* is a widespread species, but was not recorded in Mozambican waters by Muñoz *et al.* (2021) and Emmerson (2016c). The material examined matches the descriptions and comparative material for *M. victor*. At first glance, *M. victor* could be confused with *Ashtoret lunaris*. They can be distinguished from each other by the palmar ridge on the carpus of the cheliped (Galil & Clark 1994). On members of the genus *Matuta*,

the ridge is oblique, whereas members of the genus *Ashtoret* have a straight palmar ridge (Galil & Clark 1994). On the examined specimens, the ridge is clearly oblique. One of the reference specimens (RMNH.CRUS.D.38198) from the same collection and locality was identified by Prof. Dr. B. Galil in 1990, which, together with the material examined confirms the presence of *M. victor* in Mozambican waters.

Distribution. South Africa (Krauss 1843; Stebbing 1905), Mozambique (Hilgendorf 1879), Mayotte (Poupin 2010), Madagascar (Hoffmann 1874; Lenz 1910; Lenz & Richters 1881), La Réunion (A. Milne-Edwards 1862; Poupin 2010), Seychelles (Richters 1880), Tanzania (Hilgendorf 1869; Lenz 1905), Red Sea (Balss 1915; Klunzinger 1906; Kossmann 1877; Laurie 1915; Nobili 1906a; Paulson 1875; Rüppell 1830), Israel (Galil & Mendelson 2013), Gulf of Oman (Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013), India (Alcock 1896; Behera *et al.* 2018; Chopra 1933; Dev Roy 2008; Henderson 1893; Kemp 1915; Pati *et al.* 2022; Sankarankutty 1962; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018), Nicobar Islands (Heller 1865), Sri Lanka (Doflein 1902; Henderson 1893; Müller 1887), Singapore (Dana 1852b; Lanchester 1900; Nobili 1903), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Lanchester 1900, 1901; Miers 1880), Indonesia (Buitendijk 1939; De Man 1895; Heller 1865; Ihle 1918; Miers 1886; Romimohtarto 1972; Schenkel 1902), China (Dai & Yang 1991; Stimpson 1907), Taiwan (Ng *et al.* 2001, 2017; Ng & Huang 1997), Philippines (Estampador 1959; Miers 1886), Korea (Lee *et al.* 2021), Japan (Doflein 1902), Australia (Davie 2002; Haswell 1882; Leach 1817; Tyndale-Biscoe & George 1962), Papua New Guinea (Nobili 1899), Melanesia (Miers 1884a; Zehntner 1894), Tuvalu (Whitelegge 1889), Tahiti (Heller 1865), French Polynesia (Poupin 1996, 2010) and Greece (Kondylatos *et al.* 2018).

Superfamily Dorippoidea MacLeay, 1838

Family Dorippidae MacLeay, 1838

9. *Dorippe quadridens* (Fabricius, 1793)

(Fig. 1F)

Cancer dorsipes.—Linnaeus 1764: 452. [Not *Cancer dorsipes* Linnaeus, 1758].
Cancer quadridens Fabricius, 1793: 464.
Dorippe quadridens.—Weber 1795: 93 (list).—Fabricius 1798: 361.—Latreille 1802: 28; 1810: 422 (list); 1818a: 4 (list), pl. 306 fig. 1.—Desmarest 1823: 251; 1825: 135.—De Haan 1839: 121; 1841: 121, pl. 31 fig. 3.—White 1847: 54.—Stimpson 1858: 163; 1907: 167.—Herklots 1861: 137.—De Man 1888: 206.—Alcock & Anderson 1894: 204.—Estampador 1959: 65.—Serène 1968: 40 (list).—Holthuis & Manning 1990: 18, figs. 5–12.—Apel 2001: 45.—Ng *et al.* 2001: 7 (list); 2017: 35.—Davie 2002: 156.—Ng & Davie 2002: 370 (list).—Galil 2005b: 497, fig. 1.—Dev Roy 2008: 20.—Ng *et al.* 2008: 59 (list).—Emmerson 2016c: 457 (list).—Naderloo 2017: 47, figs. 4.2E, 7.1, 7.2.—Bento & Paula 2018: 33 (list).—Trivedi *et al*. 2018: 33 (list).—Zairion *et al.* 2018: 4, fig. 3A.—Muñoz *et al.* 2021: 51 (list).—Wong *et al.* 2021: 4 (list), 8, fig. 9, pl. 2B.—Guinot 2023: 231, figs. 3A, 8C, 10A, 10B, 11A–D, 12A–D, 31A, 32A, 33C, 35B.
Doripe quadridens.—Bosc 1802: 207.
Dorippe Rissoana Desmarest, 1817: 509; 1822: 119, pl. 10 figs. 1–3.—H. Milne-Edwards 1837a: 158.
Dorippe Nodosa Desmarest, 1817: 510 (nomen nudum).
Doripe atropos Lamarck, 1818: 245.
Dorippe nodulosa.—Lamarck 1818: 245.—Guérin-Méneville 1833: Crustacés, pl. 13, fig. 2.—Serène 1968: 40 (list). [Not *Cancer nodulosus* Olivier, 1791].
Dorippe rissoana.—Defrance 1819: 444.
Dorippe nodosa.—Defrance 1819: 444 (nomen nudum).—Desmarest 1822: 120 (nomen nudum); 1823: 251; 1825: 135.
Dorippe quadridentata.—H. Milne-Edwards 1837a: 156.—Gibbes 1850: 186 (list).—Hilgendorf 1879: 812.—Nauck 1880: 49.—Haswell 1882: 137.—Serène 1968: 40 (list).
Dorippa quadridentata.—Lucas 1840: 116.
Dorippe lanata.—A. Milne-Edwards 1868: 72 (list).—Serène 1937: 77 (list). [Not *Medorippe lanata* (Linnaeus, 1767)].
Dorippe dorsipes.—Miers 1884a: 185 (list), 257 (in part).—De Man 1888: 393.—Cano 1889a: 94; 1889b: 254.—Ortmann 1892: 562.—Henderson 1893: 404.—Alcock 1896: 277.—Lanchester 1900: 769; 1901: 553.—Doflein 1902: 653.—Rathbun 1902: 31; 1911: 197; 1923: 138.—Borradaile 1903a: 439, pl. 22 fig. 1.—Nobili 1903: 24; 1906a: 172; 1906b: 95.—Laurie 1906: 367; 1915: 410 (list), 429.—Lenz 1910: 545.—Parisi 1914: 300.—Balss 1915: 16; 1922b: 119.—Ihle 1916: 148, figs. 41, 45, 51, 54, 58, 59, 61, 63C.—Chopra 1933: 50.—Monod 1937: 2; 1938: 96.—Serène 1937: 77 (list); 1968: 40 (list).—Stephensen 1946: 63, figs. 4A, 4B.—Barnard 1950: 390, figs. 73A–C.—Holthuis 1956: 325.—MacNae & Kalk 1958: 44, 70, 79, 126, fig. 17J; 1969: 44, 70, 79, 126, fig. 7J.—Romimohtarto 1967: 2.—Zarenkov 1971: 173.—Bakus 1994: 188 (list).—Naiyanetr 2007: 64 (list). [Not *Cancer dorsipes* Linnaeus, 1758].

Dorippe frascone.—De Man 1895: 371.—Tyndale-Biscoe & George 1962: 66, fig. 2.—Guinot 1967a: 244 (list).—Kensley 1981: 38 (list). [Not *Cancer frascone* Herbst, 1785].
Doryppe dorsipes.—Dawydoff 1952: 139. [Not *Cancer dorsipes* Linnaeus, 1758].
Dorippe atropos.—Serène 1968: 40 (list).
Dorippe (*Dorippe*) *frascone.*—Serène & Romimohtarto 1969: 6, figs. 1, 5, 10, 15A, B, pl. 1 figs. A, B, pl. 3 figs. A–C.—Sakai 1976: 60, pl. 22 fig. 3.—Dai & Yang 1991: 55, fig. 25(1), pls. 5(8). [Not *Cancer frascone* Herbst, 1785].

Material examined. RMNH.CRUS.D.58346, 2 males (21.0 × 23.0 mm, 15.0 × 18.0 mm), in front of Barreira Vermelha, 16 m depth, fcn. X4321, 5 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58347, 2 males (31.0 × 29.0 mm, 12.0 × 13.0 mm), in front of Marine Biology Station (EBM), 12–14 m depth, fcn. X4305, 18 January 1987, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.21266, 1 male (15.5 × 15.5 mm), Gulf of Mannar, India, 1960, leg. L. Sankarankutty; RMNH.CRUS.D.27239, 1 male (26.0 × 26.5 mm), Costa do Sol, Maputo, Mozambique, 21 September 1967, leg. G. Hartmann; RMNH.CRUS.D.35936, 1 ovigerous female (25.0 × 24.0 mm), Penang, Batu Maung, Malaysia, 5°17'N 100°17'E., depth 30 m, trawled, from fishermen, 16 January 1983, leg. L.B. Holthuis & Wong Tat Meng; RMNH.CRUS.D.36085, 3 males (40.0 × 38.0 mm, 34.0 × 32.0 mm, 33.0 × 34.0 mm), Bangkok, province Chonburi, sand beach of Naklua near Pattaya, Thailand, washed up, 6 April 1984, leg. A.C.J. Burgers & L.B. Holthuis.

Remarks. Specimens agree well with the extensive description and drawings given in Holthuis & Manning (1990: 18, figs. 5–12), and with comparative material. *Dorippe quadridens* has a wide distribution within the Indo-West Pacific (Holthuis & Manning 1990). In Mozambican waters, two members of the genus *Dorippe* Weber, 1795 have been reported (Emmerson 2016c): *D. frascone* (Herbst, 1785) and *D. quadridens*. *Dorippe frascone* is easily distinguished from its congeners by the smooth carpus of the cheliped (Holthuis & Manning 1990). The specimens from Inhaca Island have granules on their carpus, and can therefore be identified as *D. quadridens*.

Distribution. Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), East Africa (Barnard 1950; Emmerson 2016c), Madagascar (Emmerson 2016c; Lenz 1910), Mauritius (Rathbun 1911), Tanzania (A. Milne-Edwards 1868), Mediterranean Sea (Galil 2005b), Suez Canal (Monod 1937), Red Sea (Balss 1915; Laurie 1915; Monod 1938; Nobili 1906a; Zarenkov 1971), Gulf of Oman (Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Nobili 1906b; Stephensen 1946), India (Alcock 1896; Alcock & Anderson 1894; Chopra 1933; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018), Bengal (Herklots 1861), The Maldives (Borradaile 1903a), Sri Lanka (Henderson 1893; Laurie 1906), Myanmar (De Man 1888), Nicobar Islands (Bakus 1994), Singapore (Lanchester 1900; Nobili 1903), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malay Peninsula (Lanchester 1901), Indonesia (De Man 1895; Ihle 1916; Romimohtarto 1967; Zairion *et al.* 2018), China (Dai & Yang 1991; Stimpson 1858, 1907; Wong *et al.* 2021), Taiwan (Balss 1922b; Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (Balss 1922b; De Haan 1839, 1841; Doflein 1902; Herklots 1861; Ortmann 1892; Rathbun 1902; Sakai 1976), Australia (Davie 2002; Haswell 1882; Rathbun 1923; Tyndale-Biscoe & George 1962) and Melanesia (Miers 1884a).

Superfamily Eriphioidea MacLeay, 1838

Family Eriphiidae MacLeay, 1838

10. *Eriphia scabricula* Dana, 1852

(Fig. 2A)

Eriphia gonagra.—Krauss 1843: 36. [Not *Cancer gonagra* Fabricius, 1781].
Eriphia scabricula Dana, 1852a: 82; 1852b: 247, pl. 14 figs. 5A, 5B.—A. Milne-Edwards 1873: 256.—Hilgendorf 1879: 798.—Richters 1880: 151.—Lenz & Richters 1881: 422.—Miers 1884b: 535; 1886: 162 (list).—Ortmann 1893: 480.—Alcock & Anderson 1894: 198 (list), 201 (list).—De Man 1895: 555.—Whitelegge 1897: 137.—Alcock 1898: 216.—Borradaile 1900: 589; 1902b: 263.—Lenz 1905: 358.—Nobili 1906a: 292.—Rathbun 1907: 57; 1910: 310; 1911: 233.—Stimpson 1907: 72.—Stebbing 1910: 303.—Laurie 1915: 415 (list).—Edmondson 1923: 19.—Sendler 1923: 39.—Boone 1934: 156, pl. 80.—Balss 1938: 66.—Sakai 1939: 523, pl. 99 fig. 3; 1976: 478, pl. 172 fig. 2.—Barnard 1950: 275.—Tweedie 1950: 125.—Holthuis 1953: 20.—Estampador 1959: 85.—Forest & Guinot 1961: 123.—Guinot 1964: 87; 1967a: 271 (list).—

Michel 1964: 26.—Derijard 1966: 169.—McNeill 1968: 66.—Serène 1968: 83 (list).—Kensley 1981: 44 (list).—Crosnier *in* Serène 1984: 311 (in key), figs. 232, 233, pl. 47A.—Garth *et al.* 1987: 244 (list).—Galil & Vannini 1990: 48.—Dai & Yang 1991: 357, fig. 174(2), pl. 48(1).—Poupin 1996: 63; 2010: 43 (list).—Ng *et al.* 2001: 23 (list); 2017: 38 (list).—Davie 2002: 174.—Ng & Davie 2002: 374 (list).—Clark & Paula 2003: 324, figs. 1–4.—Paulay *et al.* 2003: 39 (list).—Poore 2004: 442, fig. 144B.—Naiyanetr 2007: 94 (list).—Ng & Richer de Forges 2007: 322 (list).—Dev Roy 2008: 22.—Koh & Ng 2008: 334, figs. 8, 12A–C.—Ng *et al.* 2008: 63 (list).—Orchard 2012: 262.—Emmerson 2016b: 351; 2016c: 458 (list).—Bento & Paula 2018: 33 (list).—Trivedi *et al*. 2018: 39 (list).—Suvarna Devi *et al.* 2019: 480.—Muñoz *et al.* 2021: 51 (list).

Eriphia scabriculus.—Stebbing 1918: 53.

Eriphia pilumnoides Ward, 1941: 13, figs. 25, 26.—Serène 1968: 83 (list).

Eriphia scabricula garciaensis Ward, 1942: 99, pl. 6 fig. 4.—Serène 1968: 83 (list).

Material examined. RMNH.CRUS.D.58348, 1 ovigerous female (18.0 × 12.0 mm), tidal flat off Barreira Vermelha, zone 5, fcn. X3968, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58349, 1 male (9.0 × 7.0 mm juvenile), Cabo da Inhaca, "distance from coast 8 m, northwest direction, altitude 70 cm", fcn. unknown, collection date unknown, leg. Irengu Cornelio; RMNH.CRUS.D.58350, 1 female (16.0 × 12.0 mm), Cabo da Inhaca, "distance from coast 9 m, altitude 15 m, southwest direction", fcn. X4205, collection date unknown, leg. Odette Cossa; RMNH.CRUS.D.58351, 1 male (18.0 × 13.0 mm), Cabo da Inhaca, fcn. X3919, 2 August 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58352, 1 male (25.0 × 15.5 mm), Cabo da Inhaca, "altitude 0.6 m, distance from coast 12 m", fcn. X4018, 11 August 1983, leg. Paula, Isabel & Alberto.

Comparative material. RMNH.CRUS.D.497, 3 males (25.0 × 16.0 mm, 24.0 × 16.0 mm, 17.0 × 12.0 mm), Amboina, Malay Archipelago, 1864, leg. D.S. Hoedt; RMNH.CRUS.D.9766, 1 ovigerous female (13.0 × 9.0 mm), Onotoa Atoll, Gilbert Islands, 16 November 1951, leg. D.E. Strasburg; RMNH.CRUS.D.9767, 1 male (19.0 × 12.0 mm), Onotoa Atoll, Gilbert Islands, 15 August 1951, leg. A.H. Banner; RMNH.CRUS.D.17397, 1 male (14.0 × 10.0 mm), west coast, Flic and Flac, Mauritius, 23 April 1960, leg. C. Michel; RMNH.CRUS.D.25109, 3 males (21.0 × 13.0 mm, 20.0 × 14.0 mm, 14.0 × 10.0 mm), 2 females (16.0 × 11.0 mm, 14.0 × 9.0 mm), Timor, Kera, Indonesia, November 1929, Snellius Expedition.

Remarks. Three species of *Eriphia* Latreille, 1817 occur in African waters, *E. scabricula, E. sebana* (Shaw & Nodder, 1803) and *E. smithii* MacLeay, 1838 (Emmerson 2016c). *Eriphia scabricula* can be distinguished from the other African species by a prominent spine on the ventral inner margin of the basis-ischium of the cheliped (Koh & Ng 2008). Both the examined material and the comparative material show this character, as well as the characteristic smooth frontal margin of the carapace.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1910, 1918), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Miers 1884b; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Lenz & Richters 1881), La Réunion (Poupin 2010), Mauritius (Michel 1964; Richters 1880), Tanzania (Lenz 1905), Somalia (Galil & Vannini 1990), Red Sea (Laurie 1915; Nobili 1906a), Diego Garcia (Ward 1942), India (Alcock 1898; Alcock & Anderson 1894; Dev Roy 2008; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018), The Maldives (Borradaile 1902b), Christmas Island (Orchard 2012), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Indonesia (Dana 1852a; De Man 1895; Rathbun 1910), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Dana 1852b; Estampador 1959; Ward 1941), Japan (Ortmann 1893; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; McNeill 1968; Poore 2004), Melanesia (Rathbun 1911), Micronesia (Balss 1938; Sendler 1923), New Caledonia (A. Milne-Edwards 1873; Poupin 2010), Marshall Islands (Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Borradaile 1900; Dana 1852a, b), Tahiti (Dana 1852a; Forest & Guinot 1961), Tuvalu (Borradaile 1900; Whitelegge 1897), Wallis & Futuna (Poupin 2010), Samoa (Ortmann 1893), Line Islands (Edmondson 1923) and French Polynesia (Dana 1852b; Poupin 1996, 2010; Rathbun 1907).

11. *Eriphia sebana* (Shaw & Nodder, 1803)

(Fig. 2B)

Cancer sebanus Shaw & Nodder, 1803: pl. 591.

Gecarcinus anisocheles Latreille, 1818a: pl. 269, fig. 1.

Eriphia laevimana Guérin-Méneville, 1832: Crustacés, pl. 3 fig. 1.—H. Milne-Edwards 1834: 427.—A. Milne-Edwards 1862: 5.—Heller 1865: 24.—Hilgendorf 1869: 75; 1879: 797.—Miers 1877b: 135; 1886: 162 (list).—Targioni Tozzetti 1877: 60, pl. 5 figs. 1A–C.—Nauck 1880: 58.—Richters 1880: 151.—Haswell 1882: 75.—De Man 1887: 68; 1895: 555.—Henderson 1893: 367.—Ortmann 1893: 480; 1894: 54.—Zehntner 1894: 255.—Whitelegge 1897: 137.—Alcock 1898: 214.—Nobili 1899: 260; 1905: 490.—Borradaile 1900: 589; 1902b: 263.—Lenz 1905: 358; 1910: 552.—Grant & McCulloch 1906: 14.—Bouvier 1915: 263.—Laurie 1915: 415 (list).—Parisi 1916: 186.—Balss 1935: 140; 1938: 66.—Sakai 1936a: 169, pl. 12 fig. 3; 1939: 522, pl. 94 fig. 1.—Serène 1937: 75 (list); 1968: 83 (list).—Tweedie 1950: 124.—Estampador 1959: 85.—Edmondson 1962: 289, fig. 26A.—Michel 1964: 25.

Eriphia fordii MacLeay, 1838: 60.—Ng & Ahyong 2001: 90, fig. 3B.

Eriphia levimana.—Dana 1852b: 249, pl. 14 figs. 7A, B.—A. Milne-Edwards 1873: 255.—Müller 1887: 475 (list).—Stimpson 1907: 72.

Eriphia trapeziformis Hess, 1865: 135, pl. 6 fig. 4.

Eriphia laevimanus.—Miers 1884b: 517 (list), 534.—Barnard 1950: 273.—Fourmanoir 1954: 12.

Eriphia sebana.—Rathbun 1906: 865; 1907: 57; 1911: 233.—Edmondson 1923: 19.—Sendler 1923: 39.—McNeill 1926: 309; 1968: 66.—McNeill & Ward 1930: 381, pl. 59 figs. 1, 2.—Boone 1934: 159, pls. 81–84.—Holthuis 1953: 20.—Forest & Guinot 1961: 122, figs. 111A, B, 112.—Guinot 1964: 88.—Derijard 1966: 169.—Serène 1968: 83 (list).—Sakai 1976: 478, pl. 172 fig. 1.—Chen & Lan 1978: 276.—Kensley 1981: 44 (list).—Crosnier *in* Serène, 1984: 311 (in key), figs. 234, 235, pl. 47B.—Garth *et al.* 1987: 244 (list).—Galil & Vannini 1990: 49.—Dai & Yang 1991: 356, fig. 174(1), pl. 47(7).—Poupin 1996: 63; 2010: 43 (list).—Ng *et al.* 2001: 23 (list); 2017: 38 (list), fig. 3F.—Davie 2002: 174.—Ng & Davie 2002: 374 (list).—Paulay *et al.* 2003: 39 (list).—Poore 2004: 442, fig. 144A.—Naiyanetr 2007: 94 (list).—Ng & Richer de Forges 2007: 322 (list).—Dev Roy 2008: 23.—Koh & Ng 2008: 337, figs. 9–11, 12D–F, 18A, B, 19B.—Ng *et al.* 2008: 63 (list).—Castro 2011: 43.—Orchard 2012: 254.—Emmerson 2016b: 353; 2016c: 458 (list).—Bento & Paula 2018: 33 (list).—Trivedi *et al*. 2018: 39 (list).—Suvarna Devi *et al.* 2019: 480.—Muñoz *et al.* 2021: 51 (list).—Ambarwati *et al.* 2024: 3, fig. 2B.

Cancer tearlarchi Curtiss, 1938: 177.

Eriphia sebana hawaiiensis Ward, 1939: 11, figs. 13, 14.

Eriphia sebana laevimana.—Ward 1942: 98.

Eriphia sebana sebana.—Bakus 1994: 171 (list).—Venkataraman *et al*. 2004: 309 (list).

Material examined. RMNH.CRUS.D.58353, 1 female (51.0 × 36.0 mm), supra-littoral, towards the coast, in front of hotel, fcn. X4027, 20 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58354, 1 male (27.0 × 19.0 mm), Cabo da Inhaca, fcn. X4182, October 1984, collector unknown.

Comparative material. RMNH.CRUS.D.18738, 1 male (27.0 × 19.0 mm), Malay Archipelago, 1863, leg. E.W.A. Ludeking; RMNH.CRUS.D.28242, 1 male (28.0 × 19.0 mm), Aceh, Pulu Weh, Sumatra, Indonesia, 30 November 1910, leg. P. Buitendijk; RMNH.CRUS.D.28243, 1 male (25.0 × 19.0 mm), Aceh, Pulu Weh, Sumatra, Indonesia, April 1926, leg. P. Buitendijk; RMNH.CRUS.D.25062, 2 males (33.0 × 23.0 mm, 17.0 × 11.0 mm), Maluku, Aru Islands, Manumbai, Indonesia, October 1929, collected during Snellius Expedition.

Remarks. Of the three species of *Eriphia* present in African waters (*E. scabricula, E. sebana* and *E. smithii*), *E. sebana* can be distinguished from the others by the smooth outer surface of the chelae (Emmerson 2016b; Koh & Ng 2008). *Eriphia sebana* also has a prominent external frontal denticle on its carapace, with the other frontal denticles often decreasing in size externally (Koh & Ng 2008). The African material examined matches well with the description of *E. sebana* by Koh & Ng (2008) and with comparative material from other localities.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; MacLeay 1838), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Fourmanoir 1954; Lenz 1910), La Réunion (A. Milne-Edwards 1862; Poupin 2010), Mauritius (Bouvier 1915; Michel 1964; H. Milne-Edwards 1834; Ortmann 1893; Richters 1880; Ward 1942), Seychelles (Guinot 1964; Miers 1884b), Tanzania (Lenz 1905; Ortmann 1893), Somalia (Galil & Vannini 1990), Red Sea (Laurie 1915), India (Alcock 1898; Bakus 1994; Dev Roy 2008; Henderson 1893; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1902b), Sri Lanka (Henderson 1893; Müller 1887), Myanmar (De Man 1887), Nicobar Islands (Heller 1865), Christmas Island (Orchard 2012), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Indonesia (Ambarwati *et al*. 2024; De Man 1895; Nobili 1899; Ortmann 1894), China (Chen & Lan 1978; Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Grant & McCulloch 1906; Haswell 1882; McNeill 1926, 1968; McNeill & Ward 1930; Poore 2004), Papua New Guinea (Nobili 1905; Ortmann 1893), Melanesia (Rathbun 1911; Zehntner 1894), Micronesia (Balss 1938; Sendler 1923), New Caledonia (A. Milne-Edwards 1873;

Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987; Holthuis 1953), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938; Borradaile 1900; Dana 1852b; Hess 1865; Holthuis 1953), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906; Ward 1939), Tahiti (Curtiss 1938; Forest & Guinot 1961), Tuvalu (Borradaile 1900; Whitelegge 1897), Wallis & Futuna (Poupin 2010), Samoa (Dana 1852b; Ortmann 1893), Line Islands (Edmondson 1923) and French Polynesia (Dana 1852b; Forest & Guinot 1961; Poupin 1996, 2010; Rathbun 1907).

12. *Eriphia smithii* MacLeay, 1838

(Fig. 2C)

Eriphia smithii MacLeay, 1838: 60.—Hoffmann 1874: 6, pl. 1, figs. 1A–C.—Lenz & Richters 1881: 422.—Stebbing 1910: 303.—Serène 1937: 74 (list).—Barnard 1950: 274, figs. 37F, 51.—Michel 1964: 26.—Kensley 1981: 44 (list).—Bakus 1994: 188 (list).—Apel 2001: 92.—Ng & Ahyong 2001: 89, fig. 3C.—Ng & Davie 2002: 374 (list).—Venkataraman *et al*. 2004: 309 (list).—Koh & Ng 2008: 342, figs. 13–15, 18C.—Ng *et al.* 2008: 63 (list).—Emmerson 2016b: 357; 2016c: 458 (list).—Naderloo 2017: 51, figs. 8.1–8.3, 8.4B.—Bento & Paula 2018: 33 (list).—Trivedi *et al*. 2018: 39 (list).—Muñoz *et al.* 2021: 51 (list).

Eriphia laevimana var. *smithii.*—Hilgendorf 1879: 897.—Pfeffer 1889: 28.—Alcock 1898: 216.—Lenz 1905: 358; 1910: 552.—Nobili 1906a: 291; 1906b: 142.—Laurie 1915: 415 (list).—Chhapgar 1957: 38, pl. 11, figs. G–I.

Eriphia smithi.—Ortmann 1894: 54.—MacNae & Kalk 1958: 69, fig. 16C.—Serène 1968: 83 (list).—Crosnier *in* Serène 1984: 311, figs. 236, 237, pl. 47C.—Hogarth 1989: 113 (list), 114 (list); 1994: 102.—Galil & Vannini 1990: 49.—Hornby 1997: 16.—Dev Roy 2008: 23.—Naderloo & Türkay 2012: 29.—Naderloo *et al.* 2013: 5 (table).

Eriphia sebana smithi.—Stephensen 1946: 140, figs. 34C, D.—Guinot 1964: 89.

Eriphia sebana var. *smithii.*—Fourmanoir 1954: 12.—Guinot 1967a: 271 (list).—Titgen 1982: 129.

Material examined. RMNH.CRUS.D.58355, 1 male (11.0 × 8.0 mm juvenile), Cabo da Inhaca, "distance from coast 9 m, altitude 15 m, direction south-west", fcn. X4075, collection date unknown, leg. Odette Cossa; RMNH.CRUS.D.58356, 1 female (27.0 × 28.0 mm), Costa do Sol, Maputo, tidal flat, very low tide, fcn. X4070, 7 October 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58357, 1 male (26.0 × 20.0 mm), Cabo de Inhaca, between the rocks, fcn. X4118, 1 September 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58358, 1 male (21.0 × 14.0 mm), in front of Marine Biology Station (EBM), fcn. X3909, 1 August 1982, leg. Feliciano Micanto; RMNH.CRUS.D.58359, 1 male (22.0 × 17.0 mm), Cabo da Inhaca, "altitude 1.7 m, direction north, distance from coast 16.8 m", fcn. X4017, 11 August 1983, leg. Paula, Isabel & Alberto; RMNH.CRUS.D.58360, 1 male (38.0 × 28.0 mm), Cabo da Inhaca, "altitude 1.1 m, direction north, distance from coast 12.6 m", fcn. X3993, 11 August 1983, leg. Isabel Guiamba; RMNH.CRUS.D.58361, 1 ovigerous female (39.0 × 28.0 mm), north of Ponta Torres, fcn. X4029, 12 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58362, 1 female (47.0 × 33.0 mm), Cabo da Inhaca, "altitude 76 cm, direction north, distance from coast 4.386 m", fcn. X4007, 11 August 1983, leg. Octavio Cassamo; RMNH.CRUS.D.58363, 1 male (27.0 × 20.0 mm), 1 female (44.0 × 32.0 mm), Cabo da Inhaca, fcn. X4355, 15 January 1987, leg. Maimuna Amade, Lucilia Chuquela, Albertina Alage & Dulcineia Baquete; RMNH.CRUS.D.58364, 1 male (34.0 × 25.0 mm), 1 ovigerous female (44.0 × 33.0 mm), Cabo da Inhaca, "southwest direction, distance to coast 10.32 m, altitude -5 cm", fcn. X4031, 10 August 1983, leg. Odette Cossa; RMNH.CRUS.D.58365, 1 male (43.0 × 35.0 mm), Barreira Vermelha, 500 m from the coast, under the rocks, fcn. X4182, 8 January 1986, leg. M. Eulalia Valis; RMNH.CRUS.D.58366, 2 males (26.0 × 20.0 mm, 20.0 × 16.0 mm), Cabo da Inhaca, fcn. X3976, 11 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58367, 1 male (48.0 × 35.0 mm), Cabo da Inhaca, fcn. X4283, 10 December 1986, leg. Louis, Tomas & Silvestre; RMNH.CRUS.D.58368, 1 male (48.0 × 37.0 mm), 1 ovigerous female (49.0 × 37.0 mm), tidal flat off Barreira Vermelha, fcn. X4004, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58369, 1 male (41.0 × 31.0 mm), 1 female (42.0 × 31.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4064, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58370, 1 ovigerous female (34.0 × 24.0 mm), intertidal, north of Ponta Torres, fcn. X4271, 20 December 1986, leg. Francisco Mapanga; RMNH.CRUS.D.58371, 1 female (45.0 × 32.0 mm), Cabo da Inhaca, fcn. X4127, 26 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58372, 1 male (32.0 × 24.0 mm), Cabo da Inhaca, fcn. X3901, 2 August 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58373, 1 male (14.0 × 11.0 mm), fcn. X3952, date and collector unknown.

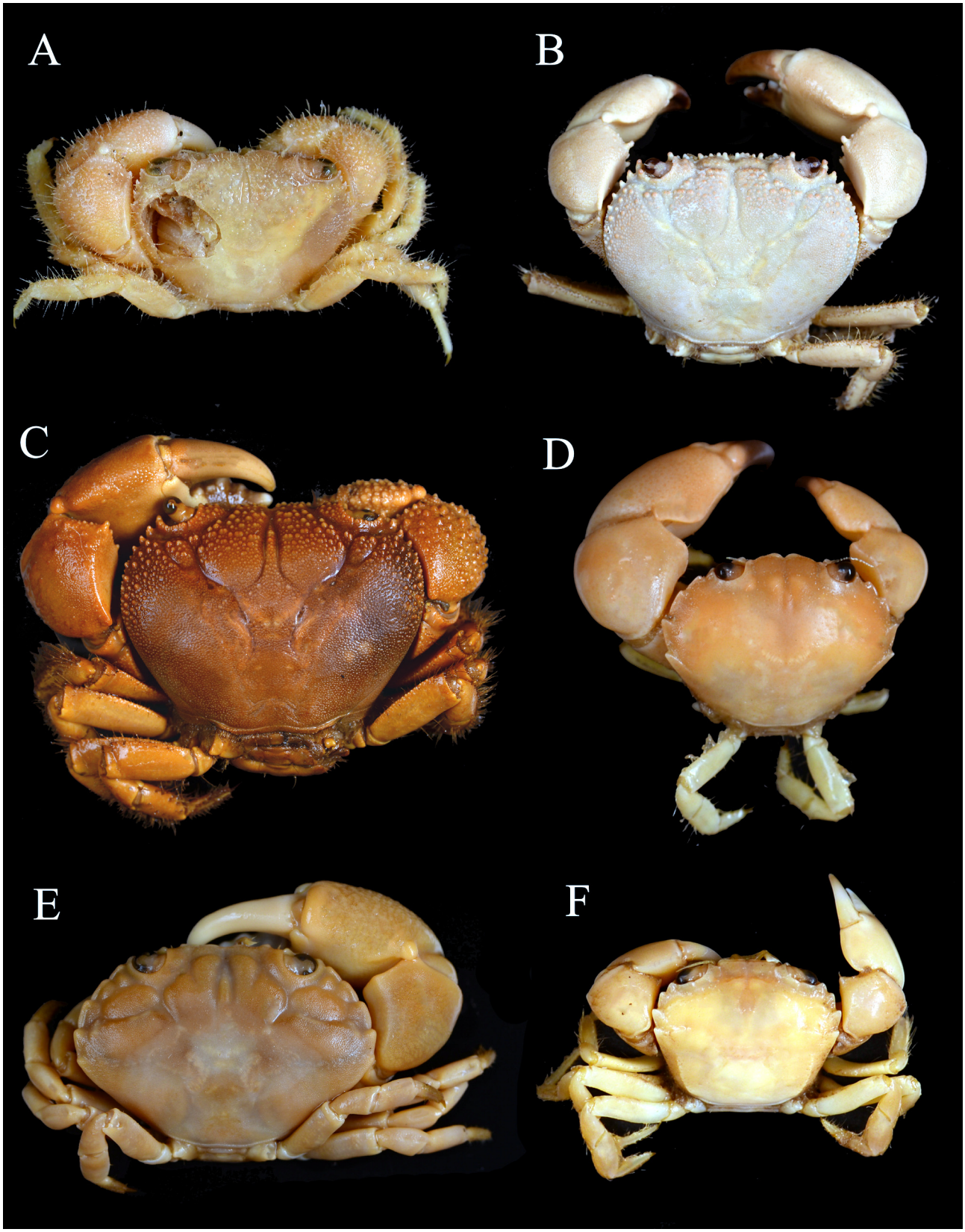

FIGURE 2. A, *Eriphia scabricula* Dana, 1852, female, CW = 16.0 mm, RMNH.CRUS.D.58350; B, *Eriphia sebana* (Shaw & Nodder, 1803), female, CW = 51.0 mm, RMNH.CRUS.D.58353; C, *Eriphia smithii* MacLeay, 1838, female, CW = 47.0 mm, RMNH.CRUS.D.58362; D, *Sphaerozius nitidus* Stimpson, 1858, female, CW = 14.0 mm, RMNH.CRUS.D.58377; E, *Lydia annulipes* (H. Milne-Edwards, 1834), male, CW = 24.0 mm, RMNH.CRUS.D.58379; F, *Eucrate crenata* (De Haan, 1835), male, CW = 9.0 mm, RMNH.CRUS.D.58382.

Comparative material. RMNH.CRUS.D.499, 2 males (45.0 × 34.0 mm, 39.0 × 30.0 mm), Nossy Bè [= Nosy Be], Madagascar, 1866, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.29909, 2 females (51.0 × 39.0 mm, 33.0 × 24.0 mm), Coast Province, 10 km north of Mombasa, between Nyali and Bamburi Beach, Kenya, 12 December 1974, leg. L.B. Holthuis; RMNH.CRUS.D.26012, 3 males (42.0 × 31.5 mm, 41.5 × 30.5 mm, 34.0 × 26.0 mm), 4 females (42.0 × 30.0 mm, 40.0 × 29.0 mm, 36.5 × 27.0 mm, 32.0 × 23.0 mm), Coast Province, Bamburi Beach, 11 km north of Mombasa, Kenya, November 1969, leg. L.B. Holthuis.

Remarks. *Eriphia smithii* was originally considered to be a widespread species, but Koh & Ng (2008) showed that western Pacific records belong to a different species, *E. ferox* Koh & Ng, 2008. Carapace tuberculation of the South African specimens is relatively lower and more blunt, as opposed to sharper and more acute in specimens from other areas (Koh & Ng 2008). This matches with the examined specimens and the comparative material from East African and Madagascar waters.

Distribution. South Africa (Barnard 1950; Kensley 1981; MacLeay 1838; Ortmann 1894; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Lenz 1910; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Fourmanoir 1954; Hoffmann 1874; Lenz & Richters 1881), Mauritius (Michel 1964), Tanzania (Lenz 1905; Ortmann 1894), Somalia (Galil & Vannini 1900), Red Sea (Guinot 1964; Laurie 1915; Nobili 1906a), Gulf of Oman (Hogarth 1989, 1994; Naderloo 2017), Persian Gulf (Apel 2001; Hornby 1997; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946; Titgen 1982), India (Alcock 1898; Chhapgar 1957; Dev Roy 2008; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Nicobar Islands (Bakus 1994) and Thailand (Ng & Davie 2002).

Family Menippidae Ortmann, 1893

13. *Sphaerozius nitidus* Stimpson, 1858

(Fig. 2D)

Sphaerozius nitidus Stimpson, 1858: 35; 1907: 62, pl. 7 fig. 5A.—Miers 1886: 144, pl. 12 fig. 4.—Ortmann 1893: 433.—Doflein 1902: 660.—Klunzinger 1913: 285, pl. 7 fig. 9.—Balss 1934: 517 (list).—Sakai 1939: 513, pl. 98 fig. 2; 1976: 471, pl. 171 fig. 1.—Barnard 1950: 254, figs. 47A–D.—MacNae & Kalk 1958: 82 (key).—Edmondson 1962: 282, fig. 25A.—Miyake *et al.* 1962: 129 (list).—Guinot 1967a: 272 (list).—Kensley 1981: 45 (list).—Garth & Kim 1983: 691.—Hogarth 1989: 106 (list); 1994: 102.—Dai & Yang 1991: 349, fig. 172A(1), pl. 46(7).—Ng *et al.* 2001: 24 (list); 2017: 40.—Ng & Davie 2002: 374 (list).—Naiyanetr 2007: 95 (list).—Ng *et al.* 2008: 64 (list).—Zenetos *et al.* 2010: 400 (list).—Castro 2011: 43.—Emmerson 2016b: 360; 2016c: 458 (list).—Lin *et al.* 2017: 72.—Bento & Paula 2018: 33 (list).—Trivedi *et al*. 2018: 53 (list).—Lee *et al.* 2021: S4 (list).—Muñoz *et al.* 2021: 51 (list).—Pati *et al.* 2022: 512, fig. 5.—Poore & Ahyong 2023: 505.

Menippe convexa Rathbun, 1894: 239; 1906: 861, pl. 11 fig. 4.—De Man 1913: 12, pl. 1.—Balss 1922c: 115.

Menippe ortmanni De Man, 1899: 60, pl. 5 fig. 2.

Sphaerozius oeschi Ward, 1941: 1 (list), 11, figs. 19, 20.

Spherozius nitidus.—Serène 1968: 83 (list).

Material examined. RMNH.CRUS.D.58374, 1 female (12.0 × 8.0 mm), Maputo Bay, on the beach, fcn. X4201, 7 August 1985, leg. Magnus; RMNH.CRUS.D.58375, 11 males (12.0 × 9.0 mm, 11.0 × 9.0 mm, 10.0 × 8.0 mm, 10.0 × 7.0 mm, 9.0 × 6.0 mm, 8.0 × 6.0 mm, 7.0 × 5.0 mm, 7.0 × 5.0 mm, 7.0 × 5.0 mm, 6.0 × 4.0 mm, 6.0 × 4.0 mm), 12 females (14.0 × 11.0 mm, 13.0 × 10.0 mm, 12.5 × 9.0 mm, 12.0 × 8.0 mm, 11.0 × 8.0 mm, 9.0 × 7.5 mm, 9.0 × 7.0 mm, 9.0 × 6.0 mm, 8.0 × 6.0 mm, 8.0 × 6.0 mm, 6.0 × 5.0 mm, 5.0 × 3.5 mm), Maputo, littoral, fcn. X4131, 15 October 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58376, 4 males (10.0 × 7.5 mm, 9.0 × 7.0 mm, 4.0 × 3.0 mm, 3.0 × 3.0 mm), 1 female (6.0 × 4.0 mm), Maputo Bay, dredged, fcn. unknown, 30 July 1985, leg. Magnus; RMNH.CRUS.D.58377, 8 males (9.0 × 7.0 mm, 7.0 × 5.5 mm, 7.0 × 4.5 mm, 7.0 × 4.5 mm, 7.0 × 4.0 mm, 6.0 × 5.5 mm, 6.0 × 4.0 mm, 6.0 × 4.0 mm), 10 females (14.0 × 9.0 mm, 12.0 × 8.0 mm, 11.0 × 8.0 mm, 10.0 × 8.0 mm, 10.0 × 7.5 mm, 8.0 × 7.0 mm, 8.0 × 6.0 mm, 8.0 × 6.0 mm, 6.5 × 5.0 mm, 5.0 × 3.0 mm), Maputo, littoral, sandy coast, fcn. X4132, 15 October 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58378, 1 female (5.0 × 4.0 mm), Maputo Bay, on the beach, fcn. X4201, 7 August 1985, leg. Magnus.

Comparative material. RMNH.CRUS.D.41935, 3 males (21.0 × 15.5 mm, 18.0 × 14.0 mm, 18.0 × 13.0 mm), 2 females (26.0 × 18.5 mm, 22.0 × 16.0 mm), Kyushu, Amakusa Archipelago, Nokama-jima, Japan, May 1983, leg. K. Harada.

Remarks. Three menippid species have been reported from South African and Mozambican waters, of which *Sphaerozius nitidus* is one (Emmerson 2016c; Muñoz *et al.* 2021). The anterior part of the carapace is smooth and the last anterolateral tooth on the carapace is low, triangular and directed obliquely. The examined specimen matches well with the figures and description given in Pati *et al.* (2022), and the present material.

Distribution. South Africa (Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Balss 1934), Eastern Mediterranean Sea (Zenetos *et al.* 2010), Red Sea (Klunzinger 1913), Gulf of Oman (Hogarth 1989, 1994), India (Pati *et al.* 2022; Trivedi *et al.* 2018), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1899), China (Dai & Yang 1991; Lin *et al.* 2017; Stimpson 1907), Taiwan (Ng *et al.* 2001, 2017), Philippines (Garth & Kim 1983; Ward 1941), Korea (Lee *et al.* 2021), Japan (Balss 1922c; Doflein 1902; Miers 1886; Miyake *et al.* 1962; Ortmann 1893; Sakai 1939, 1976) and Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1894, 1906).

Family Oziidae Dana, 1851

14. *Lydia annulipes* (H. Milne-Edwards, 1834)

(Fig. 2E)

Ruppellia annulipes H. Milne-Edwards, 1834: 422.—Dana 1852b: pl. 14 figs. 4A–C.—Stimpson 1858: 37; 1907: 71.—Haswell 1882: 74.—Whitelegge 1897: 137.
Euxanthus rugulosus Heller, 1865: 12, pl. 2 fig. 2.
Eurüppellia annulipes.—Ortmann 1894: 54.—Lenz 1910: 552.—Vatova 1943: 21.—Barnard 1950: 818 (list); 1955: 4 (list).
Ozius (*Euruppellia*) *annulipes.*—Alcock 1898: 188.—Balss 1922c: 132.
Euruppellia annulipes.—Borradaile 1900: 589.—Nobili 1900: 499.
Lydia annulipes.—Rathbun 1906: 862.—Edmondson 1923: 19; 1962: 288, fig. 25E.—Balss 1938: 66.—Sakai 1939: 521, pl. 64 fig. 3; 1976: 477, pl. 171 fig. 2.—Ward 1942: 96.—Tweedie 1950: 124.—Holthuis 1953: 23.—Forest & Guinot 1961: 122, figs. 109A, B, 110.—Michel 1964: 27.—Derijard 1966: 168.—Guinot 1967a: 272 (list).—McNeill 1968: 66.—Serène 1968: 83 (list).—Garth & Kim 1983: 691.—Crosnier *in* Serène 1984: 309, pl. 46E.—Garth *et al.* 1987: 245 (list).—Galil & Vannini 1990: 48, fig. 8F.—Dai & Yang 1991: 354, fig. 173(3), pl. 47(5).—Poupin 1996: 64; 2010: 51 (list).—Ng *et al.* 2001: 24 (list); 2017: 41 (list), fig. 4A.—Davie 2002: 181.—Clark & Paula 2003: 329, figs. 9–12.—Paulay *et al.* 2003: 39 (list).—Dev Roy 2008: 26.—Ng *et al.* 2008: 65 (list).—Castro 2011: 44.—Emmerson 2016b: 367; 2016c: 458 (list).—Bento & Paula 2018: 33 (list).—Trivedi *et al*. 2018: 56 (list).—Muñoz *et al.* 2021: 51 (list).
Euruppelia annulipes.—Bouvier 1915: 263.
Lydia danae Ward, 1939*:* 9, figs. 11, 12.

Material examined. RMNH.CRUS.D.58379, 1 male (24.0 × 18.0 mm), 1 female (26.0 × 17.0 mm), tidal flat by Cabo de Inhaca, fcn. X3945, 12 March 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58380, 1 male (24.0 × 15.0 mm), in tidal pool off Cabo de Inhaca, fcn. X4221, 9 February 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58381, 1 female (22.0 × 14.5 mm), Cabo de Inhaca, fcn. X4285, 14 January 1987, leg. Anselmo Timbrine.

Comparative material. RMNH.CRUS.D.26007, 2 males (16.0 × 10.5 mm, 11.5 × 6.5 mm), 8 females (26.0 × 16.0 mm, 24.0 × 15.0 mm, 21.5 × 14.0 mm, 21.0 × 12.0 mm, 19.0 × 11.5 mm, 16.0 × 10.5 mm, 16.0 × 10.0 mm, 14.0 × 9.5 mm), Coast Province, Bamburi Beach, 11 km north of Mombasa, Kenya, November 1969, leg. L.B. Holthuis; RMNH.CRUS.27709, 1 female (22.0 × 13.0 mm), Watamu Beach, Malindi, Kenya, November 1968, leg. B. Lanza; RMNH.CRUS.D.16415, 1 male (9.5 × 6.0 mm), Grand Gaube, Mauritius, 28 January 1960, leg. C. Michel; RMNH.CRUS.D.16416, 1 male (17.0 × 10.5 mm), Flic and Flac, Mauritius, 7 August 1960, leg. C. Michel; RMNH.CRUS.D.9723, 1 male (15.5 × 9.5 mm), Tuamoto Archipelago, Raroia Atoll, Ngarumaoa Island, French Polynesia, 23 August 1952, leg. J.P.E. Morrison.

Remarks. There are two species in the genus *Lydia* Gistel, 1848 present in the western Indian Ocean (Emmerson 2016b), *L. annulipes* and *L. tenax* (Rüppell, 1830). *Lydia tenax* is found more northwards to Somalia and in the Red Sea (Naderloo 2017) while *L. annulipes* is more widespread. Although the distribution of both *Lydia* species could overlap in the Horn of Africa, it has been suggested that they may be segregated ecologically to avoid resource competition (Emmerson 2016b). Crosnier (in Serène, 1984) described *L. tenax* as clearly more granular and reaching a much larger size than *L. annulipes*. Crosnier (in Serène, 1984) also discussed that *L. tenax* seemed to be confined to the Red Sea and the Persian Gulf, and that records around Africa could have easily been confused with *L. annulipes*. Since the examined specimens have a smooth carapace and chelipeds and are relatively small for adults, they are here identified as *L. annulipes*.

Distribution. South Africa (Barnard 1950, 1955), Mozambique (Emmerson 2016c; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Emmerson 2016c), Mauritius (Bouvier 1915; Heller 1865; Michel 1964), Seychelles (Lenz 1910), Tanzania (Ortmann 1894), Somalia (Galil & Vannini 1990; Vatova 1943), India (Alcock 1898; Dev Roy 2008; Trivedi *et al.* 2018), Cocos (Keeling) Islands (Tweedie 1950), China (Dai & Yang 1991; Stimpson 1907), Taiwan (Balss 1922c; Ng *et al.* 2001, 2017), Philippines (Garth & Kim 1983), Japan (Balss 1922c; Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Haswell 1882; McNeill 1968), Micronesia (Balss 1938), Marshall Islands (Garth *et al.* 1987; Holthuis 1953), Cook Islands (Ward 1939), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906), Fiji (Borradaile 1900), Tuvalu (Whitelegge 1897), Wallis & Futuna (Poupin 2010), Solomon Islands (Ward 1942), Line Islands (Edmondson 1923) and French Polynesia (Forest & Guinot 1961; Holthuis 1953; Poupin 1996, 2010).

Superfamily Goneplacoidea MacLeay, 1838

Family Euryplacidae Stimpson, 1871

15. *Eucrate crenata* (De Haan, 1835)

(Fig. 2F)

Cancer (*Eucrate*) *crenatus* De Haan, 1835: 51, pl. 15 fig. 1.

Pilumnoplax sulcatifrons Stimpson, 1858: 93; 1907: 90.—Targioni Tozzetti 1877: 102, pl. 7 figs. 2A–E.—Miers 1886: 226 (list).

Eucrate crenata.—Rathbun 1902: 23; 1911: 237.—Nobili 1903: 35; 1906a: 296; 1906b: 145.—Laurie 1915: 415 (list).—Tesch 1918: 158.—Balss 1922c: 137.—Calman 1927: 214.—Shen 1932: 114, figs. 66, 67, pl. 5 fig. 2.—Serène 1937: 75 (list); 1968: 90.—Monod 1938: 144.—Sakai 1939: 562, pl. 102 fig. 1; 1976: 535, pl. 192 fig. 1.—Dawydoff 1952: 141.—Holthuis 1956: 321.—Holthuis & Gottlieb 1958: 118 (list).—Guinot 1967a: 277 (list).—Campbell 1969: 136, figs. 2, 7.—Dai & Yang 1991: 401, fig. 195, pl. 54(2).—Bakus 1994: 189 (list).—Karasawa 1997: 61, pl. 15 fig. 2, pl. 18 fig. 6.—Enzenross & Enzenross 2000: 187.—Venkataraman *et al*. 2004: 314 (list).—Zenetos *et al.* 2005: 75 (list); 2010: 399 (list).—Galil 2007: 302 (list).—Naiyanetr 2007: 90 (list).—Dev Roy 2008: 28.—Ng *et al.* 2008: 78 (list).—Castro & Ng 2010: 21, figs. 2A, B, 3A–G, 14D–F.—Naderloo 2017: 63, figs. 11.1, 11.2A, 11.3.—Ng *et al.* 2017: 43 (list).—Trivedi *et al*. 2018: 40 (list).—Nayak *et al.* 2020: 1105, fig. 2.—Lee *et al.* 2021: S4 (list).—Muñoz *et al.* 2021: 51 (list).—Wong *et al.* 2021: 4 (table), 12, fig. 16, pls. 3D, E.—Poore & Ahyong 2023: 521.

Eucrate sulcatifrons.—Tesch 1918: 158.—Kensley 1981: 46 (list).—Ng *et al.* 2008: 78 (list).—Emmerson 2016c: 459 (list).

Eucarate crenata.—Miyake *et al.* 1962: 130 (list).

Material examined. RMNH.CRUS.D.58382, 2 males (9.0 × 7.0 mm, 8.0 × 7.0 mm), Maputo Bay, on the beach, fcn. X4201, 7 August 1985, leg. Magnus.

Comparative material. RMNH.CRUS.D.16333, 1 male (14.0 × 10.0 mm), Station 4, 25°55'N, 50°16'E, Persian Gulf, 6 September 1956, leg. C.E. Dawson; RMNH.CRUS.D.27699, 1 male (26.5 × 20.5 mm), Jawa Timur, Surabaya, Indonesia, February 1927, leg. P. Buitendijk; RMNH.CRUS.D.32744, 1 male (21.5 × 17.5 mm), Kochi, south east coast of Shikoku Island, Mimase, Japan, 17 May 1979, leg. K. Sakai, H. Suzuki & L.B. Holthuis; RMNH.CRUS.D.41888, 1 male (30.0 × 23.0 mm), 1 ovigerous female (30.5 × 24.5 mm), Kyushu, Amakusa Archipelago, Matsushima, Japan, tidal flat, October 1983, leg. T. Yamaguchi; RMNH.CRUS.D.48621, 1 male (28 × 22.0 mm), Palmahim, Mediterranean Sea, depth 36 m, 3 June 2000, leg. B. Galil.

Remarks. Only one species of *Eucrate* De Haan, 1835 was reported from Mozambican waters (Muñoz *et al.* 2021), *E. crenata*. According to Emmerson (2016b) this one species was *E. sulcatifrons* (Stimpson, 1858), but Castro & Ng (2010) treated *E. sulcatifrons* as a synonym of *E. crenata*. Examined specimens generally match the description given in Castro & Ng (2010), but some characters are different. There are no characteristic red spots on the upper branchial region of the carapace present in the examined material, they are also not present on the two comparative specimens from the Persian Gulf (RMNH.CRUS.D.16333) and Indonesia (RMNH.CRUS.D.27666). This may not be significant here, since both the examined and the comparative material are wet specimens that have been on ethanol 70%, and the spots may have been lost. On the examined specimens the anterolateral teeth are more acute than on the comparative material. These specimens are most likely small, pre-adult individuals of *E. crenata*, as the CW of adults can reach up to 49.1 mm (Castro & Ng 2010).

Distribution. South Africa (Emmerson 2016c; Kensley 1981), Mozambique (Emmerson 2016c; Kensley 1981;

Muñoz *et al.* 2021), Seychelles (Rathbun 1911), Mediterranean Sea (Galil 2007; Holthuis & Gottlieb 1958; Zenetos *et al.* 2005, 2010), Tunisia (Enzenross & Enzenross 2000), Red Sea (Calman 1927; Holthuis 1956; Laurie 1915; Monod 1938; Nobili 1906a), Persian Gulf (Naderloo 2017; Nobili 1906a), India (Dev Roy 2008; Nayak *et al.* 2020; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Nicobar Islands (Bakus 1994), Singapore (Nobili 1903), Thailand (Naiyanetr 2007), China (Dai & Yang 1991; Shen 1932; Stimpson 1907; Wong *et al.* 2021), Taiwan (Ng *et al.* 2017), Korea (Lee *et al.* 2021), Japan (Balss 1922c; De Haan 1835; Karasawa 1997; Miyake *et al.* 1962; Rathbun 1902; Sakai 1939, 1976) and Australia (Campbell 1969).

Superfamily Hymenosomatoidea MacLeay, 1838

Family Hymenosomatidae MacLeay, 1838

Subfamily Hymenosomatinae MacLeay, 1838

16. *Elamena mathoei* (Desmarest, 1823)

(Fig. 3A)

Hymenosoma mathœi Desmarest, 1823: 275; 1825: 163.—H. Milne-Edwards 1837a: 33.
Hymenosoma Mathei.—Rüppell 1830: 21, pl. 5, fig. 1.
Inachus (*Elamena*) *mathaei.*—Krauss 1843: 51.
Hymenosoma mirabile White, 1847: 136 (nomen nudum).
Elamene mathaei.—Heller 1861a: 371; 1861b: 20 (list).—A. Milne-Edwards 1873: 5.
Elamena mathaei.—White 1847: 33.—Paulson 1875: 71, pl. 9, fig. 3B.—Nobili 1906a: 319.—Stebbing 1910: 333.—Gordon 1940: 63, figs. 1A, B, 2, 3.—Ward 1942: 78.—Barnard 1950: 73, figs. 15G–O.—MacNae & Kalk 1958: 65, fig. 15A.—Guinot 1967a: 300 (list).—Kensley 1981: 41 (list).—Lucas 1980: 158 (in key), 171 (list).—Ng & Chuang 1996: 70, fig. 29.—Poupin 1996: 75.
Elamena mathoei.—Laurie 1915: 416 (list).—Ng *et al.* 2008: 108 (list).—Poupin 2010: 42 (list).—Zaouali *et al.* 2013: 278, fig. 2.—Emmerson 2016c: 459 (list).—Bento & Paula 2018: 46 (list).—Muñoz *et al.* 2021: 51 (list).
Epialtus vetchi Stebbing, 1920: 266, pl. 29.
Elamena matthei.—Serène 1968: 64 (list).
Elamena mathei.—Kensley 1970: 104 (list).

Material examined. RMNH.CRUS.D.58383, 1 male (3.5 × 4.0 mm), fcn. X4142, date and collector unknown; RMNH.CRUS.D.58384, 1 ovigerous female (5.0 × 4.0 mm), littoral north of Marine Biology Station (EBM), fcn. X4077, 24 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58385, 2 females (5.0 × 4.0 mm, 5.0 × 4.0 mm), tidal flat off Barreira Vermelha, fcn. X3950, 7 September 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58386, 1 female (5.0 × 6.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4046, 2 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.27696, 1 male (3.0 × 4.0 mm), Gulf of Aqaba, Eilat, "Olivia Bucht", Israel, 27 February 1971, leg. H. Schuhmacher.

Remarks. *Elamena mathoei* is the only member of the family present in Mozambican waters (Lucas 1980; Muñoz *et al.* 2021). Other members of the Hymenosomatidae family are recorded from nearby, in South Africa (Emmerson 2016c), but they are straightforward to distinguish from *E. mathoei*, as *E. mathoei* is the only member of the genus in the area with a truncated rostrum (Lucas 1980). Zaouali *et al*. (2013) reported the occurrence of *E. mathoei* in the Mediterranean Sea for the first time, but noted that, as they are very small, the crabs could also have been easily overlooked before their record. The examined specimens match well with descriptions in Gordon (1940), Barnard (1950) and with comparative material.

Distribution. South Africa (Barnard 1950; Kensley 1981; Krauss 1843; Stebbing 1910, 1920), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), La Réunion (Poupin 2010), Mauritius (Desmarest 1823, 1825), Mediterranean Sea (Zaouali *et al.* 2013), Red Sea (Gordon 1940; Heller 1861a, b; Laurie 1915; Nobili 1906a; Paulson 1875; Rüppell 1830), New Caledonia (A. Milne-Edwards 1873) and French Polynesia (Poupin 1996, 2010).

Superfamily Leucosioidea Samouelle, 1819

Family Leucosiidae Samouelle, 1819

Subfamily Ebaliinae Stimpson, 1871

17. *Hiplyra elegans* (Gravier, 1920)*

(Fig. 3B)

Philyra platychira.—Laurie 1906: 363. [Not *Philyra platycheir* De Haan, 1841].
Philyra variegata var. *elegans* Gravier, 1920*:* 379, figs. 1–7.
Philyra variegata.—Stephensen 1946: 89 (in part), figs. 15F–K, 16.
Hiplyra elegans.—Galil 2009: 292, fig. 7.—Naderloo & Apel 2012: 249, figs. 1, 2.—Naderloo *et al.* 2015: 404 (list).—Naderloo 2017: 87, figs. 14.12, 14.13A, 14.14.—Galil & Ng 2023: 71, fig. 6C.

Material examined. RMNH.CRUS.D.58387, 2 males (14.0 × 15.0 mm, 7.0 × 8.0 mm), 2 females (12.0 × 13.0 mm, 8.0 × 9.0 mm), between Barreira Vermelha and Portinho, 10 m depth, fcn. X4249, 2 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58388, 3 males (15.0 × 16.0 mm, 12.0 × 12.0 mm, 11.0 × 13.0 mm), 2 females (12.0 × 12.0 mm, 9.0 × 10.0 mm), in front of Barreira Vermelha, in the channel, 16 m depth, fcn. X4324, 5 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58389, 5 males (13.0 × 14.0 mm, 11.0 × 12.0 mm, 10.0 × 12.0 mm, 7.0 × 9.0 mm, 7.0 × 8.0 mm), 4 females (11.0 × 11.0 mm, 10.0 × 11.0 mm, 9.0 × 10.0 mm, 8.0 × 9.0 mm), in front of Barreira Vermelha, fcn. X4209, 19 October 1986, leg. J.H.C. Walenkamp.

Remarks. Examined specimens match well with extensive description in Galil (2009). This little crab was not described from Mozambique before, according to the checklists by both Emmerson (2016c) and Muñoz *et al*. (2021). At a quick glance, *H. elegans* can be mistaken for *H. variegata* (Rüppell, 1830). *Hiplyra variegata* has two subterminal denticles on its pollex, and the first pleonal somite in females is lobate (Galil 2009). On *H. elegans,* the subterminal end of the pollex is smooth, and the first pleonal somite in females is not lobate (Galil 2009). The examined specimens show indistinct subterminal denticles on the pollex that could only be seen with high magnification (x5), and the females had a lobate first pleonal somite. These specimens are the first reported *H. elegans* from Mozambican waters.

Distribution. Madagascar (Galil & Ng 2023; Gravier 1920), Gulf of Oman (Naderloo & Apel 2012), Persian Gulf (Al-Maliky *et al.* 2021; Stephensen 1946) and Sri Lanka (Laurie 1906). Newly recorded from Mozambique.

18. *Hiplyra variegata* (Rüppell, 1830)*

(Fig. 3C)

Myra variegata Rüppell, 1830: 17, pl. 4 fig. 4.
Philyra platychira.—Alcock 1896: 242 (in part).
Philyra variegata.—Nobili 1906a: 169.—Balss 1915: 14.—Laurie 1915: 410 (list).—Stephensen 1946: 89 (in part), figs. 15F–K, 16.—Guinot 1967a: 249 (list).—Serène 1968: 47 (list).—Apel 2001: 58.—Ng *et al.* 2008: 93 (list).
Hiplyra variegata.—Galil 2009: 297, fig. 13.—Naderloo & Apel 2012: 255, figs. 7, 8.—Naderloo & Türkay 2012: 31.—Naderloo *et al*. 2013: 5 (table); 2015: 404 (list).—Naderloo 2017: 91, figs. 14.13D, 14.14, 14.17.—Galil & Ng 2023: 72, fig. 6D.

Material examined. RMNH.CRUS.D.58390, 1 male (8.0 × 9.0 mm), Saco da Inhaca, inside of the mangrove, fcn. unknown, 7 January 1986, leg. Sonia; RMNH.CRUS.D.58391, 2 females (9.0 × 10.0 mm, 7.0 × 7.0 mm), in front of Marine Biology Station (EBM), fcn. X3490, 1 August 1982, leg. J. Baptista; RMNH.CRUS.D.58392, 1 male (11.0 × 11.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4043, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58393, 1 male (11.0 × 9.0 mm), Cabo da Inhaca, fcn. X3910, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58394, 3 males (8.0 × 7.0 mm, 6.0 × 7.0 mm, 4.0 × 4.0 mm), *Cymodocea* flats off Barreira Vermelha, fcn. unknown, 7 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58395, 3 males (7.0 × 9.0 mm, 7.0 × 7.0 mm, 6.0 × 6.0 mm), 1 female (7.0 × 9.0 mm), in front of Barreira Vermelha, fcn. X4209, 19 October 1986, leg. J.H.C. Walenkamp.

