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# The Brachyuran Crabs (Crustacea: Decapoda) of Hong Kong: a Historical Review and Catalogue

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The brachyuran crab fauna of subtropical Hong Kong is documented and an updated catalogue presented of all known species. Starting with the milestone studies by William Stimpson in the 1850s, many generations of workers have since added to the knowledge of this fauna. In the previous summary of the fauna by Chia-Jui Shen in 1940, 187 species were reported. Eight decades later, we now report 382 species from 27 superfamilies and 49 families, of which 22 species are new records. The present paper also reviews the history of carcinology in Hong Kong. The taxonomy of each species is treated, and a complete scientific bibliography is presented as far as possible.

**Key words:** Hong Kong, Brachyuran fauna, Historical review, Literature, Taxonomy, Biodiversity, New records

## BACKGROUND

Hong Kong is a small city in southern China with a land area of only 1107 km$^2$ and with coastal territorial waters of 1648 km$^2$ (Lands Department, HKSAR 2020). The territory seas of Hong Kong, in general, are shallow, with depths less than 50 m on average. This subtropical environment, nevertheless, exhibits remarkable spatial and temporal biodiversity (Watts 1973; Morton and Morton 1983) and contains a wealth of marine organisms with species counts reaching 6,000 (TPT Ng et al. 2016).

Brachyuran crabs of diverse forms are found in nearly all aquatic habitats, and total number of species currently exceeds 7,200 globally (Davie et al. 2015a). Elsewhere in East Asia, some 1,073 species were recorded from Chinese seas, 800 from Taiwan (Yang et al. 2008; Ng et al. 2017a), while over 1,250 from Japan (T Sakai 1976; K Sakai 2004; Sasaki 2020). S.Y. Lee and Leung's (1999) estimate that the brachyuran species diversity of Hong Kong was in excess of 300 has proven to be correct. Herein we report 382 species, representing a third of the total Chinese fauna. The fauna of Hong Kong is predominately intertidal and shallow-water, and is represented by 27 superfamilies and 49 families; the most species-rich groups being the Grapsoidea (51 spp.), Ocypodoidea (49 spp.), Portunoidea (49 spp.) and Pilumnoidea (43 spp.).

In addition to the rich habitats present in Hong Kong, this small locality has also benefited from a long history of exploration of its seas and natural history investigations. A key prelude was the North Pacific Exploring Expedition (1853–1856) of the United States in East Asia, which was followed by several workers who collected extensive materials that were eventually deposited in many major European and American Institutes. By 1940, a comprehensive checklist of 187 species was compiled by the Chinese taxonomist Chia-Jui Shen (Shen 1940a). A detailed historical review of the local brachyuran fauna is provided in the present

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work below.

For eight decades since 1940, the contributions by many workers have substantially increased the number of brachyuran taxa known from Hong Kong. A comprehensive compilation, however, has never been done until now. To facilitate future research in biodiversity and the associated fields of conservation and management, we have included detailed taxonomic and ecological information for each species whenever possible.

## HISTORICAL ACCOUNT AND GENERAL DISCUSSION

Our understanding of the locality called "Hong Kong" has evolved over time since 1842. Chinese characters representing Hong Kong appeared in documented publications not later than the mid-late Ming Dynasty in *Yueh-Ta-Chi* (printed in 1595), referring to a small remote island off the coast of present day Guangdong (for pre-colonial circumstances, see *e.g.*, Hayes 1984), while the later British colony was established as a direct result of the *Treaty of Nanking* signed between the British and Qing China after the First Opium War (1839–1842). The north-south oriented Pearl River leads to Canton (now Guangzhou), a long-time nexus of inter-continental maritime trade, and the colonized island at the east of the estuarine seas was first referred as "Hong Kong" in international literature. The British territory later extended north to include the peninsula of Kowloon opposite the Harbour in 1860 under the *Convention of Beijing*, and later leased the area south of the Shenzhen (= Sham Chun) River for another 99 years in 1898 under the *Convention for the Extension of Hong Kong Territory*. Between these periods, the boundaries of "Hong Kong" expanded, from a single island (1840s–1859), to both sides of the Harbour (1860–1898), and eventually to include the land south of the Shenzhen River (Figs. 1, 2; in Fig. 2 territory of these three stages shown in different tones of gray). The boundaries of "Hong Kong" have confused some workers. For example, Shen (1935) described a new species, *Camptandrium anomalum* (now *Shenius*, Dotillidae), based on material from "Taipo, near Canton, China". The site from which this mangrove-obligate species (Ng et al. 2010b) was collected was in fact in the present day northeastern New Territories along the Tolo Channel, Hong Kong. As such, records from localities previously listed as "Canton", or "South China", are actually within the present recognized territory of Hong Kong, are included in the present paper.

In the present section, as part of our historical review, we elaborate on how knowledge of the local brachyuran fauna accumulated through the years, emphasis being given to works which contribute new species and records. The list of names of authors of Asian ethnic origins, as well as titles of older Chinese text mentioned, are listed under appendix 1.

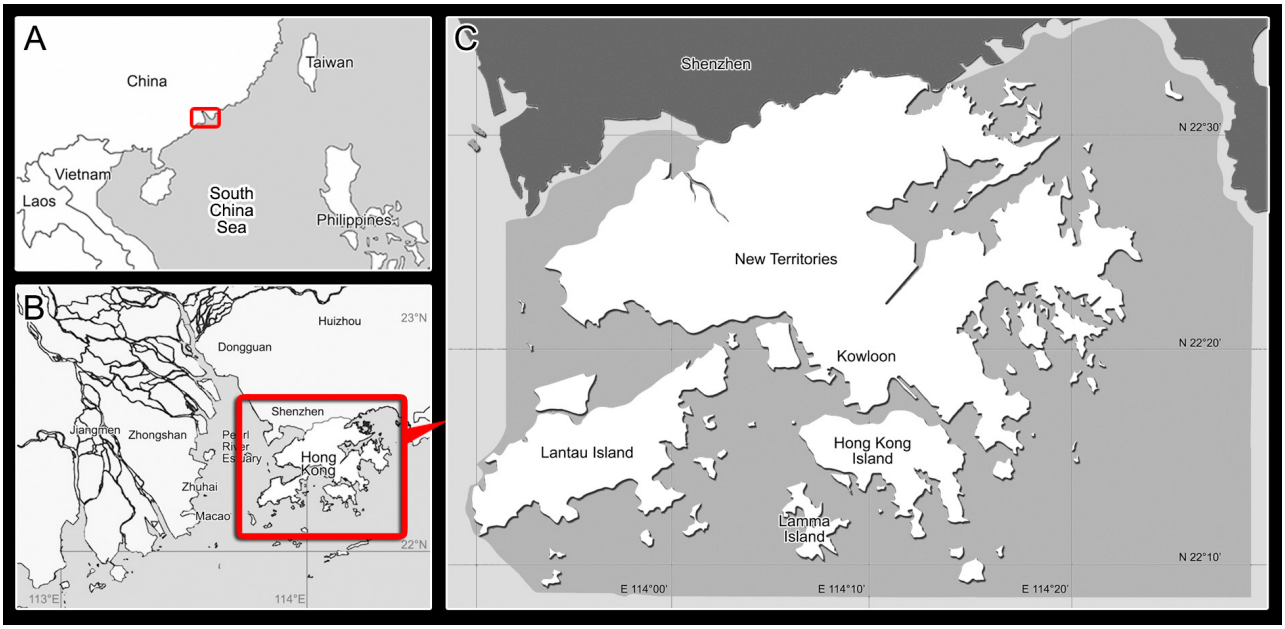



**Fig. 1.** Map showing main locations in Hong Kong: A, location of Pearl River Delta in East Asia; B, location of Hong Kong in eastern flank of Pearl River Delta; C, map of Hong Kong (territorial seas shaded in medium gray).

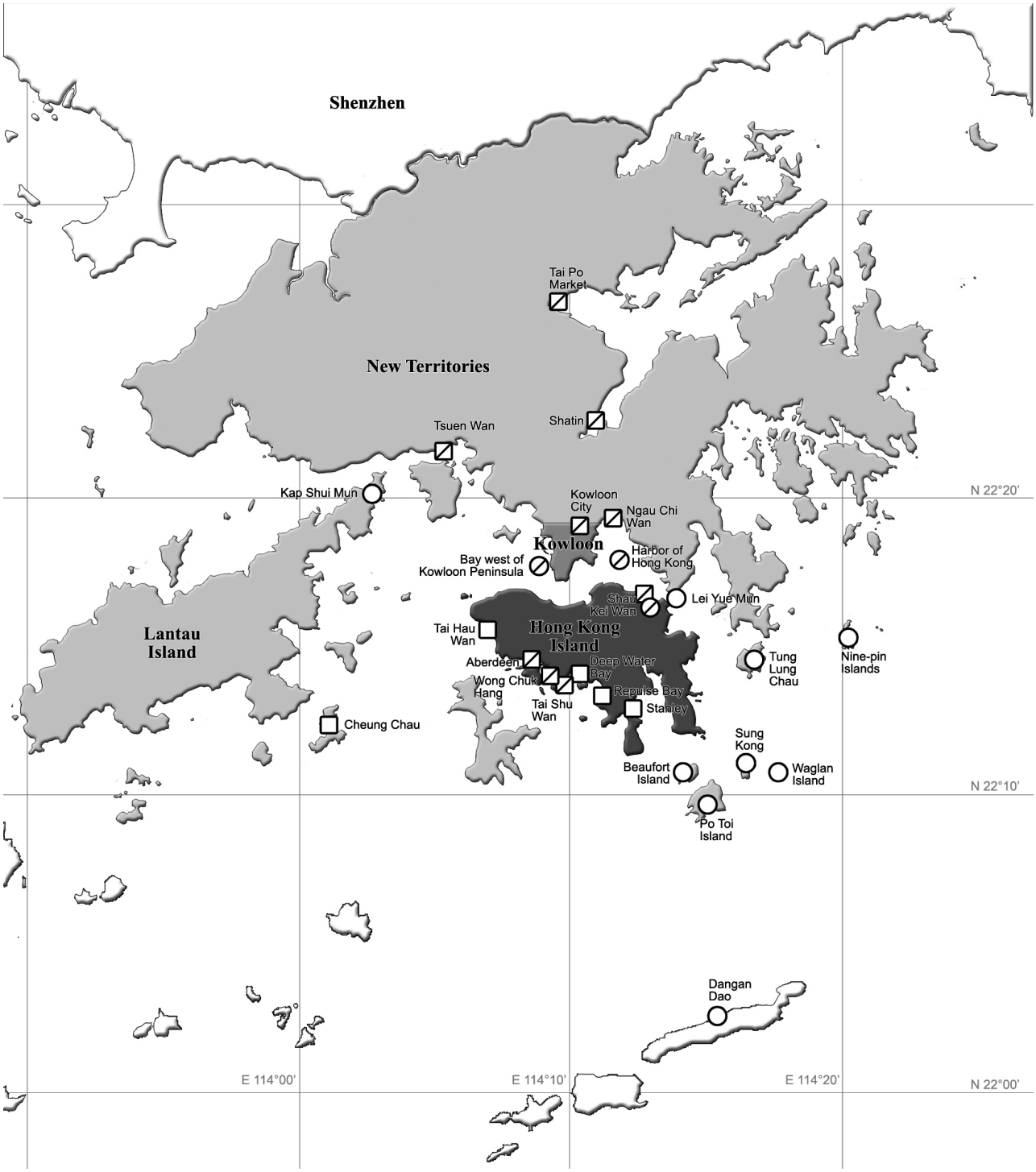



**Fig. 2.** Map of Hong Kong before most large-scale reclamation works. Parts of the colony, namely Hong Kong Island (1842–1997), Kowloon Peninsula (1860–1997) and the New Territories (1898–1997) are shaded in different tones of gray. Local sites surveyed by W. Stimpson in the 1850s and C.-J. Shen in the 1930s are shown respectively as circles and squares, those of which have undergone substantial changes and/or urbanization are shown by a crossed icon.

## A welcome station for circumnavigations (1850s to the early 20th Century)

In older Chinese texts, various intertidal crabs had been recorded (see Dai and Yang 1991), while those mentioning sites in the vicinity of Guangdong, South China, emerged later in the mid-Ming Dynasty. These works include as *Guangdong Tongzhi* (or *Gazetteer of the Guangdong Province*: first edition in 1535), and *Guangdong Xinyu* (or *New Essays of Guangdong*: printed in 1687). Regrettably, these records cannot be used as reliable or formal records of the fauna of the region, as they largely treated crabs as local produce, occasionally providing remarks on their edibility and/or flavor.

On the other hand, western (European and American) naturalists have long travelled to Asia for exploration along established trade routes, collecting specimens, reporting and describing new taxa. Specimens were either collected by the naturalists themselves, and/or passed to them by locals or colleagues. Under the British administration from the 1840s, the colony was open for foreign trade and residency, and in the decades that followed, the population grew from 7,450 in 1841, to nearly 87,000 by 1859 (SC Fan 1974). The prosperity attracted European settlers, among whom were many keen naturalists (F-t Fan 2004). The study of local terrestrial plants, for example, became the pioneer volume of *Flora Hongkongensis* (Bentham 1861). Understanding of invertebrates in the region, especially for brachyurans, however, only started from the circum-global expeditions of the west.

Most early knowledge of brachyurans can be traced to the works of American zoologist William Stimpson (1832–1872), who served as the on-board zoologist, or Chief Scientific Officer, of the North Pacific Exploring Expedition (NPEE, 1853–1856) of the United States. The NPEE was the second circumnavigation organized by the US, following the first, United States Exploring Expedition (USEE; 1838–1842). Main intentions included securing trade routes, exploring new whaling grounds, and providing a strong platform for naturalists and scientists (*e.g.*, see Wilkes 1845; Bryan 1940). Extensive details of the NPEE had been revealed in Stimpson's journal, edited and published by Vasile et al. (2005). The Expedition spent nearly nine months in the vicinity of Hong Kong (19th March–11th September 1854, and 29th January–6th April 1855, interrupted by a brief northward visit to the Ryukyus and Japanese seas), collecting extensively by dredging, shore excursions and market visits. In Chinese waters, their team accessed numerous localities, such as outlying islands eastward of Lei-Yue Mun (narrow passage east of Victoria Harbour, then as Li-ee-moon), Tung Lung Chau (as Tam-too), Nine Pins, Waglan, Po Toi (as Pootoy) and Dangan Dao (as Grand Lema), and westwards at Kap Shui Mun (as Cum-sing-moon) and Macao (see maps reproduced in Figs. 2 and 3).

In a series of preliminary papers, Stimpson (1857 1858a b c d) recorded 287 brachyuran species, of which 126 were new to science. More details and illustrations were provided in his posthumously-published compendium of 1907. Of these taxa, 110 (including three variants of *Chlorodius exaratus*, Xanthidae, cf. Stimpson 1907) were reported from seas of South China, most (97 species and two variants) of which were collected in the vicinity of what is now Hong Kong (Appendix 2), while the remaining from either up the Pearl River towards Canton, or northwards along the Taiwan Strait at around 23°N. Of these Hong Kong records, 35 were new to science.

Stimpson had planned for a comprehensive publication of the East Asian and Pacific crabs. To archieve this, he gathered the extensive collections of the NPEE, as well as the sizeable materials from the USEE reported by James Dwight Dana (1813–1895). Unfortunately, all this material was tragically lost in the Great Chicago Fire of 1871. Also lost were unpublished manuscripts and thousands of figures, some in color. Devastated, Stimpson died an early age of 40 in 1872, one year after the terrible fire. But not everything was lost. Three decades after Stimpson's death, some manuscripts and illustrations of crustaceans, Brachyura and Anomura included, were recovered at the Navy Department at Virginia, partially edited by zoologist Mary Jane Rathbun (1860–1943) from the Smithsonian Institution, and were published posthumously as "Stimpson 1907".

Given the hostile atmosphere during the years of the American Civil War (1861–1865), in contrast with its predecessor, the USEE, which produced a good series of government documents, no official report was published for the NPEE (Deiss and Manning 1981; Vasile et al. 2005) (but see Habersham 1857; Cole 1947). The results of the NPEE, at least for the Brachyura, were very impressive when compared to similar scientific circumnavigations of similar scale in the 19th Century, such as the USEE (273 brachyuran species recorded, including 156 new species) (Dana 1852a b 1855) and the Challenger Expedition (305 species recorded with 49 new) (Miers 1886; Henderson 1888). The significance of Stimpson's contributions was not only due to the sheer number of new taxa, among which many common species of shallow water and intertidal habitats; but also, as Raymond Manning commented, his "ability to accurately define so many taxa with only a few characters" (Vasile et al. 2005). In

the intervening years, some of Stimpson's specimens have been discovered in other museums, such as the U.S. National Museum of Natural History (Washington D.C.), the Natural History Museum (London) and the Museum of Comparative Zoology in Harvard University (AC Evans 1967; Griffin 1974; Deiss and Manning 1981; Manning and Reed 2006; Ng and Clark 2014; Ng 2017). These were specimens Stimpson had exchanged or given to colleagues before the fire. Unfortunately, the loss of most of his material has posed major challenges for subsequent generations of carcinologists. Through collections of topotypic material and/or selection of neotypes, however, many of Stimpson's long synonymized taxa were resurrected, and the precise identities of others clarified (*e.g.*, see Castro and Ng 2010; Shih et al. 2012; Komai and Poore 2016; Teng et al. 2016; Richer de Forges et al. 2021), testament to Stimpson's genius.

Shortly after the NPEE, an Austro-Hungarian vessel, S.M.S. *Novara* visited Hong Kong during their scientific circumnavigation from 1857 to 1859, staying in the vicinity of Hong Kong from 5th to 18th July 1858 (see narrative by Scherzer 1862), and the crustacean collections were later reported by Austrian zoologist Camill Heller (1823–1917) in 1862 and 1865. Eight species were reported from Hong Kong, all previously recorded by Stimpson (cf. Stimpson 1907). Two decades later, another circumnavigation, the United Kingdom's Challenger Expedition (1873–1876), one first fully devoted to marine sciences (see narrative by Tizard et

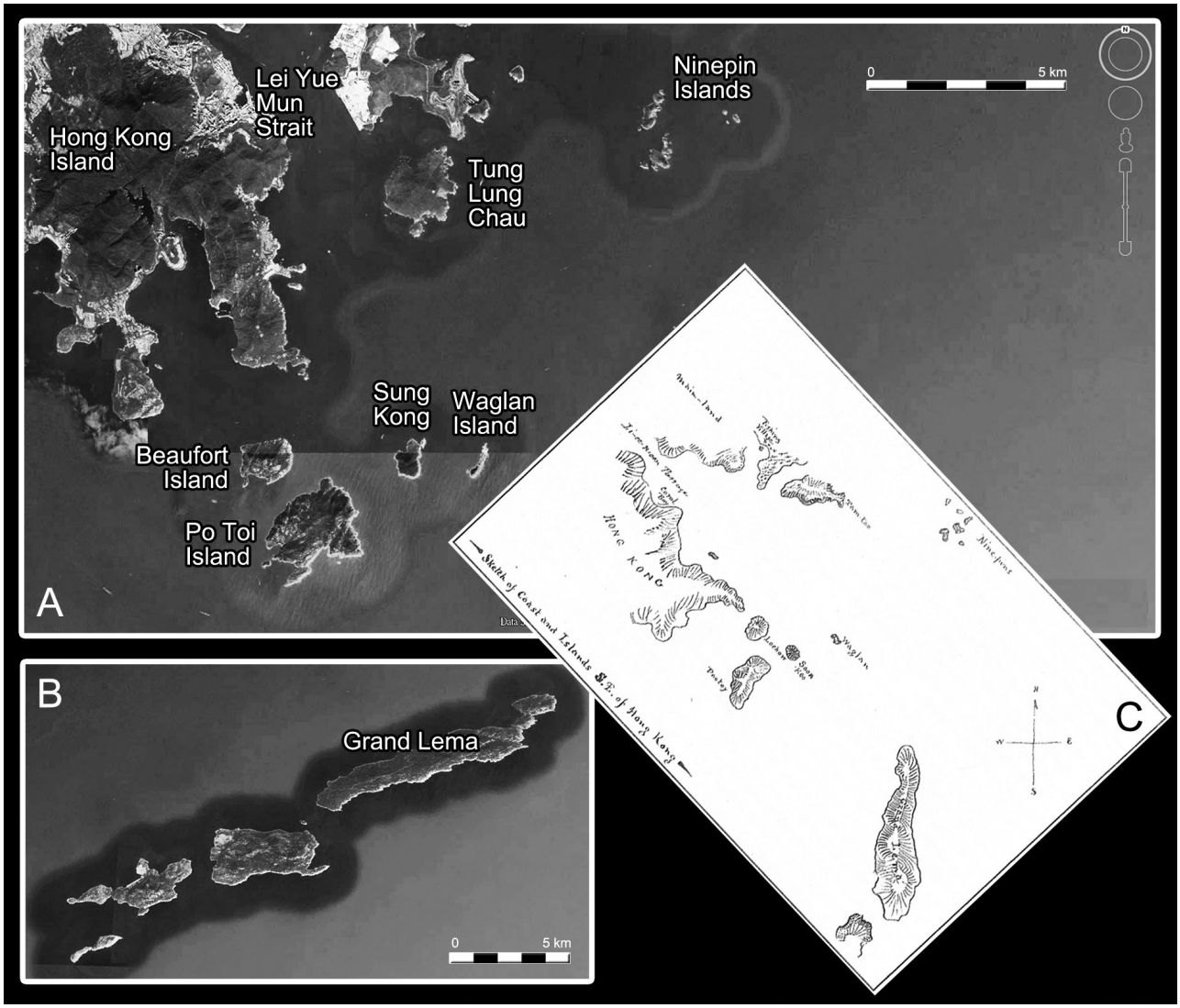



**Fig. 3.** Still-pristine out-lying islands of Hong Kong and Dangan Dao. A, B: aerial images showing current conditions. Extensive reclaimed land now as urban areas appearing light grayish white, in contrast to much darker vegetated areas. C: hand-drawn map drawn by Stimpson himself in the Expedition Journal. Sources: A, B: Google Earth, accessed Nov 2018; C: Vasile et al. (2005).

al. 1885), stayed in vicinity of Hong Kong from 16th November 1874 to 8th January 1875, and surveyed a near-shore site near Hong Kong at a depth 7 to 10 fathoms. Five species of brachyurans were reported by zoologist Edward John Miers (1851–1930) in 1886, including a new record of *Leucosia craniolaris* (but see Galil 2003a, and accounts under List of Taxa below).

German taxonomist Heinrich Otto Wilhelm Bürger (as O. Bürger; 1865–1945) reported on a small collection of sesarmid crabs collected by German biologist Carl Semper (1832–1893), en route to the Philippines in 1893 (Bürger 1893), and among the material were three species from Hong Kong. Hungarian traveler and scholar Count Béla Széchenyi (1837–1918) on his Eastern Asian Expedition (1877–1880) obtained a small collection of intertidal crustaceans while passing through Hong Kong and Macao. Eleven local records were presented in a report prepared by Hungarian zoologist Károly Koelbel in 1897 (Koelbel 1897), including one new species, the Buddhist crab *Tmethypocoelis ceratophora* (then as *Dioxippe*, Dotillidae), and three new records. During the U.S. Philippine Expedition (on the *U.S.S. Albatross*, 1907–1910), the vessel sailed northwards to Hong Kong for repair from early August to early November 1908 and surveyed a dozen of sites in "China Sea, vicinity Hongkong". However, only several stations can be considered as within the territorial seas of Hong Kong (see definitions under Material and Methods below).

## Extensive collections and the growth of carcinology (early to mid- 20th Century)

By the turn of the 20th century, as collections in major institutes increased, researchers focused on comparisons between similar forms across geographical regions. This fueled exchanges between relevant collections and new survey efforts globally. Based on material housed in the Indian Museum, Calcutta, among which included some from Hong Kong amassed by Surgeon-General Richard Hungerford (1834–1909), who travelled extensively in Asia (see mollusks reported by Nevill 1884), several India-based British zoologists referred to material from Hong Kong when reporting on the Indian fauna. In describing a raninid crab *Lyreidus channeri* Wood-Mason, 1885 (now *Lysirude*, Raninidae), entomologist James Wood-Mason (1846–1893), made comparisons, and named as well as illustrated a new species, *Lyreidus stenops* (Raninidae), from Hong Kong (Wood-Mason 1887). Physician and zoologist Alfred William Alcock (1859–1933) in his compilation of the Indian Brachyura (1895 1896 1898 1899 1900a b) included 24 species which had material from Hong Kong, contributing seven new local records. Marine biologist Stanley Wells Kemp (1882–1945) received a considerable lot of crustaceans, including various freshwater forms, amassed by zoologist Thomas Nelson Annandale (1876–1924), then Director of the Zoological Survey of India, collected on an excursion to the "Far East": East and South China, to Thailand and Peninsular Malaysia. Two endemic freshwater decapods were recorded from Hong Kong, including a new species, *Cryptopotamon anacoluthon* (then as *Potamon*, Potamidae), from the Peak (Kemp 1918).

In presenting zoological material from East Asia obtained by German zoologist Franz Theodor Doflein (1873–1924), German zoologist Heinrich Balss (1886–1957) (see Balss 1922a b 1924) included some material from Hong Kong deposited in the collections of the Museum in Moscau, Russia (now Zoological Museum of Moscow University), in addition to several collected by German zoologist Hugo Hermann Schauinsland (1857–1937) during his excursion to East Asia around 1906 (see preface in Balss 1913). In these papers, 15 species from Hong Kong were reported, of which five were new records. Later in a revision of pilumnid crabs, Balss (1933) added *Globopilumnus globosus* (now *Eupilumnus*, Oziidae; see Ng et al. 2001) to the Hong Kong fauna based on material in the Museum of Kopenhagen (now the Zoological Museum, University of Copenhagen, Denmark). Swedish zoologist Nils Johan Teodor Odhner (as T. Odhner; 1879–1928), in reporting on xanthid crabs in 1925, reported four Hong Kong actaeine species from various institutes, of which *Actaea ruppelli* var. *orientalis* was described as new (now *Gaillardiellus orientalis*, Xanthidae).

In 1926, American biologist Nathaniel Gist Gee (1876–1937), using past records and collections at the U.S. National Museum, Washington D.C., compiled a preliminary checklist of decapod crustaceans from China, including 98 brachyuran records from Hong Kong (or "near Hongkong", "Hong Kong Islands" etc.), a figure corresponding to the report by Stimpson (1907).

With substantial collections obtained by various naturalists, back at the British Museum (Natural History) (now the Natural History Museum), London, at the dawn of the 1930s, Scottish zoologist Isabella Gordon (1901–1988) published two important papers on brachyuran fauna of China which included Hong Kong (Gordon 1930 1931). The former paper (Gordon 1930) reported on a collection acquired by zoologist Richard William Durbin Barney, who was a Lecturer in Biology at the University of Hong Kong (HKU) until 1924. In this paper, five new portunid species were described, among which two, namely *Charybdis* (*Goniosoma*) *barneyi* and *C.* (*Goniohellenus*) *sinensis* have been considered as junior synonyms of *C. affinis* and *C. vadorum*, respectively (Yang et al. 2012; see Checklist

below). Records enumerated in the latter paper (Gordon 1931) was based on another larger collection obtained by Barney, resulting in 95 entries, among which including one new portunid species, *Neptunus* (*Hellenus*) *pulchricristatus*, a replacement name for *N.* (*H.*) *alcocki* Gordon, 1930 which was preoccupied, as well as another 27 new records. Gordon (1934) also mentioned a peculiar antipatharian-associated *Xenocarcinus tuberculatus* White, 1847 (Epialtidae), which was a new and only record from Hong Kong when reporting on brachyuran material acquired from Indonesia.

Hong Kong, as a part of the British Empire, had remained largely intact from military aggression until late 1941, and the preceding years had been fruitful for local brachyuran studies. This was substantially fueled by Chinese zoologist Chia-Jui Shen (also known as Jia-Rui Shen; 1902–1975). While investigating the brachyuran fauna of North China (Shen 1932b), he received considerable material amassed by British botanist and ornithologist Geoffrey Alton Craig Herklots (1902–1986), who was a Reader in Biology at HKU until 1928. This collection resulted in a series of four well-illustrated papers titled "Crabs of Hong Kong" (Shen 1931a b 1932a 1934), enumerating a total of 31 species, of which six were new records, with one new portunid species *Charybdis* (*Goniohellenus*) *hongkongensis* Shen, 1934 (now *C.* (*Archias*) *hongkongensis*). In the latter two papers (Shen 1932a 1934), a number of portunid crabs of substantial fishery values were treated. Shen himself had travelled to and collected in Hong Kong at least twice (1932 and 1938), and material he acquired resulted in two other papers, one in 1935 generally on taxa from coastal habitats, and the next was a checklist of Hong Kong brachyurans (Shen 1940a). The 1935 paper reported six local species, including new species *Sesarma* (*Sesarma*) *gordoni* (now considered as a junior synonym of *Nanosesarma minutum*, Sesarmidae) and *Camptandrium anomalum* (now *Shenius*), as well as one new record.

The first checklist on Brachyura from Hong Kong by Shen (1940a) included past records and material deposited in National University of Peking, China, and the British Museum (Natural History), London, and 187 species were listed. This reported on 25 new records, including two new species, although the names were *nomina nuda*: *Potamon* (*Potamon*) *hongkongensis* (now *Nanhaipotamon*) and *Cyclograpsus incisus* (Varunidae). The two species were formally described in the later pages of the same issue [1(2)] of the *Journal of the Hong Kong Fisheries Research Station* (Shen 1940b); and two new records, *Ilyoplax tenella* (Dotillidae) and *Gelasimus dussumieri* (cited from Stimpson 1907 and collected from Canton River, and Gee 1926, collected from Macao, respectively). The latter probably represents the now common *Tubuca paradussumieri* (Ocypodidae).

## Post-WWII fisheries research (1950s–1980s)

In December 1941, Hong Kong was occupied by Imperial Japan until the end of WWII in August 1945. During this period, studies of the local fauna came to a halt. Hong Kong's population was 1,640,000 just before the Japanese occupation in 1941, but had plummeted to around 600,000 shortly after WWII. It subsequently soared from 1,860,000 in 1949, to 2,250,000 in the years after the Chinese Civil War and subsequent establishment of Communist China (see overview by SC Fan 1974). Endless political turmoil in mainland China forced Hong Kong to achieve self-sustainability in fisheries production in the post-war years (see Morton 2005). This had a major impact on marine discoveries.

Wind-driven boats transitioned to mechanized fishing vessels after the war, expanding ranges and opportunities. The boats operated in many parts of Guangdong's waters and reaching to eastern Hainan, at depths of about 110 m (Au 1968). Supporting fishery surveys were largely carried out at the Hong Kong Fisheries Research Station which was established in 1952. Much of the work was done in the South China Sea south of Hong Kong, with the surveys continuing into the 1980s (Chau and Wong 1960; Morton 2005). These surveys expanded our knowledge of several decapod groups (penaeid shrimps: Cheung 1960 1963, Wear and Stirling 1974; alpheid shrimps: Banner and Banner 1978; deep-sea lobsters: Bruce 1965a b 1966). For brachyurans, most remained unreported although samples have been included in other studies: *Podophthalmus minabensis* (now *Vojmirophthalmus*, Portunidae; Bruce 1965c), *Lyreidus* species (Raninidae, cf. Griffin 1970a), various spider crabs of the Majoidea (cf. Griffin and Tranter 1986), and more recently, a new majid species, *Leptomithrax eldredgei* (cf. Richer de Forges and Ng 2015). Several of these are apparently deeper-water forms and were probably collected from the edge or beyond the continental shelf from depths deeper than 100 m, and are unlikely to be from the shallower territorial waters of Hong Kong. Some of the material obtained from 1953 to 1984, is still probably extant and deposited in the Aberdeen Fisheries and Marine Offices, Hong Kong (see preliminary checklist by the Agricultural, Fisheries and Conservation Department (AFCD), https://www.hk-fish.net/english/specimen_catalogue/introduction.html). This online list enumerated 73 brachyurans collected from 1958 to 1984, among which 58 of species-level identifications, and 43 have been confirmed in the literature or recent

surveys (under List of Taxa below). A preliminary updated list of the brachyuran taxa is provided as appendix 3. These records, especially of deeper-water forms, need to be re-examined. Unfortunately, the first author did not manage to access the collection before departing for Taiwan in the Fall of 2020. Relevant records for this collection are excluded for the time being; the material should be re-examined in the future.

## Research workshops and international collaborations (1980s–2000s)

Back in the 1930s when baseline data was generally absent, there was also a lack of experts in specific groups of local fauna. This was observed by British marine biologist Brian S. Morton (1942–2021) who joined HKU as a Lecturer in 1970, and embarked on a broad program to address the knowledge gap. In a career which spanned 33 years (retired in 2003), Morton mapped out strategies for wider surveys in Hong Kong and expanded collaborations between overseas and local researchers.

From late 1970s onwards, Morton's efforts resulted in many international workshops on marine biology, with invited experts from different fields and countries working in Hong Kong for varying periods of time, facilitating collaborations with local researchers and students on documentation of the local marine flora and fauna. At HKU, since the First International Workshop on Malacofauna of Hong Kong and Southern China, organized in 1977 (successively 1983 and 1992 on the same theme), subsequent events: "International Workshops on the Marine Flora and Fauna of Hong Kong and southern China" were held in 1980, 1986, 1989, 1995 and 1998. The earlier surveys were held at the YMCA Youth Camp at Wu Kai Sha, while those since early 1990s had been based at the Swire Institute of Marine Science (SWIMS) at Cape d'Aguilar, southeastern Hong Kong Island (see Morton 2003). Another one titled "International Workshop on Mangrove Ecosystem of Deep Bay and the Mai Po Marshes" in 1993 was organized jointly by the University and the World Wide Fund (WWF) for Nature, Hong Kong (SY Lee 1999). Themes of these events include identification and description of previously unknown taxa, identifying trends resultant to pollution, overfishing and other disturbances, with identification of species-rich areas for designation of conservation zones (Morton 2000 2003). Material were collected via numerous methods, and more notably, SCUBA diving was utilized for accessing subtidal fauna.

The proceedings of the First International Biological Workshop organized in 1980 contained a number of key papers pertaining to the Brachyura: George (1982) on ghost crabs of the genus *Ocypode* (Ocypodidae), with description of one new species *O. mortoni*; Hill (1982) on leucosiid crabs; Bones (1982) on ecology of sentinel crabs *Macrophthalmus* (Macrophthalmidae); Dudgeon (1982) on decorating behavior of majid crabs; and Horikoshi and Takeda (1982) on assemblage of small subtidal crustaceans, particularly on some uncommon xanthoids. Several papers on parasitic isopods on decapod species (Markham 1982 1990 1992; summarized by Li 2003) were also part of the proceedings, and their hosts included two new brachyuran records. Some of these results, as well as those of the *Flora and Fauna* checklists (Hill et al. 1975 1978), were incorporated into *The Sea Shore Ecology of Hong Kong* (Morton and Morton 1983), which became a must-read for students of Hong Kong marine biology.

Subsequent workshops added papers on the brachyuran fauna: Pregenzer and Morton (1990) on six new records of bivalve-commensal pinnotherid crabs; Davie (1992a) on intertidal brachyuran fauna with one new species *Indopinnixa mortoni* (Pinnotheridae) and five new records; Davie (1992b) on subtidal assemblages of anomuran and brachyuran crabs in Tolo Harbour, Tolo Channel and Mirs Bay derived from trawl surveys, with two new records; and SY Lee and Leung (1999) contributed five new records and life photographs of intertidal crabs, particularly sesarmids from Mai Po and Deep Bay. Investigating epibenthic brachyurans on southeastern seas of Hong Kong and changes of assemblages as result of extensive trawling and dredging during the 1990s, Blackmore and Rainbow (2000) and SY Lee et al. (2000) contributed more subtidal records, with Ng and Dai (1997) describing a new pilumnid genus and species, *Xestopilumnus cultripollex*, from these samples.

In 2002, the Hong Kong Submarine Caves Expedition, jointly organized by SWIMS and the Natural History Museum (London), collected samples from two marine caves at Conic Island and Steep Island (Morton and Bamber 2008). Results of these surveys on decapods were presented by Clark et al. (2008). The six brachyuran reported included one new pilumnid species, *Latopilumnus conicus* (described by Ng and Clark 2008 in the same volume) and three new records.

## Detailed reports, field guides, and recent progress (1970s onwards)

Numerous papers on various groups of Brachyura were published in the late 1970s and 1980s, some treating the taxa in considerable depth and detail. American zoologist Jocelyn Crane (1909–1998) visited Hong Kong for several days in 1963, investigating

taxonomy, behavior and evolution of fiddler crabs, eventually presenting in her seminal work *Fiddler Crabs of the World*. She collected in the vicinity of the Castle Peak area, and five species of fiddler crabs were collected (Crane 1975). Of this material, one *Uca* (*Thalassuca*) *vocans borealis* (now *Gelasimus borealis*; see Shih et al. 2015) was described as new, and a neotype of *Tubuca acuta* was also designated. Singaporean biologist Cheng Lam Soh visited and collected in Hong Kong in 1975, and in 1978, published a report on 15 sesarmid crabs, with description of three new species, namely *Chiromantes maipoensis* (now *Parasesarma*; see Shahdadi and Schubart 2017), *Pseudosesarma patshuni* (now *Orisarma patshuni*; see Schubart and Ng 2020) and *Holometopus serenei* (a junior synonym of *Chiromantes haematocheir*), and added two new records. Studying intertidal sipunculan-associated fauna, American zoologist Raymond Brendan Manning (1934–2000), in collaboration with Brian Morton, described one new pinnotherid genus and species, *Indopinnixa sipunculana* (Manning and Morton 1987). Singaporean zoologist Peter K. L. Ng visited Hong Kong in 1991, collaborated with freshwater biologist David Dudgeon at HKU, and described a new gecarcinucid species *Somanniathelphusa zanklon* based local material (previously collectively under the name *S. sinensis* (H. Milne Edwards, 1853); see below), as well revised the taxonomic status of two other endemic freshwater crabs (Ng and Dudgeon 1992). Some of this material (deposited in Singapore) was subsequently examined and reported by Chinese zoologist Ai-Yun Dai (1930–2005) and used in her monumental monograph on Parathelphusidae and Potamidae in China under the series *Fauna Sinica* (Dai 1999) (see also Ng 2000a).

After the defining work on fiddler crabs (then collectively as *Uca*) by Crane (1975), Australian zoologist Diana S. Jones, in collaboration with Brian Morton, reported and illustrated six local species in detail (Jones and Morton 1994). Fiddler crab taxonomy, including again local and southern Chinese taxa, were revised by Taiwanese zoologist Hsi-Te Shih and colleagues (2010b), and later a review of the ocypodid species *Uca crassipes* (Shih et al. 2012), in which *Gelasimus splendidus*, described based on material from Hong Kong and long considered synonymous with the former, was resurrected.

In the 2000s, a number of important guidebooks of fauna from various habitats were published. Although none were solely on brachyuran crabs, nor any new records presented, many of those were well-illustrated and user-friendly, providing an invaluable resource for public education. One of the earliest of this kind was a beautiful *A Colour Guide to Hong Kong Animals* published in 1981 by Dennis S. Hill, senior lecturer of zoology, HKU, in collaboration with illustrator Karen Phillipps (the Chinese version published in 1982). This guidebook presented 20 common brachyuran species illustrated in color and compelling detail. On coastal and shallow marine habitats, Brian Morton, in collaboration with various authors, published several other guidebooks or pamphlets introducing specific sites: Mai Po (Melville and Morton 1983), Hoi Ha Wan (Morton and Ruxton 1992 1997) and Cape d'Aguilar (Morton and Harper 1995). On mangrove habitats, S. Y. Lee published *Venturing Forests in the Water* in 2003 (SY Lee 2003). Several series of guidebooks had further included the local brachyuran fauna: *Hong Kong Mangroves* by Nora F. Y. Tam and Y. S. Wong at the City University of Hong Kong in 2000, three (four in the series) in 2003 by biologists at HKU, namely *Rocky Shores* by Gray A. Williams, *Hillstreams* by David Dudgeon, and *Sandy Shores* by Benny K. K. Chan and Kevin J. Caley, followed by *Commercial Crustaceans in Hong Kong* in 2004 by Siu Fai Leung and colleagues at the Agricultural, Fisheries and Conservation Department, HKSAR Government, and later another series by the team of local zoologists Terrence C. W. Fong, Vincent C. S. Lai, Henry T. H. Lui and Samson N. H. So (*Estuarine Organisms* (2005), *Hard Shore Organisms* (2006) and *Small Wetland Creatures* (2007)).