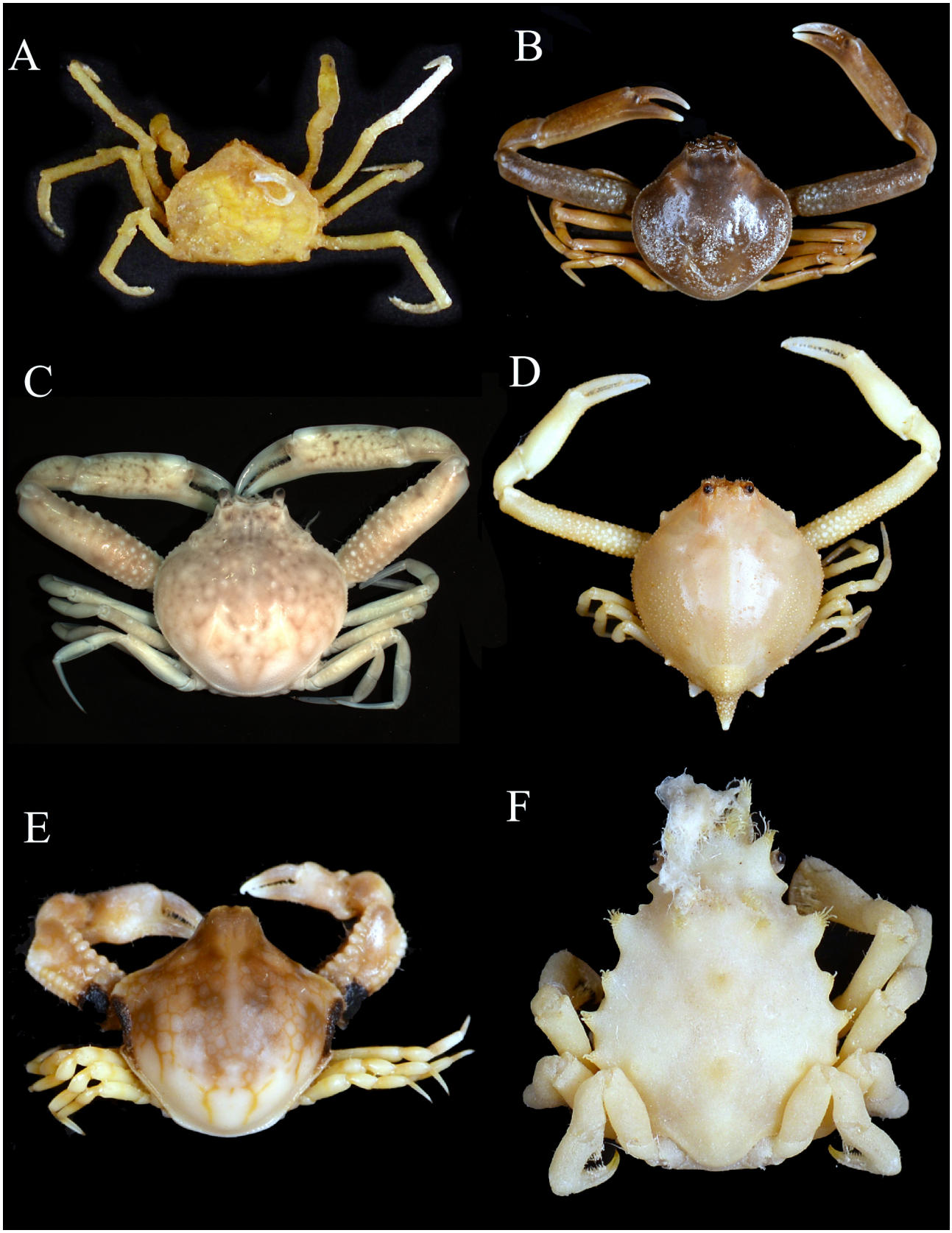

FIGURE 3. A, *Elamena mathoei* (Desmarest, 1823), female, CW = 5.0 mm, RMNH.CRUS.D.58384; B, *Hiplyra elegans* (Gravier, 1920), male, CW = 13.0 mm, RMNH.CRUS.D.58389; C, *Hiplyra variegata* (Rüppell, 1830), male, CW = 11.0 mm, RMNH.CRUS.D.58393; D, *Myra subgranulata* Kossmann, 1877, male, CW = 11.0 mm, RMNH.CRUS.D.58397; E, *Urnalana pulchella* (Bell, 1855), female, CW = 11.0 mm, RMNH.CRUS.D.58399; F, *Acanthonyx quadridentatus* (Krauss, 1843), male, CW = 9.0 mm, RMNH.CRUS.D.58401.

Comparative material. RMNH.CRUS.D.24861, 14 males (10.0 × 10.5 mm, 9.5 × 9.5 mm, 9.0 × 10.0 mm, 9.0 × 9.5 mm, 9.0 × 9.5 mm, 9.0 × 9.0 mm, 9.0 × 8.5 mm, 9.0 × 8.5 mm, 8.5 × 8.5 mm, 8.5 ×8.5 mm, 8.5 × 8.0 mm, 8.0 ×7.0 mm moult, 7.0 × 6.5 mm, 6.0 × 6.5 mm), 3 ovigerous females (9.0 × 8.5 mm, 8.0 × 7.5 mm, 7.0 × 7.0 mm), 7 females (8.0 × 7.5 mm, 8.0 × 7.5 mm, 7.5 × 7.0 mm, 7.5 × 7.0 mm, 7.5 × 7.0 mm, 7.5 × 7.0 mm, 7.5 × 7.0 mm), Janub Sinai, Ras Muhamed, Gulf of Suez, Egypt, September 1967, leg. L. Fishelson; RMNH.CRUS.D.24866, 3 males (7.5 × 7.5 mm, 6.5 × 6.0 mm, 5.0 × 5.0 mm), Gulf of Eilat, Janub Sinai, Shurat al Gharqana, Egypt, 15 September 1967, leg. L. Fishelson; RMNH.CRUS.D.38548, 1 ovigerous female (8.0 × 7.5 mm), Red Sea, Sharm el Nâga, 33 km south of Hurghada, Egypt, 26°54'N 33°58'E, sheltered bay with sandy beach, large coral reefs and stony reef flat, date unknown, leg. J. Goud & W. van Dongen; RMNH.CRUS.D.24862, 29 males (7.5 × 7.0 mm, 7.5 × 7.0 mm, 7.0 × 7.0 mm, 7.0 × 7.0 mm, 6.5 × 7.0 mm, 6.5 × 6.5 mm, 6.5 × 6.5 mm, 6.5 × 6.5 mm, 6.5 × 6.0 mm, 6.5 × 6.0 mm, 6.0 × 6.0 mm, 5.5 × 5.5 mm, 5.5 × 5.5 mm, 5.0 × 5.0 mm, 5.0 × 5.0 mm, 5.0 × 5.0 mm, 5.0 × 5.0 mm, 5.0 × 5.0 mm, 5.0 × 5.0 mm, 5.0 × 5.0 mm, 4.5 × 4.5 mm, 4.5 × 4.5 mm, 4.5 × 4.5 mm, 4.5 × 4.5 mm, 4.5 × 4.5 mm, 4.5 × 4.5 mm, 4.0 × 4.0 mm, 3.5 × 3.5 mm, 3.5 × 3.5 mm), 1 ovigerous female (6.5 × 6.5 mm), 10 females (8.0 × 7.5 mm, 8.0 × 7.0 mm, 7.5 × 7.5 mm, 7.0 × 7.0 mm, 6.5 × 6.5 mm, 6.5 × 6.5 mm, 6.5 × 6.5 mm, 6.0 × 6.0 mm, 6.0 × 6.0 mm, 5.0 × 5.0 mm), Dahlak Archipelago, Museri Island off Scopus Ridge, State of Eritrea, 10 October 1965, collector unknown; RMNH.CRUS.D.24863, 5 males (9.5 × 10.0 mm, 9.0 × 9.5 mm, 9.0 × 9.5 mm, 8.5 × 8.0 mm, 6.5 × 6.0 mm), 7 females (9.0 × 8.0 mm, 9.0 × 8.0 mm, 7.0 × 7.0 mm, 7.0 × 7.0 mm, 7.0 × 6.5 mm, 7.0 × 6.5 mm, 6.5 × 6.5 mm), Dahlak Archipelago, Cundabilu, State of Eritrea, 14 March 1962, collector unknown; RMNH.CRUS.D.24864, 3 males (8.5 × 7.0 mm, 6.5 × 6.0 mm, 6.5 × 6.0 mm), 2 ovigerous females (6.0 × 6.5 mm, 6.0 × 6.5 mm), 2 females (6.0 × 6.0 mm, 6.0 × 6.0 mm), Dahlak Archipelago, Museri Island, Camping Bay, State of Eritrea, October 1965, collector unknown; RMNH.CRUS.D.24865, 1 male (6.5 × 6.0 mm), 1 ovigerous female (7.0 × 6.5 mm), Dahlak Archipelago, Museri Island, Camping Bay, State of Eritrea, 26 October 1965, collector unknown; RMNH.CRUS.D.24867, 1 male (8.0 × 8.0 mm), Dahlak Archipelago, Enteraia Island, State of Eritrea, 26 March 1962, collector unknown; RMNH.CRUS.D.14973, 1 male (8.0 × 7.5 mm), Gulf of Akaba, near Eylath, Israel, 2 May 1955, leg. H. Steinitz.

Remarks. See the remarks under *Hiplyra elegans*. Examined specimens match with extensive description in Galil (2009) and comparative material. *Hiplyra variegata* has not been reported from Mozambique before, according to the checklists by Emmerson (2016c) and Muñoz *et al*. (2021). The examined specimens have two distinct subterminal denticles on the pollex, and in the female, the first pleonal somite does not have lobes. These specimens are the first *H. variegata* reported from Mozambican waters.

Distribution. Madagascar (Galil & Ng 2023), Kenya (Galil 2009), Eritrea (Galil 2009), Djibouti (Galil 2009), Yemen (Galil 2009), Red Sea (Balss 1915; Galil 2009; Laurie 1915; Naderloo & Apel 2012; Nobili 1906a; Rüppell 1830), Israel (Galil 2009) and Persian Gulf (Apel 2001; Naderloo & Apel 2012; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Stephensen 1946). Newly recorded from Mozambique.

19. *Myra subgranulata* Kossmann, 1877

(Fig. 3D)

Myra fugax.—White 1847: 49 (in part).—Hilgendorf 1879: 811.—Richters 1880: 157.—Nobili 1906a: 164.—Lenz 1910: 544.—Balss 1915: 15 (in part).—Bouvier 1915: 221; 1940: 214 (in part), pl. 8, fig. 3.—Calman 1927: 212.—Monod 1938: 99.—Barnard 1950: 373, figs. 71D, 71E.—Holthuis 1956: 325.—Holthuis & Gottlieb 1958: 81 (in part), pl. 2 fig. 7.—MacNae & Kalk 1958: 71.—Guinot 1967a: 248 (list, in part).—Kensley 1981: 39 (list). [Not *Myra fugax* (Fabricius, 1798)].

Myra subgranulata Kossmann, 1877: 65, pl. 1, fig. 7.—Galil 2001: 431, figs. 3A, 16.—Ozcan *et al*. 2005: 239.—Corsini & Kondylatos 2006: 168, fig. 2.—Ng *et al.* 2008: 92 (list).—Galil *et al.* 2012: 3, fig. 2C.—Emmerson 2016b: 436; 2016c: 460 (list).—Naderloo 2017: 98, figs. 14.25, 14.27.—Bento & Paula 2018: 35 (list).—Muñoz *et al.* 2021: 52 (list).—Galil & Ng 2023: 83.

Myra coalita Hilgendorf, 1879: 812, pl. 1 figs. 6, 7.

Myra dubia Miers, 1879a: 42.

Myra fugax var. *coalita*.—Ortmann 1894: 36 (in part).

Myra affinis.—Nobili 1906a: 165. [Not *Myra affinis* Bell, 1855].

Persephona fugax.—Rathbun 1911: 201.—Laurie 1915: 409 (list), 428.—Dawydoff 1952: 139.

Myra cyrenae Ward, 1942: 67, pl. 5 fig. 1.—Serène 1968: 44 (list).

Material examined. RMNH.CRUS.D.58396, 1 male (18.0 × 20.0 mm), in front of Marine Biology Station (EBM), 20 m depth, fcn. X4233, 1 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58397, 2 males (11.0 × 13.0 mm, 11.0 × 13.0 mm), in front of Barreira Vermelha, in the channel, 16 m depth, fcn. X4325, 5 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58398, 2 males (15.0 × 17.0 mm, 9.0 × 11.0 mm), between Marine Biology Station (EBM) and Ponta Rasa, 10–12 m depth, fcn. X4326, 8 March 1987, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.48676, 1 ovigerous female (29.5 × 35.0 mm), in front of Barreira Vermelha, Inhaca Island, Mozambique, in the channel, 16 m depth, 5 January 1987, leg. J.H.C. Walenkamp, det. B. Galil.

Remarks. The examined specimens match well with the extensive description in Galil (2001). The species from South African waters was long believed to be *Myra fugax* (Fabricius, 1798) (cf. Barnard, 1950), but Galil (2001) showed that the species in these waters were actually *M. subgranulata*. *Myra subgranulata* can be distinguished from *M. fugax* by the relatively longer cheliped merus and shorter cheliped dactylus. In *M. subgranulata,* the cheliped merus in males is 1.4 times as long as the carapace, in *M. fugax* this is 1.1 times as long. In *M. subgranulata,* the cheliped dactylus is 0.7 times as long as the upper margin of the palm, in *M. fugax* the cheliped dactylus is as long as the upper margin of the palm (Galil 2001). Specimen RMNH.CRUS.D.58397 has an extra blunt spine on the carapace anterior to the median posterior spine, which was not described by Galil (2001) and is not visible in her figure (Galil 2001: fig. 3A). The extra spine can be seen on the figure of *M. subgranulata* in Naderloo (2017: p. 100, fig. 14.27), and a beginning of the spine is visible on the comparative material (RMNH.CRUS.D.48676). It is possible that the spine gets more pronounced with age, and that individuals without the spine are juveniles. In order to be certain, juveniles of *M. subgranulata* will need to be checked for the presence of the spine.

Distribution. Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Galil & Ng 2023; Lenz 1910), Mauritius (Bouvier 1915; Rathbun 1911; Richters 1880; Ward 1942), Greece (Corsini & Kondylatos 2006), Turkey (Ozcan *et al.* 2005), Red Sea (Balss 1915; Calman 1927; Kossmann 1877; Laurie 1915; Monod 1938; Nobili 1906a), Israel (Holthuis & Gottlieb 1958) and Qatar (Galil *et al.* 2012).

Subfamily Leucosiinae Samouelle, 1819

20. *Urnalana pulchella* (Bell, 1855)

(Fig. 3E)

Leucosia pulchella Bell, 1855: 290, pl. 31 fig. 4.—Ihle 1918: 316 (list).—Serène 1968: 47 (list).
Leucosia margaritata.—Alcock 1896: 230.—Nobili 1906a: 99. [Not *Leucosia margaritata* A. Milne-Edwards, 1874].
Leucosia sagamiensis.—Miyake 1983: 68, pl. 23 fig. 6. [Not *Leucosia sagamiensis* Sakai, 1961].
Leucosia pseudomargaritata Chen, 1987: 197, fig. 3.
Leucosia alcocki Ovaere, 1987: 188, figs. 1B, 5B.
Leucosia parapulchella Dai & Xu, 1991: 7, fig. 5.
Urnalana pulchella.—Galil 2005a: 29, figs. 3A, 8A.—Galil & Ng 2007: 92, fig. 3E; 2023: 108.—Ng *et al.* 2008: 95 (list).—Poupin 2010: 76 (list).—Promdam & Nabhitabhata 2012: 85.

Material examined. RMNH.CRUS.D.58399, 1 female (11.0 × 9.0 mm), in front of Barreira Vermelha, fcn. X4209, 19 October 1986, leg. J.H.C. Walenkamp.

Remarks. This interesting crab was not named in the checklists of Muñoz *et al*. (2021) and Emmerson (2016c) for Mozambican waters. In the checklist by Emmerson (2016c) only *Urnalana whitei* (Bell, 1855) was reported from South Africa. The difference between *U. whitei* and *U. pulchella* is mainly seen on the dorsal surface of the cheliped merus. On *U. whitei*, the merus is entirely granulate, while on *U. pulchella,* the merus is distally smooth (Galil 2005a). The examined specimen has a distally smooth merus, confirming it as *U. pulchella*. *Urnalana pulchella* was recently recorded from Mozambique by Galil & Ng (2023).

Distribution. South Africa (Galil 2005a), Mozambique (Galil & Ng 2023), Mayotte (Galil 2005a; Poupin 2010), Madagascar (Galil 2005a; Galil & Ng 2023), Red Sea (Galil 2005a; Nobili 1906a), India (Alcock 1896), Thailand (Promdam & Nabhitabhata 2012), Indonesia (Galil 2005a; Ihle 1918), China (Bell 1855; Chen 1987; Dai & Xu 1991; Galil 2005a), Philippines (Galil & Ng 2007), Japan (Miyake 1983), Australia (Galil 2005a), Papua New Guinea (Galil 2005a; Ovaere 1987) and Fiji (Galil 2005a).

Superfamily Majoidea Samouelle, 1819

Family Epialtidae MacLeay, 1838

Subfamily Epialtinae MacLeay, 1838

21. *Acanthonyx quadridentatus* (Krauss, 1843)

(Fig. 3F)

Maja (*Acanthonyx*) *4-dentatus* Krauss, 1843: 49.
Acanthonyx quadridentatus.—Ortmann 1894: 39.—Serène & Tirmizi 1971: 24 (in key).—Griffin & Tranter 1986: 66 (key).—Ng *et al.* 2008: 100 (list).—Peer *et al.* 2014: 56, fig. 5.—Emmerson 2016c: 461 (list).—Bento & Paula 2018: 35 (list).—Muñoz *et al.* 2021: 52 (list).
Dehaanius 4-dentatus.—Stebbing 1910: 288.—Barnard 1950: 46, figs. 10E, 10F.—MacNae & Kalk 1958: 80 (key).
Dehaanius quadridentatus.—Stebbing 1918: 49.—Guinot 1967a: 292 (list).—Kensley 1970: 103 (list); 1981: 39 (list).
Acanthonyx (*Dehaanius*) *quadridentatus*.—Serène 1968: 52 (list).

Material examined. RMNH.CRUS.D.58400, 1 female (12.0 × 13.0 mm), Cabo da Inhaca, littoral between *Cymodocea* sp., fcn. X4196, 26 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58401, 2 males (9.0 × 11.0 mm, 5.0 × 6.0 mm), Cabo de Inhaca, littoral, fcn. X4224, 18 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58402, 1 male (14.0 × 21.0 mm), 1 female (3.5 × 6.0 mm), Cabo de Inhaca, littoral, fcn. X4226, 18 October 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.17388, 1 ovigerous female (10.0 × 14.0 mm), Pointe d'Ariambel, south coast of Mauritius, February 1960, leg. C. Michel; RMNH.CRUS.D.28560, 5 males (9.0 × 14.0 mm, 9.0 × 12.0 mm, 8.0 × 11.0 mm, 7.0 × 12.0 mm, 5.0 × 7.0 mm), 2 ovigerous females (9.0 × 12.0 mm, 6.0 × 8.0 mm), 2 females (7.0 × 10.0 mm, 7.0 × 10.0 mm), Xai-Xai, Mozambique, 1 October 1967, leg. G. Hartmann; RMNH.CRUS.D.28561, 2 males (9.0 × 12.0 mm, 6.5 × 9.5 mm), 1 female (7.0 × 10.0 mm), Xai-Xai, Mozambique, 3 October 1967, leg. G. Hartmann.

Remarks. Three species of *Acanthonyx* Latreille, 1828 were reported from Mozambican waters, *A. quadridentatus, A. scutellatus* MacLeay, 1838 and *A. undulatus* (Barnard, 1947) (Muñoz *et al.* 2021). *Acanthonyx quadridentatus* can be distinguished by the four anterolateral teeth on the carapace: one anterior, two submedian and one posterior (Serène & Tirmizi 1971). The examined material matches the comparative material and notes by Serène & Tirmizi (1971).

Distribution. South Africa (Barnard 1950; Kensley 1981; Krauss 1843; Peer *et al.* 2014; Stebbing 1910, 1918), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021) and Tanzania (Ortmann 1894).

22. *Acanthonyx scutellatus* MacLeay, 1838

(Fig. 4A)

Dehaanius scuttelatus MacLeay, 1838: 57.—Barnard 1950: 47, figs. 10B–D.—Guinot 1967a: 292 (list).—Kensley 1970: 103 (list); 1981: 39 (list).—Hogarth 1989: 108 (list), 113 (list).
Maja (*Acanthonyx*) *macleaii* Krauss, 1843: 47.
Epialtus scutellatus.—Stebbing 1910: 288.
Dehaanius scutellus.—MacNae & Kalk 1958: 80 (key).
Acanthonyx (*Dehaanius*) *scutellatus*.—Serène 1968: 52 (list).
Acanthonyx scutellatus.—Griffin & Tranter 1986: 66 (key).—Ng & Ahyong 2001: 83, 84, 85, 87, figs. 1C–E, table 1.—Ng *et al.* 2008: 100 (list).—Peer *et al.* 2014: 57, fig. 6.—Emmerson 2016c: 461 (list).—Bento & Paula 2018: 35 (list).—Trivedi *et al*. 2018: 36 (list).—Muñoz *et al.* 2021: 52 (list).

Material examined. RMNH.CRUS.D.58403, 1 male (18.0 × 23.0 mm), 1 female (13.0 × 16.0 mm), Cabo da Inhaca, littoral, between *Cymodocea* sp., fcn. X4090, 26 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58404, 1 male (17.0 × 22.0 mm), Cabo da Inhaca, littoral, between *Cymodocea* sp., fcn. X4196, 26 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58405, 3 males (14.0 × 18.0 mm, 11.0 × 14.0 mm, 4.0 × 5.0 mm),

4 females (13.0 × 16.0 mm, 11.0 × 13.0 mm, 11.0 × 16.0 mm, 5.0 × 6.0 mm), Cabo de Inhaca, littoral, fcn. X4224, 18 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58406, 1 male (13.0 × 16.0 mm), 1 female (12.0 × 19.0 mm), Cabo da Inhaca, littoral, between *Cymodocea* sp., fcn. X4045, 26 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58407, 1 ovigerous female (15.0 × 21.0 mm), Cabo da Inhaca, littoral, between *Cymodocea* sp., fcn. X4082, 26 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58408, 1 female (9.0 × 13.0 mm), Cabo de Inhaca, between the rocks & *Thalassodendron*, fcn. X4133, 1 September 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58409, 1 male (14.0 × 19.0 mm), entry of Saco, west of Ponta Torres, 4 m depth, fcn. X4273, 20 December 1986, leg. J.H.C. Walenkamp.

Remarks. See also remarks under *Acanthonyx quadridentatus* for other members of the *Acanthonyx* genus present in Mozambican waters. *Acanthonyx scutellatus* can be distinguished from the other *Acanthonyx* in the area by the absence of a median anterolateral tooth on the carapace and one pair of protogastric tubercles on the dorsal surface of the carapace (Serène & Tirmizi 1971). Examined specimens match these characters, Ng & Ahyong (2001: fig. 1C–E), and the description by Barnard (1950).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; MacLeay 1838; Peer *et al.* 2014; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Gulf of Oman (Hogarth 1989) and India (Trivedi *et al.* 2018).

23. *Menaethiops delagoae* Barnard, 1955

(Fig. 4B)

Menaethiops delagoae Barnard, 1955: 13, figs. 3G–I.—Guinot 1967a: 293 (list).—Serène 1968: 53 (list).—Kensley 1970: 103 (list); 1981: 40 (list).—Griffin 1974: 20, fig. 4B.—Griffin & Tranter 1986: 87 (key).—Ng *et al.* 2008: 101 (list).—Emmerson 2016c: 461 (list).—Bento & Paula 2018: 35 (list).—Muñoz *et al.* 2021: 52 (list).

Material examined. RMNH.CRUS.D.58410, 2 males (7.0 × 12.0 mm, 5.5 × 6.5 mm), in front of Barreira Vermelha, fcn. X4211, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58411, 1 male (8.0 × 13.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4072, 25 September 1984, leg. J.H.C. Walenkamp.

Remarks. Not much is known of this rare epialtid crab. *Menaethiops delagoae* was named in the checklists of Emmerson (2016c) and Muñoz *et al*. (2021) for Mozambican waters, but there seem to be no recent observations of this species. Barnard (1955) provided adequate drawings and a description to compare the examined material to. The specimen has the long rostral horns figured by Barnard (1955: p. 14, fig. 3G) and the granules on the first male thoracic sternite.

Distribution. Mozambique (Barnard 1955; Emmerson 2016c; Griffin 1974; Kensley 1970, 1981; Muñoz *et al.* 2021).

24. *Menaethius monoceros* (Latreille, 1825)

(Fig. 4C)

Pisa monoceros Latreille, 1825: 139.

Inachus arabicus Rüppell, 1830: 24, pl. 5 fig. 4.

Menaethius monoceros.—H. Milne-Edwards 1834: 339.—Heller 1861a: 306; 1861b: 4 (list).—A. Milne-Edwards 1862: 6.—Paulson 1875: 6, pl. 2 figs. 2, 3A, B.—Haswell 1882: 9.—Miers 1884a: 182 (list), 190.—Pfeffer 1889: 28.—Henderson 1893: 342.—Ortmann 1894: 39.—Zehntner 1894: 232.—Alcock 1895: 197.—Borradaile 1900: 574.—Calman 1900: 34.—Lanchester 1900: 722.—De Man 1902: 662.—Lenz 1905: 343.—Grant & McCulloch 1906: 32.—Nobili 1906a: 174; 1907: 382.—Rathbun 1906: 880; 1907: 64; 1911: 249.—Bouvier 1915: 241.—Laurie 1915: 410 (list).—Edmondson 1923: 23.—Balss 1924: 27; 1935: 122; 1938: 17.—McNeill 1926: 306; 1968: 44.—Montgomery 1931: 417.—Monod 1938: 105.—Sakai 1938: 263, pl. 26 fig. 3; 1976: 205, pl. 70 fig. 1.—Buitendijk 1939: 237.—Ward 1942: 72.—Stephensen 1946: 105, fig. 20A.—Barnard 1950: 43, figs. 9G, H; 1955: 3 (list).—Tweedie 1950: 107.—Holthuis 1953: 4.—Chhapgar 1957: 12, pl. 3 figs. I–K.—MacNae & Kalk 1958: 65, fig. 15B.—Estampador 1959: 110.—Forest & Guinot 1961: 14, figs. 9A, B.—Sankarankutty 1961: 133; 1962: 158.—Miyake *et al.* 1962: 127 (list).—Michel 1964: 4.—Guinot 1967a: 293 (list).—Serène 1968: 53 (list).—Kensley 1970: 103 (list); 1981: 40 (list).—Griffin 1974: 21.—Griffin & Tranter 1986: 89.—Jones 1986: 156, pl. 45.—Tirmizi & Kazmi 1986: 170, fig. 53.—Garth *et al.* 1987: 242 (list).—Hogarth 1989: 108 (list).—Dai & Yang 1991: 132, fig. 68(1), pl. 14(8).—Bakus 1994: 188 (list).—Poupin 1996: 27; 2010: 53 (list).—Cooper

1997: 168, figs. 3, 14.—Hornby 1997: 16.—Apel 2001: 63.—Ng *et al.* 2001: 12 (list); 2017: 51 (list).—Simões *et al.* 2001: 84 (list).—Davie 2002: 285.—Falciai 2002: 1279.—Ng & Davie 2002: 372 (list).—Paulay *et al.* 2003: 41 (list).—Poore 2004: 353, fig. 105D.—Venkataraman *et al*. 2004: 312 (list).—Naiyanetr 2007: 72 (list).—Ng & Richer de Forges 2007: 325 (list).—Dev Roy 2008: 38.—Ng *et al.* 2008: 101 (list).—Castro 2011: 48.—Naderloo & Türkay 2012: 35.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016c: 461 (list).—Naderloo 2017: 138, figs. 16.13D, 16.16, 16.17.—Bento & Paula 2018: 35 (list).—Trivedi *et al*. 2018: 38 (list).—Suvarna Devi *et al.* 2019: 481.—Innocenti & Crocetta 2020: 985.—Lee *et al.* 2021: S5 (list).—Muñoz *et al.* 2021: 52 (list).

Menaethius porcellus White, 1848: 224.

Menaethius subserratus Adams & White, 1849: 18, pl. 4 figs. 1, 2.—Dana 1852b: 122, pl. 4 figs. 7A–F.—Stimpson 1857: 219.

Menaethius tuberculatus Adams & White, 1849: 19.—Dana 1852b: 123, pl. 5 figs. 1A–C.

Menaethius angustus Dana, 1852b: 120, pl. 4 figs. 5A–C.

Menaethius areolatus Dana, 1852b: 124, pl. 5 figs. 2A–C.

Menaethius inornatus Dana, 1852b: 125, pl. 5 figs. 3A–D.

Menaethius depressus Dana, 1852b: 121, pl. 4 figs. 6A–E.—Stimpson 1857: 219.

Menaethius dentatus Stimpson, 1857: 219.

Menaethius rugosus A. Milne-Edwards, 1862: 6.

Menoethius monoceros.—Richters 1880: 145.—Lenz 1910: 541.

Menaetius monoceros.—Cano 1889a: 85.

Material examined. RMNH.CRUS.D.58412, 1 male (14.0 × 22.0 mm), in front of Barreira Vermelha, fcn. X4216, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58413, 1 female (11.0 × 16.0 mm), Barreira Vermelha, in the water under the rocks, fcn. X4178, 9 January 1986, leg. Aidate; RMNH.CRUS.D.58414, 1 male (13.0 × 22.0 mm), between Portinho and Ilha dos Portugueses, 10 m depth, fcn. X4257, 2 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58415, 2 males (11.0 × 15.0 mm, 4.0 × 6.0 mm), 1 female (9.0 × 14.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4139, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58416, 3 males (9.0 × 16.0 mm, 6.0 × 11.0 mm, 3.0 × 6.0 mm), *Cymodocea* flats off Barreira Vermelha, fcn. unknown, 7 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58417, 1 male (10.0 × 14.0 mm), 1 female (14.0 × 19.0 mm), in front of Barreira Vermelha, fcn. X4211, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58418, 1 male (6.0 × 12.0 mm), in front of Barreira Vermelha, fcn. X4211, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58419, 1 female (13.0 × 18.0 mm), between Portinho and Ilha dos Portugueses, 10 m depth, fcn. X4258, 2 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58420, 1 male (6.0 × 9.0 mm), 2 females (12.0 × 16.0 mm, 11.0 × 17.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4074, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58421, 1 male (12.0 × 17.0 mm), in front of Marine Biology Station (EBM), fcn. X4229, 3 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58422, 1 male (12.0 × 20.0 mm), tidal flat off Barreira Vermelha, fcn. X3918, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58423, 1 female (11.0 × 18.0 mm), intertidal in front of Barreira Vermelha, fcn. X4212, 17 October 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.1378, 2 males (12.0 × 18.0 mm), 1 ovigerous female (8.0 × 10.0 mm), Rockhampton, Australia, 1887, acquired via Museum Godeffroy; RMNH.CRUS.D.16487, 2 females (10.0 × 16.0 mm, 10.0 × 17.0 mm), Tārūt Bay, Ras Tanura, Persian Gulf, 31 October 1956, leg. C.E. Dawson; RMNH.CRUS.D.16488, 1 female (7.0 × 11.0 mm), Persian Gulf, September 1956, leg. C.E. Dawson; RMNH.CRUS.D.4280, 1 female (7.0 × 10.0 mm), Ambon, Indonesia, 12 September 1930, collected during Snellius expedition; RMNH.CRUS.D.4281, 1 female (9.0 × 12.0 mm), Laka, Indonesia, 12 September 1930, collected during Snellius expedition; RMNH.CRUS.D.4282, 1 female (8.0 × 12.0 mm), Flores, Endeh, Indonesia, 8 November 1930, collected during Snellius expedition; RMNH.CRUS.D.9706, 2 females (9.0 × 13.0 mm, 4.0 × 7.0 mm), Laguna west of Saipan, Mariana Islands, 4 August 1949, leg. P.E. Cloud.

Remarks. *Menaethius monoceros* is a widespread epialtid crab that is relatively well known. It is one of the few epialtid crabs in the area that has a single, non apically-divided rostrum. Examined specimens match well with the comparative material and description from Barnard (1950) and figures from previous workers.

Distribution. Tyrrhenian Sea (Falciai 2002), South Africa (Barnard 1950, 1955; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Griffin 1974; Lenz 1910), La Réunion (A. Milne-Edwards 1862; Poupin 2010), Mauritius (Bouvier 1915; Latreille 1825; Michel 1964; H. Milne-Edwards 1834; Richters 1880; Ward 1942; White 1848), Seychelles (Rathbun 1911; Richters 1880), Tanzania (Lenz 1905; Ortmann 1894; Pfeffer

1889), Red Sea (Heller 1861a, b; Laurie 1915; H. Milne-Edwards 1834; Monod 1938; Nobili 1906a; Paulson 1875; Rüppell 1830), Yemen (Simões *et al.* 2001), Gulf of Oman (Hogarth 1989; Naderloo 2017), Persian Gulf (Apel 2001; Cooper 1997; Hornby 1997; Jones 1986; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Stephensen 1946), Pakistan (Tirmizi & Kazmi 1986), India (Alcock 1895; Chhapgar 1957; Dev Roy 2008; Henderson 1893; Sankarankutty 1961; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Nicobar Islands (Bakus 1994), Singapore (Lanchester 1900), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Griffin 1974; Tweedie 1950), Malaysia (Lanchester 1900), Indonesia (Buitendijk 1939; De Man 1902; Griffin 1974), China (Dai & Yang 1991; Stimpson 1857), Taiwan (Balss 1924; Ng *et al.* 2001, 2017), Philippines (Dana 1852b; Estampador 1959), Korea (Lee *et al.* 2021), Japan (Balss 1924; Miyake *et al.* 1962; Sakai 1938, 1976; Stimpson 1857), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Grant & McCulloch 1906; Haswell 1882; McNeill 1926, 1968; Montgomery 1931; Poore 2004), Torres Strait (Calman 1900), Melanesia (Miers 1884a; Rathbun 1911; Zehntner 1894), Micronesia (Balss 1938; Dana 1852b), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938; Dana 1852b), Hawai'i (Castro 2011; Dana 1852b; Rathbun 1906), Tuvalu (Borradaile 1900; Holthuis 1953; Rathbun 1907), Wallis & Futuna (Poupin 2010), Samoa (Dana 1852b), Line Islands (Edmondson 1923) and French Polynesia (Dana 1852b; Nobili 1907; Poupin 1996, 2010; Rathbun 1907).

Family Inachidae MacLeay, 1838

Subfamily Inachinae MacLeay, 1838

25. *Achaeus barnardi* Griffin, 1968

(Fig. 4D)

Achaeus cf. *affinis*.—Barnard 1950: 19, figs. 3A, B. [Not *Achaeus affinis* Miers, 1884].

Achaeus barnardi Griffin, 1968: 81, figs. 3, 4C–G; 1974: 4.—Kensley 1974: 56; 1981: 39 (list).—Griffin & Tranter 1986: 5 (key).—Ng *et al.* 2008: 110 (list).—Emmerson 2016c: 462 (list).—Bento & Paula 2018: 36 (list).—Muñoz *et al.* 2021: 52 (list).

Material examined. RMNH.CRUS.D.58424, 1 female (7.0 × 11.0 mm), in front of Casa de Christie, 11 m depth, fcn. X4362, 14 January 1987, leg. J.H.C. Walenkamp.

Remarks. Four species of *Achaeus* Leach, 1817 were reported from Mozambican waters (Muñoz *et al.* 2021). Griffin (1968) noted that *A. barnardi* and *A. spinosissimus* Griffin, 1968 were restricted to South African waters. *Achaeus barnardi* can be distinguished from the others by the shape of the rostrum, which consists of two short, slender lobes separated by a very narrow slit. In addition, the first article of the antenna has a lateral spine and the lateral margin of the antennal fossae are divergent (Griffin & Tranter 1986). The examined specimen possesses these characters and matches well with the extensive original description by Griffin (1968).

Distribution. South Africa (Barnard 1950; Griffin 1968; Kensley 1974, 1981) and Mozambique (Emmerson 2016c; Muñoz *et al.* 2021).

26. *Achaeus lacertosus* Stimpson, 1857

Achaeus lacertosus Stimpson, 1857: 218; 1907: 20, pl. 3 fig. 8.—Haswell 1882: 3.—Miers 1884a: 181 (list), 188; 1886: 8 (list).—Henderson 1893: 341.—Lanchester 1900: 721.—Grant & McCulloch 1906: 26, pl. 3 fig. 1.—Stephensen 1946: 98, fig. 18C.—Barnard 1950: 19, figs. 3A, B; 1955: 3 (list).—MacNae & Kalk 1958: 65.—Griffin & Yaldwyn 1965: 44.—Guinot 1967a: 290 (list).—Griffin 1970: 105, figs. 1B, 5, 14A, 14D; 1974: 6.—Sakai 1976: 159 fig. 82.—Kensley 1981: 39 (list).—Griffin & Tranter 1986: 10.—Tirmizi & Kazmi 1986: 128, figs. 38, 39.—Apel 2001: 60.—Davie 2002: 291.—Poore 2004: 358, fig. 108B.—Naiyanetr 2007: 72 (list).—Dev Roy 2008: 46.—Ng *et al.* 2008: 110 (list).—Naderloo & Türkay 2012: 35.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016c: 462 (list).—Naderloo 2017: 145, figs. 17.1, 17.2A, 17.3.—Ng *et al.* 2017: 54 (list).—Bento & Paula 2018: 36 (list).—Trivedi *et al*. 2018: 44 (list).—Lee *et al.* 2021: S6 (list).—Muñoz *et al.* 2021: 52 (list).—Wong *et al.* 2021: 5 (table), 26, fig. 41, pl. 8E.

Achaeus breviceps.—Haswell 1880: 433.—Serène 1968: 50 (list).

Achaeus spinifrons Sakai, 1938: 212, fig. 6.

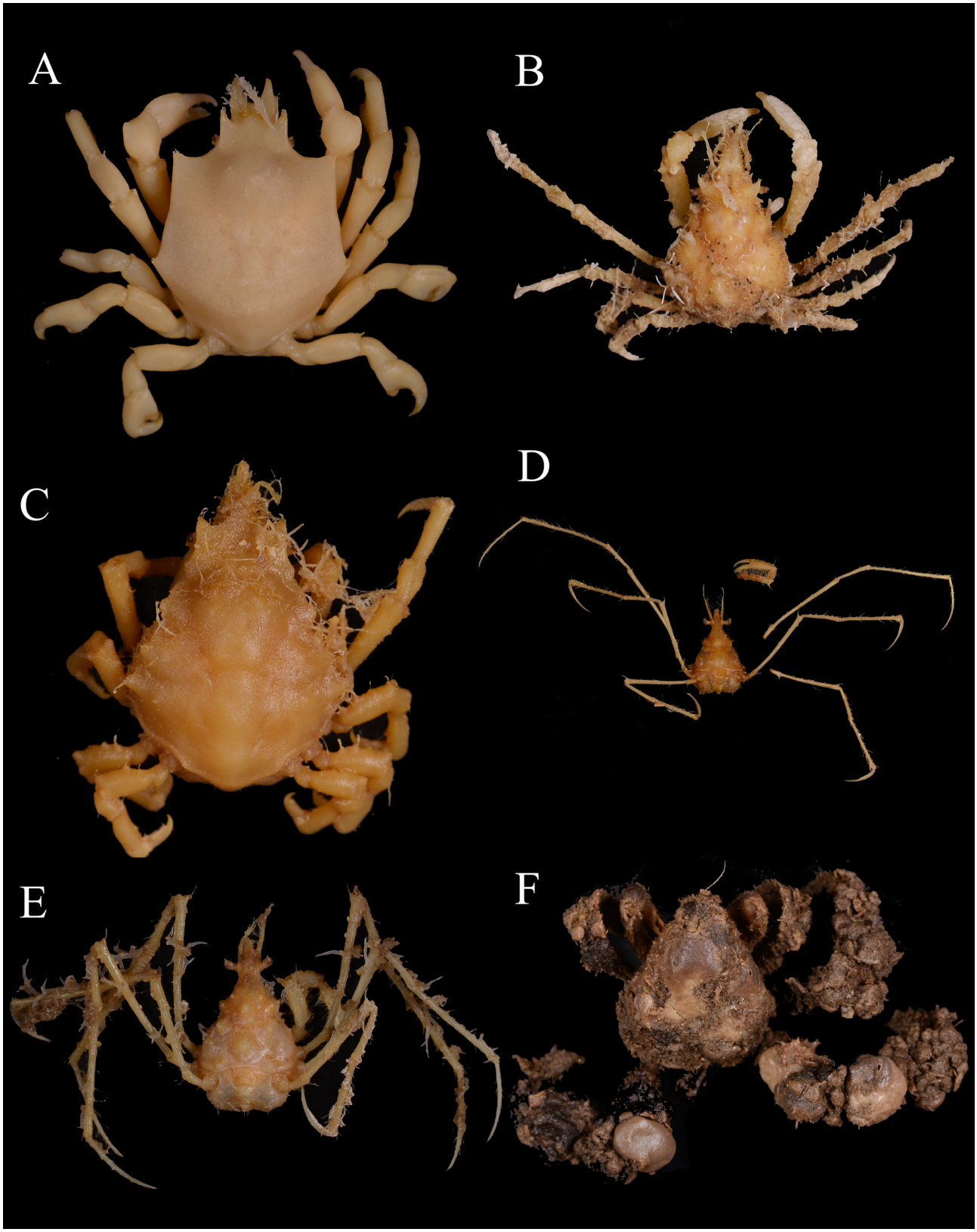

FIGURE 4. A, *Acanthonyx scutellatus* MacLeay, 1838, male, CW = 18.0 mm, RMNH.CRUS.D.58403; B, *Menaethiops delagoae* Barnard, 1955, male, CW = 7.0 mm, RMNH.CRUS.D.58410; C, *Menaethius monoceros* (Latreille, 1825), male, CW = 6.0 mm, RMNH.CRUS.D.58420; D, *Achaeus barnardi* Griffin, 1968, female, CW = 7.0 mm, RMNH.CRUS.D.58424; E, *Achaeus spinosissimus* Griffin, 1968, female, CW = 7.0 mm, RMNH.CRUS.D.58426; F, *Camposcia retusa* (Latreille, 1829), female, CW = 31.0 mm, RMNH.CRUS.D.58427.

Material examined. RMNH.CRUS.D.58425, 1 female (3.0 × 4.0 mm), tidal flat off Barreira Vermelha, zone 1, fcn. X3949, 7 August 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.16512, 1 male (4.5 × 5.0 mm), 1 female (6.0 × 7.0 mm), Persian Gulf, 6 September 1956, leg. C.E. Dawson; RMNH.CRUS.D.16513, 1 male (4.5 × 5.5 mm), 25°55'N, 50°16'E, Persian Gulf, 6 September 1956, leg. C.E. Dawson.

Remarks. *Achaeus lacertosus* can be distinguished from the other three species of *Achaeus* present in Mozambican waters by the broad lobes of the rostrum, which has prominent spinules on the margin, and is divided deeply by a V-shaped notch (Griffin & Tranter 1986). In addition to the rostrum, the dactyli of the fourth and fifth walking leg are strongly curved with spinulose inner margins (Barnard 1950). These characters are present on the examined specimen. The specimen matches well with the figures in Griffin (1970), description and drawing in Barnard (1950), and with comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Persian Gulf (Apel 2001; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Stephensen 1946), Pakistan (Tirmizi & Kazmi 1986), India (Dev Roy 2008; Trivedi *et al.* 2018), Myanmar (Henderson 1893), Singapore (Lanchester 1900), Thailand (Naiyanetr 2007), Indonesia (Griffin & Tranter 1986), China (Dai & Yang 1991; Wong *et al.* 2021), Taiwan (Ng *et al.* 2017), Korea (Lee *et al.* 2021), Japan (Griffin 1970; Sakai 1938, 1976), Australia (Davie 2002; Grant & McCulloch 1906; Griffin 1970; Griffin & Yaldwyn 1965; Haswell 1880, 1882; Poore 2004; Stimpson 1857, 1907) and Melanesia (Miers 1884a).

27. *Achaeus spinosissimus* Griffin, 1968

(Fig. 4E)

Achaeus cf. *lorina.*—Barnard 1950: 22, fig. 3G. [Not *Achaeus lorina* (Adams & White, 1848)].

Achaeus spinosissimus Griffin, 1968: 76, figs. 1, 2, 4A, B; 1974: 6.—Kensley 1974: 56; 1981: 39 (list).—Griffin & Tranter 1986: 4 (key).—Ng *et al.* 2008: 110 (list).—Emmerson 2016c: 463 (list).—Bento & Paula 2018: 36 (list).—Muñoz *et al.* 2021: 52 (list).

Material examined. RMNH.CRUS.D.58426, 1 female (7.0 × 13.0 mm), in front of Barreira Vermelha, fcn. X4211, 19 October 1986, leg. J.H.C. Walenkamp.

Remarks. *Achaeus spinosissimus* can be distinguished from the other three *Achaeus* species present in Mozambican waters by the relatively very spiny carapace and chelae (Griffin 1968). In addition, the short blunt rostral spines and postorbital region with four lateral short spines, are characters for this species. The examined specimen possesses these characters and match with the extensive original description given by Griffin (1968). The anterolateral spines on the carapace, however, are more blunt than has been described and drawn by Griffin (1968). As with *A. barnardi*, *A. spinosissimus* was described as restricted to South African waters (Griffin 1968).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Griffin 1968; Kensley 1974, 1981) and Mozambique (Emmerson 2016c; Muñoz *et al.* 2021).

28. *Camposcia retusa* (Latreille, 1829)

(Fig. 4F)

Maia retuja Latreille, 1829: 60.

Camposcia retusa.—Guérin-Méneville 1832: Crustacés, pl. 9 fig. 1.—White 1847: 2.—Adams & White 1848: 6.—Stimpson 1857: 218; 1907: 19.—A. Milne-Edwards 1872: 255.—Hilgendorf 1879: 784.—Nauck 1880: 38.—Haswell 1882: 4.—Miers 1884a: 181 (list), 189.—Ortmann 1894: 38.—Alcock 1895: 184.—De Man 1895: 486.—Nobili 1899: 251; 1906a: 172.—Borradaile 1900: 573.—Lanchester 1900: 721.—Bouvier 1915: 238.—Laurie 1915: 410 (list), 430.—Calman 1927: 212.—Balss 1935: 118; 1938: 11.—Sakai 1938: 228, pl. 23 fig. 3; 1976: 170, pl. 48 fig. 4.—Buitendijk 1939: 232.—Ward 1942: 71.—Barnard 1950: 12, fig. 1.—Estampador 1959: 108.—Miyake *et al.* 1962: 127 (list).—Michel 1964: 6.—Guinot 1967a: 290 (list).—McNeill 1968: 46.—Serène 1968: 49 (list).—Griffin 1974: 7.—Kensley 1981: 39 (list).—Griffin & Tranter 1986: 22.—Tirmizi & Kazmi 1986: 119, fig. 34.—Garth *et al.* 1987: 241 (list).—Dai & Yang 1991: 122, fig. 63A, pl. 13(4).—Poupin 1996: 26; 2010: 37 (list).—Apel 2001: 61.—Ng *et al.* 2001: 13 (list); 2017: 55 (list), fig. 5A.—Davie 2002: 292.—Ng & Davie 2002: 372 (list).—Paulay *et al.* 2003: 41 (list).—Naiyanetr 2007: 72 (list).—Ng & Richer de

Forges 2007: 325 (list).—Dev Roy 2008: 47.—Ng *et al.* 2008: 110 (list).—Emmerson 2016c: 463 (list).—Beleem *et al.* 2017: 122, fig. 2.—Bento & Paula 2018: 36 (list).—Trivedi *et al*. 2018: 44 (list).—Suvarna Devi *et al.* 2019: 481.—Habib *et al.* 2021: 42, figs. 2C, 2D.—Muñoz *et al.* 2021: 53 (list).—Wong *et al.* 2021: 5 (table), 27, figs. 42E, F, pl. 9A.

Camposcia retusus.—Stebbing 1918: 48.

Material examined. RMNH.CRUS.D.58427, 1 female (31.0 × 36.0 mm), littoral in front of Barreira Vermelha, fcn. unknown, 9 January 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.4257, 1 male (5.0 × 6.5 mm), 1 female (11.0 × 13.0 mm), Obie Latoe [= Obilatu], Indonesia, April 1930, collected during Snellius Expedition; RMNH.CRUS.D.4258, 1 male (14.0 × 20.0 mm), Talaud Island, Beo, Indonesia, June 1930, collected during Snellius Expedition; RMNH.CRUS.D.17512, 1 ovigerous female (19.0 × 24.0 mm), Pointe aux Sables, south of Port Louis, Mauritius, July 1961, leg. C. Michel; RMNH.CRUS.D.17518, 1 female (17.0 × 24.0 mm), Red Sea coast, Eylath, Israel, March 1960, leg. L. Fishelson; RMNH.CRUS.D.30475, 2 males (9.0 × 12.5 mm, 5.5 × 7.5 mm), 1 female (5.5 × 8.5 mm), Coast Province, Bamburi Beach, 7 km north of Mombasa, Kenya, December 1974, leg. L.B. Holthuis.

Remarks. *Camposcia retusa* is the only known member of the genus *Camposcia* Latreille, 1829. The examined specimen is heavily decorated, has a very short rostrum and long, curved eyestalks, characteristic of the species. The characters match well with the description given in Griffin & Tranter (1986), Barnard (1950), and with comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1918), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Emmerson 2016c; Griffin 1974), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Michel 1964), Red Sea (Calman 1927; Laurie 1915; Nobili 1906a), Gulf of Oman (Apel 2001), Pakistan (Tirmizi & Kazmi 1986), India (Alcock 1895; Beleem *et al.* 2017; Dev Roy 2008; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018), Bangladesh (Habib *et al.* 2021), Singapore (Lanchester 1900), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (Buitendijk 1939; De Man 1895; Griffin & Tranter 1986; Nobili 1899; Ortmann 1894), China (Dai & Yang 1991; Wong *et al.* 2021), Taiwan (Ng *et al.* 2001, 2017), Philippines (Adams & White 1848; Estampador 1959), Japan (Miyake *et al.* 1962; Sakai 1938, 1976; Stimpson 1857, 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Haswell 1882; McNeill 1968), Melanesia (Miers 1884a; Ward 1942), Micronesia (Balss 1938), New Caledonia (A. Milne-Edwards 1872; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987), Fiji (Balss 1938; Borradaile 1900), Wallis & Futuna (Poupin 2010) and French Polynesia (Poupin 1996, 2010)

Family Majidae Samouelle, 1819

Subfamily Majinae Samouelle, 1819

29. *Micippa thalia* (Herbst, 1803)

Cancer thalia Herbst, 1803: 50, pl. 58 fig. 3.

Pisa (*Micippe*) *thalia.*—De Haan 1837: pl. 22 fig. 3; 1839: 98.—Krauss 1843: 51.

Micippa thalia.—Adams & White 1848: 15.—A. Milne-Edwards 1872: 238, pl. 11 fig. 1.—Kossmann 1877: 8.—Richters 1880: 142.—Miers 1884a: 182 (list), 198.—Cano 1889a: 86.—Henderson 1893: 348.—Alcock 1895: 251.—Doflein 1902: 657.—Rathbun 1902: 29.—Stebbing 1905: 24; 1910: 290.—Nobili 1906a: 178.—Lenz 1910: 542.—Laurie 1915: 410 (list).—Balss 1924: 36; 1935: 127.—Serène 1937: 72 (list); 1968: 58 (list).—Monod 1938: 107.—Sakai 1938: 313, pl. 32 fig. 3; 1976: 256, fig. 137B, pl. 9 fig. 1.—Buitendijk 1939: 257.—Barnard 1950: 63, figs. 13C, D.—MacNae & Kalk 1958: 65.—Miyake *et al.* 1962: 128 (list).—Michel 1964: 7.—Guinot 1967a: 296 (list).—Griffin 1974: 21.—Kensley 1981: 40 (list).—Griffin & Tranter 1986: 274 (key), 279.—Tirmizi & Kazmi 1986: 182, fig. 57.—Garth *et al.* 1987: 242 (list).—Dai & Yang 1991: 158, fig. 80B, pl. 19(4).—Simões *et al.* 2001: 84 (list).—Davie 2002: 317.—Poore 2004: 383, fig. 117F.—Venkataraman *et al*. 2004: 312 (list).—Naiyanetr 2007: 73 (list).—Ng & Richer de Forges 2007: 325 (list).—Dev Roy 2008: 50.—Hasan *et al.* 2008: 519 (list).—Ng *et al.* 2008: 119 (list).—Poupin 2010: 54 (list).—Beleem *et al*. 2016: 87, figs. 3A–D.—Emmerson 2016c: 465 (list).—Naderloo 2017: 156, figs. 18.2, 18.4C, 18.6, 18.7.—Bento & Paula 2018: 37 (list).—Trivedi *et al*. 2018: 52 (list).—Lee *et al.* 2021: S7 (list).—Muñoz *et al.* 2021: 53 (list).—Poore & Ahyong 2023: 600.

Micippa aculeata Bianconi, 1851: 103, pl. 10 fig. 2.

Micippe miliaris Gerstaecker, 1856: 110.
Micippe thalia.—Gerstaecker 1856: 109.—Ortmann 1894: 44.—Klunzinger 1906: 29.
Micippa haanii Stimpson, 1857: 217.
Micippa pusilla Bianconi, 1869: 205, pl. 1 fig. 1.
Micippa thalia var. *caledonica* Kossmann, 1877: 8.
Micippa thalia var. *indica* Kossmann, 1877: 8.
Micippa inermis Haswell, 1880: 445, pl. 26 fig. 3; 1882: 24.
Mycippa thalia.—Dawydoff 1952: 139.

Material examined. RMNH.CRUS.D.58436, 2 males (14.0 × 15.0 mm, 8.0 × 11.0 mm), in front of Marine Biology Station (EBM), 12–14 m depth, fcn. X4305, 18 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58437, 1 male (27.0 × 31.0 mm), in front of Marine Biology Station (EBM), fcn. X4229, 3 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58438, 1 female (15.0 × 17.0 mm), in front of Marine Biology Station (EBM), 20 m depth, fcn. X4259, 1 November 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.30536, 1 female (5.5 × 8.0 mm), KwaZulu-Natal, Mission Rocks, north of St. Lucia Estuary, South Africa, 2 December 1974, leg. L.B. Holthuis; RMNH.CRUS.D.738, 1 male (26.0 × 30.0 mm) (lectotype of *M. thalia*), Japan, 1823–1834, leg. P.F. von Siebold & H. Bürger; RMNH.CRUS.D.19088, 1 ovigerous female (12.5 × 14.5 mm), Red Sea coast, Al Ghardaqa, Egypt, October 1962, leg. D. Magnus.

Remarks. Two species of *Micippa* Leach, 1817 were reported from Mozambican waters, *M. thalia* and *M. philyra* (Herbst, 1803) (Emmerson 2016c; Muñoz *et al.* 2021). *Micippa thalia* and *M. philyra* can be easily distinguished from each other by the shape of their rostrum. On *M. thalia*, the rostrum is bifid, with diverging apices. The rostrum of *M. philyra* has a lateral tooth on each side of the apical lobes (Poore 2004). The carapace of *M. thalia* has sharp spines anterolaterally, while that of *M. philyra* has denticles anterolaterally, which are more blunt (Naderloo 2017). The examined material matches the descriptions and characters of *M. thalia* from Griffin & Tranter (1986), as well as the comparative material and the lectotype from Japan.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1905, 1910), Mozambique (Barnard 1950; Bianconi 1851, 1869; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Griffin 1974), Mauritius (Michel 1964; Richters 1880), Somalia (Griffin 1974), Red Sea (Klunzinger 1906; Kossmann 1877; Laurie 1915; Monod 1938; Nobili 1906a), Yemen (Simões *et al.* 2001), Syria (Hasan *et al.* 2008), Gulf of Oman (Naderloo 2017), Pakistan (Tirmizi & Kazmi 1986), India (Alcock 1895; Beleem *et al.* 2016; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Lenz 1910), Thailand (Naiyanetr 2007), Indonesia (Buitendijk 1939; Griffin & Tranter 1986), China (Dai & Yang 1991; Stimpson 1857), Korea (Lee *et al.* 2001), Japan (Adams & White 1848; Balss 1924; De Haan 1837, 1839; Doflein 1902; Miyake *et al.* 1962; Rathbun 1902; Sakai 1938, 1976), Australia (Balss 1935; Davie 2002; Haswell 1880, 1882; Poore 2004), Torres Strait (Ortmann 1894), Melanesia (Miers 1884a), New Caledonia (A. Milne-Edwards 1872; Ng & Richer de Forges 2007; Poupin 2010) and Marshall Islands (Garth *et al.* 1987).

30. *Pseudomicippe tenuipes* A. Milne-Edwards, 1865*

Pseudomicippe tenuipes A. Milne-Edwards, 1865a: 139, pl. 5 figs. 2, 2A.—Ortmann 1894: 40 (key).—Balss 1924: 35, pl. 1 fig. 6.—Buitendijk 1939: 235, pl. 8 figs. 3, 4.—Sankarankutty 1962: 160, figs. 17–23.—Serène 1968: 51 (list).—Griffin & Tranter 1986: 237, pl. 18 figs. 87C, D, G.—Davie 2002: 310.—Yeh *et al*. 2006: 700, figs. 1A–D.—Dev Roy 2008: 48.—Ng *et al.* 2008: 118 (list).—Ng *et al.* 2017: 57 (list).—Trivedi *et al*. 2018: 52 (list).
Pseudomicippa tenuipes.—Bakus 1994: 188 (list).—Venkataraman *et al*. 2004: 312 (list).

Material examined. RMNH.CRUS.D.58903, 1 ovigerous female (12.0 × 18.0 mm), between Barreira Vermelha and Portinho, 10 m depth, fcn. X4243, 2 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58904, 1 male (12.0 × 18.0 mm), Cabo da Inhaca, fcn. X4355, 15 January 1987, leg. Maimuna Amade, Lucilia Chuquela, Albertina Alage & Dulcineia Baquete.

Comparative material. RMNH.CRUS.D.4264, 1 ovigerous female (11.5 × 17.5 mm), Timor, Koepang Indonesia, 3 December 1929, collected during Snellius Expedition; RMNH.CRUS.D.30433, 1 male (12.0 × 19.0 mm), Coast Province, 10 km north of Mombasa, between Nyali & Bamburi Beach, Kenya, 12 December 1974, leg. M. Lamarque & L.B. Holthuis.

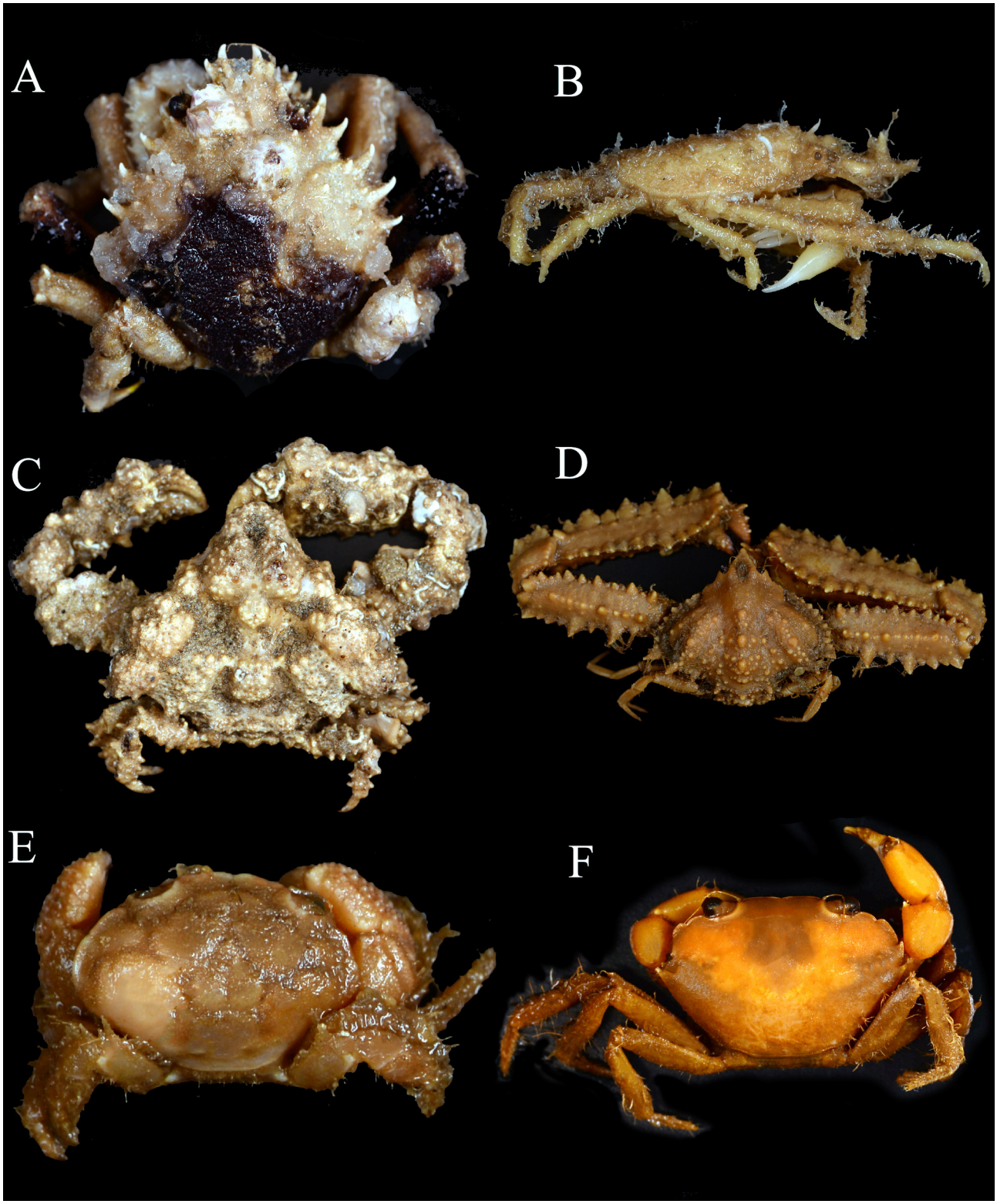

FIGURE 5. A, *Schizophrys aspera* (H. Milne-Edwards, 1831), female, CW = 29.0 mm, RMNH.CRUS.D.58433; B, *Cyphocarcinus suspensus* (Gravier, 1923), male, CW = 8.0 mm, RMNH.CRUS.D.58428; C, *Daldorfia horrida* (Linnaeus, 1758), male, CW = 46.0 mm, RMNH.CRUS.D.58440; D, *Enoplolambrus carenatus* (H. Milne-Edwards, 1834), female, CW = 27.0 mm, RMNH.CRUS.D.58442; E, *Actumnus globulus* Heller, 1861, female, CW = 11.0 mm, RMNH.CRUS.D.58447; F, *Eurycarcinus natalensis* (Krauss, 1843), male, CW = 16.0 mm, RMNH.CRUS.D.58449.

Remarks. The examined specimens have short, strongly deflected rostral spines and an anterolaterally directed triangular tooth on the basal antennal article. These characters were identified in Griffin & Tranter (1986) as specific for *P. tenuipes*. There is a slight variation in the size of the tubercles between the specimens. The specimens match with the drawings in the original description by A. Milne-Edwards (1865a) and Griffin & Tranter (1986). *Pseudomicippe tenuipes* has not been recorded before from Mozambican waters: it was not reported by Barnard (1950), MacNae & Kalk (1958) or in the checklists by Muñoz *et al.* (2021) and Emmerson (2016c).

Distribution. Madagascar (Griffin & Tranter 1986), India (Dev Roy 2008; Sankarankutty 1962; Trivedi *et al.* 2018; Vankataraman *et al.* 2004), Nicobar Islands (Bakus 1994), Indonesia (Buitendijk 1939; Griffin & Tranter 1986), Taiwan (Ng *et al.* 2017; Yeh *et al.* 2006), Japan (Balss 1924) and Australia (Davie 2002; Griffin & Tranter 1986). Newly recorded from Mozambique.

31. *Schizophrys aspera* (H. Milne-Edwards, 1831)

(Fig. 5A)

Inachus bifidus Marion de Procé, 1822: 134 (nomen oblitum).
Mithrax asper H. Milne-Edwards, 1831: 320.—Dana 1852b: 97.—Serène 1937: 72 (list).—Dawydoff 1952: 139.
Mithrax quadridentatus MacLeay, 1838: 58.
Maja (*Dione*) *affinis* De Haan, 1839: 94, pl. 22 fig. 4.
Schizophrys serratus White, 1848: 223, unnumbered figure.—Adams & White 1848: 16.—Ward 1942: 74.
Mithrax spinifrons A. Milne-Edwards, 1867: 263.
Mithrax affinis de Brito Capello, 1871: 264, pl. 3A fig. 4.
Schizophrys aspera.—A. Milne-Edwards 1872: 231, pl. 10 fig. 1.—Haswell 1882: 22.—Miers 1884a: 182 (list), 197.—De Man 1887: 20; 1895: 490; 1902: 673.—Walker 1887: 113.—Henderson 1893: 346.—Ortmann 1894: 43.—Zehntner 1894: 232.—Alcock 1895: 243.—Calman 1900: 39.—Lanchester 1900: 725; 1901: 535.—Doflein 1902: 656.—Nobili 1906a: 175; 1906b: 108.—Rathbun 1907: 65; 1911: 254.—Stebbing 1910: 292.—Bouvier 1915: 245.—Laurie 1915: 410 (list).—Balss 1924: 35; 1935: 124; 1938: 24.—Sakai 1938: 306, pl. 31 fig. 4; 1976: 246, pl. 89 fig. 3.—Buitendijk 1939: 250.—Ward 1939: 2.—Barnard 1950: 60, fig. 13B.—Chhapgar 1957: 15, pl. 4 figs. D–F.—MacNae & Kalk 1958: fig. 15D.—Sankarankutty 1961: 133; 1962: 159.—Guinot 1967a: 297 (list).—Serène 1968: 57 (list).—Kensley 1970: 103 (list); 1981: 40 (list).—Zarenkov 1971: 179.—Griffin 1974: 28.—Griffin & Tranter 1986: 245 (in part), figs. 88A, 91G, H.—Tirmizi & Kazmi 1986: 175, figs. 54–56.—Garth *et al.* 1987: 242 (list).—Hogarth 1989: 108 (list).—Dai & Yang 1991: 152, fig. 77(5), pl. 18(5).—Bakus 1994: 171 (list), 188 (list).—Poupin 1996: 27; 2010: 70 (list).—Apel 2001: 64.—Ng *et al.* 2001: 12 (list); 2017: 57 (list).—Davie 2002: 311.—Ng & Davie 2002: 371 (list).—Paulay *et al.* 2003: 41 (list).—Poore 2004: 380, fig. 115K.—Venkataraman *et al*. 2004: 311 (list), 312 (list).—Naiyanetr 2007: 73 (list).—Ng & Richer de Forges 2007: 325 (list).—Dev Roy 2008: 49.—Ng *et al.* 2008: 118 (list).—Castro 2011: 53.—Naderloo & Türkay 2012: 36.—Orchard 2012: 271.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016b: 482; 2016c: 465 (list).—Naderloo 2017: 158, figs. 18.4D, 18.8, 18.9.—Bento & Paula 2018: 37 (list).—Lee *et al.* 2018: 14, fig. 1B.—Trivedi *et al*. 2018: 52 (list).—Muñoz *et al.* 2021: 53 (list).—Wolfe *et al.* 2023: 2114, figs. 2B, C.
Mitrax asper.—Paulson 1875: 4.
Mithrax (*Schizophrys*) *triangularis* Kossmann, 1877: 13.
Mithrax (*Schizophrys*) *triangularis* var. *indica* Kossmann, 1877: 14.
Schyzophrys aspera.—Cano 1889a: 86.
Schizophrys asper.—Pfeffer 1889: 28.—Chopra & Das 1937: 390.
Schizophrys dama.—Stephensen 1946: 108 (in part). [Not *Cancer Dama* Herbst, 1804].
Schizophrys asperus.—Miyake *et al.* 1962: 127 (list).

Material examined. RMNH.CRUS.D.58432, 1 male (18.0 × 22.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4048, 7 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58433, 1 female (29.0 × 32.0 mm), Barreira Vermelha, 15 m from the coast, under the rocks, fcn. X4185, 8 January 1986, leg. Sacrificio Ferrao; RMNH.CRUS.D.58892, 1 specimen (16.0 × 19.5 mm, carapace only), coral reef off Barreira Vermelha, 1 m depth, fcn. 4114, 10 April 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58434, 2 males (17.0 × 19.0 mm, 15.0 × 17.0 mm), in front of Barreira Vermelha, 2 m depth, fcn. X4368, 16 May 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58435, 1 male (29.0 × 30.0 mm), fcn. X3989, date and collector unknown.

Comparative material. RMNH.CRUS.D.3164, 1 female (23.5 × 29.5 mm), Timor, Indonesia, date unknown, leg. Wienecke; RMNH.CRUS.D.4343, 2 males (17.5 × 21.0 mm, 17.0 × 21.0 mm), 2 females (22.0 × 27.0 mm, 9.5 × 11.5 mm), Timor, Kera, Indonesia, November 1929, collected during Snellius Expedition; RMNH.CRUS.D.5434, 1 female (37.0 × 47.0 mm), Pulau Pisang, Indonesia, January 1934, collector unknown; RMNH.CRUS.D.15382, 1

ovigerous female (37.0 × 41.0 mm), Persian Gulf, 0.5–1 mile north of Aramco Fuelpier, Saudi Arabia, 19 October 1956, leg. C.E. Dawson.

Remarks. As *Schizophrys aspera* is the only known member of the genus *Schizophrys* White, 1847 in African waters (Emmerson 2016c), it is straightforward to identify the specimens. The examined specimens have rostral spines that are not fused proximally and are curved inwards, an upper orbital margin with intercalated spines and large lateral accessory spines on the carapace. This matches with the descriptions and drawings from Barnard (1950), Griffin & Tranter (1986) and the original brief description by White (1847).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; MacLeay 1838; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Mayotte (Poupin 2010), Madagascar (Griffin & Tranter 1986), La Réunion (Poupin 2010), Mauritius (Adams & White 1848; Bouvier 1915; Griffin & Tranter 1986; Ward 1942; White 1848), Seychelles (Griffin 1974; Rathbun 1911), Tanzania (Pfeffer 1889), Red Sea (Kossmann 1877; Laurie 1915; Nobili 1906a; Paulson 1875; Zarenkov 1971), Gulf of Oman (Hogarth 1989), Persian Gulf (Apel 2001; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946), Pakistan (Tirmizi & Kazmi 1986), India (Alcock 1895; Bakus 1994; Chhapgar 1957; Dev Roy 2008; Henderson 1893; Sankarankutty 1961, 1962; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Griffin & Tranter 1986; Henderson 1893), Bangladesh (Griffin 1974), Myanmar (Chopra & Das 1937; De Man 1887), Singapore (Griffin & Tranter 1986; Lanchester 1900; Walker 1887), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Lanchester 1900, 1901), Indonesia (Buitendijk 1939; Dana 1852b; De Man 1895, 1902; Griffin & Tranter 1986; Ortmann 1894), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001), Philippines (Griffin & Tranter 1986; Marion de Procé 1822; Ward 1939), Japan (Balss 1924; De Haan 1839; Doflein 1902; Miyake *et al.* 1962; Sakai 1938, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Griffin & Tranter 1986; Haswell 1882; Poore 2004; Wolfe *et al.* 2023), Torres Strait (Calman 1900), Melanesia (Miers 1884a; Rathbun 1911; Zehntner 1894), Micronesia (Balss 1938), New Caledonia (A. Milne-Edwards 1872; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987), Gilbert Islands (Balss 1938), Fiji (Balss 1938; Griffin & Tranter 1986), Hawai'i (Castro 2011), Tuvalu (Rathbun 1907), Samoa (A. Milne-Edwards 1867), French Polynesia (Poupin 1996, 2010) and Christmas Island (Griffin & Tranter 1986; Orchard 2012).

Family Mithracidae MacLeay, 1838

32. *Cyphocarcinus suspensus* (Gravier, 1923)

(Fig. 5B)

Stenocarabus suspensus Gravier, 1923: 214, figs. 1–3.
Cyphocarcinus suspensus.—Guinot 1967a: 296 (list).—Serène 1968: 54 (list).—Griffin & Tranter 1986: 266 (key), 272, figs. 98B, 99B.—Ng *et al.* 2008: 119 (list).
Cyphocarcinus capreolus.—Barnard 1955: 15, fig. 4. [Not *Ixion capreolus* Paulson, 1875].

Material examined. RMNH.CRUS.D.58428, 3 males (8.0 × 18.0 mm, 4.0 × 11.0 mm, 3.0 × 10.0 mm), 1 ovigerous female (4.0 × 11.0 mm), 1 female (4.0 × 11.0 mm), in front of Barreira Vermelha, fcn. X4211, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58429, 2 males (5.0 × 13.0 mm, 4.0 × 11.0 mm), in front of Barreira Vermelha, fcn. X4214, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58430, 1 female (5.0 × 11.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4142, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58431, 2 males (4.0 × 16.0 mm, 4.0 × 11.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4074, 25 September 1984, leg. J.H.C. Walenkamp.

Remarks. In the checklists by Muñoz *et al*. (2021) and Emmerson (2016c), *Cyphocarcinus suspensus* was not mentioned, only *C. capreolus* (Paulson, 1875). In the extensive work by Griffin & Tranter (1986) on Majidae from the Siboga Expedition, *C. suspensus* was listed as present in Mozambique, but they discussed the consideration of Peyrot-Clausade & Serène (1976), who regarded the two species as synonymous. Griffin & Tranter (1986) found consistent differences between the two species, with *C. suspensus* having a less strongly elevated gastric region of the carapace. The gastric region in *C. capreolus* is strongly elevated and the summit lacks a tubercle, which *C. suspensus* has (Griffin & Tranter 1986). The examined specimens have a less strongly elevated gastric region,

and the tubercle on the summit is distinct. The specimens match the original description and drawings by Gravier (1923). They also match the description and drawings of Griffin & Tranter (1986) and are therefore almost certainly *Cyphocarcinus suspensus*.

Distribution. Mozambique (Barnard 1955; Griffin & Tranter 1986) and Madagascar (Gravier 1923).

Superfamily Parthenopoidea MacLeay, 1838

Family Parthenopidae MacLeay, 1838

Subfamily Daldorfiinae Ng & Rodríguez, 1986

33. *Daldorfia horrida* (Linnaeus, 1758)

(Fig. 5C)

Cancer horridus Linnaeus, 1758: 629.

Parthenope horrida.—Fabricius 1798: 353.—Guérin-Méneville 1832: Crustacés, pl. 7 fig. 1.—Randall 1840: 111.—A. Milne-Edwards 1872: 255.—Nauck 1880: 44.—Ortmann 1893: 417.—Stebbing 1893: 121; 1905: 27; 1910: 292.—Alcock 1895: 279.—Nobili 1906a: 179; 1907: 382.—Laurie 1915: 411 (list), 434.—Flipse 1930: 58, fig. 10.—Sakai 1938: 340, pl. 39 fig. 3.—Barnard 1950: 64.—Tweedie 1950: 107.—Dawydoff 1952: 139.—Forest & Guinot 1961: 26, fig. 26.—Sankarankutty 1961: 134.—Michel 1964: 9.

Cancer cristatus Shaw & Nodder, 1802: pl. 524.

Daldorfia horrida.—Rathbun 1906: 886, pl. 14 fig. 5; 1911: 259.—Sendler 1923: 41.—Buitendijk 1939: 266.—Ward 1942: 76.—Holthuis 1953: 5.—Estampador 1959: 119.—Guinot 1967a: 299 (list).—Serène 1968: 61 (list).—Zarenkov 1971: 175, fig. 76.—Sakai 1976: 283, fig. 157, pl. 96 fig. 2.—Kensley 1981: 41 (list).—Garth *et al.* 1987: 242 (list).—Dai & Yang 1991: 173, fig. 89(1), pl. 21(5).—Poupin 1996: 28; 2010: 41 (list).—Tan *et al.* 1999: 199, fig. 13C.—McLay *et al.* 2001: 966.—Ng *et al.* 2001: 15 (list); 2017: 59 (list).—Davie 2002: 385.—Ng & Davie 2002: 372 (list).—Paulay *et al.* 2003: 42 (list).—Naiyanetr 2007: 76 (list).—Ng & Richer de Forges 2007: 326 (list).—Tan & Ng 2007a: 130, figs. 2, 3, 4A, 5A, 6, 7.—Ng *et al.* 2008: 129 (list).—Tan & Low 2013: 128, unnumbered fig.—Emmerson 2016b: 497; 2016c: 465 (list).—Ng & Boyko 2017: 203, figs. 3A–F.—Bento & Paula 2018: 37 (list).—Trivedi *et al*. 2018: 57 (list).—Muñoz *et al.* 2021: 53 (list).

Material examined. RMNH.CRUS.D.58439, 1 male (26.0 × 10.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4030, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58440, 1 male (46.0 × 38.0 mm), Barreira Vermelha, 15 m from the coast, under the rocks, fcn. X4174, 8 January 1986, leg. E. Timana; RMNH.CRUS.D.58441, 1 male (86.0 × 68.0 mm), fcn., date, and collector unknown.

Comparative material. RMNH.CRUS.D.4462, 2 males (47.0 × 31.0 mm, 42.0 × 30.0 mm), Timor, Koepan [= Kupang], Indonesia, November 1929, collected during Snellius Expedition; RMNH.CRUS.D.4461, 1 male (58.0 × 38.0 mm), Timor, Kera, Indonesia, 15–16 November 1929, collected during Snellius Expedition; RMNH.CRUS.D.4464, 2 males (33.0 × 24.0 mm, 23.0 × 16.0 mm), Obi Latoe [= Obilatu], Indonesia, 23–27 April 1930, collected during Snellius Expedition; RMNH.CRUS.D.4460, 1 female (25.0 × 18.0 mm), Timor, Kera, Indonesia, 11–13 November 1929, collected during Snellius Expedition; RMNH.CRUS.D.42927, 1 male (46.0 × 33.0 mm), Platte Island atoll [= Île Platte], Seychelles, 05°49’S 55°21’E, lagoon of inner atoll, depth 12 m, scuba diving, 7 January 1993, collected during Seychelles Expedition 1992/3.

Remarks. *Daldorfia horrida* is one of the only two species in the Parthenopidae MacLeay, 1838 reported from Mozambican waters (Emmerson 2016c; Muñoz *et al.* 2021). It is easy to distinguish from the other parthenopid present in Mozambican waters, *Enoplolambrus carenatus* (H. Milne-Edwards, 1834). On *D. horrida* the fingers of the chelipeds are slightly incurved, while on *E. carenatus* the fingers are strongly incurved (Barnard 1950), pointed and slightly overlapping when closed. Also, on *D. horrida* the walking legs are strongly tuberculate, while on *E. carenatus*, they possess spaced, feeble denticles (Barnard 1950). The examined specimens match well with the very extensive description in the review of the Daldorfiinae Ng & Rodríguez, 1986 by Tan & Ng (2007a) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1893, 1905, 1910), Mozambique (Emmerson 2016c; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Mayotte (Poupin 2010), Madagascar (Tan & Ng 2007a), Glorioso Islands (Tan & Ng 2007a), La Réunion (Ortmann 1893; Poupin 2010;

Tan & Ng 2007a), Mauritius (Michel 1964; Ward 1942), Seychelles (Rathbun 1911; Tan & Ng 2007a), Red Sea (Laurie 1915; Nobili 1906a; Tan & Ng 2007a; Zarenkov 1971), Djibouti (Tan & Ng 2007a), Persian Gulf (Nobili 1907), India (Alcock 1895; Sankarankutty 1961; Trivedi *et al.* 2018), Singapore (Tan & Low 2013; Tan & Ng 2007a), Thailand (Naiyanetr 2007; Ng & Davie 2002; Tan & Ng 2007a), Cocos (Keeling) Islands (Tan & Ng 2007a; Tweedie 1950), Malaysia (Tan & Ng 2007a), Vietnam (Tan & Ng 2007a), Indonesia (Buitendijk 1939; Flipse 1930; Tan & Ng 2007a), China (Dai & Yang 1991), Taiwan (McLay *et al.* 2001; Ng *et al.* 2001, 2017; Tan & Ng 2007a; Tan *et al.* 1999), Philippines (Estampador 1959; Tan & Ng 2007a), Japan (Sakai 1938, 1976; Tan & Ng 2007a), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002), Papua New Guinea (Tan & Ng 2007a), Melanesia (Tan & Ng 2007a), Micronesia (Sendler 1923; Tan & Ng 2007a), New Caledonia (A. Milne-Edwards 1872; Ng & Richer de Forges 2007; Poupin 2010; Tan & Ng 2007a), Marshall Islands (Garth *et al.* 1987; Holthuis 1953), Hawai'i (Rathbun 1906), Samoa (Ortmann 1893; Tan & Ng 2007a), French Polynesia (Poupin 1996, 2010; Tan & Ng 2007a), Sandwich Islands (Randall 1840) and Easter Island (Ng & Boyko 2017).

Subfamily Parthenopinae MacLeay, 1838

34. *Enoplolambrus carenatus* (H. Milne-Edwards, 1834)

(Fig. 5D)

Lambrus carenatus H. Milne-Edwards, 1834: 358.
Lambrus carinatus.—Adams & White 1848: 27, pl. 5 fig. 3.—Alcock & Anderson 1894: 199 (list).
Lambrus serratus var. *mosambicana* Bianconi, 1851: 105.
Lambrus edwardsii Gerstaecker, 1856: 117.
Lambrus Holdsworthi Miers, 1879b: 19, pl. 5 fig. 3.—Nobili 1906b: 112.
Lambrus latirostris Miers, 1879b: 19.
Lambrus spinifer var. *integrifrons* Haswell, 1880: 452.
Lambrus (*Platylambrus*) *carinatus* var. *alcocki* Laurie, 1906: 388.
Lambrus (*Platylambrus*) *carinatus*.—Nobili 1906a: 183.—Laurie 1915: 411 (list).—Stephensen 1946: 111, figs. 22, 23C, D.—Guinot 1967a: 297 (list).
Platylambrus quemvis Stebbing, 1917: 3, pl. 1.
Platylambrus carinatus.—Flipse 1930: 77 (list).—Dawydoff 1952: 140.
Platylambrus quemvis.—Barnard 1950: 65, fig. 14; 1955: 3 (list).
Parthenope (*Platylambrus*) *quemvis*.—Serène 1968: 60 (list).—Kensley 1981: 41 (list).
Parthenope quemvis.—Tirmizi & Kazmi 1986: 201, fig. 62.
Parthenope carenatus.—Apel 2001: 67.
Enoplolambrus carenatus.—Tan & Ng 2007b: 104, fig. 6.—Ng *et al.* 2008: 130 (list).—Emmerson 2016b: 499; 2016c: 465 (list).—Naderloo 2017: 164, figs. 19.2, 19.4D, 19.5.—Bento & Paula 2018: 37 (list).—Trivedi *et al*. 2018: 57 (list).—Muñoz *et al.* 2021: 53 (list).
Enoplolambrus carinatus.—Poore & Ahyong 2023: 657, fig. 14.100I.

Material examined. RMNH.CRUS.D.58442, 1 ovigerous female (27.0 × 24.0 mm), in front of Marine Biology Station (EBM), 12–14 m depth, fcn. X4305, 18 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58443, 1 male (19.0 × 16.0 mm), Costa do Sol, Maputo, littoral, fcn. X3971, 28 May 1983, leg. Octavio Floriano; RMNH.CRUS.D.58444, 1 male (15.0 × 11.0 mm), in front of Barreira Vermelha, fcn. X4210, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58445, 1 male (9.0 × 9.0 mm), in between Marine Biology Station (EBM) and Barreira Vermelha, 6 m depth, fcn. X4291, 14 January 1987, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.27443, 1 male (25.0 × 20.5 mm), 1 female (27.0 × 22.0 mm), Costa do Sol, Lorenço Marques [= Maputo], Mozambique, 21 September 1967, leg. G. Hartmann; RMNH.CRUS.D.27401, 1 male (26.0 × 10.0 mm), 1 female (29.0 × 21.5 mm), Costa do Sol, Lorenço Marques [= Maputo], Mozambique, 17 September 1967, leg. G. Hartmann.

Remarks. See also the remarks under *Daldorfia horrida*. The examined material matches well with the short description and drawing in Barnard (1950) under the synonym *Platylambrus quemvis*, Tan & Ng (2007b: fig 6) and the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1917), Mozambique (Barnard 1950, 1955; Bianconi 1851; Emmerson 2016c; Kensley 1981; Muñoz *et al.* 2021), Red Sea (Laurie 1915; Nobili 1906a), Gulf of Oman (Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Nobili 1906b; Stephensen

1946), Pakistan (Tirmizi & Kazmi 1986), India (Alcock & Anderson 1894; Trivedi *et al.* 2018), Sri Lanka (Laurie 1906; Miers 1879b), Indonesia (Adams & White 1848), China (Adams & White 1848) and Australia (Haswell 1880; Miers 1879b).

Superfamily Pilumnoidea Samouelle, 1819

Family Pilumnidae Samouelle, 1819

Subfamily Pilumninae Samouelle, 1819

35. *Actumnus globulus* Heller, 1861

(Fig. 5E)

Actumnus globulus Heller, 1861a: 341, pl. 2 fig. 23; 1861b: 12.—A. Milne-Edwards 1865b: 286, pl. 18 fig. 4.—Cano 1889a: 89.—Rathbun 1911: 232.—Klunzinger 1913: 273, pl. 7 fig. 6.—Laurie 1915: 414 (list).—Poupin 1996: 61; 2010: 31 (list).—Galil *et al.* 2008: 1, figs. 1, 2.—Ng *et al.* 2008: 139 (list).—Innocenti & Crocetta 2020: 985. [Not *Actumnus globulus* Nobili, 1907].

Material examined. RMNH.CRUS.D.58446, 1 female (10.0 × 8.0 mm), tidal flat off Barreira Vermelha, fcn. X3941, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58447, 1 female (11.0 × 7.0 mm) with bopyrid parasite, tidal flat off Barreira Vermelha, fcn. X3918, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58448, 1 male (12.0 × 9.0 mm), south of Ponta Punduini, 3 m depth, fcn. X4232, 3 November 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.16558, 2 males (21.0 × 16.0 mm, 13.0 × 9.5 mm), Jeddah harbour, Saudi Arabia, 9 September 1956, leg. C.E. Dawson.

Remarks. *Actumnus globulus* was not recorded as present in Mozambican waters by Muñoz *et al*. (2021) and Emmerson (2016c). Alphonse Milne-Edwards (1865b) reported it from the coast of Mozambique, and Galil *et al*. (2008), in reporting *A. globulus* from the Mediterranean, studied comparative material from Mozambique. On the specimen studied by Galil *et al.* (2008), there is a subdistal plumose seta present on the first male pleopod, which is also figured in drawings. They note that the seta is not present on their comparative material from the Red Sea. On our examined male specimen from Mozambique, the seta on the first pleopod is absent, and it is absent on comparative material from Saudi Arabia. In addition, Galil *et al.*'s (2008) figured specimen from Italy had a significantly larger carapace length (CL = 49 mm) than their comparative material and the material examined from Inhaca Island. Considering the size and the absence of the seta on the first male pleopod, it is possible that the specimen described in Galil *et al*. (2008) is a different species of *Actumnus* Dana, 1851. Recently, Innocenti & Crocetta (2020) discussed the record of *A. globulus* from Italy, in which they suggested that the specimen Galil *et al*. (2008) studied in their report had been mislabelled. The other member of *Actumnus* present in Mozambican waters according to the checklists by Muñoz *et al*. (2021) and Emmerson (2016b) is *A. setifer* (De Haan, 1835). *Actumnus setifer* has a "very convex carapace which is covered with a very short, close, velvety pile composed of stout, spinate setae, which almost conceals the scattered granules" (Barnard 1950), which is not the case on the examined material. The examined specimens match with the original description, Heller (1861a: pl. 2 fig. 23) and with comparative material from Saudi Arabia.

Distribution. Mozambique (A. Milne-Edwards 1865b), Red Sea (Heller 1861a, b; Klunzinger 1913; Laurie 1915; A. Milne-Edwards 1865b), Melanesia (Rathbun 1911) and French Polynesia (Poupin 1996, 2010).

36. *Eurycarcinus natalensis* (Krauss, 1843)

(Fig. 5F)

Cancer (*Galene*) *natalensis* Krauss, 1843: 31, pl. 1 fig. 4.
Eurycarcinus Grandidierii A. Milne-Edwards, 1867: 277; 1868: 71 (list), 80, pl. 19 figs. 13–16.
Galene natalensis.—Hoffmann 1874: 4.
Eurycarcinus natalensis.—Kossmann 1877: 37.—Hilgendorf 1879: 792.—Lenz & Richters 1881: 422.—Ortmann 1894: 49.—Nobili 1906a: 289.—Stebbing 1910: 302.—Laurie 1915: 415 (list).—Barnard 1950: 261, figs. 48C–E.—MacNae & Kalk

1958: 82 (list).—Guinot 1967a: 273 (list).—Kensley 1981: 44 (list).—Clark & Paula 2003: 352, figs. 29–32.—Ng *et al.* 2008: 140 (list).—Emmerson 2016b: 513; 2016c: 465 (list).—Bento & Paula 2018: 38 (list).—Ng *et al.* 2018: 483, figs. 1A, B, 3A, 4A, 5A, 6A, D, 7A, D, G, 8A, D, E.—Muñoz *et al.* 2021: 54 (list).

Material examined. RMNH.CRUS.D.58449, 1 male (16.0 × 11.0 mm), Saco da Inhaca, mangrove, open zone, fcn. X4349, 12 January 1987, leg. Delfina Manfate, Lucilia Chuquela & Maimura Amade; RMNH.CRUS.D.58450, 2 males (27.0 × 18.0 mm, 24.0 × 15.0 mm), Saco da Inhaca, mangrove, fcn. X4354, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58451, 1 male (26.0 × 16.0 mm), Saco da Inhaca, mangrove, fcn. X3995, date and collector unknown; RMNH.CRUS.D.58452, 1 male (36.0 × 22.0 mm), Saco da Inhaca, intermediate level littoral, fcn. X4022, 4 August 1983, collector unknown.

Comparative material. RMNH.CRUS.D.663, 1 male (33.0 × 21.0 mm slightly damaged), Red Sea, 1880, leg. Kossmann; RMNH.CRUS.D.31385, 1 female (23.5 × 14.0 mm), Nossi-Faly [= Nosy Faly], Madagascar, date unknown, leg. D.C. van Dam & F.P.L. Pollen.

Remarks. The examined material matches the description of Barnard (1950) and the comparative material well. The specimens also match the very clear figures given in Ng *et al*. (2018). Records of *E. natalensis* from the Nicobar Islands (Barnard 1950; Emmerson 2016b) are most likely a misidentification (Ng *et al.* 2018) and are therefore not included in the distribution. There were no other members of *Eurycarcinus* A. Milne-Edwards, 1867 reported from African waters (Emmerson 2016c).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Hoffmann 1874; Lenz & Richters 1881), Tanzania (A. Milne-Edwards 1867, 1868; Ortmann 1894), Kenya (Ng *et al.* 2018) and Red Sea (Kossmann 1877; Laurie 1915; Nobili 1906a).

37. *Pilumnus longicornis* Hilgendorf, 1879

(Fig. 6A)

Pilumnus longicornis Hilgendorf, 1879: 794, pl. 1 figs. 8, 9.—Alcock 1898: 193.—Calman 1900: 16.—De Man 1902: 635.—Nobili 1906b: 135.—Rathbun 1911: 228.—Laurie 1915: 414 (list).—Balss 1933: 15.—Chopra & Das 1937: 406, pl. 6 fig. 3.—Monod 1938: 135, fig. 17F.—Sakai 1939: 533, pl. 100 fig. 3; 1976: 486, pl. 175 fig. 1.—Stephensen 1946: 144, fig. 36A.—Barnard 1950: 265, fig. 49C.—Chhapgar 1957: 37, pl. 10 figs. M, O.—Edmondson 1962: 294, fig. 29A.—Miyake *et al.* 1962: 129 (list).—Guinot 1964: 94; 1967a: 274 (list).—Michel 1964: 29.—Serène 1968: 84 (list).—Kensley 1981: 45 (list).—Garth & Kim 1983: 692.—Jones 1986: 163, pl. 48.—Garth *et al.* 1987: 246 (list).—Bakus 1994: 172 (list).—Hornby 1997: 15.—Apel 2001: 99.—Ng *et al.* 2001: 30 (list); 2017: 62 (list).—Davie 2002: 417.—Ng & Davie 2002: 377 (list).—Clark & Paula 2003: 361, figs. 33–36.—Paulay *et al.* 2003: 43 (list).—Venkataraman *et al*. 2004: 310 (list).—Naiyanetr 2007: 98 (list).—Dev Roy 2008: 57.—Ng *et al.* 2008: 142 (list).—Castro 2011: 61.—Naderloo & Türkay 2012: 38.—Naderloo *et al.* 2013: 6 (table).—Emmerson 2016b: 516; 2016c: 465 (list).—Naderloo 2017: 315, figs. 26.22C, 26.23, 26.25.—Bento & Paula 2018: 38 (list).—Trivedi *et al*. 2018: 60 (list).—Suvarna Devi *et al.* 2019: 483.—Fahimi *et al.* 2021: 10, figs. 6A–G, 12B.—Lee *et al.* 2021: S8 (list).—Muñoz *et al.* 2021: 54 (list).

Pilumnus andersoni De Man, 1887: 59, pl. 3 figs. 5, 6; 1895: 552.

Material examined. RMNH.CRUS.D.58453, 1 male (6.0 × 5.0 mm), in between Marine Biology Station (EBM) and Barreira Vermelha, 6 m depth, fcn. X4291, 14 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58454, 1 female (17.0 × 14.0 mm), in between Marine Biology Station (EBM) and Barreira Vermelha, 6 m depth, fcn. X4291, 14 January 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58455, 1 female (15.0 × 12.0 mm), Barreira Vermelha, 500 m from the water, under the rocks, fcn. X4193, 8 January 1986, leg. J.S. Duarte; RMNH.CRUS.D.58456, 1 female (10.0 × 7.0 mm), in front of Barreira Vermelha, 2 m depth, fcn. X4369, 16 May 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58457, 1 male (5.0 × 4.0 mm), tidal flat off Barreira Vermelha, fcn. X3959, 7 August 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.16161, 1 female (21.5 × 17.0 mm), Tārūt Bay, 0.5–1 mile north of Aramco Fuelpier, Saudi Arabia, 19 October 1956, leg. C.E. Dawson; RMNH.CRUS.D.16737, 3 males (20.5 × 15.5 mm, 17.0 × 13.0 mm, 12.5 × 9.0 mm), Saudi Arabia, 13–16 October 1956, leg. C.E. Dawson; RMNH.CRUS.D.16738, 1 male (17.0 × 12.0 mm), Saudi Arabia, 16 September 1956, leg. C.E. Dawson; RMNH.CRUS.D.16739, 2 males (10.5 × 8.0 mm, 9.0 × 6.0 mm), Tārūt Bay, Ras Tanura, Saudi Arabia, 31 October 1956, leg. C.E. Dawson; RMNH.CRUS.D.16740, 1 male (6.0 × 4.0 mm), 1 ovigerous female (4.0 × 3.0 mm), south of Port Louis, Pointe aux Sables, Mauritius, 11 October 1957, leg. C. Michel.

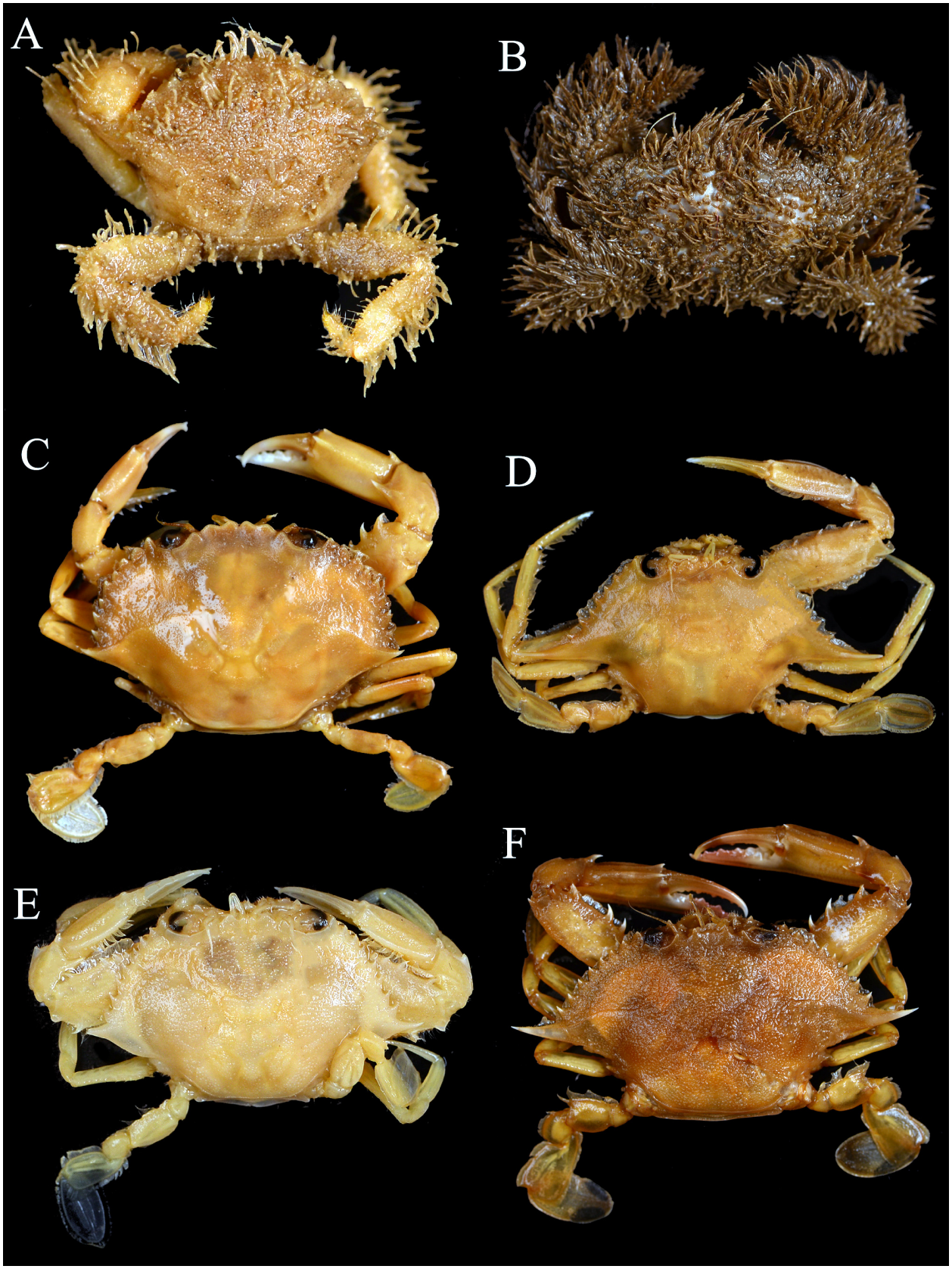

FIGURE 6. A, *Pilumnus longicornis* Hilgendorf, 1879, female, CW = 15.0 mm, RMNH.CRUS.D.58455; B, *Pilumnus vespertilio* (Fabricius, 1793), female, CW = 24.0 mm, RMNH.CRUS.D.58458; C, *Scylla serrata* (Forskål, 1775), male, juvenile, CW = 26.0 mm, RMNH.CRUS.D.58478; D, *Eodemus vassilyi* (Nguyen & Ng, 2021), male, CW = 35.0 mm, RMNH.CRUS.D.58481; E, *Monomia* sp., male, CW = 19.0 mm, RMNH.CRUS.D.58486; F, *Portunus segnis* (Forskål, 1775), male, CW = 51.0 mm, RMNH.CRUS.D.58497.

Remarks. In Mozambican waters, three members of *Pilumnus* Leach, 1816 are known: *P. dofleini* Balss, 1933, *P. longicornis* and *P. vespertilio* (Fabricius, 1793) (Muñoz *et al.* 2021). Additionally, in South Africa, *P. minutus* De Haan, 1835 has also been reported (Emmerson 2016c). *Pilumnus longicornis* can be distinguished from congeners in the area by the absence of a subhepatic tubercle on the carapace (Barnard 1950) and walking legs with spines on the anterior margin of the merus (Naderloo 2017). The carapace is covered by scattered long setae (Barnard 1950) as opposed to the thickly setae-covered carapace of *P. vespertilio*. Examined material matches well with the drawings in Fahimi *et al.* (2021), description in Barnard (1950) and with comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Seychelles (Rathbun 1911), Mauritius (Michel 1964), Red Sea (Laurie 1915; Monod 1938), Gulf of Oman (Fahimi *et al.* 2021), Persian Gulf (Apel 2001; Fahimi *et al.* 2021; Guinot 1964; Hornby 1997; Jones 1986; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946), India (Alcock 1898; Bakus 1994; Chhapgar 1957; Dev Roy 2008; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Myanmar (Chopra & Das 1937; De Man 1887), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1895, 1902), Taiwan (Ng *et al.* 2001, 2017), Philippines (Garth & Kim 1983), Korea (Lee *et al.* 2021), Japan (Miyake *et al.* 1962; Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002), Torres Strait (Calman 1900), Melanesia (Rathbun 1911), Marshall Islands (Garth *et al.* 1987) and Hawai'i (Castro 2011; Edmondson 1962).

38. *Pilumnus vespertilio* (Fabricius, 1793)

(Fig. 6B)

Cancer vespertilio Fabricius, 1793: 463.—Bosc 1802: 176, pl. 2 fig. 1.
Cancer (*Pilumnus*) *vespertilio.*—De Haan 1833: 19 (list).
Pilumnus vespertilio.—H. Milne-Edwards 1834: 418.—Heller 1861a: 343; 1861b: 12 (list).—A. Milne-Edwards 1873: 242.—Hoffmann 1874: 5.—Miers 1876: 19; 1884a: 183 (list), 219.—Targioni Tozzetti 1877: 55.—Hilgendorf 1879: 793.—Nauck 1880: 53.—Richters 1880: 148.—Lenz & Richters 1881: 422.—Haswell 1882: 65.—De Man 1887: 58; 1895: 537; 1902: 630.—Cano 1889a: 89.—Pfeffer 1889: 28.—Henderson 1893: 365.—Ortmann 1893: 438; 1894: 49.—Alcock & Anderson 1894: 201 (list).—Zehntner 1894: 248.—Alcock 1898: 192.—Nobili 1899: 259; 1903: 34; 1906a: 274.—Lanchester 1900: 743; 1901: 541.—Borradaile 1902b: 245.—Schenkel 1902: 575.—Lenz 1905: 356.—Rathbun 1906: 862.—Stimpson 1907: 65.—Bouvier 1915: 258.—Laurie 1915: 414 (list).—Parisi 1916: 183.—Balss 1922c: 117.—Sakai 1939: 532, pl. 100 figs. 1, 2; 1976: 484, fig. 258.—Barnard 1950: 263, figs. 49A, B.—Dawydoff 1952: 140.—Chhapgar 1957: 36, pl. 10, figs. J–L.—Estampador 1959: 84.—Sankarankutty 1961: 130.—Edmondson 1962: 291, fig. 28B.—Miyake *et al.* 1962: 129 (list).—Guinot 1964: 97; 1967a: 274 (list).—Michel 1964: 29.—McNeill 1968: 63.—Serène 1968: 85 (list).—Kensley 1970: 104 (list); 1981: 45 (list).—Chen & Lan 1978: 277.—Garth *et al.* 1987: 246 (list).—Dai & Yang 1991: 364, pl. 49(1), fig. 176(3).—Bakus 1994: 172 (list), 188 (list).—Ng *et al.* 2001: 30 (list); 2017: 63 (list).—Simões *et al.* 2001: 85 (list).—Davie 2002: 419.—Kyomo 2002: 317.—Ng & Davie 2002: 377 (list).—Clark & Paula 2003: 361, figs. 37–40.—Paulay *et al.* 2003: 43 (list).—Poore 2004: 457.—Venkataraman *et al*. 2004: 310 (list).—Litulo 2005: 1359.—Naiyanetr 2007: 98 (list).—Ng & Richer de Forges 2007: 327 (list).—Dev Roy 2008: 59.—Ng *et al.* 2008: 142 (list).—Poupin 2010: 66 (list).—Castro 2011: 62.—Emmerson 2016b: 519; 2016c: 465 (list).—Bento & Paula 2018: 38 (list).—Trivedi *et al*. 2018: 60 (list).—Muñoz *et al.* 2021: 54 (list).—Fahimi & Naderloo 2023: 256.
Pilumnus ursulus Adams & White, 1849: 45, pl. 9 fig. 6.—Hess 1865: 137, pl. 6 fig. 2.—Kossmann 1877: 39.
Pilumnus mus Dana, 1852a: 82.—Stimpson 1858: 36.—Cano 1889a: 89.
Actaea dentata Edmondson, 1935: 29, pl. 1B fig. 9.
Pilumnus vespitilio.—MacNae & Kalk 1958: 69, fig. 16F.

Material examined. RMNH.CRUS.D.58458, 1 female (24.0 × 17.0 mm), fcn. X3989, date and collector unknown; RMNH.CRUS.D.58459, 1 male (8.0 × 6.0 mm), tidal flat off Barreira Vermelha, zone 1, fcn. X3949, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58460, 1 male (19.0 × 14.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4047, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58461, 1 ovigerous female (19.0 × 16.0 mm), littoral between hotel and Barreira Vermelha, fcn. X4147, 16 November 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58462, 1 female (32.0 × 22.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4062, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58463, 1 ovigerous female (24.0 × 20.0 mm), intertidal flat in front of Barreira Vermelha, fcn. X4111, 22 January 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58464, 1 male (28.0 × 21.0 mm), tidal flat off Barreira Vermelha, fcn. X3966, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58465, 1 male (29.0 × 20.0 mm), 1 ovigerous female (15.0 × 11.0 mm), littoral in between Ponta Rasa and Ponta Punduini,

under the rocks, fcn. X4187, 4 January 1986, leg. Aidate; RMNH.CRUS.D.58466, 1 female (15.0 × 9.0 mm), tidal flat off Barreira Vermelha, fcn. X4078, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58467, 1 female (17.0 × 13.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4198, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58468, 1 male (24.0 × 18.0 mm), littoral north of Marine Biology Station (EBM), fcn. unknown, 24 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58469, 1 male (17.0 × 12.0 mm), intertidal in front of Barreira Vermelha, fcn. X4121, 17 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58470, 1 female (24.0 × 19.0 mm), off Barreira Vermelha, 1 m depth, fcn. X4106, 8 May 1982, leg. J.H.C Walenkamp; RMNH.CRUS.D.58471, 1 male (10.0 × 7.0 mm), 1 female (21.0 × 16.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4204, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58472, 2 males (12.0 × 9.0 mm, 8.0 × 6.0 mm), tidal flat off Barreira Vermelha, fcn. X3947, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58473, 2 males (22.0 × 14.0 mm, 13.0 × 10.0 mm), intertidal flat in front of Barreira Vermelha, fcn. X4098, 22 January 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58474, 2 females (24.0 × 19.0 mm, 21.0 × 15.0 mm), tidal flat off Barreira Vermelha, fcn. X3916, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58475, 1 male (23.0 × 18.0 mm), tidal flat off Barreira Vermelha, fcn. X3904, 8 August 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.501, 1 ovigerous female (22.0 × 17.0 mm), Ambon, Indonesia, date unknown, leg. Ludeking; RMNH.CRUS.D.517, 1 male (29.0 × 21.5 mm), Moluques [= Maluku Islands], Indonesia, date unknown, leg. Reinwardt; RMNH.CRUS.D.1319, 1 female (19.0 × 14.0 mm), Mergui Archipelago, Myanmar, 1886, leg. Prof. Anderson.

Remarks. See also the remarks under *Pilumnus longicornis*. *Pilumnus vespertilio* is easily recognisable by its very thickly setae-covered carapace and appendages, which make the lateral margins invisible when the setae are intact. When the setae are removed, a subhepatic tubercle can be seen (Barnard 1950). Examined material matches well with the description given in Barnard (1950) and with the comparative material.

Distribution. Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1970, 1981; Litulo 2005; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Hoffmann 1874; Lenz & Richters 1881), Mauritius (Bouvier 1915; Michel 1964), Seychelles (Richters 1880), Tanzania (Lenz 1905; Ortmann 1894), Suez Canal (Pfeffer 1889), Red Sea (Guinot 1964; Heller 1861a, b; Kossmann 1877; Laurie 1915; Nobili 1906a), Yemen (Simões *et al.* 2001), India (Alcock 1898; Alcock & Anderson 1894; Bakus 1994; Chhapgar 1957; Dev Roy 2008; Henderson 1893; Sankarankutty 1961; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1902b), Sri Lanka (Henderson 1893), Myanmar (De Man 1887), Nicobar Islands (Bakus 1994), Singapore (Lanchester 1900; Nobili 1903), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Lanchester 1901), Indonesia (De Man 1895, 1902; Nobili 1899; Schenkel 1902), China (Chen & Lan 1978; Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (Balss 1922c; De Haan 1833; Kyomo 2002; Miyake *et al.* 1962; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Haswell 1882; Hess 1865; McNeill 1968; Poore 2004), Papua New Guinea (Ortmann 1893), Melanesia (Miers 1884a; Zehntner 1894), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Ortmann 1893; Poupin 2010), Marshall Islands (Garth *et al.* 1987), New Zealand (Miers 1876), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906), Samoa (Dana 1852a) and Tonga Islands (Edmondson 1935).

Superfamily Portunoidea Rafinesque, 1815

Family Portunidae Rafinesque, 1815

Subfamily Necronectinae Glaessner, 1928

39. *Scylla serrata* (Forskål, 1775)

(Fig. 6C)

Cancer serratus Forskål, 1775: 90.
Portunus serratus.—Rüppell 1830: 10, pl. 2 fig. 1.
Portunus (*Scylla*) *serratus.*—De Haan 1833: 11 (list), 1835: 44.
Achelous crassimanus MacLeay, 1838: 61.—Stebbing 1910: 308.
Scylla serrata.—Krauss 1843: 25.—A. Milne-Edwards 1861: 349; 1862: 2; 1873: 163.—Heller 1865: 27.—Hess 1865: 138.—

Hoffmann 1874: 9.—Miers 1876: 27; 1886: 185.—Hilgendorf 1879: 799.—Nauck 1880: 59.—Haswell 1882: 79.—Cano 1889a: 90.—Henderson 1893: 372.—Ortmann 1894: 45.—De Man 1895: 559; 1902: 642.—Alcock 1899: 27.—Nobili 1899: 254; 1900: 497; 1903: 29; 1906a: 189.—Lanchester 1900: 748.—Doflein 1902: 658.—Stebbing 1910: 308.—Kemp 1915: 248.—Laurie 1915: 411 (list).—Parisi 1916: 173.—Balss 1922c: 110.—Boone 1934: 68, pls. 25–30.—Sakai 1936a: 162; 1939: 384; 1976: 335, pl. 115.—Chopra & Das 1937: 391.—Serène 1937: 74 (list); 1968: 67 (list).—Shen 1937: 99.—Leene 1938: 14.—Barnard 1950: 160, figs. 31B, C.—Dawydoff 1952: 143.—Edmondson 1954: 234, figs. 10B, 11A–C.—Chhapgar 1957: 17, pl. 5A–C.—MacNae & Kalk 1958: 69.—Stephenson & Campbell 1960: 111, fig. 2N, pl. 4 fig. 4, pls. 5N, 6C.—Forest & Guinot 1961: 27, 29.—Crosnier 1962: 72, figs. 128, 129.—Miyake *et al.* 1962: 128 (list).—Michel 1964: 18.—Derijard 1966: 163.—Guinot 1967a: 258 (list).—Stephenson & Rees 1967a: 55; 1967b: 18.—McNeill 1968: 50.—Stephenson 1972a: 44; 1972b: 141.—Kensley 1981: 43 (list).—Hogarth 1989: 117 (list).—Dai & Yang 1991: 209, fig. 111(1), pl. 25(5).—Poupin 1996: 33; 2010: 70 (list).—Apel & Spiridonov 1998: 312.—Keenan *et al.* 1998: 228, figs. 7A, 8A, 9A, 10.—Apel 2001: 77.—Ng *et al.* 2001: 17 (list); 2017: 70 (list).—Davie 2002: 470.—Ng & Davie 2002: 373 (list).—Paulay *et al.* 2003: 45 (list).—Poore 2004: 422, figs. 133B, 133D.—Venkataraman *et al*. 2004: 306 (list).—Naiyanetr 2007: 84 (list).—Dev Roy 2008: 68.—Ng *et al.* 2008: 153 (list).—Castro 2011: 67.—Tavares & Mendonça Jr 2011: 49, fig. 1.—Naderloo & Türkay 2012: 40.—Balasubramanian *et al.* 2014: 1, fig. 4.—Peer *et al.* 2014: 61, fig. 20.—Emmerson 2016b: 577; 2016c: 468 (list).—Naderloo 2017: 208, figs. 20.42, 20.45, 20.46, 20.47.—Bento & Paula 2018: 39 (list).—Trivedi *et al*. 2018: 68 (list).—Ma & McQuaid 2021: 1241 (list).—Muñoz *et al.* 2021: 43, fig. 14C, 54 (list).—Pati *et al.* 2022: 535.

Scylla tranquebarica var. oceanica Dana, 1852b: 270, pl. 16, figs. 16A, B.

Scylla tranquebarica.—Stimpson 1858: 38; 1907: 75.—Heller 1861b: 12 (list). [Not *Portunus tranquebarica* Fabricius, 1798].

Neptunus serratifrons Montrouzier, 1865: 161.

Scylla serrata var. *paramamosain.*—Serène 1951: 1, fig. 1D, pl. 1 fig. 4, pl. 2 fig. 4. [Not *Scylla paramamosain* Estampador, 1949].

Material examined. RMNH.CRUS.D.58476, 1 male (110.0 × 71.0 mm), Costa do Sol, Maputo, sandy area between waters, fcn. X4097, 20 June 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58477, 1 male (32.0 × 23.0 mm), Saco da Inhaca, mangrove, in front of *Avicennia* sp., fcn. X4013, 4 August 1983, collector unknown; RMNH.CRUS.D.58478, 1 male (26.0 × 17.0 mm juvenile), Maputo Bay, fcn. X4138, 31 July 1985, leg. Magnus; RMNH.CRUS.D.58479, 1 male (52.0 × 33.0 mm), fcn. X4020, date and collector unknown; RMNH.CRUS.D.58480, 1 male (86.0 × 56.0 mm), Costa do Sol, Maputo, littoral, fcn. X4130, 15 October 1985, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.2775, 2 males (75.0 × 48.0 mm, 60.0 × 39.0 mm), Upolu Island, Samoa, 1887, acquired via Museum Godeffroy; RMNH.CRUS.D.23495, 5 males (22.0 × 14.0 mm, 21.5 × 13.5 mm, 21.0 × 14.5 mm, 18.0 × 12.0 mm, 13.5 × 9.5 mm), Tuléar, St. Augustine Bay, Madagascar, 11 September 1966, leg. J.L. Moulherat; RMNH.CRUS.D.16234, 1 male (23.0 × 15.5 mm), southeast of Calcutta, Gangesdelta near Port Canning, India, 13 August 1955, leg. S.K. Banerjee; RMNH.CRUS.D.3314, 1 female (73.0 × 42.0 mm), south coast of Madoera [= Madura], Indonesia, 1 February 1924, leg. P. Buitendijk.

Remarks. In their revision of the genus *Scylla* De Haan, 1833, Keenan *et al.* (2008) discussed the confusion regarding the taxonomy of *S. serrata* and showed that there are four distinct *Scylla* species. Based on their genetic work, they have provided a clear key and characters to separate the species. The adult specimens from Inhaca Island match the description and figures of *S. serrata* from Keenan *et al.* (2008). The specimens have two obvious spines on the carpus of the cheliped. The photographed specimen from Inhaca Island (Fig. 6C) is a juvenile, the frontal lobe spines are more rounded than on adults. Even though the frontal lobe spines look more similar to *Scylla olivacea* (Herbst, 1796), the beginning of two spines can clearly be seen on the cheliped carpus. The juvenile specimen is therefore almost certainly also *S. serrata*. On Inhaca Island, Mozambique, *S. serrata* is abundant and is one of the most important species of crab to be exploited by humans for sustenance (De Boer & Prins 2002).

Distribution. Brazil (Tavares & Mendonça Jr 2011), South Africa (Barnard 1950; Emmerson 2016c; Keenan *et al.* 1998; Kensley 1981; Krauss 1843; MacLeay 1838; Peer *et al.* 2014; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Hoffmann 1874; Poupin 2010), Madagascar (Crosnier 1962), La Réunion (A. Milne-Edwards 1862; Poupin 2010), Mauritius (Keenan *et al.* 1998; Michel 1964), Tanzania (Ortmann 1894), Red Sea (Forskål 1775; Heller 1861b; Keenan *et al.* 1998; Laurie 1915; Nobili 1906a; Rüppell 1830), Gulf of Oman (Hogarth 1989; Naderloo 2017), Persian Gulf (Apel & Spiridonov 1998; Naderloo 2017; Naderloo & Türkay 2012), India (Alcock 1899; Balasubramanian *et al*. 2014; Chhapgar 1957; Dev Roy 2008; Heller 1865; Henderson 1893; Kemp 1915; Pati *et al.* 2022; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Heller 1865; Henderson 1893), Myanmar (Chopra & Das 1937), Nicobar Islands (Heller 1865), Singapore (Nobili 1903; Lanchester 1900; Shen 1937), Thailand (Naiyanetr 2007; Ng & Davie 2002), Vietnam (Serène 1951), Indonesia (De Man 1895, 1902;

Leene 1938; Nobili 1899), China (Dai & Yang 1991; Doflein 1902), Taiwan (Balss 1922c; Keenan *et al.* 1998; Ng *et al.* 2001, 2017), Philippines (Keenan *et al.* 1998), Japan (Balss 1922c; De Haan 1833, 1835; Keenan *et al.* 1998; Miyake *et al.* 1962; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Haswell 1882; Heller 1865; Keenan *et al.* 1998; McNeill 1968; Poore 2004; Stephenson & Campbell 1960), Solomon Islands (Keenan *et al.* 1998), New Caledonia (Keenan *et al.* 1998; A. Milne-Edwards 1873; Montrouzier 1865; Poupin 2010), Fiji (Keenan *et al.* 1998), New Zealand (Heller 1865; Miers 1876), Hawai'i (Castro 2011; Edmondson 1954), Tahiti (Forest & Guinot 1961; Heller 1865; Miers 1886), Wallis & Futuna (Poupin 2010), Samoa (Keenan *et al.* 1998) and French Polynesia (Poupin 1996, 2010).

Subfamily Portuninae Rafinesque, 1815

40. *Eodemus vassilyi* (Nguyen & Ng, 2021)

(Fig. 6D)

Hellenus hastatoides.—Barnard 1950: 158, figs. 30E–G.
Portunus hastatoides.—Crosnier 1962: 68, figs. 96, 109, 117, 122, 123.—Stephenson 1972a: 40 (in part).—Kensley 1981: 42 (list).—Muñoz *et al.* 2021: 54 (list).
Portunus (*Xiphonectes*) *hastatoides*.—Ng *et al.* 2008: 152 (list).—Emmerson 2016b: 608; 2016c: 468 (list).
Xiphonectes vassilyi Nguyen & Ng, 2021: 392, figs. 2A, 3B, F, 4B, 6B.
Eodemus vassilyi.—Koch *et al.* 2023: 153 (list).

Material examined. RMNH.CRUS.D.58481, 4 males (35.0 × 17.0 mm, 28.0 × 12.0 mm, 18.0 × 9.0 mm, 17.0 × 7.0 mm), in front of Barreira Vermelha, fcn. X4210, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58482, 4 males (24.0 × 9.5 mm, 23.0 × 9.0 mm, 20.0 × 8.0 mm, 19.0 × 7.0 mm), 1 female (28.0 × 11.0 mm), in front of Marine Biology Station (EBM), 8 m depth, fcn. X3959, 18 December 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58483, 1 male (26.0 × 12.0 mm), in front of Marine Biology Station (EBM), 8 m depth, fcn. X4275, 18 December 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58484, 1 male (24.0 × 10.0 mm), 1 female (27.0 × 12.0 mm), in front of Barreira Vermelha, 13 m depth, fcn. X4237, 2 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58485: 2 males (24.0 × 12.0 mm, 24.0 × 12.0 mm), 1 female (30.0 × 14.0 mm), in front of Barreira Vermelha, 16 m depth, fcn. X4323, 5 January 1987, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.21270, 1 male (28.0 × 14.0 mm), Palk Bay, India, 1959, leg. C. Sankarankutty; RMNH.CRUS.D.5246, 1 male (21.0 × 10.5 mm), 1 female (19.0 × 9.0 mm), Padang, Indonesia, date unknown, leg. Wittenrood; RMNH.CRUS.D.29969, 1 male (28.0 × 10.5 mm), Java, Semarang, Indonesia, 1911, leg. P. Buitendijk; RMNH.CRUS.D.29970, 1 female (26.0 × 12.5 mm), Jawa Tengah, Semarang, Indonesia, 1912, leg. P. Buitendijk; RMNH.CRUS.D.29971, 1 male (17.0 × 9.0 mm), Jawa Barat, Tanjong Priok, Indonesia, November 1925, leg. P. Buitendijk.

Remarks. *Eodemus vassilyi* was recently described by Nguyen & Ng (2021), based on specimens from South Africa, as *Xiphonectes vassilyi*. The specimens from Inhaca Island match the description and figures given in Nguyen & Ng (2021). The specimens have a prominent upward curving spine on the posterolateral carapace angle, which is a diagnostic feature for this species (Nguyen & Ng 2021).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Nguyen & Ng 2021), Mozambique (Emmerson 2016c; Kensley 1981; Muñoz *et al.* 2021) and Madagascar (Crosnier 1962).

41. *Monomia* sp.

(Fig. 6E)

?*Monomia* species I.—Koch *et al.* 2017.

Material examined. RMNH.CRUS.D.58486, 1 male (19.0 × 11.0 mm), in front of Barreira Vermelha, fcn. X4210, 19 October 1986, leg. J.H.C. Walenkamp.

Comparative material. Of *Monomia gladiator* (Fabricius, 1798): RMNH.CRUS.D.32777, 1 female (58.0 × 31.0 mm), Kochi, southeast coast of Shikoku Island, Tosa Bay, Mimase, Japan, 17 May 1970, leg. K. Sakai, H.

Suzuki & L. B. Holthuis; RMNH.CRUS.D.50666, 2 males (71.0 × 40.0 mm, 64.0 × 35.0 mm), 1 female (51.0 × 30.0 mm), near Tomioka, Amakusa, Kyushu, depth 60–70 m, Japan, August 1983, leg. K. Harada, don. T. Yamaguchi.

Remarks. Barnard (1950) listed two species of *Monomia* Gistel, 1848 from African waters, *M. argentata* (A Milne-Edwards, 1861) and *M. gladiator* (Fabricius, 1798). According to Barnard (1950), the difference between the two species can be seen on the suborbital notch on the carapace, which is distinct in *M. gladiator,* and nearly notable in *M. argentata.* In the examined specimen, this notch is not very distinct. *Monomia gladiator* has a quite complicated taxonomic account, which has been resolved recently using morphological descriptions, molecular work and an extensive review of taxonomic history (Windsor *et al.* 2019). The taxonomic account of *M. argentata* has also been complex and recently studied by Koch *et al.* (2017). Both *Monomia* species have a different distributional pattern according to the work done on these species by Koch *et al*. (2017) and Windsor *et al*. (2019) and do not occur in African waters. Koch *et al.* (2017) names the *M. argentata* described by Barnard (1950) "undescribed *Monomia* species I". It is possible that the examined material from Mozambique is conspecific with the material described by Barnard (1950) from Delagoa Bay, Mozambique. To be certain, the specimen needs to be compared to the specimen described by Barnard (1950), which is likely deposited in the Iziko South African Museum.

42. *Portunus segnis* (Forskål, 1775)

(Fig. 6F)

Cancer pelagicus Forskål, 1775: 89. [Junior homonym of *Cancer pelagicus* Linnaeus, 1758].
Cancer segnis Forskål, 1775: 91.
Portunus (*Portunus*) *pelagicus*.—Audouin 1826: 83.—Serène 1968: 68 (list).
Neptunus pelagicus.—Krauss 1843: 23.—A. Milne-Edwards 1861: 320.—Hoffmann 1874: 7.—Paulson 1875: 55.—Kossmann 1877: 46.—Hilgendorf 1879: 799.—Nobili 1906b: 114.—Klunzinger 1913: 336, pl. 7 fig. 17.—Monod 1938: 116.
Lupa pelagica.—Heller 1861a: 355 (in part).—Stebbing 1908: 12; 1910: 307.—Laurie 1915: 411 (list).—Barnard 1950: 153, fig. 27B.—Fourmanoir 1954: 7, fig. 7.—MacNae & Kalk 1958: 69, fig. 17E.
Neptunus (*Neptunus*) *pelagicus*.—Nobili 1906a: 190.—Parisi 1916: 171 (in part).—Stephensen 1946: 124, fig. 26E.
Portunus mauritianus Ward, 1942: 79, pl. 5 fig. 4.—Guinot 1967a: 258 (list).
Portunus pelagicus.—Holthuis 1956: 318.—Holthuis & Gottlieb 1958: 92, pl. 3, fig. 12.—Crosnier 1962: 43, figs. 58, 61, 67.—Guinot 1967a: 257 (list).—Kensley 1981: 42 (list).—Titgen 1982: 118.—Jones 1986: 161, pl. 47.—Al-Ghais & Cooper 1996: 423.—Cooper 1997: 166.—Hornby 1997: 15.—Apel & Spiridonov 1998: 300, pls. 10, 11.—Apel 2001: 76.
Portunus trituberculatus.—Stephenson & Rees 1967b: 51. [Not *Portunus trituberculatus* Miers, 1876].
Portunus (*Portunus*) *segnis.*—Ng *et al.* 2008: 152 (list).—Emmerson 2016b: 603; 2016c: 468 (list).—Naderloo 2017: 198, figs. 20.30E, 20.32–20.35.
Portunus segnis.—Lai *et al.* 2010: 215, figs. 6B, 7B, 11–14, 20B, 21B, 22B, 23B, F, 24B.—Naderloo & Türkay 2012: 40.—Naderloo *et al.* 2013: 5 (table).—Rabaoui *et al.* 2015: 169, fig. 1.—Deidun & Sciberras 2016: 43, figs. 1, 2.—Bento & Paula 2018: 39 (list).—Hatira *et al.* 2020: 207, fig. 3.—Corsini-Foka *et al.* 2021: 886, fig. 4.—Ma & McQuaid 2021: 1238, fig. 2.—Muñoz *et al.* 2021: 54 (list).—Castriota *et al.* 2022: 1.—De Carvalho-Souza *et al.* 2023: 1033, figs. 1, 3.—Grati *et al.* 2023: 1025, figs. 1, 2.—Koch *et al.* 2023: 162 (list).

Material examined. RMNH.CRUS.D.58487, 1 male (15.0 × 7.0 mm juvenile), between Ponta Punduini and Ponta Rasa, 5 m depth, fcn. X4252, 3 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58488, 1 male (45.0 × 24.0 mm), Ilha dos Portugueses, intertidal flat, southeast coast, fcn. X4038, 16 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58489, 1 male (95.0 × 42.0 mm), littoral in front of Barreira Vermelha, fcn. X4032, 13 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58490, 1 male (36.0 × 17.0 mm), Costa do Sol, Maputo, littoral, fcn. X3971, 28 May 1983, leg. Octavio Floriano; RMNH.CRUS.D.58491, 1 male (35.0 × 18.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4068, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58492, 3 males (61.0 × 27.0 mm, 59.0 × 26.0 mm, 59.0 × 25.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4033, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58493, 1 male (32.0 × 17.0 mm), Saco da Inhaca, in the channel of mangrove, fcn. X3964, 4 August 1983, collector unknown; RMNH.CRUS.D.58494, 1 male (25.0 × 13.0 mm), *Cymodocea* flats, north of Ponta Punduini, fcn. X4108, 6 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58495, 1 male (30.0 × 13.0 mm), littoral in between Marine Biology Station (EBM) and Ponta Rasa, fcn. X4163, 4 January 1986, leg. Elsa Timare; RMNH.CRUS.D.58496, 1 male (21.0 × 9.0 mm), between Portinho and Ilha dos Portugueses, 10 m depth, fcn. X4253, 2 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58497, 1 male (51.0 × 24.0 mm), Saco da Inhaca, mangrove, fcn. X4195, 24 July 1982, leg. Eleuterio Aleixo Jasso; RMNH.

CRUS.D.58498, 1 male (91.0 × 44.0 mm), Costa do Sol, Maputo, tidal flat, very low tide, fcn. X4070, 7 October 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58499, 1 male (34.0 × 16.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4081, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58500, 1 male (28.0 × 14.0 mm moult), littoral north of Marine Biology Station (EBM), fcn. unknown, 24 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58501, 3 males (52.0 × 25.0 mm, 43.0 × 19.0 mm, 35.0 × 24.0 mm), Ponta Punduini, fcn. X3908, 27 July 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58502, 1 male (144.0 × 65.0 mm), Costa do Sol, Maputo, tidal flat, very low tide, fcn. unknown, 7 October 1983, leg. U.E.M.; RMNH.CRUS.D.58503, 1 male (121.0 × 58.0 mm), Barreira Vermelha, under a stone, fcn. X4180, 9 January 1986, leg. Nelson Cugmbe; RMNH.CRUS.D.58504, 1 male (18.0 × 8.0 mm), in front of Marine Biology Station (EBM), 8 m depth, fcn. X4274, 18 December 1986, leg. J.H.C. Walenkamp.

Remarks. *Portunus segnis* can be distinguished from the other *Portunus* Weber, 1795 in Mozambican waters by the rostral teeth on the carapace. On *P. segnis,* these teeth are minute and inconspicuous, often almost obsolete. The examined specimens match well with the extensive description, remarks and images provided by Lai *et al.* (2010) in their revision of the *P. pelagicus* (Linnaeus, 1758) species complex.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Ma & McQuaid 2021; Stebbing 1908, 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Crosnier 1962; Fourmanoir 1954; Hoffmann 1874), Mauritius (Ward 1941), Mediterranean Sea (Castriota *et al.* 2022; Corsini-Foka *et al.* 2021; De Carvalho-Souza *et al.* 2023; Deidun & Sciberras 2016; Grati *et al.* 2023; Hatira *et al.* 2020; Rabaoui *et al.* 2015), Red Sea (Forskål 1775; Heller 1861a; Holthuis 1956; Klunzinger 1913; Kossmann 1877; Laurie 1915; Monod 1938; Nobili 1906a; Paulson 1875), Israel (Holthuis & Gottlieb 1958), Gulf of Oman (Naderloo 2017), Persian Gulf (Al-Ghais & Cooper 1996; Apel 2001; Cooper 1997; Hornby 1997; Jones 1986; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946; Titgen 1982) and Pakistan (Lai *et al.* 2010).