Our understanding of the local brachyuran fauna has been a slow but steady process. Vincent Lai, in 1999, reported two new intertidal records, namely *Ebalia malefactrix* and *Episesarma versicolor* (Leucosiidae and Sesarmidae, respectively), in *Porcupine!*, the newsletter of the Department of Ecology and Biodiversity, HKU (VCS Lai 1999a b). In establishing a new subfamily Gaeticinae under the Varunidae, Peter Davie and Singaporean zoologist Ngan Kee Ng (Davie and NK Ng 2007) reported on three local species under the group, and that of *Gaetice ungulatus* Sakai, 1939 was new. Similarly, the revision of the *Parasesarma plicatum* species-group (Rahayu and Ng 2010), resurrected *P. affine* (De Haan, 1837) (Sesarmidae) in East Asia as a valid species and added a new local record of *P. ungulatum* (H. Milne Edwards, 1853). Noteworthy is *Leptomithrax eldredgei* Richer de Forges & Ng, 2015 (Majidae), described from material collected in surveys by the Hong Kong Fisheries Research Station back in the 1960s (see above). The discovery of an intriguing tree-climbing sesarmid crab *Haberma tingkok* Cannicci & Ng, 2017, found exclusively among canopy of mangroves, was also a significant one as it has substantial conservation significance. In investigating small scavenging swimming crabs of the genus *Eodemus* (previously *Portunus* or *Xiphonectes*), local zoologist Kingsley J. H. Wong, in collaboration with colleagues in Hong Kong and Taiwan, added one

record of *Portunus pseudohastatoides* Yang & Tang, 2006 (now *Eodemus*), a species confounded under the name *Portunus hastatoides* in the past (Wong et al. 2010b). Later working on trawl surveys organized by aquatic biologist Kenneth M. Y. Leung at HKU from 2012 to 2018, results on the benthic brachyurans were recently published in Wong et al. (2021). Interesting, the reports of *P. hastatoides* from Hong Kong by these authors were recently regarded as a new species, *X. subtilis* (now *Eodemus subtilis*), while older records of *P. trilobatus* (Stephenson, 1972b) by Davie (1992b) were all synonymized under *X. unidens* (Laurie, 1906) (now *E. unidens*; see Nguyen and Ng 2021; Koch et al. 2022). Small cryptic species continue to be discovered, for example the hexapodid, *Mariaplax exigua*, by Ng and Wong (2019).

A number of new local records based on material acquired from surveys of intertidal and shallow reef habitats by us and colleagues, since around 2011, are also presented in this catalogue. Various teams of biologists, for the recent years, have been working intensively on local brachyuran species, led respectively by Stefano Cannici at HKU, and Ling Ming Tsang at the Chinese University of Hong Kong (CUHK). As we understand, in a volume under preparation by the latter team, more interesting new records will be published in the near future.

## Where have all the seashores gone? Natural shorelines lost to urban development

In the previous checklist, Shen (1940a) listed 187 species of brachyuran crabs from or in the vicinity of Hong Kong. These records were largely based on reports by Stimpson surveyed and published in the 1850s (1857 1858a b c d 1860), and collections examined or collected himself through the 1930s (Shen 1931a b 1932a 1934 1935 1940a b). Figure 2 shows localities surveyed by these two zoologists. Spending most of his time on the *U.S.S. Vincennes* during the North Pacific Exploring Expedition (NPEE), with the vessel anchored in the harbor of Hong Kong, Stimpson accessed most surveyed sites by boat. While most sites were aside the harbor, he also explored more exposed islands southeast of the territory, reaching as far south as the Dangan Dao (as Grand Lema; now under administration of the People's Republic of China). In contrast, sites Shen visited, with the exception of Cheung Chau, were all around Hong Kong Island, in Kowloon and three in the New Territories, namely Tsuen Wan, Shatin and Tai Po. These were accessible via land transport at that time.

Throughout the 150 years of the colonial era, reclamation and urban development, centering along the northern shores of Hong Kong Island and the Kowloon Peninsula where the Central Business District is located, persists until the recent decades. These processes brought irreversible damages to the local brachyuran fauna largely in terms of habitat loss or substantial destruction, and/or prolonged disturbance to still extant habitats. Near-shore sites were especially vulnerable. After WWII and since the 1950s, a series of "New Towns", including adjacent to those intertidal sites at Tsuen Wan, Shatin and Taipo where Shen previously visited, were developed. Little if any of natural shoreline now remains intact (*e.g.*, see Tregear and Berry (1959), Planning, Environment and Lands Branch (1995), MK Ng and Cook (1997) on land development of Hong Kong). Marine habitats within the Victoria Harbour, long been considered as sinks of sewage disposal, have the benthic habitat severely impacted (Thompson and Shin 1983; Morton 1989). Habitats around outlying islands, considering aerial photographs which show current conditions (Fig. 3A, B), in contrast, remain largely intact.

Shores along the northeastern coast of Hong Kong Island is a good example of this inevitable loss. Back in the 1850s, the western portion, from now Kennedy Town to Wanchai, was already an important political and economic center. The only land-based site Stimpson visited along the northeastern shores of Hong Kong Island was marked as "Coral Bay" in his hand-drawn map (see Vasile et al. 2005; reproduced in Fig. 3C). Along northeastern shores of Hong Kong Island, site "Shaukiwan", or Aldrich Bay, long inhabited by largely farmers, shop-keepers and fisherfolks (Hayes 1984), was visited by Shen in the 1930s. As shores distant from the northwestern center of economy and administration on the Island, the bay of Shau Kei Wan served as a typhoon shelter. Aside from fragmentary reclamations since the 1910s, the overall landscape of Hong Kong Island had remained largely unaltered (Fig. 4A, B). By the 1960s, the shores were lined with squatter structures with people living in poor hygiene (Hayes 1970). Large-scale, systematic projects for acquiring extensive residential land was planned in the 1980s (Urban Area Development Office 1989) and executed in the 1990s (Planning, Environment and Lands Branch 1995). The latter reclamation projects had the shoreline straightened, extending northwards for some 680 m of the original (Yu 2016; Fig. 4C); today it is vaguely marked by vegetated headlands, eliminating the original features of the natural shore.

Given the lack of land suitable for urban development and the heavy reliance of the Hong Kong Government on revenue from land sales as primary source of income, to accommodate the ever-expanding local population, extensive new land has consistently been reclaimed. Since the 1950s, reclamation was no

longer limited to both shores of the Victoria Harbour (see *e.g.*, MK Ng and Cook 1997), advancing at the expense of ecological and conservation values of the original shore or shallow marine habitats. While coral communities occur in the northeastern and eastern waters of the territory, their conservation value was not a major concern in the development of new towns, as was the case in Tseng Kwan O. Early developments in the 1980s involved the inner reaches of Junk Bay, and advancing in the 1990s, reclaiming lands east of Junk Island (or Fat Tong Chau), connecting the former island to the mainland, and south reaching the former islet of Tit Cham Chau, providing an area of some 1,718 ha for a planned population of 445,000 (as of 2016; CEDD 2016).

Another episode of this inevitable multi-decadal loss has been witnessed by the recent generations of locally based marine biologists. Since 1977, a series


**Fig. 4.** Changing of shorelines at Shau Kei Wan (Aldrich Bay), Hong Kong. A: oblique view, facing west taken in the 1940s; B: aerial view in 1949; C: aerial view in 1963; D: current (2018) aerial view, showing bay area reclaimed, urbanized, and coastline straightened. Sources: A: photographed by Hedda Morrison (c. 1946–1947), collection of Harvard-Yenching Library, accessed via the Harvard College Library Imaging Services. B: National Collection of Aerial Photography (NCAP), UK; C: Lands Department, HKSAR; B, C accessed and permission granted from the Common Spatial Data Infrastructure (csdi.gov.hk) and HKMS 2.0 (hkmapservice.gov.hk), Government of the Hong Kong Special Administrative Region of the People's Republic of China. D: Google Earth, accessed November 2018.

of International Malacological and Marine Biological Workshops organized by the University of Hong Kong were held at the YMCA youth camp in Wu Kwai Sha, along the southern shores of Tolo Channel, the site was only accessible via village footpath from present-day Fo Tan. As the late Prof. Morton recalled, logistics to-and-from the University were formidable, comprising rides on lorries and "kai-do" (a small, motorized ferry) (Morton 2003). In front of the camp was a shore of boulders, while less than a kilometer to the northeast lay a sheltered sand flat, Hoi Sing Wan (Starfish Bay). The rich shore fauna of the latter site was documented by Morton and Morton (1983, p. 190–196). Over the subsequent decades, urban expansion from the inner reaches of Tolo Channel from Shatin, as well as increasing pollution of the habitats in the late 1980s, eventually forced the shifting of the venue from Wu Kwai Sha to Cape d'Aguilar in 1992 (the Third Malacological Workshop). As of today, both the once remote Wu Kwai Sha camp and the Starfish Bay sand flat still exist, albeit surrounded by towering housing estates and connected to the city by a prompt railway line!

## Endemism and conservation

For the present compilation, some 15% (57) of the local records (382) comprises species described from Hong Kong or its immediate proximity (see respective species accounts below). Among these taxa, 18 of those are so far only reported from Hong Kong, including marine and intertidal taxa *Mariaplax exigua* (Hexapodidae), *Leptomithrax eldredgei* (Majidae), *Latopilumnus conicus*, *Vellumnus penicillatus*, *Xestopilumnus cultripollex* (Pilumnidae), *Actaea pura* (Xanthidae), *Lithoscaptus scottae* (Cryptochiridae), *Haberma tingkok*, *Cyclograpsus incises* (Varunidae), *Indopinnixa sipunculana*, *Pinnixa penultipedalis* and *Pinnotheres obscurus* (Pinnotheridae). These include rare species which were described based on limited material, several meagerly reported in the literature after description, in some cases resulting in poor taxonomic understanding (see respective species accounts below). Given further sampling, as well as elucidations in taxonomic status, geographical distribution of these species might not be confined to Hong Kong, but very probably spans along the coasts and shallow seas of South China or further.

Two interesting species had previously been considered endemic in the vicinity of Hong Kong. These include the sesarmid *Parasesarma maipoensis* (previously under *Perisesarma* or *Chiromantes*) reported to be also found in northern Vietnam (Ng et al. 2010a); whereas *Holometopus serenei* was shown to represent juveniles of *Chiromantes haematocheir* (Naruse and Ng 2008).

Several species associated with freshwater habitats are found to be endemic to the vicinity of the Pearl River Delta, including *Somanniathelphusa zanklon* (Gecarcinucidae), *Cryptopotamon anacoluthon*, *Nanhaipotamon aculatum*, *N. hongkongense* (Potamidae) and the sesarmid *Orisarma patshuni* (see below; and Huang and Mao 2021). Recent investigations into the diversity of *Nanhaipotamon* crabs reveal presence of numerous genetically distinct evolutionary lineages, previously unrevealed by morphology-based approaches (*e.g.*, Ng and Dudgeon 1992), and evolution among which probably shaped by recent vicariant events throughout the Quaternary (see Remarks under species account under *Nanhaipotamon hongkongense* below).

For the past decades, the conservation of extraordinarily rich brachyuran fauna, in legal context, can be interpreted at the species or habitat level. At species level, terrestrial and freshwater fauna of Hong Kong has been listed as "protected" under the Wild Animals Protection Ordinance (Cap. 170; enacted in 1976), decapods not included. Fauna of significant conservation concern, as listed by Fellowes et al. (2002) (and later revised by Whitfort et al. 2013), are heavily biased towards terrestrial and freshwater groups, with vertebrates over invertebrates. In this enumeration, partially of potential candidates for addition into the Ordinance, only five local decapod species were listed of particular concern, namely two caridean atyid shrimps (*Caridina apodosis* Cai & N. K. Ng, 2001 and *C. serrata* Stimpson, 1860) and three freshwater crabs (*Cryptopotamon anacoluthon*, *Nanhaipotamon hongkongense* and *Somanniathelphusa zanklon*). In this sense, the legal framework does not offer protection to any brachyurans at the species level. This is not unexpected. Given small sizes and often cryptic habitus, brachyurans are rarely portraited as flagship or focal species, as to raise public awareness and attract resources for conservation purposes (*e.g.*, Zacharias and Roff 2001; Home et al. 2009).

In terms of habitat-level conservation, for freshwater habitats, given the local hilly topology, immense genetic diversity across landscapes of Hong Kong has been revealed in aquatic atyid shrimps (Yam and Dudgeon 2005; Tsang et al. 2017; Ma et al. 2021). For semi-terrestrial *Nanhaipotamon* crabs, recent investigations also show previously unrecognized genetic diversity in vicinity of Hong Kong (KJHW and HTS, unpublished data; see species account of *N. hongkongense* below). Geographical distribution of the two better understood local freshwater crabs span within areas of designated Country Parks (Stanton et al.

2017 2018), within which, taxa are generally protected from development and substantial habitat change (Cap. 208 Country Parks Ordinance; see Dudgeon and Corlett 2011; W Lau 2011).

The marine counterpart of the Country Parks is Marine Parks and Reserve designated under the Marine Park Ordinance (Cap. 476). Since 1996, seven marine parks have been designated (see Morton 1997 1998). Three are located in the northeastern part of the territory, namely Hoi Ha Wan (1996), Yan Chau Tong (1996) and Tung Ping Chau (2001) Marine Parks, targeted towards conservation of coral communities (the last simultaneously a Hong Kong Global Geopark) (Morton 1994 1997), whereas Sha Chau and Lung Kwu Chau (1996), the Brothers (2016), Southwest Lantau (2020) and South Lantau Marine Parks (2022) for conservation of local cetaceans (AFCD 2023). In these areas, activities such as trawling, unauthorized fishing, hunting or collecting of marine life are prohibited; yet permission for harvesting are still granted to locals adopting artisanal methods such as gill-netting (KJHW, pers. obs.). Cape d'Aguilar Marine Reserve (1996; Morton and Harper 1995), at the southeastern extreme of Hong Kong Island, was designated in 1996 as a "no-take" zone for the wealth of marine resources (Morton 1994). However, these areas cover in total approximately 34 $km^2$, occupying only 2% of the area of the territorial seas.

Coral communities in Hong Kong is heavily influenced by the brackish conditions in the western waters, and consequently, they are generally found along northeastern, eastern to southern waters (*e.g.*, Ang et al. 2005; Yeung et al. 2021). Despite the rich faunal diversity and associated ecological functions (*e.g.*, Plaisance et al. 2011; Stella et al. 2011), only small portion of relevant habitats receive any form of legal protection (see above). While substantial coastlines and shallow seas are lost to decades of urban expansion (see above), these habitats remained poorly surveyed for brachyuran crabs or other decapod crustacea through the decades (but see *e.g.*, Morton et al. 1991; Tsang et al. 2020). Recent investigations on sympatric and symbiotic brachyurans in coral communities include report on the rare pilumnid *Cryptocoeloma haswelli* (Ng et al. 2022b), and five species of cryptochirid crabs, including two new species (Wong et al. 2023). These findings highlight the immense species diversity still awaiting formal documentation, hopefully before losing them to irreversible habitat destruction in the future.

Throughout the decades of coastal development (see above), one of the most significant episodes of reclamation involve the construction of the New Airport at Chek Lap Kok (along northwestern shores of Lantau), and this project impacted not only coastal, but also substantially, benthic habitats. During the construction phase, some 500 million $m^3$ of marine sand was required, largely retrieved from southern and southeastern seas between 1992 and 1995 (KF Leung and Morton 2000). Among the benthic brachyuran communities, while losses of rarer or specialized species had been detected, no significant differences were detected between dredged and un-dredged sites, suggesting the change might be attributable to long-term deterioration, such as that consequent of commercial trawling fisheries (Blackmore and Rainbow 2000; SY Lee et al. 2000). Marine fishery resources of the local seas have been exhausted since the 1970s as results of highly efficient, and unrestricted mechanized trawling practices (*e.g.*, Pitcher et al. 1998; WWL Cheung and Sadovy 2004; Pauly and Liang 2020), and majority of catch shifted to invertebrates especially crustaceans by the 1980s (WWL Cheung 2015). Considering trawling practices among some of the most destructive fishing approaches (*e.g.*, Thrush and Dayton 2002), and the overall decline of fishery resources, an eventual territory-wide trawl ban was enforced since the end of 2012 so as to provide rehabilitation for fishery resources in local seas (see Morton 2011). Communities of marine fauna, decapod crustaceans included, have been reported to be recovering (Tao et al. 2020a b; Z Wang et al. 2021).

Among intertidal habitats, mangrove swamps harbor much diverse fauna, brachyurans included. Such habitats occupy extensive areas in the vicinity of Deep Bay, in the northwestern part of the territory, where remarkable species diversity has been reported (SY Lee 1993 1999). Located at the southern banks of the estuary of Shenzhen River (Sham Chun River), the marshes of Mai Po have been designated as another Natural Reserve since 1983, listed as a Ramsar Site under the Ramsar Convention in 1995, since managed by the World Wide Fund (WWF) for Nature, Hong Kong. Major intentions include conservation of an important feeding site for migratory birds, as well as swamp and mangal-associated fauna (see SY Lee 2003). The site, as well as "Gei Wais" (traditional brackish water ponds for rearing shrimps and fish) within (see LWC Lai et al. 2006), remains a restricted area under the Wild Animals Protection Ordinance (Cap. 170). These habitat-based approaches do provide some optimism for conservation the local brachyuran fauna.

However, in a counter-understanding, fauna in habitats not stipulated under the general framework above, even those with substantial ecological value, are not immune from multiple anthropogenic disturbances. This discrepancy is elaborated in the case of Shui Hau, a sheltered sand flat of approximately 0.2 $km^2$, in southern Lantau. Until the opening of the Chek Lap Kok Airport

along the northwestern shores of the Island in 1998, Lantau had remained relatively remote or semi-isolated, and accessible only by ferries. Since then, extensive train and highway transportation links northern Lantau to the city downtown, transferring by bus from the train stations, making previously remote coastlines and villages much more accessible to locals. The rich intertidal fauna at Shui Hau was documented in detail by Morton and Morton (1983; as the conditions in the early 1980s), and one of the 17 local sites where juvenile horseshoe crabs (*Tachypleus tridentatus* (Leach, 1819)) were found (Shin et al. 2009; see also Poon and Chan 2001). Intertidal clams (*Meretrix* and *Anomalicardia*) have been harvested by locals throughout history of the settlement. From three local sites, S.G. Cheung et al. (2003) concluded removal rates then did not affect species diversity and evenness of benthic communities. However, clam harvesting elsewhere was reported to show negative impacts on clam abundances and non-target in-fauna (Griffiths et al. 2006). Shui Hau, in recent years, has been a popular site for recreational clam digging, receiving a constant influx of visitors, and the activity has remained largely unregulated. Habitats of intertidal brachyurans, more observably, fiddler (largely *Austruca lactea*) and soldier crabs (*Mictyris*), are routinely disrupted by trampling and digging (KJHW, pers. obs. throughout the 2010s). So far, no local data are available on ecological consequences of this recreational harvesting (but see So et al. 2021). This case highlights bottlenecks and challenges in the scope of conservation of local brachyurans: (1) landuse conflict, in this case between leisure and conservation purposes; and (2) lack of sufficient baseline data, in this case on ecological impacts resultant of anthropogenic stresses. These two aspects are also apparent in various issues concerning brachyurans in certain extent.

Mangrove swamps harbor wealth of intertidal brachyurans (SY Lee and Leung 1999), yet area of which in vicinity of Deep Bay and Tolo Harbour has plummeted respectively by 85 and 42% (as of 2000s), largely of losses to aquaculture or eventual land reclamation, the remainder otherwise subject to intense land-use conflicts, and stresses such as illegal cutting, refuse dumping, and urban development (Tam and Wong 2002). Within the vicinity of Mai Po, however, areas of intertidal mangrove coverage have expanded substantially in the past at least 25 years (Liu et al. 2018; Sun et al. 2021), yet sediments subject to intense organic and heavy metal pollution (*e.g.*, SSS Lau and Chu 2000; CK Kwok et al. 2010; SY Lee and Khim 2017), posing potential risk to fauna such as waterbirds (Y Wang et al. 2011). Baseline data on the associated brachyuran fauna probably do not provide sufficient resolution to address potential community changes in this stressful landscape.

For invasive species, while multiple brachyurans native to East Asia comprise notorious invasive species elsewhere (see Galil et al. 2011), a rare local exception which reach local subtropical habitats include that of *Pilumnopeus convexus* (Pilumnidae), presumbly from western Indian Ocean via ballast waters fouling of maritime vessels (Wong et al. 2020; see also Chu et al. 1997). Through the 2010s, this species has been increasing common among fouling, and seems to have displaced a native pilumnid *Benthopanope eucratoides*, which shares a similar niche (KJHW, pers. obs.). Likewise, a recently reported invasive species, freshwater crayfish *Cherax quadricarinatus* (von Martens, 1868) has been collected in Pok Fu Lam, Hong Kong Island (Yau and Lau 2021), where the native potamid *Nanhaipotamon hongkongense* can be found in adjacent habitats (KJHW, pers. obs.). Ecological impact of the introduction, particularly on sympatric decapods which shows marked genetic diversity, remains to be investigated. So far unfortunately, brachyuran invasives, or those posing potential threat to the native brachyuran fauna, remain unmonitored.

The lack of baseline data can also be encountered when compiling brachyuran diversity from subtidal habitats. Among the brachyuran fauna reported by Stimpson (1857 1858a b c d 1860 1907), a considerable portion were benthic inhabitants, and the author then commented “the Chinamen seem to leave no part of the bottom untouched” (p. 46, Vasile et al. 2005), showing anthropogenic disturbances in the form of trawling and dredging had long predated formal scientific documentation, and baseline dataset on faunal diversity in pristine habitat remain virtually impossible. Throughout the subsequent 170 years, even into the recent decades, documentation of benthic brachyurans has been scanty and inadequate, and often not verifiable (Wong et al. 2021). Besides, sampling effort varies among habitats. Although the local scleractinian fauna has so far been relatively well-documented (Scott 1984; Duprey et al. 2017), the rich diversity of inhabitants, brachyurans included, remained poor surveyed, contributing to rather incomplete baseline data (but see Horikoshi and Takeda 1982; Morton et al. 1991). Recent sampling efforts contribute reporting of interesting species (*e.g.*, Ng et al. 2022b), yet the diversity of the local reef-associated community remains to be revealed.

As a growing trend since the early 2010s, citizen science gradually gained momentum. For intertidal habitats, this was sparked specifically by conservation issues of Lung Mei (within Tolo Channel) and Shui Hau (Lantau), attracting attention among many passionate amateur (and some professional) naturalists. Provided with more convenient photographic devices and access

of internet connections, these citizen scientists explore, and nearly simultaneously exchange information and data on online platforms (*e.g.*, Facebook, Instagram etc.) and databases (*e.g.*, inaturalist.org). This open record-share-discuss approach gains publicity, providing broad and accessible data for biological monitoring, and possibly achieving public education at a broader scale. A recent example is the contribution of citizen sighting of nudibranchs, contributing to a comprehensive species inventory of Hong Kong (Chow et al. 2022). In this consideration, for Brachyura, although identifications of certain taxa might not always be precise in research standards, involvement and coverage of citizen scientists bring optimism in complementing the lack of field and baseline data in formal biodiversity research.

## Is the Hong Kong brachyuran fauna well documented?

Understanding in species diversity accumulated through time is not a random process, but strongly biased in terms of taxonomic group, habitat surveyed and sampling efforts, and possibly body size (Hamond 1992; Gaston et al. 1995). In a historical context, cumulative knowledge of species diversity through time, under various crustacean groups, follow a trend composed of multiple phases, each represented or contributed by a series of work by leading biologists, or results of prominent expeditions (*e.g.*, Kitmann 1999; Dworschak 2000; De Grave 2003). Interpreting the local brachyuran inventory for the past 170 years, likewise the process is far from being linear, but overall exhibit numerous discrete phases of rapid increase (or steep parts of the cumulative curve), interspaced with prolonged stagnant periods (Fig. 5). Since the 1850s, species inventory expanded rapidly in several phases, contributed by: (1) William Stimpson's work based on material from the NPEE; (2) work by Isabella Gordon and C.-J. Shen in the 1930s; (3) series of proceeding papers from HKU-based workshops from the 1980s

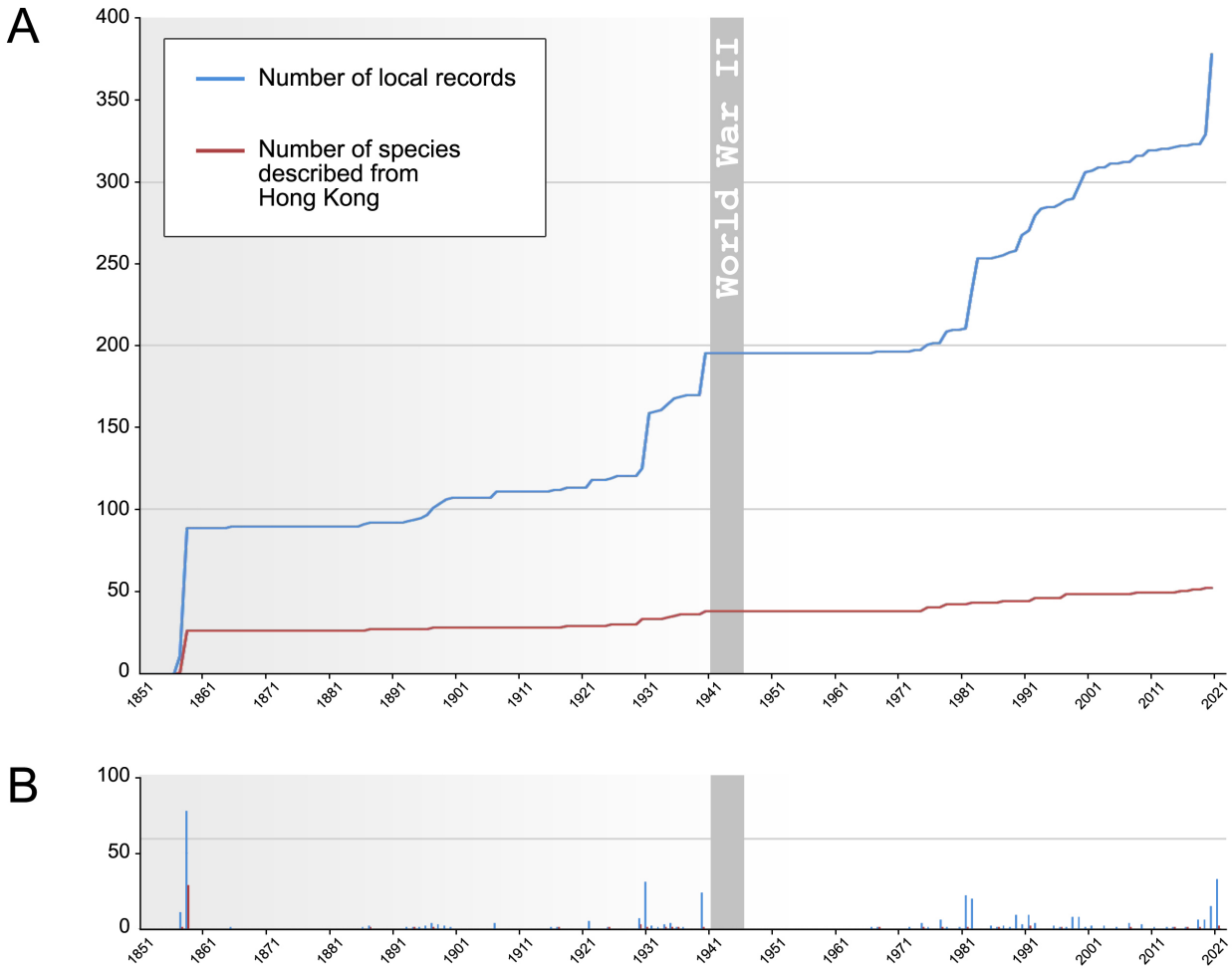



**Fig. 5.** Cumulative curve (A) and histogram (B) showing number of species recorded (blue), and new species described based on material from (red) Hong Kong.

to 2000s; and (4) additions by naturalists throughout the recent decade. A multi-decadal hiatus can be observed from 1950s to 1970s after the WWII. As such, the history of species inventory has been shaped by contributions from series of work by carcinologists, as well as the prevailing social-economical circumstances.

As to address whether the local brachyuran fauna being anyway well documented, the best answer is "appears to be, but far from being well understood". Apart from as indicated from the steep, upward cumulative curve (Fig. 5A), even for intertidal habitats which are more accessible to naturalists and researchers alike, there are no short of surprises—the long-legged arboreal *Haberma tingkok* (Sesarmidae) was only recently discovered among dense mangrove canopies (Cannicci and Ng 2017). Shallow rocky reefs and coral communities still harbor many unrevealed taxa (see below). Noteworthy is that there are still no reliable reports of any members of the Superfamily Trapezioidea from Hong Kong, other than a questionable record of *Tetralia glaberrima* (Herbst, 1790) (Tetraliidae, see below). No members of the widespread families Trapeziidae or Domeciidae, all of which are obligate symbionts of hard corals, have been reported thus far, although scleractinians are present in Hong Kong. Similarly, for cryptochirids, obligate symbionts of scleractinians, the genetic diversity of this group has been grossly underestimated in previous decades. In addition, through revisionary works adopting morphological and molecular approaches, cryptic forms continue to be identified, establishing new and elucidating previously synonymized taxa (*e.g.*, Wong et al. 2010a; Shih et al. 2012; Nguyen and Ng 2021). We hope this paper presents a comprehensive and accurate summary of the brachyuran species so far known from Hong Kong, and will facilitate future investigations on the fauna, and associated studies on ecology, biology and conservation.

## MATERIALS AND METHODS

### Recognizing records from Hong Kong

The location of Hong Kong along the coasts of South China, and a map of Hong Kong is shown in Figure 1. Given the multi-staged evolution of the understanding of the locality of Hong Kong outlined under "Historical Account" above, older pre-20th century records as "near Hong Kong" or "off Hong Kong" are accepted as local records (Fig. 2). Another complication comes from various records from deeper water, or species normally collected from seas of the continental shelf in northern South China Sea. While the territorial seas of Hong Kong are generally less than 50 m of depth (*e.g.*, see Fyfe et al. 2000 for bathymetry map), reports derived from localities apparently outside this range, such as two new species of euxanthine crabs reported from "South China Sea, near Hong Kong", from depths of 180 and 203 m (Ng and Chen 2005), which are not in the now recognized vicinity, are thus excluded. For records with GPS (Global Positioning System) data, an arbitrary limit is taken as followings, as to exclude those surveyed significantly distant from Hong Kong: southern limit at 21°N, and western and eastern limits along 113° and 115°E, respectively. This approach leaves a "working zone" of around 100 km in radius at the northern portion of the South China Sea. Records from outside of this zone are excluded. Older records indicated such as "near Hong Kong", or "South China Sea near Hong Kong" without depth, precise location data or GPS, have to be accepted for the sake of completeness.

### Selection of formal records

There is a great deal of literature on crabs, not just scientific reports, degree theses, guide books, pamphlets and other educational material, but also newsletters, newspaper articles, aquarist writings, and recipes of all kinds, and in the recent decades, an explosion of online blogs, social media, databases and so forth. Compiling an exhaustive checklist including all of these sources is impractical, so we have to be more targeted. We treat publications as defined in the *International Code of Zoological Nomenclature* (Article 8 in ICZN 2012)—regardless in printed or electronic forms, in general, one which considered publicly disseminated, with clear indications of date of publication, obtainable, and presenting unamendable scientific information. We agree with these criteria as the data captured should be accurate. The online database *Hong Kong Register of Marine Species* (HKRMS), itself a subset of *World Register of Marine Species* (WoRMS), includes online entries which are amendable over time, and contains many unpublished works like various local degree dissertations, government and consultant reports. These documents are generally not available to the public; the data are not readily obtainable or verifiable by researchers and are essentially unrefereed. As such, we prefer to omit entries now listed on HKRMS. Similarly, degree theses and dissertations are not readily accessed by most workers, and results presented are considered unpublished data by respective authors, thus relevant records are herein excluded. In this work, emphasis is placed on references containing information on crab morphology, taxonomy, diversity, and distribution; and pertaining to Hong Kong as far as possible. As

for the multitude of papers published on brachyurans that treat ecology, physiology and other biological aspects etc., they are generally excluded unless new records and/or new taxonomic ideas are presented (*e.g.*, Dudgeon 1982). There are some in which the original identifications are dubious or likely erroneous, and we have amended them. These are justified under **Remarks** of respective entries. Overall, we are confident that this layered approach strikes a balance between presenting a comprehensive checklist of fauna and keeping the data accurate and manageable.

## Format of catalogue

The classification scheme of the present catalogue follows that of Davie et al. (2015a b) which is revised and updated from Ng et al. (2008). Exceptions, such as classifications of the Portunoidea updated recently by Spiridonov et al. (2014), N. Evans (2018), Spiridonov (2020) and Koch et al. (2022), as well as that of the Sesarmidae by Schubart and Ng (2020), will be stated under respective Remarks.

Under each species entry consists of the following information. (1) **Valid scientific name and authority**: full citations of species authority are not provided for simplicity. Readers are suggested to consult works listed under "Taxonomy" (see below). (2) **Citation of local works** of the species are arranged in chronological order. In bilingual work only the English portion would be cited. In works published separately in two languages, between which barely differs (*e.g.*, Hill and Phillipps (1981) in English, and Hill and Phillipps (1982) in Chinese), only the English version would be included. As for those with versions substantially modified (*e.g.*, Morton and Ruxton (1992) in English; Morton and Ruxton (1997), bilingual version), both are treated as separate works. For first and sole authors with shared family names (particular of Asian ethnic origins), the initials also are indicated (*e.g.*, CGS Tan and SH Tan), in exception of H-L Chen, PKL Ng, T Sakai, H-T Shih and KJH Wong, who, at least so far, published or recorded more local taxa than, respectively, W-J Chen, NK Ng, K Sakai, Y-J Shih and ECK Wong. (3) **Taxonomy**: important references providing taxonomic information fostering precise identifications, but not meant to be exhaustive. (4) **Type**: whereabouts and status of type material. For extant material, acronym of institute deposited (full names listed in Appendix 4), and access number of name-bearing type, if applicable, is indicated. (5) **Type locality**: current name of locality indicated if possible. (6) **Distribution**; and (7) **Habitat**, with scientific names and authority of hosts of symbiotic brachyurans (cryptochirids and pinnotherids) following current formats indicated on WoRMS. (8) **Remarks**: additional taxonomic information justifying use of names and identity of local records.

Throughout the past decade (2010s), the first author (KJHW) had access to brachyuran material largely from benthic trawl surveys (reported in Wong et al. 2021); routine shore surveys; among fouling communities; and habitats in vicinity of coral communities by scuba diving. Although this paper presents results of a largely "desk study" approach, and the material encountered in this time period cannot be seen as an exhaustive representation of the fauna, it would be useful to indicate the taxa which local material was examined in this timespan. This indicated with a superscript hash symbol ($^{\#}$) after the title of each species entry, following the authority of species. New records presented are provided with illustrations showing diagnostic features including photographs and line drawings. Images showing overall habitus of preserved specimens are indicated as monochrome colorations in figures 35 to 41. The morphological terminology follows that of Davie et al. (2015c). Material of most of the illustrated taxa are deposited at the Coastal Ecology Laboratory (CEL), Academia Sinica, Taipei, the Zoological Collections of the Department of Life Science, National Chung Hsing University (NCHUZOOL), Taichung, Taiwan; and the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum, National University of Singapore, Singapore. Depository of illustrated specimens is listed in appendix 5. Ongoing research on several intertidal forms under preparation by us and colleagues are briefly elaborated under respective Remarks, and preliminarily included in the present work for completeness.

## LIST OF SUPERFAMILIES, FAMILIES AND SUBFAMILIES OF BRACHYURAN CRABS RECORDED FROM HONG KONG

Number of species in each superfamily are indicated in curly brackets ({ }), and that of lowest supra-generic groupings (family or subfamily level) in square brackets ([ ]).

INFRAORDER BRACHYURA LATREILLE, 1802
SECTION PODOTREMATA GUINOT, 1977
**Superfamily DROMIOIDEA De Haan, 1833 {4}**
Family Dromiidae De Haan, 1833
Subfamily Dromiinae De Haan, 1833 [3]
Family Dynomenidae Ortmann, 1892
Subfamily Dynomeninae Ortmann, 1892 [1]
**Superfamily RANINOIDEA De Haan, 1839 {3}**
Family Lyreididae Guinot, 1993 [2]
Family Raninidae De Haan, 1839 [1]

SECTION EUBRACHYURA SAINT LAURENT, 1980
SUBSECTION HETEROTREMATA GUINOT, 1977
**Superfamily AETHROIDEA Dana, 1851 {1}**
Family Aethridae Dana, 1851 [1]
**Superfamily CALAPPOIDEA De Haan, 1833 {9}**
Family Calappidae De Haan, 1833 [7]
Family Matutidae De Haan, 1835 [2]
**Superfamily CARPILIOIDEA Ortmann, 1893 {1}**
Family Carpiliidae Ortmann, 1893 [1]
**Superfamily CORYSTOIDEA Samouelle, 1819 {2}**
Family Corystidae Samouelle, 1819 [2]
**Superfamily DAIROIDEA Serène, 1965 {1}**
Family Dairidae Serène, 1965 [1]
**Superfamily DORIPPOIDEA MacLeay, 1838 {7}**
Family Dorippidae MacLeay, 1838 [7]
**Superfamily ERIPHIOIDEA MacLeay, 1838 {7}**
Family Eriphidae MacLeay, 1838 [2]
Family Menippidae Ortmann, 1893 [2]
Family Oziidae Dana, 1851 [3]
**Superfamily GECARCINUCOIDEA Rathbun, 1904 {1}**
Family Gecarcinucidae Rathbun, 1904 [1]
**Superfamily GONEPLACOIDEA MacLeay, 1838 {12}**
Family Euryplacidae Stimpson, 1871 [7]
Family Goneplacidae MacLeay, 1838
Subfamily Goneplacinae MacLeay, 1838 [4]
Family Scalopidiidae Števčić, 2005 [1]
**Superfamily HEXAPODOIDEA Miers, 1886 {4}**
Family Hexapodidae Miers, 1886 [4]
**Superfamily HYMENOSOMATOIDEA MacLeay, 1838 {3}**
Family Hymenosomatidae MacLeay, 1838
Subfamily Hymenosomatinae MacLeay, 1838 [3]
**Superfamily LEUCOSIOIDEA Samouelle, 1819 {33}**
Family Iphiculidae Alcock, 1896 [2]
Family Leucosiidae Samouelle, 1819
Subfamily Cryptocneminae Stimpson, 1907 [1]
Subfamily Ebaliinae Stimpson, 1871 [23]
Subfamily Leucosiinae Samouelle, 1819 [7]
**Superfamily MAJOIDEA Samouelle, 1819 {26}**
Family Epialtidae MacLeay, 1838
Subfamily Epialtinae MacLeay, 1838 [5]
Subfamily Pisinae Dana, 1851 [10]
Family Inachidae MacLeay, 1838
Subfamily Inachinae MacLeay, 1838 [4]
Family Majidae Samouelle, 1819
Subfamily Majinae Samouelle, 1819 [7]
**Superfamily ORITHYIOIDEA Dana, 1852 {1}**
Family Orithyiidae Dana, 1852 [1]
**Superfamily PALICOIDEA Bouvier, 1898 {1}**
Family Palicidae Bouvier, 1898 [1]
**Superfamily PARTHENOPOIDEA MacLeay, 1838 {7}**
Family Parthenopidae MacLeay, 1838
Subfamily Parthenopinae MacLeay, 1838 [7]
**Superfamily PILUMNOIDEA Samouelle, 1819 {43}**
Family Galenidae Alcock, 1898
Subfamily Dentoxanthinae Števčić, 2005 [1]
Subfamily Galeninae Alcock, 1898 [1]
Subfamily Halimedinae Alcock, 1898 [2]
Family Pilumnidae Samouelle, 1819
Subfamily Eumedoninae Dana, 1852 [4]
Subfamily Pilumninae Samouelle, 1819 [26]
Subfamily Rhizopinae Stimpson, 1858 [9]
**Superfamily PORTUNOIDEA Rafinesque, 1815 {49}**
Family Carcinidae MacLeay, 1838
Subfamily Polybiinae Ortmann, 1893 [1]
Family Geryonidae Colosi, 1924
Subfamily Ovalipinae Spiridonov, Nerelina & Schepetoc, 2014 [1]
Family Portunidae Rafinesque, 1815
Subfamily Lupocyclinae Paulson, 1875 [2]
Subfamily Necronectinae Glaessner, 1928 [3]
Subfamily Podophthalminae Dana, 1851 [1]
Subfamily Portuninae Rafinesque, 1815 [11]
Subfamily Thalamitinae Paulson, 1875 [30]
**Superfamily POTAMOIDEA Ortmann, 1896 {3}**
Family Potamonidae Ortmann, 1896
Subfamily Potamiscinae Bott, 1970 [3]
**Superfamily TRAPEZIOIDEA Miers, 1886 {1}**
Family Tetraliidae Castro, Ng & Ahyong, 2004 [1]
**Superfamily XANTHOIDEA MacLeay, 1838 {39}**
Family Xanthidae MacLeay, 1838
Subfamily Actaeinae Alcock, 1898 [9]
Subfamily Banareiinae Števčić, 2005 [1]
Subfamily Chlorodiellinae Ng & Holthuis, 2007 [3]
Subfamily Cymoinae Alcock, 1898 [1]
Subfamily Etisinae Ortmann, 1893 [2]
Subfamily Euxanthinae Alcock, 1898 [2]
Subfamily Kraussiinae Ng, 1993 [1]
Subfamily Liomerinae Sakai, 1976 [4]
Subfamily Xanthinae MacLeay, 1838 [9]
Subfamily Zosiminae Alcock, 1898 [7]
SUBSECTION THORACOTREMATA GUINOT, 1977
**Superfamily CRYPTOCHIROIDEA Paul'son, 1875 {7}**
Family Cryptochiridae Paul'son, 1875 [7]
**Superfamily GRAPSOIDEA MacLeay, 1838 {51}**
Family Grapsidae MacLeay, 1838 [3]
Family Percnidae Števčić, 2005 [1]
Family Plagusiidae Dana, 1851 [2]
Family Sesarmidae Dana, 1851 [22]
Family Varunidae H. Milne Edwards, 1853
Subfamily Asthenognathinae Stimpson, 1858 [2]
Subfamily Cyclograpsinae H. Milne Edwards, 1853 [9]
Subfamily Gaeticinae Davie & N. K. Ng, 2007 [3]
Subfamily Varuninae H. Milne Edwards, 1853 [9]
**Superfamily OCYPODOIDEA Rafinesque, 1815 {49}**
Family Camptandriidae Stimpson, 1858 [7]
Family Dotillidae Stimpson, 1858
Subfamily Dotillinae Stimpson, 1858 [12]
Subfamily Sheniinae Ng, Clark & Cuesta, 2010 [1]
Family Macrophthalmidae Dana, 1851
Subfamily Ilyograpsinae Števčić, 2005 [1]
Subfamily Macrophthalminae Dana, 1851 [10]
Subfamily Tritodynamiinae **Števčić**, 2005 [3]
Family Mictyridae Dana, 1851 [1]
Family Ocypodidae Rafinesque, 1815
Subfamily Gelasiminae Miers, 1886 [8]
Subfamily Ocypodinae Rafinesque, 1815 [3]
Family Xenophthalmidae Stimpson, 1858
Subfamily Anomalifrontinae Rathbun, 1931 [1]
Subfamily Xenophthalminae Stimpson, 1858 [2]

**Superfamily PINNOTHEROIDEA De Haan, 1833 {17}**
Family Pinnotheridae De Haan, 1833
Subfamily Pinnothereliinae Alcock, 1900 [4]
Subfamily Pinnotherinae De Haan, 1833 [13]

## LIST OF TAXA

## Section Podotremata Guinot, 1977
## Superfamily Dromioidea De Haan, 1833
## Family Dromiidae De Haan, 1833
## Subfamily Dromiinae De Haan, 1833

### *Conchoecetes atlas* McLay & Naruse, 2019 #

*Conchœcetes artificiosus* — Stimpson 1858d: 240; Alcock 1900a: 151; Stimpson 1907: 180, pl. 21(5) [not *Dromia artificiosus* Fabricius, 1798].
*Conchoecetes artificiosus* — Gee 1926: 160 [list; "off Hong Kong"]; Davie 1992b: tab. 1; Ng et al. 2000: 156, fig. 1a, b [not *D. artificiosus* Fabricius, 1798].
*Conchocoetes artificiosus* — Morton and Morton 1983: 95 [not *D. artificiosus* Fabricius, 1798].
*Conchoecetes atlas* McLay & Naruse, 2019: 10, figs. 4, 5, 6B; Wong et al. 2021: 6, fig. 2, pl. 1A.