Subfamily Thalamitinae Paulson, 1875

43. *Charybdis* (*Charybdis*) *annulata* (Fabricius, 1798)

(Fig. 7A)

Portunus annulatus Fabricius, 1798: 364.
Portunus (*Charybdis*) *annulatus.*—De Haan 1833: 10 (list).
Thalamita annulata.—H. Milne-Edwards 1834: 463.
Goniosoma annulatum.—A. Milne-Edwards 1861: 374.—Hoffmann 1874: 11. [Not *Goniosoma annulatum* De Man, 1883 and *Goniosoma annulatum* Henderson, 1893].
Goniosoma orientale.—Heller 1865: 29, pl. 3 fig. 3.—Lenz & Richters 1881: 422.—Lenz 1910: 556. [Not *Charybdis orientalis* Dana, 1852].
Charybdis (*Goniosoma*) *annulata.*—Alcock 1899: 54.—Nobili 1903: 31.—Gordon 1931: 537, fig. 13D.—Chopra & Das 1937: 393, fig. 4A–C.—Chhapgar 1957: 22, pl. 6 figs. H–K.
Charybdis annulata.—Balss 1922c: 106.—Sakai 1939: 402.—Barnard 1950: 169, fig. 32H.—MacNae & Kalk 1958: 81 (key).—Guinot 1967a: 255 (list).—Kensley 1970: 104 (list); 1981: 42 (list).—Hogarth 1989: 104 (list).—Ng *et al.* 2001: 19 (list); 2017: 72 (list).—Ng & Davie 2002: 373 (list).—Naiyanetr 2007: 85 (list).—Bento & Paula 2018: 39 (list).
Charybdis (*Charybdis*) *annulata.*—Leene 1938: 60, figs. 26–28.—Crosnier 1962: 78, figs. 136–139, pl. 5 fig. 2.—Serène 1968: 70 (list).—Stephenson 1972a: 31 (list); 1976: 14.—Sakai 1976: 356, fig. 192.—Dai & Yang 1991: 230, fig. 124(1), pl. 28(2).—Wee & Ng 1995: 17, figs. 6A–H.—Apel & Spiridonov 1998: 187, figs. 10, 11, 16.—Dev Roy 2008: 70.—Ng *et al.* 2008: 93 (list).—Emmerson 2016b: 611; 2016c: 469 (list).—Naderloo 2017: 172, figs. 20.3B, 20.4, 20.5.—Trivedi *et al*. 2018: 63 (list).—Muñoz *et al.* 2021: 54 (list).—Pati *et al.* 2022: 537.
Charybdis annullata.—Venkataraman *et al*. 2004: 306 (list).

Material examined. RMNH.CRUS.D.58505, 1 male (61.0 × 48.0 mm), Ponta Thil, 26°6.5'S, 32°58'E, on sandstone at low tide level, fcn. X4009, 27 March 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.451, 1 male (79.0 × 52.0 mm), Nossy Faly [= Nosy Faly], Madagascar, date unknown, leg. Pollen & van Dam; RMNH.CRUS.D.42498, 1 ovigerous female (64.0 × 46.5 mm), Chonburi Province, Koh Larn, near Pattaya, Thailand, from fishermen, 12–24 January 1993, leg. A.C.J. Burgers & L.B. Holthuis.

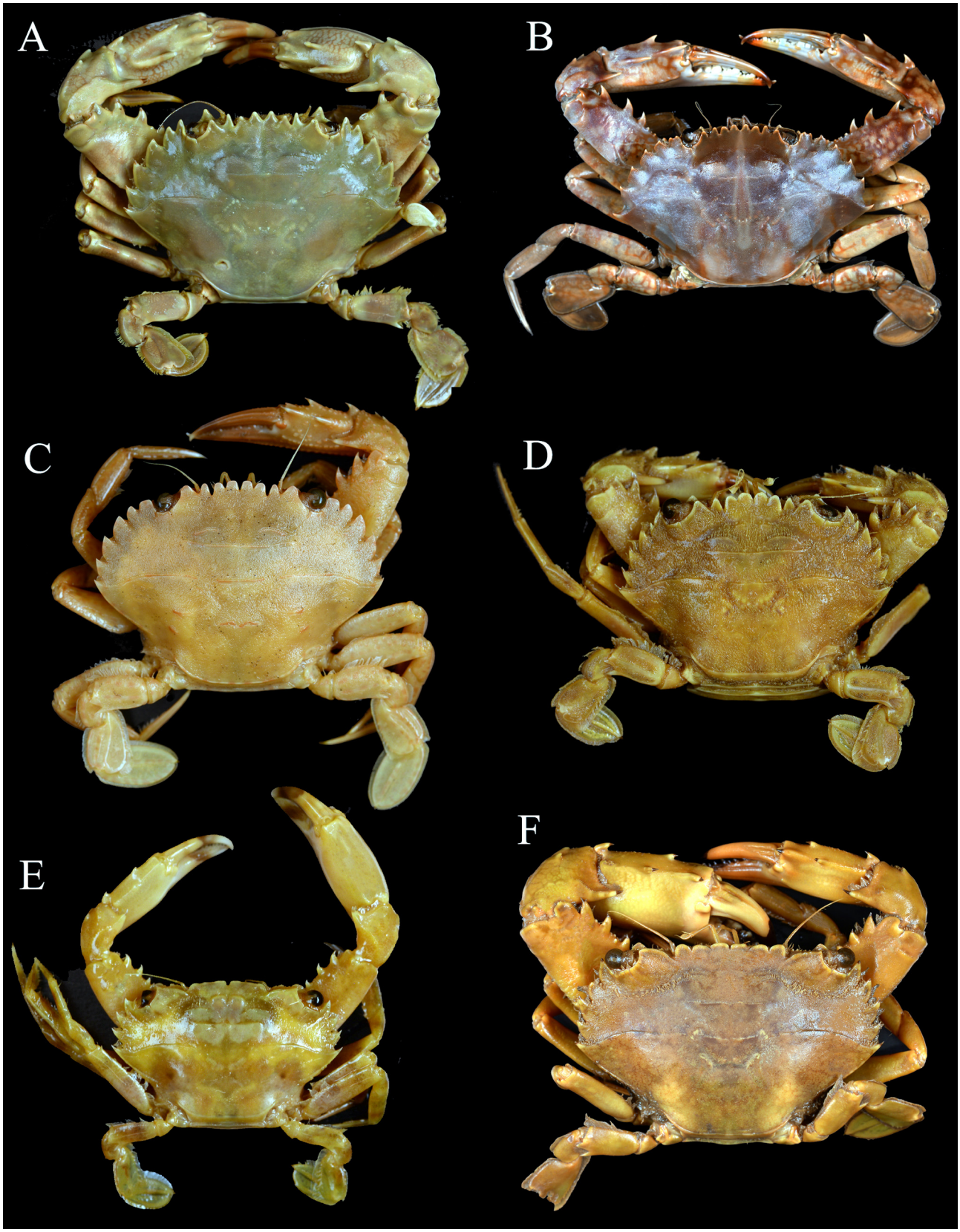

FIGURE 7. A, *Charybdis* (*Charybdis*) *annulata* (Fabricius, 1798), male, CW = 61.0 mm, RMNH.CRUS.D.58505; B, *Charybdis* (*Charybdis*) *feriata* (Linnaeus, 1758), male, CW = 82.0 mm, RMNH.CRUS.D.58506; C, *Charybdis* (*Charybdis*) *natator* (Herbst, 1794), male, CW = 46.0 mm, RMNH.CRUS.D.58507; D, *Charybdis* (*Charybdis*) *orientalis* Dana, 1852, female, CW = 38.0 mm, RMNH.CRUS.D.58508; E, *Thalamita admete* (Herbst, 1803), male, CW = 19.0 mm, RMNH.CRUS.D.58510; F, *Thalamita crenata* (Rüppell, 1830), male, CW = 59.0 mm, RMNH.CRUS.D.58512.

Remarks. Six species of *Charybdis* (*Charybdis*) De Haan, 1833 were reported from Mozambican waters (Muñoz *et al.* 2021). Stephenson (1976) stated that *C.* (*C.*) *annulata* can easily be recognised by the first two anterolateral teeth of the carapace, which he described as small. On the examined specimen, the anterolateral teeth are smaller than the others, but not by much. Looking at the comparative material and figures in for example Naderloo (2017: 173), the anterolateral teeth are also not very small, just thinner. The first anterolateral tooth on the carapace of *C.* (*C.*) *annulata* is acute and the hand of the cheliped has three spines on the upper surface (Barnard 1950). The anterolateral teeth on *C.* (*C.*) *helleri* (A. Milne-Edwards, 1867) look similar, but the difference between the rostral teeth is very clear, with *C.* (*C.*) *annulata* having more acute rostral teeth, while the teeth on *C.* (*C.*) *helleri* are rounded. The other *Charybdis* (*Charybdis*) with similar anterolateral teeth in the area is *C.* (*C.*) *natator* (Herbst, 1794), but the cheliped manus is very different on both species, with *C.* (*C.*) *natator* having granules on the manus, besides the spikes. *Charybdis* (*Charybdis*) *annulata* also has no distinct cardiac and mesobranchial ridges on its carapace, which is the case for *C.* (*C.*) *natator* and *C.* (*C.*) *variegata* (Fabricius, 1798). The examined specimen matches well with the description and figures in Wee & Ng (1995) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Emmerson 2016c; Kensley 1970; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Crosnier 1962; Hoffmann 1874; Lenz & Richters 1881), Gulf of Oman (Hogarth 1989; Naderloo 2017), Persian Gulf (Naderloo 2017), India (Alcock 1899; Chhapgar 1957; Dev Roy 2008; Pati *et al.* 2022; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Lenz 1910), Myanmar (Chopra & Das 1937), Nicobar Islands (Heller 1865), Singapore (Nobili 1903; Wee & Ng 1995), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Wee & Ng 1995), Indonesia (Leene 1938; A. Milne-Edwards 1861), China (Dai & Yang 1991; Gordon 1931), Taiwan (Balss 1922c; Ng *et al.* 2001, 2017) and Japan (De Haan 1883; Sakai 1939, 1976).

44. *Charybdis* (*Charybdis*) *feriata* (Linnaeus, 1758)

(Fig. 7B)

Cancer feriatus Linnaeus, 1758: 627.
Cancer sexdentatus Herbst, 1783: 153, pl. 8 fig. 53.
Cancer cruciatus Herbst, 1794: 155, pl. 38 fig. 1.
Portunus crucifer Fabricius, 1798: 364.
Portunus (*Oceanus*) *crucifer.*—De Haan 1833: 10 (list), 40.
Thalamita crucifera.—H. Milne-Edwards 1834: 462.—Haswell 1882: 81.
Charybdis crucifera.—Dana 1852b: 286, pl. 17 figs. 11A–C.—Stimpson 1858: 39; 1907: 80.—Balss 1922c: 104.
Goniosoma cruciferum.—A. Milne-Edwards 1861: 371.—Targioni Tozzetti 1877: 82, pl. 6 figs. 2A–G.—Nauck 1880: 61, fig. 27.—Miers 1886: 191.—De Man 1887: 79, pl. 5 fig. 1; 1895: 559.—Cano 1889a: 90.—Henderson 1893: 374.—Lanchester 1901: 545.
Charybdis (*Goniosoma*) *crucifera.*—Alcock 1899: 51.—Nobili 1900: 498; 1903: 31.—Estampador 1959: 68.
Charybdis cruciatus.—Stebbing 1902: 9; 1910: 306.
Charybdis cruciata.—Rathbun 1910: 313.—Sakai 1939: 403, pl. 82 fig. 3.—Barnard 1950: 166, fig. 32A.—Dawydoff 1952: 142.—Fourmanoir 1954: 8.—MacNae & Kalk 1958: 81 (key).—Miyake *et al.* 1962: 128 (list).—Guinot 1967a: 255 (list).—Kensley 1981: 42 (list).—Venkataraman *et al*. 2004: 306 (list).
Charybdis (*Charybdis*) *cruciatus.*—Chopra 1935: 482, fig. 7.
Charybdis (*Goniosoma*) *cruciata.*—Chopra & Das 1937: 392.—Serène 1937: 73 (list).—Shen 1937: 117.—Chhapgar 1957: 20, pl. 5 figs. D–G.
Charybdis (*Charybdis*) *cruciata.*—Leene 1938: 24, figs. 1, 2.—Stephensen 1946: 114.—Stephenson *et al.* 1957: 497, figs. 2E, 3F, pl. 1 fig. 3, pl. 4B.—Crosnier 1962: 75, figs. 130–132.
Charybdis (*Charybdis*) *feriatus.*—Serène 1968: 70 (list).—Stephenson 1972a: 31 (list); 1972b: 132.—Dai & Yang 1991: 232, fig. 125(1), pl. 28(4).—Wee & Ng 1995: 23, figs. 7A–F.—Dev Roy 2008: 71.
Charybdis feriatus.—Campbell & Stephenson 1970: 273 (list).—Ng *et al.* 2001: 19 (list); 2017: 72 (list).—Ng & Davie 2002: 373 (list).—Wong *et al.* 2021: 6 (table), 45, fig. 82, pl. 16A.
Charybdis (*Charybdis*) *feriata.*—Sakai 1976: 357, pl. 122.—Apel & Spiridonov 1998: 192, pls. 2, 3.—Apel 2001: 69.—Davie 2002: 472.—Ng *et al.* 2008: 153 (list).—Emmerson 2016b: 614; 2016c: 469 (list).—Naderloo 2017: 174, figs. 20.3C, 20.5, 20.6.—Trivedi *et al*. 2018: 63 (list).—Muñoz *et al.* 2021: 45, fig. 14E, 54 (list).—Pati *et al.* 2022: 537.—Pinto *et al.* 2023: 223, fig. 1.—Poore & Ahyong 2023: 714.
Charybdis feriata.—Poupin 2010: 38 (list).—Bento & Paula 2018: 39 (list).—Colmenero *et al.* 2019: 201, fig. 2.

Material examined. RMNH.CRUS.D.58506, 1 male (82.0 × 59.0 mm), Maputo, littoral in between Costa do Sol and Xefira, fcn. unknown, 15 October 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.37553, 1 male (35.0 × 27.0 mm), Gulf of Thailand in front of Chonburi Province, in between Si Racha and Pattaya, ca. 150 km southeast from Bangkok, Thailand, trawled 0–40 m depth, from fishers of Naklua, 3–5 November 1988, leg. A.C.J. Burgers & L.B. Holthuis; RMNH.CRUS.D.37751, 2 males (71.0 × 47.0 mm, 63.0 × 42.0 mm), Gulf of Thailand in front of Sattahip, Rayong Province, ca. 180 km southeast from Bangkok, Thailand, trawled 0–40 m depth, from fisherwoman of Naklua, 16 December 1988, leg. A.C.J. Burgers & L.B. Holthuis; RMNH.CRUS.D.13058, 1 female (56.0 × 40.0 mm), Frederik Hendrik Island [= Yos Sudarso Island, South Papua], Indonesia, 10 February 1955, leg. D.C. Zwollo; RMNH.CRUS.D.13059, 2 males (65.0 × 46.0 mm, 37.0 × 26.0 mm), Dutch New Guinea [= Merauke, Papua Province], Merauke Sea, Indonesia, 5 April 1955, leg. L.B. Holthuis.

Remarks. *Charybdis* (*Charybdis*) *feriata* can be distinguished from other *Charybdis* (*Charybdis*) in the region by the first anterolateral tooth on the carapace, which is nearly bifid. On the carapace a conspicuous cross-shaped mark can be seen (Stephenson 1972a), which can also be visible on conserved specimens and our examined material. The examined specimen matches well with comparative material and the description in Barnard (1950) (under the name *Charybdis cruciata*). The specimen also matches well with the description and figures in Wee & Ng (1995).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1902, 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Crosnier 1962; Fourmanoir 1954), Mediterranean Sea (Colmenero *et al.* 2019; Pinto *et al.* 2023), Gulf of Oman (Apel & Spiridonov 1998; Naderloo 2017), Persian Gulf (Apel 2001; Apel & Spiridonov 1998; Naderloo 2017; Stephensen 1946), India (Alcock 1899; Chhapgar 1957; Chopra 1935; Dev Roy 2008; Henderson 1893; Pati *et al.* 2022; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Henderson 1893), Myanmar (Chopra & Das 1937; De Man 1887), Singapore (Dana 1852b; Nobili 1903; Shen 1937; Wee & Ng 1995), Thailand (Ng & Davie 2002), Malaysia (Lanchester 1901; Wee & Ng 1995), Indonesia (De Man 1895; Leene 1938; Rathbun 1910), China (Dai & Yang 1991; Miers 1886; Stimpson 1907; Wong *et al.* 2021), Taiwan (Balss 1922c; Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (De Haan 1833; Miyake *et al.* 1962; Sakai 1939, 1976), Australia (Campbell & Stephenson 1970; Davie 2002; Haswell 1882; Stephensen *et al.* 1957) and New Caledonia (Poupin 2010).

45. *Charybdis* (*Charybdis*) *natator* (Herbst, 1794)

(Fig. 7C)

Cancer natator Herbst, 1794: 156, pl. 40, fig. 1.

Portunus (*Charybdis*) *natator*.—De Haan 1833: 10 (list).

Thalamita natator.—H. Milne-Edwards 1834: 463, pl. 17 figs. 13, 14.

Goniosoma natator.—A. Milne-Edwards 1861: 370.—Hoffmann 1874: 11.—Hilgendorf 1879: 801.—Henderson 1893: 374.—Lanchester 1901: 544.—Lenz 1910: 557.—Klunzinger 1913: 367.

Charybdis (*Goniosoma*) *natator*.—Alcock 1899: 61.—Laurie 1906: 418.—Nobili 1906b: 115.—Shen 1937: 125.—Serène 1937: 73 (list).—Monod 1938: 114.—Estampador 1959: 68.

Charybdis natator.—Stebbing 1908: 9, pls. 28, 29; 1910: 307.—Laurie 1915: 412 (list).—Balss 1922c: 106.—Sakai 1939: 407.—Barnard 1950: 169.—MacNae & Kalk 1958: 81 (key).—Michel 1964: 16.—Guinot 1967a: 254 (list).—Campbell & Stephenson 1970: 274 (list).—Kensley 1981: 42 (list).—Jones 1986: 161, pl. 48.—Ng *et al.* 2001: 19 (list); 2017: 73 (list).—Ng & Davie 2002: 373 (list).—Poore 2004: 425, figs. 135E, 137L, P, pl. 23I.—Venkataraman *et al*. 2004: 306 (list).—Naiyanetr 2007: 86 (list).—Poupin 2010: 38 (list).—Bento & Paula 2018: 39 (list).—Abo-Hashesh *et al*. 2020: 417, fig. 2.—Wong *et al.* 2021: 6 (table), 51, fig. 89, pl. 17B.

Charybdis (*Charybdis*) *natator*.—Rathbun 1923: 131.—Leene 1938: 93, figs. 50, 51.—Stephensen 1946: 116.—Stephenson *et al.* 1957: 501, figs. 2G, 3H, pl. 2 fig. 4, pl. 4J.—Crosnier 1962: 82, figs. 143, 144, pl. 13 fig. 2.—Stephenson & Rees 1967a: 11.—Serène 1968: 71 (list).—Stephenson 1972a: 33; 1972b: 132 (list).—Sakai 1976: 360, figs. 193A, B, pl. 127, fig. 1.—Dai & Yang 1991: 234, fig. 126(2), pl. 28(7).—Wee & Ng 1995: 40, figs. 18A–C, 19A–C, 20A, B, 21A–G.—Davie 2002: 474.—Dev Roy 2008: 73.—Ng *et al.* 2008: 153 (list).—Abbas *et al.* 2016: 322, fig. 2.—Emmerson 2016b: 621; 2016c: 469 (list).—Naderloo 2017: 178, figs. 20.3G, 20.10, 20.11.—Trivedi *et al*. 2018: 64 (list).—Muñoz *et al.* 2021: 54 (list).—Nour *et al.* 2022: 789, fig. 3.

Charybdis (*Charybdis*) *natator natator*.—Apel & Spiridonov 1998: 201, fig. 28, pls. 5, 6.—Spiridonov 1999: 69.—Apel 2001: 70.—Davie 2002: 474.

Material examined. RMNH.CRUS.D.58507, 1 male (46.0 × 33.0 mm), between Barreira Vermelha and Portinho, 10 m depth, fcn. X4231, 2 November 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.15572, 1 female (36.0 × 25.0 mm), station number 6, Persian Gulf, 26–28 September 1956, leg. C.E. Dawson; RMNH.CRUS.D.7157, 1 male (20.5 × 15.0 mm), Pankaja, Makassar, Indonesia, 3 March 1930, collected during Snellius Expedition; RMNH.CRUS.D.41975, 1 female (35.0 × 25.5 mm), Gulf of Thailand, off Pattani, Thailand, from fishermen, 14 November 1985, leg. C. Swennen; RMNH.CRUS.D.38723, 1 male (65.0 × 46.0 mm), coast of the Gulf of Thailand, 5 km north of Cha-Am, 120 km southwest of Bangkok, Thailand, July–August 1990, leg. Werner Thielen.

Remarks. *Charybdis* (*Charybdis*) *natator* can be distinguished from the other *Charybdis* (*Charybdis*) in the area by a few characters. On the manus of the chelipeds are, besides spines, granules of varying sizes (Barnard 1950). The carapace also has two series of ridges anterior to the epibranchial ridges that are quite distinct (Stephenson 1972a). On the carapace, the first anterolateral teeth are blunt instead of pointed. The examined specimen matches well with the description and figures in Wee & Ng (1995) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1908, 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Crosnier 1962; Hoffmann 1874), Mauritius (Michel 1964), Red Sea (Abbas *et al.* 2016; Abo-Hashesh *et al.* 2020; Apel & Spiridonov 1998; Klunzinger 1913; Laurie 1915; Monod 1938; Nour *et al.* 2022), Gulf of Oman (Apel & Spiridonov 1998; Naderloo 2017), Persian Gulf (Apel 2001; Apel & Spiridonov 1998; Jones 1986; Naderloo 2017; Nobili 1906b; Stephensen 1946), India (Alcock 1899; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Henderson 1893; Laurie 1906; Lenz 1910), Singapore (Shen 1937; Wee & Ng 1995), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Lanchester 1901; Wee & Ng 1995), Indonesia (Leene 1938; Spiridonov 1999), China (Dai & Yang 1991; Wong *et al.* 2021), Taiwan (Balss 1922c; Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (De Haan 1833; Sakai 1939, 1976) and Australia (Campbell & Stephenson 1970; Davie 2002; Poore 2004; Rathbun 1923; Stephenson *et al.* 1957).

46. *Charybdis* (*Charybdis*) *orientalis* Dana, 1852

(Fig. 7D)

Talamita sexdentata.—Rüppell 1830: 4, pl. 1 fig. 1. [Not *Cancer sexdentatus* Herbst, 1783].

Charybdis orientalis Dana, 1852a: 85; 1852b: 285, pl. 17 fig. 10.—Rathbun 1906: 872, pl. 13 fig. 1.—Laurie 1915: 411 (list).—Stebbing 1918: 50.—Sakai 1939: 407, pl. 83 fig. 2.—Barnard 1950: 170, figs. 32D–G.—Fourmanoir 1954: 9.—Michel 1964: 16.—Guinot 1967a: 255 (list).—Kensley 1970: 104 (list); 1981: 42 (list).—Poupin 1996: 31; 2010: 38 (list).—Ng *et al.* 2001: 19 (list); 2017: 73 (list).—Paulay *et al.* 2003: 44 (list).—Poore 2004: 425, fig. 135F.—Venkataraman *et al*. 2004: 306 (list).—Ng & Richer de Forges 2007: 327 (list).—Bento & Paula 2018: 39 (list).

Goniosoma orientale.—A. Milne-Edwards 1861: 383.—Cano 1889a: 90.—Henderson 1893: 375.

Goniosoma dubium Hoffmann, 1874: 11, pl. 2 figs. 6–8.—De Man 1883: 151.

Charybdis (*Goniosoma*) *orientalis.*—Alcock 1899: 63.—Laurie 1906: 418.—Nobili 1906a: 195.—Chhapgar 1957: 23, pl. 7 figs. D–G.

Charybdis (*Goniosoma*) *helleri.*—Nobili 1906a: 195. [Not *Goniosoma Hellerii* A. Milne-Edwards, 1867].

Charybdis (*Charybdis*) *orientalis.*—Leene 1938: 68, figs. 32–34.—Stephenson *et al.* 1957: 502, figs. 2B, 3B, pl. 3 fig. 1, pl. 4G.—Crosnier 1962: 80.—Stephenson & Rees 1967a: 11; 1972a: 33 (list); 1972b: 133; 1976: 14.—Serène 1968: 70 (list).—Sakai 1976: 362, pl. 128 fig. 2.—Dai & Yang 1991: 231, fig. 124(2), pl. 28(3).—Wee & Ng 1995: 45, figs. 22A–I.—Apel & Spiridonov 1998: 206, figs. 24, 29.—Spiridonov 1999: 68.—Dev Roy 2008: 73.—Ng *et al.* 2008: 153 (list).—Emmerson 2016c: 469 (list).—Trivedi *et al*. 2018: 64 (list).—Muñoz *et al.* 2021: 54 (list).

Material examined. RMNH.CRUS.D.58508, 1 female (38.0 × 26.0 mm), intertidal flat in front of Barreira Vermelha, fcn. X4115, 22 January 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58509, 1 male (48.0 × 32.0 mm), intertidal flat in front of Barreira Vermelha, fcn. X4213, 17 October 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.476, 2 males (31.0 × 19.5 mm, 29.0 × 19.0 mm), 1 ovigerous female (30.0 × 19.0 mm), Timor, Indonesia, 1864, leg. Ludeking; RMNH.CRUS.D.3384, 1 male (34.0 × 23.0 mm), Poeloe Weh [= Pulau Weh], Indonesia, 30 November 1910, leg. P. Buitendijk; RMNH.CRUS.D.7162, 8 males (32.0 × 21.5 mm, 24.5 × 18.5 mm, 23.0 × 16.0 mm, 22.0 × 16.0 mm, 18.0 × 13.0 mm, 17.0 × 13.5 mm, 16.0 × 12.0 mm, 12.5 × 9.0 mm), 8 females (41.0 × 24.0 mm, 30.0 × 19.5 mm, 28.0 × 18.0 mm, 23.0 × 16.5 mm, 21.5 × 14.0 mm, 13.5 ×

9.5 mm, 10.5 × 9.5 mm, 6.5 × 6.0 mm), Flores, Endeh, Indonesia, 6–8 November 1930, collected during Snellius Expedition; RMNH.CRUS.D.42958, 1 ovigerous female (42.5 × 27.0 mm), Moluccas, Ambon, Hitu, Baguala Bay, 0.5 km west of Tial, Indonesia, depth 2–4 m, snorkelling, 13 November 1990, leg. J.C. den Hartog; RMNH.CRUS.D.46545, 1 male (22.0 × 16.0 mm), Moluccas, Ambon, Hitu, Ambon Bay, outer bay, west side of Laha, Indonesia, 6 December 1990, collected during Rumphius Biohistorical Expedition 1990; RMNH.CRUS.D.46549, 1 female (29.0 × 18.5 mm), Moluccas, Ambon, Bay of Benguela near Paso, Indonesia, 6 October 1989, Station S3 leg. H. Strack during Rumphius Biohistorical Expedition; RMNH.CRUS.D.42959, 1 male (36.0 × 25.5 mm), 1 female (37.0 × 22.0 mm), Moluccas, Ambon, Hitu, Ambon Bay, outer bay, west side of Laha, Indonesia, littoral collecting, 6 December 1990, leg. C.H.J.M. Fransen.

Remarks. *Charybdis* (*Charybdis*) *orientalis* can be distinguished from the other *Charybdis* (*Charybdis*) in the area by the first sharp anterolateral tooth on the carapace, which is followed by a second rudimentary small tooth (Barnard 1950; Poore 2004). Its carapace is densely pilose and has one ridge on each side of the branchial region, as opposed to the other *Charybdis* (*Charybdis*) in the region, which have two or more epibranchial ridges (Barnard 1950; Poore 2004). The examined specimens match well with the description and figures in Wee & Ng (1995) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1918), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; Muñoz *et al.* 2021), Madagascar (Crosnier 1962; Fourmanoir 1954), La Réunion (Apel & Spiridonov 1998; De Man 1883; Hoffmann 1874; Poupin 2010), Mauritius (Michel 1964), Red Sea (Apel & Spiridonov 1998; Laurie 1915; Nobili 1906a; Rüppell 1830), India (Alcock 1899; Chhapgar 1957; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Henderson 1893; Laurie 1906), Singapore (Wee & Ng 1995), Malaysia (Wee & Ng 1995), Indonesia (Apel & Spiridonov 1998; De Man 1883; Leene 1938; Spiridonov 1999), China (Dai & Yang 1991), Taiwan (Apel & Spiridonov 1998; Ng *et al.* 2001, 2017), Philippines (Dana 1852b; A. Milne-Edwards 1861), Japan (Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Poore 2004; Stephenson *et al.* 1957), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), Hawai'i (Rathbun 1906), Tahiti (Apel & Spiridonov 1998) and French Polynesia (Poupin 1996, 2010).

47. *Thalamita admete* (Herbst, 1803)

(Fig. 7E)

Cancer admete Herbst, 1803: 40, pl. 57, fig. 1.

Thalamita admete.—Guérin-Méneville 1832: Crustacés, pl. 1 fig. 4.—Krauss 1843: 25.—Stimpson 1858: 39; 1907: 83.—Heller 1861a: 355; 1861b: 15 (list); 1865: 28.—A. Milne-Edwards 1861: 356; 1873: 162.—Paulson 1875: 58, pl. 8 fig. 1C.—Hilgendorf 1879: 799.—Richters 1880: 153.—Miers 1884a: 183 (list), 230.—Thallwitz 1891: 46.—Henderson 1893: 372.—Alcock & Anderson 1894: 201 (list).—Ortmann 1894: 46.—Whitelegge 1897: 138.—Nobili 1899: 255; 1900: 498; 1907: 383.—Borradaile 1900: 579.—Calman 1900: 23.—Lenz 1905: 362.—Grant & McCulloch 1906: 19.—Rathbun 1906: 874; 1907: 63; 1911: 208.—Stebbing 1910: 309.—Parisi 1916: 177.—Sendler 1923: 40.—McNeill 1926: 307; 1968: 51.—Sakai 1939: 421, pl. 85 fig. 1; 1976: 377, pl. 130 fig. 2.—Ward 1942: 80.—Barnard 1950: 176, fig. 33C.—Holthuis 1953: 7.—Edmondson 1954: 255, figs. 30A, B, 31A–E.—Fourmanoir 1954: 10.—Stephenson & Hudson 1957: 320, 324, figs. 2I, 3I, pl. 1 fig. 1, pls. 7A, 10A.—Holthuis & Gottlieb 1958: 118 (list).—MacNae & Kalk 1958: 81 (key).—Forest & Guinot 1961: 30, figs. 19A, B.—Crosnier 1962: 96, figs. 154, 157, 162–164, 168.—Sankarankutty 1962: 122.—Michel 1964: 18.—Derijard 1966: 164.—Guinot 1967a: 255 (list).—Stephenson & Rees 1967a: 56, fig. 20; 1967b: 18.—Campbell & Stephenson 1970: 275.—Kensley 1970: 104 (list); 1981: 43 (list).—Zarenkov 1971: 184.—Stephenson 1972a: 44 (list); 1972b: 141, 144.—Titgen 1982: 120.—Hogarth 1989: 104 (list), 113 (list).—Garth *et al.* 1987: 242 (list).—Dai & Yang 1991: 256, fig. 139(1), pl. 31(6).—Bakus 1994: 171 (list), 187 (list).—Wee & Ng 1995: 59, figs. 29A–F.—Poupin 1996: 33; 2010: 73 (list).—Apel & Spiridonov 1998: 228, figs. 42, 47.—Spiridonov 1999: 70.—Ng *et al.* 2001: 20 (list); 2017: 74 (list).—Simões *et al.* 2001: 84 (list).—Davie 2002: 477.—Ng & Davie 2002: 373 (list), 381.—Paulay *et al.* 2003: 45 (list).—Poore 2004: 428, figs. 135G, 137H, 138A.—Naiyanetr 2007: 87 (list).—Ng & Richer de Forges 2007: 328 (list).—Dev Roy 2008: 75.—Ng *et al.* 2008: 154 (list).—Castro 2011: 72.—Naderloo & Türkay 2012: 41.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016c: 469 (list).—Naderloo 2017: 211, figs. 20.48, 20.49A, 20.50.—Bento & Paula 2018: 39 (list).—Evans 2018: 37, figs. 2G, 8G.—Trivedi *et al*. 2018: 68 (list).—Suvarna Devi *et al.* 2019: 484.—Lee *et al.* 2021: S9 (list).—Muñoz *et al.* 2021: 54 (list).—Kumar *et al.* 2023: 437.—Takeda 2023: 19.

Portunus (*Thalamita*) *admete.*—De Haan 1833: 10 (list).

Thalamita admeta.—Alcock 1899: 82.—Balss 1938: 34.—Vatova 1943: 18.—Tweedie 1950: 109.—Estampador 1959: 70.

Thalamita admeta var. *admeta* Borradaile, 1902a: 202.

Thalamita admete var. *admete*.—Laurie 1915: 412 (list).
Thalmita admete.—Venkataraman *et al*. 2004: 306 (list).

Material examined. RMNH.CRUS.D.58510, 1 male (19.0 × 13.0 mm), Barreira Vermelha, under a stone, fcn. X4108, 9 January 1987, leg. Nelson Cugmbe.

Comparative material. RMNH.CRUS.D.46519, 2 males (29.0 × 16.5 mm, 25.0 × 14.5 mm), Moluccas, Ambon, Hitu, Baguala Bay, 0.5 km west of Tial, Indonesia, depth 2–4 m, snorkelling, 13 November 1990, leg. J.C. den Hartog during Rumphius Biohistorical Expedition 1990; RMNH.CRUS.D.16199, 2 males (27.0 × 15.0 mm, 23.0 × 13.5 mm), Mahébourg, Mauritius, October 1960, leg. C. Michel; RMNH.CRUS.D.9525, 1 male (10.5 × 7.0 mm), 1 ovigerous female (21.0 × 12.0 mm), northwest Saipan, Matuis Beach, Mariana Islands, 17 December 1948, leg. P.E. Cloud; RMNH.CRUS.D.9524, 1 ovigerous female (21.5 × 12.5 mm), Onotoa Atoll, Gilbert Islands, 13 July 1951, leg. A.H. Banner; RMNH.CRUS.D.9526, 1 male (23.0 × 12.5 mm), 4 ovigerous females (17.0 × 9.0 mm, 16.0 × 10.0 mm, 16.0 × 9.0 mm, 14.5 × 9.0 mm), 3 females (14.0 × 9.5 mm, 13.0 × 8.0 mm, 13.0 × 7.5 mm), Onotoa Atoll, Gilbert Islands, 11–19 July 1951, leg. A.H. Banner; RMNH.CRUS.D.9523, 6 males (24.0 × 15.5 mm, 24.0 × 15.0 mm, 20.0 × 12.0 mm, 19.0 × 14.5 mm, 16.5 × 10.0 mm, 11.0 × 6.5 mm), 5 ovigerous females (18.0 × 11.0 mm, 16.0 × 9.0 mm, 15.0 × 9.0 mm, 14.0 × 9.5 mm, 14.0 × 8.0 mm), Onotoa Atoll, Gilbert Islands, 16 November 1951, leg. D.E. Strasburg.

Remarks. The carapace of the examined specimen has five anterolateral teeth, with the fourth being rudimentary and indistinct. The front is divided into two distinct lobes, separated by a distinct notch, excluding the inner supraorbital lobes. The palm on the chelae has four spines and two tubercles on the upper surface. The carapace is finely pilose. These characters match with the description in Forest & Guinot (1961) and Wee & Ng (1995) for *Thalamita admete*, and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Crosnier 1962; Fourmanoir 1954), La Réunion (Apel & Spiridonov 1998; Poupin 2010), Mauritius (Michel 1964; Richters 1880; Ward 1942), Seychelles (Rathbun 1911), Tanzania (Lenz 1905), Kenya (Apel & Spiridonov 1998), Somalia (Vatova 1943), Mediterranean Sea (Holthuis & Gottlieb 1958), Red Sea (Heller 1861a, b; Laurie 1915; Paulson 1875; Zarenkov 1971), Yemen (Simões *et al.* 2001), Gulf of Oman (Apel & Spiridonov 1998; Hogarth 1989; Naderloo 2017), Persian Gulf (Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Titgen 1982), Diego Garcia (Ward 1942), India (Alcock 1899; Alcock & Anderson 1894; Apel & Spiridonov 1998; Bakus 1994; Dev Roy 2008; Henderson 1893; Sankarankutty 1962; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Maledives (Apel & Spiridonov 1998; Borradaile 1902a), Nicobar Islands (Bakus 1994), Singapore (Wee & Ng 1995), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Malaysia (Wee & Ng 1995), Indonesia (Ortmann 1894; Spiridonov 1999; Thallwitz 1891), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Korea (Lee *et al.* 2001), Japan (De Haan 1833; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Campbell & Stephenson 1970; Davie 2002; Grant & McCulloch 1906; McNeill 1926, 1968; Poore 2004; Stephenson & Hudson 1957), Torres Strait (Calman 1900), Melanesia (Miers 1884a; Rathbun 1911), Micronesia (Holthuis 1953; Sendler 1923; Takeda 2023), New Caledonia (A. Milne-Edwards 1861; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Balss 1938; Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Apel & Spiridonov 1998; Balss 1938; Borradaile 1900), Hawai'i (Apel & Spiridonov 1998; Castro 2011; Edmondson 1954; Rathbun 1906), Tahiti (Forest & Guinot 1961), Tuvalu (Balss 1938; Rathbun 1907; Whitelegge 1897), Wallis & Futuna (Poupin 2010) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

48. *Thalamita integra integra* Dana, 1852

(Fig. 8A)

Thalamita integra Dana, 1852a: 85.—Stimpson 1858: 39; 1907: 83.—A. Milne-Edwards 1861: 358; 1862: 2.—Hilgendorf 1879: 799.—Richters 1880: 153.—Miers 1884b: 518 (list), 540.—De Man 1887: 74; 1902: 646.—Cano 1889a: 90.—Pfeffer 1889: 29.—Henderson 1893: 373.—Whitelegge 1897: 138.—Alcock 1899: 85.—Borradaile 1900: 579.—Nobili 1906a: 209; 1907: 383.—Rathbun 1906: 873; 1911: 208.—Lenz 1910: 557.—Laurie 1915: 412 (list), 441.—Parisi 1916:

177.—Balss 1922c: 111; 1935: 131; 1938: 33.—Sakai 1936a: 162; 1939: 420, fig. 15, pl. 84 fig. 2; 1976: 377, fig. 201.—Barnard 1950: 177; 1955: 3 (list).—Tweedie 1950: 109.—Dawydoff 1952: 142.—Edmondson 1954: 253, figs. 27A–E, 28A.—Stephenson & Hudson 1957: 339, figs. 2H, 3H, pl. 3 fig. 3, pls. 7I, 10F.—Estampador 1959: 71.—Sankarankutty 1961: 122.—Crosnier 1962: 103, figs. 156, 161, 170.—Michel 1964: 19.—Guinot 1967a: 256 (list).—Stephenson & Rees 1967a: 79.—Serène 1968: 69 (list).—Stephenson 1972a: 48; 1972b: 149 (list); 1976: 22.—Kensley 1981: 43 (list).—Garth *et al.* 1987: 243 (list).—Dai & Yang 1991: 255, fig. 138(2), pl. 31(5).—Bakus 1994: 187 (list).—Wee & Ng 1995: 84, figs. 44A–C.—Poupin 1996: 35; 2010: 73 (list).—Ng *et al.* 2001: 21 (list); 2017: 75 (list).—Davie 2002: 479.—Paulay *et al.* 2003: 45 (list).—Venkataraman *et al*. 2004: 206 (list).—Dev Roy 2008: 78.

Thalamita integra integra.—Ng *et al.* 2008: 154 (list).—Castro 2011: 75.—Emmerson 2016c: 469 (list).—Bento & Paula 2018: 40 (list).—Trivedi *et al*. 2018: 69 (list).—Muñoz *et al.* 2021: 55 (list).

Material examined. RMNH.CRUS.D.58518, 2 males (26.0 × 19.0 mm, 23.0 × 17.0 mm), littoral zone north of Ponta Torres, fcn. X4052, 27 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58519, 1 male (7.0 × 5.0 mm), 1 female (12.0 × 9.0 mm), littoral in front of Barreira Vermelha, between the seagrass, fcn. X4207, 10 January 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58520, 2 males (22.0 × 15.0 mm, 18.0 × 12.0 mm), between seagrass of *Thalassodendron* flats, north of Pontes Torres, fcn. X4120, 2 September 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58521, 7 males (13.0 × 10.0 mm, 13.0 × 9.0 mm, 12.0 × 9.0 mm, 10.0 × 7.0 mm, 10.0 × 6.0 mm, 7.0 × 6.0 mm, 5.0 × 4.0 mm), 6 females (14.0 × 9.0 mm, 13.0 × 10.0 mm, 13.0 × 9.0 mm, 12.0 × 9.0 mm, 12.0 × 9.0 mm, 10.0 × 8.0 mm), *Cymodocea* flats, north of Ponta Punduini, fcn. X4108, 6 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58522, 1 male (19.0 × 13.0 mm), in between Ponta Rasa and Ponta Punduini, fcn. unknown, 1 August 1984, leg. Tomas Malo; RMNH.CRUS.D.58523, 1 male (20.0 × 13.0 mm), in front of Barreira Vermelha, fcn. X4210, 19 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58524, 2 females (17.0 × 12.0 mm, 15.0 × 11.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4074, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58525, 4 males (10.0 × 7.0 mm, 9.0 × 7.0 mm, 7.0 × 6.0 mm, 7.0 × 5.0 mm), *Cymodocea* flats off Barreira Vermelha, fcn. unknown, 7 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58526, 2 males (12.0 × 9.0 mm, 7.0 × 5.0 mm), 1 female (13.0 × 9.0 mm), between *Thalassodendron ciliatum*, in front of Barreira Vermelha, fcn. X4072, 25 September 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.32166, 1 male (20.0 × 14.0 mm), Gesira Beach, 5–10 km south of Mogadishu, Somalia, December 1976, leg. M. Vannini; RMNH.CRUS.D.433, 1 male (26.0 × 16.0 mm), Amboina [= Ambon], Indonesia, 1864, leg. Ludeking; RMNH.CRUS.D.21261, 2 males (37.0 × 24.0 mm, 29.0 × 18.0 mm), 1 ovigerous female (33.0 × 19.5 mm), Palk Bay, India, 1960, leg. C. Sankarankutty; RMNH.CRUS.D.16200, 1 male (27.0 × 18.0 mm), Tombeau Bay, Mauritius, November 1960, leg. C. Michel.

Remarks. According to Barnard (1950), *Thalamita integra integra* and *T. admete* can be distinguished from the other species of *Thalamita* in African waters by the bilobed front on the carapace, five anterolateral teeth, of which the fourth rudimental and very indistinct. *Thalamita integra integra* is different from *T. admete* in the crest of the basal joint of antenna two, which is smooth in *T. integra integra*. In *T. admete*, the crest is clearly serrate. The carapace of *T. integra integra* is distinctly convex and the transversal ridges are indistinct. The examined specimens match well with the description and figures in Wee & Ng (1995) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950, 1955; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Crosnier 1962; Lenz 1910), La Réunion (A. Milne-Edwards 1862; Poupin 2010), Mauritius (Michel 1964; Richters 1880), Seychelles (Miers 1884b), Suez Canal (Pfeffer 1889), Red Sea (Laurie 1915; Nobili 1906a), Diego Garcia (Rathbun 1911), India (Alcock 1899; Dev Roy 2008; Henderson 1893; Sankarankutty 1961; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Myanmar (De Man 1887; Henderson 1893), Nicobar Islands (Bakus 1994); Cocos (Keeling) Islands (Tweedie 1950), Indonesia (De Man 1902), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (Balss 1922c; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Stephenson & Hudson 1957), New Caledonia (Poupin 2010), Marshall Islands (Garth *et al.* 1987), Gilbert Islands (Balss 1938), Hawai'i (Castro 2011; Dana 1852a; Edmondson 1954; Rathbun 1906), Tahiti (A. Milne-Edwards 1861), Tuvalu (Borradaile 1900; Whitelegge 1897), Polynesia (Nobili 1907), French Polynesia (Dana 1852a; A. Milne-Edwards 1861; Poupin 1996, 2010) and Sandwich Islands (A. Milne-Edwards 1861).

49. *Thalamita crenata* (Rüppell, 1830)

(Fig. 7F)

Talamita crenata Rüppell, 1830: 6, pl. 1 fig. 2.
Portunus (*Thalamita*) *crenatus.*—De Haan 1833: 10 (list).
Thalamita crenata.—H. Milne-Edwards 1834: 461.—Krauss 1843: 25.—Bianconi 1851: 109.—Stimpson 1858: 39; 1907: 84, pl. 10 figs. 6, 6A.—Heller 1861a: 356; 1861b: 15 (list); 1865: 29.—A. Milne-Edwards 1861: 365; 1873: 166.—Hoffman 1874: 9.—Hilgendorf 1879: 800.—Lenz & Richters 1881: 422.—Miers 1884a: 184 (list), 232.—De Man 1887: 79; 1895: 569; 1902: 644.—Thallwitz 1891: 47.—Ortmann 1894: 46.—Alcock 1899: 76.—Lanchester 1900: 748; 1901: 543.—Schenkel 1902: 575.—Nobili 1903: 32; 1906a: 202; 1906b: 119.—Lenz 1905: 361.—Rathbun 1907: 62; 1910: 313; 1911: 207.—Stebbing 1910: 309.—Klunzinger 1913: 351, pl. 7 fig. 19.—Kemp 1915: 249.—Gravier 1920: 383.—Balss 1922c: 111; 1938: 32.—Sakai 1936a: 161, pl. 12 fig. 2; 1939: 414, pl. 84 fig. 3; 1976: 369, pl. 132 fig. 1.—Serène 1937: 73 (list); 1968: 68 (list).—Shen 1937: 129, fig. 16.—Barnard 1950: 172, figs. 27E, 33A.—Tweedie 1950: 109.—Dawydoff 1952: 142.—Edmondson 1954: 267, figs. 39B, 40A–F.—Fourmanoir 1954: 10, fig. 9.—Chhapgar 1957: 25, pl. 7, figs. L–N.—Stephenson & Hudson 1957: 332, figs. 2Q, 3Q, pl. 2 fig. 3, pls. 7F, 9C.—MacNae & Kalk 1958: 81 (key).—Estampador 1959: 70.—Crosnier 1962: 130, figs. 220, 226, 227, 232, 233.—Michel 1964: 18.—Guinot 1967a: 256 (list).—Stephenson & Rees 1967a: 69; 1967b: 19.—McNeill 1968: 52.—Stephenson 1972a: 46 (list); 1972b: 145.—Kensley 1981: 43 (list).—Titgen 1982: 121.—Dai & Yang 1991: 246, fig. 134(1), pl. 30(3).—Bakus 1994: 187 (list).—Wee & Ng 1995: 69, figs. 34A, 34B, 35A, 35B, 36A–H.—Al-Ghais & Cooper 1996: 423.—Poupin 1996: 34.—Apel & Spiridonov 1998: 233, figs. 44, 49, 50, pl. 8.—Spiridonov 1999: 72.—Apel 2001: 78.—Ng *et al.* 2001: 20 (list); 2017: 75 (list).—Simões *et al.* 2001: 84 (list).—Davie 2002: 478.—Ng & Davie 2002: 373 (list).—Paulay *et al.* 2003: 45 (list).—Poore 2004: 428, figs. 134, 137M, 138B.—Naiyanetr 2007: 88 (list).—Ng & Richer de Forges 2007: 328 (list).—Dev Roy 2008: 77.—Ng *et al.* 2008: 154 (list).—Castro 2011: 74.—Naderloo & Türkay 2012: 41.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016b: 630; 2016c: 469 (list).—Naderloo 2017: 214, figs. 20.49C, 20.50, 20.52.—Bento & Paula 2018: 39 (list).—Trivedi *et al*. 2018: 68 (list).—Muñoz *et al.* 2021: 54 (list).—Wong *et al.* 2021: 6 (table), 55, fig. 93, pl. 17F.—Ambarwati *et al.* 2024: 4, fig. 2D.
Thalamita prymna var. *crenata.*—Kossmann 1877: 49.—Laurie 1915: 412 (list).—Stephensen 1946: 125.
Thalamita kotoensis Tien, 1969: 507, figs. 4.1, 5.1, 4, 7, 10, 11.
Thalmita crenata.—Venkataraman *et al.* 2004: 306 (list).
Thranita crenata.—Evans 2018: 43, figs. 7C, 9A.—Mustaquim *et al.* 2022: 127.—Pati *et al.* 2022: 540.

Material examined. RMNH.CRUS.D.58511, 1 male (40.0 × 26.0 mm), *Cymodocea* flats, north of Ponta Punduini, fcn. X4117, 6 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58512, 1 male (59.0 × 39.0 mm), mangrove, open zone, fcn. X4292, 12 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58513, 1 female (36.0 × 25.0 mm), littoral zone north of Ponta Torres, fcn. X4052, 27 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58514, 1 male (19.0 × 14.0 mm), off Ponta Rasa, 50 cm depth, fcn. X4104, 20 January 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58515, 1 male (32.0 × 22.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X3992, 1 August 1984, leg. Tomas Malo; RMNH.CRUS.D.58516, 1 male (48.0 × 33.0 mm), littoral in front of Barreira Vermelha, fcn. X4054, 13 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58517, 1 male (44.0 × 29.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4034, 1 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.46534, 2 males (59.0 × 31.0 mm, 31.5 × 21.5 mm), 1 female (26.0 × 17.0 mm), Moluccas, Ambon, Ambon Bay, inner bay, Paso, Indonesia, mangrove forest, mudflat, 13–14 November 1990, collected during Rumphius Biohistorical Expedition 1990; RMNH.CRUS.D.47334, 1 female (58.0 × 39.0 mm), Korangi Creek, south of Karachi, Pakistan, 24°27'N 67°08'E, 23 January 1995, don. N.M. Tirmizi; RMNH.CRUS.D.24909, 1 male (42.0 × 28.0 mm), Melita Bay, S of Massawa, State of Eritrea, 14 April 1962, collector unknown; RMNH.CRUS.D.41914, 1 male (13.0 × 8.0 mm), 2 ovigerous females (41.0 × 26.0 mm, 31.0 × 20.0 mm), Phuket Province, southwest of Ban Kantang, Ko Libong, Thailand, 24 October 1984, leg. C. Swennen; RMNH.CRUS.D.51592, 1 female (39.0 × 26.0 mm), Mtoni estuary near Dar-es-Salaam, Tanzania, 22 January 2004, leg. C. Kruitwagen & I. Nagelkerken.

Remarks. Stephenson (1972b) noted that the original author of *Thalamita crenata* is H. Milne-Edwards (1834) rather than Latreille, but Rüppell (1830) was actually the first to describe this species. *Thalamita crenata* can be distinguished from the other species in Mozambican waters by the five subequal anterolateral teeth on the carapace, and the front with six subequal rounded-quadrate lobes (Barnard 1950). Three major spines are present on the front margin of the fourth joint of the cheliped. The upper surface of the chela hand has five spines (Barnard 1950; Poore 2004), the palm is smooth with one single ridge running to the fixed finger on the outer surface (Poore 2004). The examined specimens match well with the characters given in Wee & Ng (1995), Barnard (1950), Poore (2004) and the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1910), Mozambique (Barnard 1950; Bianconi 1851; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Apel & Spiridonov 1998; Crosnier 1962; Fourmanoir 1954; Gravier 1920; Hoffmann 1874; Lenz & Richters 1881), Mauritius (Apel & Spiridonov 1998; Michel 1964), Seychelles (Apel & Spiridonov 1998; Rathbun 1911), Tanzania (Lenz 1905; Ortmann 1894), Kenya (Apel & Spiridonov 1998), Somalia (Apel & Spiridonov 1998), Red Sea (Apel & Spiridonov 1998; Heller 1861a, b; Klunzinger 1913; Kossmann 1877; Laurie 1915; Nobili 1906a; Rüppell 1830), Yemen (Simões *et al.* 2001), Gulf of Oman (Apel & Spiridonov 1998; Naderloo 2017), Persian Gulf (Al-Ghais & Cooper 1996; Apel 2001; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946; Titgen 1982), Pakistan (Mustaquim *et al.* 2022), India (Alcock 1899; Apel & Spiridonov 1998; Chhapgar 1957; Dev Roy 2008; Kemp 1915; Pati *et al.* 2022; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Myanmar (De Man 1887), Nicobar Islands (Bakus 1994; Heller 1865), Singapore (Lanchester 1900; Nobili 1903; Shen 1937; Wee & Ng 1995), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Malaysia (Lanchester 1901; Wee & Ng 1995), Vietnam (Tien 1969), Indonesia (Ambarwati *et al*. 2024; Apel & Spiridonov 1998; De Man 1895, 1902; Rathbun 1910; Schenkel 1902; Spiridonov 1999), China (Dai & Yang 1991; Stimpson 1907; Wong *et al.* 2021), Taiwan (Balss 1922c; Ng *et al.* 2001, 2017), Philippines (Apel & Spiridonov 1998; Estampador 1959), Japan (Apel & Spiridonov 1998; De Haan 1833; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Apel & Spiridonov 1998; Davie 2002; McNeill 1968; Poore 2004; Stephenson & Hudson 1957), Torres Strait (Ortmann 1894), Papua New Guinea (Thallwitz 1891), Melanesia (Miers 1884a), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007), Gilbert Islands (Balss 1938), Fiji (Balss 1938), Hawai'i (Castro 2011; Edmondson 1954) and French Polynesia (Poupin 1996; Rathbun 1907).

Superfamily Xanthoidea MacLeay, 1838

Family Xanthidae MacLeay, 1838

Subfamily Actaeinae Alcock, 1898

50. *Actaeodes hirsutissimus* (Rüppell, 1830)

(Fig. 8B)

Xantho hirsutissimus Rüppell, 1830: 26, pl. 5 fig. 6.—H. Milne-Edwards 1834: 389.

Cancer (*Actaea*) *hirsutissimus*.—De Haan 1833: 18 (list).

Actaea hirsutissima.—Dana 1852b: 164.—Heller 1861a: 314; 1861b: 7; 1865: 9.—A. Milne-Edwards 1865b: 263; 1873: 191.—Paulson 1875: 25, pl. 5 fig. 1.—Kossmann 1877: 23.—De Man 1902: 607.—Richters 1880: 145.—Cano 1889a: 87.—Ortmann 1893: 453.—Alcock 1898: 141.—Nobili 1899: 258; 1906a: 252.—Borradaile 1900: 583.—Rathbun 1907: 42; 1911: 218.—Lenz 1910: 549.—Bouvier 1915: 286.—Laurie 1915: 413 (list), 446.—Edmondson 1923: 15.—Odhner 1925: 69, pl. 4 fig. 13.—Calman 1927: 213.—Boone 1934: 124, pl. 66.—Sakai 1939: 488.—Ward 1942: 88.—Barnard 1950: 234.—Dawydoff 1952: 140.—Holthuis 1953: 10; 1956: 326.—MacNae & Kalk 1958: 82 (key).—Estampador 1959: 81.—Forest & Guinot 1961: 78.—Guinot 1964: 39; 1967a: 260 (list).—Michel 1964: 20.—McNeill 1968: 70.—Bakus 1994: 187 (list).—Venkataraman *et al*. 2004: 307 (list). [Not *Actaea hirsutissima* Rathbun, 1906].

Actea hirsutissima.—Targioni Tozzetti 1877: 37, pl. 3 figs. 24, 26A, 31.

Actaea hirsutissimus.—Stebbing 1921: 455.

Actaeodes hirsutissimus.—Guinot 1976: 245, fig. 38E, pl. 15 fig. 2A.—Sakai 1976: 448, pl. 159 fig. 3.—Chen & Lan 1978: 264, pl. 5 fig. 20.—Garth & Kim 1983: 681.—Serène 1984: 135, fig. 79, pl. 18B.—Garth *et al.* 1987: 243 (list).—Galil & Vannini 1990: 37.—Dai & Yang 1991: 313, fig. 161(3), pl. 40(4).—Bakus 1994: 171 (list).—Poupin 1996: 42; 2010: 31 (list).—Ng *et al.* 2001: 26 (list); 2017: 86 (list), fig. 9C.—Davie 2002: 512.—Ng & Davie 2002: 375 (list).—Paulay *et al.* 2003: 47 (list).—Venkataraman *et al*. 2004: 308 (list).—Naiyanetr 2007: 100 (list).—Ng & Richer de Forges 2007: 329 (list).—Dev Roy 2008: 86.—Ng *et al.* 2008: 195 (list).—Lee *et al.* 2010: 90, fig. 2; 2021: S9 (list).—Emmerson 2016c: 473 (list).—Bento & Paula 2018: 41 (list).—Trivedi *et al*. 2018: 76 (list).—Al-Hindi *et al*. 2020: 199, fig. 4H.—Muñoz *et al.* 2021: 55 (list).—Poore & Ahyong 2023: 753, fig. 14.149C.

Actaeodes hirsutissima.—Serène 1968: 79 (list).—Kensley 1981: 43 (list).

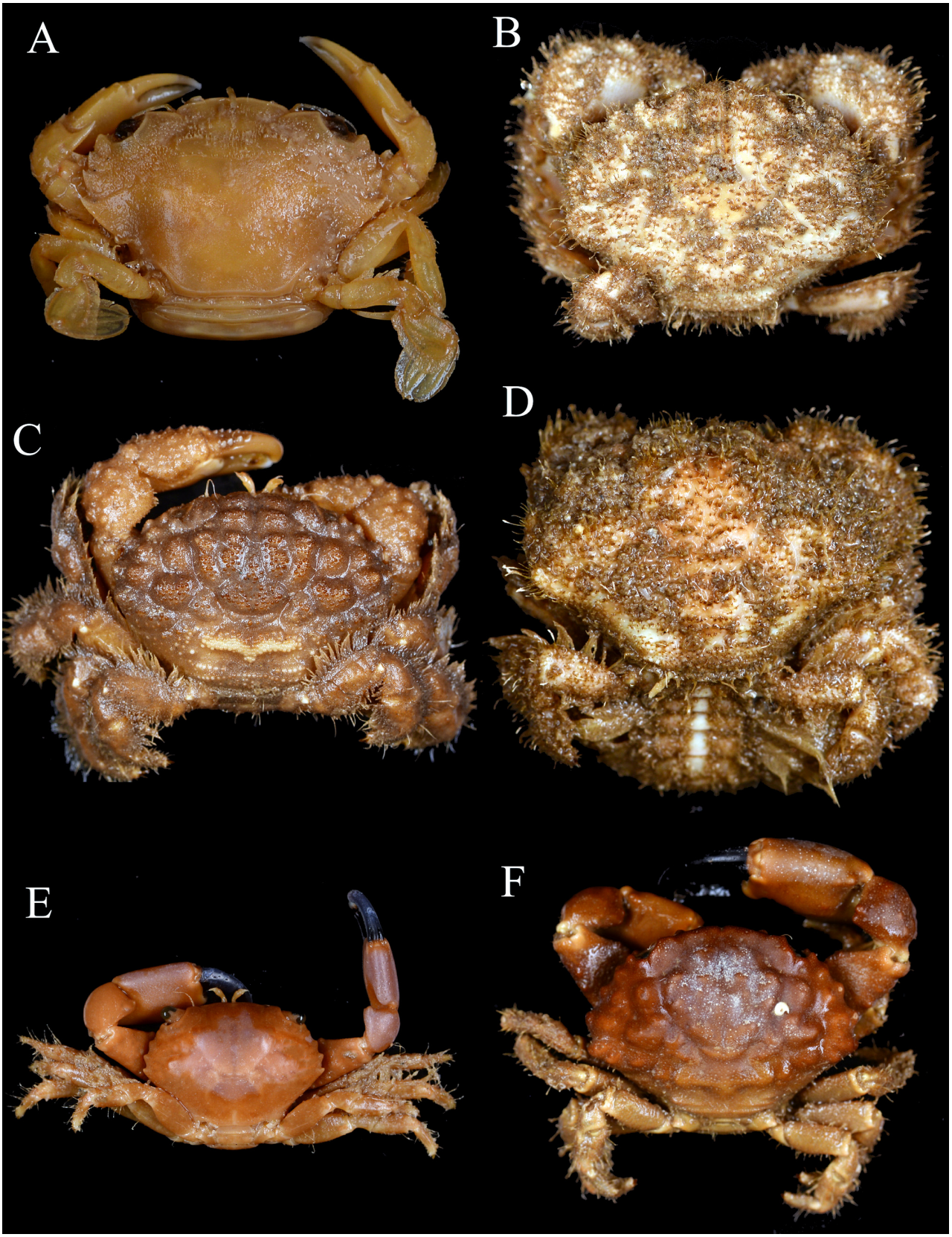

FIGURE 8. A, *Thalamita integra integra* Dana, 1852, female, CW = 17.0 mm, RMNH.CRUS.D.58524; B, *Actaeodes hirsutissimus* (Rüppell, 1830), male, CW = 28.0 mm, RMNH.CRUS.D.58527; C, *Actaeodes tomentosus* (H. Milne-Edwards, 1834), male, CW = 23.0 mm, RMNH.CRUS.D.58528; D, *Gaillardiellus rueppelli* (Krauss, 1843), ovigerous female, CW = 23.0 mm, RMNH.CRUS.D.58531; E, *Chlorodiella nigra* (Forskål, 1775), female, CW = 14.0 mm, RMNH.CRUS.D.58532; F, *Cyclodius obscurus* (Hombron & Jacquinot, 1846), male, CW = 23.0 mm, RMNH.CRUS.D.58546.

Material examined. RMNH.CRUS.D.58527, 1 male (28.0 × 19.0 mm), tidal flat off Barreira Vermelha, fcn. X4001, 7 August 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.1824, 1 male (30.0 × 19.0 mm), Republic of Fiji, acquired via Museum Godeffroy, date unknown.

Remarks. The examined specimen of *Actaeodes hirsutissimus* agrees well with the description given in Barnard (1950). The specimen is a little larger than reported by Serène (1984), but matches with the comparative material from Fiji and the measurements given in Barnard (1950). Two members of the genus *Actaeodes* Dana, 1851 can be found in Mozambique (Emmerson 2016c; Muñoz *et al.* 2021), *A. hirsutissimus* and *A. tomentosus* (H. Milne-Edwards, 1834). This specimen bears short, stiff setae on the carapace, which is characteristic for *A. hirsutissimus* (Barnard 1950; Serène 1984).

Distribution. South Africa (Stebbing 1921), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Sudan (Odhner 1925), Mayotte (Poupin 2010; Serène 1984), Madagascar (Lenz 1910; Serène 1984), Djibouti (Odhner 1925), Mauritius (Bouvier 1915; Guinot 1976; Michel 1964; A. Milne-Edwards 1865b; Odhner 1925; Richters 1880), Seychelles (A. Milne-Edwards 1865b; Odhner 1925; Serène 1984), Tanzania (Odhner 1925), Kenya (Serène 1984), Somalia (Galil & Vannini 1990), Red Sea (Calman 1927; Guinot 1964; A. Milne-Edwards 1865b; H. Milne-Edwards 1834; Heller 1861a, b; Kossmann 1877; Laurie 1915; Nobili 1906a; Odhner 1925; Paulson 1875; Rüppell 1830), Jeddah (Odhner 1925), Yemen (Al-Hindi *et al.* 2020), India (Alcock 1898; Bakus 1994; Dev Roy 2008; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Nicobar Islands (Bakus 1994; Odhner 1925), Singapore (Odhner 1925), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1902; Odhner 1925), China (Chen & Lan 1978; Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959; Garth & Kim 1983; Odhner 1925), Korea (Lee *et al.* 2010, 2021), Japan (De Haan 1833; Sakai 1939, 1976), Australia (Davie 2002; McNeill 1968; Nobili 1899), Marianas Islands (Paulay *et al.* 2003), Papua New Guinea (Odhner 1925), Melanesia (Rathbun 1911), Solomon Islands (Odhner 1925; Ward 1942), Micronesia (Holthuis 1953), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Odhner 1925; Poupin 2010), Marshall Islands (Garth *et al.* 1987; Odhner 1925), Fiji (Borradaile 1900; Odhner 1925), Tahiti (Forest & Guinot 1961; Guinot 1976; Heller 1865; Odhner 1925; Rathbun 1907), Samoa (Dana 1852b; Odhner 1925; Ortmann 1893), Line Islands (Edmondson 1923) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

51. *Actaeodes tomentosus* (H. Milne-Edwards, 1834)

(Fig. 8C)

Zozymus tomentosus H. Milne-Edwards, 1834: 385.—Hoffmann 1874: 38 (list).

Actaeodes tomentosus.—Dana 1852b: 197.—Heller 1861a: 328; 1861b: 9 (list); 1865: 17.—Miers 1877b: 134; 1879a: 30; 1884b: 517 (list).—De Man 1895: 499.—Cano 1889a: 88.—Lanchester 1900: 734.—Serène 1968: 79 (list); 1984: 134, fig. 78, pl. 18A.—Guinot 1971: 1072; 1976: 244, figs. 38D, 41C, pl. 15 figs. 1, 1A.—Sakai 1976: 447, fig. 239.—Chen & Lan 1978: 264.—Kensley 1981: 43 (list).—Hogarth 1989: 106 (list); 1994: 94.—Galil & Vannini 1990: 37.—Poupin 1996: 43; 2010: 31 (list).—Ng *et al.* 2001: 26 (list); 2017: 86 (list).—Simões *et al.* 2001: 85 (list).—Davie 2002: 513.—Ng & Davie 2002: 375 (list).—Paulay *et al.* 2003: 47 (list).—Poore 2004: 463.—Naiyanetr 2007: 101 (list).—Ng & Richer de Forges 2007: 329 (list).—Dev Roy 2008: 87.—Ng *et al.* 2008: 195 (list).—Castro 2011: 84.—Corsini-Foka & Kondylatos 2015: 201.—Emmerson 2016c: 110, 473 (list).—Bento & Paula 2018: 41 (list).—Trivedi *et al*. 2018: 76 (list).—Suvarna Devi *et al.* 2019: 485.—Ghanem & Jamila 2020: 99.—Muñoz *et al.* 2021: 55 (list).

Acteodes tomentosus.—Stimpson 1858: 32; 1907: 44.

Actaea tomentosa.—A. Milne-Edwards 1865b: 262; 1873: 191.—Richters 1880: 145.—Haswell 1882: 44.—Ortmann 1893: 453; 1894: 50.—Zehntner 1894: 241.—Alcock 1898: 140.—Nobili 1899: 258; 1906a: 252.—Borradaile 1900: 583; 1902b: 254.—Schenkel 1902: 575.—Lenz 1905: 352; 1910: 549.—Grant & McCulloch 1906: 11.—Rathbun 1906: 852; 1907: 42; 1911: 217.—Bouvier 1915: 286.—Laurie 1915: 413 (list), 446.—Sendler 1923: 37.—Odhner 1925: 70.—McNeill 1926: 312; 1968: 71.—Sakai 1939: 487, pl. 93 fig. 8.—Vatova 1943: 19.—Barnard 1950: 233, figs. 43E, F.—Holthuis 1953: 12.—Fourmanoir 1954: 11.—Estampador 1959: 81.—Edmondson 1962: 256, fig. 11C.—Guinot 1964: 38; 1967a: 260 (list).—Michel 1964: 21.—Derijard 1966: 168.—Bakus 1994: 187 (list).—Venkataraman *et al*. 2004: 308 (list).

Actea tomentosa.—Targioni Tozzetti 1877: 35, pl. 3 figs. 14, 15, 19, 22, 23, 25, 28.

Actaeodes tomentosa.—Dai & Yang 1991: 312, fig. 161(2), pl. 40(3).

Actaoedes tomentosus.—Orchard 2012: 270.

Material examined. RMNH.CRUS.D.58528, 1 male (23.0 × 15.0 mm), intertidal in front of Barreira Vermelha, fcn. X4218, 17 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58529, 1 ovigerous female (18.0 × 12.0 mm), Barreira Vermelha, fcn. X4172, 8 January 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58530, 1 male (17.0 × 12.0 mm), tidal flat off Barreira Vermelha, fcn. X3902, 15 May 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.17508, 1 male (23.0 × 16.0 mm), Ilot Barkly, port of Port Louis, Mauritius, 5 October 1960, leg. C. Michel.

Remarks. The examined specimens of *Actaeodes tomentosus* agree well with the description given in Emmerson (2016b), the figures given in Guinot (1976) and with comparative material. The specimen bears a fine, close-cropped maroon velvet felt, as opposed to the short stiff, setae of *Actaeodes hirsutissimus*, the other member of the genus present in Mozambique waters (Serène 1984).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Odhner 1925), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; Lenz 1910; Muñoz *et al.* 2021; Odhner 1925), Europa Island (Barnard 1950; Derijard 1966; Odhner 1925), Mayotte (Poupin 2010), Glorioso Islands (Serène 1984), Madagascar (Fourmanoir 1954; Lenz 1910; Serène 1984; Odhner 1925), Djibouti (Odhner 1925), La Réunion (Odhner 1925; Poupin 2010), Mauritius (Bouvier 1915; Hoffmann 1874; Michel 1964; Odhner 1925; Ortmann 1893; Richters 1880), Seychelles (Guinot 1964; Miers 1884b; Rathbun 1911), Tanzania (Lenz 1905; Odhner 1925; Ortmann 1894), Kenya (Serène 1984), Somalia (Galil & Vannini 1990; Vatova 1943), Mediterranean Sea (Corsini-Foka & Kondylatos 2015; Ghanem & Jamila 2020), Red Sea (Heller 1861a, b; Laurie 1915; Nobili 1906a; Odhner 1925), Jeddah (Odhner 1925), Yemen (Simões *et al.* 2001), Gulf of Oman (Hogarth 1989, 1994), India (Alcock 1898; Dev Roy 2008; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Maledives (Borradaile 1902b; Ortmann 1893), Nicobar Islands (Bakus 1994; Heller 1865; Odhner 1925), Singapore (Lanchester 1900), Christmas Island (Orchard 2012), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1895; Nobili 1899; Odhner 1925; Schenkel 1902), China (Chen & Lan 1978; Dai & Yang 1991; Stimpson 1907), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959; Odhner 1925), Japan (Miers 1879a; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Grant & McCulloch 1902; Haswell 1882; McNeill 1926, 1968; Poore 2004), Torres Strait (Odhner 1925), Papua New Guinea (Odhner 1925), Melanesia (Zehntner 1894), Solomon Islands (Odhner 1925), Micronesia (Sendler 1923), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Holthuis 1953; Odhner 1925), Fiji (Borradaile 1900; Dana 1852b; Odhner 1925), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906), Tahiti (Heller 1865), Wallis & Futuna (Poupin 2010), Samoa (Dana 1852b; Odhner 1925), Polynesia (Odhner 1925; Rathbun 1907) and French Polynesia (Poupin 1996; 2010).

52. *Gaillardiellus rueppelli* (Krauss, 1843)

(Fig. 8D)

Cancer (*Aegle*) *rüppelli* Krauss, 1843: 28, pl. 1 fig. 1.
Actaea pilosa Stimpson, 1858: 33.
Actaea ruppellii.—A. Milne-Edwards 1865b: 270.—Henderson 1893: 358.—Alcock 1898: 144.—Grant & McCulloch 1906: 11.—Rathbun 1911: 219.—Edmondson 1923: 15.
Actaea rueppellii.—Hilgendorf 1879: 787.—McNeill 1968: 71.—Kensley 1970: 104 (list).
Actaea rüppellii.—Miers 1884a: 183 (list), 209.—De Man 1895: 499; 1902: 610.—Lanchester 1900: 733.—Lenz 1905: 351.—Stebbing 1910: 199.—Sakai 1939: 491, pl. 93 fig. 6.—Stephensen 1946: 150.—Barnard 1950: 235, figs. 37D, 43I, 43J.—Miyake *et al.* 1962: 129 (list).
Actaea rüppelli.—Ortmann 1893: 454.—Calman 1900: 7.—Nobili 1906b: 125.—Bouvier 1915: 286.
Actaea ruppelli.—Borradaile 1902b: 254.—Odhner 1925: 45 (in part).—Ward 1942: 87.—Estampador 1959: 81.—Guinot 1964: 41; 1967a: 260 (list).—Michel 1964: 21.—Venkataraman *et al*. 2004: 308 (list).
Actaea rüpelli.—Dawydoff 1952: 140.
Gaillardiellus rueppelli.—Guinot 1976: 254, figs. 42A, 43A, 44B, pl. 16 figs. 1, 1A.—Garth & Kim 1983: 684.—Serène 1984: 118, fig. 71, pl. 15F.—Poupin 1996: 43; 2010: 45 (list).—Apel 2001: 85.—Davie 2002: 514.—Ng & Davie 2002: 375 (list).—Dev Roy 2008: 88.—Ng *et al.* 2008: 195 (list).—Emmerson 2016c: 473 (list).—Naderloo 2017: 251, figs. 21.20C, 21.23, 21.24.—Ng *et al.* 2017: 86 (list).—Bento & Paula 2018: 41 (list).—Trivedi *et al*. 2018: 79 (list).—Suvarna Devi *et al.* 2019: 485.—Lee *et al.* 2021: S9 (list).—Maenosono 2021a: 26, figs. 5A–E.—Muñoz *et al.* 2021: 55 (list).
Paractaea ruppellii.—Sakai 1976: 451, fig. 242.—Kensley 1981: 45 (list).
Paractaea rueppellii.—Kensley 1981: 45 (list).
Gaillardiellus rueppellii.—Garth *et al.* 1987: 244 (list).—Takeda 2023: 26, fig. 9A.

Gaillardiellus rüppelli.—Galil & Vannini 1990: 36.
Paractaea rüppellii.—Dai & Yang 1991: 314, fig. 162(1), pl. 40(6).
Gaillardiellus ruppellii.—Naiyanetr 2007: 101 (list).

Material examined. RMNH.CRUS.D.58531, 1 male (21.0 × 14.0 mm), 1 ovigerous female (23.0 × 16.0 mm), tidal flat off Barreira Vermelha, fcn. X3902, 15 May 1983, leg. J.H.C. Walenkamp.

Remarks. The examined specimens agree with the original description and drawing given in Krauss (1843) and with the description by Barnard (1950) for *Actaea rueppellii*. The specimens are smaller than reported by Serène (1984), but other characters follow the descriptions.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; A. Milne-Edwards 1865b; Odhner 1925; Serène 1984; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1970, 1981; Muñoz *et al.* 2021; Odhner 1925), Mayotte (Poupin 2010), Madagascar (Odhner 1925; Serène 1984), La Réunion (Odhner 1925; Poupin 2010), Mauritius (Bouvier 1915; Michel 1964; Odhner 1925; Ortmann 1893; Rathbun 1911), Saint Brandon (Ward 1942), Seychelles (Guinot 1964; Rathbun 1911), Tanzania (Lenz 1905; Odhner 1925), Kenya (Serène 1984), Somalia (Galil & Vannini 1990), Persian Gulf (Apel 2001; Naderloo 2017; Nobili 1906b; Stephensen 1946), India (Alcock 1898; Dev Roy 2008; Henderson 1893; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1902b), Singapore (Lanchester 1900), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1895, 1902), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2017), Philippines (Estampador 1959; Garth & Kim 1983), Korea (Lee *et al.* 2021), Japan (Maenosono 2021a; Miyake *et al.* 1962; Ortmann 1893; Sakai 1939, 1976), Australia (Davie 2002; Grant & McCulloch 1906; McNeill 1968), Torres Strait (Calman 1900), Melanesia (Miers 1884a), Micronesia (Takeda 2023), New Caledonia (Poupin 2010), Marshall Islands (Garth *et al.* 1987), Fiji (Ortmann 1893), Samoa (Ortmann 1893), Line Islands (Edmondson 1923) and French Polynesia (Poupin 1996, 2010).

Subfamily Chlorodiellinae Ng & Holthuis, 2007

53. *Chlorodiella nigra* (Forskål, 1775)

(Fig. 8E)

Cancer niger Forskål, 1775: 89.
Chlorodius niger.—Rüppell 1830: 20, pl. 4 fig. 7.—H. Milne-Edwards 1834: 401.—Dana 1852b: 216, pl. 12 figs. 5A–C.—Stimpson 1858: 33; 1907: 50.—Heller 1861a: 335; 1861b: 10 (list); 1865: 18.—A. Milne-Edwards 1873: 214.—Paulson 1875: 35, pl. 6, fig. 4B.—Kossman 1877: 34.—Richters 1880: 147.—Haswell 1882: 62.—Miers 1884a: 183 (list), 215.—De Man 1887: 32; 1895: 519; 1902: 618.—Henderson 1893: 361.—Ortmann 1893: 465; 1894: 51.—Zehntner 1894: 244.—Alcock 1898: 160.—Nobili 1899: 258; 1905: 487; 1906a: 262; 1906b: 128; 1907: 393.—Borradaile 1900: 587; 1902b: 259.—Calman 1900: 11; 1927: 213.—Lanchester 1900: 737; 1901: 539.—Grant & McCulloch 1906: 12.—Laurie 1906: 405.—Lenz 1910: 550.—Bouvier 1915: 274.—Serène 1937: 75 (list).—Vatova 1943: 20.—Stephensen 1946: 156, figs. 38D, E.—Estampador 1959: 82.
Clorodius niger.—De Haan 1833: 14 (list).—Wedenissow 1894: 410.
Chlorodius hirtipes White, 1848: 226.—Adams & White 1849: 40, pl. 11 fig. 4.
Chlorodius (*Chlorodius*) *nebulosus* Dana, 1852a: 80.
Chlorodius depressus Heller, 1861b: 11.—Hilgendorf 1869: 74.
Chlorodiella niger.—Rathbun 1906: 857; 1907: 46; 1911: 225; 1923: 108.—Laurie 1915: 414 (list), 447.—Edmondson 1923: 17; 1962: 281, fig. 23D.—Sendler 1923: 38.—McNeill 1926: 310.—McNeill & Ward 1930: 383.—Boone 1934: 135, pl. 71.—Sakai 1936a: 166.—Chopra & Das 1937: 402, fig. 8, pl. 6, fig. 2.—Balss 1938: 52.—Monod 1938: 132.—Barnard 1950: 213; 1955: 29, fig. 10.—MacNae & Kalk 1958: 82 (key).—Bakus 1994: 187 (list).
Chlorodiella nigra.—Montgomery 1931: 441.—Sakai 1939: 508, pl. 97 fig. 1; 1976: 465, pl. 166 fig. 1.—Holthuis 1953: 15.—Forest & Guinot 1961: 95, figs. 87–89, 97A, 97B.—Guinot 1964: 69; 1967a: 262 (list).—Michel 1964: 24.—McNeill 1968: 74.—Serène 1968: 81 (list); 1984: 258, fig. 168, pl. 36B.—Chen & Lan 1978: 268, pl. 1 fig. 1.—Kensley 1981: 44 (list).—Titgen 1982: 128.—Garth & Kim 1983: 687.—Garth *et al.* 1987: 243 (list).—Hogarth 1989: 114 (list); 1994: 95.—Galil & Vannini 1990: 45.—Dai & Yang 1991: 339, fig. 169(2), pl. 45(5).—Poupin 1996: 54; 2010: 39 (list).—Apel 2001: 83.—Ng *et al.* 2001: 27 (list); 2017: 88 (list).—Davie 2002: 519.—Ng & Davie 2002: 376 (list).—Poore 2004: 465, fig. 148G.—Venkataraman *et al*. 2004: 308 (list).—Naiyanetr 2007: 101 (list).—Ng & Richer de Forges 2007: 330 (list).—Dev Roy 2008: 90.—Ng *et al.* 2008: 197 (list).—Emmerson 2016c: 473 (list).—Naderloo 2017: 238, figs. 21.10B, 21.10C, 21.11, 21.12.—Bento & Paula 2018: 41 (list).—Trivedi *et al*. 2018: 78 (list).—Muñoz *et al.* 2021: 55 (list).—Maenosono 2022: 16, figs. 8A–F.—Amer *et al*. 2023: 281, figs. 5A–C.

Material examined. RMNH.CRUS.D.58532, 1 male (14.0 × 10.0 mm), 1 female (14.0 × 10.0 mm), on *Acropora* coral, north of Ilha dos Portugueses, 1 m depth, fcn. X4177, 6 March 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.16675, 1 male (11.5 × 7.5 mm), Jaraid Island, Persian Gulf, near station 7, shallow reef to 12 ft., 4 October 1956, leg. C.E. Dawson; RMNH.CRUS.D.16774, 1 male (9.0 × 6.0 mm), 1 female (10.0 × 8.0 mm), Tārūt Bay, Persian Gulf, 19 October 1956, leg. C.E. Dawson; RMNH.CRUS.D.16676, 1 male (14.0 × 9.0 mm), Mauritius, received July 1961, leg. C. Michel; RMNH.CRUS.D.16677, 2 females (6.0 × 4.0 mm, 6.0 × 4.0 mm), Flic and Flac, west coast of Mauritius, 9 October 1960, leg. C. Michel; RMNH.CRUS.D.18798, 1 female (7.0 × 5.0 mm), Tutuila, Samoa, 8 October 1959, leg. H. Caspers; RMNH.CRUS.D.27721, 3 females (13.5 × 7.0 mm, 13.0 × 9.0 mm, 9.0 × 6.0 mm), Gulf of Suez, Janub Sina', A-Tur, Egypt, 20 September 1967, leg. L. Fishelson; RMNH.CRUS.D.553, 1 male (16.0 × 11.0 mm), 1 female (14.0 × 9.0 mm), Red Sea, 1880, leg. R. Kossmann; RMNH.CRUS.D.2148, 6 males (13.0 × 9.0 mm, 10.0 × 6.0 mm, 8.0 × 5.0 mm, 6.0 × 4.0 mm, 6.0 × 4.0 mm, 4.0 × 3.0 mm), 1 ovigerous female (13.0 × 8.0 mm), 5 females (13.0 × 8.0 mm, 11.0 × 7.0 mm, 10.0 × 7.0 mm, 9.0 × 6.0 mm, 8.0 × 4.0 mm), Sinabang, Simaloer, Indonesia, February 1913, leg. E. Jacobson; RMNH.CRUS.D.10592, 1 male (25.0 × 16.0 mm), Queensland, Capricorn Group, Heron Island, Australia, date unknown, leg. B. Dew.

Remarks. The examined specimens of *Chlorodiella nigra* agree with the original description given in Forskål (1775), the figures in Serène (1984) and the description given in Barnard (1950). Specimens are smaller than reported by Serène (1984), but in line with comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1955; Emmerson 2016c; Hilgendorf 1869; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Serène 1984), Mayotte (Poupin 2010), Madagascar (Lenz 1910, Serène 1984), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Michel 1964; Richters 1880; White 1848), Seychelles (Rathbun 1911; Richters 1880), Tanzania (Ortmann 1894), Somalia (Galil & Vannini 1990; Vatova 1943; Wedenissow 1894), Red Sea (Amer *et al.* 2023; Calman 1927; Guinot 1964; Heller 1861a, b; Kossmann 1877; Laurie 1915; H. Milne-Edwards 1834; Monod 1938; Nobili 1906a; Ortmann 1893; Paulson 1875; Rüppell 1830), Gulf of Oman (Hogarth 1989, 1994; Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Nobili 1906b; Stephensen 1946; Titgen 1982), Diego Garcia (Rathbun 1911), India (Alcock 1898; Dev Roy 2008; Heller 1865; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1902b), Sri Lanka (Laurie 1906), Myanmar (Chopra & Das 1937; De Man 1887), Nicobar Islands (Bakus 1994; Heller 1865), Singapore (Lanchester 1900; Ortmann 1893), Thailand (Naiyanetr 2007; Ng & Davie 2002), Malaysia (Lanchester 1901), Indonesia (De Man 1895, 1902), China (Chen & Lan 1978; Dai & Yang 1991), Taiwan (Ng *et al.* 2001), Philippines (Adams & White 1849; Dana 1852a, b; Estampador 1959; Garth & Kim 1983), Japan (Boone 1934; De Haan 1833; Maenosono 2022; Ortmann 1893; Sakai 1939, 1976; Stimpson 1907), Australia (Davie 2002; Grant & McCulloch 1906; Haswell 1882; McNeill 1926, 1968; McNeill & Ward 1930; Montgomery 1931; Nobili 1899; Poore 2004; Rathbun 1923), Torres Strait (Calman 1900), Papua New Guinea (Nobili 1905), Melanesia (Miers 1884b; Rathbun 1911; Zehntner 1894), Micronesia (Dana 1852b; Sendler 1923), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Balss 1938; Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938; Borradaile 1900; Dana 1852b; Ortmann 1893), Hawai'i (Edmondson 1962; Rathbun 1906), Tahiti (Forest & Guinot 1961; Heller 1865; Stimpson 1907), Tuvalu (Borradaile 1900; Rathbun 1907), Wallis & Futuna (Poupin 2010), Samoa (Ortmann 1893), Line Islands (Edmondson 1923), Polynesia (Balss 1938; Dana 1852b; Nobili 1907) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

54. *Cyclodius obscurus* (Hombron & Jacquinot, 1846)

(Fig. 8F)

Chlorodius obscurus Hombron & Jacquinot, 1846: pl. 3 fig. 4.
Chlorodius (*Chlorodius*) *monticulosus* Dana, 1852a: 79.
Chlorodius (*Cyclodius*) *ornatus* Dana, 1852a: 80.
Phymodius obscurus.—A. Milne-Edwards 1873: 220.
Phymodius monticulosus.—Cano 1889a: 88.—Henderson 1893: 363.—De Man 1895: 524.—Whitelegge 1897: 136.—Alcock 1898: 163.—Nobili 1906a: 264.—Lenz 1910: 550.—Bouvier 1915: 276.—Barnard 1950: 217, figs. 40A–H.—Tweedie 1950: 122.—Derijard 1966: 168.—Guinot 1967a: 267 (list).—Serène 1984: 250, figs. 156, 157, 160, pl. 25A.—Galil & Vannini 1990: 45.—Dai & Yang 1991: 335, fig. 167A, pl. 44(6).—Poupin 1996: 55.—Venkataraman *et al*. 2004: 310 (list).

Cyclodius ornatus.—Nobili 1906a: 271.
Chlorodius monticulosus.—Stimpson 1907: 50.
Cyclodius obscurus.—Davie 2002: 521.—Poore 2004: 466, fig. 148H.—Dev Roy 2008: 91.—Ng *et al.* 2008: 197 (list).—Poupin 2010: 41 (list).—Castro 2011: 90.—Emmerson 2016c: 473 (list).—Bento & Paula 2018: 41 (list).—Trivedi *et al*. 2018: 78 (list).—Habib *et al.* 2021: 44: figs. 3A, B.—Muñoz *et al.* 2021: 55 (list).—Poore & Ahyong 2023: 761, fig. 14.153B.

Material examined. RMNH.CRUS.D.58533, 1 male (12.0 × 9.0 mm), between Ponta Punduini and Ponta Rasa, 5 m depth, fcn. X4252, 3 November 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58534, 1 male (26.0 × 20.0 mm), 1 female (27.0 × 19.0 mm), tidal flat off Barreira Vermelha, fcn. X3957, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58535, 1 male (17.0 × 11.0 mm), 1 female (18.0 × 13.0 mm), Ponta Punduini, fcn. X3911, 27 July 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58536, 1 male (18.0 × 13.0 mm), littoral in front of Barreira Vermelha, fcn. X4071, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58537, 3 males (21.0 × 14.0 mm, 17.0 × 13.0 mm, 14.0 × 9.0 mm), 5 females (20.0 × 13.0 mm, 20.0 × 13.0 mm, 18.0 × 12.0 mm, 17.0 × 11.0 mm, 16.0 × 10.0 mm), tidal flat off Barreira Vermelha, fcn. X3917, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58538, 1 male (22.0 × 14.0 mm), 1 female (18.0 × 13.0 mm), tidal flat off Barreira Vermelha, fcn. X3991, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58539, 1 male (17.0 × 13.0 mm), 5 females (17.0 × 12.0 mm, 16.0 × 12.0 mm, 15.0 × 9.0 mm, 15.0 × 10.0 mm, 15.0 × 9.0 mm), tidal flat off Barreira Vermelha, fcn. X3953, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58540, 1 male (9.0 × 7.0 mm), 1 ovigerous female (9.0 × 6.0 mm), 1 female (7.0 × 5.0 mm), tidal flat off Barreira Vermelha, zone 2, fcn. X3925, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58541, 1 male (19.0 × 14.0 mm), on *Acropora* coral, north of Ilha dos Portogueses, 1 m depth, fcn. X4177, 6 March 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58542, 1 male (21.0 × 15.0 mm), 1 female (19.0 × 13.0 mm), tidal flat off Barreira Vermelha, fcn. X4065, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58543, 1 male (20.0 × 14.0 mm), in front of Marine Biology Station (EBM), fcn. X4100, 8 January 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58544, 4 males (21.0 × 14.0 mm, 16.0 × 10.0 mm, 16.0 × 10.0 mm, 16.0 × 10.0 mm), 2 females (19.0 × 14.0 mm, 19.0 × 13.0 mm), tidal flat off Barreira Vermelha, fcn. X3922, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58545, 1 female (19.0 × 13.0 mm), tidal flat off Barreira Vermelha, fcn. X4058, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58546, 6 males (23.0 × 15.0 mm, 21.0 × 15.0 mm, 20.0 × 14.0 mm, 19.0 × 13.0 mm, 17.0 × 12.0 mm, 5.0 × 3.5 mm), 2 females (22.0 × 15.0 mm, 19.0 × 13.0 mm), tidal flat off Barreira Vermelha, fcn. X3918, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58547, 2 males (13.0 × 9.0 mm, 9.0 × 7.0 mm), tidal flat off Barreira Vermelha, fcn. X4203, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58548, 1 male (21.0 × 13.0 mm), intertidal flat off Barreira Vermelha, fcn. X4099, 22 January 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58549, 2 males (21.0 × 14.0 mm, 15.0 × 9.0 mm), tidal flat off Barreira Vermelha, fcn. X4095, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58550, 2 females (17.0 × 12.0 mm, 16.0 × 12.0 mm), tidal flat off Barreira Vermelha, fcn. X3914, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58551, 2 females (20.0 × 13.0 mm, 19.0 × 12.0 mm), Barreira Vermelha, under the rocks, fcn. X4168, 8 January 1986, leg. Simao Marcos Muchanga; RMNH.CRUS.D.58552, 3 males (22.0 × 14.0 mm, 21.0 × 16.0 mm, 18.0 × 13.0 mm), 1 female (18.0 × 12.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4189, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58553, 1 male (4.0 × 3.0 mm juvenile), intertidal flat in front of Barreira Vermelha, fcn. X4107, 22 January 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58554, 1 male (12.0 × 9.0 mm), 1 female (18.0 × 12.0 mm), tidal flat off Barreira Vermelha, fcn. X3928, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58555, 1 male (23.0 × 17.0 mm), tidal flat off Barreira Vermelha, fcn. X3902, 15 May 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58556, 1 male (24.0 × 16.0 mm), fcn. X4063, date and collector unknown; RMNH.CRUS.D.58557, 1 male (26.0 × 18.0 mm), tidal flat off Barreira Vermelha, fcn. X3936, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58558, 1 female (16.0 × 13.0 mm), tidal flat off Barreira Vermelha, fcn. X4197, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58559, 1 female (27.0 × 18.0 mm), tidal flat off Barreira Vermelha, fcn. X4092, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58560, 1 male (25.0 × 16.0 mm), tidal flat off Barreira Vermelha, fcn. X3946, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58561, 1 male (23.0 × 16.0 mm), Barreira Vermelha, 15 m from the coast, under the rocks, fcn. X4157, 8 January 1986, leg. E. Timana; RMNH.CRUS.D.58562, 1 male (19.0 × 12.0 mm), in front of Marine Biology Station (EBM), caught with net, fcn. X3972, 8 August 1983, collector unknown.

Comparative material. RMNH.CRUS.D.4530, 5 males (21.0 × 15.0 mm, 21.0 × 13.0 mm, 20.0 × 14.0 mm, 16.0 × 11.0 mm, 15.0 × 11.0 mm), 3 females (15.0 × 12.0 mm, 13.0 × 9.0 mm, 14.0 × 9.0 mm), Kafal Misool, Indonesia, 1929–1930, collected during Snellius Expedition.

Remarks. The examined specimens of *Cyclodius obscurus* agree with the original short description and figures given for *Chlorodius monticulosus* (Dana, 1852) in Dana (1852a), figures given in Serène (1984), and with the comparative material.

Distribution. Mozambique (Barnard 1950; Emmerson 2016c; Muñoz *et al.* 2021), Europa Island (Derijard 1966; Serène 1984), Mayotte (Poupin 2010), Madagascar (Emmerson 2016c; Lenz 1910; Serène 1984), La Réunion (Poupin 2010), Mauritius (Bouvier 1915), Kenya (Serène 1984), Somalia (Galil & Vannini 1990), Red Sea (Nobili 1906a), India (Alcock 1898; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Bangladesh (Habib *et al.* 2021), Cocos (Keeling) Islands (Tweedie 1950), Indonesia (De Man 1895), China (Dai & Yang 1991), Philippines (Dana 1852a), Japan (Stimpson 1907), Australia (Davie 2002; Poore 2004), New Caledonia (A. Milne-Edwards 1873; Poupin 2010), Fiji (Dana 1852a), Hawai'i (Castro 2011), Tahiti (Dana 1852a; Stimpson 1907), Tuvalu (Whitelegge 1897), Samoa (Dana 1852a) and French Polynesia (Poupin 1996, 2010).

Subfamily Etisinae Ortmann, 1893

55. *Etisus electra* (Herbst, 1801)

(Fig. 9A)

Cancer electra Herbst, 1801: 34, pl. 51 fig. 6.
Cancer metis Herbst, 1801: 36, 54, fig. 3.
Etisus rugosus Hombron & Jacquinot, 1846: pl. 4 fig. 2.
Chlorodius dentifrons Stimpson, 1858: 34; 1907: 51, pl. 6 fig. 5.
Etisodes sculptilis Heller, 1861a: 333.
Actaeodes frontalis Paulson, 1875: 27, pl. 5 figs. 3, 3B. [Not *Etisus frontalis* (Dana, 1852)].
Chlorodius samoensis Miers, 1875: 341.
Etisodes electra.—Miers 1884a: 183 (list), 217.—Henderson 1893: 362.—Alcock 1898: 133.—Calman 1900: 7.—Borradaile 1902b: 263.—Lenz 1905: 349.—Grant & McCulloch 1906: 10.—Nobili 1906a: 245; 1906b: 122; 1907: 390.—Rathbun 1906: 851, pl. 9 fig. 7; 1907: 42; 1911: 217.—Laurie 1915: 413 (list).—Edmondson 1923: 15.—McNeill 1926: 310.—Ward 1942: 90.—Stephensen 1946: 158, fig. 41A.—Forest & Guinot 1961: 89, figs. 82A, B.
Etisus electra.—Klunzinger 1913: 236, 243, pl. 1, fig. 11, pl. 6 fig. 15.—Balss 1938: 44.—Barnard 1950: 245, figs. 45A, 45B.—MacNae & Kalk 1958: 81 (key).—Edmondson 1962: 265, fig. 13B.—Guinot 1964: 49, figs. 21, 22, 28, 30, pl. 5 fig. 1; 1967a: 263 (list).—Michel 1964: 26.—McNeill 1968: 65.—Serène 1968: 80; 1984: 228, fig. 138, pl. 21D.—Sakai 1976: 458, pl. 161 fig. 3.—Kensley 1981: 44 (list).—Garth *et al.* 1987: 244 (list).—Hogarth 1989: 106 (list); 1994: 96.—Galil & Vannini 1990: 43.—Dai & Yang 1991: 322, pl. 41(8).—Poupin 1996: 52; 2010: 44 (list).—Apel 2001: 84.—Ng *et al.* 2001: 27 (list); 2017: 89 (list).—Simões *et al.* 2001: 85 (list).—Davie 2002: 530.—Ng & Davie 2002: 376 (list).—Paulay *et al.* 2003: 48 (list).—Poore 2004: 468, fig. 149B.—Naiyanetr 2007: 103 (list).—Ng & Richer de Forges 2007: 330 (list).—Dev Roy 2008: 96.—Ng *et al.* 2008: 198 (list).—Castro 2011: 94.—Emmerson 2016c: 474 (list).—Naderloo 2017: 247, figs. 21.17, 21.19, 21.20A.—Bento & Paula 2018: 42 (list).—Trivedi *et al*. 2018: 79 (list).—Muñoz *et al.* 2021: 56 (list).
Etisus (*Etisodes*) *electra.*—Sakai 1939: 500, fig. 40.—Holthuis 1953: 21.
Etisus frontalis.—Titgen 1982: 130. [Not *Etisus frontalis* (Dana, 1852)].
Estisus electra.—Venkataraman *et al*. 2004: 308 (list).

Material examined. RMNH.CRUS.D.58563, 1 male (23.0 × 17.0 mm), fcn. X3989, date and collector unknown; RMNH.CRUS.D.58564, 1 male (15.0 × 11.0 mm), fcn. X4055, 18 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58565, 1 male (25.0 × 18.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4047, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58566, 1 male (9.0 × 6.0 mm), tidal flat in front of Barreira Vermelha, fcn. X3941, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58567, 1 male (16.0 × 11.0 mm), 1 female (8.0 × 6.0 mm), tidal flat off Barreira Vermelha, zone 5, fcn. X3960, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58568, 1 male (17.0 × 12.0 mm), littoral between hotel and Barreira Vermelha, fcn. X4147, 16 November 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58569, 1 female (16.0 × 11.0 mm), littoral in front of Barreira Vermelha, fcn. X4041, 13 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58570, 1 male (9.0 × 6.0 mm), tidal flat off Barreira Vermelha, zone 2, fcn. X3925, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58571, 1 female (16.0 × 11.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4065, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58572, 1 male (20.0 × 14.0 mm), in front of Marine Biology Station (EBM), fcn. X4100, 8 January 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58573, 1 male (20.0 × 14.0 mm), intertidal in front of Barreira Vermelha, fcn. X4218, 17 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.

D.58574, 2 males (14.0 × 10.0 mm, 8.0 × 7.0 mm), 2 females (13.0 × 9.0 mm, 12.0 × 9.0 mm), tidal flat in front of Barreira Vermelha, fcn. X3918, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58575, 1 male (21.0 × 15.0 mm), 1 ovigerous female (11.0 × 9.0 mm), Barreira Vermelha, underneath the stone, fcn. unknown, 9 January 1986, leg. Aidate; RMNH.CRUS.D.58576, 1 male (24.0 × 17.0 mm), intertidal flat in front of Barreira Vermelha, fcn. X4107, 22 January 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58577, 1 female (19.0 × 13.0 mm), between Ponta Rasa and Marine Biology Station (EBM), 1 m depth, fcn. X4105, 21 January 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58578, 1 female (16.0 × 9.0 mm), off Barreira Vermelha, fcn. unknown, 12 June 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58579, 2 females (16.0 × 12.0 mm, 15.0 × 10.0 mm), intertidal in front of Barreira Vermelha, fcn. X4212, 17 October 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.16354, 2 females (9.0 × 7.0 mm, 9.0 × 6.0 mm), Persian Gulf, Red Sea, shore station 1, 16 September 1956, leg. C.E. Dawson; RMNH.CRUS.D.16353, 1 male (13.0 × 9.0 mm), Jidda Harbour, from shallow inshore reef, depth 1–3 ft, 9 September 1956, leg. C.E. Dawson.

Remarks. Two species of *Etisus* H. Milne-Edwards, 1834 were reported from Mozambican waters (Muñoz *et al.* 2021), *E. electra* and *E. laevimanus* Randall, 1840. The front of the carapace of *E. electra* has four teeth, on *E. laevimanus* the front is nearly straight (Barnard 1950). In addition, the cheliped of *E. electra* is granulate, while the cheliped of *E. laevimanus* is smooth (Barnard 1950). The examined specimens agree with the original description in Herbst (1801), the drawings in Barnard (1950) and the figures in Serène (1984) and Naderloo (2017). The specimens also match with the comparative material.

Distribution. Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Madagascar (Serène 1984), Djibouti (Guinot 1964), Mauritius (Michel 1964; Ward 1942), Seychelles (Rathbun 1911; Serène 1984), Tanzania (Lenz 1905), Kenya (Serène 1984), Somalia (Galil & Vannini 1990), Red Sea (Guinot 1964; Heller 1861a, b; Klunzinger 1913; Laurie 1915; Nobili 1906a; Paulson 1875), Yemen (Simões *et al.* 2001), Gulf of Oman (Hogarth 1989, 1994), Persian Gulf (Apel 2001; Naderloo 2017; Nobili 1906b; Stephensen 1946; Titgen 1982), Egmont Islands (Rathbun 1911), India (Alcock 1898; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1902b), Thailand (Naiyanetr 2007; Ng & Davie 2002), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Japan (Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Grant & McCulloch 1906; McNeill 1926, 1968; Poore 2004), Torres Strait (Calman 1900), Melanesia (Miers 1884a), Micronesia (Holthuis 1953), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Balss 1938; Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906), Tahiti (Forest & Guinot 1961), Samoa (Miers 1875), Line Islands (Edmondson 1923), Polynesia (Nobili 1907) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

56. *Etisus laevimanus* Randall, 1840

(Fig. 9B)

Etisus laevimanus Randall, 1840: 115.—Gibbes 1850: 176.—Dana 1852a: 76.—Targioni Tozzetti 1877: 29.—Hilgendorf 1879: 791.—Richters 1880: 146.—Haswell 1882: 54.—Miers 1884a: 183 (list), 217; 1886: 132.—Henderson 1893: 362.—Ortmann 1893: 473.—Alcock & Anderson 1894: 200 (list).—De Man 1895: 527.—Whitelegge 1897: 131.—Alcock 1898: 131.—Calman 1900: 7.—Borradaile 1902b: 263.—Schenkel 1902: 577.—Lenz 1905: 351.—Nobili 1906a: 244; 1906b: 121; 1907: 390.—Rathbun 1906: 851; 1907: 42; 1911: 217.—Laurie 1915: 413 (list), 445.—McNeill 1926: 310; 1968: 65.—Balss 1934: 508 (list); 1938: 44.—Boone 1934: 121, pls. 64, 65.—Sakai 1936a: 164; 1939: 497, pl. 59 fig. 3, pl. 95 fig. 3; 1976: 455, fig. 245, pl. 161 fig. 1.—Ward 1942: 98.—Stephensen 1946: 157.—Barnard 1950: 244, figs. 45C, D.—Tweedie 1950: 120.—Dawydoff 1952: 140.—Chhapgar 1957: 32, pl. 9 figs. J–L.—MacNae & Kalk 1958: 81 (key).—Estampador 1959: 80.—Forest & Guinot 1961: 88.—Edmondson 1962: 268, fig. 17B.—Miyake *et al.* 1962: 129 (list).—Michel 1964: 26.—Guinot 1967a: 263 (list).—Serène 1968: 80; 1984: 225, fig. 136, pl. 33B.—Kensley 1981: 44 (list).—Garth *et al.* 1987: 244 (list).—Dai & Yang 1991: 324, fig. 164B(5), pl. 42(2).—Bakus 1994: 171 (list), 188 (list).—Poupin 1996: 52; 2010: 44 (list).—Apel 2001: 85.—Ng *et al.* 2001: 28 (list); 2017: 89 (list).—Davie 2002: 531.—Ng & Davie 2002: 376 (list).—Paulay *et al.* 2003: 48 (list).—Venkataraman *et al*. 2004: 308 (list).—Naiyanetr 2007: 101 (list).—Ng & Richer de Forges 2007: 330 (list).—Dev Roy 2008: 97.—Ng *et al.* 2008: 198 (list).—Castro 2011: 94.—Emmerson 2016c: 474 (list).—Naderloo 2017: 248, figs. 21.17, 21.20B, 21.21.—Bento & Paula 2018: 42 (list).—Trivedi *et al*. 2018: 79 (list).—Lee *et al.* 2021: S10 (list).—Muñoz *et al.* 2021: 56 (list).—Amer *et al*. 2023: 278, figs. 3A–C.

Etisus macrodactylus Bianconi, 1851: 107, pl. 10, figs. 1A, B.—Hombron & Jacquinot 1854: pl. 9 fig. 2.

Etisus convexus Stimpson, 1858: 31.

Etisus maculatus Heller, 1861a: 332; 1861b: 9.
Etisus levimanus.—A. Milne-Edwards 1873: 234.—Kossmann 1877: 30.—Lanchester 1900: 738.
Etisus laevissimus.—Borradaile 1900: 588.
Etisus (*Etisus*) *laevimanus*.—Holthuis 1953: 21.

Material examined. RMNH.CRUS.D.58580, 1 male (45.0 × 29.0 mm), fcn. X4124, date and collector unknown.

Comparative material. RMNH.CRUS.25004, 2 males (32.0 × 21.0 mm, 30.0 × 20.0 mm), 1 ovigerous female (21.0 × 15.0 mm), Ethiopia, Dahlak Archipelago, Entedebir Island, Goliath Bay [= Eritrea], State of Eritrea, collected on 30 March 1962, collector unknown.

Remarks. See also the remarks under *Etisus electra.* The examined specimen of *E. laevimanus* agrees with the concise original description in Randall (1840) and Barnard (1950). The specimen also matches with the comparative material, although the specimen is larger than the comparative material. The size given in Serène (1984) matches with the examined specimen.

Distribution. Mozambique (Barnard 1950; Bianconi 1851; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), East Africa (Emmerson 2016c), Madagascar (Balss 1934; Serène 1984), La Réunion (Poupin 2010), Mauritius (Michel 1964; Ortmann 1893; Richters 1880), Tanzania (Lenz 1905), Red Sea (Amer *et al.* 2023; Heller 1861a, b; Kossmann 1877; Laurie 1915; Nobili 1906a), Gulf of Oman (Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Nobili 1906b; Stephensen 1946), Diego Garcia (Rathbun 1911; Ward 1942), India (Alcock 1898; Alcock & Anderson 1894; Bakus 1994; Chhapgar 1957; Dev Roy 2008; Henderson 1893; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), The Maldives (Borradaile 1902b), Sri Lanka (Henderson 1893), Nicobar Islands (Bakus 1994), Singapore (Lanchester 1900), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Indonesia (De Man 1895; Schenkel 1902), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Korea (Lee *et al.* 2021), Japan (Miyake *et al.* 1962; Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Haswell 1882; McNeill 1926, 1968), Torres Strait (Calman 1900), Melanesia (Miers 1884a), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Ortmann 1893; Poupin 2010), Marshall Islands (Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938; Borradaile 1900; Dana 1852a), Hawai'i (Castro 2011; Dana 1852a; Edmondson 1962; Rathbun 1906), Tuvalu (Whitelegge 1897), Polynesia (Miers 1886; Nobili 1907), French Polynesia (Poupin 1996, 2010; Rathbun 1907) and Sandwich Islands (Miers 1886; Randall 1840).

Subfamily Euxanthinae Alcock, 1898

57. *Hypocolpus diverticulatus* (Strahl, 1861)

(Fig. 9C)

Cancer sculptus H. Milne-Edwards, 1834: 376. [Junior homonym of *Cancer sculptus* Herbst, 1794].
Atergatis exsculptus.—White 1847: 14. [Not *Cancer exsculptus* Herbst, 1790].
Hypocoelus sculptus.—Heller 1861a: 322; 1861b: 8 (list).—A. Milne-Edwards 1865b: 295.—Hoffmann 1874: 4.—Kossmann 1877: 29.—Hilgendorf 1879: 788.—Ortmann 1894: 51.—Bouvier 1915: 288.
Melissa diverticulata Strahl, 1861: 103.
Hypocolpus sculptus.—Nobili 1906a: 239 (in part).—Klunzinger 1913: 172, pl. 3 figs. 5A–D.
Hypocolpus diverticulatus.—Rathbun 1911: 215.—Laurie 1915: 413 (list).—Balss 1934: 510 (list).—Barnard 1950: 209.—Guinot-Dumortier 1960: 180, pl. 1 fig. 6, pl. 2 fig. 8, pl. 3 fig. 17, pl. 4 figs. 24–26, pl. 6 fig. 34, pl. 10 figs. 54, 55, pl. 11 figs. 64, 65.—Guinot 1967a: 264 (list).—Serène 1968: 75 (list); 1984: 80, figs. 33, 41B, pl. 10A.—Kensley 1981: 44 (list).—Vannini 1982: 101.—Galil & Vannini 1990: 2.—Ng *et al.* 2008: 199 (list).—Poupin 2010: 48 (list).—Emmerson 2016c: 474 (list).—Bento & Paula 2018: 42 (list).—Muñoz *et al.* 2021: 56 (list).
Hypocolpus exsculptus.—Stebbing 1924: 2.

Material examined. RMNH.CRUS.D.58581, 1 male (29.0 × 21.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4043, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58582, 1 male (24.0 × 17.0 mm), littoral in front of Barreira Vermelha, fcn. X4076, 13 July 1984, collector unknown.

Comparative material. RMNH.CRUS.D.1357, 1 female (20 × 15.5 mm), Red Sea, 1880, leg. R. Kossmann.

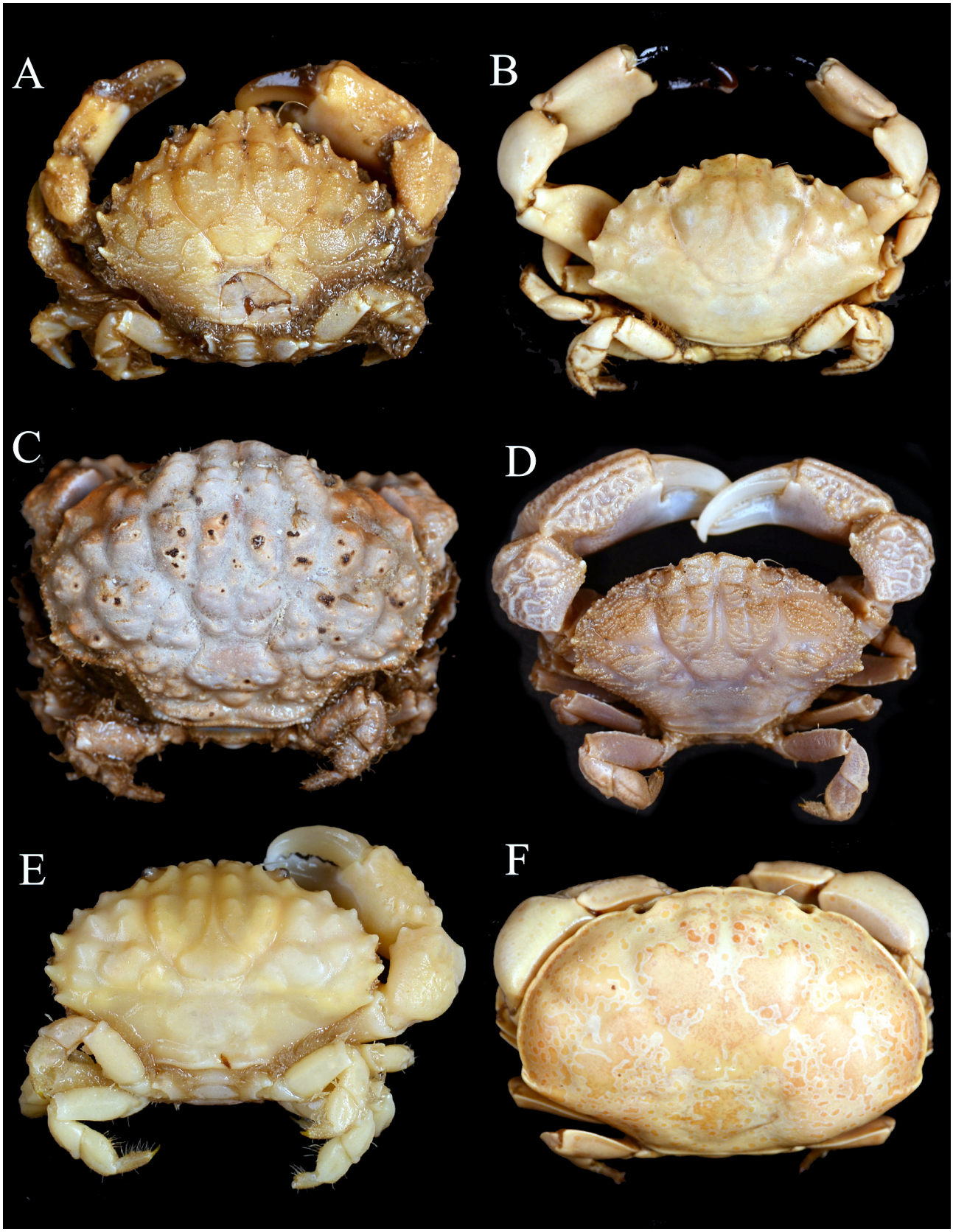

FIGURE 9. A, *Etisus electra* (Herbst, 1801), male, CW = 20.0 mm, RMNH.CRUS.D.58573; B, *Etisus laevimanus* Randall, 1840, male, CW = 45.0 mm, RMNH.CRUS.D.58580; C, *Hypocolpus diverticulatus* (Strahl, 1861), male, CW = 29.0 mm, RMNH.CRUS.D.58581; D, *Medaeops neglectus* (Balss, 1922), male, CW = 20.0 mm, RMNH.CRUS.D.58583; E, *Macromedaeus quinquedentatus* (Krauss, 1843), male, CW = 21.0 mm, RMNH.CRUS.D.58599; F, *Atergatis ocyroe* (Herbst, 1801), female, CW = 47.0 mm, RMNH.CRUS.D.58609.

Remarks. The examined specimens agree with the concise description in Strahl (1861), and the extensive description and images given in Guinot-Dumortier (1960). The specimens also match with the comparative material, although they are larger than the comparative specimens. The size given in Serène (1984) matches with the examined specimens.

Distribution. South Africa (Stebbing 1924), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Mayotte (Guinot-Dumortier 1960; Poupin 2010), Madagascar (Balss 1934; Guinot-Dumortier 1960; Hoffmann 1874; Serène 1984), Mauritius (Bouvier 1915; Guinot-Dumortier 1960; Rathbun 1911), Tanzania (Ortmann 1894), Kenya (Serène 1984), Somalia (Galil & Vannini 1990; Vannini 1982) and Red Sea (Guinot-Dumortier 1960; Heller 1861a, b; Klunzinger 1913; Kossmann 1877; Laurie 1915; H. Milne-Edwards 1834; Nobili 1906a).

58. *Medaeops neglectus* (Balss, 1922)*

(Fig. 9D)

Xantho distinguendus.—Heller 1861a: 323.—Alcock 1898: 113 (in part).—Laurie 1906: 401.—Nobili 1906a: 239.—Klunzinger 1913: 200, pl. 3 fig. 1 (in part). [Not *Xantho distinguendus* De Haan, 1835].

Medaeus distinguendus.—Henderson 1893: 359. [Not *Xantho distinguendus* De Haan, 1835].

Xantho neglectus Balss, 1922a: 6.—Chopra & Das 1937: 397.

Medaeus granulosus.—Barnard 1950: 219, figs. 41A, 42A, B.—Jones 1986: 161, pl. 48.—Hogarth 1989: 106 (list). [Not *Medaeops granulosus* (Haswell, 1882)].

Medaeops neglectus.—Guinot 1967b: 367, figs. 21, 31, 41.—Serène 1968: 76; 1984: 91, fig. 52, pl. 12B.—Hogarth 1989: 106 (list); 1994: 98.—Ng & McLay 2007: 43.—Ng *et al.* 2008: 199 (list).—Mendoza *et al.* 2009: 44, figs. 2D, E.—Naderloo & Türkay 2012: 44.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016c: 474 (list).—Naderloo 2017: 260, figs. 21.20G, 21.35, 21.36.—Bento & Paula 2018: 42 (list).—Trivedi *et al*. 2018: 81 (list).

Medaeops granulosus.—Guinot 1967b: 366, fig. 40.—Kensley 1981: 44.—Apel 2001: 87. [Not *Medaeops granulosus* (Haswell, 1882)].

Material examined. RMNH.CRUS.D.58583, 1 male (20.0 × 14.0 mm), in front of Barreira Vermelha, 2 m depth, fcn. X4368, 16 May 1987, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58584, 1 ovigerous female (20.0 × 13.0 mm), littoral between hotel and Barreira Vermelha, fcn. X4147, 16 November 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58585, 1 female (17.0 × 11.0 mm), tidal flat off Barreira Vermelha, fcn. X3902, 15 May 1983, leg. J.H.C. Walenkamp.

Remarks. Specimens agree with concise description and figures of *Medaeops neglectus* in Guinot (1967b: figs. 21, 31, 41), Serène (1984: fig. 52, pl. 12B) and those in Naderloo (2017: figs. 21.20G, 21.35, 21.36). This species is also mentioned in Mendoza *et al.* (2009), in comparison with other members of *Medaeops* Guinot, 1967. Our specimens generally match the figures in Mendoza *et al.* (2009), especially regarding the carapace. The chelipeds of our specimens, however, have a more eroded surface on the palm, with distinct cavities.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Madagascar (Serène 1984), Kenya (Mendonza *et al.* 2009; Serène 1984), Red Sea (Heller 1861a; Klunzinger 1913; Nobili 1906a), Gulf of Oman (Hogarth 1989, 1994; Naderloo 2017), Persian Gulf (Alcock 1898; Apel 2001; Jones 1986; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013), Pakistan (Alcock 1898), India (Trivedi *et al.* 2018), Gulf of Mannar (Laurie 1906), Myanmar (Alcock 1898; Chopra & Das 1937; Henderson 1893), China (Alcock 1898) and Japan (Balss 1922a). Newly recorded from Mozambique.

Subfamily Liomerinae Sakai, 1976

59. *Liomera bella* (Dana, 1852)

Actaeodes bellus Dana, 1852a: 78; 1852b: 196, pl. 11 fig. 2.

Acteodes bellus.—Stimpson 1858: 32; 1907: 43.

Carpiloxanthus vaillantianus A. Milne-Edwards, 1862: 3.—Hoffmann 1874: 38.

Carpiloxanthus rugipes.—Heller 1865: 17. [Not *Actaea rugipes* Heller, 1861].

Carpilodes vaillantianus.—A. Milne-Edwards 1865b: 231, pl. 11, fig. 3.—Paulson 1875: 24.—Haswell 1882: 57.—Ortmann

1894: 51.—Nobili 1899: 256; 1906a: 220; 1907: 387.—Borradaile 1900: 585; 1902b: 260.—Lenz 1905: 348; 1910: 545.—Rathbun 1906: 843.—Klunzinger 1913: 140.—Bouvier 1915: 293.—Michel 1964: 23.

Actaea bella.—Targioni Tozzetti 1877: 33 (list).—Nobili 1906a: 251.

Carpilodes rugatus.—Richters 1880: 146.—Miers 1884b: 529.—Alcock 1898: 84.—Rathbun 1907: 37.—Laurie 1915: 412 (list), 443. [Not *Zozymus rugatus* H. Milne-Edwards, 1834].

Carpilodes bellus.—Miers 1886: 134.—Cano 1889a: 88.—Odhner 1925: 16, pl. 1 fig. 9.—Sakai 1939: 476.—Ward 1939: 4.—Tweedie 1950: 112.—Holthuis 1953: 12.—Estampador 1959: 76.—Sankarankutty 1961: 127.—Edmondson 1962: 249, fig. 8F.

Liomera bella.—Montgomery 1931: 434.—Forest & Guinot 1961: 38, figs. 26A, B.—Guinot 1964: 10; 1967a: 265 (list).—Serène 1968: 72 (list).—Sakai 1976: 394, fig. 210.—Chen & Lan 1978: 261, pl. 7, fig. 27.—Kensley 1981: 44 (list).—Garth *et al.* 1987: 244 (list).—Dai & Yang 1991: 269, fig. 144(2), pl. 33(6).—Bakus 1994: 171 (list).—Poupin 1996: 38; 2010: 50 (list).—Ng *et al.* 2001: 28 (list); 2017: 91 (list).—Ng & Davie 2002: 375 (list).—Paulay *et al.* 2003: 49 (list).—Venkataraman *et al*. 2004: 309 (list).—Naiyanetr 2007: 104 (list).—Dev Roy 2008: 99.—Ng *et al.* 2008: 200 (list).—Castro 2011: 97.—Orchard 2012: 279.—Emmerson 2016c: 474 (list).—Bento & Paula 2018: 42 (list).—Trivedi *et al*. 2018: 80 (list).—Muñoz *et al.* 2021: 56 (list).

Liomera bellus.—MacNae & Kalk 1958: 82 (key).

Liomera (*Liomera*) *bella.*—Serène 1984: 60, fig. 21, pl. 5E.—Galil & Vannini 1990: 28.

Material examined. RMNH.CRUS.D.58586, 1 male (11.0 × 6.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4073, 3 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.34845, 1 male (7.0 × 5.0 mm), Maluku, Misool Group, Waaf, Indonesia, 5 October 1929, collected during Snellius Expedition 1929–1930.

Remarks. The original descriptions by Dana (1852a, b) were concise, but the information and given figure are sufficient for identification of the specimen as *Liomera bella*. The specimen also matches the description and drawing provided by Barnard (1950) for *Liomera bellus,* and the figure and plate in Serène (1984). The examined specimen matches with comparative material from Indonesia, but no comparative material closer to Mozambique was available to examine.

Distribution. South Africa (Emmerson 2016c; Kensley 1981; Odhner 1925), Mozambique (Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021; Odhner 1925), Europa Island (Lenz 1910; Odhner 1925), Mayotte (Poupin 2010), Madagascar (Serène 1984), Glorioso Islands (Serène 1984), La Réunion (Hoffmann 1874; A. Milne-Edwards 1862; Poupin 2010), Mauritius (Bouvier 1915; Michel 1964; Odhner 1925; Richters 1880), Seychelles (Guinot 1964; Miers 1884b; Odhner 1925; Serène 1984), Tanzania (Lenz 1905; Odhner 1925; Ortmann 1894), Somalia (Galil & Vannini 1990), Red Sea (Klunzinger 1913; Laurie 1915; Nobili 1906a; Paulson 1875), Diego Garcia (Odhner 1925), India (Alcock 1898; Bakus 1994; Dev Roy 2008; Sankarankutty 1961; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Maledives (Borradaile 1902b; Odhner 1925), Sri Lanka (Odhner 1925), Nicobar Islands (Odhner 1925), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Christmas Island (Orchard 2012), Indonesia (Odhner 1925; Ortmann 1894), China (Chen & Lan 1978; Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959; Miers 1886; Odhner 1925), Japan (Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Haswell 1882; Montgomery 1931; Nobili 1899), Micronesia (Holthuis 1953), Marshall Islands (Garth *et al.* 1987), Gilbert Islands (Holthuis 1953), Fiji (Borradaile 1900), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906), Tahiti (Heller 1865; Rathbun 1907), Tahiti (Forest & Guinot 1961), Tuvalu (Rathbun 1907), Wallis and Futuna (Poupin 2010), Samoa (Dana 1852a, b; Ward 1939), Polynesia (Nobili 1907) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

Subfamily Polydectinae Dana, 1851

60. *Lybia leptochelis* (Zehntner, 1894)

Ceratoplax leptochelis Zehntner, 1894: 174, pl. 7, figs. 9A, B.—Tesch 1918: 202.

Lybia leptochelis.—Barnard 1947: 364; 1950: 251, figs. 46C–E.—MacNae & Kalk 1958: 82 (key).—Guinot 1967a: 274 (list); 1976: 71, figs. 16C, 21E, 21F, 22C, pl. 2 fig. 2.—Serène 1968: 88 (list); 1984: 29, fig. 4, pl. 1F.—Kensley 1981: 44 (list).—Ng *et al.* 2008: 201 (list).—Mendoza & Ng 2011: 52, fig. 1A.—Emmerson 2016c: 475 (list).—Bento & Paula 2018: 42 (list).—Muñoz *et al.* 2021: 56 (list).

Material examined. RMNH.CRUS.D.58587, 1 female (4.0 × 4.0 mm), littoral, Barreira Vermelha, under the top rocks, fcn. X4192, 8 January 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58588, 1 male (6.0 × 5.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4066, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58589, 1 male (4.0 × 4.0 mm), 1 female (7.0 × 6.0 mm), intertidal in front of Barreira Vermelha, fcn. X4227, 17 October 1986, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.51828, 1 female (8.0 × 7.0 mm), South of Eilat, Tur-Yam beach, Israel, 1 m depth, February 2012, leg. Y. Schnytzer.

Remarks. The examined specimens agree well with the original description and drawings given by Zehntner (1894) and Guinot (1976), as well as with the short description given in the key in Serène (1984). There are three members of the genus *Lybia* H. Milne-Edwards, 1834 reported in African waters, *L. leptochelis* is distinguished from its congeners in the area by the scattered tufts of setae on its carapace and legs (Emmerson 2016c). The examined specimens held two sea anemones in their chelae.

Distribution. South Africa (Barnard 1950), Mozambique (Barnard 1947; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Indonesia (Guinot 1976; Zehntner 1894) and Philippines (Mendoza & Ng 2011).

Subfamily Xanthinae MacLeay, 1838

61. *Leptodius exaratus* (H. Milne-Edwards, 1834)

Cancer inaequalis.—Savigny 1809: pl. 5 fig. 7.—Audouin 1826: 86. [Not *Cancer inaequalis* Olivier, 1791].
Chlorodius exaratus H. Milne-Edwards, 1834: 402.
Leptodius exaratus.—A. Milne-Edwards 1868: 71.—Richters 1880: 148.—Henderson 1893: 362.—Rathbun 1911: 215.—Nobili 1906a: 240; 1906b: 121.—Klunzinger 1913: 209, pl. 3 fig. 6, pl. 5 fig. 16.—Bouvier 1915: 284.—Calman 1927: 213.—Chhapgar 1957: 29, pl. 8O–Q.—Forest & Guinot 1961: 66, fig. 54.—Guinot 1964: 25; 1967a: 265 (list).—Serène 1968: 75 (list); 1984: 183, fig. 106, pl. 26A.—Kensley 1981: 44 (list).—Titgen 1982: 131.—Hogarth 1989: 106 (list), 113 (list), 114 (list); 1994: 96.—Galil & Vannini 1990: 40.—Apel 2001: 86.—Simões *et al.* 2001: 85 (list).—Clark & Paula 2003: 343, figs. 21–24.—Dev Roy 2008: 103.—Ng *et al.* 2008: 203 (list).—Hosseini 2009: 39 (table), fig. 2.—Naderloo & Türkay 2012: 44.—Lee *et al.* 2013: 190, figs. 2, 4A–D.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016c: 475 (list).—Naderloo 2017: 253, figs. 21.20E, 21.23, 21.26, 21.27.—Bento & Paula 2018: 42 (list).—Trivedi *et al*. 2018: 80 (list).—Muñoz *et al.* 2021: 56 (list).—Pati *et al.* 2022: 542.—Amer *et al*. 2023: 275, fig. 1.
Actaeodes lividus Paulson, 1875: 26, pl. 5 fig. 2B.
Chlorodius (*Leptodius*) *exaratus.*—Kossmann 1877: 32.—Hilgendorf 1879: 790.
Xantho exaratus var. *typica* Ortmann, 1893: 445 (in part).
Xantho (*Leptodius*) *exaratus.*—Alcock 1898: 118 (in part).—Stephensen 1946: 149, fig. 37C.—Jones 1986: 162, pl. 47.
Xantho hydrophilus.—Laurie 1915: 444, pl. 43, fig. 1. [Not *Cancer hydrophilus* Herbst, 1790].
Xantho exaratus.—Monod 1938: 125, fig. 17B.—Vatova 1943: 19.—MacNae & Kalk 1958: fig. 16E.
Xantho (*Leptodius*) *hydrophilus.*—Barnard 1950: 223, figs. 41C, 42C–E. [Not *Cancer hydrophilus* Herbst, 1790].
Xantho exarata.—MacNae & Kalk 1958: 69.
Leptodius (*Xantho*) *exaratus.*—Hornby 1997: 15.

Material examined. RMNH.CRUS.D.58590, 1 male (19.0 × 13.0 mm with rhizocephalan parasite), tidal flat in front of Barreira Vermelha, fcn. X4047, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58591, 2 males (23.0 × 14.0 mm, 17.0 × 12.0 mm), Ponta Punduini, fcn. X3926, 27 June 1982, leg. J. Baptista; RMNH.CRUS.D.58592, 2 males (22.0 × 14.0 mm, 19.0 × 13.0 mm), in front of Marine Biology Station (EBM), fcn. X3923, 1 August 1982, leg. Feliciano Micanto; RMNH.CRUS.D.58593, 3 males (41.0 × 14.0 mm, 21.0 × 14.0 mm with rhizocephalan parasite, 21.0 × 14.0 mm), 1 female (22.0 × 15.0 mm with rhizocephalan parasite) in front of Marine Biology Station (EBM), fcn. X4100, 8 January 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58594, 1 male (14.0 × 10.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4084, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58595, 1 male (17.0 × 11.0 mm), Ponta Punduini, fcn. X3969, 27 June 1982, leg. J. Baptista; RMNH.CRUS.D.58596, 2 males (19.0 × 13.0 mm, 18.0 × 12.0 mm), 2 females (14.0 × 9.0 mm, 13.0 × 9.0 mm), littoral in between Ponta Rasa and Ponta Punduini, fcn. X4153, 4 January 1986, leg. Nelson Cugmbe; RMNH.CRUS.D.58597, 2 males (22.0 × 13.0 mm, 21.0 × 13.0 mm), between Ponta Rasa and Marine Biology Station (EBM), 1 m depth, fcn. X4105, 21 January 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58598, 1 male (25.0 × 15.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4176, 2 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.45583, 1 male (16.0 × 10.0 mm), Bushehr City, Coast of Persian Gulf, Iran, intertidal zone, sandy beach with dead coral, December 1993–January 1994, leg. et don. S.D.H. Husseini.

Remarks. The examined specimens agree with the original description given for *Chlorodius exaratus* H. Milne-Edwards, 1834 regarding the shape of the carapace. *Leptodius exaratus* is widely reported from the Indo-West Pacific, but the taxonomy is complex, with several untreated synonyms (Lee *et al.* 2013). Re-examination of specimens by Lee *et al.* (2013) showed that *L. exaratus* was restricted to the western Indian Ocean and that populations from the Indian and Western Pacific Ocean are in fact *L. affinis* (De Haan, 1835). The main difference between *L. exaratus* and *L. affinis* can be seen in the morphology of the first male gonopod, which is shorter and more tightly curled on *L. exaratus* (Lee *et al.* 2013). This can also be seen on the examined material from Mozambique and reference specimen RMNH.CRUS.D.45585 from the Persian Gulf. Three of the specimens were visibly parasitized by rhizocephalans, while no other examined specimen of any other genus was visibly infected. Al-Wazzan *et al.* (2021) reported high infection rates in *L. exaratus* from the Persian Gulf by *Parasacculina leptodiae* (Guérin-Ganivet, 1911). The rhizocephalans on the specimens from Mozambique were not identified, but this crab species seems to be no stranger to rhizocephalan infections.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (A. Milne-Edwards 1868; Serène 1984), Djibouti (Guinot 1964), Mauritius (Bouvier 1915; Rathbun 1911; Richters 1880), Seychelles (Forest & Guinot 1961; Guinot 1964; Rathbun 1911; Richters 1880), Somalia (Galil & Vannini 1990; Vatova 1943), Red Sea (Amer *et al.* 2023; Audouin 1826; Calman 1927; Guinot 1964; Klunzinger 1913; Kossmann 1877; Laurie 1915; Monod 1938; Nobili 1906a; Ortmann 1893; Paulson 1875; Savigny 1809), Yemen (Simões *et al.* 2001), Gulf of Oman (Hogarth 1989, 1994; Naderloo 2017), Persian Gulf (Apel 2001; Hornby 1997; Hosseini 2009; Jones 1986; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946; Titgen 1982), Pakistan (Lee *et al.* 2013) and India (Alcock 1898; Chhapgar 1957; Dev Roy 2008; Henderson 1893; H. Milne-Edwards 1834; Pati *et al.* 2022; Trivedi *et al.* 2018).