*Taxonomy*: Ng et al. (2000: as *C. artificiosus*), McLay and Naruse (2019).

*Type*: Holotype ♂ ZRC 2019.1631.

*Type locality*: Camiguin Island, Bohol Sea, the Philippines.

*Distribution*: West Pacific: Indonesia, Singapore, Philippines, Gulf of Thailand, South China, Taiwan and Japan (McLay and Naruse 2019).

*Habitat*: Subtidal, muddy or sandy substrates; depths 30 to 150 m (Chen and Sun 2002).

*Remarks*: Past local records of "*C. artificiosus*" probably represent *C. atlas* or *C. chanty* (see McLay and Naruse 2019). On the basis of material on hand (reported by Wong et al. 2021), characterized by a sub-pentagonal carapace, bearing a distinct obtuse anterolateral tooth but devoid of posterolateral tooth (Wong et al. 2021: fig. 2a, pl. 1A), we can record *C. atlas* McLay & Naruse, 2019 for now.

### *Lauridromia dehaani* (Rathbun, 1923) #

*Dromia rumphii* — Stimpson 1858d: 240; Stimpson 1907: 177, pl. 21(7). [not *Dromia rumphii* Fabricius, 1798 = *Cancer dormia* Linnaeus, 1763].
*Dromia dehaani* Rathbun, 1923: 68; Gee 1926: 160; Gordon 1931: 526; Morton 1988: 22, pl. 3; Davie 1992b: tab. 1; Blackmore and Rainbow 2000: app. 1.
*Dromia dormia* — Shen 1931a: 96, text-figs. 3, 4, pl. 4; Hill et al. 1975: 65; Hill et al. 1978: 92; Morton 1979a: 121, fig. 6.19; Morton 1979b: 129; Hill and Phillipps 1981: 156, pl. 52i; Morton and Morton 1983: 95, fig. 10.4(8) [not *Cancer dormia* Linnaeus, 1763].
*Lauridromia dehaani* — Dai and Ng 1997: 754, fig. 1; Sin et al. 2009: tab. 2; Wong et al. 2021: 7, fig. 3, pl. 1B.

*Taxonomy*: Rathbun (1923: as *Dromia*), McLay (1993), Ahyong et al. (2009).

*Type*: Syntypes in USNM, RMNH, NHM (Yamaguchi and Baba 1993; Fransen et al. 1997).

*Type locality*: Hakodate, Japan.

*Distribution*: Western Indian Ocean to West Pacific: from South and East Africa, Red Sea, Pakistan, India, to Indonesia, South and East China Seas and East Asia.

*Habitat*: Subtidal, muddy substrates; depths 14 to 150 m (Chen and Sun 2002); occasionally intertidal.

*Remarks*: Rathbun (1923) gave a thorough elaboration on the distinctions of two large-sized dromiids in the Indo-Pacific, at present represented by the names *Tumidodromia dormia* (Linnaeus, 1763) and *Lauridromia dehaani* (Rathbun, 1923). The name *Dromia rumphii* Fabricius, 1798, was shown to be a junior synonym of *Cancer dormia* Linnaeus, 1763. However, this name was used by numerous earlier authors to represent a form found East Asia, including De Haan (1839: material from Japan) and Stimpson (1858d: material from Hong Kong). This form was recognized as *D. dehaani* by Rathbun (1923). The records of "*D. dormia*" from Hong Kong were based on an illustrated but erroneous record in Shen (1931a) (Rathbun 1923; Sakai 1976; Dai and Yang 1991; Chen and Sun 2002).

### *Petalomera granulata* Stimpson, 1858

*Petalomera granulata* — Gordon 1931: 526; Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Sakai (1936), McLay and Ng (2007).

*Type*: Neotype ♀ SMF (designated by McLay and Ng 2007).

*Type locality*: Sagami Bay, Japan (neotype).

*Distribution*: East Asia: South China Sea, Taiwan and Japan (Chen and Sun 2002).

*Habitat*: Subtidal, substrates sandy, muddy, or shelly; depths of 50 to 150 m (Chen and Sun 2002).

## Family Dynomenidae Ortmann, 1892
## Subfamily Dynomeninae Ortmann, 1892

### *Hirsutodynomene spinosa* (Rathbun, 1911)

*Dynomene* cf. *spinosa* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: McLay (1999), Chen and Sun (2002), Ahyong et al. (2009).

*Type*: Holotype ♂ USNM 41048 (McLay 1999).

*Type locality*: Coetivy Island, Seychelles.

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar to Indonesia, Southeast and East Asia, Australia, Mariana Islands, Guam, Line Islands and French Polynesia (McLay 1999; Chen and Sun 2002).

*Habitat*: Intertidal; shallow coral reeds; depths up to 15 m (McLay 1999).

### Superfamily Raninoidea De Haan, 1839
### Family Lyreididae Guinot, 1993

#### *Lyreidus stenops* Wood-Mason, 1887

*Lyreidus stenops* Wood-Mason, 1887: 209, pl. 1(7, 8); Griffin 1970a: 106, figs. 1, 6c, h, q, 7e, 8d, pl. 2A [south of Hong Kong: 21°10.7'N to 21°20'N, 114°25.6'E to 114°28.5'E].
*Lyreidus politus* — Gordon 1931: 532; Shen 1940a: 214.
*Lyreidus integra* — Shen 1931b: 190, text-fig. 7, pl. 12(2).

*Taxonomy*: Griffin (1970a), Goeke (1985), Ahyong et al. (2009).

*Type*: Holotype ♀ IM-8467/6 (Griffin 1970a).

*Type locality*: Hong Kong.

*Distribution*: Eastern Indian Ocean to West Pacific: Western Australia, South and East China Seas, Taiwan and Japan (Chen and Sun 2002; Ahyong et al. 2009).

*Habitat*: Subtidal; substrates sandy; depths 31 to 118 m (Ahyong et al. 2009).

#### *Lyreidus tridentatus* De Haan, 1841

*Lyreidus* 3-*dentatus* — Wood-Mason 1887: 209.
*Lyreidus tridentatus* — Griffin 1970a: 94, figs. 1–5, 6a, e, f, j–o, 7a, b, 8a, b, f, g, pl. 1A [south of Hong Kong: 21°04.5'N to 21°15.2'N, 114°30.5'E to 115°18'E].

*Taxonomy*: Griffin (1970a), Goeke (1985), Ahyong et al. (2009).

*Type*: Lectotype ♀ RMNH D 23017 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: West to Central Pacific: East Asia to Australia, New Zealand, New Caledonia, Fiji and Hawaii (Chen and Sun 2002; Ahyong et al. 2009).

*Habitat*: Subtidal; substrates sandy-mud shelf on shelf and slope; depths 27 to 382 m (McLay 1988).

### Family Raninidae De Haan, 1839

#### *Ranina ranina* (Linnaeus, 1758)

*Ranina ranina* — Shen 1931a: 103, text-fig. 9, pl. 7; Shen 1940a: 214.

*Taxonomy*: Ahyong et al. (2009).

*Type*: Status unknown, probably lost (Davie 2002).

*Type locality*: Indian Ocean.

*Distribution*: Western Indian Ocean to Central Pacific: South and East Africa to Australia, East Asia, Hawaii and French Polynesia (Chen and Sun 2002; Ahyong et al. 2009).

*Habitat*: Intertidal to shallow subtidal; substrates sandy, to depths of 121 m (Ahyong et al. 2009).

### Section Eubrachyura Saint Laurent, 1980
### Subsection Heterotremata Guinot, 1977
### Superfamily Aethroidea Dana, 1851
### Family Aethridae Dana, 1851

#### *Drachiella morum* (Alcock, 1896) [#]

*Drachiella morum* — Wong et al. 2021: 7, fig. 4a, b, pl. 1C.

*Taxonomy*: Serène (1954: as *Actaeomorpha*), Serène and Soh (1976), Chen (1989).

*Type*: Syntype ♀ ♀ in ZSI (Chopra 1934).

*Type locality*: Ganjam coast, northeastern India, Gulf of Bengal.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Bay of Bengal, Phuket (Thailand), South and East China Seas, and Japan (Chen and Sun 2002).

*Habitat*: Subtidal: substrates of muddy sand, coarse silt or shell fragments; depths 23 to 150 m (Chen and Sun 2002).

### Superfamily Calappoidea De Haan, 1833
### Family Calappidae De Haan, 1833

#### *Calappa calappa* (Linnaeus, 1758)

*Calappa calappa* — Hill et al. 1978: 114; Morton 1979b: 136; Morton and Morton 1983: 158, fig. 10.4(5).

*Taxonomy*: Chen (1993), Galil (1997), Chen and Sun (2002).

*Type*: Lost (see discussion below).

*Type locality*: Asia.

*Distribution*: Western Indian Ocean to Central Pacific: from East Africa, Madagascar, India, to Indonesia and East Asia, and New Caledonia, French Polynesia and Hawaii (Galil 1997; Chen and Sun 2002).

*Habitat*: Subtidal: rocky, gravelly and shelly bottoms, of depth 10 to 50 m (Chen and Sun 2002).

*Remarks*: *Calappa calappa* was described by Linnaeus (1758) from somewhere in Asia. *Cancer fornicatus* Fabricius, 1781, is generally regarded as a junior synonym, although the types of both nominal

taxa have never been redescribed, figured or reexamined since their original descriptions. Galil (1997) listed in her synonymy two other species: *Cancer flosculosus* Seba, 1759, and *Cancer heracleoticus* Seba, 1759, but without any comments.

Linnaeus (1758: 630) described *Cancer calappa* very briefly, "C. brachyurus, thorace strigus fubimbricato gibbo trilobo." He did not indicate if he had any specimens with him, but he did refer to Rumphius (1705: 21, pl. 11 figs. 2, 3) record of this species from Ambon (Indonesia). The type locality was stated as from somewhere in Asia. In the Stockholm Museum in Uppsala, Sweden (UMS), where Linnaeus' material is now kept, there is specimen of *Cancer calappa* Linnaeus, 1758 (see Holm 1957: 56). The specimen was examined and thoroughly photographed through the courtesy of S.H. Tan who visited the museum at the request of the second author. The specimen (UMS 254), a dried male measuring 70.8 by 125.2 mm, is still in good condition. This specimen was labelled as from the collection of "Gustav IV Adolf", which was obtained by Linnaeus only after 1758 and subsequently reported in 1764 (see Holm 1957: 56; Wallin 1997: 16). This specimen, however, is not one of Linnaeus' type(s) of *Cancer calappa*. Specimen UMS 254 was obtained only after 1758 and therefore cannot be a type. Linnaeus' type specimen(s) of *Cancer calappa* Linnaeus, 1758 (if indeed he had any), is in all probability, lost. As Linnaeus (1758) also described *C. calappa* with reference to Rumphius' (1705) work, Rumphius' material could also constitute the type series. Unfortunately, the latter's specimens are also lost.

The type specimen of *Cancer fornicata* Fabricius, 1781, a dried male in the Natural History Museum of Denmark in the University of Copenhagen, is clearly a subjective junior synonym of *Cancer calappa* Linnaeus, 1758. Fabricius (1781) did not indicate how many specimens he had with him, and as such, the only extant specimen is regarded as the lectotype of *C. fornicata*.

The identities of Seba's (1759) *Cancer flosculosus* and *C. heracleoticus* is more problematic. The two taxa in question were published in the third volume of the series which is often cited as "1758" or "1761", but Holthuis (1969) showed that it was released in 1759. In any case, Seba's (1759) names are not available for nomenclatural purposes. The beginning of the Seba's (1759) book (in the contents section after the preface) has an unpaginated summary list of the plates, with an associated index (in Latin) and table (in French), and this has names which appear to be binominal scientific names. Subsequently, Seba appended a similar Latin index and French table after each plate to elaborate on the figures, and it often contains what appear to be binomial names in Latin. The problem with Seba's (1759) work is that in his Latin indices, he uses a mixture of binomial as well as polynomial names throughout the book. For the Decapod Crustacea, while most of these "scientific names" are in Latin and appear binomial, he also uses names like "*Cancer pagurus Maja*" (for numbers 2 and 3 of his plate 18), "*Cancer Uka una*" (for number 8 of his plate 18), and "*Cancer Ciri Apoa*" (for number 9 of plate 18). Article 11.4 states that for names to be nomenclaturally available, there must be "Consistent application of binominal nomenclature. The author must have consistently applied the Principle of Binominal Nomenclature [Art. 5.1] in the work in which the name or nomenclatural act was published …", with the caveat that "An index published before 1931 in a work that is not consistently binominal is acceptable itself as a work consistent with the Principle of Binominal Nomenclature provided that the Principle is consistently applied to scientific names in the index; thus a scientific name published in such an index is available if the name satisfies the other provisions …." (Article 11.4.3). As such, the scientific names in Seba's (1759) work, even if they are interpreted as such, are not available as his work contravenes the said ICZN articles. Although Galil (1997) used these two Seba names as junior synonyms of *C. calappa*, on the basis of the current code, they also are also not available from her work even though she recognized them as available names.

While the names *Cancer flosculosus* Seba, 1759, and *Cancer heracleoticus* Seba, 1759, are not available for nomenclatural purposes, it is nevertheless useful to determine what they are, especially since Seba's plates are good. Another issue is that the Latin text in the index and the French tables that briefly describes the species and figures do not always match, often emphasising different aspects. As such, it is necessary to know what he wrote about the two species in both Latin and French.

For *Cancer flosculosus*, the name was used for three different species crabs depicted in plate 19. The name was used in the contents page and subsequent index as follows:

Unpaginated contents page for plate 19: Latin: "2. 3. Cancer flosculosus, pronus & supinus."

"13. Cancer flosculosus, Amboinensis, rarior, elegantissimus."

"24. Cancer flosculosus"

French: 2. 3. "Cancre parfemé de fleurs, couché sur le dos & sur le ventre."

"13. Cancre d'Amboine, parfemé de felurs, très rare, d'une grande beauté."

"24. Cancre parfemé de fleurs."

Indices after plate 19: Latin "Num. 2. *Cancer*

*flosculosus*, pronus. Tegmen superius, pallide rubens, coccineis maculis, tanquam flosculis, distinguitur Pedes antici, quorum sinister, unà cum forcipe süo, vel altero tanto major est, quam dexter, saturate rubri funt coloris. E capitis rotundi parte antica oculi protuberant. Reliqui decem pedes posteriores, pallide rubentes, prater quaternos, è quibus constant, articulos, longis quoque & acuminatis unguiculis gaudent. Num. 3. *Idem supinus*." [Number 2. *Cancer flosculosus*, in prone position. The upper cover, pale red, with crimson spots, like flowers, is distinguished by chelipeds, whose left, together with its forceps, is much larger than the right, are of a saturated red color. Eyes protruded from the front of the round head. The remaining ten hind feet, pale red, besides the four, and of which they consist, the joints, also have long and pointed claws. Number 3. Same as above in supine position.] (Seba 1759: 46).

French: "N°. 2. *Cancre décoré de taches en façon de petites fleurs, vu par dessus*. Sa coque du dessus du corps est d'un rouge-pâle, sursemé de tâches d'un rouge d'écarlate, qui ont quelque ressemblance à de petites fleurs. Ses deux bras sont d'un rouge-foncé; le gauche muni d'une bonne pince est de beaucoup plus grand que le droit. Ses deux yeux ronds sortens de la téte, où ils font places à la partie antérieure. Ses pieds font au nombre de dix, d'un rouge déteint, composés de quatre articulations, & munis d'ongles longs & pointus. N°. 3. Le méme Cancre couché sur le dos." [Number 2. Crab decorated with spots in the shape of small flowers, seen from above. Its upper body shell is a pale red, dotted with scarlet-red spots, which have some resemblance to small flowers. Its two chelipeds are dark red; the left one fitted with good pincers is much larger than the right one. Its two round eyes protrude from the head, where they give way to the front part. Its feet are ten in number, a faded red, composed of four joints, and equipped with long and sharp claws. Number 3. The same crab lying on its back.] (Seba 1759: 46).

Latin: "Num. 13: *Cancer flosculosus*, *Amboinensis*, *rarior*, *elegantissimus*. Postica ejus pars lata admodum utrinque acuminatos emittit processus, raro admodum in aliis Cancris conspicuos. Testa superior, dilutè Arantii coloris, ocellis exiguis, quos inter quidam minutissimi funt, tanquam squamulis vestita, parte antica saturate Arantio colore interstincta, singulari flosculorum quafi apparatu superbit. Oculi, anteriùs circa os proxime ad se mutuo collocati, ope articuli cujusdam prominent, ut eminus dispicere queant. Brachia crassa, forcipata, pedesque postici & cauda tam pressè sub testa superiore contracta hærent, ut vix videri possint. [Number 13: *Cancer flosculosus*, from Ambon, rare, very elegant. Its posterior part is very broad and, on both sides, there are pointed processes, very rarely visible in other Cancers. The upper shell, of a dilute orange color, with small eyes, some of which are the smallest, as if clothed with scales, the anterior part interspersed with a saturated orange color, boasts a unique arrangement of flower patterns. The eyes, placed close to each other near the front of the mouth, protrude by means of a joint, so that they can see from a distance. The chelipeds are thick, forked, and the hind feet and tail are so tightly contracted under the upper shell that they can scarcely be seen.] (Seba 1759: 47).

French: "N°. 13. *Cancre d' Amboine, rare, magnifique, sursemé de taches qui imitent des fleurs*. Le dessus de son corps sort large sur le derriere, est encore remarquable par deux apophyses pointues qu'on trouve rarement dans d'autres Cancres. Sa coque ici orangée-clair, semble comme revêtue de petites écailles par les petits boutons dont elle est couvèrte, qu'on prendroit pour autant d'yeux, & parmi lesquels il y en a quantité d'une extrême petitesse; la partie antérieure de la coque est d'un orangé plus obscur, mais superbe par un assemblage de taches faites en façon de fleurs. Ses yeux font situés l'un près de l'autre de chaque côté de la bouche, s'avançant en avant par le moyen de quelque appendice pour voir de loin. Ses deux gros bras sourchus, ses jambes, & sa queuë font si sort ramassés sous la coque, qu'on peut à peine les découvrir." [Number 13. Ambon Crab, rare, magnificent, dotted with spots that imitate flowers. The top of its body comes out wide at the back, is further remarkable by two pointed processes which are rarely found in other Dunces. Its shell, here light orange, seems to be covered in small scales by the small buttons with which it is covered, which we take for so many eyes, and among which there are a number of extremely small ones; the anterior part of the shell is a darker orange, but superb with an assembly of spots made in the shape of flowers. Its eyes are located close to each other on each side of the mouth, projecting forward by means of some appendage to see from a distance. Its two big chelipeds, its legs, and its pleon are so compacted

under the hull that we can barely discover them.] (Seba 1759: 47).

Latin: "Num. 24. *Cancer flosculosus*, *pronus*. Pallida hîc rubedo saturatius rubris quasi florum foliolis, hinc inde dispersis, variegatur. Postica pars latio est, antica angustior rotunde convergit. Inter oculos apice quodam os prominet. Brachia crassa sunt; pedes vero postici minores sub ventre delitescunt." [Number 24. *Cancer flosculosus*, in prone position. Carapace saturated with pale red spots reminiscent of flowers blooming. The posterior part is broad, the front is narrower and roundly converging. Between the eyes a kind of mouth protrudes at the tip. The chelipeds are thick; but the smaller hind feet are hidden under the belly.] (Seba 1759: 49).

French: "N°. 24. *Cancre orné de taches faites en façon defleurs, vu par dessus*. Il est d'un rouge incarnat. émaillé de taches d'un rouge plus foncé, faites en maniere de petites feuilles de fleur femées çà & là. Sa partie de derriere est large, & sa partie de devant plus étroite & plus arrondie. Sa bouche pointue s'avance entre les yeux. Ses bras font gros. Ses pieds font petits, cachés fous le ventre." [Number 24. Crab decorated with spots made in the style of flowers, seen from above. It is a crimson red. enamelled with spots of a darker red, made in the manner of small flower leaves cut here and there. Its back part is wide, and its front part narrower and more rounded. His pointed mouth juts out between his eyes. His chelipeds are big. His feet are small, hidden beneath his ventrum.] (Seba 1759: 49).

For *Cancer heracleoticus*, the name was used for a crab depicted in plate 20. The name was used in the contents page and subsequent index as follows:

Unpaginated contents page for plate 20: Latin: "7. 8. Cancer Heracleoticus, pronus and supinus." French: "7. 8. Cancre héracléotique, vu par dessus & par dessous."

Indices after plate 20: Latin: "Num. 7. *Cancer Heracleoticus*, *pronus*. Rarissimus hic Cancer, unà cum aliis speciminibus, ex Amboina mihi missus est, sub nomine *Cancri cristati*, seu *Galli marini*. Aristoteli *Pagurus* vocatur *ex mari Adriatico*; Bellonio *Cancer Heracleoticus*, *species Majæ*; J. Cæsari Scaligero *Pagurus*, *crista galli*; Rondeletio *Pagurus Migrane*, id est, *Malum Punicum*; & Rumphio, in Museo Amboinensi, *Cancer Calappoides*. Unde equidem pater, aliis Authoribus alia placuisse nomina, pro varia similitudine, quam invenisse sibi quisque imaginatus est. Parte postica latus est limbo elato instructus. Cauda brevis & obrusa: amica pars angustior rotundè convergit. Testa superior, antrorsum, malum Punicum, maturescens, ipso etiam colore refert. Posteriora versus latior testa, instar aquæ lente fluctuantis sulcata, undas maris dense congestas repræsentat. Oculi profunde intra testaceas orbitas, ad latera nasi veluti essictas, delitescunt. Num. 8. *Idem supinus*. Brachia duo antica, Galli capitibus fimilia, anterius admodum lata, incurvum singula unguem gerunt acuminatum, rubicundum, qui cum inferna forcipis parte, itidem antrorsum late protensa, arctè committitur limbo interno dentatus. Testa superior, geminæ instar galli cristæ, serrata & quam elegantissime picta est. Pedes octo postici, dilute flavi, ungues acutos, rubentes, gerunt." [Number 7. *Cancer Heracleoticus*, in prone position. This very rare Cancer, together with other specimens, was sent to me from Ambon, under the name of Crested Cancer, or Rooster of the Sea. Aristotle's *Pagurus* is called from the Adriatic sea; Bellonio's *Cancer Heracleoticus*, a species of Majæ; J. Caesar Scaligero's *Pagurus* with a cock's crest; Rondeletio's *Pagurus Migrane*, that is, Phoenician Apple [pomegranate]; & Rumphius, in the Museum of Ambon, *Cancer Calappoides*. Wherefore, indeed, the originator, each one imagined that other authors had chosen other names, for the various likenesses which he had found for himself. The rear side is equipped with a raised rim. The tail is short and stubby: the friendly part is narrower and rounded. The upper shell, in front, represents the Punic apple, ripening, in the same color. The posterior towards the wider shell, like the furrows of slowly undulating water, represents the densely packed waves of the sea. The eyes are hidden deep within the orbits, along the sides of the front. Number 8. The same in supine position. Two chelipeds in front, similar to rooster heads, very wide in front, each curved claw is pointed, red, forming very sharp forceps on the side, also extended wide along the front is a serrated inner rim. The upper shell is like a cock's crest, serrated and most elegantly coloured. The hind feet are eight, pale yellow, and have sharp, red claws.] (Seba 1759: 51–52).

French: "N°. 7. *Cancre Héracléotique*, *vu par dessus*. Ce Cancre qui est extrêmement rare m'a été envoyé d'Amboine avec d'autres Curiosités, sous le nom de *Cancre portant une Crête*, ou

*Coq de Mer*. Aristote l'appelle le *Squinado de la Mer Adriatique*, Belon le *Cancre Héracléotique Espece de Mæas*, J. César Scaliger le *Squinado à crête de Coq*, Rondelet le *Cancre Migraine*, c'est-à-dire ressemblant à une Grenade qu'on nomme *Migraine* en Languedoc. Ainsi chaque Auteur lui a donné un nom à fa fantaisie, conformément à la ressemblance qu'il lui a trouvée avec telle ou telle chose. Il est large par derriere, avec une bordure relevée. Sa queuë est courte & obtuse. La partie antérieure de son corps est étroite & arrondie. La coque du dessus du corps ressemble par devant de couleur & de figure à une Grenade presque mure; ensuite s'élargissant sur le derriere du corps, elle est fillonnée de rayes faitesen ondes, representant celles de l'eau quand elles se touchent de prés & se succedent lentement les unes aux autres. Ses yeux sont cachés dans leurs orbites, qui semblent être creusés vers les côtés du nez. No. 8. *Le même Cancre, vu par dessous*. Ses deux bras ressemblent par leur figure à des tétes de Coq. Ils sont fort larges dans la partie antérieure, armés de pinces pointues au bout, de couleur rouge, dentelées intérieurement, & dont la supérieure qui est crochue entre dans l'inférieure par engrénure. La coque qui couvre l'Animal est ornée de belles couleurs, & entaillée sur les bords d'une dentelure qui imite une double créte de Coq." [Number 7. *Cancer Heracleoticus*, seen from above. This crab which is extremely rare was sent to me from Ambon with other Curiosities, under the name of Crab wearing a Crest, or Sea Cock. Aristotle calls it the *Squinado* of the Adriatic Sea, Belon the Heracleotic Crab Species of Mæas, J. César Scaliger the Cock-crested *Squinado*, Rondelet the Cancer Migraine, resembling a Pomegranate which is called Migraine in Languedoc. Thus each Author has given it a name at will, in accordance with the resemblance he found to be close with this or that thing. It is wide from behind, with a raised border. Its tail is short & obtuse. The front part of its body is narrow & rounded. The shell of the upper body resembles an almost ripe pomegranate from the front in colour and figure; then widening on the back of the body, it is filled with wave-like stripes, like those of water when they touch closely and slowly follow one another. Its eyes are hidden in their sockets, which appear to be sunken towards the sides of the nose. Number 8. The same crab, seen from below. Its two arms look like rooster heads. They are very wide in the front part, armed with pointed pincers at the end, red in color, serrated internally, and the upper one, which is hooked, enters the lower one. The shell which covers the animal is decorated with beautiful colors and notched on the edges with a serration which imitates a double crest of a rooster.] (Seba 1759: 51–52).

Seba's (1759) "*Cancer flosculosus*" is a mix of three species. The specimen depicted in plate 19 figures 2 and 3 (no locality given) is clearly what is today called *Carpilius convexus* (Forskål, 1775) (Carpiliidae), a widespread species in the Indo-West Pacific. That in plate 19 figure 13 is clearly *Calappa flammea* (Herbst, 1794), a common species in the Atlantic. Although Seba reports that the specimen was from Ambon, there must be a mistake in the labelling. As for the specimen shown in plate 19 figure 24 (no location), it is probably a young *Calappa calappa* as its carapace has low nodules on the carapace. Seba's (1759) "*Cancer heracleoticus*" (no location indicated) is clearly *C. calappa*, the morphology and colour agreeing in all aspects.

### ***Calappa capellonis*** **Laurie, 1906** [#]

(Figs. 6, 35A)

*Calappa capellonis* — present record.

*Taxonomy*: Takeda and Koyama (1974), Chen (1993), Galil (1997), Ng (2002a).

*Type*: Syntypes NHM 1907.5.22.13-15 (Galil 1997).

*Type locality*: Gulf of Mannar, Sri Lanka.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Seychelles, to Indonesia, South China, Taiwan and Japan, to Australia and New Guinea (Galil 1997).

*Habitat*: Subtidal; rocky substrates of coarse sand or rock fragments; depths 9 to 80 m (Galil 1997).

*Remarks*: The present species was described as a variety of *Calappa gallus* (Herbst, 1803), but is distinguished from it by more flattened and smoother nodules on the carapace among various characters (Laurie 1906). The distinction was dismissed by Rathbun (1937), but later recognized by Takeda and Koyama (1974) who raised it to a full species (see also Chen 1993; Galil 1997). This species is a new record for the fauna of Hong Kong.

### ***Calappa hepatica*** **(Linnaeus, 1758)** [#]

*Calappa calappa* — Hill and Phillipps 1981: 156, pl. 52k [not *Cancer calappa* Linnaeus, 1758].
*Calappa hepatica* — Morton and Morton 1983: 157, fig. 10.4(4).

*Taxonomy*: Chen (1993), Galil (1997), Chen and Sun (2002).

*Type*: Status unknown.

*Type locality*: "in Indiis": Indian Ocean.

*Distribution*: Western Indian Ocean to East Pacific: South Africa, Madagascar, Red Sea, Persian/Arabian Gulf, to South China Sea and East Asia, Indonesia, Papua New Guinea, Australia, New Zealand and New Caledonia, to Hawaii and Clipperton Island (Galil 1997); exotic species in the Mediterranean (Brockerhoff and McLay 2011; Galil 2011).

*Habitat*: Intertidal to subtidal; substrates sandy, muddy or gravelly, to depths of 100 m (Galil 1997).

### *Calappa lophos* (Herbst, 1782) #

*Calappa lophos* — Wong et al. 2021: 8, fig. 5, pl. 1D.

*Taxonomy*: Chen (1993), Ng et al. (1999a), JCY Lai et al. (2006).

*Type*: Lectotype ♂ ZMB 2168 (K Sakai 1999; JCY Lai et al. 2006).

*Type locality*: East Indian Seas.

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Andaman Sea, South and East China Seas, Taiwan, Japan, and Australia (Chen and Sun 2002; Davie 2002; JCY Lai et al. 2006).

*Habitat*: Subtidal; substrates of muddy sand, fine sand or shell fragments; depths 30 to 100 m (Chen and Sun 2002).

### *Calappa philargius* (Linnaeus, 1758) #

*Calappa cristata* — Stimpson 1858c: 162; Stimpson 1907: 165.

*Calappa philargius* — Gee 1926: 160; Shen 1931a: 104, text-figs. 10, 11, pl. 8; Shen 1940a: 214; Hill et al. 1978: 114; Morton 1979b: 136, tab. 7.1; Hill and Phillipps 1981: 156, pl. 52j; Morton and Morton 1983: fig. 10.4(6); Davie 1992b: tab. 1; Galil 1997: 307, figs. 17d, 20d, 21, 23; Morton and Ruxton 1997: 1 unnumb. fig. (51); Blackmore and Rainbow 2000: app. 1; B Chan and Leung 2002: 25, fig. 2G; Leung et al. 2004: 87, 1 unnumb. fig.; Tsang et al. 2020: 68, 2 unnumb. figs.; Wong et al. 2021: 8, fig. 6, pl. 1E.

*Taxonomy*: Chen (1993), Galil (1997), Chen and Sun (2002), Ng et al. (2002).

*Type*: Neotype ♂ ZRC 1998.67 (designated by Ng et al. 2002).

*Type locality*: Changi Beach, Singapore (neotype).

*Distribution*: Eastern Indian Ocean to West Pacific: from Straits of Malacca eastwards, to Southeast and East Asia, and Western Australia (Ng et al. 2002).

*Habitat*: Subtidal; substrates sandy-muddy, shelly, of depth 24 to 100 m (Chen and Sun 2002).

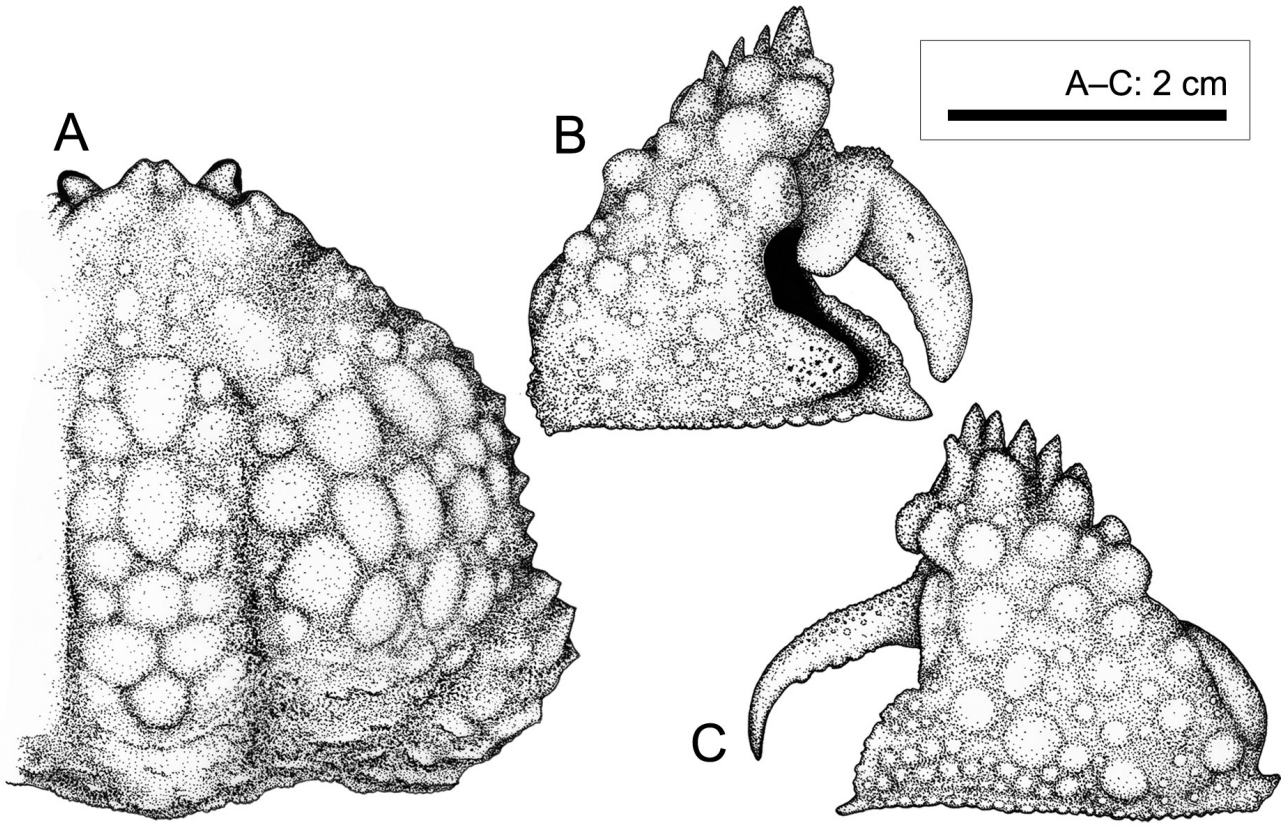



**Fig. 6.** *Calappa capellonis* Laurie, 1906 (female, 62.2 × 47.4 mm, off Kau Sai Chau): A, carapace; B, right chela; C, left chela.

### *Cycloes granulosa* De Haan, 1837

*Cryptosoma granulosum* — Shen 1940a: 214.

*Taxonomy*: Chen (1993), Galil and Clark (1996), Chen and Sun (2002).

*Type*: Holotype ♀ in RMNH D 42161 (Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: South China Sea and East Asia: Singapore, Vietnam, South China, Taiwan and Japan (Galil and Clark 1996).

*Habitat*: Subtidal; substrate sandy or sandy-muddy; depths 29 to 100 m (Chen and Sun 2002).

### *Mursia armata* De Haan, 1837

*Mursia armata* — Gordon 1931: 527; Shen 1940a: 214; Galil 1993: 352, figs. 1b, 2c, d, 3c, d.

*Taxonomy*: Chen (1993), Galil (1993), Chen and Sun (2002).

*Type*: Lectotype ♀ RMNH D 38154 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: West Pacific: Vietnam, South and East China Seas, Korea, Japan, and New Caledonia (Galil 1993; Chen and Sun 2002).

*Habitat*: Subtidal; substrates of fine sand, mud or clay; depths 50 to 260 m (Chen and Sun 2002).

## Family Matutidae De Haan, 1835

### *Matuta planipes* Fabricius, 1798 #

*Matuta planipes* — Gordon 1931: 527; Wong et al. 2021: 8, fig. 7, pl. 1F.

*Taxonomy*: Chen (1993), Galil and Clark (1994), Chen and Sun (2002).

*Type*: Lectotype ♂ ZM 154-6 and paralectotypes in NHMD (designated by Galil and Clark 1994).

*Type locality*: "Oceano Indico", possibly Tharangambadi (= Tranquebar), India (Fransen et al. 1997).

*Distribution*: Eastern Indian Ocean to West Pacific: from India, Southeast and East Asia, Indonesia, Papua New Guinea and Australia (Galil and Clark 1994; Chen and Sun 2002).

*Habitat*: Intertidal to subtidal; substrates sandy, muddy or shelly; depths 16 to 40 m (Chen and Sun 2002).

### *Matuta victor* (Fabricius, 1781) #

*Matuta victor* — Stimpson 1907: 166; Gordon 1931: 527; Galil and Clark 1994: 39, fig. 7a, b, pl. 13(a, b).

*? Matuta lunaris* — Shen 1940a: 214.

*Matuta lunaris* — Poon and Chan 2001: 20, fig. 4; BKK Chan and Caley 2003: 86, 2 unnumb. figs.; Fong et al. 2005: 50, 3 unnumb. figs. [not *Cancer lunaris* Forskål, 1775].

*Matuta lunata* [sic] — Hill et al. 1975: 65; Morton 1976: 102; Hill et al. 1978: 92; Morton 1979a: 118, fig. 6.17; Hill and Phillipps 1981: 152, pl. 51g; Morton and Morton 1983: 157, fig. 9.5(1); ECK Wong 1990: 150.

*Taxonomy*: Galil and Clark (1994), Ng et al. (2002).

*Type*: Neotype ♂ ZM-49-1 in NHMD (designated by Galil and Clark 1994).

*Type locality*: Tharangambadi (as Tranquebar) India (neotype).

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, East Africa, Red Sea, India, Southeast and East Asia reaching Japan, to Australia, New Hebrides and New Caledonia (Galil and Clark 1994); recently reported as exotic species in eastern Mediterranean Sea (Innocenti et al. 2017).

*Habitat*: Intertidal and shallow subtidal; sandy or shelly bottoms of depth 10 to 15 m (Chen and Sun 2002).

*Remarks*: The local records of *Matuta* are somewhat confusing. Shen (1940a) listed only one species, "*M. lunaris*", citing an Indian record of *M. victor* by Alcock (1896). Apparently, C.-J. Shen had considered *Cancer lunaris* Forskål, 1775 (*Matuta*; now *Ashtoret*) and *C. victor* Fabricius, 1781 to be synonymous, the former having priority. Both species were shown to be distinct by Galil and Clark (1994), and *A. lunaris* has so far been reliably recorded from South China (Guangxi and Hainan; see Chen and Sun 2002). Apart from armature of male chelae (Galil and Clark 1994; Chen and Sun 2002), *A. lunaris* can be distinguished by a slightly more elongate carapace, on which there are six visible conical tubercles, around each is an aggregate of small dark spots (cf. Sakai 1976: pl. 44(3) (as *M. banksi*); versus Ng et al. 2002: fig. 2G). Among illustrations presented in local records, none display such features. According to our observations since the 2000s, *M. victor* is not uncommon along semi-exposed sandy shores, but we have not seen any specimens which can be identified with *A. lunaris*. For the moment, we treat all past local records of "*M. lunaris*" as *M. victor* instead.

## Superfamily Carpilioidea Ortmann, 1893
## Family Carpiliidae Ortmann, 1893

### *Carpilius maculatus* (Linnaeus, 1758)

*Carpilius maculatus* — Morton and Morton 1983: 273, fig. 12.9(9).

*Taxonomy*: Guinot (1968), Crosnier (1984a), Karasawa and Schweitzer (2006).

*Type*: Status unknown.

*Type locality*: Asia.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, India, to South China and Japan, to Australia and Hawaii.