62. *Macromedaeus quinquedentatus* (Krauss, 1843)

(Fig. 9E)

Xantho (*Xantho*) *5-dentatus* Krauss, 1843: 30, pl. 1 fig. 3.

Xantho quinquedentatus.—Richters 1880: 147.—Stebbing 1910: 298.—Odhner 1925: 80.—Fourmanoir 1954: 11.—Edmondson 1962: 239.—Kensley 1981: 46 (list).

Xantho (*Leptodius*) *euglyptus* Alcock, 1898: 121.

Leptodius quinquedentatus.—Lenz 1910: 547.—Guinot 1967a: 265 (list).

Leptodius euglyptus.—Laurie 1915: 413 (list).

Xantho (*Leptodius*) *quinquedentatus*.—Barnard 1950: 225, figs. 41B, 42F, G.

Macromedaeus quinquedentatus.—Guinot 1968: 708.—Serène 1968: 75 (list); 1984: 179, fig. 104, pls. 25D, E.—Kensley 1970: 104 (list).—Hogarth 1989: 106 (list); 1994: 97.—Galil & Vannini 1990: 40.—Apel 2001: 87.—Dev Roy 2008: 106.—Ng *et al.* 2008: 203 (list).—Castro 2011: 104.—Emmerson 2016c: 475 (list).—Naderloo 2017: 258, figs. 21.30, 21.32.—Bento & Paula 2018: 42 (list).—Trivedi *et al*. 2018: 81 (list).—Maenosono 2021b: 4, figs. 1B, 1C, 3, 8B.—Yuan *et al.* 2022: 19, fig. 11.

Material examined. RMNH.CRUS.D.58599, 1 male (21.0 × 13.0 mm), Cabo da Inhaca, "direction southeast, altitude 0.8 m, angle horizontal, distance to coast 32.3 m", zone 1, fcn. X3990, 11 August 1983, collector unknown.

Remarks. The original description for *Macromedaeus quinquedentatus* in Krauss (1843) is concise, but the specimen matches with the description and drawing given. The specimen matches well with the description and drawing given in Serène (1984) and Barnard (1950). The species was not listed in the recent checklist of Mozambican waters by Muñoz *et al* (2021), but Kensley (1970) has reported it from Mozambique, and it has been reported from waters nearby.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1910), Mozambique (Kensley 1970), Madagascar (Fourmanoir 1954; Lenz 1910; Serène 1984), Somalia (Galil & Vannini 1990), Red Sea (Laurie 1915), Gulf of Oman (Apel 2001; Hogarth 1989, 1994; Naderloo 2017), India (Alcock 1898; Dev Roy 2008; Trivedi *et al.* 2018), China (Yuan *et al.* 2022), Japan (Maenosono 2021b) and Hawai'i (Castro 2011; Edmondson 1962).

63. *Macromedaeus voeltzkowii* (Lenz, 1905)

Leptodius voeltzkowii Lenz, 1905: 353, pl. 47, fig. 6A.—Guinot 1967a: 265 (list).—Kensley 1981: 44 (list).
Xantho (*Leptodius*) *voeltzkowi.*—Balss 1934: 507.
Xantho voeltkowi.—Monod 1938: 125, figs. 16, 17C–E.—MacNae & Kalk 1958: 82 (key).
Xantho (*Leptodius*) *voeltzkowii.*—Barnard 1950: 226, figs. 41D, 42H.
Macromedaeus voeltzkowi.—Guinot 1968: 708.—Serène 1968: 75 (list); 1984: 178, fig. 102, pl. 25F.—Galil & Vannini 1990: 40.—Ng *et al.* 2008: 203 (list).—Poupin 2010: 52 (list).—Naderloo & Türkay 2012: 44.—Emmerson 2016c: 475 (list).—Naderloo 2017: 259, figs. 21.20F, 21.30, 21.33.—Bento & Paula 2018: 42 (list).—Mendoza 2021: 469.—Muñoz *et al.* 2021: 56 (list).—Trivedi *et al.* 2021: 236, fig. 2.

Material examined. RMNH.CRUS.D.58600, 1 male (5.0 × 4.0 mm), tidal flat off Barreira Vermelha, zone 1, fcn. X3949, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58601, 1 male (11.0 × 7.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4046, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58602, 1 male (7.0 × 4.5 mm), tidal flat off Barreira Vermelha, fcn. X4365, 14 January 1987, leg. Albertina Alage.

Remarks. The specimen agrees with the size indication and drawing of the cheliped in Lenz (1905), and with description given in Barnard (1950). Two species of *Macromedaeus* have been recorded in East and South African waters, *M. voeltzkowii* (Lenz, 1905) and *M. quinquedentatus* (Krauss, 1843). The species can be distinguished by looking at the number of anterolateral teeth on the carapace, *M. voeltzkowii* has four, while *M. quinquedentatus* has five (Serène 1984).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Balss 1934; Poupin 2010), Madagascar (Balss 1934; Serène 1984), Tanzania (Lenz 1905), Somalia (Galil & Vannini 1990), Red Sea (Monod 1938), Gulf of Oman (Naderloo 2017), Persian Gulf (Naderloo 2017; Naderloo & Türkay 2012) and India (Trivedi *et al.* 2021). There is one record of *M. voeltzkowii* in France (De Man 1913; Goulletquer *et al.* 2002), but it was likely a hitchhiker on the hull of a ship from Madagascar, and another hasn't been recorded ever since (pers. comm. with Dr. Pierre Noël).

64. *Xanthias lamarckii* (H. Milne-Edwards, 1834)

Xantho lamarckii H. Milne-Edwards, 1834: 391.—A. Milne-Edwards 1862: 4.—Heller 1865: 10.—Estampador 1959: 80.
Xantho cultrimanus White, 1847: 17 (nomen nudum).
Xantho cultrimanus White, 1848: 225.
Xantho (*Xanthodes*) *granoso-manus* Dana, 1852a: 75.
Xantho granoso-manus.—Heller 1868: 11.
Xanthodes lamarckii.—A. Milne-Edwards 1873: 200, pl. 7, fig. 3.—Hilgendorf 1879: 789.—Miers 1884b: 517 (list).—De Man 1892: 278; 1895: 513.—Alcock & Anderson 1894: 200 (list).—Whitelegge 1897: 130.—Alcock 1898: 157.—Calman 1900: 11.—Lenz 1905: 350; 1910: 547.—Grant & McCulloch 1906: 12.—Rathbun 1906: 854.
Xanthias lamarcki.—Borradaile 1900: 582; 1902b: 251.—Ortmann 1893: 448.—Nobili 1907: 393.—Boone 1934: 131, pl. 70.—Balss 1935: 134; 1938: 50.—Holthuis 1953: 26.—Forest & Guinot 1961: 70, figs. 63, 66A, B.—Michel 1964: 31.—Derijard 1966: 167.—Guinot 1967a: 269 (list).—Serène 1968: 76 (list); 1984: 195, fig. 112, pl. 27B.—Sakai 1976: 427, pl. 154 fig. 1.—Garth *et al.* 1987: 246 (list).—Galil & Vannini 1990: 42.—Bakus 1994: 172 (list).—Poupin 1996: 50.—Ng *et al.* 2001: 26 (list); 2017: 94 (list).—Davie 2002: 555.—Ng & Davie 2002: 374 (list).—Paulay *et al.* 2003: 51 (list).—Poore 2004: 474.—Naiyanetr 2007: 106 (list).—Ng & Richer de Forges 2007: 331 (list).—Dev Roy 2008: 106.—Orchard 2012: 274.
Xanthias lamarckii.—Rathbun 1907: 44; 1911: 223.—Edmondson 1923: 16; 1962: 243, fig. 7C.—Sendler 1923: 37.—McNeill 1926: 313; 1968: 57.—Sakai 1939: 466.—Barnard 1950: 242, figs. 44G, 44H.—Kensley 1981: 45 (list).—Dai & Yang 1991: 297, fig. 156A(2), pl. 38(1).—Ng *et al.* 2008: 204 (list).—Poupin 2010: 76 (list).—Castro 2011: 106.—Corsini-Foka *et al.* 2013: 295, fig. 1.—Emmerson 2016c: 140, 475 (list).—Bento & Paula 2018: 43 (list).—Trivedi *et al*. 2018: 83 (list).—Suvarna Devi *et al.* 2019: 489.—Muñoz *et al.* 2021: 56 (list).—Poore & Ahyong 2023: 780, fig. 14.166F.
Xanthodes Lamarcki.—Bouvier 1915: 273.
Xanthia lamarckii.—Bakus 1994: 188 (list).—Venkataraman *et al*. 2004: 310 (list).

Material examined. RMNH.CRUS.D.58603, 1 male (9.0 × 7.0 mm), littoral in front of Barreira Vermelha, fcn. X4071, 25 September 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.4681, 1 male (8.0 × 6.0 mm), Sissie, Misool Group, Indonesia, beach

and reef, 6 December 1926, collected during Snellius Expedition 1929–1930; RMNH.CRUS.D.4682, 1 male (9.0 × 8.0 mm), Atapoepoe, Timor, Indonesia, 19 November 1929, collected during Snellius Expedition 1929–1930.

Remarks. The specimen matches well with the description and drawing given in Barnard (1950) and figure in Serène (1984). The specimen also matches with the extensive description in Emmerson (2016c). Three species in *Xanthias* Rathbun, 1897 have been recorded from African waters: *X. lamarckii, X. punctatus* (H. Milne-Edwards, 1834) and *X. maculatus* Sakai, 1961 (Emmerson 2016c; Muñoz *et al.* 2021). The studied specimen bears three longitudinal furrows on the external face of the cheliped palm, which is characteristic for *X. lamarckii* (Serène 1984).

Distribution. South Africa (Emmerson 2016c), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Europa Island (Derijard 1966; Serène 1984), Mayotte (Poupin 2010), The Comoros (Serène 1984), Madagascar (Lenz 1910; Serène 1984), La Réunion (A. Milne-Edwards 1862; Poupin 2010), Mauritius (Bouvier 1915; Michel 1964; H. Milne-Edwards 1834; White 1848), Seychelles (Miers 1884b; Rathbun 1911), Tanzania (Lenz 1905), Somalia (Galil & Vannini 1990), Mediterranean Sea (Corsini-Foka *et al.* 2013), Egmont Islands (Rathbun 1911), India (Alcock 1898; Alcock & Anderson 1894; Bakus 1994; Dev Roy 2008; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Maledives (Borradaile 1902b), Nicobar Islands (Bakus 1994; Heller 1865), Christmas Island (Orchard 2012), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1892, 1895), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Grant & McCulloch 1906; McNeill 1926, 1968; Poore 2004), Torres Strait (Calman 1900), Papua New Guinea (Ortmann 1893), Melanesia (Rathbun 1911), Micronesia (Holthuis 1953; Sendler 1923), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Balss 1939; Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938; Borradaile 1900), Hawai'i (Castro 2011; Edmondson 1962; Rathbun 1906), Tahiti (Dana 1852a; Forest & Guinot 1961; Rathbun 1907), Tuvalu (Borradaile 1900; Whitelegge 1897), Wallis & Futuna (Poupin 2010), Samoa (Dana 1852a; Ortmann 1893), Line Islands (Edmondson 1923), Polynesia (Nobili 1907) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

Subfamily Zosiminae Alcock, 1898

65. *Atergatis ocyroe* (Herbst, 1801)

(Fig. 9F)

Cancer ocyroe Herbst, 1801: 20, pl. 54 fig. 2.
Atergatis compressipes MacLeay, 1838: 59.
Cancer (*Atergatis*) *floridus*.—Krauss 1843: 27. [Not *Cancer floridus* Linnaeus, 1767].
Atergatis floridus.—Targioni Tozzetti 1877: 24 (in part).—Lenz 1910: 546.—Barnard 1950: 207, figs. 38C, D.—MacNae & Kalk 1958: 82 (key).—Guinot 1967a: 261 (list).—Kensley 1981: 43 (list).—Serène 1984: 148, fig. 87, pl. 21D.—Galil & Vannini 1990: 38.—Dev Roy 2008: 107 (in part).
Atergatis ocyroe.—Stebbing 1910: 296.—Ng & Davie 2007: 172, figs. 1, 2D–H, 3B, 4B, 4D.—Ng *et al.* 2008: 205 (list).—Emmerson 2016c: 143, 475 (list).—Naderloo 2017: 236, figs. 21.4, 21.9, 21.10A.—Bento & Paula 2018: 43 (list).—Trivedi *et al*. 2018: 77 (list).—Meher & Thiruchitrambalam 2020: 488, figs. 2, 3.—Muñoz *et al.* 2021: 56 (list).

Material examined. RMNH.CRUS.D.58604, 1 male (24.0 × 16.0 mm), 1 female (44.0 × 32.0 mm), littoral in front of Barreira Vermelha, fcn. X4057, 13 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58605, 1 male (47.0 × 32.0 mm), littoral in front of Barreira Vermelha, fcn. X4186, 18 January 1986, leg. O. Gove; RMNH.CRUS.D.58606, 1 male (33.0 × 22.0 mm), Barreira Vermelha, 500 m from the water, under the rocks, fcn. X4171, 8 January 1986, leg. J. Duarte; RMNH.CRUS.D.58607, 1 male (16.0 × 9.0 mm), off Barreira Vermelha, 1 m depth, fcn. unknown, 8 April 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58608, 1 male (36.0 × 24.0 mm), Barreira Vermelha, under the rocks, fcn. unknown, 8 January 1986, leg. M.L. Dai; RMNH.CRUS.D.58609, 2 females (47.0 × 32.0 mm, 38.0 × 26.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4026, 2 August 1984, leg. J.H.C. Walenkamp.

Remarks. The identification key by Serène (1984) was used to identify the specimens to *Atergatis floridus* (Linnaeus, 1767), but Ng & Davie (2007) assigned the Western Indian population to *A. ocyroe* (Herbst, 1801), and the South-East Asian and Pacific populations are now regarded as *A. floridus* sensu stricto. The examined specimens match with the figures and remarks in Ng & Davie (2007) for *A. ocyroe*.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; MacLeay 1838; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Serène 1984), Somalia (Galil & Vannini 1990), India (Dev Roy 2008; Meher & Thiruchitrambalam 2020; Trivedi *et al.* 2018), Sri Lanka (Lenz 1910), Gulf of Oman (Naderloo 2017) and Thailand (Ng & Davie 2007).

66. *Zozymodes xanthoides* (Krauss, 1843)

Cancer (*Pilumnus*) *xanthoides* Krauss, 1843: 32, pl. 1 fig. 6.
Zozymodes carinipes Heller, 1861a: 328, pl. 1 figs. 16–18; 1861b: 8.—Nobili 1906a: 236.—Laurie 1915: 413 (list).
Pilumnus xanthoides.—Stebbing 1910: 301.
Zozymodes xanthoides.—Klunzinger 1913: 167.—Monod 1938: 124, fig. 15.—Stephensen 1946: 156, figs. 39C, D.—Barnard 1950: 211, figs. 39B, C; 1955: 3 (list).—MacNae & Kalk 1958: 82 (key).—Forest & Guinot 1961: 51, fig. 37.—Guinot 1967a: 269 (list).—Serène 1968: 73 (list); 1984: 153, fig. 89, pl. 19D.—Kensley 1970: 104 (list); 1981: 46 (list).—Titgen 1982: 140.—Hogarth 1994: 100.—Galil & Vannini 1990: 38.—Poupin 1996: 48; 2010: 76 (list).—Apel 2001: 91.—Simões *et al.* 2001: 85 (list).—Clark & Paula 2003: 352, figs. 25–28.—Ng *et al.* 2008: 206 (list).—Naderloo & Türkay 2012: 45.—Lasley & Ng 2013: 2, figs. 4E, 4F.—Naderloo *et al.* 2013: 5 (table).—Emmerson 2016c: 149, 475 (list).—Naderloo 2017: 276, figs. 21.46F, 21.53, 21.54.—Bento & Paula 2018: 43 (list).—Muñoz *et al.* 2021: 56 (list).

Material examined. RMNH.CRUS.D.58610, 2 males (12.0 × 9.0 mm, 10.0 × 7.0 mm), 1 female (14.0 × 9.0 mm), Cabo da Inhaca, "direction southeast, altitude 0.8 m, distance to coast 32.3 m, zone 1", fcn. X3990, 11 August 1983, collector unknown; RMNH.CRUS.D.58611, 1 female (9.0 × 6.0 mm), Cabo da Inhaca, "direction southeast, altitude 0.8 m, distance to coast 32.3 m, zone 1", fcn. X3990, 11 August 1983, collector unknown; RMNH.CRUS.D.58612, 1 male (11.0 × 7.0 mm juvenile), Cabo da Inhaca, "distance from coast 8 m, direction northwest, altitude 70 cm", fcn. unknown, date unknown, leg. Irengu Cornelio; RMNH.CRUS.D.58613, 1 male (5.0 × 3.0 mm juvenile), Cabo da Inhaca, tidal flat, fcn. 3907, 12 March 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58614, 1 female (11.0 × 6.5 mm), Cabo de Inhaca, "distance from the coast 8 m, direction northwest, altitude 70 cm", fcn. unknown, 10 August 1983, leg. Irengu Cornelio; RMNH.CRUS.D.58615, 1 male (9.0 × 6.0 mm), Cabo da Inhaca, "direction south-west, distance from coast 10.32 m", fcn. X4031, 10 August 1983, leg. Odette Cossa; RMNH.CRUS.D.58616, 1 male (6.0 × 4.0 mm), 1 female (9.0 × 6.0 mm), Cabo da Inhaca, "altitude 0.6 m, distance from coast 12 m", fcn. X4018, 11 August 1983, leg. Paula, Isabel & Alberto.

Comparative material. RMNH.CRUS.D.28587, 4 males (12.5 × 8.0 mm, 12.0 × 8.0 mm, 11.0 × 7.0 mm, 11.0 × 7.0 mm), 4 ovigerous females (12.0 × 8.0 mm, 11.0 × 8.0 mm, 10.0 × 7.0 mm, 9.0 × 6.0 mm,), 2 females (13.0 × 8.0 mm, 7.0 × 4.0 mm), Xai-Xai, Mozambique, between oysters and Balanidae, 3 October 1967, leg. G. Hartmann; RMNH.CRUS.D.28586, 2 males (10.0 × 7.0 mm, 10.0 × 7.0 mm), 2 ovigerous females (10.0 × 6.0 mm, 9.0 × 7.0 mm), 2 females (10.0 × 6.0 mm, 7.0 × 4.0 mm), Xai-Xai, Mozambique, between oysters and Balanidae, 2 October 1967, leg. G. Hartmann.

Remarks. The specimens agree well with description and size indications given in Klunzinger (1913) and with the extensive description given in Emmerson (2016c). Three species of *Zozymodes* Heller, 1860 were reported from the Indo-Pacific (Emmerson 2016c): *Z. cavipes* (Dana, 1852), *Z. pumilus* (Jacquinot, 1852) and *Z. xanthoides*. On *Z. xanthoides*, the chelipeds have the external surface of the palm setiferous, and on the supero-internal margin of the palm a thick carina is present (Serène 1984), which can also be seen on the examined specimens.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Serène 1984), Somalia (Galil & Vannini 1990), Red Sea (Heller 1861a, b; Klunzinger 1913; Laurie 1915; Monod 1938; Nobili 1906a; Serène 1984), Yemen (Simões *et al.* 2001), Gulf of Oman (Hogarth 1994; Naderloo 2017), Persian Gulf (Apel 2001; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Stephensen 1946; Titgen 1982) and French Polynesia (Poupin 1996, 2010).

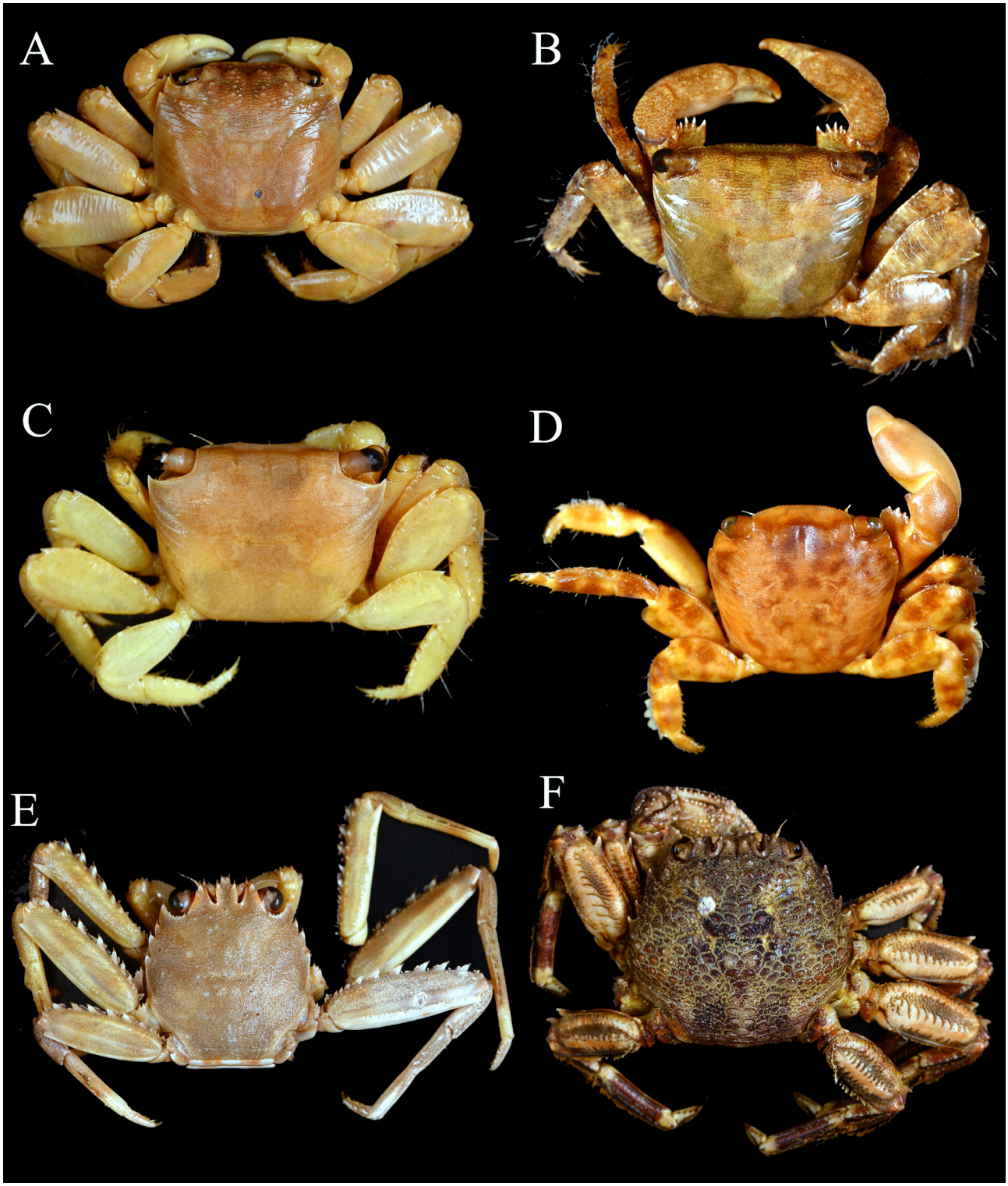

FIGURE 10. A, *Grapsus fourmanoiri* Crosnier, 1965, female, CW = 27.0 mm, RMNH.CRUS.D.58618; B, *Metopograpsus messor* (Forskål, 1775), male, CW = 19.0 mm, RMNH.CRUS.D.58626; C, *Metopograpsus cannicci* Innocenti, Schubart & Fratini, 2020, male, CW = 18.0 mm, RMNH.CRUS.D.58628; D, *Planes minutus* (Linnaeus, 1758), male, CW = 17.0 mm, RMNH.CRUS.D.58630; E, *Percnon planissimum* (Herbst, 1804), male, CW = 14.0 mm, RMNH.CRUS.D.58637; F, *Plagusia squamosa* (Herbst, 1790), male, CW = 48.0 mm, RMNH.CRUS.D.58639.

Subsection Thoracotremata Guinot, 1977

Superfamily Grapsoidea MacLeay, 1838

Family Grapsidae MacLeay, 1838

67. *Grapsus fourmanoiri* Crosnier, 1965

(Fig. 10A)

Grapsus strigosus.—Hilgendorf 1879: 808.—Kingsley 1880c: 194 (in part).—Nauck 1880: 32.—Pfeffer 1889: 30.—Stebbing 1908: 13; 1910: 317.—Balss 1922c: 147 (in part).—Chace 1942: 201.—Vatova 1943: 26, pl. 2 fig. 3.—Barnard 1950: 115, fig. 22E.—Dawydoff 1952: 142.—MacNae & Kalk 1958: 69, fig. 16B. [Not *Grapsus strigosus* (Herbst, 1799)].

Grapsus intermedius.—Lenz 1910: 559. [Not *Grapsus intermedius* De Man, 1888].

Grapsus fourmanoiri Crosnier, 1965: 12, figs. 4–6, pl. 3 fig. 1.—Derijard 1966: 174.—Serène 1968: 102 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 46 (list).—Ng *et al.* 2008: 216 (list).—Poupin 2010: 47 (list).—Emmerson 2016c: 180, 476 (list).—Bento & Paula 2018: 43 (list).—Ng *et al.* 2019: 104, fig. 3E.—Muñoz *et al.* 2021: 56 (list).

Grapsus tourmanoiri.—Kensley 1970: 104 (list).

Material examined. RMNH.CRUS.D.58617, 2 males (33.0 × 31.0 mm, 30.0 × 26.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4028, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58618, 1 female (27.0 × 25.0 mm), Cabo da Inhaca, "direction east, altitude 20 cm, distance from coast 2.85 m, zone 7", fcn. X3915, 10 August 1983, collector unknown; RMNH.CRUS.D.58619, 1 male (9.0 × 7.0 mm juvenile), 2 females (29.0 × 26.0 mm, 28.0 × 24.0 mm), Cabo da Inhaca, fcn. X3930, 2 August 1982, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.27222, 2 males (25.5 × 23.5 mm, 14.5 × 11.5 mm), 1 ovigerous female (22.0 × 18.5 mm), 2 females (27.5 × 22.5 mm, 20.0 × 17.5 mm), Bamburi Beach, 7 miles North of Mombasa, Kenya, 0–1 m, 19–26 November 1969, leg. L.B. Holthuis; RMNH.CRUS.D.22683, 1 male (26.0 × 23.0 mm) syntype, Nosy Bé, Madagascar, date unknown, leg. A. Crosnier; RMNH.CRUS.D.32151, 1 male (22.5 × 19.5 mm), Sar Vanle, 20 km south of Chisimaio, Somalia, September 1971, leg. M. Vannini; RMNH.CRUS.D.29908, 4 males (22.5 × 21.0 mm, 19.0 × 16.5 mm, 15.5 × 14.5 mm, 11.0 × 9.0 mm), 2 ovigerous females (27.0 × 23.0 mm, 20.0 × 17.0 mm), Natal [= KwaZulu-Natal], Mission Rocks, north of St. Lucia Estuary, South Africa, 2 December 1974, leg. L.B. Holthuis.

Remarks. Two species of *Grapsus* Lamarck, 1801 were recorded from Mozambican waters, *G. fourmanoiri* and *G. tenuicrustatus* (Herbst, 1783) (Muñoz *et al*. 2021). According to Crosnier (1965), the difference between the two *Grapsus* can be seen on the front of the carapace. On *G. fourmanoiri*, the width/height ratio of the front is close to 4, measured at the anterior edge and the median of the frontal lobe. On *G. tenuicrustatus*, this ratio is close to 2. The examined specimen matches with the description by Crosnier (1965) and the comparative material, of which one is the syntype collected by A. Crosnier.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Kingsley 1880c; Stebbing 1908, 1910), Mozambique (Balss 1922c; Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Crosnier 1965; Poupin 2010), The Comoros (Crosnier 1965), Madagascar (Crosnier 1965), La Réunion (Poupin 2010), Tanzania (Chace 1942; Hartnoll 1975; Pfeffer 1889), Kenya (Lenz 1910) and Somalia (Vatova 1943).

68. *Metopograpsus messor* (Forskål, 1775)

(Fig. 10B)

Cancer messor Forskål, 1775: 88.

Grapsus Gaimardi Audouin, 1826: 82, pl. 2 fig. 3.

Metopograpsus messor.—H. Milne-Edwards 1853: 165.—Heller 1861a: 362; 1861b: 18 (list); 1865: 44.—Paulson 1875: 68.—Kossmann 1877: 57.—Hilgendorf 1879: 808.—Kingsley 1880c: 190.—Richters 1880: 156.—Lenz & Richters 1881: 425.—Miers 1884a: 184 (list), 245.—De Man 1887: 144, pl. 9 fig. 11.—Cano 1889a: 92.—Henderson 1893: 390.—Alcock & Anderson 1894: 202 (list).—Ortmann 1894: 55.—Whitelegge 1897: 139.—Nobili 1899: 265; 1906a: 320; 1906b: 155; 1907: 405.—Calman 1900: 24; 1927: 215.—Schenkel 1902: 577.—Lenz 1905: 369.—Grant & McCulloch 1906: 23.—Rathbun 1906: 839; 1907: 29.—Stebbing 1910: 319.—Bouvier 1915: 304.—Laurie 1915: 416 (list), 472.—Balss 1922c:

147; 1935: 141; 1938: 77.—Edmondson 1923: 10.—Sakai 1936a: 172; 1939: 654, pl. 107 fig. 3; 1976: 633, pl. 216 fig. 2.—Monod 1938: 151.—Ward 1942: 105.—Stephensen 1946: 195, figs. 59E–G.—Barnard 1950: 118, figs. 22A, 23E, 24C.—Fourmanoir 1954: 5.—Holthuis 1956: 327; 1977: 152.—Chhapgar 1957: 54, pl. 15, figs. N–Q.—Estampador 1959: 92.—Banerjee 1960: 174, figs. 4H, I, 5C.—Crosnier 1965: 23, figs. 19, 26.—Guinot 1967a: 285 (list).—Serène 1968: 102 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 47 (list).—Titgen 1982: 144.—Jones 1986: 160, pl. 47.—Hogarth 1989: 104 (list), 114 (list).—Al-Ghais & Cooper 1996: 411, fig. 2.—Poupin 1996: 67; 2010: 54 (list).—Cooper 1997: 165.—Hornby 1997: 14.—Apel 2001: 118.—Ng *et al.* 2001: 40 (list).—Simões *et al.* 2001: 85 (list).—Naiyanetr 2007: 110 (list).—Dev Roy 2008: 118.—Ng *et al.* 2008: 217 (list).—Priyadarshani *et al*. 2008: 109.—Hosseini 2009: 39 (table), fig. 7.—Castro 2011: 114.—Naderloo 2011: 8, figs. 3A–G, 5E.—Naderloo & Türkay 2012: 46.—Naderloo *et al.* 2013: 6 (table).—Rumisha *et al.* 2015: 4 (list).—Emmerson 2016c: 189, 476 (list).—Khot *et al.* 2016: 213.—Naderloo 2017: 341, figs. 30.6, 30.7, 30.10E, 30.11.—Bento & Paula 2018: 43 (list).—Trivedi *et al*. 2018: 42 (list).—Muñoz *et al.* 2021: 56 (list).

Grapsus (*Pachygrapsus*) *aethiopicus* Hilgendorf, 1869: 88, pl. 4 fig. 2.

Grapsus messor.—Hoffmann 1874: 23.

Metapograpsus messor.—Dawydoff 1952: 142.

Material examined. RMNH.CRUS.D.58620, 1 male (6.0 × 4.0 mm subadult), tidal flat off Barreira Vermelha, zone 1, fcn. X3949, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58621, 2 males (21.0 × 16.0 mm, 10.0 × 8.0 mm), 1 female (19.0 × 15.0 mm), Saco da Inhaca, mangrove, fcn. X4354, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58622, 1 ovigerous female (7.0 × 6.0 mm), Cabo da Inhaca, "distance from coast 9 m, altitude 15 m, direction southwest", fcn. X4091, date unknown, leg. Odette Cossa; RMNH.CRUS.D.58623, 1 male (18.0 × 13.0 mm), 1 female (12.0 × 8.0 mm), in front of mangrove, fcn. X3998, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58624, 1 male (6.0 × 4.0 mm subadult), Saco da Inhaca, zone 6B, mangrove, fcn. X3965, 6 August 1983, collector unknown; RMNH.CRUS.D.58625, 1 male (damaged carapace), Saco da Inhaca, mangrove, fcn. X4335, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58626, 1 male (19.0 × 15.0 mm), Saco da Inhaca, mangrove, open zone along the border of the river, fcn. X4345, 12 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58627, 2 males (7.5 × 5.0 mm, 5.0 × 3.5 mm subadult), 1 ovigerous female (9.0 × 7.5 mm), tidal flat off Barreira Vermelha, fcn. X3918, 7 August 1983, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.30849, 2 males (21.5 × 16.0 mm, 20.0 × 15.5 mm), 1 female (18.0 × 13.0 mm), Janub Sina', Ras Matarma, northern part of Gulf of Suez, Egypt, 24 September 1970, leg. S.L.R.; RMNH.CRUS.D.30637, 1 male (26.5 × 20.5 mm), neotype, Sinai Peninsula, 13 km southeast of Suez, Ras el Misalla, Egypt, 11 August 1970, leg. S.L.R.; RMNH.CRUS.D.81, 1 male (19.5 × 13.5 mm), 1 damaged moult, Nossi-Faly [= Nosy Faly], Madagascar, date unknown, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.11145, 1 male (26.0 × 19.5 mm), 1 ovigerous female (21.5 × 16.5 mm), Jeddah, Red Sea, 1880, leg. J.A. Kruyt; RMNH.CRUS.D.27810, 1 ovigerous female (17.5 × 13.0 mm), Dahlak Archipelago, Museri Island, Camping Bay, State of Eritrea, 26 October 1965, collected during Israel South Red Sea expedition.

Remarks. Two species of *Metopograpsus* H. Milne-Edwards, 1853 were reported from Mozambican waters (Muñoz *et al.* 2021), *M. messor* and *M. thukuhar* (Owen, 1839). A recent investigation of specimens from the Indo-Pacific showed that the *M. thukuhar* in the Red Sea and along the East African coast belong to a different species, *M. cannicci* Innocenti, Schubart & Fratini, 2020 (Innocenti *et al.* 2020). Innocenti *et al.* (2020) described *M. cannicci* as a pseudocryptic species, with many morphological similarities to *M. thukuhar*. The difference between *M. messor* and *M. thukuhar*/*M. cannicci* can be seen in the shape of the carapace. On *M. messor*, the anterolateral margins distinctly converge posteriorly, while in *M. thukuhar*/*M. cannicci* the anterolateral margins only converge slightly and are nearly straight (Naderloo 2017, for *M. thukuhar*). Crosnier (1965) mentioned that in *M. messor,* the external border of the internal orbital is at an angle of 60°, where on *M. thukuhar* the angle is closer to 90°. The inner infraorbital margin in *M. messor* has a conspicuous keel on the outer surface. On *M. thukuhar* the keel is weak and indistinct (Naderloo 2017). Crosnier (1965: p. 24) provided clear figures of these characters to compare the specimens with. The examined specimens show the characters identified for *M. messor* in Crosnier (1965), and they match the extensive description in Emmerson (2016c) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Kingsley 1880c; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Crosnier 1965; Fourmanoir 1954; Hoffmann 1874; Lenz & Richters 1881), Mauritius (Bouvier 1915; Kingsley 1880c; Ward 1942), Seychelles (Richters 1880), Tanzania (Hartnoll 1975; Hilgendorf 1869; Lenz 1905; Ortmann 1894; Rumisha *et al*. 2015), Red Sea (Audouin 1862; Heller 1865; Holthuis 1977; Kossmann

1877; Laurie 1915; H. Milne-Edwards 1853; Monod 1938; Nobili 1906a; Paulson 1875), Yemen (Simões *et al.* 2001), Gulf of Oman (Hogarth 1989; Naderloo 2011, 2017), Persian Gulf (Al-Ghais & Cooper 1996; Apel 2001; Cooper 1997; Hornby 1997; Hosseini 2009; Jones 1986; Naderloo 2011, 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2013; Nobili 1906b; Stephensen 1946; Titgen 1982), India (Alcock & Anderson 1894; Chhapgar 1957; Dev Roy 2008; Heller 1865; Henderson 1893; Khot *et al.* 2016; Trivedi *et al.* 2018), Sri Lanka (Heller 1865; Priyadarshani *et al.* 2008), Myanmar (De Man 1887), Thailand (Naiyanetr 2007), Indonesia (Schenkel 1902), Taiwan (Balss 1922c; Ng *et al.* 2001), Philippines (Estampador 1959), Japan (Balss 1922c; Sakai 1939, 1976), Australia (Balss 1935; Grant & McCulloch 1906; Kingsley 1880c; Nobili 1899), Torres Strait (Calman 1927; Ortmann 1894), Melanesia (Miers 1884a), Fiji (Balss 1938), Tonga Islands (Rathbun 1907), Tahiti (Kingsley 1880c), Tuvalu (Whitelegge 1897), Line Islands (Edmondson 1923), Polynesia (Nobili 1907), French Polynesia (Poupin 1996, 2010; Rathbun 1907) and Sandwich Islands (Kingsley 1880c).

69. *Metopograpsus cannicci* Innocenti, Schubart & Fratini, 2020

(Fig. 10C)

Metopograpsus thukuhar.—Crosnier 1965: 25, figs. 20, 27.—Guinot 1967a: 285 (list).—Holthuis 1977: 157.—Kensley 1981: 47 (list).—Al-Ghais & Cooper 1996: 413, fig. 3.—Hornby 1997: 14.—Apel 2001: 118.—Ng *et al.* 2008: 217 (list).—Naderloo 2011: 11, figs. 4A–G, 5F; 2017: 343, figs. 30.8, 30.9, 30.10E, 30.10F, 30.11.—Naderloo & Türkay 2012: 46.—Peer *et al.* 2014: 57, fig. 8.—Emmerson 2016c: 194, 476 (list).—Muñoz *et al.* 2021: 56 (list).

Metopograpsus cannicci Innocenti, Schubart & Fratini, 2020: 621, figs. 1A, 2A, 3A, 4A, 5A, 6.—Pati *et al.* 2022: 516, figs. 7A–D.

Material examined. RMNH.CRUS.D.58628, 1 male (18.0 × 14.0 mm), Saco da Inhaca, mangrove, fcn. X3996, 6 August 1983, collector unknown.

Comparative material. RMNH.CRUS.D.31055, 1 ovigerous female (32.0 × 24.5 mm), Gulf of Akaba, Janub Sina', Shurat el Manqata, North of Nabq, Egypt, 25 April 1976, leg. C. Lewinsohn & L.B. Holthuis; RMNH.CRUS.D.31049, 1 male (30.0 × 23.5 mm), Gulf of Akaba, Janub Sina', Shurat el Manqata, North of Nabq, Egypt, 25 April 1976, leg. C. Lewinsohn & L.B. Holthuis; RMNH.CRUS.D.16467, 2 males (13.0 × 10.0 mm, 12.0 × 10.0 mm), Mahébourg, Mauritius, December 1960, leg. C. Michel; RMNH.CRUS.D.27806, 4 males (9.0 × 5.5 mm, 8.0 × 6.0 mm, 6.5 × 5.5 mm, 6.0 × 4.5 mm), 1 ovigerous female (8.0 × 5.5 mm), Xai-Xai, Mozambique, 2 October 1967, leg. G. Hartmann.

Remarks. See remarks under *Metopograpsus messor*. The examined specimen shows the characters mentioned specifically for *M. thukuhar* in Crosnier (1965), matches with the extensive description in Emmerson (2016c) and with the comparative material. Innocenti *et al.* (2020) indicated the morphological differences between *M. thukuhar* and *M. cannicci*, the most important difference being the shape of the first male gonopod. In *M. cannicci*, the first male gonopod is more slender and less inflated at the distal end, with a more acute hump. Unfortunately, our specimen is not a fully grown adult, and therefore the specimen can not be truly distinguished by the first male gonopod. Considering that Innocenti *et al.* (2020) assumed the two species do not co-occur in the area, our specimen is very likely *M. cannicci*.

Distribution. South Africa (Emmerson 2016c; Peer *et al.* 2014), Mozambique (Emmerson 2016c; Innocenti *et al.* 2020; Kensley 1981; Muñoz *et al.* 2021), Madagascar (Crosnier 1965), Mauritius (Innocenti *et al.* 2020), Seychelles (Innocenti *et al.* 2020), Tanzania (Innocenti *et al.* 2020), Kenya (Innocenti *et al.* 2020), Somalia (Innocenti *et al.* 2020), Red Sea (Holthuis 1977; Innocenti *et al.* 2020), Gulf of Oman (Naderloo 2011, 2017) and Persian Gulf (Al-Ghais & Cooper 1996; Apel 2001; Hornby 1997; Naderloo 2011, 2017; Naderloo & Türkay 2012).

70. *Pachygrapsus minutus* A. Milne-Edwards, 1873

Nautilograpsus eriantus Klunzinger, 1870: 391 (nomen nudum).

Pachygrapsus minutus A. Milne-Edwards, 1873: 292, pl. 14 fig. 2.—Kingsley 1880c: 201.—De Man 1883: 158; 1888: 148.—Cano 1889a: 92.—Alcock 1900: 399.—Borradaile 1900: 592; 1903a: 432.—Lenz 1905: 370.—Rathbun 1906: 840; 1907: 30; 1911: 242.—Tesch 1918: 77.—Edmondson 1923: 10.—Boone 1934: 180, pl. 91.—Balss 1938: 78.—Sakai 1939: 656, fig. 112; 1976: 635, figs. 347A–C.—Holthuis 1953: 31; 1977: 158.—Forest & Guinot 1961: 155.—Michel 1964: 13.—

Crosnier 1965: 26, figs. 23, 29, 30.—Garth 1965: 27, fig. 14.—Guinot 1967a: 285 (list).—McNeill 1968: 78.—Serène 1968: 103 (list).—Kensley 1970: 104 (list), 106, figs. 1A–D; 1981: 47 (list).—Hartnoll 1975: 311 (list).—Garth *et al.* 1987: 247 (list).—Dai & Yang 1991: 510, fig. 261(2), pl. 65(5).—Bakus 1994: 187 (list).—Ng *et al.* 2001: 41 (list); 2017: 101 (list).—Simões *et al.* 2001: 86 (list).—Davie 2002: 218.—Ng & Davie 2002: 379 (list).—Paulay *et al.* 2003: 40 (list).—Venkataraman *et al*. 2004: 307 (list).—Poupin *et al*. 2005: 31, figs. 9A–D, 14C, 15C.—Naiyanetr 2007: 110 (list).—Ng & Richer de Forges 2007: 323 (list).—Dev Roy 2008: 120.—Ng *et al.* 2008: 217 (list).—Poupin 2010: 60 (list).—Castro 2011: 116.—Emmerson 2016c: 476 (list).—Bento & Paula 2018: 43 (list).—Trivedi *et al*. 2018: 42 (list).—Ng *et al.* 2019: 118, fig. 7F.—Suvarna Devi *et al.* 2019: 490.—Muñoz *et al.* 2021: 56 (list).

Sesarma murrayi Calman, 1909: 708, pl. 72 figs. 4, 5.

Material examined. RMNH.CRUS.D.58629, 2 males (4.0 × 3.0 mm, 4.0 × 3.0 mm), Cabo da Inhaca, "altitude 0.6 m, distance from coast 12 m", fcn. X4018, 11 August 1983, leg. Paula, Isabel & Alberto.

Comparative material. RMNH.CRUS.D.31084, 2 males (6.5 × 5.5 mm, 4.5 × 4.0 mm), 2 ovigerous females (7.0 × 4.5 mm, 5.0 × 4.0 mm), 1 female (7.0 × 5.5 mm,), Gulf of Akaba, Janub Sina', Shurat al Gharqana, north of Nabq, Egypt, 24 April 1976, leg. C. Lewinsohn & L.B. Holthuis; RMNH.CRUS.D.26327, 1 male (5.5 × 4.0 mm), 1 female (9.0 × 6.0 mm), Gulf of Akaba, Janub Sina', Wasset, Egypt, 8 October 1968, leg. L. Fishelson; RMNH.CRUS.D.26328, 3 males (5.5 × 5.0 mm, 4.0 × 3.5 mm, 4.5 × 4.0 mm), Gulf of Akaba, Janub Sina', Ras Burka, Egypt, 5 October 1968, leg. L. Fishelson; RMNH.CRUS.D.26329, 2 males (5.0 × 4.0 mm, 4.0 × 3.5 mm), Gulf of Akaba, Janub Sina', Wasset, Egypt, 7 October 1968, leg. L. Fishelson.

Remarks. Muñoz *et al.* (2021) reported two species of *Pachygrapsus* Randall, 1840 from Mozambican waters, *P. minutus* and *P. plicatus* (H. Milne-Edwards, 1837). The difference between the species can be seen from the transverse lines on the carapace. On *P. minutus*, the lines are glabrous, while on *P. plicatus* the lines are edged with setae (Crosnier 1965). The examined specimens had no setae on the transverse lines and match with the description given in Crosnier (1965) and with comparative material.

Distribution. South Africa (Emmerson 2016c), Mozambique (Emmerson 2016c; Kensley 1970, 1981; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Crosnier 1965), La Réunion (Poupin 2010), Mauritius (Michel 1964), Seychelles (Rathbun 1911), Tanzania (Hartnoll 1975; Lenz 1905), Red Sea (Holthuis 1956; Klunzinger 1870), Yemen (Simões *et al.* 2001), India (Alcock 1900; Dev Roy 2008; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Maledives (Borradaile 1903a), Myanmar (De Man 1887), Nicobar Islands (Bakus 1994), Thailand (Naiyanetr 2007; Ng & Davie 2002), Indonesia (De Man 1883; Tesch 1918), Christmas Island (Calman 1909), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Japan (Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; McNeill 1968), Micronesia (Poupin *et al.* 2005; Rathbun 1907), New Caledonia (Kingsley 1880c; A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010; Poupin *et al.* 2005), Marshall Islands (Balss 1938; Garth *et al.* 1987), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Borradaile 1900), Hawai'i (Castro 2011; Rathbun 1906), Tahiti (Forest & Guinot 1961), Wallis & Futuna (Poupin 2010), Line Islands (Edmondson 1923), French Polynesia (Forest & Guinot 1961; Poupin 2010; Poupin *et al.* 2005) and Clipperton Island (Garth 1965; Poupin 2010; Poupin *et al.* 2005).

71. *Planes minutus* (Linnaeus, 1758)

(Fig. 10D)

Cancer minutus Linnaeus, 1758: 625.

Planes minutus.—Dana 1852b: 346.—Miers 1876: 39.—Haswell 1882: 99.—Rathbun 1900: 279; 1906: 840; 1907: 69.—Borradaile 1903a: 432.—Stebbing 1905: 43; 1910: 320.—Nobili 1906a: 321.—Lenz 1910: 560.—Bouvier 1915: 304.—Laurie 1915: 416 (list).—Monod 1927: 621.—Montgomery 1931: 456.—Sakai 1939: 664, pl. 108 fig. 2.—Barnard 1950: 120, figs. 23D, 24E.—Chace 1951: 65, figs. 1A, D, G, J–L, 3A–H, 4–8 (full synonymy).—Holthuis & Gottlieb 1958: 102.—Guinot 1967a: 285 (list).—Holthuis 1977: 160.—Kensley 1981: 47 (list).—Ng *et al.* 2008: 217 (list).—Emmerson 2016c: 206, 476 (list).—Bento & Paula 2018: 44 (list).—Muñoz *et al.* 2021: 56 (list).

Nautilograpsus minutus.—H. Milne-Edwards 1852: 174.—A. Milne-Edwards 1862: 6.—Heller 1865: 50.—Kingsley 1880c: 202.—Stimpson 1907: 121.

Material examined. RMNH.CRUS.D.58630, 1 male (17.0 × 17.0 mm), fcn. X4020, date and collector unknown.

Comparative material. RMNH.CRUS.D.16950, 1 male (14.0 × 14.0 mm), 1 ovigerous female (14.0 × 13.5 mm), Atlantic Ocean, 40 miles east of the coast of Virginia, United States of America, 30 October 1960, leg. J.S.

Zaneveld; RMNH.CRUS.D.30384, 3 males (6.0 × 6.0 mm, 5.5 × 6.0 mm, 5.5 × 5.5 mm), 3 ovigerous females (5.5 × 6.0 mm, 5.5 × 5.5 mm, 4.5 × 4.5 mm), Atlantic Ocean north of Bermuda, 1 August 1964, collected during Pillsbury Expedition; RMNH.CRUS.D.17757, 4 males (21.0 × 20.0 mm, 9.0 × 9.0 mm, 8.5 × 8.0 mm, 7.0 × 7.0 mm), 1 ovigerous female (21.0 × 19.5 mm), São Paulo near Cananeia, near island of Bom Abrigo, Brazil, May 1962, leg. Oceanographic Institute of São Paulo.

Remarks. "The taxonomy of *Planes* Bowdich, 1825 has been discussed many times, and the current consensus is that the genus has three species: *P. major* (MacLeay, 1838), *P. minutus* (Linnaeus, 1758) and *P. marinus* Rathbun, 1914 (Chace 1951; Ng *et al*. 2008). The carapace shapes and general morphology of *P. marinus* is quite different so there is no problem with its specific identity. The status of the other two species is more debatable as they are very close, being separated by more subtle characters like carapace shape and leg proportions (Chace 1951). There is growing genetic evidence that *P. minutus* and *P. major* are synonyms (see Pfaller *et al*. 2019), with these authors suggesting that hybridisation may account for some of the observed differences. This matter will need to be re-examined in greater detail to confirm this supposed synonymy. Various authors have shown that the sister species to *P. marinus* is actually *Pachygrapsus laevimanus* Stimpson, 1858, and both share many morphological and genetic similarities (Ip *et al*. 2015; Pfaller *et al*. 2019; Schubart 2011). Chace (1951) had in fact argued that *P. marinus* is just a neustonic member of *Pachygrapsus* and referred the species there. The new genetic available supports this action and the species is referred there. In any case, *Pachygrapsus* itself is probably polyphyletic (see previous footnote) and will need to be reassessed at a later date (see also Poupin *et al*. 2005)." (Peter Ng pers. comm.)

Distribution. Very widely spread in tropical and temperate seas. Mainly Atlantic (Barnard 1950), distribution in the Indo-Pacific seems to be patchy (Emmerson 2016c).

Family Percnidae Števčić, 2005

72. *Percnon planissimum* (Herbst, 1804)

(Fig. 10E)

Cancer planissimus Herbst, 1804: 3, pl. 59 fig. 3.
Plagusia clavimana Latreille, 1806: 34.
Plagusia serripes Lamarck, 1818a: 247.
Acanthopus planissimus.—Dana 1852b: 372.—Heller 1865: 51.
Acanthopus tenuifrons H. Milne-Edwards, 1853: 180.
Liolophus planissimus.—Alcock 1900: 439.
Percnon planissimum.—Rathbun 1900: 281; 1906: 842; 1907: 37; 1911: 242.—Stebbing 1910: 324.—Bouvier 1915: 307.—Laurie 1915: 416 (list).—Tesch 1918: 130.—Balss 1922c: 156; 1935: 144; 1938: 80.—Edmondson 1923: 11.—Sendler 1923: 36.—Montgomery 1931: 457.—Sakai 1939: 703, pl. 79, fig. 4; 1976: 676, pl. 230, fig. 2.—Ward 1942: 108.—Barnard 1950: 138, figs. 26I, 26J.—Tweedie 1950: 136, fig. 4D.—Holthuis 1953: 33; 1977: 177.—Fourmanoir 1954: 6.—MacNae & Kalk 1958: 69.—Forest & Guinot 1961: 163.—Sankarankutty 1961: 125.—Miyake *et al.* 1962: 131 (list).—Michel 1964: 13.—Crosnier 1965: 90, figs. 135, 138, 144, 150, 151.—Derijard 1966: 174.—Guinot 1967a: 289 (list).—McNeill 1968: 77.—Serène 1968: 110 (list).—Kensley 1970: 104 (list); 1981: 47 (list).—Hartnoll 1975: 311 (list).—Garth *et al.* 1987: 247 (list).—Poupin 1996: 71; 2010: 63 (list).—Ng *et al.* 2001: 47 (list); 106 (list), fig. 11F.—Simões *et al.* 2001: 86 (list).—Davie 2002: 439.—Ng & Davie 2002: 380 (list).—Paulay *et al.* 2003: 44 (list).—Venkataraman *et al*. 2004: 307 (list).—Naiyanetr 2007: 110 (list).—Ng & Richer de Forges 2007: 327 (list).—Dev Roy 2008: 122.—Ng *et al.* 2008: 219 (list).—McLay 2009: 49, figs. 25A, B, 26A, B.—Castro 2011: 118.—Orchard 2012: 271.—Emmerson 2016c: 213, 476 (list).—Bento & Paula 2018: 44 (list).—Trivedi *et al*. 2018: 58 (list).—Suvarna Devi *et al.* 2019: 490.—Muñoz *et al.* 2021: 57 (list).
Percnon planissimus.—Nobili 1905: 502; 1906a: 324; 1907: 406.—Dawydoff 1952: 142.—Dai & Yang 1991: 564, fig. 294(1), pl. 74(1).
Percnon demani Ward, 1935: 5, 24, pl. 3 figs. 3, 3A.
Perenon planissimum.—Bakus 1994: 187 (list).

Material examined. RMNH.CRUS.D.58631, 1 male (10.0 × 11.0 mm), Barreira Vermelha, fcn. X3967, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58632, 1 female (31.0 × 36.0 mm), fcn. X4135, date and collector unknown; RMNH.CRUS.D.58633, 2 females (16.0 × 18.0 mm, 14.0 × 16.0 mm), intertidal in front of Barreira Vermelha, fcn. X4220, 17 October 1986, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58634, 1 female (21.0 × 24.0 mm), tidal flat off Barreira Vermelha, fcn. X3961, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58635,

1 male (12.0 × 14.0 mm), tidal flat off Barreira Vermelha, fcn. X3943, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58636, 1 female (28.0 × 30.0 mm), fcn. X3989, date and collector unknown; RMNH.CRUS.D.58637, 1 male (14.0 × 15.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4047, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58638, 1 male (12.0 × 13.0 mm), littoral in front of Barreira Vermelha, fcn. X4054, 13 August 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.34870, 1 male (35.0 × 38.5 mm), Shizuoka, Shimoda, Honshu, Izu Peninsula, Japan, date unknown, leg. T. Sakai; RMNH.CRUS.D.34868, 1 female (11.5 × 13.0 mm), Maluku, Kafal, Misool, Indonesia, 3–5 October 1929, collected during Snellius Expedition; RMNH.CRUS.D.34869, 1 female (15.0 × 15.0 mm), Sulawesi, Beo, Talaud Islands, Indonesia, 14–21 June 1930, collected during Snellius Expedition; RMNH.CRUS.D.89, 1 female (17.0 × 18.0 mm), Java, Indonesia, date unknown, leg. Kuhl & van Hasselt; RMNH.CRUS.D.17530, 1 female (21.0 × 21.0 mm), Flic and Flac, Mauritius, date unknown, leg. C. Michel; RMNH.CRUS.D.3245, 1 male (6.0 × 5.5 mm), Durban, Isipingo, Reunion Rocks, South Africa, 28 October 1938, leg. H. Engel.

Remarks. The examined specimens match well with the description in Emmerson (2016c) and with comparative material. Muñoz *et al.* (2021) listed *P. planissimum* as the only species of *Percnon* Gistel, 1848 in Mozambican waters. Emmerson (2016c) noted that *P. abbreviatum* (Dana, 1851) could potentially occur in the north of Mozambique, because it has been recorded from Europa Island between Mozambique and Madagascar. The present specimens are all *P. planissimum*. The difference between the two *Percnon* can be seen on the chela, *P. abbreviatum* has a row of setae on its upper edge, while *P. planissimum* has glabrous chelae (Crosnier 1965).

Distribution. Madeira (Dana 1852b; Rathbun 1900), Canary Islands (Rathbun 1900), South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Crosnier 1965; Fourmanoir 1954), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Michel 1964), Seychelles (Rathbun 1911), Tanzania (Hartnoll 1975), Red Sea (Holthuis 1977; Laurie 1915; Nobili 1906a), Yemen (Simões *et al.* 2001), India (Alcock 1900; Dev Roy 2008; Heller 1865; Sankarankutty 1961; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Nicobar Islands (Bakus 1994), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Christmas Island (Ward 1935; Orchard 2012), China (Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Japan (Balss 1922c; Miyake *et al.* 1962; Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; McNeill 1968; H. Milne-Edwards 1853; Montgomery 1931), New Zealand (McLay 2009), Papua New Guinea (Nobili 1905), Solomon Islands (Ward 1942), Micronesia (Sendler 1923), New Caledonia (Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Balss 1938; Garth *et al.* 1987; Holthuis 1953), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938), Hawai'i (Castro 2011; Dana 1852b; Rathbun 1906), Tahiti (Dana 1852b; Forest & Guinot 1961), Tuvalu (Balss 1938), Wallis & Futuna (Poupin 2010), Samoa (Dana 1852b), Line Islands (Edmondson 1923), Polynesia (Nobili 1907) and French Polynesia (Poupin 1996, 2010; Rathbun 1907).

Family Plagusidae Dana, 1851

73. *Plagusia squamosa* (Herbst, 1790)

(Fig. 10F)

Cancer squamosus Herbst, 1790: 260, pl. 20 fig. 113.

Grapse tuberculatus Latreille, 1812: 275.

Plagusia squamosa.—H. Milne-Edwards 1837a: 94.—Heller 1861a: 363; 1861b: 18 (list); 1865: 51.—A. Milne-Edwards 1873: 298.—Richters 1880: 157.—Alcock & Anderson 1894: 202 (list).—Nobili 1906a: 324; 1907: 406.—Stimpson 1907: 122.—Stebbing 1910: 323.—Serène 1968: 110 (list).—Schubart & Ng 2000: 327, fig. 3.—Ng *et al.* 2001: 47 (list); 2017: 108 (list), fig. 11G.—Davie 2002: 441.—Paulay *et al.* 2003: 44 (list).—Ng & Richer de Forges 2007: 327 (list).—Dev Roy 2008: 122.—Ng *et al.* 2008: 218 (list).—Poupin 2010: 66 (list).—Castro 2011: 119.—Naderloo 2011: 36, figs. 17A–F, 18E, F; 2017: 366, figs. 33.2, 33.3.—Emmerson 2016c: 227, 477 (list).—Bento & Paula 2018: 44 (list).—Trivedi *et al*. 2018: 62 (list).—Suvarna Devi *et al.* 2019: 490.—Lee *et al.* 2021: S11 (list).

Plagusia orientalis Stimpson, 1858: 103.

Plagusia tuberculata.—Haswell 1882: 110.—Ward 1942: 108.—Guinot 1967a: 288 (list).—Hartnoll 1975: 311 (list).—Holthuis 1977: 176.—Hogarth 1989: 104 (list), 113 (list).—Poupin 1996: 72.—Apel 2001: 120.

Plagusia depressa var. *squamosa.*—Alcock 1900: 437.—Borradaile 1903a: 432.—Bouvier 1915: 307.—Estampador 1959: 97.—Schubart *et al*. 2001: 303, figs. 1, 2.

Plagusia depressa var. *tuberculata.*—Rathbun 1906: 841; 1911: 242.—Kemp 1915: 241.—Laurie 1915: 416 (list).—Tesch 1918: 129.—Balss 1922c: 157; 1935: 143.—Montgomery 1931: 457.—Sakai 1939: 702, pl. 109 fig. 4; 1976: 676, pl. 230 fig. 1.—Barnard 1950: 134, figs. 26G, H.—Tweedie 1950: 136.—Chhapgar 1957: 61, pl. 16R, S.—Garth 1965: 32, figs. 17, 18.—Kensley 1981: 47 (list).—Garth *et al.* 1987: 247 (list).

Material examined. RMNH.CRUS.D.58639, 1 male (48.0 × 46.0 mm), Cabo da Inhaca, littoral, fcn. X4217, 18 October 1986, leg. J.H.C. Walenkamp.

Comparative material. [*Plagusia depressa* (Fabricius, 1775)] RMNH.CRUS.D. 39517, 1 female (44.0 × 43.0 mm), south coast of Hierro, Puerto de Naos, west of Punta de la Restinga, Canary Islands, 3–10 September 1977, collected during CANCAP II - Tydeman Canary Islands Expedition; [*Plagusia depressa*] RMNH.CRUS.D.17742, 1 male (22.5 × 21.0 mm), Trinidad, Balandra Bay, Trinidad and Tobago, 19 June 1961, leg. I. Kristensen; [*Plagusia depressa*] RMNH.CRUS.D.24879, 1 female (22.0 × 20.0 mm), Martinique, 14 April 1968, leg. Schoelcher; [*Plagusia depressa*] RMNH.CRUS.D.18643, 1 male (24.0 × 22.5 mm), Aruba, north Boca Grandi, Rincon, Netherlands Antilles, 7 May 1955, leg. P.W. Hummelinck; [*Plagusia depressa*] RMNH.CRUS.D.12160, 1 male (35.0 × 32.5 mm), Bonaire, Boca Washikemba, Netherlands Antilles, 7 April 1955, leg. P.W. Hummelinck.

Remarks. The checklist by Emmerson (2016c) listed two species of *Plagusia* Latreille, 1804 in Mozambican waters, *P. depressa* and *P. squamosa* (Herbst, 1790). Muñoz *et al.* (2021) only listed *P. depressa*. Barnard (1950) described the presence of the typical *P. depressa* and a variety *P. depressa* var. *tuberculata,* a synonym of *P. squamosa* (Schubart & Ng 2000). Since Barnard's work in 1950, *P. depressa* var. *tuberculata* has been elevated to species status as *P. squamosa* using morphological comparisons of zoeae, megalopae and mtDNA analysis (Schubart *et al.* 2001). Emmerson (2016c) described *P. depressa* as being present only on the west coast of Africa and Namibia, and that records of *P. depressa* from Mozambican waters are incorrect. However, the species was included in Emmerson's (2016c) checklist as being present in Mozambican waters. The most reliable morphological difference to distinguish the two species is the shape of the lobe from the coxal joints of the walking legs (Schubart *et al.* 2001). On *P. depressa*, this lobe is dentate, whereas on *P. squamosa*, the lobe is rounded. On the examined specimen, the lobe is definitely rounded. The examined specimen was compared to specimens of *P. depressa* which showed dentate lobes on the coxal joints; therefore, it is highly likely that this specimen is *P. squamosa*.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981), Mayotte (Poupin 2010), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Richters 1880), Tanzania (Hartnoll 1975), Kenya (Naderloo 2011), Red Sea (Heller 1861a, b; Holthuis 1977; Laurie 1915; Naderloo 2011; Nobili 1906a), Gulf of Oman (Apel 2001; Hogarth 1989; Naderloo 2011, 2017), Egmont Islands (Rathbun 1911), India (Alcock 1900; Alcock & Anderson 1894; Chhapgar 1957; Dev Roy 2008; Heller 1865; Kemp 1915; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018), Maledives (Borradaile 1903a), Nicobar Islands (Heller 1865), Cocos (Keeling) Islands (Tweedie 1950), Indonesia (Tesch 1918), Taiwan (Balss 1922c; Naderloo 2011; Ng *et al.* 2001), Philippines (Estampador 1959), Korea (Lee *et al.* 2021), Japan (Balss 1922c; Naderloo 2011; Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Haswell 1882; Heller 1865; Montgomery 1931), Solomon Islands (Ward 1942), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987), Hawai'i (Castro 2011; Rathbun 1906), Polynesia (Nobili 1907), French Polynesia (Poupin 1996, 2010) and Clipperton Island (Garth 1965; Poupin 2010).

Family Sesarmidae Dana, 1851

74. *Cristarma eulimene* (De Man *in* Weber, 1897)

(Fig. 11A)

Sesarma (*Sesarma*) *eulimene* De Man *in* Weber, 1897: 157, pl. 15 fig. 1.
Sesarma eulimene.—Stebbing 1910: 322.—MacNae & Kalk 1958: 69.
Sesarma (*Holometopus*) *eulimene.*—Tesch 1917: 150.—Barnard 1950: 130, figs. 25I, J.—Crosnier 1965: 51, figs. 68, 69, 73, 77B, 85, 107, 108.—Guinot 1967a: 288 (list).—Serène 1968: 107 (list).
Sesarma (*Chiromantes*) *eulimene.*—Kensley 1981: 47 (list).
"Chiromantes" eulimene.—Ng *et al.* 2008: 220 (list).—Emmerson 2016c: 235, 477 (list).
Chiromantes eulimene.—Guerao *et al.* 2011: 100, figs. 1–11.—Peer *et al*. 2014: 64, fig. 27.—Rumisha *et al.* 2015: 4 (list).—

Bento & Paula 2018: 44 (list).—Schubart & Ng 2020: 930, figs. 13E, 14E, 15C, 15D, 18C, 20A–H, 43G.—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58640, 2 males (17.0 × 13.0 mm, 12.0 × 9.0 mm), 1 female (17.0 × 13.0 mm), Ponta Punduini, fcn. X3980, 9 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58641, 2 males (19.0 × 17.0 mm, 19.0 × 15.0 mm), mangrove north of island, fcn. X4148, 17 November 1985, leg. J.H.C. Walenkamp.