*Habitat*: Intertidal, shallow subtidal to 35 m (Castro 2011), often among corals or rocky reefs (Morton and Morton 1983).

## Superfamily Corystoidea Samouelle, 1819
## Family Corystidae Samouelle, 1819

### *Gomeza bicornis* Gray, 1831

*Gomeza bicornis* — Ong Che and Morton 1991: tab. 1.

*Taxonomy*: Sakai (1939), Ng et al. (2000).

*Type*: Status unknown.

*Type locality*: Indian Ocean.

*Distribution*: Eastern Indian Ocean to West Pacific: from Sri Lanka, Singapore to East China Sea and Japan, to Indonesia and Australia (Ng et al. 2000).

*Habitat*: Subtidal; soft substrates of sand or sandy mud; depths of 30 to 50 m (Sakai 1976).

### *Jonas distinctus* (De Haan, 1835) #

*Gomeza distincta* — Shen 1940a: 223.
*Jonas distinctus* — Wong et al. 2021: 8, fig. 4c, d, pl. 2A.

*Taxonomy*: Sakai (1976), Ng et al. (2000).

*Type*: Neotype ♂ in ZRC (designated by Ng et al. 2000).

*Type locality*: Minase, Kochi, Japan (neotype).

*Distribution*: East Asia: South China, Taiwan and Japan (Ng et al. 2000; Yang et al. 2008).

*Habitat*: Subtidal; sand-muddy substrates in relatively shallow waters, depths to 100 m (Ng et al. 2000).

## Superfamily Dairoidea Serène, 1965
## Family Dairidae Serène, 1965

### *Daira perlata* (Herbst, 1790)

*Daira perlata* — Morton and Morton 1983: 273, fig. 12.9(13).

*Taxonomy*: Guinot (1967b), JCY Lai et al. (2014).

*Type*: Status unknown (Not reported by K. Sakai 1999; may be lost as not found despite search of ZMB collections and archives by PKL Ng).

*Type locality*: Unknown.

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar and East Africa, Red Sea, India, Southeast and East Asia as north as the Ryukyus, to Australia, Central Pacific and Hawaii (Guinot 1967b).

*Habitat*: Subtidal, in shallow waters, often associated with corals or reefs (locally see Morton and Morton 1983).

## Superfamily Dorippoidea Macleay, 1838
## Family Dorippidae Macleay, 1838

### *Dorippe quadridens* (Fabricius, 1793) #

*Dorippe quadridens* — Stimpson 1858c: 163; Stimpson 1907: 167; Holthuis and Manning 1990: 18, figs. 5–12; Wong et al. 2021: 8, fig. 8, pl. 2B.
*Dorippe dorsipes* — Gee 1926: 160 [list]; Shen 1931a: 98, text-figs. 5–7, pl. 5(1, 2); Gordon 1931: 527; Shen 1940a: 213 [pre-occupied name *Cancer dorsipes* Linnaeus, 1758].
*Dorippe frascone* — Blackmore and Rainbow 2000: app. 1 [not *Cancer frascone* Herbst, 1785].

*Taxonomy*: Holthuis and Manning (1990).

*Type*: Syntype ♀ RMNH D 43031 (Fransen et al. 1997); and syntypes in NHMD (Zimsen 1964; Holthuis and Manning 1990).

*Type locality*: "India orientali": Tharangambadi (= Tranquebar), India (Holthuis and Manning 1990).

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, southeastern Africa, Red Sea, Persian/Arabian Gulf, India, to Southeast and East Asia, and Australia (Holthuis and Manning 1990).

*Habitat*: Subtidal; substrates muddy or sandy; depths 12 to 50 m (Chen and Sun 2002).

*Remarks*: *Cancer dorsipes* Linnaeus, 1764 had been shown to be a preoccupied name of *C. dorsipes* Linnaeus, 1758, the older name is actually a raninid crab, now as *Notopus dorsipes* (Linnaeus, 1758), and the next available name is *C. quadridens* Fabricius, 1793 (Holthuis and Manning 1990). Older records of "*D. frascone*" reported from the Philippines and Indonesia, and reports from outside that range, including those in East Asia, are either *D. quadridens* or *D. sinica*

(Holthuis and Manning 1990). The record of *D. frascone* presented by Blackmore and Rainbow (2000) was probably identified based on regional works such as Chen (1980), Dai et al. (1986), or Dai and Yang (1991). They are here treated as *D. quadridens* as well (cf. Chen and Sun 2002).

### *Dorippe sinica* Chen, 1980 #

*Dorippe sinica* — Holthuis and Manning 1990: 36, figs. 13–16; Wong et al. 2021: 10, fig. 9, pl. C.
*? Dorippe* cf. *sinica* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Chen (1980), Holthuis and Manning (1990).

*Type*: Holotype ♂ IOASQ C00117 and paratypes in IOASQ (now IOCAS).

*Type locality*: Nan'ao Island, Guangdong, China.

*Distribution*: East Asia: South and East China Seas, Taiwan and Japan (Holthuis and Manning 1990; Chen and Sun 2002).

*Habitat*: Intertidal and subtidal; to depths of 118 m (Chen and Sun 2002).

### *Dorippe tenuipes* Chen, 1980

*Dorippe tenuipes* — Holthuis and Manning 1990: 43, figs. 17, 18.

*Taxonomy*: Chen (1980), Holthuis and Manning (1990).

*Type*: Holotype ♂ IOASQ L46B-28 and paratypes in IOASQ (now IOCAS).

*Type locality*: Off Guangdong, China.

*Distribution*: Southeast and East Asia: from Indonesia, the Philippines, Vietnam, South and East China Seas (Holthuis and Manning 1990; Chen and Sun 2002).

*Habitat*: Subtidal; substrates sandy and muddy, with shell fragments; depths 15 to 129 m (Chen and Sun 2002).

### *Dorippoides facchino* (Herbst, 1785) #

*Dorippe facchino* — Stimpson 1858c: 163; Miers 1886: 328; Shen 1931a: 100, text-fig. 8, pl. 5(3, 4); Gordon 1931: 527; Shen 1940a: 213; Davie 1992b: tab. 1; SY Lee and Leung 1999: 78; SY Lee et al. 2000: tab. 3.
*? Dorippe granulata* — Thompson and Horikoshi 1982: tab. 1; RSS Wu 1982: tab. 1; Mackie et al. 1993: app. [not *D. granulata* De Haan, 1841].
*Dorippe granulata* — Morton and Morton 1983: 187, fig. 10.4(7); Morton 1988: 62, pl. 18; B Chan and Leung 2002: 24, fig. 2E [not *D. granulata* De Haan, 1841].
*Dorippoides facchino* — Holthuis and Manning 1990: 49, figs. 19–25; Wong et al. 2021: 10, fig. 10, pl. 2D.

*Taxonomy*: Serène and Romimohtarto (1969), Holthuis and Manning (1990).

*Type*: "Presumed lectotype" ♀ ZMB HERBST 0780 (designated by Serène and Romimohtarto 1969, see comments by M. Türkay in K Sakai 1999); syntypes in RMNH (Fransen et al. 1997).

*Type locality*: Tharangambadi (as Tranquebar), India (see Holthuis and Manning 1990).

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: from southern India and Sri Lanka to Southeast and East Asia, and Indonesia (Holthuis and Manning 1990).

*Habitat*: Subtidal; substrates sandy or muddy, depths of 15 to 100 m (Holthuis and Manning 1990).

### *Heikeopsis japonica* (von Siebold, 1824) #

*Dorippe japonica* — Shen 1931a: 101, pl. 6(1, 2); Gordon 1931: 527; Shen 1940a: 213.
*Heikea japonica* — Holthuis and Manning 1990: 75, figs. 29–35.
*Neodorippe japonica* — Davie 1992b: tab. 1.
*Heikeopsis arachnoides* — Wong et al. 2021: 10, fig. 11, pl. 2E.
*Heikeopsis japonica* — Wong et al. 2021: 11, fig. 12, pl. 2F.

*Taxonomy*: Serène and Romimohtarto (1969), Holthuis and Manning (1990).

*Type*: Lectotype ♂ RMHN D 822 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Shimonoseki, Japan.

*Distribution*: South China Sea and East Asia: from Vietnam to coasts of China to Bohai, Taiwan, Korea, and southern Japan (Holthuis and Manning 1990; Chen and Sun 2002).

*Habitat*: Intertidal to subtidal; depths to 130 m (Chen and Sun 2002).

*Remarks*: The species *H. arachnoides* can only reliably be distinguished from *H. japonica* by the slightly longer ambulatory legs (Manning and Holthuis 1986). Wong et al. (2021) treated the two as separate species but we now consider both local records representing *H. japonica*. Examination of a large series of specimens of both species from Taiwan and Hong Kong indicates that the degree of variation nullifies any small differences. The second author has examined the types in NHM and there are no major differences between the two species, both of which are from Japan. The subtle differences in the G1 structure observed by Ng and Huang (1997) are not reliable when more specimens are examined. The tendency is for smaller specimens of *H. japonica* to usually have more slender legs in any case. This matter is now being resolved by Danièle Guinot (MNHN; pers. comm.).

### *Neodorippe callida* (Fabricius, 1798) #

*Dorippe callida* — SY Lee and Leung 1999: 78.
*Neodorippe callida* — Wong et al. 2021: 11, fig. 13, pl. 3A.

*Taxonomy*: Holthuis and Manning (1990), Chen and Sun (2002), Ng and Rahayu (2002).

*Type*: Lectotype ♂ and paralectotype in UZMC (now NHMD; designated by Holthuis and Manning 1990).

*Type locality*: "Mari Asiatico": possibly Tharangambadi (= Tranquebar), India (Holthuis and Manning 1990).

*Distribution*: Western Indian Ocean to South China Sea: from Red Sea, Pakistan, India, Indonesia to South China Sea (Holthuis and Manning 1990; Chen and Sun 2002).

*Habitat*: From intertidal pools, shallow water, to mud or sandy bottoms; depths 3.6 to 46 m; also occurs in mangroves (Holthuis and Manning 1990).

### *Paradorippe granulata* (De Haan, 1841) #

*Dorippe granulata* — Stimpson 1858c: 163; Stimpson 1907: 167; Ortmann 1892: 561; Shen 1931a: 102, pl. 6(3, 4); Shen 1940a: 214.
*Paradorippe granulata* — Holthuis and Manning 1990: 117, figs. 48–51; Davie 1992b: tab. 1; Wong et al. 2021: 12, fig. 14, pl. 3B.

*Taxonomy*: Serène and Romimohtarto (1969), Holthuis and Manning (1990).

*Type*: Lectotype in RMNH D 817, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Taiwan, Korea, north to Hokkaido, Japan and Peter the Great Bay, Russia (Holthuis and Manning 1990; Chen and Sun 2002).

*Habitat*: Intertidal and subtidal; substrates sandy-muddy or shelly; depths 2 to 154 m, more common within depths of 50 m (Holthuis and Manning 1990; Chen and Sun 2002).

## Superfamily Eriphioidea Macleay, 1838
## Family Eriphidae Macleay, 1838

### *Eriphia ferox* Koh & Ng, 2008 #

*Eriphia smithii* — Stimpson 1858a: 37; Stimpson 1907: 72 [not *E. smithii* MacLeay, 1838].
*Eriphia sebana smithii* — Gee 1926: 163 [list; "near Hong Kong"] [not *E. smithii* MacLeay, 1838].
*Eriphia laevimana* var. *smithi* — Gordon 1931: 528 [not *E. smithii* MacLeay, 1838].
*Eriphia laevimana smithi* — Shen 1940a: 227 [not *E. smithii* MacLeay, 1838].
*Eriphia laevimana smithii* — Morton and Morton 1983: 42, fig. 4.4(4); Morton and Harper 1995: 57, fig. 9(3) [not *E. smithii* MacLeay, 1838].
*Eriphia laevimana* — Williams 2003: 92, 2 unnumb. figs. [not *E. laevimana* Guérin, 1829 = *Cancer sebana* Shaw and Nodder, 1803].
*Eriphia smithi* — VCS Lai et al. 2006: 62, 3 unnumb. figs. [not *E. smithii* MacLeay, 1838].

*Taxonomy*: Koh and Ng (2008).

*Type*: Holotype ♂ ZRC 1999.1001 and paratypes in ZRC.

*Type locality*: Salu Island, Singapore.

*Distribution*: Southeast and East Asia: from Singapore and Malaysia, Indonesia, Gulf of Thailand, South China, Taiwan and Japan (Koh and Ng 2008).

*Habitat*: Intertidal and shallow subtidal, along crevices of rocks and among coral reefs (Dai and Yang 1991).

*Remarks*: *Eriphia smithii* MacLeay, 1838 *sensu stricto* was shown to be a wholly western Indian Ocean species (Koh and Ng 2008). The form found in East and Southeast Asia was recognized as distinct, *E. ferox*, in the same paper.

### *Eriphia sebana* (Shaw & Nodder, 1803)

*Eriphia sebana* — Morton and Morton 1983: 273.

*Taxonomy*: Koh and Ng (2008).

*Type*: Neotype ♂ ZRC 1999.1020 (designated by Koh and Ng 2008).

*Type locality*: Okinawa, Japan (neotype).

*Distribution*: Widespread in the Indo-Pacific region: East Africa, India, to Australia, Samoa, French Polynesia, Hawaii; South China Sea and East Asia (Koh and Ng 2008; Yang et al. 2008).

*Habitat*: Intertidal and shallow subtidal, along crevices of rocks and among coral reefs (Dai and Yang 1991).

*Remarks*: The species appears to be distributed in more oceanic localities, and the only reliable record in the Chinese literature was from the Paracel (= Xisha) Islands (Chen and Lan 1978; Dai and Yang 1991; Yang et al. 2008), elsewhere in East Asia from Pingtung and Taitung, Taiwan, and the Ryukyus, Japan. The only local record provided by Morton and Morton (1983) did not provide any illustrations but noted "a genus already noted on exposed shores" (p. 273). In the last two decades, we have not seen any Hong Kong material identifiable as *E. sebana*. As this is a common species wherever it is found, the record by Morton and Morton (1983) might have been based on a misidentification of the more common *E. ferox*. We include it as it is likely

to be found in Hong Kong in the future; it is inside the known range of the species.

## Family Menippidae Ortmann, 1893

### *Menippe rumphii* (Fabricius, 1798) #

(Figs. 7, 35B)

*Menippe rumphii* — present record.

*Taxonomy*: De Man (1888b), Ng (1998).

*Type*: Syntype in UZMC (now NHMD; Zimsen 1964).

*Type locality*: Tharangambadi (= Tranquebar), India.

*Distribution*: Western Indian Ocean to South China Sea and East Asia: from Madagascar, East Africa, Red Sea, Persian/Arabian Gulf, India, Mergui Archipelago, to Thailand, Indonesia, South China and Taiwan (Ng et al. 2001; Naderloo and Türkay 2012).

*Habitat*: Intertidal and shallow subtidal; along rocky reefs beneath or among rocks.

*Remarks*: This species is fairly common among local rocky reefs, though surprising, not recorded in any previous taxonomic treatments. Herein reported as a new record for the fauna of Hong Kong.

### *Sphaerozius nitidus* Stimpson, 1858 #

*Sphaerozius nitidus* Stimpson, 1858a: 35; Stimpson 1907: 62, pl. 7(5, 5a); Gee 1926: 163 [list]; Hill et al. 1975: 59; Morton 1976: 100; Hill et al. 1978: 84; Morton 1979a: 115, figs. 6.15, 6.16b; Horikoshi and Takeda 1982: tab. 1; ZG Huang and Mak 1982: app.; Morton and Morton 1983: 93, fig. 7.3(9); ZG Huang et al. 1992: app. 1; ZG Huang and Lin 1993: app.; Clark et al. 2008: 920.

*Menippe convexa* — Gordon 1931: 527; Shen 1940a: 227.

*Taxonomy*: Sakai (1939), Crosnier (1984a).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, to

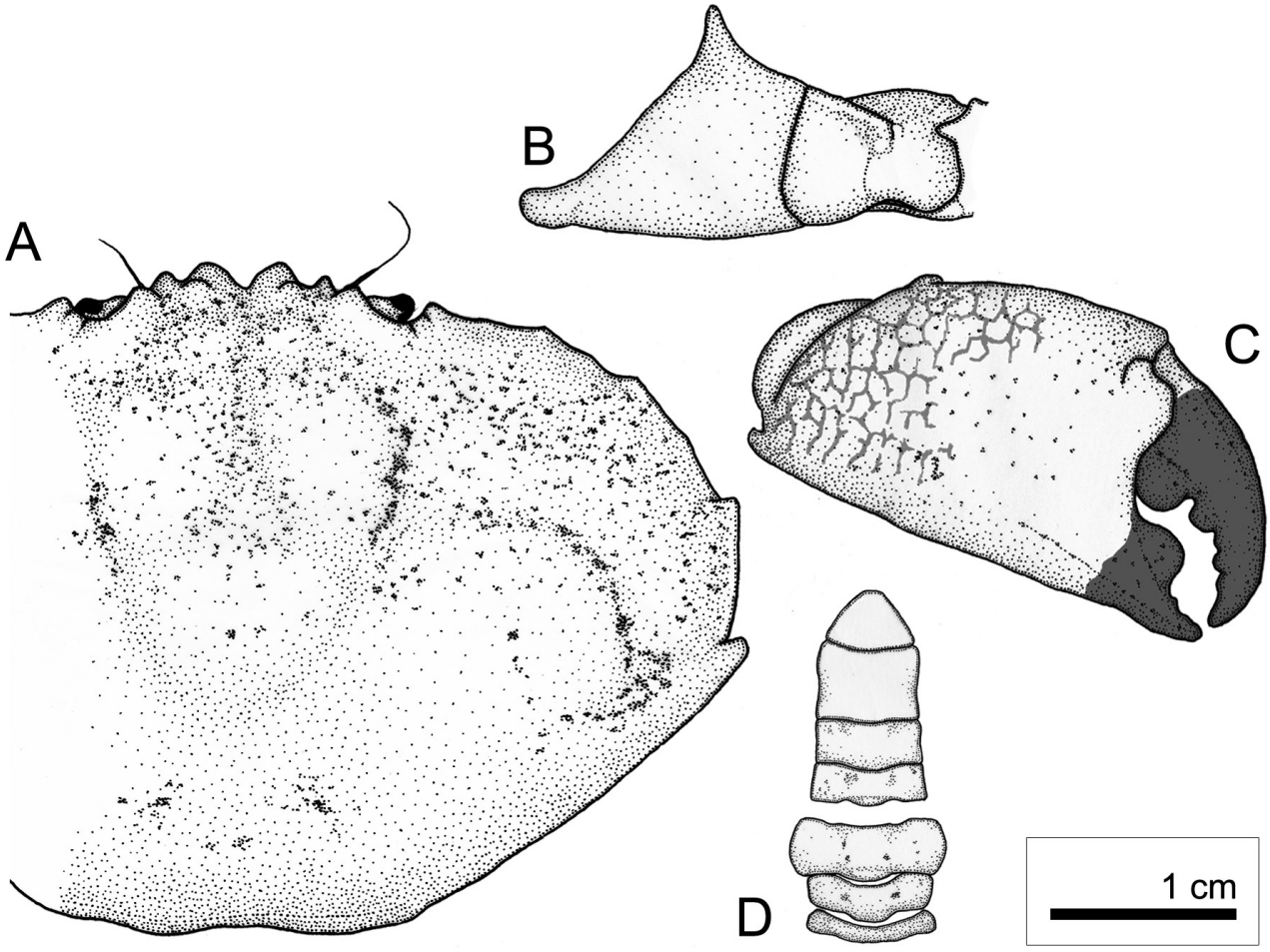



**Fig. 7.** *Menippe rumphii* (Fabricius, 1798) (male, 54.2 × 36.8 mm, off Wong Shek Pier): A, carapace; B, right cheliped merus, internal view; C, major chela; D, pleon.

South China Sea and East Asia, eastwards to Hawaii (Crosnier 1984a).

*Habitat*: Intertidal and shallow subtidal, down to depths of 35 m (Castro 2011).

*Remarks*: The taxonomy of this species was revised by Pati et al. (2021) and the many synonyms associated with it reappraised (see also Ng et al. 2008).

## Family Oziidae Dana, 1851

### *Epixanthus corrosus* A. Milne-Edwards, 1873

*Epixanthus corrosus* — Thompson and Shin 1983: tab. 4.

*Taxonomy*: Sakai (1976), Crosnier (1984a).

*Type*: Syntypes probably in MNHN (see De Man (1891)).

*Type locality*: New Caledonia.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Red Sea to Malay Archipelago, South China Sea (Paracel Islands = Xisha) and East Asia, to New Caledonia (Dai and Yang 1991).

*Habitat*: Intertidal, rocky or stony beaches (Sakai 1976).

*Remarks*: This intertidal species displays a distribution along localities of much open ocean influences (see *e.g.*, A Milne-Edwards 1873; Guinot 1958b; Sakai 1976; Dai and Yang 1991; Asakura et al. 1993). The single local record, without further illustrations or elaborations, was from benthic grab samples from the Victoria Harbour. We retain this record with hesitation.

### *Epixanthus frontalis* (H. Milne Edwards, 1834) #

*Ozius frontalis* — Stimpson 1858a: 34; Stimpson 1907: 60.
*Epixanthus frontalis* — Gee 1926: 162 [list]; Gordon 1931: 528; Shen 1940a: 227; Hill et al. 1975: 59; Morton 1976: 100, fig. 54g; Hill et al. 1978: 84; Morton 1979a: 115, fig. 6.15; Morton and Morton 1983: 93, figs. 7.3(7), 7.12(9), pl. 6D; Morton 1988: 96, pl. 32; Morton and Harper 1995: 43, fig. 6(4); Poon 2000: 12; VCS Lai et al. 2006: 63, 4 unnumb. figs.; Bravo et al. 2021: tab. 2.
*Sphaerozius nitidus* — Hill and Phillipps 1981: 150, pl. 50g.

*Taxonomy*: Barnard (1950), Crosnier (1984a).

*Type*: Syntypes probably in MNHN (Davie 2002).

*Type locality*: Tharangambadi (as Tranquebar), India.

*Distribution*: Western Indian Ocean to West Pacific: from South and East Africa, Red Sea, Persian/Arabian Gulf, India, Southeast and East Asia, to Australia and New Caledonia (Dai and Yang 1991; Naderloo and Türkay 2012).

*Habitat*: Intertidal, beneath rocks fragments.

### *Eupilumnus globosus* (Dana, 1852)

*Globopilumnus globosus* — Balss 1933: 7, pl. 1(1, 2).

*Taxonomy*: Balss (1933: as *Globopilumnus*), Guinot-Dumortier (1959: as *Globopilumnus*), Ng et al. (2001).

*Type locality*: Tahiti.

*Type*: Presumably lost.

*Distribution*: Eastern Indian Ocean to Central Pacific: from India, South China, Taiwan Strait, Japan, to Central Pacific, reaching Tahiti and Hawaii (Guinot-Dumortier 1959; Castro 2011).

*Habitat*: Subtidal; shallow in crevices in rock or coral reef (Sakai 1976).

*Remarks*: An earlier taxonomic treatment of this species had been provided by Balss (1933), in which *Globopilumnus* was established, and a juvenile male specimen from Hong Kong housed in the museum in Copenhagen (now NHMD) was reported. In Balss's paper (1933), however, *Actumnus elegans* De Man, 1888 was also cited as a junior synonym of *Pilumnus globosus* Dana, 1852, an action considered erroneous by Chopra and Das (1937) and Takeda and Miyake (1969c). Both of these species have been reported from Hong Kong, and are here treated as distinct taxa (for *A. elegans*, see below under Pilumnidae). The identity of Balss' (1933) specimen from Hong Kong should be checked.

## Superfamily Gecarcinucoidea Rathbun, 1904
## Family Gecarcinucidae Rathbun, 1904

### *Somanniathelphusa zanklon* Ng & Dudgeon, 1992 #

*Parathelphusa sinensis* — Gee 1926:162 [list, part]; Gordon 1931: 528 [part] [not *Parathelphusa sinensis* H. Milne Edwards, 1853].
*Parathelphusa* (*Parathelphusa*) *sinensis* — Shen 1940a: 229 [not *P. sinensis* H. Milne Edwards, 1853].
*Somanniathelphusa sinensis sinensis* — Bott 1968b: 409, figs. 11, 12, 30 [part]; Bott 1970a: 338; Bott 1970b: 111, pl. 20(42–44) [part] [not *P. sinensis* H. Milne Edwards, 1853].
*Somanniathelphusa zanklon* Ng & Dudgeon, 1992: 761, figs. 11–13; Dudgeon and Corlett 1994: 53, 133, fig. 6B, pl. 20; Dudgeon 1999: 181, fig. 4.21B; Fellowes et al. 2002: tab. 2 [list]; Shih et al. 2007: tab. 1.

*Taxonomy*: Ng and Dudgeon (1992), Shih et al. (2007), C Huang et al. (2018).

*Type*: Holotype ♂ ZRC 1991.1822, paratypes in AS (now IZCAS), MP (now MNHN) and ZRC.

*Type locality*: Lower course of Lam Tsuen River, Hong Kong (Ng and Dudgeon 1992).

*Distribution*: South China: Hong Kong, Macao and Guangdong (Shih et al. 2007; C Huang et al. 2018).

*Habitat*: Freshwater; low-gradient streams with muddy substratum (Ng and Dudgeon 1992); occasionally seen in freshwater marshes.

*Remarks*: Records under the name *Parathelphusa sinensis* H. Milne Edwards, 1853, and even the type series (from "Mers de la Chine"), was reported to be heterogeneous (Ng and Dudgeon 1992). A lectotype for *P. sinensis* was designated by Ng and Dudgeon (1992), and another distinct species in the former type series of *P. sinensis* was described as *Somanniathelphusa falx*. Old material from Hong Kong were referred to the present species in the same paper.

## Superfamily Goneplacoidea Macleay, 1838
## Family Euryplacidae Stimpson, 1871

### *Eucrate alcocki* Serène, in Serène & Lohavanijaya, 1973 #

*? Eucrate crenata* var. *dentata* — Alcock 1900b: 301 [not *Heteroplax dentatus* Stimpson, 1858].

*Eucrate alcocki* — Shin and Thompson 1982: app.; Morton and Morton 1983: 98; Shin 1989: app. 1; Ong Che and Morton 1991: tab. 1; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Castro and Ng 2010: 18, figs. 2C, 4A–C, 14A–C; Wong et al. 2021: 12, fig. 15, pl. 3C.

*Taxonomy*: Serène and Lohavanijaya (1973), Castro and Ng (2010).

*Type*: Holotype ♂ MNHN-B10134 and paratype ♀ in MNHN (Castro and Ng 2010).

*Type locality*: Nhatrang Bay, Vietnam.

*Distribution*: South China Sea and East Asia: Singapore, eastern Peninsular Malaysia, Gulf of Thailand, Vietnam, the Philippines and South and East China Seas (Castro and Ng 2010).

*Habitat*: Subtidal; substrates muddy-sandy; to depths of 50 m (Dai and Yang 1991).

### *Eucrate crenata* (De Haan, 1835) #

*Pilumnoplax sulcatifrons* Stimpson, 1858b: 93; Stimpson 1907: 90.

*Eucrate crenata* — Alcock 1900b: 300; Gordon 1931: 528; Shen 1940a: 229; Shin and Thompson 1982: app.; Thompson and Horikoshi 1982: tab. 1; Thompson et al. 1982: tab. 1; Thompson and Shin 1983: tab. 4; Shin 1990: tab. 2; Ong Che and Morton 1991: tab. 1; Davie 1992b: tab. 1; SY Lee and Leung 1999: 78; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Castro and Ng 2010: 21, figs. 2A, B, 3A–G, 14D–F; Wong et al. 2021: 12, fig. 16, pl. 3D, E.

*Heteroplax sulcatifrons* — Gee 1926: 163 [list].

*Eucrate sulcatifrons* — Gordon 1931: 528; Shen 1940a: 230; Davie 1992b: tab. 1.

*Taxonomy*: Castro and Ng (2010).

*Type*: Lectotype ♂ RMNH D 287 and paralectotypes in RMNH (designated by Yamaguchi and Baba (1993); see also Fransen et al. (1997)).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to South China Sea and East Asia: questionably Madagascar, Seychelles and northern Australia, verified from the Red Sea, Persian/Arabian Gulf, Arabian Sea, India, Southeast and East Asia (Castro and Ng 2010).

*Habitat*: Subtidal; to depths of 36 m (Castro and Ng 2010).

### *Eucrate solaris* Yang & Sun, 1979

*Eucrate solaris* — SY Lee et al. 2000: tab. 3.

*Taxonomy*: Chen (1998), Hsueh and Huang (2002), Castro and Ng (2010).

*Type*: Holotype ♂ BNHM J79136.

*Type locality*: Beihai, Guangxi, China.

*Distribution*: West Pacific: Gulf of Thailand, the Philippines, South China Sea, Taiwan, Vanuatu; questionably from Ryukyu Islands, Japan (Castro and Ng 2010).

*Habitat*: Subtidal; of muddy-sandy bottom (Dai and Yang 1991); to depths of at least 200 m but with records from tangle nets reaching to 500 m (Castro and Ng 2010).

### *Eucrate tripunctata* Campbell, 1969 #

(Figs. 8, 35C–E)

*Eucrate tripunctata* — present record.

*Taxonomy*: Campbell (1969), Castro and Ng (2010).

*Type*: Holotype ♂ QM W3034 and paratypes in QM.

*Type locality*: Moreton Bay, Queensland, Australia.

*Distribution*: Eastern Indian Ocean to West Pacific: from Queensland Australia), Mergui Archipelago, Singapore, Gulf of Thailand (Castro and Ng 2010) to South China (Hong Kong).

*Habitat*: Intertidal to shallow subtidal; substrates of coarse sand and shell and rock fragments.

*Remarks*: In the recent revision of the family, Castro and Ng (2010) included a live-color photograph under presentation of *E. crenata*, entirely pale orange in color, from intertidal habitats of Hong Kong (fig. 2B; Pl. 1C). From thousands of trawled specimens our colleagues has sorted, none display such coloration. Based on examined material from local shores, given the markedly broad P5 propodus (Fig. 8B), as well as obtuse anterolateral teeth (1 to 3; Fig. 8A) (cf. Campbell 1969; Castro and Ng 2010), we have identified them as

*E. tripunctata* instead. This species is a new record for the fauna of Hong Kong.

### *Henicoplax nitida* (Miers, 1879)

*Henicoplax nitida* — Castro and Ng 2010: 63, figs. 23A–D, 24G, H.

*Taxonomy*: Castro and Ng (2010).
*Type*: Holotype ♀ NHM 78.11 (Castro and Ng 2010).
*Type locality*: Strait of Korea.
*Distribution*: East Asia: South China (Hong Kong) and Japan.
*Habitat*: Shallow subtidal (Castro and Ng 2010).

### *Heteroplax transversa* Stimpson, 1858 #

*Heteroplax transversus* Stimpson, 1858b: 94; Stimpson 1907: 95.
*Heteroplax transversa* — Gee 1926: 163 [list]; Castro and Ng 2010: 73, figs. 27G–I, 28A–F; Wong et al. 2021: 12, fig. 17, pl. 3F.
*Eucrate transversa* — Gordon 1931: 528; Shen 1940a: 229.
*Heteroplax nagasakiensis* — Ong Che and Morton 1991: tab. 1.

*Taxonomy*: Castro and Ng (2010).
*Type*: Presumably lost.
*Type locality*: Hong Kong.
*Distribution*: East Asia: South China and Japan (Castro and Ng 2010).
*Habitat*: Subtidal; to depths of 18 to 50 m (Castro and Ng 2010).

### *Trissoplax dentata* (Stimpson, 1858) #

*Heteroplax dentatus* Stimpson, 1858b: 94; Stimpson 1907: 94.
*Heteroplax dentata* — Gee 1926: 163 [list; "near Hong Kong"].
*Eucrate dentata* — Gordon 1931: 528; Shen 1940a: 229; Davie 1992b: tab. 1.
*Eucrate costata* — Blackmore and Rainbow 2000: app. 1.
*Trissoplax dentata* — Castro and Ng 2010: 98, figs. 39D–F, 40A–F, 41A–G, 43A–C; Wong et al. 2021: 13, fig. 18, pl. 4A.

*Taxonomy*: Castro and Ng (2010).
*Type*: Neotype ♂ QM W27400 (designated by Castro and Ng 2010).
*Type locality*: Tolo Harbour, New Territories, Hong Kong (neotype).
*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Persian/Arabian Gulf, India, Singapore, Thailand to South China, Indonesia and Australia (Castro and Ng 2010).
*Habitat*: Shallow subtidal to depths of 40 m (Castro and Ng 2010).

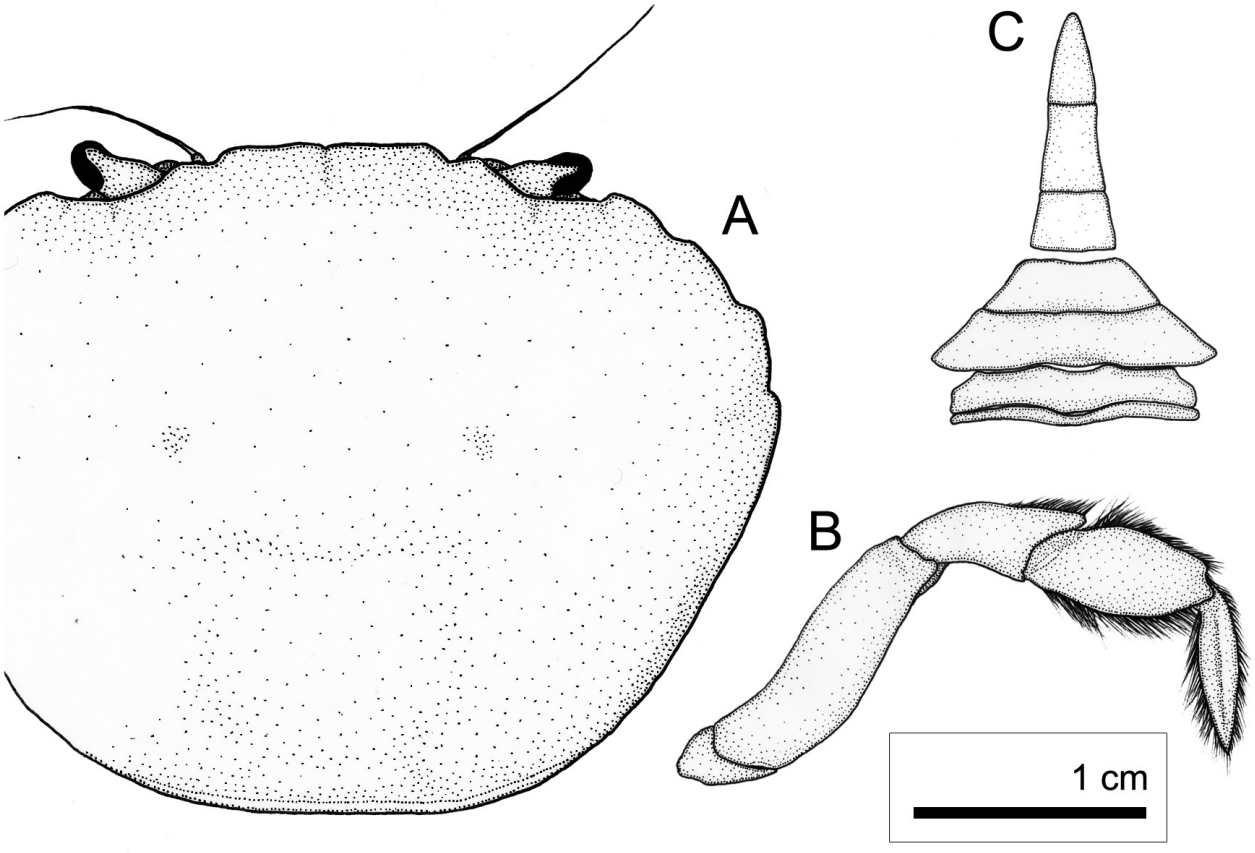



**Fig. 8.** *Eucrate tripunctata* Campbell, 1969 (male, 39.6 × 31.0 mm, Lung Mei): A, carapace; B, right P5; C, pleon.

## Family Goneplacidae Macleay, 1838
## Subfamily Goneplacinae Macleay, 1838

### *Carcinoplax haswelli* (Miers, 1884) #

*Carcinoplax sinica* — Wong et al. 2021: 14, fig. 20, pl. 4C.

*Taxonomy*: Chen (1984: as *C. sinica*), Ng and Mitra (2019: as *C. sinica*), Ng et al. (2022a).

*Type*: Lectotype ♂ and paralectotype ♀ in NHM 1882.7 (designated by Ng et al. 2022a).

*Type locality*: Arafura Sea, Australia.

*Distribution*: West Pacific: Southern Taiwan and South China Sea, to northern Australia and Papua New Guinea (Ng et al. 2022a).

*Habitat*: Subtidal; substrates sandy and stony (Dai and Yang 1991); depths 25 to 187 m, usually less than 100 m (Ng et al. 2022a).

*Remarks*: The better understood *C. sinica* Chen, 1984 has been recorded from various localities in vicinity of the South China Sea (Castro 2007; Ng and Mitra 2019). Ng et al. (2022a) recently demonstrated that a poorly known *Homoioplax haswelli* (Miers, 1884) from northern Australia, the syntypes being juveniles, was a senior synonym of *C. sinica*. The genetics of this and allied species was recently done by Prema et al. (2024).

### *Carcinoplax longimana* (De Haan, 1833)

*Carcinoplax longimanus* — Gordon 1931: 528; Shen 1940a: 229.

*Taxonomy*: Chen (1984), Guinot (1989), Castro (2007).

*Type*: Lectotype ♂ RMHN D 308 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to South China Sea and East Asia: from South Africa, Madagascar, to South and East China Seas and Indonesia (Castro 2007).

*Habitat*: Subtidal; from depths 66 to 377 m (Castro 2007).

### *Carcinoplax purpurea* Rathbun, 1914 #

*Carcinoplax purpurea* — Davie 1992b: tab. 1; Wong et al. 2021: 14, fig. 19, pl. 4B.

*Taxonomy*: Chen (1984), Guinot (1989), Castro (2007).

*Type*: Holotype ♀ USNM 46143.

*Type locality*: Between Luzon and Mindoro, Verde Island Passage, the Philippines.

*Distribution*: Southeast and East Asia: from Indonesia to the Philippines, Vietnam, South and East China, Taiwan and Japan (Castro 2007).

*Habitat*: Subtidal; depths from 17 to 180 m (Castro 2007).

### *Entricoplax vestita* (De Haan, 1833)

*Carcinoplax vestita* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Chen (1984: as *Carcinoplax*), Castro (2007).

*Type*: Lectotype ♀ RMHN D 311; paralectotypes in RMHN and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: East China Sea and Yellow Sea, to Pacific coast of Japan (Castro 2007).

*Habitat*: Subtidal; substrates muddy and sandy (Dai and Yang 1991); depths 15 to 110 m (Castro 2007).

## Family Scalopidiidae Števčić, 2005

### *Scalopidia spinosipes* Stimpson, 1858 #

*Scalopidia spinosipes* Stimpson, 1858b: 95; Alcock 1900b: 325 [part: material from Hong Kong only]; Gordon 1931: 528; Rathbun 1931: 100 [“near Hong Kong”]; Shen 1940a: 230; AC Evans 1967: 407; Davie 1992b: tab. 1; SY Lee et al. 2000: tab. 3; Ng and Castro 2013: 60, figs. 1, 2A–D, 3, 5A, 6A, 7A–D, 8A, B, 9A, B, 10A, B, 11A, B, 12A–D, 14A; Wong et al. 2021: 143, fig. 21, pl. 4D.

*Hypophthalmus leucochirus* Richters, in Lenz & Richters, 1881: 429, pls. 1–10.

*Taxonomy*: Ng and Castro (2013).

*Type*: Lectotype ♂ and paralectotype ♀ in NHM (Stimpson Collection NHM 61.44) (designated by Ng and Castro 2013).

*Type locality*: Hong Kong.

*Distribution*: Southeast and East Asia: Singapore, Indonesia, the Philippines, Gulf of Thailand, to Vietnam and Hong Kong (Ng and Castro 2013).

*Habitat*: Subtidal; substrates muddy-sandy; depths about 20 m (Dai and Yang 1991).

## Superfamily Hexapodoidea Miers, 1886
## Family Hexapodidae Miers, 1886

### *Hexalaughlia orientalis* (Rathbun, 1909) #

*Hexalaughlia orientalis* — Ng and Wong 2019: fig. 1; Wong et al. 2021: 14, fig. 22, pl. 4E.

*Taxonomy*: Rathbun (1910), Guinot (2006).

*Type*: Probably in now NHMD (original text), yet

"not possible to examine" as noted by Guinot (2006).

*Type locality*: North of Koh Kut, eastern Gulf of Thailand.

*Distribution*: South China Sea and East Asia: Gulf of Thailand, South China, Taiwan, and possibly also to Japan (Guinot 2006; Manning and Holthuis 1981).

*Habitat*: Subtidal; substrates muddy, commensal in tubes of annelids (Dai and Yang 1991).

### *Hexapinus simplex* Rahayu & Ng, 2014 #

*Hexapinus simplex* — Ng and Wong 2019: 236, fig. 2; Wong et al. 2021: 14, fig. 23, pl. 4F.

*Taxonomy*: Rahayu and Ng (2014), Naruse et al. (2017).

*Type*: Holotype ♂ MZB-Cru 3790; paratypes in MZB, USNM and ZRC.

*Type locality*: Ekas, Lombok, Indonesia.

*Distribution*: South China Sea and East Asia: Indonesia, Singapore, to South China and Taiwan Strait, and Ryukyus (Japan) (Rahayu and Ng 2014).

*Habitat*: Intertidal and subtidal; from muddy or sandy substrates, or intertidal seagrass beds; has also been reported from tubes of chaetopterid worms (Rahayu and Ng 2014).

### *Mariaplax chenae* Rahayu & Ng, 2014 #

*? Hexapus anfractus* — Morton 1988: 36, pl. 7 [not *Lambdophallus anfractus* Rathbun, 1909].

*? Hexapus granuliferus* — Ong Che and Morton 1991: tab. 1 [not *H. granuliferus* Campbell & Stephenson, 1970].

*Mariaplax chenae* — Ng and Wong 2019: 237, figs. 3–5; Wong et al. 2021: 15, fig. 24, pl. 5A.

*Taxonomy*: Rahayu and Ng (2014), Naruse et al. (2017), Ng and Wong (2019).

*Type*: Holotype ♂ in IOCAS; paratypes in IOCAS and ZRC.

*Type locality*: Coastal waters of Zhejiang, China.

*Distribution*: East Asia: coasts of China to Shandong, and Japan (Rahayu and Ng 2014).

*Habitat*: Subtidal; from depths of 4 to 39 m (Rahayu and Ng 2014).

### *Mariaplax exigua* Ng & Wong, 2019 #

*Mariaplax exigua* Ng & Wong, 2019: 239, figs. 6, 7; Wong et al. 2021: 16, fig. 25, pl. 5B.

*Taxonomy*: Ng and Wong (2019).

*Type*: Holotype ♂ ZRC 2018.0706.

*Type locality*: Tolo Channel, Hong Kong.

*Distribution*: So far from Hong Kong only.

*Habitat*: Subtidal; shallow waters.

## Superfamily Hymenosomatoidea Macleay, 1838
## Family Hymenosomatidae Macleay, 1838
## Subfamily Hymenosomatinae Macleay, 1838

### *Halicarcinus setirostris* (Stimpson, 1858)

*Rhynchoplax setirostris* Stimpson, 1858b: 109; Stimpson 1907: 148; Shen 1940a: 231 [no new specimens].

*Taxonomy*: Shen (1932b: as *H. yangi*), Sakai (1938: as *Rhynchoplax*), Ng et al. (1999b).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: East Asia: coasts of China (South China Sea to Yellow Sea), Taiwan and Japan (Ng et al. 1999b; Ng and Jeng 1999; Yang et al. 2008).

*Habitat*: Subtidal; substrate muddy or shelly; depths 50 to 100 m (Dai and Yang 1991).

### *Neorhynchoplax introversa* (Kemp, 1917) #

(Figs. 9, 35F)

*Neorhynchoplax introversa* — present record.

*Taxonomy*: Kemp (1917: as *Rhynchoplax*), Ng et al. (1999b).

*Type*: Holotype ZSI 9730/10 (original text).

*Type locality*: Tai Hu Lake, Jiangsu (as Kiangsu), China.

*Distribution*: Coasts of China: from estuaries of Pearl River to Yellow Sea.

*Habitat*: Intertidal to freshwater; under rocky fragments along intertidal mudflats, or among foliage on freshwater wetlands.

*Remarks*: This species is a new record for the fauna of Hong Kong.

### *Neorhynchoplax sinensis* (Shen, 1932) #

(Figs. 10, 36A)

*Neorhynchoplax sinensis* — present record.

*Taxonomy*: Shen (1932b: as *Rhynchoplax*), Ng et al. (1999b), Takeda (2001: as *Elamenopsis*).

*Type*: Holotype ♂ ZMFMIB 8615: status unknown.

*Type locality*: Lutao, Shandong, China.

*Distribution*: Coasts of China: from Hainan to Yellow Sea.

*Habitat*: Intertidal; under rock fragments, along crevices, or among oyster clumps.

*Remarks*: This species is a new record for the fauna of Hong Kong.

## Superfamily Leucosioidea Samouelle, 1819
## Family Iphiculidae Alcock, 1896

### *Iphiculus spongiosus* Adams & White, 1849 #

*Iphiculus spongiosus* — Stimpson 1858c: 161; Stimpson 1907: 159, pl. 18(8); Gee 1926: 160 [list; "near Hong Kong"]; Shen 1940a: 215; Ong Che and Morton 1991: tab. 1; Davie 1992b: tab. 1; Wong et al. 2021: 16, fig. 26, pl. 5C.

*Taxonomy*: Serène (1955), Chen (1989), Chen and Sun (2002).

*Type*: Syntypes probably in NHM (NHM Data Portal).

*Type locality*: The Philippines, locality unspecified.

*Distribution*: Western Indian Ocean to South China Sea and East Asia: from Red Sea, India, Singapore, Indonesia, South and East China Seas and Japan (Chen 1989).

*Habitat*: Subtidal; bottom of sandy mud of soft mud, depths of 11 to 204 m (Chen 1989).

### *Pariphiculus mariannae* (Herklots, 1852)

*Pariphiculus mariannae* — Gordon 1931: 527; Shen 1940a: 215; Guinot 1979: 147, pl. 15(8–10); CGS Tan 1996: 1049 [21°44'N, 114°48'E].

*Taxonomy*: Serène and Lohavanijaya (1973), Chen (1989), Chen and Sun (2002), Y-J Shih et al. (2017).

*Type*: Syntypes in "Musée de Louvain" (original text); whereabouts and status unknown (see Fransen et al. 1997: 212 on the museum).

*Type locality*: China, locality unspecified.

*Distribution*: Western Indian Ocean to South China Sea and East Asia: Red Sea, Bay of Bengal, the Philippines, Indonesia, and South China Sea to Japan (Chen 1989).

*Habitat*: Subtidal; substrates of mud, sandy mud; depths 65 to 296 m (Chen 1989).

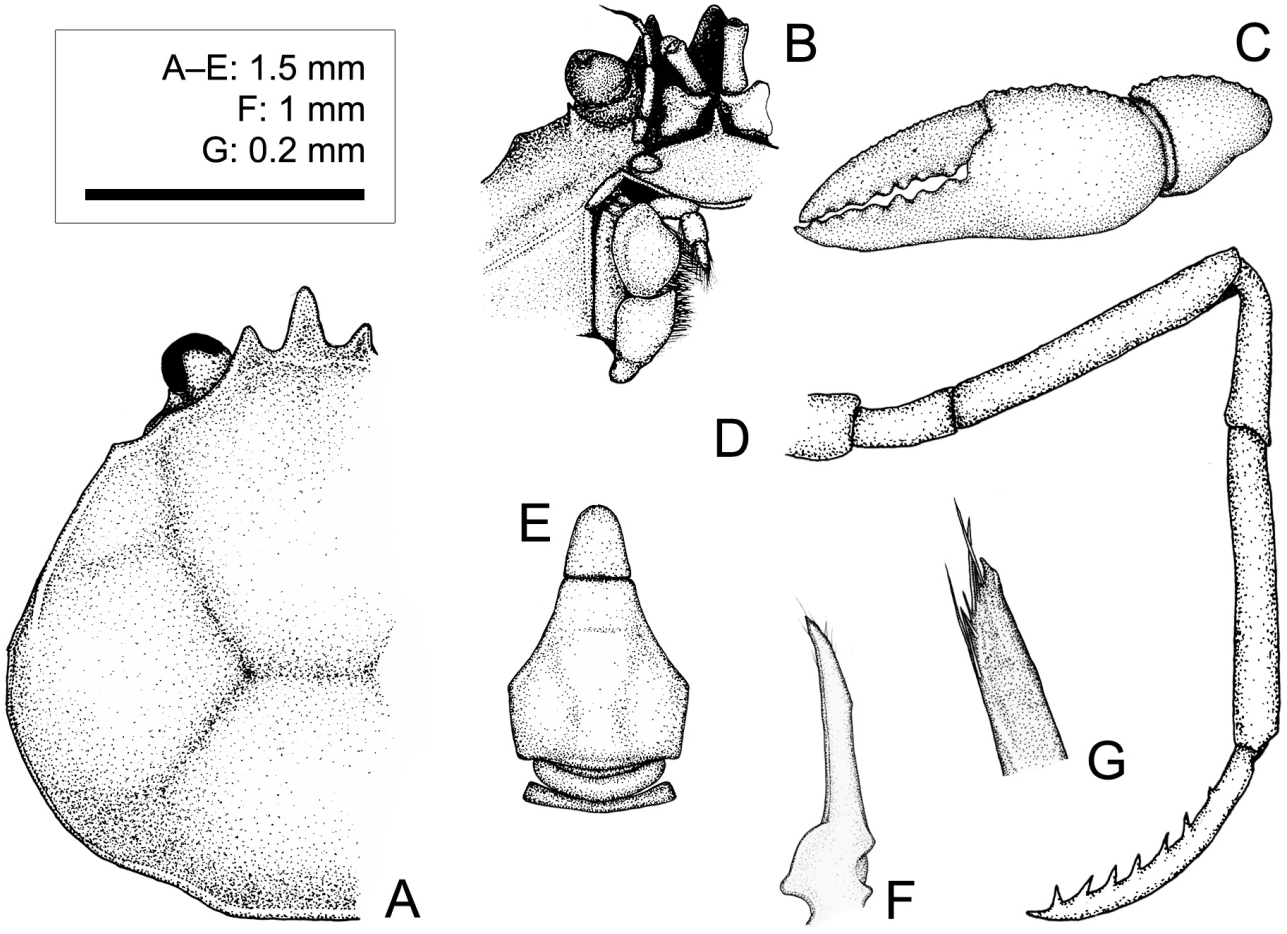



**Fig. 9.** *Neorhynchoplax introversa* (Kemp, 1917) (male, 3.2 × 3.4 mm, Mai Po Marshes): A, carapace; B, frontal region and maxilliped 3, ventral view; C, cheliped carpus and chela; D, right P5; E, pleon; F, right G1, ventral view; G, tip of right G1, ventral view. Structures A to D denuded.

## Family Leucosiidae Samouelle, 1819
## Subfamily Cryptocneminae Stimpson, 1907

### *Onychomorpha lamelligera* Stimpson, 1858

*Onychomorpha lamelligera* Stimpson, 1858c: 162; Stimpson 1907: 164, pl. 19(8, 8a); Gee 1926: 161 [list]; Shen 1940a: 217 [no new specimens].

*Taxonomy*: Serène and Soh (1976), Chen and Sun (2002).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: Eastern Indian Ocean to South China Sea: Palk Strait, Phuket (Thailand), Singapore, Gulf of Thailand, the Philippines and South China (Chen and Sun 2002).

*Habitat*: Subtidal; substrates soft mud, sandy mud or sandy shelly, depths 6 to 27 m (Chen and Sun 2002).

## Subfamily Ebaliinae Stimpson, 1871

### *Alox somphos* C.G.S. Tan & Ng, 1995 #

(Figs. 11, 36B)

*Alox somphos* — present record.

*Taxonomy*: Serène (1954: as *Oreophorus* (*O.*) *rugosus*), CGS Tan and Ng (1995), Galil and Ng (2007).

*Type*: Holotype ♀ ZRC-1984.5644, and paratypes in ZRC and ZMA.

*Type locality*: Sentosa Reef, Singapore.

*Distribution*: Southeast and East Asia: Indonesia, Palau, Singapore, Vietnam (CGS Tan and Ng 1995), and now South China (Hong Kong).

*Habitat*: Lower intertidal and subtidal; under rock fragments, in rocky or coral reefs.

*Remarks*: This interesting species was identified by a slender, gently tapering G1 (Fig. 11E, F) as

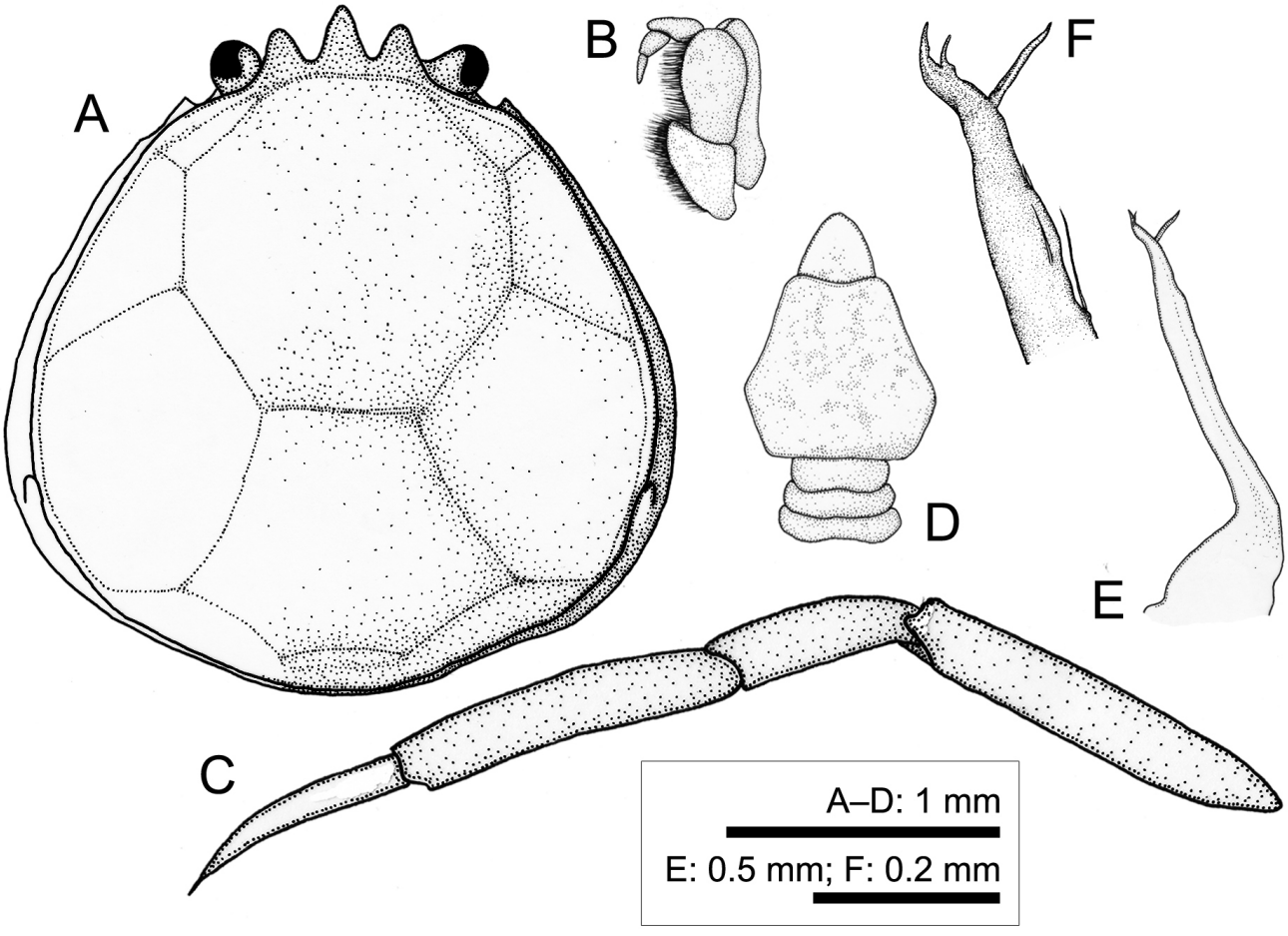



**Fig. 10.** *Neorhynchoplax sinensis* (Shen, 1932) (male, 2.7 × 3.0 mm, Lower Pak Nai): A, carapace; B, maxilliped 3; C, left P5; D, pleon; E, right G1, mesial view; F, tip of right G1, mesial view. Structures A to D denuded.

illustrated by Galil and Ng (2007: fig. 5C, D), as well as overall form of carapace (Figs. 11A, 38B; CGS Tan and Ng 1995: pl. 8D). This is a new record for the fauna of Hong Kong.

### *Arcania globata* Stimpson, 1858

*Arcania globata* — Stimpson, 1858c: 160; Stimpson 1907: 156, pl. 18(9); Gee 1926: 160 [list]; Shen 1940a: 215.

*Taxonomy*: Shen (1937a), Galil (2001a), Chen and Sun (2002).

*Type*: Presumably lost.

*Type locality*: China Seas at 23°N (near Hong Kong).

*Distribution*: East Asia: South China Sea to Yellow Sea, Korea and Japan (Galil 2001a; Chen and Sun 2002).

*Habitat*: Subtidal; substrates sandy, muddy or shelly; depths 30 to 150 m (Chen and Sun 2002).

### *Arcania gracilis* Henderson, 1893

*Arcania quinquespinosa* — Gordon 1931: 527; Shen 1940a: 215; CGS Tan 1996: 1028, figs. 2b, e, 7F [21°42–46'N, 114°47–50'E].
*Arcania gracilis* — Galil 2001a: 184, figs. 2D, 5D.

*Taxonomy*: Chen (1989: as *A. quinquespinosa*), CGS Tan (1996: as *A. quinquespinosa*), Galil (2001a), Chen and Sun (2002: as *A. quinquespinosa*).

*Type*: Syntype ♂ NHM 1884.34 (Galil 2001a).

*Type locality*: Gulf of Martaban, Myanmar.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Red Sea, Persian/Arabian Gulf, India, to Southeast and East Asia, Australia, New Caledonia and Vanuatu (Galil 2001a).

*Habitat*: Subtidal; substrates of sand, mud, shell fragments and coarse sand; depths 21 to 185 m (Chen and Sun 2002).

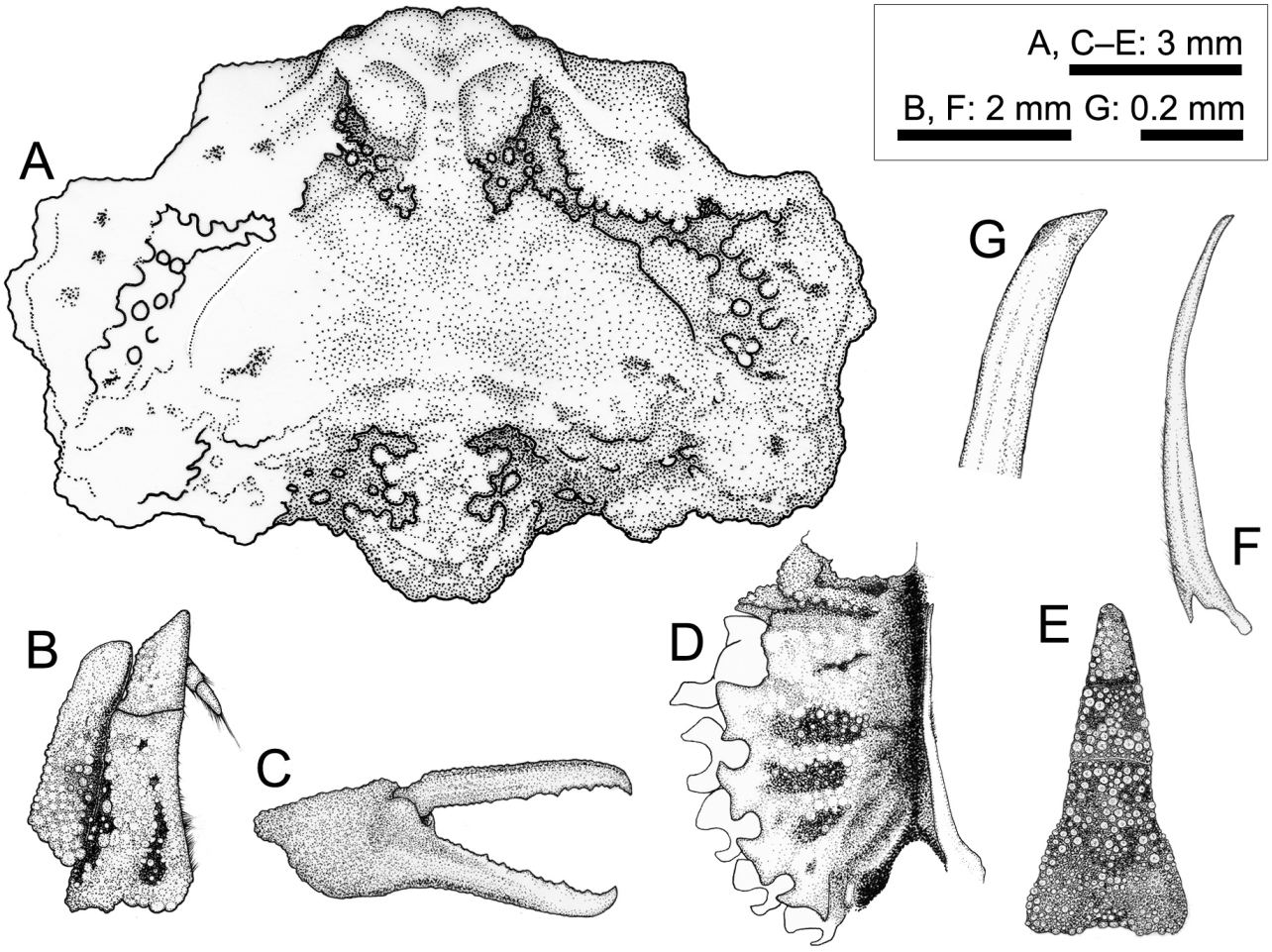



**Fig. 11.** *Alox somphos* C.G.S. Tan & Ng, 1995 (male, 14.7 × 9.9 mm, Shelter Island): A, carapace; B, maxilliped 3; C, chela, right; D, thoracic sternum, showing left G1; E: pleon; F: left G1, mesial view; tip of left G1, mesial view.

### *Arcania heptacantha* De Man, 1907 #

*Iphis septemspinosa* — Stimpson 1858c: 161; Stimpson 1907: 157 [not *Cancer septemspinosa* Fabricius, 1787].
*Arcania heptacantha* — Hill 1982: 201, pl. 4C; Shin and Thompson 1982: app.; Davie 1992b: tab. 1; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Galil 2001a: 187, figs. 2D, 6A; Wong et al. 2021: 16, fig. 27a–c, pl. 5D.

*Taxonomy*: De Man (1907), Galil (2001a), Chen and Sun (2002).

*Type*: Holotype ♀ RMNH D 42112 (Fransen et al. 1997).

*Type locality*: Unknown (Herklots 1861 (*Iphis heptacantha* as *nomen nudum*); Galil 2001a).

*Distribution*: South China Sea and East Asia: Singapore, South and East China Seas, Taiwan and Japan (Galil 2001a).

*Habitat*: Subtidal; substrate soft-muddy or muddy-sandy; depths 6 to 150 m (Chen and Sun 2002).

### *Arcania septemspinosa* (Fabricius, 1787) #

*Arcania septemspinosa* — Miers 1886: 300; Koelbel 1897: 710; Balss 1922a: 132; Gee 1926: 160 [list; "near Hong Kong"]; Gordon 1931: 527; Shen 1940a: 215; CGS Tan 1996: 1029, figs. 1D, 2a [21°42'N, 114°50'E]; Galil 2001a: 192, figs. 3B, 7B; Wong et al. 2021: 16, fig. 27d, e, pl. 5E.

*Taxonomy*: Chen (1989), Galil (2001a), Chen and Sun (2002).

*Type*: Syntypes in ZMK (Zimsen 1964), in present NHMD (examined by second author, not studied by Galil 2001a).

*Type locality*: Indian Ocean.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, Persian/Arabian Gulf, India, to Southeast and East Asia, and northern Australia and Fiji (Galil 2001a).

*Habitat*: Subtidal; substrate muddy sand or soft, muddy; depths 21 to 180 m (Chen and Sun 2002).

### *Arcania tropicalis* Naruse, 2014

*Arcania tropicalis* Naruse, 2014: 320, figs. 18–21.

*Taxonomy*: Naruse (2014).

*Type*: Holotype ♂ NTOU B00111, and paratypes in NTOU, ZRC, NMMB.

*Type locality*: Kezailiao, Kaohsiung, Taiwan.

*Distribution*: West Pacific: Vanuatu, the Philippines, South China (Hong Kong), and Taiwan.

*Habitat*: Subtidal; collected by trawling or tangle nets; to depths of 500 m (Naruse 2014).

### *Arcania undecimspinosa* De Haan, 1841 #

*Arcania undecimspinosa* — Shen 1931a: 107, pl. 10(1); Gordon 1931: 527; Shen 1940a: 215; Davie 1992b: tab. 1; Wong et al. 2021: 17, fig. 28a, pl. 5F.
*Arcania novemspinosa* — Hill 1982: 201, pl. 4D.

*Taxonomy*: Shen (1931a), Sakai (1937), Naruse (2014).

*Type*: Lectotype ♂ in RMNH D 790; and paratypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Seychelles, India, to Southeast and East Asia, to northern Australia, Loyalty Islands and Marquesas Islands (Galil 2001a).

*Habitat*: Subtidal; substrates of sandy-mud, muddy-sand or soft mud; depths 22 to 210 m (Chen and Sun 2002).

### *Ebalia hayamaensis* Sakai, 1963

*Ebalia hayamaensis* — Thompson and Shin 1983: tab. 4.

*Taxonomy*: Sakai (1963), Komatsu (2011).

*Type*: Holotype ♀ in BLIH.

*Type locality*: Hayama, Sagami Bay, Japan.

*Distribution*: Endemic to Japan: Sagami Bay and Ogasawara Islands, Japan (Takeda 1977; Komatsu 2011).

*Habitat*: Subtidal; of depths 65 to 124 m (Komatsu 2011).

*Remarks*: *Ebalia hayamaensis* Sakai, 1963 is known for certain only from Japan thus far (Komatsu 2011). The single local record was based on benthic grab sampling within the Victoria Harbour. We retain this record with much hesitation; the specimen in question needs to be located and re-examined to confirm this record.

### *Ebalia scabriuscula* Ortmann, 1892

*Ebalia scabriuscula* — Morton and Morton 1983: 157.

*Taxonomy*: Sakai (1937: only the female specimen, according to Chen and Sun 2002), Chen (1989), Chen and Sun (2002).

*Type*: Holotype ♀ MZS 645 (Komai 1999).

*Type locality*: Sagami Bay, Japan.

*Distribution*: South China Sea and East Asia: the Philippines, South and East China Seas, and Japan (Chen and Sun 2002).

*Habitat*: Subtidal; substrates sandy, muddy, shelly; depths 50 to 202 m (Chen and Sun 2002; see Remarks

below).

*Remarks*: Many *Ebalia* species, including the present, inhabit deeper waters (holotype of *E. scabriuscula* Ortmann, 1892 from depths of 100 fathoms). The only local record of this species was recorded from intertidal habitats, according to Morton and Morton (1983), "… found in more silty sand beaches…" (p. 157). This record is probably incorrect and belongs to another species, but until the specimens can be re-examined, we retain it with doubt.

### *Hiplyra platycheir* (De Haan, 1841) #

*Philyra platycheira* — Stimpson 1858c: 160; Stimpson 1907: 154; Gee 1926: 161 [list]; Shen 1940a: 216.
*Philyra platychira* — Hill 1982: 199, pl. 3B; Davie 1992b: tab. 1; Blackmore and Rainbow 2000: app. 1.
*Hiplyra platycheir* — Wong et al. 2021: 18, fig. 28b, c, pl. 6A.

*Taxonomy*: Sakai (1937: as *Philyra*), Chen and Sun (2002: as *Philyra*), Galil (2009).

*Type*: Lectotype ♂ RMNH D 793, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South and East China Seas, Taiwan and Japan (Galil 2009).

*Habitat*: Subtidal; substrate sandy; depths 17 to 150 m (Chen and Sun 2002).

### *Ixa cylindrus* (Fabricius, 1777)

*Ixa cylindrus* — Shen 1940a: 216; Hill 1982: 201, pl. 4A.

*Taxonomy*: Holthuis and Gottlieb (1956), Chen and Sun (2002), Takeda and Nagai (2009).

*Type*: Syntypes in NHMD (Zimsen 1964).

*Type locality*: Tharangambadi (= Tranquebar), India.

*Distribution*: Western Indian Ocean to West Pacific: from East Africa, India, Singapore, Thailand, South China Sea, Taiwan, and Australia (Chen and Sun 2002; Davie 2002).

*Habitat*: Subtidal; substrates of fine sand, muddy sand or soft mud; depths 19 to 33 m (Chen and Sun 2002).

### *Ixa edwardsii* Lucas, 1858 #

*Ixa* cf. *inermis* — Hill 1982: 201, pl. 4B [not *I. inermis* Leach, 1817].
*Ixa edwardsii* — Wong et al. 2021: 19, fig. 29, pl. 6B.

*Taxonomy*: Holthuis and Gottlieb (1956), Chen (1989), CGS Tan (1996), Chen and Sun (2002), Takeda and Nagai (2009).

*Type*: Status unknown.

*Type locality*: Unknown.

*Distribution*: Western Indian Ocean to South China Sea: from East Africa, Red Sea, Persian/Arabian Gulf, India, to South China, Taiwan, Philippines and Indonesia (Holthuis and Gottlieb 1956; Chen and Sun 2002).

*Habitat*: Subtidal; substrates of muddy-sand, sandy-mud or soft mud; depths 16 to 76 m (Chen and Sun 2002).

### *Ixoides cornuta* MacGilchrist, 1905

*Ixoides coruntus* (?) — Gordon 1931: 527, 530, text-fig. 7.
*Ixoides cornutus* — Shen 1940a: 215.

*Taxonomy*: Serène and Lohavanijaya (1973), Chen (1989), Galil (2001a: as *Arcania*), Chen and Sun (2002).

*Type*: Syntypes probably in NHM (Davie 2002).

*Type locality*: Persian Gulf.

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar, East Africa, Persian/Arabian Gulf, to Southeast and East Asia, to New Caledonia, Vanuatu and Fiji (Galil 2001a).

*Habitat*: Subtidal; substrates sandy-muddy; depths 28 to 204 m (Chen and Sun 2002).

*Remarks*: The genus *Ixiodes* was synonymized under *Arcania* by Galil (2001) but Ng et al. (2017) argued that it should be recognized as a separate genus as it had several diagnostic morphological features. An ongoing phylogenetic study of these genera by Y.-J. Shih and B. Galil supports this.

### *Lyphira ngankee* Rahayu & Ng, 2024 #

*? Philyra tuberculosa* — Shen 1931b: 185, text-figs. 1–4 [not *P. tuberculosa* Stimpson, 1858 = *P. carinata* Bell, 1855].
*? Philyra globosa* — Shen 1940a: 216 [not *C. globosus* Fabricius, 1793 = *C. globus* Fabricius, 1775].
*Philyra* cf. *laminata* — Hill 1982: 199, pl. 3C [not *P. laminata* Doflein, 1904].
*Philyra heterograna* — Blackmore and Rainbow 2000: app. 1.
*Lyphira heterograna* — Wong et al. 2021: 20, fig. 30a–c, pl. 6C.
*Lyphira ngankee* Rahayu & Ng, 2024: 376, figs. 1E–J, 5A, B, 6D, 8A, 9D, 10E, 11E, 13F, G, 14D, 15F, 16E, 18A–E, 20A–D, 21D.

*Taxonomy*: Rahayu and Ng (2024).

*Type*: Holotype ♂ ZRC 1999.0456, and paratypes in ZRC.

*Type locality*: Nanao Island, Guangdong, China.

*Distribution*: South China: so far only from Guangdong and Hong Kong.

*Habitat*: Subtidal; substrate of soft mud or broken shells.

*Remarks*: There are two primary issues associated with the taxonomy of this species. The first pertains to

the identities of specimens initially referred to "*Philyra tuberculosa*" by Shen in 1931(b) from Hong Kong; and the second is with identities of *L. heterograna sensu stricto*. Shen (1931b) illustrated material he identified as "*P. tuberculosa*" from Hong Kong in considerable detail. He added more figures of the species (Shen 1932) when he compared it with his new species, *Philyra peitaihoensis* Shen, 1932, from northern China. Shen (1940a) subsequently decided that his Hong Kong material should be identified as "*Philyra globosa*" instead. Galil (2009) synonymized *P. peitaihoensis* as well as *Phylira acutidens* Chen, 1987, under *Lyphira heterograna* (Ortmann, 1892), figuring the overall male habitus and a G1 from southern Malaysia (not Indonesia as was stated). Previous records from China were referred to *L. heterograna* by Galil (2009).

*Philyra tuberculosa s. str.* is now regarded as a junior synonym of *P. carinata* (Bell, 1855) (Galil 2009; see below). The name "*Philyra globosa*" presented in Shen (1940a) (citing Fabricius), can be traced back to the names *Cancer globus* Fabricius, 1775 and *C. globosus* Fabricius, 1793, but both represent the same species (Galil 2009). As shown by Galil (2009), the types of *Cancer globus* Fabricius, 1775 consist of two specimens, among which one smaller female was designated as the lectotype of that species by Holthuis (1962). The other male specimen, what H. Milne Edwards (1837) called "*Philyra globulosa*", was shown to be *P. heterograna* (*s. lato*) instead.

Rahayu and Ng (2024) recently revised the taxonomy of *Lyphyira heterograna*, examined and figured the types of *L. heterograna* (type locality: Japan), as well as of specimens from Japan, Korea, East and Southeast Asia, including Indonesian Papua, and showed that it is a complex of six species. *Philyra peitaihoensis* was confirmed to be synonymous with *L. heterograna s. str.*, while *P. acutidens* was regarded as a valid *Lyphira* species and not just representing juveniles as had been supposed by Galil (2009). The specimens Galil (2009) figured as "*P. heterograna*" from Malaysia were shown to belong to new species. Rahayu and Ng (2024) referred material from Hong Kong and southern China, including the records of "*P. tuberculosa*" by Shen (1931b 1932) and "*L. heterograna*" by Wong et al. (2021), to a new species. This species, now *L. ngankee*, differs markedly from *L. heterograna s. str.* in possessing a distinct endostomial spine (see Shen 1931b: fig. 1; 1932: fig. 11c) (versus absent) and the exopod of the third maxilliped is proportionately much wider (see Shen 1931b: fig. 2; 1932: fig. 11f), characters already observed by Shen (1931b 1932) when he compared his material of *P. peitaihoensis* (= *L. heterograna s. str.*) with "*P. tuberculosa*" (= *L. ngankee*) from Hong Kong. There are also differences in the G1 as well as proportions of the chelae and ambulatory meri.

### *Myra celeris* Galil, 2001 #

*Myra fugax* — Stimpson 1907: 152; Gee 1926: 161 [list]; Shen 1931a: 108, pl. 10(2); Gordon 1931: 527; Shen 1940a: 217; Hill 1982: 196, pl. 1A; Morton and Morton 1983: 187, fig. 10.4(3); Blackmore and Rainbow 2000: app. 1 [not *Leucosia fugax* Fabricius, 1798].
*Myra* sp. — Hill 1982: 198, pl. 1B.
*Myra celeris* — Wong et al. 2021: 20, fig. 30d–f, pl. 6D.

*Taxonomy*: Galil (2001b), Chen and Sun (2002: as *M. fugax*).

*Type*: Holotype ♂ RMNH D 43202, and paratypes in RMNH, UMZC and NHM.

*Type locality*: Japan, locality unspecified.

*Distribution*: West Pacific: from South and East China, Taiwan, Japan, to Indonesia, Australia, and New Caledonia (Galil 2001b).

*Habitat*: Subtidal; depths 4 to 52 m (Galil 2001b).

*Remarks*: *Myra celeris* differs from *M. fugax* (Fabricius, 1798) *sensu stricto* by comparatively shorter fingers in relative to palm, and all past records of "*M. fugax*" from East Asia represent *M. celeris* instead (Galil 2001b).

### *Myra hainanica* Chen & Türkay, 2001

*Myra affinis* — Hill 1982: 198, pl. 2A [not *M. affinis* Bell, 1855].

*Taxonomy*: Chen and Türkay (2001), Chen and Sun (2002).

*Type locality*: Off west coast of Hainan, China.

*Type*: Holotype ♂ IOCAS K218B-40 and paratypes in IOASQ (now IOCAS) and SMF.

*Distribution*: South China (Hainan and Hong Kong).

*Habitat*: Subtidal; substrates of sandy mud or soft mud; depths 18 to 30 m (Chen and Sun 2002).

### *Nursia plicata* (Herbst, 1803) #

*Nursia plicata* — Stimpson 1858c: 161; Stimpson 1907: 160; Alcock 1896: 180; Wong et al. 2021: 21, fig. 31a, b, pl. 6E.
*Nursia hardwickii* — Gee 1926: 161 [list] [not *N. hardwichii* Leach, 1817 = *Cancer lar* Fabricius, 1793].
*Nursia lar* — Shen 1940a: 217 [no new specimens] [not *C. lar* Fabricius, 1793].

*Taxonomy*: Alcock (1896), Sakai (1965 1976), Campbell and Stephenson (1970), Serène and Soh (1976), Chen and Sun (2002: as *N. lar*), Naruse and Ng (2006).

*Type*: Holotype ♂ ZMB HERBST 2198 (K Sakai

1999).

*Type locality*: East Indies.

*Distribution*: Arabian Sea to East Asia: Iranian Gulf, India, South China, Taiwan and Japan (Sakai 1976).

*Habitat*: Subtidal; substrates of sand or muddy sand; depths 20 to 35 m (Sakai 1976).

*Remarks*: The record of *N. lar* is based on the list by Shen (1940a), who cited work of Ihle (1918) who regarded *N. hardwickii* Leach, 1817 and *N. plicata* Bell, 1855 as junior synonyms of *Parthenope lar* Fabricius, 1798. According to Alcock (1896), Campbell and Stephenson (1970) and Sakai (1976), however, *N. lar* and *N. plicata* are morphologically distinct. We have little doubt that material as *N. plicata* recorded by Stimpson (1858 1907) and Alcock (1896), and *N. lar* of Shen (1940a) are conspecific, and hence list both under *N. plicata* as above.

### *Nursilia tonsor* Alcock, 1896

*Nursilia tonsor* — CGS Tan 1996: 1045 [“near Hong Kong”: 21°42'N, 114°50'E].

*Taxonomy*: Serène and Soh (1976), Chen (1982 1989), Chen and Sun (2002).

*Type*: Syntypes in ZSI (Serène and Soh 1976).

*Type locality*: Andaman Sea.

*Distribution*: Eastern Indian Ocean to South China Sea: India, Sri Lanka, Thailand, the Philippines and South China (Chen and Sun 2002).

*Habitat*: Subtidal; substrates of muddy sand, shell fragments or soft mud; depths of 33 to 469 m (Chen and Sun 2002).

### *Ovilyra fuliginosa* (Targioni Tozzetti, 1877) #

(Figs. 12, 36C)

*Ovilyra fuliginosa* — present record.

*Taxonomy*: Chen and Sun (2002: as *Philyra olivacea*), Ng (2021).

*Type*: Presumably lost (Lucas 1981; Schubart and Ng 2020).

*Type locality*: Java, Indonesia.

*Distribution*: Southeast and East Asia: Java (Indonesia), Peninsular Malaysia, Singapore, Gulf of Thailand, to Hainan to Zhejiang (South China) (Ng 2021).

*Habitat*: Lower intertidal or shallow subtidal; substrates sandy or muddy (Chen and Sun 2002; Ng 2021).

*Remarks:* Ng (2021) recently showed that *Philyra olivacea* Rathbun, 1909, is a junior synonym of *Philyra fuliginosa* Targioni Tozzetti, 1877, and should be transferred to a new genus, *Ovilyra*. This species is a new record for the fauna of Hong Kong.

### *Paranursia abbreviata* (Bell, 1855) #

*Paranursia abbreviata* — Chen and Sun 2002: 464, fig. 211; Wong et al. 2021: 24, fig. 31c, pl. 6F.

*Taxonomy*: Chen and Sun (2002), BY Lee and NK Ng (2014).

*Type*: Syntypes probably in NHM (Davie 2002).

*Type locality*: Indian Ocean.

*Distribution*: Eastern Indian Ocean to West Pacific: from India, Phuket (Thailand), Malaysia, Singapore, South China, to Australia (see BY Lee and NK Ng 2014).

*Habitat*: Intertidal and shallow subtidal: substrates muddy (as locally in Deep Bay and Lower Pak Nei).

### *Philyra malefactrix* (Kemp, 1915)

*Ebalia malefactrix* — VCS Lai 1999b: 9.
*Philyra malefactrix* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Kazmi and Tirmizi (1990), Chen and Sun (2002: as *P. minuta*), Rahayu and Ng (2003).

*Type*: Lectotype ♂ NHM 1919.11.1.81 (designated by Rahayu and Ng 2003), and paralectotypes in NHM.

*Type locality*: Chilka Lake, Orissa, India.

*Distribution*: Arabian Sea to South China Sea: Pakistan, India, Peninsular Malaysia, Singapore and South China (Kazmi and Tirmizi 1990; Chen and Sun 2002).

*Habitat*: Intertidal; on sandy substrates (Chen and Sun 2002).

### *Pyrhila carinata* (Bell, 1855) #

*Philyra tuberculosa* Stimpson 1858c: 160; Stimpson 1907: 153, pl. 18(5); Gee 1926: 161 [list; “near Hong Kong”]; Gordon 1931: 527.
*Philyra carinata* — Shen 1940a: 216; Fong et al. 2005: 49, 3 unnumb. figs.
*Philyra pisum* — Hill 1982: 199 [in part?]; BKK Chan and Caley 2003: 86, 2 unnumb. figs. [not *Philyra pisum* De Haan, 1841].

*Taxonomy*: Chen and Sun (2002: as *Philyra*), Galil (2009).

*Type*: Holotype ♂ NHM 1847.21 (Galil 2009).

*Type locality*: Borneo.

*Distribution*: South China Sea and coasts of China: Borneo, coasts of China and Korea (Galil 2009).

*Habitat*: Intertidal to shallow subtidal; on sandy or muddy substrates.