Comparative material. ZMA.CRUS.D.242499, 2 males (16.5 × 14.5 mm, 15.0 × 11.5 mm), 1 ovigerous female (12.0 × 10.0 mm), 2 females (14.0 × 11.5 mm, 12.0 × 9.0 mm), (holotype of *Cristarma eulimene*), Umbilo Ris, Sweet at lowtide, Natal [= KwaZulu-Natal], South Africa, 1895, leg. M. Weber.

Remarks. In their revision of the genera *Chiromantes* Gistel, 1848, and *Pseudosesarma* Serène & Soh, 1970, Schubart & Ng (2020) placed *C. eulimene* and *C. ortmanni* (Crosnier, 1965) in a new genus, *Cristarma* Schubart & Ng, 2020, based on morphology and molecular work. *Cristarma eulimene* was originally described from two males and four females from Umbilo River, Natal [= KwaZulu-Natal]. Schubart & Ng (2020) did not see the type material, noting that it was not in the main collection of RMNH at the time and queried if it was still extant. The holotype (ZMA.CRUS.D.242499) is present in Leiden, however, but as part of the Zoological Museum of Amsterdam material, which has recently merged with the Naturalis (RMNH) collection. Since the work by Schubart & Ng (2020) is very recent, these species were named under *Chiromantes* in the checklists by Emmerson (2016c) and Muñoz *et al*. (2021). Crosnier (1965) redescribed *C. eulimene* and compared it with *C. ortmanni*. Both *C. eulimene* and *C. ortmanni* are present in Mozambican waters (Emmerson 2016c; Muñoz *et al.* 2021). The difference can be seen in the carapace shape, in *C. eulimene* it is more quadrate, with the lateral margins sinuous, while on *C. ortmanni* it is distinctly more rectangular with the lateral margins almost straight (Schubart & Ng 2020). Besides the carapace, there is also a difference in the dorsal margin of the male cheliped dactylus. *Cristarma eulimene* has around 12 slightly asymmetrical tubercles on the margin, while *C. ortmanni* has 25, with half of them larger and relatively symmetrical (Crosnier 1965; Schubart & Ng 2020). The figures provided by Crosnier (1965: p. 52, figs. 72, 73) were very clear and useful for identification of the two *Cristarma* species. The examined specimens match well with the description in Crosnier (1965), Schubart & Ng (2020) and with the type material.

Distribution. South Africa (Barnard 1950; De Man in Weber 1897; Emmerson 2016c; Kensley 1981; Peer *et al.* 2014; Schubart & Ng 2020; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021; Schubart & Ng 2020), Madagascar (Crosnier 1965) and Tanzania (Rumisha *et al*. 2015).

75. *Neosarmatium africanum* Ragionieri, Fratini & Schubart, 2012

(Fig. 11B)

Grapsus (*Sesarma*) *tetragona.*—Krauss 1843: 44. [Not *Cancer tetragona* Fabricius, 1798: 341].

Sesarma tetragona.—Hilgendorf 1869: 90, pl. 3 fig. 3D; 1879: 809.—Hoffmann 1874: 23.—Kingsley 1880c: 218.—Lenz & Richters 1881: 425.

Sesarma meinerti.—Pfeffer 1889: 31.—Ortmann 1894: 56.—Lenz 1905: 372.—Bouvier 1915: 306.—Fourmanoir 1954: 5.—Barnard 1955: 3 (list).—MacNae & Kalk 1958: 69, fig. 16A.

Sesarma tetragonum.—Stebbing 1910: 321.

Sesarma tetragonus.—Stebbing 1917: 10.

Sesarma (*Sesarma*) *meinerti.*—Tesch 1917: 171 (in part).—Chace 1942: 201.—Barnard 1950: 125, figs. 25E, F.—Crosnier 1965: 61, figs. 81, 90, 91, 96, 103.—Guinot 1967a: 288 (list).—Kensley 1981: 47 (list).

Sesarma (*Episesarma*) *meinerti.*—Vatova 1943: 28.

Neosarmatium africanum Ragionieri, Fratini & Schubart, 2012: 73, figs. 1A, 2A, 3A, E, 4A, 4E, 5A, 6A, B.—Peer *et al*. 2014: 63, fig. 25.—Rumisha *et al.* 2015: 4 (list).—Emmerson 2016c: 244, 477 (list).—Bento & Paula 2018: 44 (list).—Ma & McQuaid 2021: 1240 (list).—Mégevand *et al.* 2021: 60649.—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58642, 1 male (33.0 × 30.0 mm), mangrove by Ponta Punduini, fcn. X3931, 9 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58643, 1 male (32.0 × 30.0 mm), 1 female (37.0 × 32.0 mm), fcn. X3924, date and collector unknown; RMNH.CRUS.D.58644, 1 male (15.0 × 14.0 mm), Saco da Inhaca, mangrove zone 3, fcn. X3994, August 1983, collector unknown.

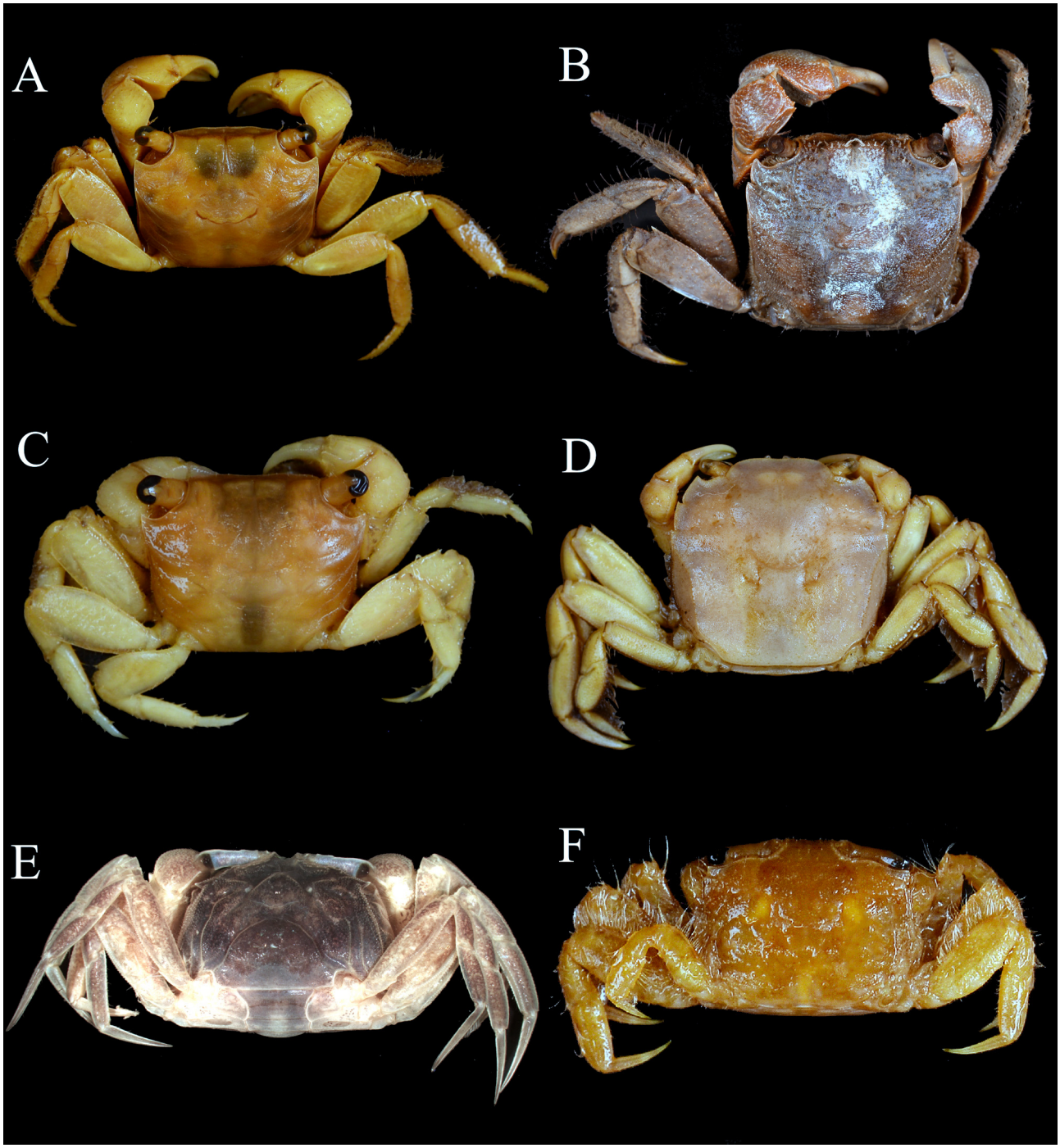

FIGURE 11. A, *Cristarma eulimene* (De Man *in* Weber, 1897), male, CW = 17.0 mm, RMNH.CRUS.D.58640; B, *Neosarmatium africanum* Ragionieri, Fratini & Schubart, 2012, male, CW = 37.0 mm, RMNH.CRUS.D.58643; C, *Parasesarma catenatum* (Ortmann, 1897), male, CW = 11.0 mm, RMNH.CRUS.D.58647; D, *Varuna litterata* (Fabricius, 1798), male, CW = 24.0 mm, RMNH.CRUS.D.58669; E, *Dotilla fenestrata* Hilgendorf, 1869, male, CW = 7.0 mm, RMNH.CRUS.D.58671; F, *Chaenostoma crassimanus* Stimpson, 1858, female, CW = 7.0 mm, RMNH.CRUS.D.58701.

Comparative material. RMNH.CRUS.D.171, 1 female (34.0 × 29.0 mm), former syntype of *Neosarmatium meinerti* (De Man, 1887), Nossi-Bé [= Nosy Be], Madagascar, date unknown, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.40839, 1 male (36.5 × 30.0 mm), registered as *Neosarmatium meinerti*, Inhaca Island, mangal of Ponte Raza [= mangrove of Ponta Rasa], Mozambique, 15 August 1983, leg. J.H.C. Walenkamp, det. P. Davie.

Remarks. In their review of the *Neosarmatium meinerti* (De Man, 1887) species complex, Ragionieri *et al.*

(2012) showed that the population of *N. meinerti* on the East African coast and Madagascar is a separate species, *N. africanum*. In Mozambican waters, *N. africanum* is the only species of *Neosarmatium* Serène & Soh, 1970 present (Muñoz *et al.* 2021). According to Emmerson (2016c), *N. smithi* (H. Milne-Edwards, 1853) can be found in KwaZulu-Natal, which is geographically not far from Inhaca Island, Mozambique. The difference between the two can be seen on the dactylus of the male cheliped. On *N. smithi*, strong chitinous teeth are present on the dorsal margin (Ragionieri *et al.* 2012). The examined specimens have a smooth dorsal margin without teeth, and match with the extensive description given by Ragionieri *et al.* (2012). The examined specimens match well with the comparative material from Inhaca Island and Madagascar.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Peer *et al.* 2014; Ragionieri *et al.* 2012; Stebbing 1910, 1917), Mozambique (Barnard 1950, 1955; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Mégevand *et al.* 2021), Madagascar (Crosnier 1965; Emmerson 2016c; Fourmanoir 1954; Hoffmann 1874; Lenz & Richters 1881; Ragionieri *et al.* 2012; Tesch 1917), Mauritius (Bouvier 1915), Tanzania (Chace 1942; Hilgendorf 1869; Lenz 1915; Ortmann 1894; Pfeffer 1889; Rumisha *et al*. 2015), and Somalia (Ragionieri *et al.* 2012; Vatova 1943).

76. *Parasesarma catenatum* (Ortmann, 1897)

(Fig. 11C)

Sesarma catenate Ortmann, 1897: 334, pl. 17 fig. 9.
Sesarma catenatum.—Stebbing 1905: 44; 1910: 322.
Sesarma (*Parasesarma*) *catenata.*—Barnard 1950: 128, figs. 25A–D.—Kensley 1981: 47 (list).
Sesarma catenata.—Barnard 1955: 3 (list).—MacNae & Kalk 1958: 69.
Parasesarma catenatum.—Ng *et al.* 2008: 223 (list).—Peer *et al.* 2014: 63, fig. 26.—Emmerson 2016c: 258, 477 (list).—Cannicci *et al.* 2017: 93.—Bento & Paula 2018: 44 (list).—Shahdadi & Schubart 2018: 534 (list).—Shahdadi *et al.* 2020: 1126 (list).—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58645, 1 male (12.0 × 9.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4002, 28 July 1983, leg. Obede Baldi; RMNH.CRUS.D.58646, 1 male (12.0 × 10.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4002, 28 July 1983, leg. Obede Baldi; RMNH.CRUS.D.58647, 1 male (11.0 × 8.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4006, 28 July 1983, leg. Alberto Tsamba; RMNH.CRUS.D.58648, 1 male (9.0 × 8.0 mm), Saco da Inhaca, mangrove, fcn. X3996, 6 August 1983, collector unknown.

Comparative material. RMNH.CRUS.D.3227, 4 males (14.0 × 11.0 mm, 11.0 × 9.0 mm, 10.0 × 8.0 mm, 10.0 × 8.0 mm), 1 ovigerous female (10.0 × 7.0 mm), 4 females (12.0 × 9.0 mm, 11.0 × 8.0 mm, 9.0 × 8.0 mm, 7.0 × 5.5 mm), Zoeloeland [= KwaZulu-Natal], St. Lucia Bay, South Africa, 26 October 1938, leg. L.D. Brongersma; RMNH.CRUS.D.3252, 4 males (18.0 × 13.0 mm, 11.5 × 9.0 mm, 10.0 × 7.5 mm, 8.0 × 5.5 mm), 1 ovigerous female (10.0 × 8.0 mm), 1 female (12.5 × 10.0 mm), Salisbury Island, Durban Bay, South Africa, 14 November 1938, leg. H. Engel; RMNH.CRUS.D.3230, 5 males (17.0 × 14.0 mm, 16.0 × 13.0 mm, 10.0 × 8.0 mm, 9.0 × 6.5 mm, 5.5 × 4.5 mm), 3 females (13.0 × 9.0 mm, 9.5 × 7.0 mm, 7.5 × 5.0 mm), Salisbury Island, Durban Bay, South Africa, 27 October 1938, leg. L.D. Brongersma.

Remarks. Five species of *Parasesarma* De Man, 1895 were reported from Mozambican waters. Muñoz *et al.* (2021) listed four, they likely overlooked the work by Fratini *et al.* (2019) which showed that *P. guttatum* (A Milne-Edwards, 1869) in the south of Mozambique is actually a different species, *P. capensis* Fratini, Cannicci & Innocenti in Fratini, Cannicci, Porri & Innocenti, 2019. *Parasesarma catenatum* can be distinguished from the other *Parasesarma* by its cheliped. In *P. catenatum* the dactylus of the cheliped has 5 or 6 oval tubercles, and the males have a tuft of setae on the inner margin of the dactylus (Fratini *et al.* 2019). The carapace of *P. catenatum* has no anterolateral tooth (Fratini *et al.* 2019). The examined specimens match well with the description and drawing in Barnard (1950), and with comparative material.

Distribution. South Africa (Barnard 1950, 1955; Emmerson 2016c; Kensley 1981; Peer *et al.* 2014; Stebbing 1905, 1910) and Mozambique (Emmerson 2016c; MacNae & Kalk 1958; Muñoz *et al.* 2021).

77. *Parasesarma capensis* Fratini, Cannicci & Innocenti *in* Fratini, Cannicci, Porri & Innocenti, 2019

Sesarma (*Chiromantes*) *guttata*.—Barnard 1950: 126, figs. 25G, H.
Sesarma (*Perisesarma*) *guttatum*.—Kensley 1981: 47 (list).
Perisesarma guttatum.—Ng *et al.* 2008: 222 (list) (in part).—Emmerson 2016c: 269, 478 (list).
Parasesarma capensis Fratini, Cannicci & Innocenti, 2019: 213, figs. 4A, B, 5A, B, 6A, B, 7A, 8A, B.—Shahdadi *et al.* 2020: 1125 (list).

Material examined. RMNH.CRUS.D.58649, 1 male (18.0 × 16.0 mm), in front of mangrove, fcn. X4014, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58650, 2 males (15.0 × 12.0 mm, 11.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. X4353, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58651, 1 female (22.0 × 18.0 mm), Saco da Inhaca, fcn. X3920, 4 August 1983, leg. Ana Paula Dias; RMNH.CRUS.D.58652, 1 male (7.0 × 5.0 mm), mangrove, shady zone, fcn. X4313, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58653, 1 female (17.0 × 15.0 mm), Saco da Inhaca, mangrove zone 3, fcn. X3994, August 1983, collector unknown; RMNH.CRUS.D.58654, 1 male (16.0 × 13.0 mm), mangrove, shady zone, fcn. X4309, 12 January 1987, leg. Ana dos Santos P.; RMNH.CRUS.D.58655, 1 male (damaged carapace), Saco da Inhaca, mangrove, fcn. X4363, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58656, 1 female (16.0 × 13.0 mm), Saco da Inhaca, mangrove, fcn. X4347, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58657, 2 males (12.0 × 9.0 mm, 6.0 × 5.0 mm), 1 ovigerous female (6.0 × 5.0 mm), Saco da Inhaca, mangrove, fcn. X4356, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58658, 1 male (14.0 × 12.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4280, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58659, 1 male (14.0 × 11.0 mm), Costa do Sol, Maputo, mangrove, fcn. X3979, 28 July 1983, leg. Obede Baldi; RMNH.CRUS.D.58660, 1 female (16.0 × 13.0 mm), Saco da Inhaca, mangrove, fcn. X4352, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58661, 1 female (9.0 × 8.0 mm), mangrove, shady zone, fcn. X4337, 12 January 1987, leg. Judith Ernesto Muchanga; RMNH.CRUS.D.58662, 1 male (7.0 × 6.0 mm), Saco da Inhaca, mangrove, fcn. X4364, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58663, 2 males (22.0 × 18.0 mm, 10.0 × 8.0 mm), Saco da Inhaca, behind the mangrove, fcn. X3975, 3 August 1983, collector unknown; RMNH.CRUS.D.58664, 1 male (8.0 × 7.0 mm), tidal flat off Barreira Vermelha, fcn. X4199, 8 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58665, 1 male (17.0 × 14.0 mm), 1 female (17.0 × 14.0 mm), inside the mangrove, fcn. X4087, date unknown, leg. Carl Mohrherr; RMNH.CRUS.D.58666, 1 male (17.0 × 13.0 mm), Saco da Inhaca, mangrove, fcn. X4335, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58667, 1 female (6.0 × 4.5 mm), Costa do Sol, Maputo, mangrove, fcn. X4006, 28 July 1983, leg. Alberto Tsamba; RMNH.CRUS.D.58668, 4 males (23.0 × 18.0 mm, 22.0 × 20.0 mm, 17.0 × 15.0 mm, 14.0 × 11.0 mm), 1 female (16.0 × 12.0 mm), fcn. X3924, date and collector unknown.

Comparative material. RMNH.CRUS.D.26951, 1 male (8.5 × 7.0 mm), Dahlak Archipelago, Museri Island, Camping Bay, State of Eritrea, 21 October 1965, collected during Israel South Red Sea Expedition; RMNH.CRUS.D.25027, 2 males (22.0 × 17.0 mm, 16.0 × 11.0 mm), 4 females (17.0 × 14.5 mm, 17.0 × 14.0 mm, 17.0 × 14.0 mm, 14.0 × 9.0 mm), Melita Bay, south of Massawa, Zula Bay, South Africa, 14 April 1962, collected during Israel South Red Sea Expedition; RMNH.CRUS.D.51586, 2 males (24.0 × 20.0 mm, 18.5 × 14.0 mm), Mtoni River near Dar-es-Salaam, Tanzania, mangroves, 22 January 2004, leg. G. Kruitwagen & I. Nagelkerken.

Remarks. See also the remarks under *Parasesarma catenatum*. Recent molecular work by Fratini *et al*. (2019) has shown that *P. guttatum* in the south of Mozambique is actually a separate species, *P. capensis*. The difference can be seen in the morphology of the cheliped dactylus. The cheliped dactylus on *P. capensis* has 13–15 tubercles, while the dactylus on *P. guttatum* has 12 or 13 tubercles. The upper surface of the palm on *P. capensis* has three transverse crests, one tuberculate and two pectinated. The palm on *P. guttatum* has two distinct pectinated crests, with another one only sparsely tuberculated, with the tubercles irregularly arranged. The examined specimens match the detailed description and images by Fratini *et al*. (2019), as well as the comparative material on hand.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Fratini *et al.* 2019) and Mozambique (Emmerson 2016c; Fratini *et al.* 2019; Kensley 1981).

Family Varunidae H. Milne-Edwards, 1853

Subfamily Varuninae H. Milne-Edwards, 1853

78. *Varuna litterata* (Fabricius, 1798)
(Fig. 11D)

Cancer litteratus Fabricius, 1798: 342.
Grapsus litteratus.—Bosc 1802: 203.
Grapsus (*Trichopsus*) *litteratus.*—De Haan 1835: 32.
Varuna litterata.—H. Milne-Edwards 1853: 176.—Heller 1865: 51.—A. Milne-Edwards 1873: 295.—Miers 1876: 40.—Targioni Tozzetti 1877: 122, pl. 8 figs. 2A–G.—Hilgendorf 1879: 808.—Kingsley 1880c: 205.—Nauck 1880: 29.—Haswell 1882: 103.—Henderson 1893: 391.—Stebbing 1893: 96; 1905: 41; 1910: 319.—Alcock & Anderson 1894: 202 (list).—Ortmann 1894: 55.—De Man 1895: 112; 1902: 504.—Nobili 1899: 267; 1905: 495.—Calman 1900: 24.—Lanchester 1900: 756; 1901: 549.—Doflein 1902: 664.—Schenkel 1902: 545.—Lenz 1905: 370; 1910: 560.—Stimpson 1907: 124.—Bouvier 1915: 305.—Kemp 1915: 232.—Tesch 1918: 85.—Balss 1922c: 149.—Chopra & Das 1937: 425.—Sakai 1939: 665, pl. 76 fig. 2, pl. 108 fig. 1; 1976: 644, pl. 220 fig. 3.—Ward 1942: 107.—Barnard 1950: 122, figs. 22C, 23F, 24D; 1955: 3 (list).—Fourmanoir 1954: 5.—Chhapgar 1957: 56, pl. 15, fig. 5.—MacNae & Kalk 1958: 69.—Miyake *et al.* 1962: 130 (list).—Michel 1964: 15.—Crosnier 1965: 34, figs. 40, 41A, B, 46, pl. 6 fig. 1.—Guinot 1967a: 286 (list).—Serène 1968: 104 (list).—Kensley 1970: 104 (list); 1981: 47 (list).—Hartnoll 1975: 311 (list).—Dai & Yang 1991: 519, fig. 265(4), pl. 66(6).—Poupin 1996: 69; 2010: 76 (list).—Ng *et al.* 2001: 46 (list); 2017: 115 (list).—Davie 2002: 230.—Ng & Davie 2002: 379 (list).—Paulay *et al.* 2003: 47 (list).—Naiyanetr 2007: 116 (list).—Ng & Richer de Forges 2007: 329 (list).—Dev Roy 2008: 138.—Ng *et al.* 2008: 229 (list).—Orchard 2012: 191.—Peer *et al*. 2014: 65, fig. 31.—Emmerson 2016c: 290, 478 (list).—Devi & Joseph 2017: 995, pls. 1–5.—Mos *et al.* 2017: 258, fig. 1.—Suppapan *et al.* 2017: 2251.—Bento & Paula 2018: 45 (list).—Trivedi *et al*. 2018: 76 (list).—Ma & McQuaid 2021: 1242 (list).—Muñoz *et al.* 2021: 57 (list).—Wong *et al.* 2021: 6 (list), 65, figs. 102A–C, pl. 19D.—Ambarwati *et al.* 2024: 5, fig. 2F.—Poore & Ahyong 2023: 835.
Varuna tomentosa Pfeffer, 1889: 30.—Kensley 1981: 47 (list).
Cancer simmonsi Curtiss, 1938: 176.

Material examined. RMNH.CRUS.D.58669, 1 male (24.0 × 23.0 mm), Pantano de Hlangwini [= Hlangwini swamp], fcn. unknown, 26 September 1984, leg. J.H.C. Walenkamp.

Comparative material. RMNH.CRUS.D.41954, 1 male (44.0 × 38.0 mm), Tahiti, Moorea, Opunohu River, French Polynesia, 7 May 1983, leg. G. Marquet; RMNH.CRUS.D.35887, 1 male (26.0 × 23.0 mm), Komodo, Banu Jombak, Indonesia, 4 June 1982, leg. J. Verheijen; RMNH.CRUS.D.2353, 3 males (26.0 × 24.0 mm, 21.0 × 21.0 mm, 21.0 × 20.0 mm), 1 female (24.0 × 22.0 mm), Rede van Semarang, Indonesia, April 1911, leg. P. Buitendijk; RMNH.CRUS.D.2603, 1 male (31.0 × 28.0 mm), river near Mbawa, Flores, Indonesia, 24 April 1930, leg. J.G. de Man; RMNH.CRUS.D.48700, 2 males (20.0 × 18.0 mm, 13.0 × 11.5 mm), 1 female (23.0 × 21.0 mm), Gulf of Thailand, near Pattani, March 2001, leg. C. Swennen.

Remarks. Only two species of *Varuna* H. Milne-Edwards in Bory de Saint Vincent, 1830 are described, of which only *V. litterata* is known from African waters (Emmerson 2016c). The other is *Varuna yui* Hwang & Takeda, 1986, originally described from Taiwan and recently recorded from India (Pati *et al*. 2022). The two species can be distinguished from each other by the carapace, which is somewhat swollen on *V. yui*, while on *V. litterata* the hepatic and epibranchial regions are flattened (Hwang & Takeda 1986). On *V. yui* the ambulatory legs are more slender than those in *V. litterata* (Hwang & Takeda 1986). The examined material matches well with the description and figures of Crosnier (1965), the extensive description in Emmerson (2016c) and with comparative material.

Distribution. Widely distributed in the Indo-Pacific. South Africa (Barnard 1950, 1955; Emmerson 2016c; Kensley 1981; Peer *et al.* 2014; Stebbing 1893, 1905, 1910), Mozambique (Emmerson 2016c; Hilgendorf 1879; Kensley 1970, 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), The Comoros (Lenz 1910), Mayotte (Poupin 2010), Madagascar (Crosnier 1965; Fourmanoir 1954), La Réunion (Poupin 2010), Mauritius (Bouvier 1915; Kingsley 1880c; Michel 1964; Ward 1942), Tanzania (Hartnoll 1975; Lenz 1905; Ortmann 1894; Pfeffer 1889), India (Alcock & Anderson 1894; Chhapgar 1957; Dev Roy 2008; Devi & Joseph 2017; Heller 1865; Henderson 1893; Kemp 1915; Trivedi *et al.* 2018), Sri Lanka (Henderson 1893), Myanmar (Chopra & Das 1937), Singapore (Lanchester 1900), Christmas Island (Orchard 2012); Thailand (Naiyanetr 2007; Ng & Davie 2002; Suppapan *et al.* 2017), Malaysia (Lanchester 1901), Indonesia (Ambarwati *et al*. 2024; De Man 1895, 1902; Nobili 1899; Schenkel 1902; Tesch 1918), China (Dai & Yang 1991; Doflein 1902; Heller 1865; Kingsley 1880c; Stimpson 1907; Wong *et al.* 2021),

Taiwan (Balss 1922c; Ng *et al.* 2001, 2017), Philippines (Kingsley 1880c), Japan (Balss 1922c; Kingsley 1880c; Miyake *et al.* 1962; Sakai 1939, 1976), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Haswell 1882; Mos *et al.* 2017), Torres Strait (Calman 1900), Papua New Guinea (Nobili 1905), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010), New Zealand (Heller 1865; Kingsley 1880c; Miers 1876), Tahiti (Curtiss 1938) and French Polynesia (Poupin 1996, 2010).

Superfamily Ocypodoidea Rafinesque, 1815

Family Dotillidae Stimpson, 1858

79. *Dotilla fenestrata* Hilgendorf, 1869

(Fig. 11E)

Dotilla fenestrata Hilgendorf, 1869: 85, pl. 3 fig. 5; 1879: 806.—Pfeffer 1889: 29.—Ortmann 1894: 58.—Lenz 1905: 367.—Stebbing 1910: 329.—Balss 1934: 521.—Vatova 1943: 25.—Barnard 1950: 99, figs. 20A, B; 1955: 3 (list).—MacNae & Kalk 1958: 69, fig. 15F.—Crosnier 1965: 120, fig. 216.—Guinot 1967a: 282 (list).—Serène 1968: 99 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 49 (list).—Vannini & Valmori 1981: 214, fig. 8B.—Ruwa *et al.* 1989: 31.—Ng *et al*. 2008: 235 (list).—Poupin 2010: 42 (list).—Peer *et al*. 2014: 56, fig. 4.—Emmerson 2016c: 315, 478 (list).—Bento & Paula 2018: 45 (list).—Munoz *et al*. 2021: 57 (list).

Dotilla clepsydra Stebbing, 1917: 18, pl. 5.

Material examined. RMNH.CRUS.D.58670, 1 male (13.0 × 10.0 mm), mangrove, along the river, fcn. X4338, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58671, 1 male (7.0 × 7.0 mm), fcn. unknown, date and collector unknown; RMNH.CRUS.D.58672, 4 males (12.0 × 9.0 mm, 11.0 × 10.0 mm, 7.0 × 10.0 mm, 7.0 × 8.0 mm), Saco da Inhaca, fcn. X4040, 7 August 1983, collector unknown; RMNH.CRUS.D.58673, 1 male (12.0 × 10.0 mm), entry to Saco River, fcn. X4366, 12 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58674, 2 males (9.0 × 7.0 mm, 8.0 × 7.0 mm), Saco da Inhaca, mangrove, fcn. X4343, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58675, 1 male (10.0 × 9.0 mm), Costa do Sol, Maputo, littoral, fcn. X3971, 28 May 1983, leg. Octavio Floriano; RMNH.CRUS.D.58676, 6 males (12.0 × 9.0 mm, 11.0 × 9.0 mm, 10.0 × 10.0 mm, 9.0 × 7.0 mm, 8.0 × 6.0 mm, 6.0 × 4.0 mm), Costa do Sol, Maputo, tidal flat, very low tide, fcn. X4070, 7 October 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58677, 1 male (8.0 × 7.0 mm), Ponta Punduini, fcn. X3926, 27 June 1982, leg. J. Baptista; RMNH.CRUS.D.58678, 1 male (8.0 × 6.0 mm), Saco da Inhaca, mangrove zone 6B, fcn. X3977, 6 August 1983, collector unknown; RMNH.CRUS.D.58679, 1 male (9.0 × 8.0 mm), Saco da Inhaca, mangrove, sandy open area, fcn. X4341, 12 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58680, 1 male (9.0 × 7.0 mm), Saco da Inhaca, mangrove, open zone along the border of the river, fcn. X4345, 12 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58681, 1 male (12.0 × 11.0 mm), on the bank of the river among the trees, fcn. X4295, 12 January 1987, leg. Maimuna Amade, Delfina Manjate & Lucilia Chuquela; RMNH.CRUS.D.58682, 2 males (9.0 × 8.0 mm, 8.0 × 7.0 mm), Saco da Inhaca, mangrove, fcn. X4361, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58683, 1 male (11.0 × 9.0 mm), Cabo da Inhaca, littoral, fcn. X4143, 14 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58684, 1 male (9.0 × 8.0 mm), mangrove, open zone, fcn. X4319, 12 January 1987, leg. Dulcineia Baguete; RMNH.CRUS.D.58685, 3 males (13.0 × 10.0 mm, 11.0 × 10.0 mm, 11.0 × 10.0 mm), Costa do Sol, Maputo, tidal flat, very low tide, fcn. X4021, 7 October 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58686, 2 males (9.0 × 8.0 mm, 7.0 × 6.0 mm), Saco da Inhaca, entrance of Saco River, sandy zone, fcn. X4279, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58687, 3 males (5.0 × 5.0 mm, 5.0 × 4.0 mm, 4.0 × 5.0 mm), Barreira Vermelha, 25 m from the beach, fcn. X4293, 12 January 1987, leg. Lucilia Chuquela & Maimuna Amade; RMNH.CRUS.D.58688, 2 males (9.0 × 7.0 mm, 8.0 × 7.0 mm), Ponta Torres, mangrove flat, fcn. X4191, 3 July 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58689, 2 males (7.0 × 5.0 mm, 4.0 × 3.0 mm), Saco da Inhaca, zone 6B, mangrove, fcn. X3965, 6 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58690, 1 male (9.0 × 7.0 mm), Saco da Inhaca, fcn. X4307, 12 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58691, 29 males (6.0 × 6.0 mm, 6.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 4.5 × 4.0 mm, 4.5 × 3.0 mm, 4.0 × 5.0 mm, 4.0 × 5.0 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 3.5 mm, 4.0 × 3.5 mm, 4.0 × 3.5 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 3.5 × 4.0 mm, 3.5 × 3.5 mm, 3.5 × 3.5 mm, 3.5 × 3.0 mm, 3.5 × 3.0 mm, 3.5 × 3.0

mm, 3.0 × 3.0 mm, 3.0 × 3.0 mm), 1 ovigerous female (5.5 × 4.5 mm), Saco da Inhaca, fcn. X3927, 7 August 1983, leg. Obede Baldi; RMNH.CRUS.D.58692, 2 males (9.0 × 8.0 mm, 9.0 × 7.0 mm), mangrove flat by Ponta Torres, fcn. X3948, 3 June 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58693, 53 males (9.0 × 7.0 mm, 8.0 × 7.0 mm, 7.0 × 5.0 mm, 6.5 × 6.0 mm, 6.5 × 5.0 mm, 6.0 × 6.0 mm, 6.0 × 5.0 mm, 6.0 × 5.0 mm, 6.0 × 5.0 mm, 6.0 × 5.5 mm, 5.5 × 5.0 mm, 5.5 × 4.5 mm, 5.0 × 5.0 mm, 5.0 × 4.5 mm, 5.0 × 4.5 mm, 5.0 × 4.5 mm, 5.0 × 4.5 mm, 5.0 × 4.5 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 4.5 × 4.0 mm, 4.5 × 4.0 mm, 4.5 × 4.0 mm, 4.5 × 3.0 mm, 4.0 × 4.5 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 3.5 mm, 4.0 × 3.5 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 4.0 × 3.0 mm, 3.5 × 3.5 mm, 3.5 × 3.0 mm, 3.5 × 3.0 mm, 3.0 × 3.0 mm, 3.0 × 3.0 mm), 2 ovigerous females (6.0 × 5.0 mm, 5.0 × 4.0 mm), 5 females (7.0 × 6.0 mm, 7.0 × 6.0 mm, 7.0 × 6.0 mm, 7.0 × 6.0 mm, 5.0 × 4.0 mm), Saco da Inhaca, fcn. X3987, 7 August 1983, leg. Obede Baldi; RMNH.CRUS.D.58694, 10 males (9.0 × 8.0 mm, 8.0 × 7.0 mm, 6.0 × 5.5 mm, 6.0 × 5.0 mm, 6.0 × 4.0 mm, 5.5 × 5.0 mm, 4.0 × 3.0 mm, 3.0 × 3.0 mm, 3.0 × 3.0 mm, 3.0 × 2.0 mm), 3 females (5.5 × 4.5 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm), in front of Barreira Vermelha, fcn. X4365, 14 January 1987, leg. Albertina Alage; RMNH.CRUS.D.58695, 1 male (10.0 × 9.0 mm), littoral by Costa do Sol, Maputo, fcn. X3933, 28 May 1983, leg. Odette Cossa; RMNH.CRUS.D.58696, 1 male (9.0 × 8.0 mm), Costa do Sol, Maputo, littoral, fcn. X3981, 28 June 1983, leg. Isabel Guiamba; RMNH.CRUS.D.58697, 1 male (9.0 × 9.0 mm), Saco da Inhaca, littoral, fcn. X3985, 4 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58698, 1 male (9.0 × 8.0 mm), Costa do Sol, Maputo, littoral, fcn. X4016, 28 July 1983, leg. Alberto Tsamba.

Comparative material. RMNH.CRUS.D.28244, 6 males (9.0 × 8.0 mm, 9.0 × 7.5 mm, 9.0 × 6.5 mm, 8.0 × 6.5 mm, 6.5 × 6.0 mm, 6.5 × 5.0 mm), 1 female (5.5 × 5.0 mm), Lourenço Marques [= Maputo], tidal Costa do Sol, Mozambique, 17 September 1967, leg. G. Hartmann; RMNH.CRUS.D.28245, 2 males (10.0 × 9.0 mm, 10.0 × 9.0 mm), Lourenço Marques [= Maputo], Mozambique, upper tidal, sand coast, 21 September 1967, leg. G. Hartmann; RMNH.CRUS.D.28246, 11 males (6.5 × 5.0 mm, 6.0 × 5.0 mm, 6.0 × 4.5 mm, 5.0 × 4.0 mm, 5.0 × 4.0 mm, 5.0 × 3.5 mm, 4.0 × 4.0 mm, 4.0 × 4.0 mm, 4.0 × 3.0 mm, 3.5 × 3.0 mm, 3.5 × 3.0 mm), 1 female (4.5 × 4.0 mm), Lourenço Marques [= Maputo], Mozambique, mangrove tidal flat, Costa do Sol, 22 September 1967, leg. G. Hartmann.

Remarks. The specimens agree well with concise original description and drawings in Hilgendorf (1869) and more recent descriptions and drawings in Barnard (1950), Crosnier (1965), Vannini & Valmori (1981) and Emmerson (2016c). *Dotilla fenestrata* was the only member of *Dotilla* reported from South Africa and Mozambican waters (Emmerson 2016c).

Distribution. South Africa (Barnard 1950, 1955; Emmerson 2016c; Kensley 1981; Peer *et al.* 2014; Stebbing 1910, 1917), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1869; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021; Pfeffer 1889), Mayotte (Poupin 2010), Madagascar (Balss 1934; Crosnier 1965; Emmerson 2016c), Tanzania (Hartnoll 1975; Lenz 1905; Ortmann 1894; Pfeffer 1889), Kenya (Ruwa *et al.* 1989) and Somalia (Vannini & Valmori 1981; Vatova 1943).

Family Macrophthalmidae Števčić, 2005

Subfamily Macrophthalminae Dana, 1851

80. *Chaenostoma crassimanus* Stimpson, 1858*

(Fig. 11F)

Macrophthalmus boscii.—Krauss 1843: 40, pl. 2 fig. 5.—Lenz & Richters 1881: 425.—Fourmanoir 1954: 3, fig. 3.—Crosnier 1965: 134, figs. 244–248. [Not *Macrophthalmus Boscii* Audouin, 1826].
? *Euplax bosci.*—H. Milne-Edwards 1852: 160 (in part). [Not *Macrophthalmus Boscii* Audouin, 1826].
Chaenostoma crassimanus Stimpson, 1858: 97.—Teng *et al*. 2016: figs. 1L–N, 19 (in table).—Ng *et al.* 2017: 120 (list).
Euplax boscii.—Lenz 1905: 367.—Stebbing 1910: 329. [Not *Macrophthalmus Boscii* Audouin, 1826].

Material examined. RMNH.CRUS.D.58699, 2 males (6.0 × 4.0 mm, 5.0 × 3.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4085, 2 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58700, 1 male (7.0 × 5.0 mm), Cabo da Inhaca, fcn. X4355, 15 January 1987, leg. Maimuna Amade, Lucidia Chuquela, Albertina Alage & Dulcineia

Baquete; RMNH.CRUS.D.58701, 1 female (7.0 × 5.0 mm), Cabo da Inhaca, fcn. X4355, 15 January 1987, leg. Maimuna Amade, Lucidia Chuquela, Albertina Alage & Dulcineia Baquete; RMNH.CRUS.D.58702, 1 male (4.0 × 3.0 mm), tidal flat off Barreira Vermelha, fcn. X3918, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58703, 1 male (4.0 × 3.0 mm), 3 females (8.0 × 6.0 mm, 6.0 × 5.0 mm, 5.0 × 3.0 mm), tidal flat off Barreira Vermelha, fcn. X4043, 7 August 1983, leg. J.H.C. Walenkamp.

Remarks. *Chaenostoma crassimanus* was not named in the checklists for African waters by Emmerson (2016c) and for Mozambican waters by Muñoz *et al.* (2021). In the review of the *C. boscii* (Audouin, 1826) species-complex by Teng *et al.* (2016), an extensive morphological comparison was done between *Chaenostoma* Stimpson, 1858 species, aided by molecular analysis. They found that *C. crassimanus* is the most widely distributed species, ranging from East Africa to New Caledonia (Teng *et al.* 2016). In the publication, the results of the morphological comparison are given in a table, accompanied by drawings, which are useful in identifying these small crabs. The examined specimens have a low, wide, rectangular tooth on the cutting margin of the cheliped dactylus, which is characteristic for *C. crassimanus*. The carapace of the specimens also has a convex front, as opposed to the concave front of the other species of *Chaenostoma*. Teng *et al.* (2016) provided a wide distributional range, but a the presence of *C. crassimanus* in Mozambican waters has not been confirmed or published. Barnard (1950) reported the presence of *Macrophthalmus boscii* from Mozambique, an identification that was given to this species by more authors, but the given drawing (p. 100, fig. 20F) is incomplete, and not detailed enough to determine if Barnard had the same species at the time. He also discussed his specimens had a faint granulate ridge on the outer surface of the cheliped hand (Barnard 1950), which is absent on the Inhaca Island specimens. It is likely Barnard's specimens were *C. sinuspersici.*

Distribution. From East Africa to New Caledonia (Teng *et al.* 2016). Newly recorded from Mozambique.

81. *Chaenostoma sinuspersici* (Naderloo & Türkay, 2011)

Macrophthalmus boscii.—Barnard 1950: 103, figs. 20F–I.—Crosnier 1965: 134, figs. 244–248.—Kensley 1981: 49 (list).—Hogarth 1989: 104 (list). [Not *Macrophthalmus Boscii* Audouin, 1826].

Macrophthalmus sinuspersici Naderloo & Türkay, 2011: 508, figs. 3C, D, 4C, D, 5A–G, 6A–G, 7A–C.—Naderloo *et al.* 2011: 30, figs. 17E, F, 18A–I.

Macrophthalmus (*Chaenostoma*) *sinuspersici.*—Naderloo & Türkay 2012: 51.—Emmerson 2016c: 334, 479 (list).

Chaenostoma sinuspersici.—Naderloo 2013: 2 (key); 2017: 388, figs. 36.1, 36.2B, 36.2C, 36.3.—Teng *et al.* 2016: figs. 1D–F, 19 (in table).—Trivedi & Vachhrajani 2017: 2, fig. 1.—Bento & Paula 2018: 45 (list).—Trivedi *et al*. 2018: 50 (list).—Muñoz *et al.* 2021: 57 (list).—Pati *et al.* 2022: 526.

Material examined. RMNH.CRUS.D.58704, 1 male (15.0 × 9.0 mm), littoral zone north of Ponta Torres, fcn. X4052, 27 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58705, 1 ovigerous female (6.0 × 4.0 mm), tidal flat off Barreira Vermelha, zone 1, fcn. X3949, 7 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58706, 1 male (12.0 × 9.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4047, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58707, 1 female (6.0 × 4.5 mm), tidal flat off Barreira Vermelha, fcn. X3916, 8 August 1983, leg. J.H.C. Walenkamp.

Remarks. The examined specimens match well with the original description in Naderloo & Türkay (2011). *Chaenostoma sinuspersici* can be distinguished from the other *Chaenostoma* in the region, *C. crassimanus*, by the presence of a stridulating ridge on the inner merus of the cheliped (Teng *et al.* 2016). The examined specimens show a clear stridulating ridge and a concave front of the carapace, which is also a distinct difference between *C. sinuspersici* and *C. crassimanus*.

Distribution. South Africa (Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; Muñoz *et al.* 2021; Naderloo & Türkay 2011), Madagascar (Crosnier 1965; Naderloo & Türkay 2011), Djibouti (Naderloo & Türkay 2011), Seychelles (Naderloo & Türkay 2011), Tanzania (Naderloo & Türkay 2011), Gulf of Oman (Hogarth 1989; Naderloo 2017; Naderloo & Türkay 2011), Persian Gulf (Naderloo 2017; Naderloo & Türkay 2011), Pakistan (Naderloo & Türkay 2011), India (Pati *et al.* 2022; Trivedi & Vachhrajani 2017; Trivedi *et al.* 2018), Indonesia (Naderloo & Türkay 2011), Australia (Naderloo & Türkay 2011) and Papua New Guinea (Naderloo & Türkay 2011).

82. *Macrophthalmus* (*Macrophthalmus*) *grandidieri* A. Milne-Edwards, 1867
(Fig. 12A)

Macrophthalmus Grandidierii A. Milne-Edwards, 1867: 285.

Macrophthalmus grandidieri.—Lenz & Richters 1881: 423.—Ortmann 1894: 58.—Lenz 1905: 365.—Tesch 1915: 166, pl. 6 fig. 3.—Balss 1934: 522 (list).—Monod 1938: 148, fig. 27.—Barnard 1950: 102, figs. 20C–E.—Fourmanoir 1954: 3, fig. 3.—MacNae & Kalk 1958: 69, figs. 15G, 15H.—Crosnier 1965: 127, figs. 230, 231, 235, 236.—Guinot 1967a: 283 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 49 (list).—Poupin 2010: 52 (list).—Naderloo *et al.* 2011: 15, figs. 8A–F, 9A–D, 21A, 21B.—Naderloo *et al.* 2013: 6 (in table).—Bento & Paula 2018: 45 (list).—Muñoz *et al.* 2021: 57 (list).

Macrophthalmus (*Macrophthalmus*) *grandidieri.*—Barnes 1967: 203 (list); 1970: 223, figs. 6A–C.—Serène 1968: 100 (list).—Vannini & Valmori 1981: 216, fig. 9A.—Apel 2001: 108.—Ng *et al.* 2008: 237 (list).—Naderloo & Türkay 2012: 52.—Peer *et al*. 2014: 58, fig. 11.—Emmerson 2016c: 330, 479 (list).—Naderloo 2017: 392, figs. 36.2D, 36.2E, 36.5, 36.6, 36.12.

Material examined. RMNH.CRUS.D.58708, 1 male (25.0 × 12.0 mm), mangrove Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4359, 21 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58709, 2 males (28.0 × 13.0 mm, 22.0 × 12.0 mm), Saco da Inhaca, along the water, fcn. X4332, 21 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58710, 1 male (22.0 × 12.0 mm), Saco da Inhaca, fcn. X4040, 7 August 1983, collector unknown; RMNH.CRUS.D.58711, 1 male (27.0 × 12.0 mm), littoral north of Marine Biology Station (EBM), fcn. X4036, 24 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58712, 1 male (11.0 × 5.0 mm juvenile, very soft), Saco da Inhaca, fcn. X3979, date unknown, leg. Henrique Saude; RMNH.CRUS.D.58713, 1 male (32.0 × 14.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4060, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58714, 1 male (25.0 × 13.0 mm), Ponta Punduini, fcn. X3938, 27 July 1982, leg. J. Baptista; RMNH.CRUS.D.58715, 1 ovigerous female (18.0 × 11.0 mm), in front of Marine Biology Station (EBM), fcn. X3963, 1 August 1982, leg. J. Baptista Rafael; RMNH.CRUS.D.58716, 1 female (22.0 × 11.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4059, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58717, 2 males (24.0 × 11.0 mm, 24.0 × 11.0 mm), Saco da Inhaca, mangrove, fcn. X4156, 6 January 1986, leg. N. Chilemba; RMNH.CRUS.D.58718, 1 male (25.0 × 11.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4061, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58719, 1 male (20.0 × 11.0 mm), 1 female (21.0 × 10.0 mm), Saco da Inhaca, littoral, bridge north of Ponta Panos, fcn. unknown, 27 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58720, 1 male (28.0 × 13.0 mm), between Ponta Rasa and Ponta Punduini, fcn. X4051, 1 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58721, 5 males (27.0 × 11.0 mm, 26.0 × 12.0 mm, 23.0 × 10.0 mm, 21.0 × 9.0 mm, 20.0 × 10.0 mm), 2 females (19.0 × 9.0 mm, 16.0 × 7.0 mm), in front of mangrove, fcn. X4014, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58722, 1 male (23.0 × 12.0 mm), Ponta Punduini, fcn. X3911, 27 July 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58723, 1 male (21.0 × 10.0 mm), Ponta Punduini, fcn. X3926, 27 July 1982, leg. J. Baptista; RMNH.CRUS.D.58724, 2 males (9.0 × 4.0 mm, 8.0 × 4.0 mm), 1 ovigerous female (20.0 × 9.0 mm), 4 females (26.0 × 11.0 mm, 18.0 × 9.0 mm, 11.0 × 6.0 mm, 10.0 × 4.0 mm), Saco da Inhaca, fcn. X3986, 7 August 1983, leg. Obede Baldi; RMNH.CRUS.D.58725, 1 male (24.0 × 11.0 mm), 1 female (19.0 × 9.0 mm), Saco da Inhaca, mangrove, zone 6B, fcn. X3977, 6 August 1983, collector unknown; RMNH.CRUS.D.58726, 4 males (23.0 × 11.0 mm, 19.0 × 9.0 mm, 17.0 × 9.0 mm, 6.0 × 3.0 mm), 1 female (18.0 × 8.0 mm), Saco da Inhaca, fcn. X3929, 7 August 1983, leg. Daima Ussene Raja; RMNH.CRUS.D.58727, 2 males (28.0 × 12.0 mm, 26.0 × 11.0 mm), 1 female (23.0 × 11.0 mm), in front of Barreira Vermelha, 1 meter depth, fcn. X4101, 7 February 1982, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58728, 2 males (21.0 × 10.0 mm, 13.0 × 7.0 mm), littoral, fcn. X4173, 4 January 1986, leg. Simao Marcos Muchanga; RMNH.CRUS.D.58729, 1 male (24.0 × 11.0 mm), Ponta Punduini, fcn. X4093, 27 July 1982, leg. J. Baptista; RMNH.CRUS.D.58730, 4 males (27.0 × 12.0 mm, 26.0 × 13.0 mm, 25.0 × 11.0 mm, 22.0 × 10.0 mm), 1 female (20.0 × 10.0 mm), Saco da Inhaca, mangrove, in front of *Avicennia* sp., fcn. X3983, 4 August 1983, collector unknown; RMNH.CRUS.D.58731, 1 male (26.0 × 12.0 mm), *Cymodocea* flats, north of Ponta Punduini, fcn. X4102, 6 April 1982, leg. Custodio Boane; RMNH.CRUS.D.58732, 1 female (20.0 × 10.0 mm), Saco da Inhaca, mangrove, open zone along the border of the river, fcn. X4345, 21 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58733, 1 male (27.0 × 13.0 mm), in front of mangrove, fcn. X3998, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58734, 1 male (23.0 × 12.0 mm), alongside the border of the river, fcn. X4297, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58735, 1 male (carapace damaged), Ilha dos Portugueses, fcn. X3999, 15 August 1983, leg. Alberto Tsamba.

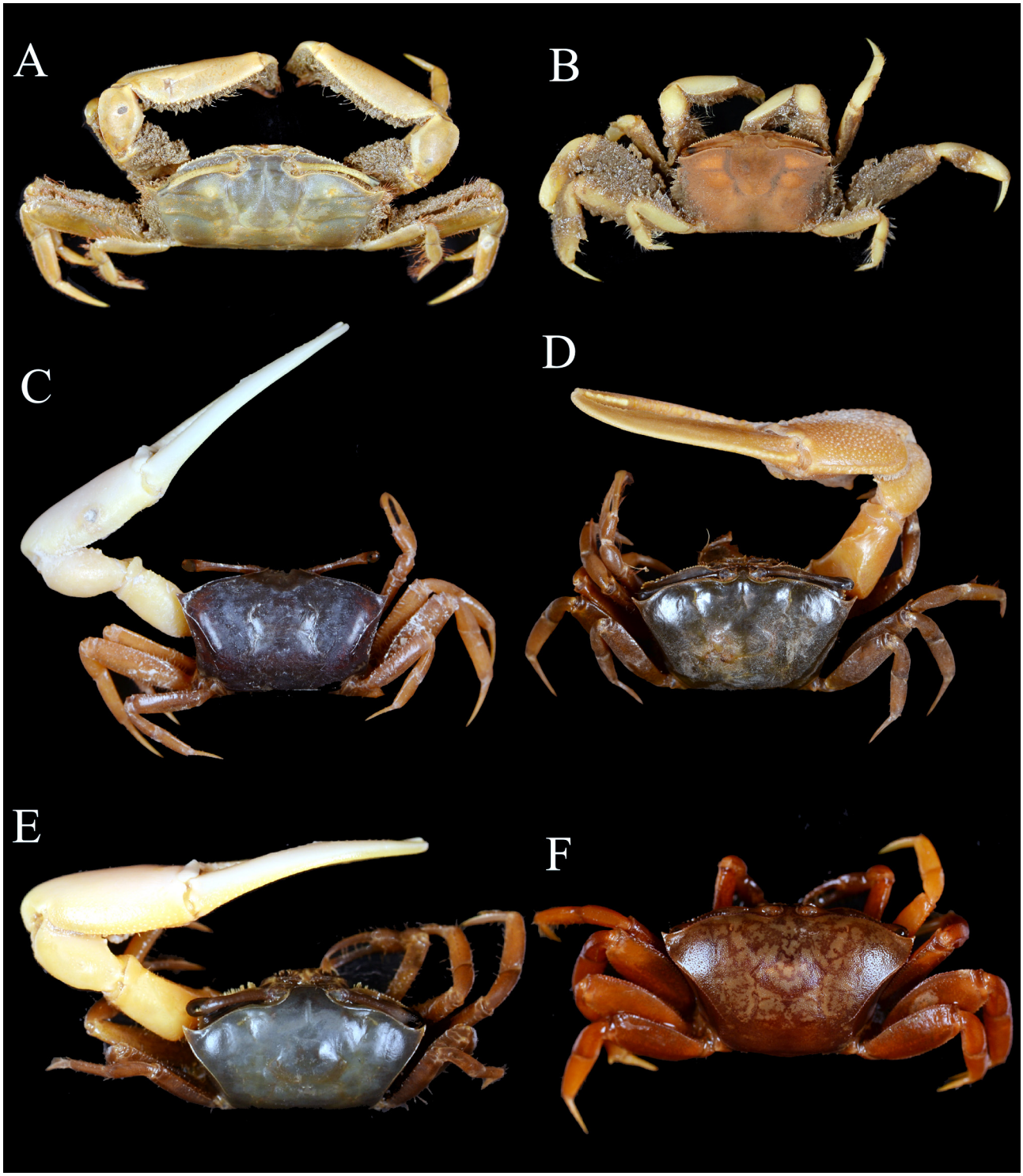

FIGURE 12. A, *Macrophthalmus* (*Macrophthalmus*) *grandidieri* A. Milne-Edwards, 1867, male, CW = 28.0 mm, RMNH.CRUS.D.58709; B, *Macrophthalmus* (*Mareotis*) *depressus* Rüppell, 1830, male, CW = 14.0 mm, RMNH.CRUS.D.58736; C, *Austruca occidentalis* (Naderloo, Schubart & Shih, 2016), male, CW = 16.0 mm, RMNH.CRUS.D.58756; D, *Gelasimus hesperiae* (Crane, 1975), male, CW = 23.0 mm, RMNH.CRUS.D.58774; E, *Paraleptuca chlorophthalmus* (H. Milne-Edwards, 1837), male, CW = 15.0 mm, RMNH.CRUS.D.58819; F, *Tubuca urvillei* (H. Milne-Edwards, 1852), female, CW = 24.0 mm, RMNH.CRUS.D.58828.

Comparative material. RMNH.CRUS.D.294, 1 male (21.5 × 11.0 mm) (lectotype of *M. grandidieri*), Bay of Passandava, Madagascar, between 1863 and 1866, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.22684, 1

male (21.0 × 9.0 mm), Diego Suarez, Madagascar, date unknown, leg. J. Millot; RMNH.CRUS.D.14162, 1 male (28.0 × 14.0 mm), Red Sea, Sinai Peninsula, Abu Zabad, Israel, 2 January 1957, leg. H. Steinitz.

Remarks. Two members of *Macrophthalmus* Desmarest, 1823 were reported from Mozambican waters, *M.* (*Macrophthalmus*) *grandidieri* and *M.* (*Mareotis*) *depressus* Rüppell, 1830. The two are easy to distinguish by the width to length ratio of their carapace. *Macrophthalmus* (*Macrophthalmus*) *grandidieri* has a carapace width to length ratio of about two, while *M.* (*Mareotis*) *depressus* has a width to length ratio of about 1.5. The examined specimens match the description and drawing by Naderloo *et al.* (2011) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Peer *et al.* 2014), Mozambique (Barnard 1950; Barnes 1970; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Balss 1934; Crosnier 1965; Fourmanoir 1954; Lenz & Richters 1881), Tanzania (Hartnoll 1975; Lenz 1905; A. Milne-Edwards 1867; Ortmann 1894), Somalia (Vannini & Valmori 1981), Red Sea (Monod 1938; Tesch 1915), Gulf of Oman (Apel 2001; Naderloo 2017; Naderloo *et al.* 2011) and Persian Gulf (Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2011, 2013).

83. *Macrophthalmus* (*Mareotis*) *depressus* Rüppell, 1830

(Fig. 12B)

Macrophthalmus depressus Rüppell, 1830: 19, pl. 4, fig. 6.—Heller 1861a: 362; 1861b: 17 (list).—Paulson 1875: 65.—De Man 1887: 124; 1895: 578.—Henderson 1893: 389.—Nobili 1906a: 318; 1906b: 155.—Laurie 1915: 416 (list), 472.—Calman 1927: 215.—Balss 1934: 522.—Monod 1938: 149.—Stephensen 1946: 191, fig. 58A.—Dawydoff 1952: 142.—Barnard 1955: 22.—Holthuis 1956: 328.—Chhapgar 1957: 52, pl. 15, figs. E–G.—MacNae & Kalk 1958: 69.—Crosnier 1965: 133, fig. 243.—Guinot 1967a: 282 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 49 (list).—Hogarth 1989: 117 (list).—Al-Ghais & Cooper 1996: 415, fig. 5.—Cooper 1997: 158.—Hornby 1997: 15.—Poupin 2010: 52 (list).—Naderloo *et al.* 2011: 11, figs. 6A–E, 7A–D, 10C, 10D.—Naderloo *et al.* 2013: 6 (table).—Bento & Paula 2018: 45 (list).—Venkataraman *et al*. 2004: 307 (list).—Pandya & Vachhrajani 2010: 1055.

Macrophthalmus affinis Guérin-Méneville, 1838: Crustacés, pl. 4.

Macrophthalmus (*Mareotis*) *depressus.*—Barnes 1967: 203 (list); 1970: 226, figs. 7A, 7B.—Serène 1968: 100 (list).—Vannini & Valmori 1981: 217, fig. 9D.—Titgen 1982: 148.—Jones 1986: 159, pl. 47.—Apel 2001: 110.—Dev Roy 2008: 145.—Ng *et al.* 2008: 237 (list).—Naderloo & Türkay 2012: 52.—Emmerson 2016c: 479 (list).—Naderloo 2017: 398, figs. 36.13C, 36.13D, 36.14, 36.15.—Trivedi *et al*. 2018: 51 (list).—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58736, 1 male (14.0 × 9.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4002, 28 July 1983, leg. Obede Baldi; RMNH.CRUS.D.58737, 2 females (13.0 × 8.0 mm, 10.0 × 6.0 mm), mangrove, shady zone, fcn. X4336, 12 January 1987, leg. Maria Simango.

Comparative material. RMNH.CRUS.D.21275, 1 male (21.0 × 13.5 mm), Gulf of Mannar, India, 1959, leg. C. Sankarankutty; RMNH.CRUS.D.30832, 1 female (11.0 × 7.0 mm), Janub Sina', Gulf of Suez, Ras Matarma, Egypt, 12 August 1970, collector unknown; RMNH.CRUS.D.51691, 3 males (14.0 × 9.0 mm, 11.5 × 7.0 mm, 11.0 × 7.0 mm), 1 female (11.5 × 8.0 mm), Zanzibar Island, Chwaka Bay, Tanzania, 25 January 2004, leg. I. Nagelkerken & G. Kruitwagen, registered as *Macrophthalmus* (*Chaenostoma*) *boscii* Audouin, 1826, redet. M. Willems, 2023.

Remarks. See also the remarks under *Macrophthalmus* (*Macrophthalmus*) *depressus*. Examined specimens of *Macrophthalmus (Mareotis) depressus* match well with the original description by Rüppell (1830), the description and figures in Naderloo *et al.* (2011) and with the comparative material.

Distribution. South Africa (Emmerson 2016c; Kensley 1981), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010), Madagascar (Balss 1934; Crosnier 1965), Tanzania (Hartnoll 1975), Somalia (Vannini & Valmori 1981), Red Sea (Calman 1927; Heller 1861a, b; Laurie 1915, Monod 1938; Nobili 1906a; Paulson 1875; Rüppell 1830), Gulf of Oman (Hogarth 1989; Naderloo 2017), Persian Gulf (Al-Ghais & Cooper 1996; Apel 2001; Cooper 1997; Hornby 1997; Jones 1986; Naderloo 2017; Naderloo & Türkay 2012; Naderloo *et al.* 2011, 2013; Nobili 1906b; Stephensen 1946; Titgen 1982), India (Chhapgar 1957; Dev Roy 2008; Henderson 1893; Pandya & Vachhrajani 2010; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Myanmar (De Man 1887) and Indonesia (De Man 1895).

Family Ocypodidae Rafinesque, 1815

Subfamily Gelasiminae Miers, 1886

84. *Austruca occidentalis* (Naderloo, Schubart & Shih, 2016)
(Fig. 12C)

Gelasimus lacteus.—Krauss 1843: 39. [Not *Gelasimus lacteus* (De Haan, 1835)].
Gelasimus annulipes.—Hilgendorf 1869: 85; 1879: 803.—Hoffmann 1874: 18.—Kingsley 1880a: 148. (in part)—Richters 1880: 155.—Lenz & Richters 1881: 423.—Pfeffer 1889: 29 (in part).—Lenz 1905: 365; 1910: 558. [Not *Gelasimus annulipes* H. Milne-Edwards, 1837].
Uca annulipes.—Chace 1942: 202.—Vatova 1943: 24.—Barnard 1950: 97, figs. 18G–I, 19E.—MacNae & Kalk 1958: 67.—Michel 1964: 11.—Crosnier 1965: 117, figs. 204, 206, 207, 212, 213.—Guinot 1967a: 281 (list).—Serène 1968: 97 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 49 (list).—Rumisha *et al.* 2015: 4 (list).
Uca lactea.—Barnard 1950: 96.
Austruca annulipes.—Bott 1973: 322 (in part), fig. 13.—Muñoz *et al.* 2021: 57 (list).
Uca (*Celuca*) *lactea annulipes*.—Crane 1975: 299 (in part).—Vannini & Valmori 1981: 208, figs. 5C, 6C.
Uca (*Paraleptuca*) *annulipes*.—Ng *et al.* 2008: 241 (list).—Emmerson 2016c: 480 (list).
Uca (*Austruca*) *annulipes*.—Naderloo *et al.* 2010: 7 (in part), figs. 2B, H, 3E, 12C.—Peer *et al*. 2014: 59, fig. 13.—Emmerson 2016c: 366.
Uca (*Austruca*) *occidentalis* Naderloo, Schubart & Shih, 2016: 13, figs. 3, 4E–J, 5A, 6B.
Austruca occidentalis.—Shih *et al.* 2016: 153 (list).—Ma & McQuaid 2021: 1239 (list).