*Remarks*: *Pyrhila carinata* and *P. pisum* can be readily distinguished from each other based on a conspicuous granulated ridge along the median line (*P. carinata*), or patch of beaded tubercles around the cardiac region (*P. pisum*) (Galil 2009). Stimpson's (1858c) "*P. tuberculosa*", following his illustrations in 1907, is considered to represent *P. carinata* instead (Galil 2009).

### *Pyrhila pisum* (De Haan, 1841)

*Philyra pisum* — Hill et al. 1978: 92; Hill and Phillipps 1981: 152, pl. 51f; Hill 1982: 199, pl. 3A; Morton and Morton 1983: 157, fig. 9.5(4); Davie 1992b: tab. 1.

*Taxonomy*: Chen and Sun (2002: as *Philyra*), Galil (2009).

*Type*: Lectotype ♂ RMNH D 797, and paralectotypes in RMNH, NSMT, SMF, MNHN, USNM (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: China, Taiwan, Korea and Japan (Galil 2009).

*Habitat*: Intertidal to subtidal; on sandy or muddy substrates (Chen and Sun 2002).

*Remarks*: See remarks under *P. carinata* above.

## Subfamily Leucosiinae Samouelle, 1819

### *Coleusia urania* (Herbst, 1801)

*Leucosia urania* — Shen 1940a: 216.

*Taxonomy*: Chen and Sun (2002: as *Leucosia grandis*), Galil (2006), Ng et al. (2014).

*Type*: Lectotype ♀ ZMB 2183 (designated by Ng et al. 2014).

*Type locality*: Ambon, Indonesia (K Sakai 1999: as *L. anatum*; see Galil 2006 and Ng et al. 2014).

*Distribution*: Eastern Indian Ocean and South China Sea: Andamans, Singapore, Thailand, South

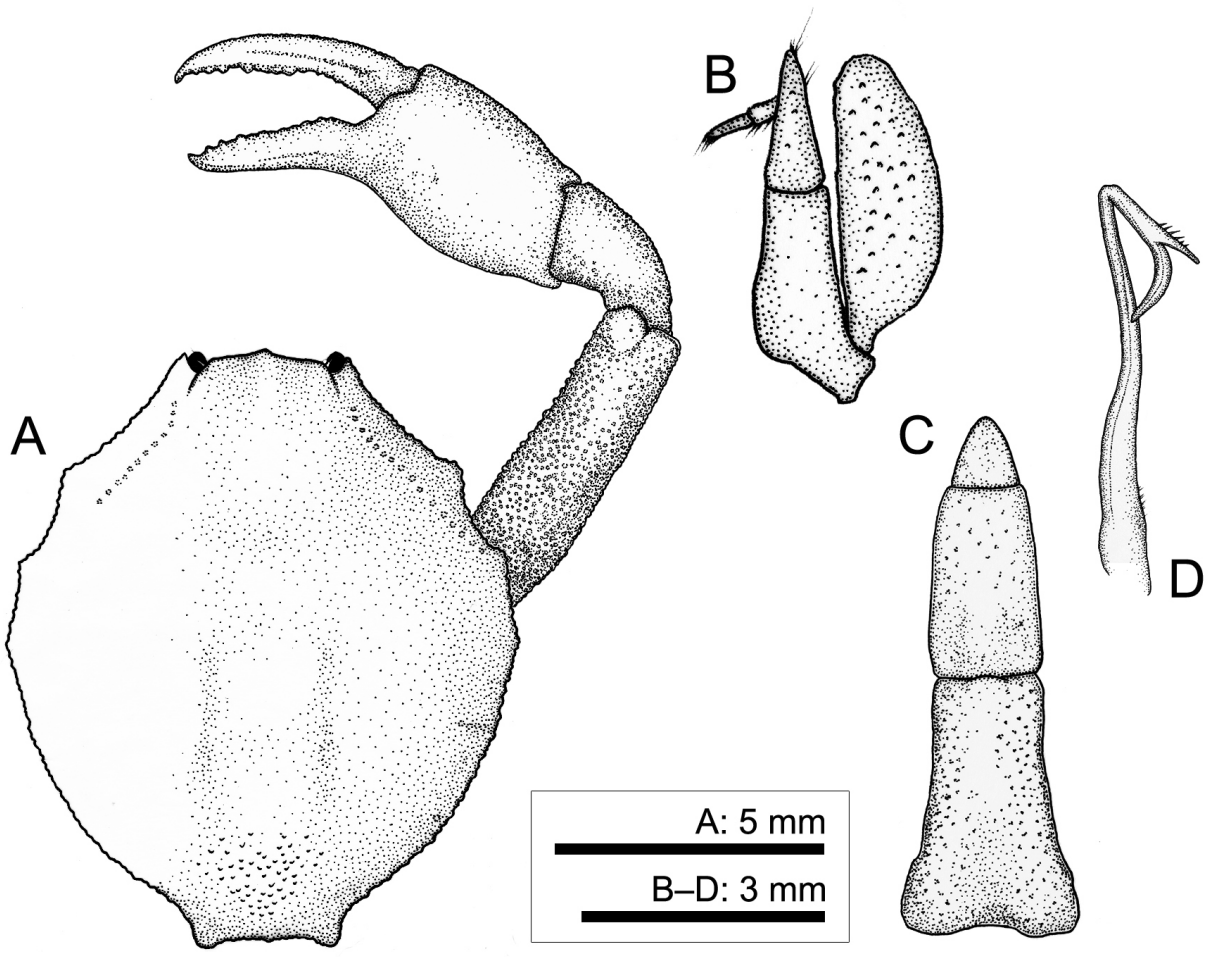



**Fig. 12.** *Ovilyra fuliginosa* (Targioni-Tozetti, 1877) (male, 9.2 × 11.2 mm, Lower Pak Nai): A, carapace and cheliped; B, maxilliped 3; C, pleon; D, left G1, mesial view.

China and Taiwan (Galil 2006; Ng et al. 2014).

*Habitat*: Probably trawled from shallow subtidal habitats (Chen and Sun 2002; Galil 2006).

### *Euclosiana unidentata* (De Haan, 1841)

*Leucosia unidentata* — Alcock 1896: 215; Gordon 1931: 527; Shen 1940a: 216 [no new specimens].
*Leucosia obtusifrons unidentata* — Gee 1926: 160 [list].
*Euclosia unidentata* — Galil 2003b: 342: figs. 2C, 5B, 6I.

*Taxonomy*: Sakai (1937: as *Leucosia*), Chen and Sun (2002: as *Leucosia*), Galil (2003b: *as Euclosia*).

*Type*: Lectotype ♂ RMNH D 808, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South and East China, and Japan (Chen and Sun 2002).

*Habitat*: Subtidal; substrates sandy or muddy, soft mud, or shell fragments; depths of 30 to 168 m (Chen and Sun 2002).

### *Leucosia anatum* (Herbst, 1783)

*Leucosia anatum* — Hill 1982: 203, pl. 5C.

*Taxonomy*: Tyndale-Biscoe and George (1962), Kazmi and Tirmizi (1990), Chen and Sun (2002), Ng et al. (2014).

*Type*: Type material in ZMB (holotype designated by Holthuis 1959; see also Ng et al. 2014).

*Type locality*: Ambon, Indonesia (Holthuis 1959; K Sakai 1999).

*Distribution* (*L. anatum sensu lato*): Eastern Indian Ocean to West Pacific: India, Australia, Indonesia, South China, Korea and Japan (Chen and Sun 2002).

*Habitat*: Subtidal; substrates of coarse sand and mud; depths 12 to 82 m (Chen and Sun 2002).

*Remarks*: The form reported in Hill (1982) roughly corresponds to "morph C" in Tyndale-Biscoe and George (1962: fig. 6), and that presented by Sakai (1976: pl. 34(3)). In both of these works, past records of "*L. anatum*" in the literature had been compiled. It is apparent that this is a species complex (Tyndale-Biscoe and George 1962; Sakai 1976; Kazmi and Tirmizi 1990; Ng et al. 2014) and needs to be revised in the future.

### *Seulocia latirostrata* (Shen & Chen, 1978) #

*Leucosia* cf. *obtusifrons* — Hill 1982: 203, pl. 5A [part?].
*Seulocia latirostrata* — Wong et al. 2021: 24, fig. 32, pl. 7A.

*Taxonomy*: Shen and Chen (1978: as *Leucosia*), Galil (2005b).

*Type*: Holotype ♂ C-00958 and paratypes in IOASQ (now IOCAS).

*Type locality*: Wai-luo, Guangdong, China.

*Distribution*: East Asia: China, Taiwan and Japan (Galil 2005b).

*Habitat*: Subtidal; shallow estuarine seas, in soft substrates.

### *Seulocia rhomboidalis* (De Haan, 1841) #

*Leucosia rhomboidalis* — Alcock 1896: 234; Gee 1926: 160 [list]; Gordon 1931: 527; Shen 1931b: 187, text-figs. 5, 6, pl. 12(1); Shen 1940a: 216.
*Leucosia maculata* — Stimpson 1907: 150, pl. 18(2).
*Leucosides rhomboidalis* — Gee 1926: 160 [list; "near Hong Kong].
*? Leucosia* sp. — Hill 1982: 203, pl. 5B.
*Seulocia rhomboidalis* — Galil 2005b: 51, fig. 2D; Wong et al. 2021: 24, fig. 33, pl. 7B.

*Taxonomy*: Chen and Sun (2002: as *Leucosia*), Galil (2005b).

*Type*: Lectotype ♂ RMHN D 52261 (redesignated by Galil 2005b), and paralectotypes in RMHN (paralectotypes designated by Yamaguchi and Baba 1993; see Galil 2005b).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South and East China Seas and Japan (Chen and Sun 2002; Galil 2005b).

*Habitat*: Subtidal; substrate of sandy mud, soft mud or shell fragments; depths of 20 to 59 m (Chen and Sun 2002).

### *Seulocia vittata* (Stimpson, 1858) #

*Leucosia vittata* Stimpson, 1858c: 159; Stimpson 1907: 149, pl. 18(3, 3a); Shen 1940a: 216 [no new specimens]; Manning and Reed 2006: 287 ["coast of China near Hong Kong"].
*? Leucosia craniolaris* — Miers 1886: 325 [part: Hong Kong material only]; Shen 1940a: 216 [not *Cancer craniolaris* Linnaeus, 1758].
*Leucosides vittata* — Gee 1926: 160 [list; "near Hong Kong"].
*Leucosia craniolaris* — Morton and Morton 1983: 157, fig. 9.5(5) [not *C. craniolaris* Linnaeus, 1758].
*Seulocia vittata* — Galil 2005b: 54, fig. 3B.
*? Seulocia* cf. *vittata* — Wong et al. 2021: 24, fig. 34, pl. 7C, D.

*Taxonomy*: Chen and Sun (2002: as *Leucosia*), Galil (2005b).

*Type*: Lectotype juvenile MCZ 1351 (designated by Galil 2005b), and possible syntype in now NHMD (Manning and Reed 2006).

*Type locality*: Coast of China near Hong Kong.

*Distribution*: Western Indian Ocean to South China Sea: from Mauritius, India, to Thailand, Malaysia, Singapore, South China, the Philippines and Indonesia (Galil 2005b).

*Habitat*: Subtidal; substrates of sandy-mud, muddy sand or soft mud; depths of 11 to 41 m (Chen

and Sun 2002).

*Remarks*: Based on the external and G1 morphology, *L. craniolaris* (Linnaeus, 1758) was revised by Galil (2003a) and restricted to Southeast Asia, Ryukyus, eastwards in the Pacific towards Caroline and Palau Islands. Galil (2005b) reported *S. vittata* and *S. rhomboidalis* from Hong Kong. We have, however, seen substantial variation in the live colorations of "*S. vittata*" from subtidal habitats in Hong Kong (see Wong et al. 2021); more studies are needed to be done to see if the various color forms are all one species.

### *Urnalana haematosticta* (Adams & White, 1849) #

*Urnalana haematosticta* — Wong et al. 2021: 25, fig. 36, pl. 7E.

*Taxonomy*: Chen and Sun (2002: as *Leucosia*), Galil (2005a).

*Type*: Syntypes NHM 1847.21 (Galil 2005a).

*Type locality*: "Eastern seas".

*Distribution*: Eastern Indian Ocean to West Pacific: from Sri Lanka, Thailand, Singapore, South China, to Indonesia, Coral Sea, New Guinea and Australia (Galil 2005a).

*Habitat*: Subtidal; substrates sandy-muddy or shelly; depths 24 to 100 m (Chen and Sun 2002).

## Superfamily Majoidea Samouelle, 1819
## Family Epialtidae Macleay, 1838
## Subfamily Epialtinae Macleay, 1838

### *Huenia heraldica* (De Haan, 1837)

*Huenia proteus* — Morton and Morton 1983: 47, fig. 4.5(2).

*Taxonomy*: Sakai (1938: as *H. proteus*), Griffin and Tranter (1986: as *H. proteus*), Holthuis (1987).

*Type*: Lectotype ♀ RMNH D 42190, and paralectotypes in RMNH (designated by Holthuis 1987; see also Yamaguchi and Baba 1993, Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean to Central Pacific: Australia, Indonesia, South China Sea, Taiwan and Japan, to Hawaii (Griffin and Tranter 1986; Ng et al. 2001; Yang et al. 2008; Castro 2011).

*Habitat*: Subtidal; rocky or weedy beaches, sometimes pebbly bottoms, not more than 50 m deep (Dai and Yang 1991).

*Remarks*: Individuals of this species resemble foliage of the seaweed *Halimeda* sp. (Borradaile 1903) and display extreme variation in the carapace shape (Sakai 1976; as *H. proteus*). Holthuis (1987) showed the name of the species, *H. heraldica* (De Haan, 1837) has priority over *H. proteus* (De Haan, 1839).

### *Menaethius monoceros* (Latreille, 1825)

*Menæthius subserratus* — Stimpson 1857: 219; Stimpson 1907: 25.
*Menaethius monoceros* — Gee 1926: 166 [list]; Shen 1940a: 218 [no new specimens]; Dudgeon 1982: tab. 1; Morton and Morton 1983: 47, fig. 4.5(4).

*Taxonomy*: Sakai (1938), Griffin and Tranter (1986).

*Type*: Syntypes probably in MNHN (Davie 2002).

*Type locality*: Mauritius (as Île-de-France).

*Distribution*: Western Indian Ocean to Central Pacific: East Africa, Red Sea, to South China Sea, Taiwan, Japan, and Hawaii and French Polynesia (Griffin and Tranter 1986; Davie 2002; Ng et al. 2001; Castro 2011).

*Habitat*: Subtidal to intertidal; coasts of rocky, weedy, at low-tide marks (Dai and Yang 1991).

*Remarks*: A number of names synonymous with *M. monoceros* (Latreille, 1825), including *M. subserratus* Adams & White, 1848, have been listed by Sakai (1976), Davie (2002) and De Grave et al. (2022).

### *Pugettia nipponensis* Rathbun, 1932

*Pugettia nipponensis* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Sakai (1938), Griffin and Tranter (1986).

*Type*: Holotype ♂ USNM 48254.

*Type locality*: Domiki-Zaki, Honshu (as Doumiki Saki), Japan.

*Distribution*: West Pacific: from Ambon, Indonesia, to China (East China Sea), Taiwan and Japan (Griffin and Tranter 1986; Ng et al. 2001).

*Habitat*: Subtidal; substrates muddy-sandy or shelly; depths 50 to 150 m (Dai and Yang 1991).

### *Pugettia quadridens* (De Haan, 1839) #

*Pugettia quadridens* — Stimpson 1857: 219; Stimpson 1907: 24; Shen 1940a: 218; ZG Huang and Mak 1982: app.; Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Shen (1932b), Sakai (1938).

*Type*: Lectotype ♂ and paralectotypes in RMHN D 42298 (designated by Yamaguchi and Baba 1993; see Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South China to Bohai Seas and Japan (Dai and Yang 1991).

*Habitat*: Intertidal to subtidal; weedy and muddy-

sandy bottoms, sometimes concealed among seaweeds or in rocky crevices (Dai and Yang 1991).

### *Xenocarcinus tuberculatus* White, 1847

*Xenocarcinus tuberculatus* — Gordon 1934: 69, fig. 37b, c.

*Taxonomy*: Gordon (1934), Sakai (1976), Griffin and Tranter (1986).

*Type*: Holotype ♀ in NHM (Gordon 1934).

*Type locality*: Long Island, Cumberland Group, Queensland, Australia.

*Distribution*: Western Indian Ocean to West Pacific: East Africa, Red Sea, Singapore, East Asia, to Sulu Archipelago and Australia (Griffin and Tranter 1986; Ng et al. 2001).

*Habitat*: Subtidal; commensals of wire coral *Cirrhipathes* spp. (Tazioli et al. 2007), among coral and rock reefs, bottom often weedy; depths 10 to 150 m (Davie 2002).

## Subfamily Pisinae Dana, 1851

### *Doclea armata* De Haan, 1839

*Doclea armata* — Wagner 1986: 908, figs. 12–15, pls. 4, 5.

*Taxonomy*: Wagner (1986), Holthuis (1993).

*Type*: Holotype ♀ RMNH D 36155 (Wagner 1986; Holthuis 1993; Fransen et al. 1997).

*Type locality*: Padang, Sumatra, Indonesia.

*Distribution*: Eastern Indian Ocean to South China Sea: from India, Sri Lanka, Southeast and East Asia to South China (Wagner 1986; Dai and Yang 1991).

*Habitat*: Subtidal; substrates sandy and muddy; depths from a few to 33 m (Wagner 1986).

### *Doclea canalifera* Stimpson, 1857 #

*Doclea canalifera* Stimpson, 1857: 217; Stimpson 1907: 7, pl. 1(4); Gee 1926: 166 [list; "near Hong Kong"]; Gordon 1931: 529; Shen 1940a: 219; Davie 1992b: tab. 1; Wong et al. 2021: 25, fig. 37, pl. 7F.

*? Doclea ovis* — Gordon 1931: 529; Shen 1940a: 219 [not *Cancer ovis* Fabricius, 1787].

*Doclea ovis* — Wagner 1986: 897, figs. 1–4, pls. 1, 2 [part] [not *C. ovis* Fabricius, 1787].

*Taxonomy*: Griffin and Tranter (1986: as *D. japonica*), Wagner (1986: as *D. japonica*), Chen and Ng (2004).

*Type*: Neotype ♂ ZRC 1999.447 (designated by Chen and Ng 2004).

*Type locality*: Nanao Island, Guangdong, China (neotype).

*Distribution*: East Asia: South China, Taiwan and Japan (Chen and Ng 2004).

*Habitat*: Subtidal; muddy bottoms; depths 40 to 50 m deep (Dai and Yang 1991).

### *Doclea rissoni* Leach, 1815 #

*Doclea gracilipes* Stimpson, 1857: 216; Stimpson 1907: 6, pl. 1(1); Alcock 1895: 229; Gee 1926: 166 [list]; Shen 1940a: 219.

*Naxoides hystrix* — Morton and Morton 1983: 187, fig. 10.4(2) [not *Naxia hystrix* Miers, 1886].

*Doclea rissonii* — Wagner 1986: 904, figs. 8–11, pls. 2, 3.

*Doclea rissoni* — Wong et al. 2021: 26, fig. 38, pl. 8A, B.

*Taxonomy*: Wagner (1986).

*Type*: Holotype ♀ BMNH 81a (now NHM) (Wagner 1986; Ingle 2001).

*Type locality*: Unknown.

*Distribution*: Eastern Indian Ocean to South China Sea: from India, Sri Lanka, Mergui Archipelago, Southeast and East Asia to South China (Wagner 1986; Dai and Yang 1991).

*Habitat*: Subtidal; bottoms with fine gravel and mud (Dai and Yang 1991); to depths of 33 m (Wagner 1986).

### *Hyastenus cracentis* Griffin & Tranter, 1986

*Hyastenus cracentis* — Loh and Ng 1999: 64, fig. 4.

*Taxonomy*: Griffin and Tranter (1986), Loh and Ng (1999).

*Type*: Holotype ♂ ZSC 1377-8/7 (now ZSI), and paratypes in ZSI and ZMA.

*Type locality*: Gasper Straits, Java Sea, Indonesia.

*Distribution*: Arabian Sea to West Pacific: from Red Sea, India, South China, to Java Sea (Griffin and Tranter 1986; Loh and Ng 1999).

*Habitat*: Presumably subtidal.

### *Hyastenus diacanthus* (De Haan, 1839) #

*Naxia dicantha* — Stimpson 1857: 218; Stimpson 1907: 16.

*Naxia diacantha* — Heller 1865: 3.

*Halimus diacanthus* — Balss 1924: 32.

*Hyastenus diacantha* — Gee 1926: 166 [list].

*Halimus dicanthus* — Shen 1931b: 194, text-fig. 12, pl. 14(1); Dudgeon 1982: tab. 1.

*Hyastenus diacanthus* — Shen 1940a: 218; Markham 1982: 355; Markham 1992: tab. 1 [list]; Davie 1992b: tab. 1; ZG Huang et al. 1992: app. 1; Li 2003: 153 [no new specimens]; Wong et al. 2021: 26, fig. 39, pl. 8C.

*Taxonomy*: Sakai (1938), Griffin and Tranter (1986).

*Type*: Lectotype and paratypes in RMNH D 742;

and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: West Pacific: Indonesia, to South China Sea, Taiwan Strait and Japan (Griffin and Tranter 1986).

*Habitat*: Subtidal; substrates muddy-sandy or shelly; depths of 50 to 100 m (Dai and Yang 1991).

### *Hyastenus ducator* B.Y. Lee & Ng, 2020 #

*Hyastenus* sp. — Wong et al. 2021: 26, fig. 40, pl. 8D.

*Taxonomy*: BY Lee and Ng (2020).

*Type*: Holotype ♂ in IOCAS and paratype ♂ ♂ in ZRC 2002.0497.

*Type locality*: Qingdao, China.

*Distribution*: East Asia: Coasts of China from Guangdong to Qingdao, Korea and possibly Japan (BY Lee and Ng 2020).

*Habitat*: Subtidal.

*Remarks*: In reporting a rare local "*Hyastenus* sp.", Wong et al. (2021) made comparisons with illustrations of "present anan previously undescribed form, now as *H. ducator* (BY Lee and Ng 2020). *H. pleione*" recorded from Shandong, China by Shen (1932b), sharing more markedly six stout tubercles aligned as a "Y" shape on the gastric region. In elucidating identities of *H. pleione* (Herbst, 1803), Shen's record was shown to represent a previously undescribed form, now known as *H. ducator* (BY Lee and Ng 2020). This species has also been recorded along coasts of South China at Shanwei, Guangdong, and the presence in seas of Hong Kong is not unexpected.

### *Hyastenus hilgendorfi* De Man, 1887 #

*Hyastenus hilgendorfi* — Clark et al. 2008: 920.

*Taxonomy*: Griffin (1968a), Griffin and Tranter (1986).

*Type*: Syntypes probably in ZSI (Davie 2002).

*Type locality*: Eplhinstone Island and King Island Bay, Mergui Archipelago.

*Distribution*: Western Indian Ocean to Central Pacific: from East Africa, Red Sea, Iranian Gulf, India, to South China, the Philippines, Indonesia, Australia and Hawaii (Griffin and Tranter 1986).

*Habitat*: Subtidal; coral reef; substrates sandy with corals, shells, and rubble; depths 2 to 54 m (Davie 2002).

### *Naxioides robillardi* (Miers, 1882)

*? Naxioides* cf. *mammillata* — Dudgeon 1982: tab. 1.
*Naxioides robillardi* — Poupin 1995: 89, figs. 7a–d, 8a, b, 9a, b.

*Taxonomy*: Sakai (1938: as *N. mammillata*), Serène and Lohavanijaya (1973: as *N. mammillata*), Griffin (1974), Poupin (1995).

*Type*: Holotype ♀ NHM 1882.4 (Poupin 1995).

*Type locality*: Mauritius.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, East Africa, to the Philippines, South and East China Seas, Japan, to Indonesia, Solomon and Norfolk Islands (Poupin 1995).

*Habitat*: Subtidal; on continental shelf, substrates ranging from sand to mud or rock and broken shell; depths 30 to 260 m (Davie 2002).

### *Phalangipus filiformis* Rathbun, 1916

*Phalangipus filiformis* — Griffin 1973a: 172, figs. 1b, 3e, f, 6b, 7b, 8g, h ["near Hong Kong"]; Griffin 1976: 204 ["near Hong Kong": 21°42–54'N, 114°46–50'E].

*Taxonomy*: Griffin (1973a).

*Type*: Holotype ♂ USNM 48223 (Griffin 1973a).

*Type locality*: East of Leyte, the Philippines.

*Distribution*: Western Indian Ocean to West Pacific: from Maldives Islands, Arabian Sea, Malay Archipelago, to South China Sea and Taiwan, towards northwest and northern Australia (Griffin 1973a).

*Habitat*: Subtidal; on continental shelf, substrates of sand to mud; depths 10 to 114 m (Davie 2002).

### *Phalangipus longipes* (Linnaeus, 1758)

*Leptopus longipes* — Stimpson 1857: 216; Stimpson 1907: 5.
*Egeria herbstii* — Heller 1865: 4 [not *E. herbstii* H. Milne Edwards, 1834 = *E. indica* Leach, 1815].
*Phalangipus* (*Egeria*) *herbstii* — Gee 1926: 166 [list] [not *E. herbstii* H. Milne Edwards, 1834].
*Plalangipus longipes* — Gee 1926: 166 [list].
*Egeria arachnoides* — Gordon 1931: 529.
*Phalangipus longipes* — Shen: 1931b: 191, text-figs. 8–11, pl. 13; Griffin 1973a: 182, figs. 1c, 3c, d, 6d, 7d, 8a, b.
*Egeria longipes* — Shen 1940a: 218.

*Taxonomy*: Griffin (1973a).

*Type*: Neotype ♂ USNM 138270 (designated by Griffin 1973a).

*Type locality*: North Andaman Sea (neotype).

*Distribution*: Eastern Indian Ocean to West Pacific: Bay of Bengal, Andaman Sea, to Southeast and East Asia to Taiwan, to New Guinea and Australia (Griffin 1973a).

*Habitat*: Subtidal; substrates sandy or muddy-

sandy; depths 10 to 100 m (Dai and Yang 1991).

## Family Inachidae Macleay, 1838
## Subfamily Inachinae Macleay, 1838

### *Achaeus japonicus* (De Haan, 1839)

*Achæus japonicus* — Stimpson 1857: 25; Stimpson 1907: 18.
*Achaeus japonicus* — Gee 1926: 166 [list]; Shen 1940a: 218.

*Taxonomy*: Sakai (1938).
*Type*: Syntype RMNH D 42106 (only mouthparts; see Yamaguchi and Baba 1993, Fransen et al. 1997).
*Type locality*: Japan, locality unspecified.
*Distribution*: East Asia: China (Guangdong to East China Sea) and Japan (Dai and Yang 1991).
*Habitat*: Subtidal; substrates usually weedy and rocky, sometimes sandy or muddy; depths 20 to 100 m (Dai and Yang 1991).

### *Achaeus lacertosus* Stimpson, 1857 #

*Achaeus lacertosus* — Wong et al. 2021: 26, fig. 42, pl. 8E.

*Taxonomy*: Griffin and Yaldwyn (1965), Griffin (1970b), Sakai (1976), Dai and Chen (1992).
*Type*: Presumably lost.
*Type locality*: Port Jackson, New South Wales, Australia.
*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Persian/Arabian Gulf, India, to South China, Japan, towards Java Sea, Aru and Kai Islands to Australia (Griffin and Tranter 1986).
*Habitat*: Subtidal; muddy to sandy substrates with shells or coral rubble (Davie 2002).

### *Achaeus tuberculatus* Miers, 1879 #

*Achaeus tuberculatus* — Dudgeon 1982: tab. 1; Wong et al. 2021: 27, fig. 42a–d, pl. 8F.

*Taxonomy*: Shen (1937a), Sakai (1938).
*Type*: Syntypes probably in NHM.
*Type locality*: 33°10'N, 129°12'E (near Nagasaki, Japan).
*Distribution*: East Asia: coasts of China north to Bohai Seas, and Japan (Shen 1937a; Takeda and Miyake 1969b; Griffin and Tranter 1986).
*Habitat*: Subtidal; substrates muddy, muddy-sandy or shelly; depths 30 to 200 m (Dai and Yang 1991).

### *Camposcia retusa* (Latreille, 1829) #

*Camposcia rectusa* (sic) — Shen 1940a: 218.
*Camposcia retusa* — Dudgeon 1982: tab. 1; Wong et al. 2021: 27, fig. 42e, f, pl. 9A.

*Taxonomy*: Sakai (1938), Takeda (1973).
*Type*: Probably in MNHN if still extant (Davie 2002).
*Type locality*: Unknown.
*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Red Sea, to South China Sea, Taiwan and Japan, Palau to Australia (Griffin and Tranter 1986; Ng et al. 2001; Yang et al. 2008).
*Habitat*: Subtidal, occasionally intertidal; substrate rocky or weedy; depths 1 to 30 m (Dai and Yang 1991).

## Family Majidae Samouelle, 1819
## Subfamily Majinae Samouelle, 1819

### *Leptomithrax eldredgei* Richer de Forges & Ng, 2015

*Leptomithrax eldredgei* Richer de Forges & Ng, 2015: 124, figs. 1, 2 ["off Hong Kong"].

*Taxonomy*: Richer de Forges and Ng (2015).
*Type*: Holotype ♂ ZRC 1970.2.17.1, and paratypes in ZRC.
*Type locality*: South China Sea near Hong Kong.
*Distribution*: South China: so far known only from type locality.
*Habitat*: Subtidal; on continental shelf.

### *Micippa philyra* (Herbst, 1803) #

*Micippa philyra* — Gordon 1931: 529; Shen 1940a: 219; Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 47.

*Taxonomy*: Sakai (1938), Buitendijk (1939).
*Type*: Holotype ♀ ZMB HERBST 0077 (K Sakai 1999).
*Type locality*: East Indies.
*Distribution*: Western Indian Ocean to West Pacific: from Mauritius, Maldives, to Singapore, South China, Taiwan, Japan, to Indonesia and Australia (Buitendijk 1939).
*Habitat*: Subtidal to intertidal; rocky lower intertidal zone (Yeh et al. 2006); at coral reef and rocky reef, associated with coral sponges, rubble and algae; depths up to 90 m (Davie 2002).

### *Micippa platipes* Rüppell, 1830

*Micippa platipes* — Dudgeon 1982: tab. 1.

*Taxonomy*: Sakai (1938), Buitendijk (1939).
*Type*: Status unknown (Davie 2002).
*Type locality*: Red Sea.

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Red Sea, India, Southeast and East Asia, to Indonesia, Coral Sea and New Caledonia (Buitendijk 1939; Davie 2002; Yang et al. 2008).

*Habitat*: Subtidal to intertidal; on and under encrusted rocks and dead coral in coral reefs and reef flats (Davie 2002); or beaches near the shoreline to depths of 20 m (Dai and Yang 1991).

### *Micippa thalia* (Herbst, 1803) #

*Micippa thalia* — Alcock 1895: 251; Dudgeon 1982: tab. 1; Thompson and Horikoshi 1982: tab. 1; Davie 1992b: tab. 1.

*Taxonomy*: Sakai (1938), Barnard (1950).

*Type locality*: East Indies.

*Type*: Holotype ♀ ZMB HERBST 0075 (K Sakai 1999).

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Red Sea, India, to South China, Japan, towards Australia and New Caledonia (Dai and Yang 1991; Davie 2002).

*Habitat*: Subtidal; at coral reef and rock reef, associated with broken shell, coral and sponge; or on muddy, muddy-sandy or shelly bottoms; depths 20 to 100 m (Dai and Yang 1991; Davie 2002).

### *Ovimaja compressipes* (Miers, 1879)

*Leptomithrax compressipes* — Shen 1940a: 219.

*Taxonomy*: Dai (1981: as *Maja brevispinosis*), Griffin and Tranter (1986), Ng and Richer de Forges (2015).

*Type*: Holotype ♀ NHM 1860.15 (Griffin and Tranter 1986; Ng and Richer de Forges 2015).

*Type locality*: Guangzhou (as Canton), China.

*Distribution*: South China Sea and East Asia: from Indonesia, Thailand, the Philippines, to South China, Taiwan and Japan (Ng and Richer de Forges 2015).

*Habitat*: Subtidal; substrates sandy-muddy; depths less than 50 m (S-H Wu 1999).

### *Prismatopus aculeatus* (H. Milne Edwards, 1834)

*Chlorinoides aculeatus* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Sakai (1938: as *Acanthophrys*), Griffin and Tranter (1986: as *Thacanophrys*); Ng et al. (2001).

*Type*: Status unknown, probably in MNHN (Davie 2002).

*Type locality*: "mers d'Asie": seas of Asia.

*Distribution*: Eastern Indian Ocean to West Pacific: from Sri Lanka, Mergui Archipelago, to Singapore, Thailand, South China and Taiwan, and Torres Strait and Australia (Sakai 1976; Yang et al. 2008).

*Habitat*: Subtidal; substrates rocky and weedy (Dai and Yang 1991); body often decorated with corals and sponges (Davie 2002).

### *Schizophrys aspera* (H. Milne Edwards, 1834) #

*Schizophrys aspera* — Shen 1940a: 219; Horikoshi and Takeda 1982: tab. 1; Dudgeon 1982: tab. 1; Morton and Morton 1983: 274.

*Taxonomy*: Griffin and Tranter (1986), BY Lee et al. (2018).

*Type*: Lectotype ♀ MNHN-B463 (designated by BY Lee et al. 2018).

*Type locality*: Unknown.

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Red Sea, to South China, Taiwan Japan, towards Fiji and Australia (Griffin and Tranter 1986; Ng et al. 2001; Yang et al. 2008); probably introduced to New Zealand (Ahyong and Wilkens 2011) and Hawaii (Carlton and Eldredge 2009; Castro 2011).

*Habitat*: Subtidal to subtidal; rocky bottoms near to the shore, and sandy bottoms of coral reefs (Dai and Yang 1991).

*Remarks*: B.Y. Lee et al. (2018) discussed the many taxonomic and nomenclatural problems with this species.

## Superfamily Orithyioidea Dana, 1852
## Family Orithyiidae Dana, 1852

### *Orithyia sinica* (Linnaeus, 1771) #

*Orithyia mammillaris* — Shen 1931a: 106, pl. 9(1–3); Shen 1940a: 214.

*Orithyia sinica* — Wong et al. 2021: 28, fig. 43, pl. 9B.

*Taxonomy*: Chen (1993), Chen and Sun (2002), Ng et al. (2008).

*Type*: Status unknown (Holm 1957; Wallin 2001).

*Type locality*: China, locality unspecified.

*Distribution*: East Asia: along coasts of China to Korea.

*Habitat*: Subtidal; shallow seas of muddy-sandy substrates (Chen and Sun 2002).

## Superfamily Palicoidea Bouvier, 1898
## Family Palicidae Bouvier, 1898

### *Parapalicus trituberculatus* (Chen, 1981)

*Palicus bidentatus* Sakai, 1983a: 630, fig. 3g–j [southeast of Hong Kong Island, 21°42'N, 114°50'E].
*Parapalicus trituberculatus* — Castro 2000: 517, figs. 26c, 28, 58 [southeast of Hong Kong: 21°42'N, 114°50'E].

*Taxonomy*: Chen (1981: as *Palicus*), Sakai (1983a: as *Palicus bidentatus*), Castro (2000).

*Type*: Holotype ♂ S209B-14, and paratypes in IOASQ (now IOCAS).

*Type locality*: South China Sea southeast of Hong Kong (21°N, 114°30'E).

*Distribution*: West Pacific: from Aru Sea, Indonesia, the Philippines, Gulf of Tonkin to northern South China Sea (Castro 2000).

*Habitat*: Subtidal; on continental shelf from depths 69 to 122 m (Castro 2000).

## Superfamily Parthenopoidea Macleay, 1838
## Family Parthenopidae Macleay, 1838
## Subfamily Parthenopinae Macleay, 1838

### *Cryptopodia fornicata* (Fabricius, 1787) #

*Cryptopodia fornicata* — Stimpson 1857: 220; Stimpson 1907: 31; Gee 1926: 166 [list]; Shen 1940a: 217 [no new specimens]; Chiong and Ng 1998: 161, figs. 2–7, 10B; Wong et al. 2021: 29, fig. 44, pl. 9C.

*Taxonomy*: Chiong and Ng (1998).

*Type*: Lectotype ♀ ZMUC Cru 397 (now NHMD) (designated by Chiong and Ng 1998).

*Type locality*: Tharangambadi (as Tranquebar), India.

*Distribution*: Central Indian Ocean to South China Sea and East Asia: Central Indian Ocean, Andaman Islands, Singapore, the Philippines, Borneo, Indonesia, South China and Japan (Chiong and Ng 1998).

*Habitat*: Subtidal, substrates broken-shelly and muddy-sandy; depths 25 to 30 m (Dai and Yang 1991).

### *Cryptopodia transitans* (Ortmann, 1893)

*Cryptopodia angusta* Rathbun, 1916: 559 ["near Hong Kong": 21°42'N, 114°50'E].
*? Heterocrypta transitans* — Thompson and Horikoshi 1982: tab. 1.

*Taxonomy*: Sakai (1965 1976: as *Heterocrypta*), SH Tan and Ng (2003).

*Type*: Syntypes in MZS 920 (Komai 1999: as *Heterocrypta*).

*Type locality*: Sagami Bay, Japan.

*Distribution*: South China Sea and East Asia: the Philippines, South China, Taiwan and Japan (Sakai 1976).

*Habitat*: Subtidal: substrates sandy or broken-shelly; depths 30 to 150 m (Sakai 1976).

### *Enoplolambrus echinatus* (Herbst, 1790) #

*Lambrus tuberculosus* Stimpson, 1857: 220; Stimpson 1907: 29; Shen 1940a: 217.
*Parthenope tuberculosa* — Gee 1926: 166 [list; "near Hong Kong"].
*Parthenope tuberculosis* — SY Lee et al. 2000: tab. 3.
*Enoplolambrus echinatus* — Wong et al. 2021: 30, fig. 45, pl. 9D.

*Taxonomy*: Flipse (1930: as *L.* (*Platylambrus*) *echinatus* and *L.* (*P.*) *echinatus* var. *granulosus*), SH Tan et al. (1999: as *Platylambrus*).

*Type*: Lectotype ♀ ZMB HERBST 2055 and paralectotype in ZMB (K Sakai 1999).

*Type locality*: Tharangambadi (as Tranquebar), India.

*Distribution*: Eastern Indian Ocean to South China Sea: from East India, Singapore, Thailand, Vietnam, to South and East China, Taiwan, and Indonesia (Flipse 1930; SH Tan et al. 1999).

*Habitat*: Subtidal, substrates broken-shelly or muddy; depths about 30 m deep (Dai and Yang 1991).

### *Enoplolambrus laciniatus* (De Haan, 1839) #

*Lambrus laciniatus* — Stimpson 1857: 220; Stimpson 1907: 29.
*Lambrus validus* — Shen 1931a: 109, pl. 10(3); Shen 1940a: 217; Morton and Morton 1983: 187, fig. 10.4(1) [not *Parthenope* (*Lambrus*) *validus* De Haan, 1837].
*Enoplolambrus laciniatus* — Wong et al. 2021: 30, fig. 46, pl. 9E, F.

*Taxonomy*: Sakai (1976: as *Parthenope* (*Platylambrus*) *validus* forma *laciniatus*), SH Lee et al. (2016).

*Type*: Lectotype ♂ RMNH D 39124, and paralectotypes in RMHN and USNM (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South China, Korea, and Japan (Sakai 1976; SH Lee et al. 2016; Wong et al. 2021).

*Habitat*: Subtidal; substrates sandy or muddy, of shallow estuarine seas (material from local trawl surveys).

*Remarks*: Based on material from recent local trawl surveys, three species of *Enoplolambrus* are present in seas adjacent to Hong Kong, of which *E. laciniatus* is the most common one. Past local records

of *Lambrus* (or *Parthenope*) *validus* probably include *E. laciniatus*. Precise illustrations of local material were provided by Wong et al. (2021).

### *Enoplolambrus validus* (De Haan, 1837) #

*? Lambrus validus* — Balss 1922a: 134; Gordon 1931: 529; Thompson and Horikoshi 1982: tab. 1; Thompson and Shin 1983: tab. 4.
*? Parthenope validus* — Gee 1926: 166 [list]; Hill et al. 1978: 92, 114; Davie 1992b: tab. 1; Morton and Ruxton 1992: 1 unnumb. fig. (50); Blackmore and Rainbow 2000: app. 1; Shin 2000: tab. 1.
*? Parthenope valida* — Ong Che and Morton 1991: tab. 1.
*Enoplombrus validus* — Wong et al. 2021: 31, fig. 47, pl. 10A.

*Taxonomy*: Sakai (1976: as *Parthenope* (*Platylambrus*) *validus* forma *validus*).

*Type*: Lectotype ♀ and paralectotypes in RMNH D 701, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: West Pacific: China, Taiwan, Korea and Japan (Shen 1932b; Kim 1973; Sakai 1976; Dai and Yang 1991; Wong et al. 2021), likely also the Philippines (Estampador 1937), Indonesia (Buitendijk 1939) and Queensland, Australia (Campbell and Stephenson 1970).

*Habitat*: Subtidal; substrates of sand, mud or broken shells; depths 30 to 200 m (Sakai 1976).

*Remarks*: See Remarks under *E. laciniatus* above.

### *Parthenope longimanus* (Linnaeus, 1758)

*Lambrus longimanus* — Gordon 1931: 529; Shen 1940a: 217.

*Taxonomy*: Flipse (1930: as *Lambrus* (*Lambrus*)), SH Tan et al. (1999).

*Type*: Status unknown (see below).

*Type locality*: "Oceano Asiatico": Asian Seas.

*Distribution*: Western Indian Ocean to West Pacific: from Mauritius, India, Southeast and East Asia reaching Japan, to Indonesia, New Guinea and Australia (Flipse 1930; Sakai 1976; Davie 2002).

*Habitat*: Subtidal, substrates muddy-sandy; depths 60 to 70 m (Dai and Yang 1991).

*Remarks*: Extant Linnaean material compiled by Holm (1957: p. 56) and Wallin (2001: p. 16) includes one male individual of *Cancer longimanus* Linnaeus, 1758. However, this specimen was indicated to be a donation from "Gustav IV Adolf", among material examined by Linnaeus after 1758 (Holm 1957; Wallin 1992) and thus is not a type of the species.

### *Rhinolambrus lippus* (Lanchester, 1902) #

(Figs. 13, 36D, E)

*Rhinolambrus lippus* — present record.

*Taxonomy*: Lanchester (1902: as *Lambrus*), Trivedi and SH Tan (2019).

*Type*: Holotype ♂ UMZCI 10519 (Trivedi and SH Tan 2019).

*Type locality*: Peninsular Malaysia.

*Distribution*: Western Indian Ocean to South China Sea: Madagascar, Djibouti, India and Peninsular Malaysia (Lanchester 1902; Nobili 1906; Trivedi and SH Tan 2019), to South China.

*Habitat*: Shallow subtidal: substrate of rock fragments; depths around 5 m (local material).

*Remarks*: Morphology of the only locally collected male agrees well with original descriptions based on material from an unknown locality in the Peninsular Malaysia (Lanchester 1902), extending distribution of this interesting species from the Indian Ocean to and northern South China Sea (Hong Kong). This species is a new record for the fauna of Hong Kong.

## Superfamily Pilumnoidea Samouelle, 1819
## Family Galenidae Alcock, 1898
## Subfamily Dentoxanthinae Števčić, 2005

### *Parapanope orientalis* Ng & Guinot, 2021 #

*Parapanopeus euagora* — SY Lee and Leung 1999: tab. 2 [not *P. euagora* De Man, 1895].
*Parapanope euagora* — Wong et al. 2021: 32, fig. 51, pl. 10E [not *P. euagora* De Man, 1895].

*Taxonomy*: Shen (1937a: as *P. euagora*), Guinot (1985: as *P*. sp.), Ng and Guinot (2021).

*Type*: Holotype ♂ ZRC 2020.0404, and paratypes in ZRC.

*Type locality*: Shacheng, Fujian, China.

*Distribution*: East Asia: South China to Zhejiang, Korea and Japan (Ng and Guinot 2021).

*Habitat*: Subtidal; substrates sandy and shelly, or in shallow waters on coral reefs, to depths of 35 m (Sakai 1976; Ng and Guinot 2021).

*Remarks*: Guinot (1985) had doubts about specimens she had from China and Japan, which were referred to *P. euagora* De Man, 1895. Ng and Guinot (2021) revised the genus with fresh material from East Asia and transferred relevant records, including those from Japan to a new species, *P. orientalis*. Local material recently reported as *P. euagora* by Wong et al. (2021), having anterolateral lobes broadly triangular rather than laciniated with margins sinuous, and gastric regions moderately raised, are here identified

as *P. orientalis*. As for the subfamily, Ng and Mitra (2021) argued that Parapanopinae Števčić, 2005 and Dentoxanthinae Števčić, 2005 were subjective synonyms and selected the latter name to have priority.

### Subfamily Galeninae Alcock, 1898

### *Galene bispinosa* (Herbst, 1783) #

*Galene bispinosa* — Alcock 1898: 136; Gee 1926: 163 [list]; Gordon 1931: 527; Shen 1940a: 227; SY Lee and Leung 1999: tab. 2; Wong et al. 2021: 31, fig. 48, pl. 10B.

*Taxonomy*: Guinot (1969b), Ng (1998).

*Type*: Lectotype ♂ ZMB HERBST 0170, and paralectotypes in ZMB (designated by K Sakai 1999).

*Type locality*: "East Indies".

*Distribution*: Eastern Indian Ocean to West Pacific: from East India, Mergui Archipelago, Singapore, South China, Taiwan, to northern Australia (Dai and Yang 1991; Davie 2002).

*Habitat*: Subtidal; substrates sandy and muddy, shallow waters (Dai and Yang 1991).

### Subfamily Halimedinae Alcock, 1898

### *Halimede fragifer* (De Haan, 1835) #

*Halimede fragifer* — Stimpson 1858a: 33; Stimpson 1907: 50; Gee 1926: 163 [list; "near Hong Kong"]; Shen 1940a: 225 [no new specimens]; Galil 2000: 326, fig. 1A, B; Wong et al. 2021: 31, fig. 49, pl. 10C.

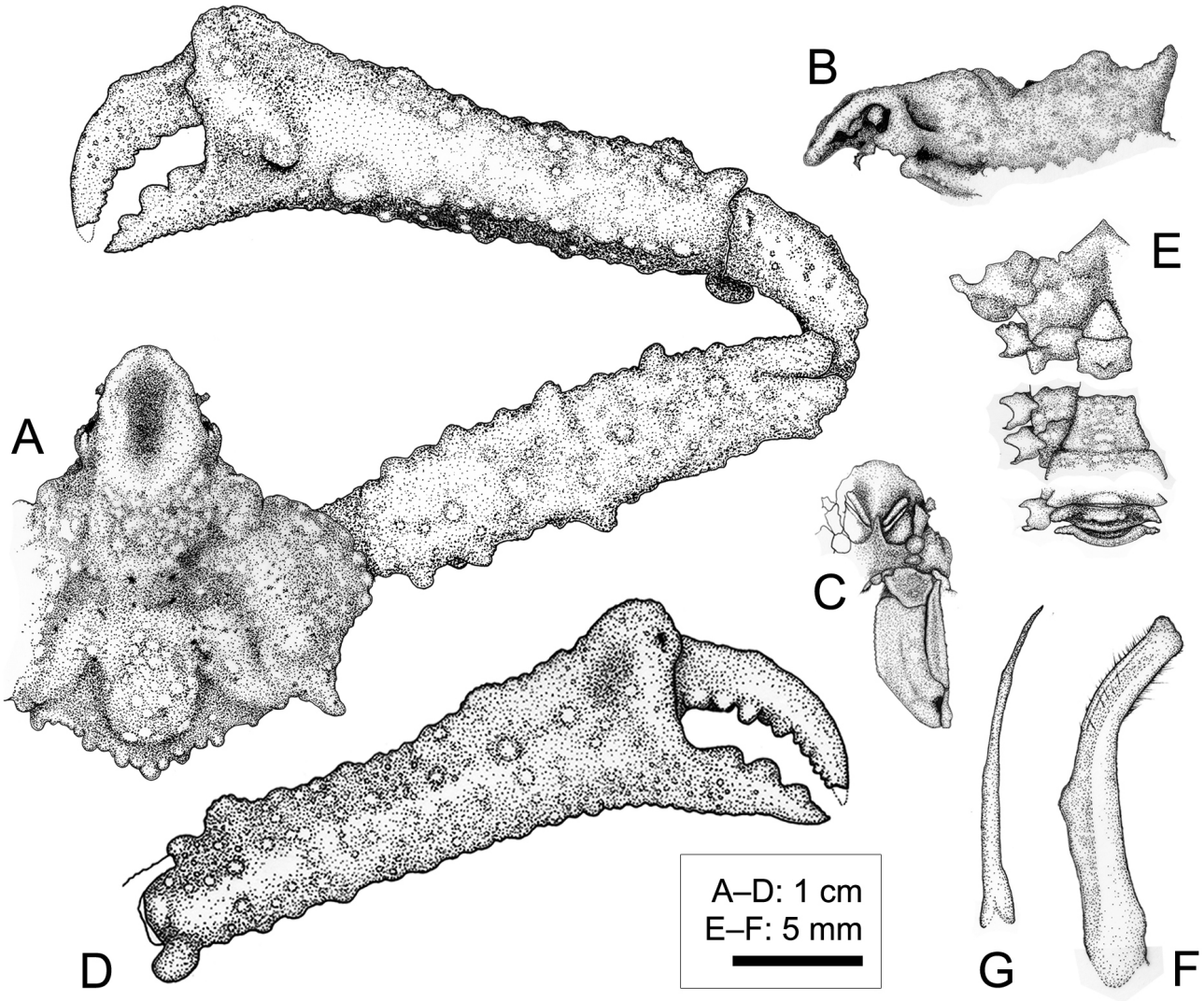



**Fig. 13.** *Rhinolambrus lippus* (Lanchester, 1902) (male, 36.0 × 33.8 mm, Clear Water Bay): A, carapace and cheliped; B, carapace, lateral view; C, frontal region and maxilliped 3, ventral view; D, right chela, ventral view; E, pleon and thoracic sternites; F, left G1, ventral view; G, left G2, ventral view.

*? Halimede thurstoni* — Gee 1926: 163 [list].
*? Halimede tyche* — Gordon 1931: 528; Shen 1940a: 225 [not *Cancer tyche* Herbst, 1801].

*Taxonomy*: Galil (2000).
*Type*: Holotype ♂ RMNH D 42183 (Yamaguchi and Baba 1993; Fransen et al. 1997; Galil 2000).
*Type locality*: Japan, locality unspecified.
*Distribution*: West Pacific: South China, Taiwan, Japan, and New Caledonia.
*Habitat*: Subtidal; substrates muddy or sandy-muddy; depths 20 to 50 m (Dai and Yang 1991).

### *Halimede ochtodes* (Herbst, 1783) #

*Polycremnus verrucifer* Stimpson, 1858a: 33; Stimpson 1907: 49, pl. 6(1); Gee 1926: 163 [list; "near Hong Kong"]; AC Evans 1967: 406.
*Halimede ochtodes* — Gee 1926: 163 [list]; Gordon 1931: 528; Shen 1940a: 225; Davie 1992b: tab. 1; Galil 2000: 328, fig. 2A, B; Wong et al. 2021: 31, fig. 50, pl. 10D.

*Taxonomy*: Galil (2000).
*Type*: Holotype ♀ ZMB HERBST 0144 (K Sakai 1999).
*Type locality*: "East Indies".
*Distribution*: Arabian Sea to West Pacific: from Pakistan, India, Southeast and East Asia to South China, to Indonesia and Australia (Galil 2000; Davie 2002).
*Habitat*: Subtidal; substrates muddy or muddy-sandy; depths 20 to 50 m (Dai and Yang 1991).

## Family Pilumnidae Samouelle, 1819
## Subfamily Eumedoninae Dana, 1852

### *Ceratocarcinus frontodentata* (Shen, Dai & Chen, 1982)

*Harrovia frontodentata* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Shen et al. (1982: as *Harrovia*), Chia and Ng (1998).
*Type*: Holotype ♂ and paratype ♂ in IOASQ (now IOCAS).
*Type locality*: Haimen, Guangdong, China.
*Distribution*: So far only from South China (Chia and Ng 1998).
*Habitat*: Subtidal; possibly symbiotic with crinoids as in congeneric *C. longimanus* White, 1847 (Castro et al. 1995).

### *Ceratocarcinus trilobatus* (Sakai, 1938)

*Ceratocarcinus trilobatus* — Morton 1988: 20, pl. 2.

*Taxonomy*: Sakai (1938: as *Harrovia*), Chia and Ng (1998).
*Type*: Status and whereabouts unknown.
*Type locality*: Shimoda, Japan.
*Distribution*: East Asia: South China and Japan.
*Habitat*: Subtidal; symbiotic with comasterids (Sakai 1938), or from *Dendronethya*, a soft coral (Dai and Yang 1991).

### *Harrovia albolineata* Adams & White, 1849 #

*Ceratocarcinus albolineatus* — Stimpson 1857: 221; Stimpson 1907: 33; Shen 1940a: 218 [no new specimens].
*Harrovia albolineata* — Gee 1926: 166 [list]; Wong et al. 2021: 32, fig. 52. pl. 10F.

*Taxonomy*: Chia et al. (1993), Chia and Ng (1998).
*Type*: Lectotype ♂ BMNH 43.6 (now NHM), and paralectotype ♀ in NHM (designated by Chia et al. 1993).
*Type locality*: Philippine Islands.
*Distribution*: West Pacific: Sahul Shelf and Sunda Shelf (Chia and Ng 1998).
*Habitat*: Subtidal; associated with crinoids; depths 10 to 140 m (Chia and Ng 1998).

### *Permanotus purpureus* (Gordon, 1934)

*Harrovia bituberculata* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Gordon (1934: as *Harrovia*), Chia and Ng (1998).
*Type*: Holotype ♂ IRSNB IG 9223 (Chia and Ng 1998).
*Type locality*: now Irian Jaya, Indonesia (as Sorong, New Guinea).
*Distribution*: West Pacific: from Australia, Papua New Guinea, Indonesia, East Malaysia, to South China, Taiwan and Japan (Chia and Ng 1998; Yang et al. 2008).
*Habitat*: Subtidal, of shallow waters, associated with crinoids (Chia and Ng 1998).

## Subfamily Pilumninae Samouelle, 1819

### *Actumnus dorsipes* (Stimpson, 1858)

*Pilumnus dorsipes* Stimpson, 1858a: 37; Stimpson 1907: 70, pl. 9(3, 3a); Gee 1926: 163 [list].
*Actumnus asper* — Shen 1940a: 227 [no new specimens].

*Taxonomy*: Sakai (1939), Takeda and Miyake (1969c).
*Type*: Probably lost.
*Type locality*: Hong Kong.
*Distribution*: West Pacific: from northwestern Australia, the Philippines, to South China and Japan

(Garth and Kim 1983; Dai and Yang 1991; Hosie et al. 2015).

*Habitat*: Subtidal; substrates shelly; depths 20 to 60 m (Sakai 1976); or between crevices of rocks or coral reefs, or among roots of algae or within sponges at depths of 10 to 15 m (Dai and Yang 1991).

*Remarks*: Shen (1940a), following Balss (1933), recognized *A. dorsipes* (Stimpson, 1858) a junior synonym of *A. asper* (Rüppell, 1830). Sakai (1939) examined material from Japan (*A. dorsipes*) and Palau (*A. asper*) and reported both as distinct, with material reported in Shen's (1940a) and Stimpson's (1858a) reports probably conspecific.

### *Actumnus elegans* De Man, 1888

*Actumnus elegans* — Clark et al. 2008: 921.

*Taxonomy*: Chopra and Das (1937), Takeda and Miyake (1969c), Sakai (1983b).

*Type*: Syntype RMNH D 1356c, other syntypes possibly also in ZMA (Fransen et al. 1997; Davie 2002).

*Type locality*: Lampi Island (as Sullivan Island), Mergui Archipelago, Myanmar.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Western Australia, Mergui Archipelago, the Philippines, South China, and Japan (Takeda and Miyake 1969c; Garth and Kim 1983; Davie 2002; Clark et al. 2008).

*Habitat*: Subtidal; associated with epifauna, among coral head and sponges, often in areas with faster flowing waters (Goh et al. 1990; Clark et al. 2008).

*Remarks*: The record presented by Clark et al. (2008) was identified based on work of Takeda and Miyake (1969c). The understanding of this species in the latter paper was considered erroneous by Sakai (1983b: p. 11), given frontal and anterolateral margins shown (Takeda and Miyake 1969c: fig. 1) differ substantially from the syntype in the ZSI, illustrated by Chopra and Das (1937: text-fig. 12).

### *Actumnus setifer* (De Haan, 1835) #

*Actumnus setifer* — Alcock 1898: 202; Gordon 1931: 527; Shen 1940a: 227; Horikoshi and Takeda 1982: tab. 1; Johnson et al. 2008: 262, figs. 1–3; Wong et al. 2021: 33, fig. 53, pl. 11A.

*Taxonomy*: Sakai (1939 1965), Takeda and Miyake (1969c), Campbell and Stephenson (1970).

*Type*: Lectotype ♂ and paralectotype in RMNH D 42108, 42109, paralectotypes also in RMNH and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Mauritius, Red Sea, to Southeast and East Asia reaching Japan, towards New Caledonia, Australia, Vanuatu, Fiji, Samoa, and Tahiti (Johnson et al. 2008).

*Habitat*: Subtidal; in crevices of rock or coral reefs, or depths from littoral to 200 m (Dai and Yang 1991; Johnson et al. 2008); also reported to be excavating burrows in living or dead coral clumps (Johnson et al. 2008).

### *Actumnus squamosus* (De Haan, 1835) #

*Actumnus squamosus* — Wong et al. 2021: 35, fig. 54, pl. 11B.

*Taxonomy*: Sakai (1939 1965), Takeda and Miyake (1969c), Campbell and Stephenson (1970).

*Type*: Holotype RMNH D 44480: only maxilliped 3 extant (Yamaguchi and Baba 1993; Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean to West Pacific: from Palk Strait (India), Sri Lanka, Singapore, Southeast and East Asia reaching Japan, and Queensland (Australia) (Takeda and Miyake 1969c; Campbell and Stephenson 1970).

*Habitat*: Intertidal to subtidal; to depths of 35 m (Sakai 1976).

### *Aniptumnus quadridentatus* (De Man, 1895) #

(Figs. 14, 36F)

*Aniptumnus quadridentatus* — present record.

*Taxonomy*: Takeda (2001: as *Pilumnopeus riui*), Ng (2002b), Ng and Clark (2008), Hari et al. (2022).

*Type*: Lectotype ♂ and paralectotype ♀ in RMNH D 1483 (designated by Ng 2002b; see also Fransen et al. 1997).

*Type locality*: Pontianak, western Borneo, Indonesia.

*Distribution*: South China Sea: so far from Papua (Indonesia), Borneo, Singapore, and South China (Takeda 2001; Ng and Clark 2008; Widyastuti and Rahayu 2022).

*Habitat*: Intertidal; among barnacle clumps in mangroves (Mendoza and Ng 2011); locally shallow subtidal, proximal to the shore.

*Remarks*: This species is a new record for the fauna of Hong Kong.

### *Bathypilumnus sinensis* (Gordon, 1930)

*Pilumnus sinensis* Gordon, 1930: 523; Gordon 1931: 527, text-figs. 14, 15, 16(a, b); Shen 1940a: 228.

*Taxonomy*: Gordon (1931: as *Pilumnus*), Balss (1933: as *Pilumnus*), Ng and Tan (1984).

*Type*: Holotype ♀ and paratype ♂ in NHM.

*Type locality*: Hong Kong.

*Distribution*: Arabian Sea to South China Sea: from Lakshadweep Islands (= Laccadives), Gulf of Thailand, to Singapore and South China (Ng and Tan 1984).

*Habitat*: Subtidal; substrates sandy, shelly and muddy; depths 12 to 70 m (Ng and Tan 1984).

### ***Benthopanope eucratoides*** **(Stimpson, 1858)** #

*Heteropanope eucratoides* Stimpson, 1858a: 35; Stimpson 1907: 64, pl. 8(2, 2a); Shen 1940a: 227.
*Heteropahope eucratoides* — Gee 1926: 163 [list].
*? Heteropanope eucratoides* — Melville and Morton 1983: 18, 1 unnumb. fig. (29).

*Taxonomy*: De Man (1888b: as *Heteropanope*), Balss (1938: as *Pilumnopeus*), Davie (1989).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: Eastern Indian Ocean to South China Sea: Mergui Archipelago, Malaysia and Singapore, and South China (Balss 1938; Lim et al. 1986).

*Habitat*: Intertidal and shallow subtidal (Dai and Yang 1991).

### ***Glabropilumnus laevimanus*** **(Dana, 1852)**

*Pilumnus laevimanus* — Gordon 1931: 527; Shen 1940a: 228 [no new specimens].
*Glabropilumnus laevimanus* — Galil and Takeda 1988: 72, figs. 3C, 4.

*Taxonomy*: Galil and Takeda (1988).

*Type*: Presumably lost.

*Type locality*: Balabac Strait (as Balabac Passage), north of Borneo.

*Distribution*: Western Indian Ocean to West Pacific: from East Africa, Red Sea, to Southeast and East Asia reaching Taiwan; Indonesia, Western Australia and New Caledonia (Galil and Takeda 1988).

*Habitat*: Intertidal to shallow subtidal; coral or rocky reefs (Galil and Takeda 1988).

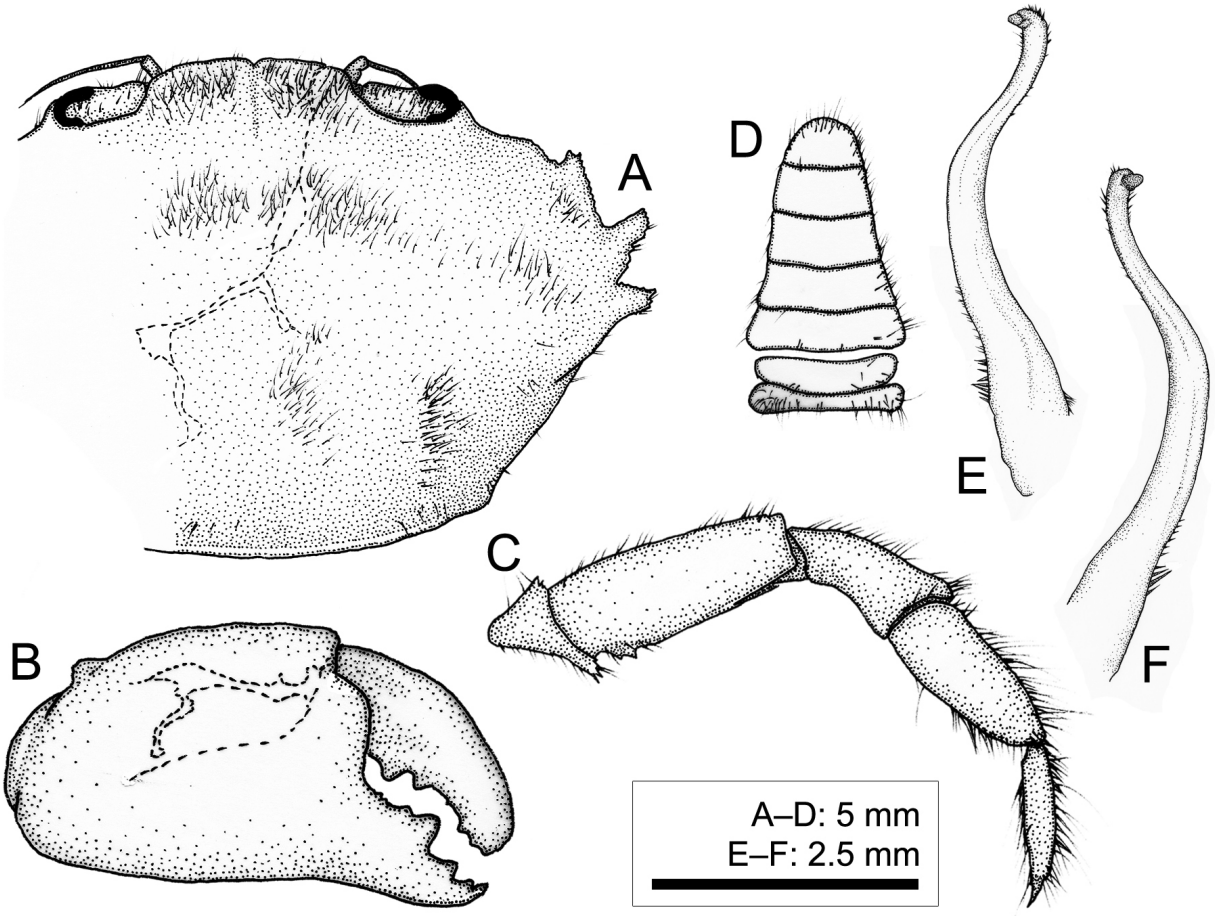



**Fig. 14.** *Aniptumnus quadridentatus* (De Man, 1895) (male, 16.1 × 10.6 mm, off Castle Peak): A, carapace; B, major chela; C, P5, right; D, pleon; E, right G1, mesial view; F, right G1, lateral view. Structures A, C and D partially denuded; dashed line showing damage of specimen.

### *Glabropilumnus seminudus* (Miers, 1884)

*Pilumnus seminudus* — Gordon 1931: 542, text-fig. 17a.
*Glabropilumnus seminudus* — Shen 1940a: 228.

*Taxonomy*: Galil and Takeda (1988).
*Type locality*: Thursday Island, Queensland, Australia.
*Type*: Holotype ♀ BM 1882:7 and paratypes in NHM (Galil and Takeda 1988).
*Distribution*: West Pacific: from northern Australia, Indonesia, to South China (Galil and Takeda 1988); exotic species in Hawaii (Carlton and Eldredge 2009).
*Habitat*: Probably intertidal and shallow subtidal; recovered from fouling on hull of a barge (Edmondson 1962).

### *Heteropanope glabra* Stimpson, 1858 #

*Heteropanope glabra* Stimpson, 1858a: 35; Stimpson 1907: 63, pl. 8(1); Gee 1926: 163 [list]; Shen 1940a: 227; J Jiang and Zhou 1982: 681.

*Taxonomy*: Serène (1973a), Davie (1989).
*Type*: Probably lost.
*Type locality*: Hong Kong.
*Distribution*: Western Indian Ocean to West Pacific: from East Africa, the Mergui Archipelago, Singapore, South China, Taiwan, to northern Australia and New Caledonia (Davie 1989).
*Habitat*: Intertidal; in muddy and mangrove environments, sometimes with substantial freshwater influences, locally common among oyster clumps or rock crevices.

### *Heteropilumnus ciliatus* (Stimpson, 1858)

*Heteropilumnus ciliatus* — Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 273, fig. 7.3(10).

*Taxonomy*: Shen (1936a: as *H. cristadentatus*), Sakai (1939).
*Type*: Presumably lost.
*Type locality*: Shimoda (as Simoda), Japan.
*Distribution*: East Asia: coasts of China to Shandong, Korea and Japan.
*Habitat*: Intertidal; under rock fragments, on muddy substrates (Dai and Yang 1991).

### *Heteropilumnus cristatus* (Rathbun, 1909) #

*Heteropilumnus cristata* — Wong et al. 2021: 36, fig. 55, pl. 11C.

*Taxonomy*: Rathbun (1910: as *Litochira*).
*Type*: Holotype ♀ and paratypes probably in NHMD (original text).
*Type locality*: Two miles south of Koh Tutu, Gulf of Thailand.
*Distribution*: South China Sea: so far from Gulf of Thailand and South China (Hong Kong).
*Habitat*: Local female specimen collected among abandoned fish net, trawled from sandy-muddy substrates of depths 20 to 40 m.

### *Heteropilumnus holthuisi* Ng & Tan, 1988 #

*Litocheira subintegra* — Gordon 1931: 528, text-fig. 25b.
*Heteropilumnus subinteger* — Balss 1933: 42, pl. 7(32, 33); Shen 1936a: 65; Shen 1940a: 228.

*Taxonomy*: Balss (1933: as *H. subinteger*), Ng and Tan (1988).
*Type*: Holotype ♂ and paratypes in NHM 1900.10.22.175, and paratypes in ZRC.
*Type locality*: Singapore.
*Distribution*: Eastern Indian Ocean to South China Sea: from Mergui Islands to Singapore or Malacca, to South China (Guangxi to Fujian) (Ng and Tan 1988; Yang et al. 2008).
*Habitat*: Intertidal and subtidal; under rocks on muddy substrata (Ng and Tan 1988).
*Remarks*: As demonstrated in Ng and Tan (1988), the name *Carcinoplax subinteger*, established in Lanchester (1900: p. 750) was intended to "replace" the name *Carcinoplax integra* Miers, 1884, and thus based on the same type specimen. As such the name *C. subinteger* is not available. *Carcinoplax integra* s. str., a species from western Indian Ocean, is very distinct from the present West Pacific form previously called *C. subinteger* but referred to a new name, *H. holthuisi* by Ng and Tan (1988). Mier's (1884) *C. integra* is now in *Pseudolitochira* Ward, 1942 (see Ng 1987; Maenosono 2019; Ng et al. 2021).

### *Latopilumnus conicus* Ng & Clark, 2008

*Latopilumnus conicus* Ng & Clark, 2008: 893, figs. 6–12; Clark et al. 2008: 922.

*Taxonomy*: Ng and Clark (2008).
*Type locality*: Conic Island, Hong Kong.
*Type*: Holotype ♂ NHM 2003.690; paratypes in NHM and ZRC.
*Distribution*: South China: so far from Hong Kong only.
*Habitat*: Subtidal; within submarine caves (for description and discussions on sites, see Morton and Bamber 2008).

### *Nanopilumnus rouxi* (Balss, 1935) #

*Nanopilumnus rouxi* — Clark et al. 2008: 922.

*Taxonomy*: Serène and Umali (1972: as *Medaeus*), Takeda (1974), Tirmizi and Ghani (1986).

*Type locality*: Pamban, Gulf of Mannar, India.

*Type*: Holotype ♂ in Basel Museum (now NMBA), Switzerland.

*Distribution*: Arabian Sea to South China Sea and East Asia: from Pakistan, India, to Singapore, South China and Japan.

*Habitat*: Shallow subtidal.

### *Pilumnopeus convexus* (Maccagno, 1936) #

*Pilumnopeus convexus* — Wong et al. 2020: 2, figs. 1–4.

*Taxonomy*: Davie (1989), Ghory et al. (2013), Wong et al. (2020).

*Type*: Lectotype ♀ in MCG (designated by Davie 1989).

*Type locality*: Assab, Eritrea (as Aseb, Ethiopia), southern Red Sea.

*Distribution*: Western Indian Ocean: Chagos Archipelago, southern Red Sea, Persian/Arabian Gulf, Pakistan and India (Ghani and Davie 2000; Ghory et al. 2013); exotic species in Hong Kong (South China).

*Habitat*: Intertidal and shallow subtidal; often among oyster clumps or fouling.

### *Pilumnopeus makianus* (Rathbun, 1931) #

*Pilumnopeus makiana* — J Jiang and Zhou 1982: 681; ZG Huang and Lin 1993: app.

*Taxonomy*: Shen (1932b: as *Heteropanope*), Balss (1933), Sakai (1939), Takeda and Miyake (1969c).

*Type*: Holotype ♂ USNM 57497.

*Type locality*: Shyago, Formosa (likely now Shehou, New Taipei City, Taiwan).

*Distribution*: East Asia: coasts of China (East China to Bohai Seas), Taiwan, Korea and Japan (Takeda and Miyake 1969c; Yang et al. 2008).

*Habitat*: Intertidal; under rocks on muddy or weedy substrates (Dai and Yang 1991).

### *Pilumnus cursor* A. Milne-Edwards, 1873

*? Pilumnus cursoni* — J Jiang and Zhou 1982: 681.

*Taxonomy*: Ng (1988a).

*Type*: Syntype ♀ in MNHN (Ng 1988a).

*Type locality*: New Caledonia.

*Distribution*: Indo-West Pacific: so far confirmed from Phuket, Thailand and New Caledonia only (see Remarks below).

*Habitat*: Subtidal; in coral rock (Ng and Davie 2002).

*Remarks*: Records elsewhere previously recognized as "*P. cursor*" comprises a species complex, and various of these in the region had been referred to other species (Ng 1988a). This local record is thus very likely "either incorrect or suspicious" (Ng and Davie 2002: p. 382) and needs to be verified. Until then, we retain this record for the time being.

### *Pilumnus longicornis* Hilgendorf, 1878 #

*? Pilumnus andersoni* — Shen 1940a: 228.
*? Pilumnus* cf. *andersoni* — Horikoshi and Takeda 1982: tab. 1.
*Pilumnus longicornis* — Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 273.

*Taxonomy*: Balss (1933), Sakai (1939), Takeda and Miyake (1968).

*Type*: Holotype ♂ in ZMB (Balss 1933).

*Type locality*: Inhambane, Mozambique.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Persian Gulf, Arabian Sea and Bay of Bengal, to Southeast and East Asia reaching Japan, and Indonesia, Australia, New Zealand towards Hawaii (Takeda and Miyake 1968; Garth and Kim 1983; Yang et al. 2008).

*Habitat*: Intertidal and subtidal; rocky shores down depths of 10 to 20 m, also on sandy substrates down to depths of 85 m (Sakai 1976).

*Remarks*: Balss (1933) synonymized *P. andersoni* De Man, 1887 (type locality Mergui Archipelago) under *P. longicornis* Hilgendorf, 1878, arguing that the morphological variations between the two (whether frontal and supraorbital margin denticulate) were age-dependent. Shen (1940a), however, cited Alcock (1898: p. 191) who interpreted the two as distinct, listing the Hong Kong material as *P. andersoni*. Following Balss (1933) for the moment, we list the Hong Kong records under *P. longicornis*.

### *Pilumnus minutus* De Haan, 1835 #

*? Pilumnus* cf. *minutus* — Horikoshi and Takeda 1982: tab. 1; Wong et al. 2021: 36, fig. 56, pl. 11D.
*Pilumnus minutus* — Ong Che and Morton 1992: tab. 1.

*Taxonomy*: Sakai (1939), Takeda and Miyake (1968).

*Type*: Status unknown (Davie 2002; not reported by Yamaguchi and Baba 1993).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Maldives, Red Sea, Persian/Arabian Gulf, Bay of Bengal, Southeast and East Asia to Japan, Indonesia, Australia and New Caledonia (Takeda and Miyake 1968; Yang et al. 2008).

*Habitat*: Intertidal to subtidal; along crevices of rocks, or on sandy or muddy substrates, or in sponges; depth up to 50 m (Dai and Yang 1991).

### *Pilumnus trispinosus* (Sakai, 1965)

*Parapilumnus trispinosus* — Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 273.

*Taxonomy*: Sakai (1965: as *Parapilumnus*), Takeda and Miyake (1969c: as *Parapilumnus*); on *Parapilumnus* Kossmann, 1877: Ng (2002b), Ng and Chen (2004a).

*Type*: Syntypes in BLIH.

*Type locality*: Sagami Bay, Japan.

*Distribution*: West Pacific: from South China, Taiwan, Japan, to Fiji (Sakai 1976; Horikoshi and Takeda 1982; Hsueh et al. 2009).

*Habitat*: Intertidal; along rocky shores, entangled to *Sargassum* seaweed (Sakai 1976).

### *Pilumnus vespertilio* (Fabricius, 1793)

*Pilumnus verspertilio* — Hill et al. 1978: 92; Morton and Morton 1983: 186.

*Taxonomy*: Sakai (1939), Takeda and Miyake (1968).

*Type*: Syntype in ZMK (Zimsen 1964), now probably in NHMD.

*Type locality*: India, locality unspecified.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Red Sea, Persian/Arabian Gulf, India, Southeast and East Asia to Japan, Palau, Australia, New Caledonia, to Hawaii (Takeda and Miyake 1968).

*Habitat*: Intertidal and shallow subtidal; fringing coral reefs.

### *Ser amoyensis* Gordon, 1930 [#]

*Ser fukiensis* — Wong et al. 2021: 37, fig. 59, pl. 12A.
*Ser amoyensis* — Ng and Wong 2024: 12, figs. 1–5, 7K, L.

*Taxonomy*: Gordon (1930: as *Litocheira*), Rathbun (1931: as *S. fukiensis*), Ng and Wong (2024).

*Type locality*: Xiamen (as Amoy), China.

*Type*: Holotype ♂ NHM 1930.11.14.34.

*Distribution*: South China: Guangdong (Hong Kong) to Fujian.

*Habitat*: Subtidal; on sandy-muddy substrates of estuarine seas.

*Remarks*: Understanding of *Ser fukiensis* Rathbun, 1931 has remained obscure for many decades, and the name recently shown to be a junior synonym of *Litocheira amoyensis*, likewise poorly known, described merely months prior in 1930 (Ng and Wong 2024). See Remarks under *S. sasekumari* below.

### *Ser sasekumari* (Serène, 1971) [#]

*Heteropilumnus sasekumari* — Bravo et al. 2021: tab. 2.
*Ser sasekumari* — Ng and Wong 2024: figs. 6, 7A–I, M–O.

*Taxonomy*: Ng (1985: as *Rhizopa*), Ng and Davie (1991: as *Heteropilumnus*), Ng and Wong (2024).

*Type locality*: Port Klang (as Port Swettenham), Malaysia.

*Type*: Holotype ♀ ZRC 1969.12.2.7 (Ng and Davie 1991).

*Distribution*: Eastern Indian Ocean to West Pacific: from northeastern Australia, Phuket (Thailand), western Peninsular Malaysia, Singapore and South China, to Papua, Indonesia (Serène 1971; Ng and Davie 1991; Davie 2002; BY Lee and NK Ng 2012; Widyastuti and Rahayu 2022).

*Remarks*: This species was originally described under *Rhizopa* Stimpson, 1858 by Serène (1971) with doubt, and this generic placement was challenged by Guinot (1979), with Ng and Davie (1991) tentatively placing it under *Heteropilumnus* De Man, 1895. *Heteropilumnus* has long been considered heterogenous (Ng and Tan 1988; Ng and Davie 1991; Ng et al. 2018; Maenosono 2019), and the identity of the allied *Ser* Rathbun, 1931 was poorly understood (Ng 1987). The second author has since examined the type of *Ser fukiensis* Rathbun, 1931, the type and previously the only species in *Ser*, and we have obtained fresh specimens from Hong Kong. We also have examined specimens of *Heteropilumnus stormi* De Man, 1895, the type species of *Heteropilumnus* De Man, 1895, which differs from typical members of this genus in being covered by a short dense felt-like pubescence, without any long setae lining the margins of the carapace or appendages. Comparing *Ser amoyensis* with our specimens of *H. sasekumari* from Hong Kong and Southeast Asia (cf. Ng and Davie 1991; BY Lee and NK Ng 2012; Widyastuti and Rahayu 2022; Ng and Wong 2024), we are certain that they are congeneric. As such, *Rhizopa sasekumari* Serène, 1971, was referred to *Ser* Rathbun, 1931. The taxonomy of these and allied species has been elaborated at length recently by Ng and Wong (2024), and in further work in progress.

### *Vellumnus penicillatus* (Gordon, 1930)

*Pilumnus penicillatus* Gordon, 1930: 523; Gordon 1931: 543, text-fig. 18; Shen 1940a: 228.

*Taxonomy*: Ng et al. (2008: as "*Pilumnus*"), Ng (2010).

*Type*: Holotype ♀ and paratype ♂ in NHM.

*Type locality*: Hong Kong.

*Distribution*: South China Sea: so far from Hong Kong only (see Remarks below).

*Habitat*: Subtidal; dredged from depths of 20 to 30 m (Ng 2010).

*Remarks*: This species was described from Hong Kong, with Balss (1938) subsequently reporting the species from Singapore (see also Ng 2010). A recent study shows that the Singapore specimen is actually a juvenile *V. labyrinthicus* (Miers, 1884) (Ng and Clark 2023). As such, *Vellumnus penicillatus* is known only from Hong Kong thus far; but has not been reported again since 1931.

### *Xestopilumnus cultripollex* Ng & Dai, 1997 #

*Xestopilumnus cultripollex* Ng & Dai, 1997: 38, figs. 1–3, pl. 1; Wong et al. 2021: 37, fig. 57, pl. 11E.

*Taxonomy*: Ng and Dai (1997).

*Type*: Holotype ♂ in ASB (now IZCAS), paratypes in HKU and ZRC.

*Type locality*: Off eastern Hong Kong Island.

*Distribution*: South China: so far from Hong Kong only.

*Habitat*: Subtidal; substrates sandy or muddy; depths 27 to 36 m (Ng and Dai 1997).

## Subfamily Rhizopinae Stimpson, 1858

### *Arges canaliculata* (Rathbun, 1909) #

*Typhlocarcinops canaliculata* — Ong Che and Morton 1991: tab. 1; SY Lee et al. 2000: tab. 3.
*Typhlocarcinops canaliculatus* — Ng and Rahayu 2020: 9, figs. 2A, 3, 5–15, 40A–C; Wong et al. 2021: 37, fig. 60, pl. 12B.
*Arges canaliculatus* — Ng et al. 2023: 711.

*Taxonomy*: Rathbun (1910: as *Typhlocarcinops*), Ng and Rahayu (2020: as *Typhlocarcinops*), Ng et al. 2023).

*Type*: Holotype ♂ NHMD 5956 (Ng and Rahayu 2020).

*Type locality*: Between Koh Mesan and Cape Liant, Gulf of Thailand.

*Distribution*: Southeast and East Asia: western Indonesia, Singapore, Gulf of Thailand, South China (Hong Kong), possibly Japan (Ng and Rahayu 2020).

*Habitat*: Subtidal; substrates of sandy mud; depths 9 to 14 m (Ng and Rahayu 2020).

*Remarks*: Ng et al. (2023) showed that the recent fossil genus *Arges* De Haan, 1833 is actually a senior synonym of the better-known name *Typhlocarcinops* Rathbun, 1909.

### *Arges decrescens* (Rathbun, 1914) #

*Typhlocarcinops decrescens* — Ng and Rahayu 2020: 21, figs. 16–24, 40D–F; Wong et al. 2021: 38, fig. 61, pl. 12C.
*Arges decrescens* — Ng et al. 2023: 711.

*Taxonomy*: Rathbun (1914: as *Typhlocarcinops*), Ng and Rahayu (2020: as *Typhlocarcinops*).

*Type*: Holotype ♂ and paratypes in USNM 46407.

*Type locality*: NW of Tawitawi Island (as Tinakta Island, Tawi Tawi Group), Sulu Archipelago, the Philippines.

*Distribution*: Southeast and East Asia: Indonesia, the Philippines, South China, and Japan (Ng and Rahayu 2020).

*Habitat*: Subtidal; substrates of sand or shelly mud of depths 50 to 85 m (Sakai 1976).