Material examined. RMNH.CRUS.D.58738, 3 males (21.0 × 11.0 mm, 16.0 × 11.0 mm, 14.0 × 10.0 mm), Saco da Inhaca, mangrove, inland margin of *Avicennia* sp., fcn. X3984, 4 August 1983, collector unknown; RMNH.CRUS.D.58739, 1 male (14.0 × 8.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4359, 12 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58740, 2 males (16.0 × 10.0 mm, 15.0 × 11.0 mm), Saco da Inhaca, intertidal zone, mangrove, fcn. X4288, 21 January 1987, leg. Marcelino Lucas; RMNH.CRUS.D.58741, 2 males (13.0 × 8.0 mm, 12.0 × 7.0 mm), Saco da Inhaca, uplifted open zone, fcn. X4290, 12 January 1987, leg. Bertino Saaco; RMNH.CRUS.D.58742, 1 male (11.0 × 7.0 mm), Saco da Inhaca, external open zone, fcn. X4281, 12 January 1987, leg. Bertino Saaco; RMNH.CRUS.D.58743, 2 males (17.0 × 12.0 mm, 15.0 × 10.0 mm), Saco da Inhaca, fcn. X3944, 4 August 1983, collector unknown; RMNH.CRUS.D.58744, 1 male (12.0 × 7.0 mm), 1 female (13.0 × 9.0 mm), Saco da Inhaca, zone S, mangrove, fcn. X3935, 6 August 1983, collector unknown; RMNH.CRUS.D.58745, 3 males (15.0 × 10.0 mm, 13.0 × 9.0 mm, 9.0 × 6.0 mm), 1 female (14.0 × 8.0 mm), Saco da Inhaca, mangrove, fcn. X4334, 12 January 1987, leg. Judith Ernesto Muele; RMNH.CRUS.D.58746, 1 male (18.0 × 11.0 mm), Saco da Inhaca, fcn. X4150, 6 January 1986, leg. Pedro Fato, Naomy Chilemba & Nadia dos Aujio; RMNH.CRUS.D.58747, 3 males (16.0 × 10.0 mm, 15.0 × 9.0 mm, 11.0 × 7.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4302, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58748, 3 males (15.0 × 9.0 mm, 15.0 × 9.0 mm, 13.0 × 8.0 mm), Saco da Inhaca, mangrove, shady zone, fcn. X4300, 12 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58749, 3 males (15.0 × 9.0 mm, 14.0 × 9.0 mm, 13.0 × 8.0 mm), 2 females (14.0 × 9.0 mm, 12.0 × 7.0 mm), Saco da Inhaca, mangrove, open zone, fcn. X4349, 12 January 1987, leg. Delfina Manfate, Lucilia Chuquela & Maimura Amade; RMNH.CRUS.D.58750, 1 male (17.0 × 10.0 mm), Saco da Inhaca, mangrove, fcn. X4164, 6 January 1985, leg. P. Fato; RMNH.CRUS.D.58751, 1 male (17.0 × 10.0 mm), mangrove by Ponta Punduini, fcn. X3931, 9 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58752, 1 male (14.0 × 8.0 mm), Saco da Inhaca, mangrove, fcn. X4354, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58753, 1 male (12.0 × 7.0 mm), inside of the mangrove, fcn. X3962, date unknown, leg. Carl Mohrherr; RMNH.CRUS.D.58754, 1 male (damaged carapace), Saco da Inhaca, inside of the mangrove, fcn. X4161, 7 January 1986, leg. Teresa; RMNH.CRUS.D.58755, 1 male (16.0 × 10.0 mm), Saco da Inhaca, mangrove, fcn. X3970, 24 July 1982, leg. Daimia Ussene Raja; RMNH.CRUS.D.58756, 1 male (16.0 × 10.0 mm), mangrove, fcn. X4277, 12 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58757, 5 males (14.0 × 9.0 mm, 14.0 × 9.0 mm, 14.0 × 9.0 mm, 14.0 × 9.0 mm, 14.0 × 8.0 mm), Saco da Inhaca, mangrove, shady zone, fcn. X4284, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58758, 1 male (15.0 × 8.0 mm), littoral between Marine Biology Station (EBM) and Ponta Rasa, fcn. X4149, 4 January 1986, leg. M. dos Sujes & Domingo Joseul; RMNH.CRUS.D.58759, 6 males (23.0 × 12.0 mm, 22.0 × 14.0 mm, 21.0 × 12.0 mm, 21.0 × 12.0 mm, 20.0 × 11.0 mm, 18.0 × 10.0 mm), Cabo de Inhaca, littoral, fcn. X4145, 17 November 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58760, 1 male

(14.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. unknown, 6 January 1986, leg. R. Rafael; RMNH.CRUS.D.58761, 3 males (11.0 × 6.0 mm, 10.0 × 6.0 mm, 6.0 × 4.0 mm), Saco da Inhaca, mangrove, fcn. X4356, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58762, 1 male (14.0 × 8.0 mm), mangrove, shady zone, fcn. X4337, 12 January 1987, leg. Judith Ernesto Muchanga; RMNH.CRUS.D.58763, 1 male (17.0 × 11.0 mm), Saco da Inhaca, back of the mangrove, fcn. X3939, 3 August 1983, collector unknown; RMNH.CRUS.D.58764, 2 males (12.0 × 7.0 mm, 10.0 × 7.0 mm), mangrove, open zone, fcn. X4318, 12 January 1987, leg. Dulcineia Baguete; RMNH.CRUS.D.58765, 2 males (11.0 × 9.0 mm, 9.0 × 6.0 mm), mangrove, shady zone, fcn. X4336, 12 January 1987, leg. Maria Simango; RMNH.CRUS.D.58766, 4 males (16.0 × 10.0 mm, 13.0 × 8.0 mm, 12.0 × 8.0 mm, 12.0 × 8.0 mm), 1 female (12.0 × 8.0 mm), Saco da Inhaca, mangrove, open zone along the border of the river, fcn. X4345, 12 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58767, 1 male (12.0 × 8.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4280, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58768, 2 males (15.0 × 10.0 mm, 14.0 × 9.0 mm), inside of Saco, open zone, fcn. X4317, 12 January 1987, leg. Joaquim Gomas; RMNH.CRUS.D.58769, 2 males (15.0 × 9.0 mm, 14.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. X4351, 12 January 1987, leg. Dulceria Baguete; RMNH.CRUS.D.58770, 1 male (13.0 × 8.0 mm), mangrove, open zone, fcn. X4278, 12 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58771, 1 male (14.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. X4361, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58772, 4 males (15.0 × 10.0 mm, 13.0 × 8.0 mm, 13.0 × 8.0 mm, 11.0 × 7.0 mm), mangrove, open zone, fcn. X4333, 12 January 1987, leg. Helena Conçalves.

Comparative material. RMNH.CRUS.D.2011, 1 male (18.0 × 11.0 mm), Port Natal [= Durban], South Africa, 20 April 1916, leg. P. Buitendijk; RMNH.CRUS.D.3256, 1 female (12.0 × 8.0 mm), Inhaca Island, Mozambique, date unknown, don. Museum of Amsterdam; RMNH.CRUS.D.25919, 19 males (16.0 × 9.0 mm, 12.0 × 8.0 mm, 12.0 × 8.0 mm, 12.0 × 7.0 mm, 11.0 × 6.5 mm, 11.0 × 6.5 mm, 11.0 × 6.5 mm, 11.0 × 6.0 mm, 11.0 × 6.0 mm, 11.0 × 6.0 mm, 11.0 × 6.0 mm, 11.0 × 5.5 mm, 11.0 × 5.5 mm, 10.0 × 7.0 mm, 10.0 × 6.0 mm, 10.0 × 6.0 mm, 10.0 × 5.5 mm, 9.0 × 5.5 mm, 8.0 × 4.5 mm), 2 females (11.5 × 6.0 mm, 11.0 × 5.5 mm), Tanganyika, Dar es Salaam, Tanzania, 9 January 1959, leg. A. Nevo; RMNH.CRUS.D.28697, 3 males (13.0 × 8.0 mm, 11.0 × 8.0 mm, 8.0 × 6.0 mm), 32 km north of Malindi, Ngomeni, Kenya, 30 December 1971, leg. R.L. Casebeer; RMNH.CRUS.D.26277, 5 males (15.0 × 9.0 mm, 13.0 × 7.0 mm, 12.0 × 8.0 mm, 9.0 × 5.5 mm, 7.0 × 4.0 mm), 6 females (11.0 × 6.0 mm, 9.0 × 6.0 mm, 7.0 × 4.5 mm, 7.0 × 4.5 mm, 6.0 × 4.0 mm, 6.0 × 4.0 mm), Coast Province, Muapa Creek, Mombasa, Kenya, 25 August 1968, leg. D.B.E. Magnus.

Remarks. *Austruca occidentalis* (Naderloo, Schubart & Shih, 2016) was mentioned in the checklist by Muñoz *et al*. (2021) for Mozambican waters, but as *A. annulipes* (H. Milne-Edwards, 1837). They appeared to have overlooked the work by Naderloo *et al.* (2016) that showed that the population of *A. annulipes* within the Indo-West Pacific actually consists of two separate species. The first being *A. annulipes,* which is widely spread within the Pacific, and the second *A. occidentalis*, which is restricted to the western Indian Ocean. *Austruca occidentalis* can be recognised by the broad front of the carapace and on the larger cheliped, the manus is smooth (Barnard 1950). The examined material matches well with the description and figures in Naderloo *et al.* (2016) and with the comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Peer *et al.* 2014), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Crosnier 1965; Hoffmann 1874; Lenz & Richters 1881; Naderloo *et al.* 2016), Mauritius (Michel 1964; Richters 1880), Seychelles (Naderloo *et al.* 2016), East Africa (Lenz 1910), Tanzania (Chace 1942; Hartnoll 1975; Hilgendorf 1869; Lenz 1905; Naderloo *et al.* 2016; Pfeffer 1889; Rumisha *et al.* 2015), Kenya (Naderloo *et al.* 2016) and Somalia (Vannini & Valmori 1981; Vatova 1943).

85. *Gelasimus hesperiae* (Crane, 1975)

(Fig. 12D)

Gelasimus tetragonon var. *spinicarpa* Kossmann, 1877: 52.
Uca (*Thalassuca*) *vocans hesperiae* Crane, 1975: 92 (in part).—Vannini & Valmori 1981: 210, figs. 5D, 6D.
Uca vocans var. *excisa.*—Al-Ghais & Cooper 1996: 421.
Uca hesperiae.—Apel 2001: 115.—Naiyanetr 2007: 132 (list).—Rosenberg 2013: 494.
Uca (*Gelasimus*) *hesperiae.*—Ng *et al.* 2008: 240 (list).—Emmerson 2016c: 385, 480 (list).

Gelasimus hesperiae.—Shih *et al.* 2016: 151 (list), fig. 7C.—Naderloo 2017: 416, figs. 37.13F, 37.16, 37.17.—Bento & Paula 2018: 45 (list).—Trivedi *et al*. 2018: 54 (list).—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58773, 1 male (22.0 × 14.0 mm), fcn. X3955, August 1983, collector unknown; RMNH.CRUS.D.58774, 2 males (23.0 × 14.0 mm, 22.0 × 15.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4302, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58775, 1 male (22.0 × 14.0 mm), Saco da Inhaca, mangrove, border of the Saco River, fcn. X4282, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58776, 2 males (23.0 × 14.0 mm, 20.0 × 14.0 mm), Saco da Inhaca, along the water, fcn. X4332, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58777, 2 males (20.0 × 12.0 mm, 15.0 × 10.0 mm), inside the mangrove, fcn. X4079, 3 August 1983, leg. Carl Mohrherr; RMNH.CRUS.D.58778, 1 male (17.0 × 10.0 mm), Saco da Inhaca, back of the mangrove, fcn. X3939, 3 August 1983, collector unknown; RMNH.CRUS.D.58779, 1 male (21.0 × 12.0 mm), Saco da Inhaca, mangrove, intertidal open zone, fcn. X4311, 12 January 1987, leg. Bertina Samet; RMNH.CRUS.D.58780, 2 males (22.0 × 14.0 mm, 18.0 × 12.0 mm), Saco da Inhaca, mangrove, open zone, fcn. X4357, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58781, 1 male (23.0 × 14.0 mm), on the inside of the mangrove, fcn. X3997, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58782, 3 males (23.0 × 14.0 mm, 23.0 × 14.0 mm, 21.0 × 13.0 mm), Saco da Inhaca, open and tree-less zone, fcn. X4315, 21 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58783, 1 male (24.0 × 15.0 mm), Saco da Inhaca, mangrove, shady zone, fcn. X4301, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58784, 1 male (15.0 × 10.0 mm), mangrove, open zone, fcn. X4320, 12 January 1987, leg. Ana S.L. Patricio; RMNH.CRUS.D.58785, 4 males (24.0 × 16.0 mm, 22.0 × 14.0 mm, 21.0 × 15.0 mm, 19.0 × 13.0 mm), 1 female (22.0 × 15.0 mm), Saco da Inhaca, mangrove, fcn. X4351, 12 January 1987, leg. Dulceria Baguete; RMNH.CRUS.D.58786, 1 male (23.0 × 14.0 mm), mangrove, fcn. X4312, 12 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58787, 4 males (24.0 × 16.0 mm, 22.0 × 13.0 mm, 21.0 × 13.0 mm, 19.0 × 14.0 mm), alongside the border of the river, fcn. X4297, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58788, 2 males (25.0 × 15.0 mm, 21.0 × 14.0 mm), on the bank of the river among the trees, fcn. X4295, 12 January 1987, leg. Maimuna Amade, Delfina Manjate & Lucilia Chuquela.

Comparative material. RMNH.CRUS.D.274, 8 males (21.0 × 12.0 mm, 20.0 × 12.0 mm, 20.0 × 10.5 mm, 19.0 × 12.5 mm, 19.0 × 10.5 mm, 18.0 × 11.0 mm, 13.0 × 8.0 mm, 12.0 × 7.0 mm) paratype, Nossy Bé [= Nosy Be], Madagascar, 1866, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.28633, 1 male (20.0 × 11.5 mm) paratype, Nossy Bé [= Nosy Be], Madagascar, 1863, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.32656, 1 female (20.0 × 11.5 mm), Tamil Nadu, Madras, India, 3 February 1955, leg. S.K. Banerjee; RMNH.CRUS.D.2751, 1 male (26.0 × 16.0 mm) paratype, Padang, west coast of Sumatra, Indonesia, date unknown, collector unknown.

Remarks. *Gelasimus hesperiae* can be distinguished from the other members of the Gelasiminae Miers, 1886 in the area by the very distinct distal tooth on the male cheliped. The front of the carapace is narrow and the manus of the bigger cheliped on males has moderate to large tubercles. The examined specimens match well with the figures in Naderloo (2017), the description in Emmerson (2016c) and with the comparative paratypes.

Distribution. South Africa (Emmerson 2016c), Mozambique (Emmerson 2016c; Muñoz *et al.* 2021), Somalia (Vannini & Valmori 1981), Red Sea (Kossmann 1877), Gulf of Oman (Naderloo 2017), Persian Gulf (Al-Ghais & Cooper 1996; Apel 2001; Naderloo 2017), India (Trivedi *et al.* 2018) and Thailand (Naiyanetr 2007).

86. *Paraleptuca chlorophthalmus* (H. Milne-Edwards, 1837)

(Fig. 12E)

Gelasimus chlorophthalmus H. Milne-Edwards, 1837a: 54.—Hoffmann 1874: 18.—Hilgendorf 1879: 803.—Kingsley 1880a: 151, pl. 10 figs. 26, 27.—Cano 1889a: 92.

Uca amazonensis Doflein, 1899: 193.

Uca chlorophthalmus.—Stebbing 1910: 327.—Barnard 1950: 95, figs. 18J, K, 19C.—MacNae & Kalk 1958: 67, figs. J, K.—Crosnier 1965: 119.—Derijard 1966: 171, figs. 16–19, 20–23.—Guinot 1967a: 281 (list).—Poupin 2010: 75 (list).

Uca chlorophthalma.—Ward 1942: 104.—Serène 1968: 97 (list).

Uca (*Amphiuca*) *chlorophthalmus chlorophthalmus.*—Crane 1975: 102.—Vannini & Valmori 1981: 208, figs. 5B, 6B.

Uca (*Paraleptuca*) *chlorophthalmus.*—Ng *et al.* 2008: 241 (list).—Peer *et al*. 2014: 59, fig. 14.—Emmerson 2016c: 394, 480 (list).

Paraleptuca chlorophthalmus.—Shih *et al.* 2013: 644.—Shih *et al.* 2016: 156 (list), fig. 10C.—Bento & Paula 2018: 45 (list).—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58789, 1 male (14.0 × 7.0 mm), 3 ovigerous females (16.0 × 10.0 mm, 15.0 × 9.0 mm, 14.0 × 9.0 mm), Saco da Inhaca, fcn. X4342, 12 January 1987, leg. Maria Simango; RMNH.CRUS.D.58790, 3 males (20.0 × 12.0 mm, 14.0 × 11.0 mm, 14.0 × 9.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4010, 28 July 1983, leg. Alexandra Rodrigues; RMNH.CRUS.D.58791, 2 males (14.0 × 10.0 mm, 13.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. X4190, 6 August 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58792, 2 males (11.0 × 7.0 mm, 8.0 × 6.0 mm), mangrove, shady zone, fcn. X4313, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58793, 1 male (20.0 × 10.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4302, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58794, 1 male (18.0 × 11.0 mm), Saco da Inhaca, mangrove, fcn. X4308, 12 January 1987, leg. Anselmo Timbrine; RMNH.CRUS.D.58795, 9 males (22.0 × 13.0 mm, 22.0 × 12.0 mm, 22.0 × 12.0 mm, 21.0 × 12.0 mm, 21.0 × 12.0 mm, 21.0 × 12.0 mm, 20.0 × 11.0 mm, 19.0 × 12.0 mm, 19.0 × 12.0 mm), mangrove north of island, fcn. X4146, 17 November 1985, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58796, 1 male (16.0 × 9.0 mm), along the Saco da Inhaca river, fcn. X4331, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58797, 2 males (17.0 × 11.0 mm, 13.0 × 8.0 mm), 1 female (17.0 × 11.0 mm), Saco da Inhaca, mangrove, fcn. X4344, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58798, 1 male (17.0 × 10.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4002, 28 July 1983, leg. Obede Baldi; RMNH.CRUS.D.58799, 1 male (20.0 × 12.0 mm), Saco da Inhaca, mangrove, fcn. X4276, 12 January 1987, leg. Maria Simango; RMNH.CRUS.D.58800, 1 male (14.0 × 8.0 mm), Saco da Inhaca, fcn. X3920, 4 August 1983, leg. Ana Paula Dias; RMNH.CRUS.D.58801, 1 female (14.0 × 9.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4002, 28 July 1983, leg. Obede Baldi; 1 male RMNH.CRUS.D.58802, 1 male (12.0 × 8.0 mm), 1 female (12.0 × 7.0 mm), Saco da Inhaca, mangrove, zone 3, fcn. X3994, August 1983, collector unknown; RMNH.CRUS.D.58803, 2 males (14.0 × 8.0 mm, 12.0 × 8.0 mm), 1 female (11.0 × 7.0 mm), Saco da Inhaca, mangrove, fcn. X4303, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58804, 3 males (13.0 × 8.0 mm, 12.0 × 8.0 mm, damaged carapace), 1 female (12.0 × 7.0 mm), Saco da Inhaca, river entry, fcn. X4348, 12 January 1987, leg. Ana S. L. Patricio; RMNH.CRUS.D.58805, 1 male (17.0 × 10.0 mm), Saco da Inhaca, behind the mangrove, fcn. X4005, 3 August 1983, collector unknown; RMNH.CRUS.D.58806, 1 male (19.0 × 11.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4012, 28 July 1983, leg. Alexandra Rodrigues; RMNH.CRUS.D.58807, 3 males (12.0 × 7.0 mm, 9.0 × 6.0 mm, 9.0 × 5.0 mm), 1 ovigerous female (14.0 × 9.0 mm), 1 female (12.0 × 8.0 mm), Saco da Inhaca, mangrove, fcn. X4353, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58808, 5 males (13.0 × 8.0 mm, 13.0 × 8.0 mm, 11.0 × 7.0 mm, 11.0 × 7.0 mm, 9.0 × 6.0 mm), 1 female (11.0 × 6.0 mm), Saco da Inhaca, mangrove, fcn. X4347, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58809, 1 male (15.0 × 9.0 mm), Saco da Inhaca, open and tree-less zone, fcn. X4315, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58810, 4 males (15.0 × 9.0 mm, 14.0 × 9.0 mm, 12.0 × 8.0 mm, 12.0 × 8.0 mm), 1 ovigerous female (11.0 × 7.0 mm), Saco da Inhaca, mangrove, fcn. X4340, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58811, 5 males (13.0 × 9.0 mm, 11.0 × 6.0 mm, 8.0 × 5.0 mm, 7.0 × 5.0 mm, 7.0 × 4.0 mm), Saco da Inhaca, mangrove, fcn. X4364, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58812, 4 males (17.0 × 10.0 mm, 15.0 × 9.0 mm, 15.0 × 9.0 mm, 11.0 × 7.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4006, 28 July 1983, leg. Alberto Tsamba; RMNH.CRUS.D.58813, 5 males (12.0 × 7.0 mm, 11.0 × 6.0 mm, 10.0 × 7.0 mm, 10.0 × 6.0 mm, 7.0 × 5.0 mm), 1 ovigerous female (12.0 × 7.0 mm), 1 female (9.0 × 6.0 mm), Saco da Inhaca, mangrove, fcn. X4360, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58814, 1 male (10.0 × 6.0 mm), mangrove, shady zone, fcn. X4306, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58815, 1 male (9.0 × 6.0 mm), in front of mangrove, fcn. X3998, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58816, 6 males (16.0 × 10.0 mm, 15.0 × 9.0 mm, 14.0 × 9.0 mm, 14.0 × 8.0 mm, 11.0 × 8.0 mm, 7.0 × 5.0 mm), mangrove, shady zone, fcn. X4314, 12 January 1987, leg. Susana Costa; RMNH.CRUS.D.58817, 1 male (14.0 × 9.0 mm), in front of Barreira Vermelha, fcn. X4144, 25 September 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58818, 1 male (17.0 × 12.0 mm), Saco da Inhaca, mangrove, fcn. X4352, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58819, 8 males (15.0 × 10.0 mm, 14.0 × 9.0 mm, 12.0 × 8.0 mm, 12.0 × 8.0 mm, 12.0 × 7.0 mm, 12.0 × 7.0 mm, 11.0 × 7.0 mm, 11.0 × 6.0 mm), 1 female (6.0 × 4.0 mm), on the bank of the river among the trees, fcn. X4296, 12 January 1987, leg. Maimuna Amade, Delfina Manjate & Lucilia Chuquela; RMNH.CRUS.D.58820, 1 male (9.0 × 6.0 mm), 1 ovigerous female (16.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. X4363, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58821, 1 male (11.0 × 6.0 mm), inside of the mangrove, fcn. X3962, date unknown, leg. Carl Mohrherr; RMNH.CRUS.D.58822, 2 males (13.0 × 7.5 mm, 9.0 × 5.5 mm), 1 ovigerous female (13.0 × 9.0 mm), 1 female (8.0 × 4.5 mm), Saco da Inhaca, mangrove, fcn. X4356, 13 January 1987, leg.

Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58823, 1 male (9.0 × 6.0 mm), Saco da Inhaca, back of the mangrove, fcn. X3939, 3 August 1983, collector unknown; RMNH.CRUS.D.58824, 1 male (14.0 × 9.0 mm), Inside of Saco da Inhaca, open zone, fcn. X4317, 12 January 1987, leg. Joaquim Gomas; RMNH.CRUS.D.58825, 3 males (15.0 × 9.0 mm, 13.0 × 8.0 mm, 13.0 × 8.0 mm), mangrove, open zone, fcn. X4333, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58826, 3 males (10.0 × 7.0 mm, 9.0 × 7.0 mm, 8.0 × 4.0 mm), Saco da Inhaca, zone inside the mangrove between the trees, fcn. X4330, 12 January 1987, leg. Helena Conçalves.

Comparative material. RMNH.CRUS.D.16178, 1 male (15.0 × 9.0 mm, 14.0 × 8.5 mm), south of Mahébourg, Pointe d'Esny, Mauritius, 26 December 1959, leg. C. Michel; RMNH.CRUS.D.1256, 1 male (17.0 × 10.0 mm), 1 female (16.0 × 11.0 mm), New Caledonia, 1878, leg. A. Milne-Edwards; RMNH.CRUS.D.32507, 3 males (16.0 × 9.0 mm, 14.0 × 9.0 mm, 14.0 × 8.0 mm), Natal, Durban Bay, Salisbury Island, South Africa, 27 October 1938, leg. L.D. Brongersma.

Remarks. *Paraleptuca chlorophthalmus* can be recognised by several carapace characters. The front is broad and the antero-lateral angles are very acute and directed obliquely outward (Barnard 1950). The manus of the bigger cheliped on males is smooth. The examined specimens match well with the description by Barnard (1950), Emmerson (2016c) and comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Peer *et al.* 2014; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010; Shih *et al.* 2013), Madagascar (Crosnier 1965; Hoffmann 1874), La Réunion (Poupin 2010), Mauritius (Ward 1942) and Somalia (Vannini & Valmori 1981).

87. *Tubuca urvillei* (H. Milne-Edwards, 1852)

(Fig. 12F)

Gelasimus arcuatus.—Krauss 1843: 39. [Not *Ocypode* (*Gelasimus*) *arcuata* De Haan, 1835].
Gelasimus urvillei H. Milne-Edwards, 1852: 148, pl. 3 fig. 10.—Kingsley 1880a: 145.—Ortmann 1894: 59.
Gelasimus dussumieri.—A. Milne-Edwards 1868: 71 (list).—Hilgendorf 1869: 84, pl. 4 fig. 1.—Hoffmann 1874: 17, pl. 3 figs. 19–22 (in part).—Kingsley 1880a: 145 (list) (in part).—Lenz & Richters 1881: 423.—Pfeffer 1889: 30.—Lenz 1910: 559. [Not *Gelasimus dussumieri* H. Milne-Edwards, 1852].
Uca arcuata.—Stebbing 1905: 40; 1910: 327 (list). [Not *Ocypode (Gelasimus) arcuata* De Haan, 1835].
Uca arcuatus.—Stebbing 1917: 15. [Not *Ocypode (Gelasimus) arcuata* De Haan, 1835].
Uca urvillei.—Vatova 1943: 25.—Barnard 1950: 93, figs. 18D–F, 19A, B.—MacNae & Kalk 1958: 67.—Crosnier 1965: 110, figs. 186, 191–193, 195, 196.—Guinot 1967a: 281 (list).—Serène 1968: 98 (list).—Hartnoll 1975: 311 (list).—Kensley 1981: 49 (list).—Poupin 2010: 75 (list).—Rumisha *et al.* 2015: 4 (list).
Uca (*Deltuca*) *urvillei.*—Crane 1975: 61, 595.—Vannini & Valmori 1981: 212, figs. 5F, 6F.
Uca (*Tubuca*) *urvillei.*—Ng *et al.* 2008: 242 (list).—Peer *et al*. 2014: 60, fig. 15.—Emmerson 2016c: 402, 480 (list).
Tubuca urvillei.—Shih *et al.* 2016: 159 (list).—Bento & Paula 2018: 46 (list).—Shih *et al.* 2018: 43, figs. 1, 2, 4B, 5E–H, 7B, D, F, H.—Ma & McQuaid 2021: 1242 (list).—Muñoz *et al.* 2021: 57 (list).

Material examined. RMNH.CRUS.D.58827, 2 males (27.0 × 17.0 mm, 25.0 × 13.0 mm), Saco da Inhaca, mangrove, shady, closed zone in front of *Avicennia* sp., fcn. X4346, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58828, 1 male (18.0 × 11.0 mm), 1 ovigerous female (24.0 × 15.0 mm), Saco da Inhaca, mangrove, fcn. X4342, 12 January 1987, leg. Maria Simango; RMNH.CRUS.D.58829, 1 female (13.0 × 9.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4359, 12 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58830, 4 males (29.0 × 21.0 mm, 25.0 × 18.0 mm, 22.0 × 15.0 mm, 21.0 × 16.0 mm), east side of the Saco, pavement like rocks, hiding in small burrows in mud filled spaces, only males encountered, 12:30PM, low tide, colour turquoise in the sun, moulted, legs mottled red, rocks near Ponte Torres, fcn. X3921, 12 August 1983, collector unknown; RMNH.CRUS.D.58831, 2 males (28.0 × 17.0 mm, 18.0 × 11.0 mm), 1 female (14.0 × 9.0 mm), Saco da Inhaca, zone inside the mangrove between the trees, fcn. X4330, 12 January 1987, leg. Lucilia Chuquela & Maimuna Amade; RMNH.CRUS.D.58832, 1 male (26.0 × 14.0 mm), Saco da Inhaca, mangrove, fcn. X4160, 6 January 1986, leg. S. Casadel; RMNH.CRUS.D.58833, 1 male (20.0 × 12.0 mm), Inside of Saco, mangrove, fcn. X4286, 12 January 1987, collector unknown; RMNH.CRUS.D.58834, 2 males (24.0 × 15.0 mm, 22.0 × 13.0 mm), Saco da Inhaca, canal in mangrove, fcn. X4011, 4 August 1983, collector unknown; RMNH.CRUS.D.58835, 1 male (19.0 × 11.0 mm), 1 female (11.0 × 8.0 mm), inside the mangrove, fcn. X4194, 3 August 1983, leg. Carl Mohrherr;

RMNH.CRUS.D.58836, 1 male (20.0 × 12.0 mm), 1 female (21.0 × 16.0 mm), Saco da Inhaca, mangrove, fcn. X4334, 12 January 1987, leg. Judith Ernesto Muele; RMNH.CRUS.D.58837, 1 male (23.0 × 16.0 mm), mangrove, fcn. X4151, 6 January 1986, leg. S. Casadel; RMNH.CRUS.D.58838, 3 males (27.0 × 16.0 mm, 15.0 × 9.0 mm, 13.0 × 8.0 mm), along the Saco de Inhaca River, fcn. X4331, 12 January 1982, leg. Helena Conçalves; RMNH.CRUS.D.58839, 2 males (21.0 × 13.0 mm, 21.0 × 13.0 mm), Saco da Inhaca, mangrove, border of the Saco River, fcn. X4282, 12 January 1987, leg. Perpetua Scarlett; RMNH.CRUS.D.58840, 2 males (30.0 × 18.0 mm, 28.0 × 17.0 mm), Saco da Inhaca, mangrove, fcn. X4344, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58841, 5 males (30.0 × 15.0 mm, 24.0 × 13.0 mm, 21.0 × 15.0 mm, 18.0 × 11.0 mm, 13.0 × 7.0 mm), 1 female (13.0 × 9.0 mm), Saco da Inhaca, mangrove, open zone, fcn. X4349, 12 January 1987, leg. Delfina Manfate, Lucilia Chuquela & Maimura Amade; RMNH.CRUS.D.58842, 1 male (25.0 × 16.0 mm), Saco da Inhaca, mangrove, fcn. X4343, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58843, 1 male (19.0 × 11.0 mm), mangrove, along the river, fcn. X4338, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58844, 1 male (25.0 × 16.0 mm), mangrove, shady zone, fcn. X4309, 12 January 1987, leg. Ana dos Santos P.; RMNH.CRUS.D.58845, 1 male (19.0 × 12.0 mm), entry to Saco river, fcn. X4343, 13 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58846, 1 male (10.0 × 6.0 mm), 1 female (15.0 × 9.0 mm), in front of mangrove, fcn. X4014, 3 August 1983, leg. A. Tarde; RMNH.CRUS.D.58847, 6 males (29.0 × 17.0 mm, 27.0 × 15.0 mm, 25.0 × 14.0 mm, 24.0 × 14.0 mm, 20.0 × 13.0 mm, 18.0 × 10.0 mm), Saco da Inhaca, mangrove, fcn. X4354, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58848, 1 male (16.0 × 9.0 mm), Saco da Inhaca, mangrove, fcn. X4170, 6 January 1986, leg. R. Rafael; RMNH.CRUS.D.58849, 3 males (27.0 × 16.0 mm, 27.0 × 14.0 mm, 22.0 × 12.0 mm), Barreira Vermelha, under a stone, fcn. X4152, 9 January 1986, leg. Vitoria Hobo; RMNH.CRUS.D.58850, 2 males (10.0 × 6.0 mm, 9.0 × 5.0 mm), Saco da Inhaca, fcn. X3951, 4 August 1983, leg. Octavio Cassamo; RMNH.CRUS.D.58851, 1 male (24.0 × 14.0 mm), zone on the border of the river, fcn. X4296, 12 January 1987, leg. Eliseth Faria; RMNH.CRUS.D.58852, 1 male (22.0 × 13.0 mm), Saco da Inhaca, mangrove, intertidal open zone, fcn. X4311, 12 January 1987, leg. Bertina Samet; RMNH.CRUS.D.58853, 3 males (27.0 × 16.0 mm, 23.0 × 13.0 mm, 22.0 × 13.0 mm), 1 female (14.0 × 8.0 mm), Saco da Inhaca, mangrove, fcn. X4335, 13 January 1987, leg. Maria Simango; RMNH.CRUS.D.58854, 1 male (26.0 × 13.0 mm), Saco da Inhaca, mangrove, sandy open area, fcn. X4341, 12 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58855, 2 males (24.0 × 12.0 mm, 19.0 × 13.0 mm), Saco da Inhaca, mangrove, open zone, fcn. X4357, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58856, 2 males (25.0 × 15.0 mm, 21.0 × 12.0 mm), Saco da Inhaca, river entry, fcn. X4348, 12 January 1987, leg. Ana S. L. Patricio; RMNH.CRUS.D.58857, 1 male (22.0 × 13.0 mm), 1 ovigerous female (17.0 × 10.0 mm), 1 female (17.0 × 10.0 mm), Saco da Inhaca, mangrove, closed zone, fcn. X4328, 12 January 1987, leg. Albertina Alage; RMNH.CRUS.D.58858, 1 male (18.0 × 10.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4299, 12 January 1987, leg. Susana Costa; RMNH.CRUS.D.58859, 4 males (26.0 × 14.0 mm, 24.0 × 14.0 mm, 22.0 × 14.0 mm, 22.0 × 13.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4350, 12 January 1987, leg. Maria de A. Pinto; RMNH.CRUS.D.58860, 2 males (26.0 × 15.0 mm, 20.0 × 12.0 mm), Saco da Inhaca, mangrove, open zone along the border of the river, fcn. X4345, 12 January 1987, leg. Samira Izidine; RMNH.CRUS.D.58861, 2 males (22.0 × 13.0 mm, 21.0 × 12.0 mm), 1 ovigerous female (10.0 × 6.0 mm), 2 females (22.0 × 13.0 mm, 19.0 × 12.0 mm), Saco da Inhaca, mangrove, fcn. X4329, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58862, 1 male (22.0 × 13.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4294, 12 January 1987, leg. Susana Costa; RMNH.CRUS.D.58863, 4 males (25.0 × 14.0 mm, 24.0 × 13.0 mm, 20.0 × 12.0 mm, 18.0 × 12.0 mm), Saco da Inhaca, mangrove, fcn. X4347, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58864, 4 males (24.0 × 12.0 mm, 21.0 × 12.0 mm, 20.0 × 12.0 mm, 18.0 × 12.0 mm), Saco da Inhaca, fcn. X4339, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58865, 3 males (26.0 × 16.0 mm, 17.0 × 12.0 mm, damaged carapace), Saco da Inhaca, open and tree-less zone, fcn. X4315, 12 January 1987, leg. Angelina Macuacua; RMNH.CRUS.D.58866, 2 males (27.0 × 16.0 mm, 24.0 × 14.0 mm), Saco da Inhaca, mangrove, shady zone, fcn. X4301, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58867, 1 male (20.0 × 8.0 mm), Saco da Inhaca, open zone between pneumatophores of *Avicennia* sp., fcn. X4280, 12 January 1987, leg. Cyrus Patel; RMNH.CRUS.D.58868, 1 male (25.0 × 15.0 mm), 1 female (14.0 × 9.0 mm), Costa do Sol, Maputo, mangrove, fcn. X3979, 28 July 1983, leg. Obede Baldi; RMNH.CRUS.D.58869, 3 males (26.0 × 15.0 mm, 23.0 × 13.0 mm, 22.0 × 13.0 mm), mangrove, open zone, fcn. X4327, 12 January 1987, leg. Judith Ernesto Muele; RMNH.CRUS.D.58870, 1 male (28.0 × 17.0 mm), Saco da Inhaca, mangrove, fcn. X4351, 12 January 1987, leg. Dulceria Baguete; RMNH.CRUS.D.58871, 5 males (25.0 × 15.0 mm, 17.0 × 10.0 mm, 17.0 × 9.0 mm, 17.0 × 9.0

mm, 10.0 × 6.0 mm), 1 female (18.0 × 11.0 mm), Saco da Inhaca, mangrove, fcn. X4352, 13 January 1987, leg. Samira Izidine & Helena Conçalves; RMNH.CRUS.D.58872, 4 males (20.0 × 11.0 mm, 18.0 × 12.0 mm, 15.0 × 8.0 mm, 14.0 × 9.0 mm), 1 female (20.0 × 13.0 mm), zone on the border of the river, fcn. X4298, 12 January 1987, leg. Albertina Alage; RMNH.CRUS.D.58873, 1 male (27.0 × 17.0 mm), mangrove, open zone, fcn. X4333, 12 January 1987, leg. Helena Conçalves; RMNH.CRUS.D.58874, 5 males (25.0 × 14.0 mm, 22.0 × 12.0 mm, 21.0 × 11.0 mm, 21.0 × 11.0 mm, 6.0 × 4.0 mm juvenile), on the bank of the river among the trees, fcn. X4295, 12 January 1987, leg. Maimuna Amade, Delfina Manjate & Lucilia Chuquela; RMNH.CRUS.D.58875, 1 male (9.0 × 6.0 mm juvenile), mangrove, shady zone, fcn. X4337, 12 January 1987, leg. Judith Ernesto Muchanga.

Comparative material. RMNH.CRUS.D.1504, 3 males (23.0 × 12.0 mm, 23.0 × 12.0 mm, 22.0 × 11.0 mm), Nosy Faly, Madagascar, date unknown, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.1243, 6 males (25.0 × 12.0 mm, 22.0 × 12.0 mm, 22.0 × 12.0 mm, 22.0 × 12.0 mm, 19.0 × 10.0 mm, 18.0 × 10.0 mm), Nosy Faly, Madagascar, date unknown, leg. F.P.L. Pollen & D.C. van Dam; RMNH.CRUS.D.27187, 7 males (28.0 × 15.0 mm, 27.0 × 14.0 mm, 26.0 × 12.5 mm, 25.0 × 13.0 mm, 22.0 × 10.5 mm, 19.0 × 10.0 mm, 18.0 × 10.0 mm), Coast Province, Mombasa, Kenya, 1970–1971, don. D. Neumann; RMNH.CRUS.D.25516, 2 males (24.0 × 13.0 mm, 22.0 × 12.0 mm), 1 ovigerous female (18.0 × 10.0 mm), 1 female (21.0 × 9.0 mm), Coast Province, Mombasa, Mtuapa Creek, Kenya, 25 August 1968, leg. D.B.E. Magnus; RMNH.CRUS.D.51688, 3 males (17.0 × 10.0 mm, 14.0 × 10.0 mm, 13.0 × 10.0 mm), Zanzibar Island, Chwaka Bay near Chwaka, Tanzania, 25 January 2004, leg. I. Nagelkerken & G. Kruitwagen.

Remarks. *Tubuca urvillei* can be recognised by the small front on its carapace and the crenate lower border of the orbit (Shih *et al.* 2018), which has an accessory row of granules within the margin (Barnard 1950). The manus of the bigger cheliped has small to large tubercles and the minor cheliped possesses setae, which distinguishes it from the other gelasimines in the area. The examined specimens match well with the description and figures in Shih *et al.* (2018) and with comparative material.

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Krauss 1843; Peer *et al.* 2014; Stebbing 1905, 1910, 1917), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Mayotte (Poupin 2010; Shih *et al.* 2018), Madagascar (Crosnier 1965; Hoffmann 1874; Lenz & Richters 1881), Tanzania (Hartnoll 1975; Hilgendorf 1869; Lenz 1910; A. Milne-Edwards 1868; Ortmann 1894; Pfeffer 1889; Rumisha *et al.* 2015), Kenya (Shih *et al.* 2018) and Somalia (Vannini & Valmori 1981).

Subfamily Ocypodinae Rafinesque, 1815

88. *Ocypode ceratophthalmus* (Pallas, 1772)

(Fig. 13A)

Cancer ceratophthalmus Pallas, 1772: 83, pl. 5 figs. 7, 8.
Cancer caninus Herbst, 1782: 78.
Ocypode ceratophthalma.—Bosc 1802: 194.—A. Milne-Edwards 1862: 5; 1873: 270.—Hoffmann 1874: 13, pl. 2 figs. 11–13, pl. 3 figs. 14, 15.—Kossmann 1877: 55.—Hilgendorf 1879: 802.—Alcock & Anderson 1894: 202 (list).—Ortmann 1894: 60.—De Man 1895: 570.—Nobili 1899: 275.—Borradaile 1900: 595.—Lanchester 1900: 751; 1901: 548.—Doflein 1902: 668.—Rathbun 1906: 833; 1907: 26; 1910: 305.—Stimpson 1907: 108, pl. 7 fig. 2.—Laurie 1915: 416 (list).—Edmondson 1923: 8.—McNeill 1926: 316; 1968: 85.—Balss 1938: 76.—Chace 1942: 202.—Holthuis 1953: 28.—Estampador 1959: 99.—Garth 1965: 37, figs. 23–26.—Guinot 1967a: 281 (list).—Sakai 1976: 600, fig. 327B, pl. 207.—Sakai & Türkay 1977: 178; 2013: 685, figs. 1D–I, 10, 32.—Garth *et al.* 1987: 247 (list).—Poupin 1996: 73.—Davie 2002: 357.—Paulay *et al.* 2003: 42 (list).—Poore 2004: 496, fig. 157I, pl. 28C.—Naiyanetr 2007: 131 (list).—Dev Roy 2008: 149.
Ocypoda ceratophthalma.—Latreille 1818b: 198.—Heller 1865: 42.—Kingsley 1880b: 179.—Richters 1880: 155.—Lenz & Richters 1881: 423.—Haswell 1882: 94.—Miers 1884a: 184 (list), 237.—De Man 1887: 107; 1902: 477, pl. 19 figs. 1, 1A.—Pfeffer 1889: 30.—Thallwitz 1891: 42.—Henderson 1893: 387.—Zehntner 1894: 272.—Whitelegge 1897: 138.—Schenkel 1902: 581.—Lenz 1905: 365; 1910: 558.—Nobili 1905: 494; 1906a: 310.—Calman 1900: 24.—Grant & McCulloch 1906: 20.—Bouvier 1915: 299.—Tesch 1918: 36.—Balss 1922c: 141; 1935: 140.—Sendler 1923: 21.—Chopra & Das 1937: 418.—Sakai 1939: 614, pl. 104 fig. 5.—Ward 1942: 103.—Tweedie 1950: 127.—Dawydoff 1952: 141.—Chhapgar 1957: 44, pl. 13, figs. A–C.—Sankarankutty 1961: 125.—Bakus 1994: 187 (list).—Venkataraman *et al*. 2004: 307 (list).
Ocypode Urvillii Guérin-Méneville, 1829: 58, fig. 1.
Ocypode (*Ocypode*) *ceratophthalmus.*—De Haan 1835: 29 (list).
Ocypoda brevicornis var. *longicornuta.*—Dana 1852b: 327, pl. 20 figs. 4A–E.

Ocypoda Macleayana Hess, 1865: 143, pl. 6, fig. 8.
Ocypode ceratophthalmus.—Stebbing 1893: 86; 1910: 326.—Barnard 1950: 86, figs. 17C, D.—MacNae & Kalk 1958: 67, figs. 15L, M.—Crosnier 1965: 93, figs. 152, 160, 167, 168, pl. 8 fig. 1, pl. 10 fig. 3.—Michel 1964: 11.—Derijard 1966: 170.—Serène 1968: 97 (list).—Kensley 1970: 104 (list); 1981: 49 (list).—Hartnoll 1975: 311 (list).—Vannini & Valmori 1981: 20, figs. 1A, 2A, 3A, 4A.—Dai & Yang 1991: 458, fig. 231(1–3), pl. 58(4).—Bakus 1994: 172 (list).—Ng *et al.* 2001: 35 (list); 2017: 127 (list).—Ng & Davie 2002: 378 (list).—Ng & Richer de Forges 2007: 326 (list).—Ng *et al.* 2008: 240 (list).—Poupin 2010: 59 (list).—Castro 2011: 123.—Orchard 2012: 232.—Peer *et al.* 2014: 60, fig. 17.—Emmerson 2016c: 345, 479 (list).—Shih *et al.* 2016: 147 (list).—Bento & Paula 2018: 46 (list).—Ma *et al.* 2018: 2658.—Trivedi *et al*. 2018: 55 (list).—Suvarna Devi *et al.* 2019: 492.—Ma & McQuaid 2021: 1240 (list).—Muñoz *et al.* 2021: 57 (list).—Murniati *et al.* 2022: 465, fig. 2.—Pati *et al.* 2022: 530, figs. 15A, B.
Cancer francisci Curtiss, 1938: 175.
Ocypoda ceratophthalmus.—Fourmanoir 1954: 2, fig. 1.

Material examined. RMNH.CRUS.D.58876, 1 male (34.0 × 30.0 mm), Costa do Sol, Maputo, tidal flat, very low tide, fcn. X4070, 7 October 1983, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58877, 1 male (37.0 × 34.0 mm), littoral in front of Barreira Vermelha, fcn. X4030, 13 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58878, 1 male (11.0 × 9.0 mm juvenile), fcn. X4167, date and collector unknown; RMNH.CRUS.D.58879, 2 males (27.0 × 22.0 mm, 11.0 × 9.0 mm juvenile), littoral in between Marine Biology Station (EBM), fcn. X4183, 4 January 1986, leg. C. Balave; RMNH.CRUS.D.58880, 1 male (31.0 × 29.0 mm), littoral in between Marine Biology Station (EBM) and Ponta Rasa, fcn. X4179, 4 January 1986, leg. R. Rafael; RMNH.CRUS.D.58881, 1 male (33.0 × 28.0 mm), littoral in between Ponta Rasa and Ponta Punduini, on the beach, fcn. X4186, 4 January 1986, leg. Mamudo Rafael Augusto; RMNH.CRUS.D.58882, 1 female (28.0 × 24.0 mm), Costa do Sol, Maputo, littoral, fcn. X3988, 28 July 1983, leg. Esteban Cocho; RMNH.CRUS.D.58883, 1 male (20.0 × 17.0 mm), Ilha dos Portugueses, fcn. X3999, 15 August 1983, leg. Alberto Tsamba; RMNH.CRUS.D.58884, 1 male (27.0 × 23.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4019, 28 July 1983, leg. Esteban Cocho; RMNH.CRUS.D.58885, 1 male (32.0 × 30.0 mm), littoral in between Marine Biology Station (EBM) and Ponta Rasa, low zone, fcn. X4181, 4 January 1986, leg. Alemanda Giani; RMNH.CRUS.D.58886, 4 males (40.0 × 33.0 mm, 34.0 × 32.0 mm, 33.0 × 30.0 mm, 33.0 × 28.0 mm), Costa do Sol, Maputo, littoral, fcn. X4008, 26 July 1983, leg. Sergio Miguel; RMNH.CRUS.D.58887, 1 male (40.0 × 34.0 mm), Costa do Sol, Maputo, littoral, fcn. X3982, 26 July 1983, leg. Ana Paula Loforte.

Comparative material. RMNH.CRUS.D.16279, 2 males (24.0 × 19.0 mm, 20.0 × 16.0 mm), Papua, Numfor, Kameri, Indonesia, 2 March 1955, received from inhabitants of island; RMNH.CRUS.D.16280, 3 males (27.5 × 23.0 mm, 19.0 × 14.0 mm, 8.0 × 6.0 mm), Papua, next to Humboldt Bay, Indonesia, 17 October 1954, collected for RMNH; RMNH.CRUS.D.2151, 1 male (10.0 × 8.0 mm), Sumatra, Poeloe Babi, Indonesia, April 1913, leg. E. Jacobson; RMNH.CRUS.D.16281, 1 male (8.0 × 5.5 mm), Polana Beach, Lourenço [= Maputo], Mozambique, August 1959, leg. A.C. van Bruggen & W.H. van Bruggen; RMNH.CRUS.D.27421, 1 female (33.0 × 30.0 mm), Costa do Sol, Lorenço Marques [= Maputo], Mozambique, 19 September 1967, leg. G. Hartmann; RMNH.CRUS.D.38720, 1 female (39.0 × 32.0 mm), Coast of the Gulf of Thailand, 5 km north of Cha-Am, 120 km southwest of Bangkok, July 1990, leg. Werner Thielen; RMNH.CRUS.D.48701, 1 male (25.0 × 11.0 mm), Gulf of Thailand, near Pattani, March 2001, leg. C. Swennen.

Remarks. Four species of *Ocypode* Weber, 1795 have been reported from Mozambican waters (Emmerson 2016c; Muñoz *et al.* 2021). In the revision of *Ocypode* by Sakai & Türkay (2013) an identification key is given for the species within the genus. *Ocypode ceratophthalmus* can be distinguished from congeners in Mozambican waters by the presence of a stridulating ridge on the cheliped palm and the prolonged eyestalks in adults (Barnard 1950; Sakai & Türkay 2013). The propodi of the second and third walking leg have setae (Sakai & Türkay 2013). The examined specimens match well with the description in Barnard (1950), Emmerson (2016c), Sakai & Türkay (2013) and with the comparative material. Ma *et al.* (2018) examined the population genetics of *O. ceratophthalmus* in the Indo-Pacific region, and found at least three distinct geographical clades, of which one in and around East Africa. It is possible that this species is comprised of multiple cryptic species, but extensive morphological examination needs to be done in order to resolve this question (Ma *et al.* 2018).

Distribution. South Africa (Barnard 1950; Emmerson 2016c; Kensley 1981; Peer *et al.* 2014; Stebbing 1893, 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Europa Island (Derijard 1966), Mayotte (Poupin 2010), Madagascar (Crosnier 1965; Fourmanoir 1954; Hoffmann 1874; Lenz 1910; Lenz & Richters 1881), La Réunion (A. Milne-Edwards 1862; Poupin 2010; Sakai & Türkay 1977), Mauritius (Bouvier 1915; Michel 1964; Richters 1880; Sakai & Türkay 1977), Tanzania

(Chace 1942; Hartnoll 1975; Lenz 1905; Ortmann 1894; Pfeffer 1889), Somalia (Vannini & Valmori 1981), Red Sea (Kossmann 1877; Laurie 1915; Nobili 1906a), Diego Garcia (Ward 1942), India (Alcock & Anderson 1894; Bakus 1994; Chhapgar 1957; Dev Roy 2008; Heller 1865; Henderson 1893; Pati *et al.* 2022; Sankarankutty 1961; Suvarna Devi *et al.* 2019; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Balss 1922c; Doflein 1902; Heller 1865), Myanmar (Chopra & Das 1937; De Man 1887), Nicobar Islands (Bakus 1994), Singapore (Lanchester 1900), Christmas Island (Orchard 2012), Thailand (Naiyanetr 2007; Ng & Davie 2002), Cocos (Keeling) Islands (Tweedie 1950), Malaysia (Lanchester 1900, 1901; Sakai & Türkay 1977), Indonesia (De Man 1895, 1902; Murniati *et al.* 2022; Nobili 1899; Rathbun 1910; Sakai & Türkay 1977; Schenkel 1902), China (Dai & Yang 1991; Stimpson 1907), Taiwan (Balss 1922c; Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Japan (Balss 1922c; De Haan 1835; Sakai 1939, 1976; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Balss 1935; Davie 2002; Grant & McCulloch 1906; Haswell 1882; Hess 1865; McNeill 1926, 1968; Nobili 1899; Poore 2004), Torres Strait (Calman 1900; Ortmann 1894), Papua New Guinea (Nobili 1905; Sakai & Türkay 1977; Thallwitz 1891), Melanesia (Miers 1884a; Zehntner 1894), Micronesia (Sendler 1923), New Caledonia (A. Milne-Edwards 1862; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987; Holthuis 1953), Gilbert Islands (Balss 1938; Holthuis 1953), Fiji (Balss 1938; Borradaile 1900), Hawai'i (Castro 2011; Rathbun 1906; Stimpson 1907), Tahiti (Curtiss 1938; Stimpson 1907), Tuvalu (Whitelegge 1897), Wallis & Futuna (Poupin 2010), Line Islands (Edmondson 1923), Tonga Islands (Rathbun 1907), French Polynesia (Poupin 1996, 2010; Rathbun 1907) and Clipperton Island (Garth 1965; Poupin 2010).

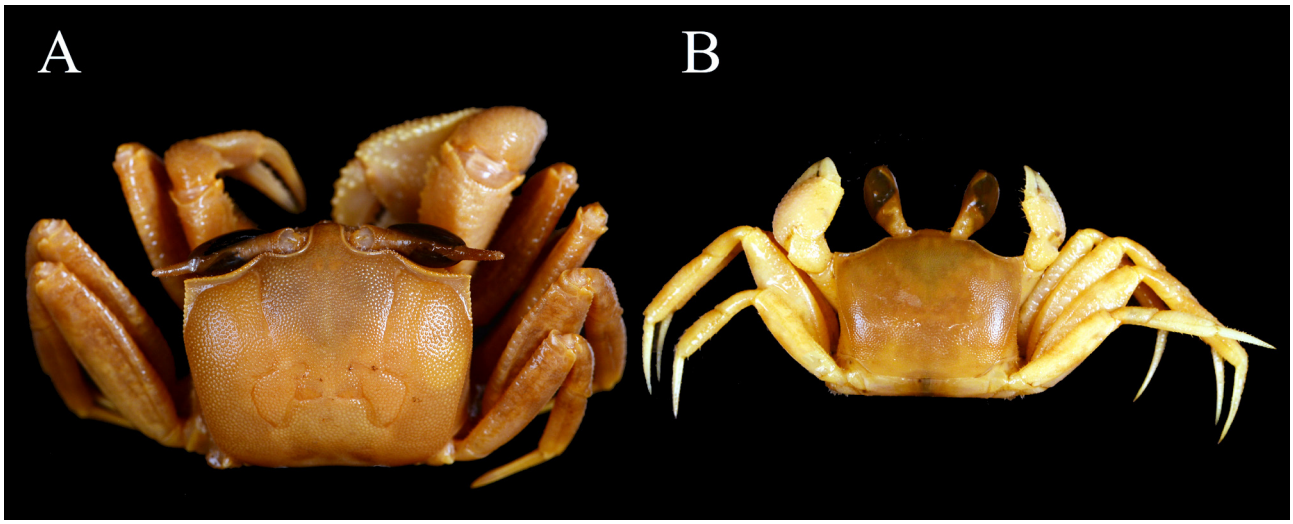

FIGURE 13. A, *Ocypode ceratophthalmus* (Pallas, 1772), male, CW = 27.0 mm, RMNH.CRUS.D.58879; B, *Ocypode ryderi* Kingsley, 1880, male, CW = 11.0 mm, RMNH.CRUS.D.58891.

89. *Ocypode cordimana* Latreille, 1818

Ocypode cordimana Latreille, 1818b: 198.—Desmarest 1825: 121.—H. Milne-Edwards 1852: 143.—Heller 1861a: 361.—Hilgendorf 1869: 82; 1879: 803.—A. Milne-Edwards 1873: 271.—Hoffmann 1874: 13, pl. 2 figs. 9, 10.—Kossmann 1877: 55.—Targioni Tozzetti 1877: 108, pl. 7 figs. 3A–D.—Alcock & Anderson 1894: 202 (list).—De Man 1895: 572.—Lanchester 1900: 752; 1901: 548.—Doflein 1902: 668.—Rathbun 1907: 26.—Stebbing 1910: 326.—Laurie 1915: 416 (list).—Boone 1934: 191, pls. 99, 100.—Holthuis 1953: 29.—Estampador 1959: 100.—Guinot 1967a: 281 (list).—McNeill 1968: 85.—Vannini & Valmori 1981: 206, figs. 1D, 2D, 3D, 4D.—Garth *et al.* 1987: 247 (list).—Dai & Yang 1991: 455, fig. 230(4), pl. 58(3).—Bakus 1994: 172 (list).—Poupin 1996: 73.—Ng *et al.* 2001: 36 (list); 2017: 128 (list).—Paulay *et al.* 2003: 42 (list).—Naiyanetr 2007: 131 (list).—Dev Roy 2008: 150.—Shih *et al.* 2016: 147 (list).—Bento & Paula 2018: 46 (list).—Trivedi *et al.* 2018: 55 (list).—Lee *et al.* 2021: S13 (list).—Muñoz *et al.* 2021: 57 (list).—Murniati *et al.* 2022: 465, fig. 3.—Pati *et al.* 2022: 531.

Ocypode (*Ocypode*) *cordimana*.—De Haan 1835: 29 (list), 57, pl. 15 fig. 4.—Krauss 1843: 41.

Ocypoda cordimana.—H. Milne-Edwards 1837a: 45.—Heller 1861b: 17 (list); 1865: 42.—Kingsley 1880b: 185.—Richters 1880: 155.—Lenz & Richters 1881: 423.—Haswell 1882: 95.—De Man 1887: 108; 1902: 483.—Pfeffer 1889: 30.—Henderson 1893: 387.—Zehntner 1894: 272.—Alcock 1900: 349.—Nobili 1905: 494; 1906a: 310.—Lenz 1910: 558.—Tesch 1918: 35.—Balss 1922c: 142.—Chopra & Das 1937: 420, fig. 18.—Ward 1942: 103.—Tweedie 1950: 126.—Chhapgar 1957: 45, pl. 13D–F.—Sankarankutty 1961: 126.—Bakus 1994: 187 (list).—Venkataraman *et al*. 2004: 307 (list).

Ocypoda cordimanus.—Miers 1884b: 542.
Cancer roberti Curtiss, 1938: 175.
Ocypode cordimanus.—Barnard 1950: 84, figs. 17A, B.—Michel 1964: 11.—Crosnier 1965: 96, figs. 154, 162, 171, 172, pl. 8 fig. 3.—Serène 1968: 97 (list).—Sakai & Türkay 1977: 178; 2013: 696, figs. 12, 34.—Kensley 1981: 49 (list).—Huang *et al.* 1998: 952, figs. 1B, C, 2B, D, H, I, 3B, D, G, H, 4B, F–I.—Apel 2001: 112.—Simões *et al.* 2001: 86 (list).—Davie 2002: 357.—Poore 2004: 496.—Ng & Richer de Forges 2007: 326 (list).—Ng *et al.* 2008: 240 (list).—Poupin 2010: 59 (list).—Orchard 2012: 244.—Emmerson 2016c: 479 (list).—Naderloo 2017: 406, figs. 37.2, 37.8B, 37.9.

Material examined. RMNH.CRUS.D.58888, 1 male (17.0 × 15.0 mm), tidal flat in front of Barreira Vermelha, fcn. X4049, 3 August 1984, leg. J.H.C. Walenkamp; RMNH.CRUS.D.58889, 4 males (19.0 × 18.0 mm, 10.0 × 8.0 mm, 9.0 × 9.0 mm, 7.0 × 6.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4023, 28 July 1983, leg. Alexandra Rodrigues.

Comparative material. RMNH.CRUS.D.2000, 1 female (26.0 × 22.0 mm), Poeloe Weh [= Pulau Weh], Java, Indonesia, January 1911, leg. P. Buitendijk; RMNH.CRUS.D.224, 1 male (31.0 × 25.0 mm), Bezuki, Java, Indonesia, 1865, leg. J. Semmelink; RMNH.CRUS.D.223, 1 female (35.0 × 31.0 mm), Xulla-Bessy [= Sulabesi Island], Indonesia, date and collector unknown; RMNH.CRUS.D.36091, 1 male (37.5 × 31.0 mm), south of Barrio Polo Tulay, Pagbilao Grande Island, Luzon, Philippines, 5 January 1980, leg. A.C.J. Burgers; RMNH.CRUS.D.9648, 1 female (29.5 × 26.0 mm), Utirik Island (atoll), Marshall Islands, 1 December 1951, leg. F.R. Fosberg.

Remarks. *Ocypode cordimana* can be distinguished from the other *Ocypode* spp. in Mozambican waters by the absence of the stridulating ridge on the cheliped palm. The eyestalks are not prolonged beyond the cornea (Barnard 1950; Sakai & Türkay 2013). The closely related *O. sinensis* also lacks the stridulating ridge on the cheliped palm, Huang *et al.* (1998) discusses the difference between the two species in more detail. The carapace of the specimens from Inhaca Island is strongly arched dorsally, a character Huang *et al.* (1998) list for *O. cordimanus.* The bigger specimens have a distinct cleft in the median part of the suborbital margin, but on the smaller specimens this is only very slight. The smaller specimens are not full adults, which may explain the less-pronounced cleft. The examined specimens match well with the description and figures in Huang *et al.* (1998), Sakai & Türkay (2013) and with the comparative material.

Distribution. South Africa (Barnard 1950; Krauss 1843; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Hilgendorf 1879; Kensley 1981; Muñoz *et al.* 2021), Europa Island (Lenz 1910), Mayotte (Poupin 2010), Madagascar (Crosnier 1965; Lenz & Richters 1881), La Réunion (Hoffmann 1874; Poupin 2010; Sakai & Türkay 1977), Mauritius (Michel 1964; Richters 1880; Sakai & Türkay 1977), Seychelles (Miers 1884b), Tanzania (Hilgendorf 1869; Pfeffer 1889), Somalia (Vannini & Valmori 1981), Red Sea (Heller 1861a, b; Kossmann 1877; Laurie 1915; Nobili 1906a), Yemen (Simões *et al.* 2001), Gulf of Oman (Apel 2001; Naderloo 2017), Diego Garcia (Ward 1942), India (Alcock 1900; Alcock & Anderson 1894; Bakus 1994; Chhapgar 1957; Dev Roy 2008; Heller 1865; Henderson 1893; Pati *et al.* 2022; Sankarankutty 1961; Trivedi *et al.* 2018; Venkataraman *et al.* 2004), Sri Lanka (Balss 1922c; Doflein 1902), Myanmar (Chopra & Das 1937; De Man 1887), Nicobar Islands (Bakus 1994), Singapore (Lanchester 1900), Christmas Island (Orchard 2012), Thailand (Naiyanetr 2007), Cocos (Keeling) Islands (Tweedie 1950), Malaysia (Lanchester 1901; Sakai & Türkay 1977), Indonesia (De Man 1895, 1902; Murniata *et al.* 2022; Sakai & Türkay 1977), China (Balss 1922c; Dai & Yang 1991), Taiwan (Ng *et al.* 2001, 2017), Philippines (Estampador 1959), Korea (Lee *et al.* 2021), Japan (Balss 1922c; De Haan 1835; Stimpson 1907), Marianas Islands (Paulay *et al.* 2003), Australia (Davie 2002; Haswell 1882; McNeill 1968; Poore 2004), Papua New Guinea (Nobili 1905), Melanesia (Zehntner 1894), New Caledonia (A. Milne-Edwards 1873; Ng & Richer de Forges 2007; Poupin 2010), Marshall Islands (Garth *et al.* 1987; Holthuis 1953), Gilbert Islands (Holthuis 1953), Tahiti (Curtiss 1938), Wallis & Futuna (Poupin 2010), Tonga Islands (Rathbun 1907) and French Polynesia (Poupin 1996, 2010).

90. *Ocypode ryderi* Kingsley, 1880

(Fig. 13B)

Ocypoda ryderi Kingsley, 1880b: 183.—Kensley 1981: 49 (list).—Vannini & Valmori 1981: 206, figs. 1C, 2C, 3C, 4C.—Ng *et al.* 2008: 240 (list).—Peer *et al*. 2014: 61, fig. 19.—Emmerson 2016c: 358, 479 (list).—Bento & Paula 2018: 46 (list).—Muñoz *et al.* 2021: 58 (list).
Ocypoda kuhli.—Ortmann 1894: 59 (in part).—Lenz 1910: 558.—MacNae & Kalk 1958: 67.—Guinot 1967a: 281 (list).
Ocypode kuhlii.—Stebbing 1910: 327.—Barnard 1950: 87, figs. 17E–G.—Crosnier 1965: 101, figs. 157, 164, 176, 177, pl. 9 fig. 1. [Not *Ocypode kuhlii* De Haan, 1835].

Ocypode kuhli.—Serène 1968: 97 (list).—Hartnoll 1975: 311 (list).
Ocypode ryderi.—Sakai & Türkay 1977: 179; 2013: 738, figs. 5B, 26, 48.—Vannini & Valmori 1981: 206, figs. 1C, 2C, 3C, 4C.—Simões *et al.* 2001: 86 (list).

Material examined. RMNH.CRUS.D.58890, 1 male (35.0 × 37.0 mm), Cabo da Inhaca, fcn. X4304, 12 January 1987, leg. Dulcineia Baguete, Maimuna Amade, Albertina Alage & Lucilia Chuquela; RMNH.CRUS.D.58891, 1 male (11.0 × 10.0 mm), Costa do Sol, Maputo, mangrove, fcn. X4006, 28 July 1983, leg. Alberto Tsamba.

Comparative material. RMNH.CRUS.D.25852, 1 male (35.5 × 29.0 mm), south of Malindi, Watamu Beach, Kenya, November 1968, leg. B. Lanza; RMNH.CRUS.D.7380, 2 males (26.0 × 21.0 mm, 15.0 × 10.0 mm), beach of Durban Natal, South Africa, 20 September 1916, leg. P. Buitendijk.

Remarks. *Ocypode ryderi* was originally not named by Barnard (1950) as present in African waters. Instead, he identified specimens as *O. kuhlii* De Haan, 1835. It was later shown that *O. kuhlii* is only distributed in Indonesia, and that material previously identified to this species on the eastern to southern coasts of Africa is actually *O. ryderi* (see Sakai & Türkay 2013). *Ocypode ryderi* can be distinguished from the congeners in the region by the palm of the cheliped, which has a stridulating ridge composed of 15 tubercles (Sakai & Türkay 2013) that occupies only half of the width of the palm. On the palm of *O. ceratophthalmus*, the stridulating ridge occupies the entire width (Barnard 1950) and has of 10 or 11 tubercles (Sakai & Türkay 2013). The examined specimens match well with the extensive description and figures of *O. ryderi* in Sakai & Türkay (2013), and with comparative material.

Distribution. South Africa (Barnard 1950; Kensley 1981; Peer *et al.* 2014; Stebbing 1910), Mozambique (Barnard 1950; Emmerson 2016c; Kensley 1981; MacNae & Kalk 1958; Muñoz *et al.* 2021), Madagascar (Crosnier 1965), East Africa (Lenz 1910), Tanzania (Hartnoll 1975; Ortmann 1894), Kenya (Sakai & Türkay 1977), Somalia (Vannini & Valmori 1981) and Yemen (Simões *et al.* 2001).

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