### *Arges denticarpes* (Dai and Yang, in Dai, Yang, Song & Chen, 1986) #

*Typhlocarcinops denticarpes* — Ng and Rahayu 2020: 31, figs. 2C, 25–30, 40G–I; Wong et al. 2021: 38, fig. 62, pl. 12D.
*Arges denticarpes* — Ng et al. 2023: 711.

*Taxonomy*: Dai and Yang (1991: as *Typhlocarcinops*), Ng and Rahayu (2020: as *Typhlocarcinops*).

*Type*: Holotype ♂ possibly in IZASB (now IZCAS; see Ng and Rahayu 2020).

*Type locality*: Shanwei, Guangdong, China.

*Distribution*: East Asia: South China and Japan (Ng and Rahayu 2020).

*Habitat*: Subtidal; substrates of soft mud with shell fragments (local specimen from southeastern waters off Tung Lung Island).

### *Arges raouli* (Ng & Rahayu, 2020) #

*Typhlocarcinops raouli* Ng & Rahayu, 2020: 50, figs. 41–44; Wong et al. 2021: 38, fig. 63, pl. 12E.
*Arges raouli* — Ng et al. 2023: 711.

*Taxonomy*: Ng and Rahayu (2020: as *Typhlocarcinops*).

*Type*: Holotype ♂ MZB Cru 4806.

*Type locality*: Digul, Arafura Sea.

*Distribution*: West Pacific: Arafura Sea, Vietnam,

and South China (Hong Kong).

*Habitat*: Subtidal; substrates of sand and mud; depths less than 20 m (local specimen from south of Lantau).

### *Ceratoplax ciliata* Stimpson, 1858

*Ceratoplax ciliata* — Shen 1940a: 229; Davie 1992b: tab. 1; Markham 1992: 285, tab. 1; Li 2003: 154 [no new specimens].
*? Ceratoplax* cf. *sagamiensis* — Thompson and Horikoshi 1982: tab. 1.

*Taxonomy*: Tesch (1918a), Ng (1987).

*Type*: Neotype ♂ in ZMA (designated by Ng 1987).

*Type locality*: West Coast of Salawatti, Indonesia (neotype).

*Distribution*: Eastern Indian Ocean to West Pacific: Andaman Sea, Gulf of Thailand, northern South China Sea, Indonesia and Queensland (Australia) (Tesch 1918a).

*Habitat*: Subtidal; to depths to 18 m (Davie 2002).

### *Cryptocoeloma haswelli* Rathbun, 1923 #

*Cryptocoeloma haswelli* — Ng et al. 2022b: 1048, figs. 1–7.

*Taxonomy*: Ng (1989: gynandromorph), Ng and Holthuis (1987), Ng et al. (2022b).

*Type*: Lectotype ♀ NHM 1847.21 (designated by Ng 1989).

*Type locality*: Billiton (Belitung) Island, Java Sea, Indonesia.

*Distribution*: West Pacific: Western Australia to Queensland, Australia, Java Sea, to South China (Hong Kong) and Penghu, Taiwan (Davie 2002; Ng 1989; Ng et al. 2022b).

*Habitat*: Shallow subtidal, under rock fragments on coarse substrates near coral communities, to depths of 52 m (Ng et al. 2022b).

### *Rhizopa gracilipes* Stimpson, 1858 #

*Rhizopa gracilipes* Stimpson, 1858b: 41; Alcock 1900b: 322; Rathbun 1931: 100 [list]; Shen 1940a: 230; Wong et al. 2021: 37, fig. 58, pl. 11F.

*Taxonomy*: Rathbun (1910), Ng (1987).

*Type*: Neotype ♂ in now NHMD (designated by Ng 1987).

*Type locality*: Sound of Koh Chang, Gulf of Thailand (neotype).

*Distribution*: South China Sea: so far verified from Gulf of Thailand and Hong Kong.

*Habitat*: Subtidal; substrates of mud or shells; depths from 5 to 16 m (Ng 1987).

*Remarks*: Based on material obtained from trawling surveys since 2007, this species has been collected often and is not particularly rare. We believe it is likely to have been recorded under other names (possibly "*Typhlocarcinus* species") in older local literature as they are very similar externally. The G1 of this species, however, is very distinct as it has the tip truncated (Ng 1987).

### *Typhlocarcinus nudus* Stimpson, 1858

*Typhlocarcinus nudus* Stimpson, 1858b: 96; Shen 1940a: 230; Shin 2000: tab. 1.

*Taxonomy*: Rathbun (1910), Tesch (1918a), Sakai (1976).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: Southeast and East Asia: Indonesia, Singapore, Phuket and Gulf of Thailand, South China, to Japan (Stimpson 1858b; Rathbun 1910; Tesch 1918a; Sakai 1976; Dai and Yang 1991; Takeda et al. 2000; Ng and Davie 2002; see Remarks below).

*Habitat*: Subtidal; substrates muddy-sandy; depths 30 to 50 m (Dai and Yang 1991).

*Remarks*: After the present species was described from material from Hong Kong, subsequent reports were made from localities across the Indo-West Pacific. Most of them need to be rechecked. Records in the Indian Ocean as presented by Alcock (1900b: from Karachi to various localities in Bay of Bengal) and Stephensen (1946: Persian/Arabian Gulf) were later referred to *Typhlocarcinops stephenseni* Serène, 1964 instead (see Serène 1964).

### *Typhlocarcinus villosus* Stimpson, 1858 #

*Typhlocarcinus villosus* Stimpson, 1858b: 96; Alcock 1900b: 322; Shen 1940a: 230; AC Evans 1967: 407; Shin 1989: app. 1; Ong Che and Morton 1991: tab. 1; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Wong et al. 2021: 38, fig. 64, pl. 12F.

*Taxonomy*: Rathbun (1910), Tesch (1918a), Sakai (1939).

*Type*: Syntype NHM 61.44 (AC Evans 1967).

*Type locality*: Hong Kong.

*Distribution*: Eastern Indian Ocean to West Pacific: Bay of Bengal, Singapore, Gulf of Thailand, South China Sea, Taiwan, Japan, to Indonesia.

*Habitat*: Subtidal; substrates muddy-sandy; depths 30 to 36 m (Dai and Yang 1991).

## Superfamily Portunoidea Rafinesque, 1815

*Remarks*: While the taxonomy of Portunoidea has previously been well studied, the phylogenetic relationships between the various groups now in the superfamily have been less settled with different systems being proposed (*e.g.*, see like Schubart and Reuschel (2009) and Spiridonov et al. (2014). N. Evans (2018), based on morphological and molecular evidence, only recognized Geryonidae Colosi, 1924, Carcinidae MacLeay, 1838 and Portunidae Rafinesque, 1815 under the Portunoidea, leaving the status of one family, Brusiniidae Števčić, 1991 unresolved (but see Spiridonov 2020). We retain the Brusiniidae in the Portunoidea until more studies can be done.

We follow Spiridonov et al. (2014) in recognizing the Podophthalminae Dana, 1851 and Lupocyclinae Alcock, 1899 as subfamilies under the Portunidae, and elevating *Monomia* Gistel, 1848 and *Xiphonectes* A. Milne-Edwards, 1873, to full genera; and N. Evans (2018) in recognizing *Goniosupradens* Davie & Ng, 2024 as full genus, and *Thranita* Evans, 2018 for members of the "*Thalamita prymna* group". In the Portuninae, the genera *Portunus*, *Monomia* and *Xiphonectes* had been shown to be composite (N. Evans 2018), many were resolved by Koch et al. (2022). For taxa treated herein, several species previously placed under *Xiphonectes* have recently been placed in new genera, a scheme we also follow.

## Family Carcinidae MacLeay, 1838
## Subfamily Polybiinae Ortmann, 1893

### *Liocarcinus strigilis* (Stimpson, 1858) #

*Portunus corrugatus strigilis* — Balss 1922b: 101.
*Charybdis japonica* — Hill and Phillipps 1981: 156, pl. 521 [not *Goniosoma japonicum* A. Milne-Edwards, 1861].
*Macropipus corrugatus* — Thompson and Horikoshi 1982: tab. 1; Morton and Morton 1983: 158, fig. 9.5(3); Davie 1992b: tab. 1 [not *Cancer corrugatus* Pennant, 1777].

*Taxonomy*: Rathbun (1902), Sakai (1939: as *Portunus corrugatus strigilis*), Manning and Holthuis (1981), Plagge et al. (2016).

*Type*: Presumably lost.

*Type locality*: Kagoshima (as Kagosima), Japan.

*Distribution*: West Pacific: verified from the Philippines, Taiwan and Japan, Australia, and possibly New Zealand (see Remarks below).

*Habitat*: Subtidal; substrates of soft mud, coarse sand and shell fragments; depths 30 to 120 m (Yang et al. 2012).

*Remarks*: *Cancer corrugatus* Pennett, 1777 has long been reported as an East Atlantic and Indo-Pacific species (Stephenson and Campbell 1960), while speculated to represent a species complex (Davie 2002). The latter assessment was recently verified by Plagge et al. (2016), with Asian material shown to be distinct from the European *L. corrugatus sensu stricto*. The Asian form had been described under the name *Portunus strigilis* Stimpson, 1858, which was resurrected by Plagge et al. (2016).

## Family Geryonidae Colosi, 1924
## Subfamily Ovalipinae Spiridonov, Nerelina & Schepetov, 2014

### *Ovalipes punctatus* (De Haan, 1833)

*Ovalipes punctatus* — Morton 1979b: tab. 7.1; Morton and Morton 1983: 158, fig. 9.5(2).

*Taxonomy*: Sakai (1939), Stephenson and Rees (1968a), Spiridonov et al. (2014).

*Type*: Lectotype ♂ RMNH D 365, and paralectotypes in RMNH and NHM (designated by Stephenson and Rees 1968a; see also Yamaguchi and Baba 1993 and Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: China (East China Sea and Yellow Sea), Taiwan and Japan (Stephenson 1972a; J-F Huang and Yu 1997).

*Habitat*: Subtidal; substrates of fine sand, medium muddy sand or shell fragments; depths 42 to 130 m (Yang et al. 2012).

## Family Portunidae Rafinesque, 1815
## Subfamily Lupocyclinae Paulson, 1875

### *Alionectes pulchricristatus* (Gordon, 1931) #

*Neptunus* (*Hellenus*) *alcocki* Gordon, 1930: 521 [pre-occupied name *Neptunus* (*Hellenus*) *alcocki* Nobili, 1905].
*Neptunus* (*Hellenus*) *pulchricristatus* Gordon, 1931: 527, 534, text-figs. 8, 10B.
*Neptunus* (*Hellenus*) *gracillimus* — Shen 1940a: 220.
*Portunus pulchricristatus* — Stephenson and Rees 1967: 37, fig. 7.
*Portunus pulchicristatus* — Apel and Spiridonov 1998: 303, figs. 112, 116.
*Xiphonectes pulchricristatus* — Wong et al. 2021: 43, fig. 76, pl. 14F.
*Alionectes pulchricristatus* — Koch et al. 2022: 16, fig. 6.

*Taxonomy*: Ghani and Tirmizi (1993: as *Portunus*), Apel and Spiridonov (1998: as *Portunus*), Yang et al. (2012: as *Portunus*); Koch et al. (2022).

*Type*: Syntypes in NHM 1930.12.2.82-85 (Apel and Spiridonov 1998; Koch et al. 2022).

*Type locality*: Hong Kong.

*Distribution*: Arabian Sea to West Pacific: from Gulf of Oman, Pakistan, India, the Andamans, to

Phuket (Thailand), South China, the Philippines, and Queensland, Australia (Apel and Spiridonov 1998).

*Habitat*: Subtidal; substrates of soft mud, muddy sand or sandy mud; depths 16 to 830 m (Yang et al. 2012).

*Remarks*: Among species previously assigned to *Xiphonectes*, *X. pulchricristatus* is abberant in having relatively large, dorsally entire orbit, maxilliped 3 merus not produced anterolaterally, P5 merus posteriorly armed, and G1 distal slender portion of about 1/3 of total length (see *e.g.*, Wong et al. 2021). The genetic evidence presented by Koch et al. (2022) shows its affiliation with *Lupocycloporus* rather than lineages under the Portuninae. A new genus to accommodate *X. pulchricristatus*, *Alionectes*, was therefore established, and this was placed in the Lupocyclinae (Koch et al. 2022).

### *Lupocycloporus gracilimanus* (Stimpson, 1858) #

*Amphitrite gracilimanus* — Stimpson 1858a: 38; Stimpson 1907: 77, pl. 10(3) ["off the Chinese coast near Hong Kong"].
*Portunus* (*Lupocycloporus*) *gracilimanus* — Gee 1926: 161 [list].
*Neptunus* (*Lupocycloporus*) *gracilimanus* — Gordon 1931: 527; Shen 1940a: 221.
*Portunus gracilimanus* — Davie 1992b: tab. 1; B Chan and Leung 2002: 24, fig. 2A.
*Lupocycloporus gracilimanus* — Wong et al. 2021: 39, fig. 65, pl. 13A.

*Taxonomy*: Shen (1937b: as *Neptunus* (*Lupocycloporus*)), Stephenson and Campbell (1959: as *Portunus*), Yang et al. (2012: as *Portunus*).

*Type*: Presumably lost.

*Type locality*: Chinese shores along latitude 23°N.

*Distribution*: Eastern Indian Ocean to West Pacific: from East India, Southeast and East Asia to Taiwan, to Papua New Guinea and Australia (Takeda and Miyake 1969a).

*Habitat*: Subtidal; substrates muddy sand, soft mud or sandy mud; depths 6 to 140 m (Yang et al. 2012).

## Subfamily Necronectinae Glaessner, 1928

### *Scylla olivacea* (Herbst, 1796) #
(Fig. 37A–C)

*Scylla olivacea* — present record.

*Taxonomy*: Serène (1952), Keenan et al. (1998), Ng (1998), Yang et al. (2012).

*Type*: Neotype ♂ QM W20895 (designated by Keenan et al. (1998).

*Type locality*: Kupang, Indonesia (neotype).

*Distribution*: Central or eastern Indian Ocean to West Pacific: Pakistan, northwestern and northern Australia, Southeast and East Asia to southern China and southwestern Taiwan (Keenan et al. 1998).

*Habitat*: Intertidal to shallow subtidal; associated with mangrove forests inundated with reduced salinity seawater during wet season (Keenan et al. 1998).

*Remarks*: The present species is distinguished from the locally common *S. paramamosain* Estampador, 1949 by the rounded instead of acute frontal lobes, and chela nearly entirely rusty reddish (instead of patches of orange on cream-colored background in *S. paramamosain*). See Remarks under *S. serrata* below. This species is a new record for the fauna of Hong Kong.

### *Scylla paramamosain* Estampador, 1949 #

*Scylla paramamosain* — Keenan et al. 1998: 232, figs. 7C, 8C, 9C, 13; Keenan 1999: 54, fig. 3; B Chan and Leung 2002: 24; Yam et al. 2002: 18; Fong et al. 2005: 64, 4 unnumb. figs.; Wong et al. 2021: 40, fig. 72, pl. 14B; Bravo et al. 2021: tab. 2.
*Scylla serrata* — SY Lee and Leung 1999: 75, pl. 19; Tam and Wong 2000: 119, 2 unnumb. figs.; Leung et al. 2004: 101, 1 unnumb. fig. [not *Cancer serrata* Forskål, 1775].

*Taxonomy*: Serène (1952), Keenan et al. (1998), Ng (1998), Yang et al. (2012).

*Type*: Neotype ♂ QM W22174 (designated by Keenan et al. 1998).

*Type locality*: Timbulsloko, Central Java, Indonesia (neotype).

*Distribution*: West Pacific: Indonesia to Singapore, Cambodia, Vietnam, South China, Taiwan and Japan (Keenan et al. 1998).

*Habitat*: Intertidal to subtidal; associated with shallow reef rubble, subtidal flats and estuarine pools, or in mangrove forests (Keenan et al. 1998).

*Remarks*: Records of *Scylla* species from Hong Kong likely or shown to represent *S. paramamosain* are listed above. This species is not uncommon in mangrove habitats ("gei wai" included), and occasionally obtained by trawls from shallow estuarine seas. See remarks under *S. serrata* below.

### *Scylla serrata* (Forskål, 1775)

*Scylla serrata* — Gordon 1931: 527; Shen 1932a: 36, text-figs. 4, 5, pl. 7b; Shen 1940a: 219; Hill et al. 1975: 77; Morton 1976: 105; Morton 1979b: 136, tab. 7.1; Melville and Morton 1983: 11, 1 unnumb. fig. (13); Morton and Morton 1983: 229, fig. 11.11(11); SY Lee 1993: 203; Lui et al. 2007: tab. 1; Bravo et al. 2021: tab. 2.

*Taxonomy*: Keenan et al. (1998), Ng (1998), Yang et al. (2012).

*Type locality*: Central coast of Yemen, Red Sea

(neotype).

*Type*: Neotype ♂ QM W20917 (designated by Keenan et al. 1998).

*Distribution*: Western Indian Ocean to Central Pacific: verified from South Africa, Mauritius, Red Sea, Philippines, Taiwan and Okinawa (Japan), Indonesia, Arafura Sea, Australia, Solomon Islands, New Caledonia, Fiji and western Samoa (Keenan et al. 1998).

*Habitat*: Intertidal; in mangrove forests inundated with full salinity oceanic water for greater part of the year (Keenan et al. 1998).

*Remarks*: This widely distributed commercially valuable species has long being recorded as "*Scylla serrata*" despite variations in morphology and coloration reported (Estampador 1949; Serène 1952), until the revision by Keenan et al. (1998) using morphological and molecular data showed otherwise (see also Fushimi and Wanatabe 2000). The distributions of the four recognized species include southern China (Ng 1998; Yang et al. 2012). It is not possible to identify older records with any accuracy without good illustrations and some of the records are probably also mixed as well. We retain the local records as above.

## Subfamily Podophthalminae Dana, 1851

### *Podophthalmus vigil* (Fabricius, 1798) #

*Podophthalmus vigil* — Wong et al. 2021: 39, fig. 66, pl. 13B.

*Taxonomy*: Sakai (1939), Stephenson and Campbell (1959), Apel and Spiridonov (1998).

*Type*: Syntype in now NHMD (Zimsen 1964).

*Type locality*: "In Oceano Indico", possibly Tharangambadi (= Tranquebar), India (Fransen et al. 1997).

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar, East Africa, Red Sea, Persian/Arabian Gulf, to Singapore, the Philippines, China, Taiwan, Japan, to Australia and Hawaii (Sakai 1976).

*Habitat*: Subtidal; substrates sandy-muddy or weedy, depths to 70 m (Dai and Yang 1991).

## Subfamily Portuninae Rafinesque, 1815

### *Eodemus* aff. *hastatoides* #

*Xiphonectes* aff. *hastatoides* — Wong et al. 2021: 43, fig. 74, pl. 14D.

*Remarks*: The form previously reported as "*X.* aff. *hastatoides*" from local seas (by Wong et al. 2021) is recognized as a previously undescribed species based on morphological and molecular approaches. Report of which is currently under preparation by Yu-Hsuan Huang (Academia Sinica, Taiwan) and colleagues. See Remarks under *E. subtilis* below.

### *Eodemus pseudohastatoides* (Yang & Tang, 2006) #

*Portunus pseudohastatoides* — Wong et al. 2010b: 676, figs. 1E–N, 2E, F.

*Xiphonectes pseudohastatoides* — Wong et al. 2021: 43, fig. 75, pl. 14E; Nguyen and Ng 2021: 396, figs. 5A, B, 6F.

*Taxonomy*: Yang and Tang (2006: as *Portunus*), Wong et al. (2010b: as *Portunus*), Koch et al. (2015: as *Xiphonectes*), Nguyen and Ng (2021: as *Xiphonectes*), Koch et al. (2022).

*Type*: Holotype ♂ BNHM J204128 and paratypes in BNHM.

*Type locality*: Longmen, Guangxi, China.

*Distribution*: South China Sea and East Asia: northwestern Peninsular Malaysia, Vietnam, South and East China and west coast of Taiwan (Koch et al. 2015).

*Habitat*: Subtidal; substrates of fine sand, muddy sand or shell fragments; depths 7 to 100 m (Yang et al. 2012).

*Remarks*: Swimming crabs previously of the genus *Xiphonectes* (or *Portunus* (*Xiphonectes*) had been shown to be heterogeneous by morphological and molecular approaches (Spiridonov et al. 2014; N Evans 2018), and eventually revised, with description of four new genera by Koch et al. (2022). Among local taxa previously as *Xiphonectes* (see Wong et al. 2021), *X. pulchricristatus* (Gordon, 1931), was placed under the Lupocyclinae (see above), whereas *X. pseudohastatoides* (Yang & Tang, 2006), *X. subtilis* Nguyen & Ng, 2021 and *X. unidens* (Laurie, 1906) retained in Portuninae under *Eodemus*, and *X. tuberculosus* (A. Milne-Edwards, 1861) under *Incultus* (Koch et al. 2022).

### *Eodemus subtilis* (Nguyen & Ng, 2021) #

*Amphitrite hastatoides* — Stimpson 1858a: 38; Stimpson 1907: 78.

*Neptunus* (*Amphitrite*) *hastatoides* — Miers 1886: 175.

*Neptunus* (*Hellenus*) *hastatoides* — Alcock 1899: 38; Gordon 1931: 527; Shen 1940a: 220.

*Portunus* (*Achelous*) *hastatoides* — Gee 1926: 161 [list].

*Portunus hastatoides* — Stephenson and Rees 1967: 27.

*? Portunus hastatoides* — Shin and Thompson 1982: app. [part?]; RSS Wu 1982: tab. 1 [part]; Thompson and Shin 1983: tab. 4 [part?]; SY Lee and Leung 1999: 78 [part?]; Blackmore and Rainbow 2000: app. 1 [part?]; SY Lee et al. 2000: tab. 3 [part?].

*? Portunus longispinosus bidens* — Ong Che and Morton 1991: tab. 1.

*Portunus hastatoides* — Wong et al. 2010b: 671, figs. 1A–D, 2A, B, 6C, D [part?].

*Xiphonectes* species — Wong et al. 2021: 43, fig. 77, pl. 15A.

*Xiphonectes subtilis* — Nguyen & Ng, 2021: 395, figs. 2B, C, 3C, D, G, H, 4C, D, 6C, D.

*Taxonomy*: Yang and Tang (2006: as *P. hastatides*), Nguyen and Ng (2021: as *Xiphonectes*).

*Type*: Holotype ♂ ZRC 2003.0527 and paratype ♀ in ZRC.

*Type locality*: Teluk Tarempa, Anambas, Indonesia.

*Distribution*: West Pacific: South China Sea to Taiwan and Japan, Indonesia and Australia (Nguyen and Ng 2021).

*Habitat*: Subtidal; substrates of fine sand, muddy sand, soft mud or of shell fragments; depths 7 to 100 m (Yang et al. 2012).

*Remarks*: Three *Eodemus* species (previously as *Xiphonectes*) are common in local shallow-water habitats, and at least four forms are sampled from local trawl surveys: *X. dayawanensis* (now *E. unidens*, see below), *X.* aff. *hastatoides* (yet described), *X. pseudohastatoides*, and "*X.* species" (Wong et al. 2021). These species were previously confounded under local records of "*Portunus hastatoides*" (Wong et al. 2010b 2021). Inspecting images of one of the syntypes of *Portunus hastatoides* Fabricius, 1798, Wong et al. (2010b) noted local material using this name might not be conspecific with the "real" *X. hastatoides*, and the local forms having the median frontal lobes less protruding than lateral lobes, comprise *X. subtilis* and "*X.* aff. *hastatoides*" (Wong et al. 2021). Recently, this issue was partially resolved by Nguyen and Ng (2021), who concluded *X. hastatoides sensu stricto* distributing from central Indian Ocean to Southeast Asia. The local form as "*X.* species", distribution range of which spanning along the West Pacific, was described as *X. subtilis* (Nguyen and Ng 2021; now *Eodemus*).

### *Eodemus unidens* (Laurie, 1906) #

*? Portunus hastatoides* — Thompson and Horikoshi 1982: tab. 1 [part?].
*? Portunus trilobatus* — Davie 1992b: tab. 1 [not *P.* (*X.*) *trilobatus* Stephenson, 1972].
*Portunus dayawanensis* — Wong et al. 2010b: 674, figs. 1E–I, 2C, D.
*Xiphonectes dayawanensis* — Wong et al. 2021: 41, fig. 73, pl. 14C.
*Xiphonectes unidens* — Nguyen and Ng 2021: 397, figs. 5D–H, 6G, H, 7.

*Taxonomy*: Chen (1986: as *Portunus dayawanensis*), Wong et al. (2010b: as *P. dayawanensis*), Yang et al. (2012: as *P. dayawanensis*), Nguyen and Ng (2021: as *Xiphonectes*).

*Type*: Holotype ♂ NHM 1907.5.22.309 (Nguyen and Ng 2021).

*Type locality*: Gulf of Manaar, Sri Lanka.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Sri Lanka, Malaysia, Singapore, Gulf of Thailand, to South China (Nguyen and Ng 2021).

*Habitat*: Subtidal; substrates sandy or gravelly, or of shell fragments, depths to around 20 m (local records from Tolo Channel, where the species is common).

*Remarks*: Davie (1992b) was correct in pointing out many past local records of "*P. hastatoides*" represented, or included the present species, a form bearing three frontal lobes instead of four, then listed as *P. trilobatus* Stephenson, 1972(b) (type locality Sumatra, Indonesia). This form was later recorded as *P. dayawanensis* Chen, 1986 (Wong et al. 2010b 2021), a species described from Daya Bay, Guangdong. Revising the *Xiphonectes hastatoides* species complex, Nguyen and Ng (2021) recently demonstrated several Indo-Pacific forms sharing a tri-lobed front, including *Neptunus* (*Hellenus*) *tweediei* Shen, 1937, *P. trilobatus* and *P. dayawanensis*, being junior synonyms of *N.* (*H.*) *hastatoides* var. *unidens* Laurie, 1906 (now as *Eodemus unidens*), a decision we herein follow.

### *Incultus tuberculosus* (A. Milne-Edwards, 1861)

*Neptunus* (*Hellenus*) *tuberculatus* — Gordon 1931: 527 [not *Achelous tuberculatus* Stimpson, 1860].
*Neptunus* (*Hellenus*) *tuberculosus* — Shen 1940a: 220.

*Taxonomy*: Crosnier (1962: as *Portunus*), Stephenson and Rees (1967: as *Portunus*), Apel and Spiridonov (1998: as *Portunus*), Yang et al. (2012: as *Portunus*), Koch et al. (2022).

*Type*: Holotype ♂ MNHN B.6073 (Apel and Spiridonov 1998).

*Type locality*: Hawaii Islands (as Iles Sandwich), yet probably erroneous (Castro 2011).

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar, East Africa, Gulf of Aden, Gulf of Oman, Phuket (Thailand), South China Sea, to Palau, Indonesia, Australia, towards Hawaii (Stephenson 1972a; Apel and Spiridonov 1998); record from Hawaii remains doubtful (Castro 2011).

*Habitat*: Subtidal; substrates of soft mud, sandy mud, muddy sand or shell fragments; depths 21 to 580 m (Yang et al. 2012).

*Remarks*: Gordon's (1931) record of "*N.* (*H.*) *tuberculatus*" citing "A. M.-Edw." (contrasting *Acheloüs tuberculatus* Stimpson, 1860, an East Pacific species; see Garth and Stephenson (1966)), is probably erroneous, and actually belongs to the present species. Another record of this species from "China Sea, vicinity Hong Kong" at 21°53'N, 115°51'E, collection of the Albatross Philippine Expedition (1907–1910), was reported by Stephenson and Rees (1967: p. 52).

### *Monomia argentata* (A. Milne-Edwards, 1861) #

*Neptunus* (*Amphitrite*) *argentatus* — Gordon 1931: 527; Shen 1940a: 220.

*Portunus argentatus* — Stephenson and Rees 1967: 16, fig. 2.
*Monomia argentatus* — Wong et al. 2021: 39, fig. 67, pl. 13C.

*Taxonomy*: Sakai (1939: as *Portunus* (*Amphitrite*)), J-F Huang and Yu (1997: as *Portunus*), Yang et al. (2012: as *Portunus*), Koch et al. (2017).

*Type*: Lectotype ♂ NHM 1947.21 (designated by Koch et al. 2017).

*Type locality*: Mouth of Lundu River, Borneo.

*Distribution*: South China Sea to East Asia: Indonesia, Borneo (Malaysia), the Philippines, Vietnam, South China, Taiwan and Japan (Koch et al. 2017).

*Habitat*: Subtidal; substrates of sand, muddy sand or soft mud; depths 10 to 219 m (Yang et al. 2012).

### ***Monomia haanii*** **(Stimpson, 1858)** [#]

*Neptunus* (*Amphitrite*) *gladiator* — Shen 1940a: 220.
*Portunus gladiator* — Morton 1979b: 136, tab. 7.1; Morton and Morton 1983: fig. 7.4(7).
*Portunus haani* — Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3.
*Monomia haanii* — Wong et al. 2021: 39, fig. 68, pl. 13D.

*Taxonomy*: Sakai (1976: as *Portunus* (*M.*) *gladiator*), J-F Huang and Yu (1997: as *Portunus*), Ng et al. (2008: as *Portunus*), Yang et al. (2012: as *P. gladiator*), Windsor et al. (2019).

*Type*: Lectotype ♂ RMNH D 379, and paralectotypes in RMNH ad NHM (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean and West Pacific: Western Australia, South China Sea, Taiwan and Japan (Windsor et al. 2019).

*Habitat*: Subtidal; substrate muddy with coarse and fine sands or shell fragments; depths 12 to 103 m (Yang et al. 2012).

*Remarks*: The confusing taxonomy of *Amphitrite haani* Stimpson, 1858(a) and *Portunus gladiator* Fabricius, 1798 have been addressed by numerous authors, and revised in detail by Windsor et al. (2019).

### ***Monomia rubromarginatus*** **(Lanchester, 1900)**

*Neptunus* (*Amphitrite*) *rubro-marginatus* — Shen 1937b: 104, text-fig. 3.

*Taxonomy*: Shen (1937b: as *Neptunus* (*Amphitrite*)), Stephenson and Campbell (1959: as *Portunus*).

*Type*: Holotype ♀ NHM 1900.10.22.156 (NHM Data Portal).

*Type locality*: Singapore.

*Distribution*: West Pacific: the Philippines, Malay Archipelago and Singapore, Australia and New Caledonia (Davie 2002; Richer de Forges and Ng 2006).

*Habitat*: Subtidal; substrates sandy, to depths of 38 m (Davie 2002).

*Remarks*: In a treatment of Singapore swimming crabs, Shen (1937b) listed "South China Sea; Hong Kong; Malay Archipelago" as distribution of *N.* (*A.*) *rubromarginatus* (p. 104), yet this record was not cited in his later checklist of Hong Kong brachyuran fauna in 1940(a). Subsequent authors (*e.g.*, Stephenson and Campbell 1959; Stephenson 1967 1972a) had cited Shen's (1937b) report, including Hong Kong, or northern portion of South China Sea, within the distribution range of this Australian species. Extensive studies of brachyuran fauna in this region for the decades, however, have revealed no records of this species (Dai and Yang 1991; Yang et al. 2012). It is here retained in the Hong Kong fauna with doubt.

### ***Portunus pelagicus*** **(Linnaeus, 1758)** [#]

*Lupa pelagica* — Stimpson 1858a: 38; Stimpson 1907: 76.
*Neptunus pelagicus* — Heller 1865: 27 [part: material from East and Southeast Asia only]; Alcock 1899: 34 [part: material from Japan and Hong Kong only].
*Portunus pelagicus* — Gee 1926: 161 [list]; Hill et al. 1975: 82; Morton 1979a: fig. 6.16a; Morton and Morton 1983: 94, fig. 7.4(10); Thompson and Shin 1983: tab. 4; RSS Wu and Shin 1998: 108; SY Lee and Leung 1999: 78; B Chan and Leung 2002: 24, fig. 2C; Leung et al. 2004: 95, 2 unnumb. figs.; Tsang et al. 2020: 70, 2 unnumb. figs.; Wong et al. 2021: 40, fig. 69, pl. 13E.
*Portunus* (*Portunus*) *pelagicus* — Shen 1934: 37, text-fig. 1.
*Neptunus* (*Neptunus*) *pelagicus* — Shen 1940a: 220.

*Taxonomy*: Sakai (1939: as *Neptunus* (*Neptunus*)), Holthuis (2004), JCY Lai et al. (2010).

*Type*: Neotype ♂ ZRC 2007.0235 (designated by JCY Lai et al. 2010).

*Type locality*: Pulau Tekong, Singapore (neotype).

*Distribution*: West Pacific: northern Australia, Indonesia, the Philippines, Vietnam, South China, Taiwan and Japan; hybrid populations in Bay of Bengal and Andaman Sea (with *P. reticulatus* (Herbst, 1784)), and northern Australia (with *P. armatus* (A. Milne-Edwards, 1861) (JCY Lai et al. 2010).

*Habitat*: Intertidal, beneath seagrass or rocks, on muddy substrate or in shallow pools; or subtidal, substrates sandy, muddy, or of soft mud in estuaries; depths 5 to 47 m (Yang et al. 2012).

### ***Portunus sanguinolentus*** **(Herbst, 1783)** [#]

*Lupa sanguinolenta* — Stimpson 1858a: 38; Stimpson 1907: 76.
*Neptunus* (*Neptunus*) *sanguinolentus* — Balss 1922b: 106; Gordon 1931: 527; Shen 1940a: 220.

*Portunus sanguinolentus* — Gee 1926: 161 [list]; Stephenson and Rees 1967: 45, fig. 12a, b; Morton 1979a: fig. 6.15; Morton 1979b: 136, tab. 7.1; Thompson and Horikoshi 1982: tab. 1; RSS Wu 1982: tab. 1; Morton and Morton 1983: 94, fig. 7.4(9); Thompson and Shin 1983: tab. 4; Morton 1988: 24, pl. 4; Davie 1992b: tab. 1; RSS Wu and Shin 1998: 108; SY Lee and Leung 1999: 78; Blackmore and Rainbow 2000: app. 1; B Chan and Leung 2002: 24, fig. 2B; Leung et al. 2004: 97, 1 unnumb. fig.; Lui et al. 2007: 637; Wong et al. 2021: 40, fig. 70, pl. 13f.
*Portunus* (*Portunus*) *sanguinolentus* — Shen 1932a: 34, text-figs. 2, 3, pl. 7a.

*Taxonomy*: Sakai (1939: as *Neptunus* (*Neptunus*)), Stephenson and Campbell (1959), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Holotype ♂ ZMB 2099 (Apel and Spiridonov 1998; K Sakai 1999).

*Type locality*: Tharangambadi (= Tranquebar), India (Apel and Spiridonov 1998).

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, Gulf of Oman, through Southeast and East Asia to Australia, New Zealand and French Polynesia (Apel and Spiridonov 1998; Yang et al. 2012).

*Habitat*: Intertidal to subtidal; substrates sandy, muddy or of soft mud; depths to 80 m or deeper (Yang et al. 2012).

### ***Portunus trituberculatus*** **(Miers, 1876)** [#]

*Portunus* (*Portunus*) *trituberculatus* — Shen 1932a: 32, text-fig. 1, pl. 6.
*Neptunus* (*Neptunus*) *trituberculatus* — Shen 1940a: 220.
*Portunus trituberculatus* — Hill et al. 1975: 82; Hill et al. 1978: 114; Morton 1979b: 136, tab. 7.1; Davie 1992b: tab. 1; Leung et al. 2004: 99, 1 unnumb. fig.; Wong et al. 2021: 40, fig. 71, pl. 14A.
*Portunus trituberculata* — Morton and Morton 1983: 94, fig. 7.4(8).

*Taxonomy*: Sakai (1939: as *Neptunus* (*Neptunus*)), Stephenson and Rees (1967), Yang et al. (2012).

*Type*: Holotype probably in NHM; paratype RMNH D 44303 (Fransen et al. 1997).

*Type locality*: "Coasts of China or Japan".

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Phuket (Thailand), Peninsular Malaysia, coasts of China, Taiwan and Japan (Stephenson 1972a; Ng and Davie 2002; Yang et al. 2012).

*Habitat*: Subtidal; substrates of muddy sand, shell fragments or soft mud; depths 8 to 100 m (Yang et al. 2012).

## Subfamily Thalamitinae Paulson, 1875

### ***Charybdis acuta*** **(A. Milne-Edwards, 1869)**

*Charybdis* (*Goniosoma*) *acuta* — Shen 1934: 39, text-figs. 2–5; Shen 1940a: 221.

*Taxonomy*: Shen (1934), Leene (1938), Yang et al. (2012).

*Type*: Syntype probably in MNHN.

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South China, Taiwan, Korea and Japan (Yang et al. 2012).

*Habitat*: Subtidal; among seagrass; depths 10 to 20 m (Yang et al. 2012).

### ***Charybdis affinis*** **Dana, 1852** [#]

*Charybdis* (*Goniosoma*) *barneyi* Gordon, 1930: 522; Gordon 1931: 527, 536, text-fig. 13 (a, b, b'); Shen 1934: 42, text-figs. 6–8; Shen 1940a: 221.
*Charybdis* (*Charybdis*) *affinis* — Leene 1938: 35, figs. 8, 9.
*? Charybdis* (*Goniosoma*) *gordoni* — Shen 1940a: 221.
*Charybdis affinis* — Davie 1992b: tab. 1; SY Lee and Leung 1999: tab. 2; Wong et al. 2021: 44, fig. 78, pl. 15B, C.

*Taxonomy*: Shen (1937b), Leene (1938), Wee and Ng (1995), Yang et al. (2012).

*Type*: Probably lost.

*Type locality*: Singapore.

*Distribution*: Eastern Indian Ocean to South China Sea: Bay of Bengal, Mergui Archipelago, Malaysia and Singapore, Sumatra, to South China and Taiwan (Yang et al. 2012).

*Habitat*: Intertidal and subtidal; substrates of sand or muddy sand, from shallow depths (Yang et al. 2012).

### ***Charybdis anisodon*** **(De Haan, 1850)** [#]

*Charybdis anisodon* — Stimpson 1858a: 39; Stimpson 1907: 80, pl. 12(1); Gee 1926: 161 [list; "near Hong Kong"]; Davie 1992b: tab. 1; Blackmore and Rainbow 2000: app. 1; Wong et al. 2021: 45, fig. 79, pl. 25D.
*Charybdis* (*Goniosoma*) *anisodon* — Gordon 1931: 527; Shen 1932a: 43, text-figs. 9, 10, pl. 9b; Shen 1940a: 221.

*Taxonomy*: Leene (1938), Crosnier (1962), Holthuis (1993), Wee and Ng (1995), Yang et al. (2012).

*Type*: Lectotype ♂ RMNH D 44189, and paralectotypes in RMNH (designated by Holthuis 1993; see also Fransen et al. 1997).

*Type locality*: Moluccas, Indonesia.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Red Sea, to South China Sea and Japan, and northern Australia and New Caledonia (Wee and Ng 1995).

*Habitat*: Subtidal; substrates of sandy mud or rock reefs; depths 5 to 30 m (Yang et al. 2012).

### *Charybdis annulata* (Fabricius, 1798) #

(Figs. 15, 37D)

*Charybdis annulata* — present record.

*Taxonomy*: Leene (1938), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Syntypes in NHMD (Zimsen 1964), and possibly at ZMB (Apel and Spiridonov 1998).

*Type locality*: "Oceano Indico": possibly Tharangambadi (= Tranquebar), India (Fransen et al. 1997).

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Madagascar, Pakistan and India, Southeast and East Asia to Japan (Apel and Spiridonov 1998).

*Habitat*: Intertidal and shallow subtidal; among boulders along rocky reefs.

*Remarks*: This species is a new record for the fauna of Hong Kong.

### *Charybdis bimaculata* (Miers, 1886) #

*Charybdis* (*Gonioneptunus*) *bimaculata* — Shen 1940a: 222.
*Charybdis bimaculata* — Morton and Morton 1983: fig. 7.4(5); Davie 1992b: tab. 1; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Wong et al. 2021: 45, fig. 80, pl. 15E.

*Taxonomy*: Shen (1932b), Leene (1938), Stephenson et al. (1957), Yang et al. (2012).

*Type*: Syntypes probably in NHM.

*Type locality*: Kobé, Japan.

*Distribution*: Western Indian Ocean to West Pacific: Maldives, Lakshadweep (= Laccadive Islands), Bay of Bengal, Thailand, East Asia to Japan, and eastern Australia (Stephenson 1972a; Yang et al. 2012).

*Habitat*: Subtidal; in shallow waters among seagrass, or on substrates of mud, sand, or shell fragments; depths 20 to 430 m (Yang et al. 2012).

### *Charybdis brevispinosa* Leene, 1937 #

*Charybdis brevispinosa* — Wong et al. 2021: 45, fig. 81, pl. 15F.

*Taxonomy*: Leene (1937 1938), Wee and Ng (1995), Yang et al. (2012).

*Type*: Holotype ♂ and paratypes in ZMA.

*Type locality*: Java Sea, Indonesia (6°13'S, 107°57'E).

*Distribution*: West Pacific: Java Sea, Indonesia, to Singapore and Peninsular Malaysia, and South China (Yang et al. 2012).

*Habitat*: Subtidal; substrates muddy sandy; depths around 30 m (Yang et al. 2012).

### *Charybdis feriata* (Linnaeus, 1758) #

*Charybdis crucifera* — Stimpson 1858a: 39; Stimpson 1907: 80.
*Goniosoma cruciferum* — Miers 1886: 191.
*Charybdis cruciata* — Gee 1926: 161 [list]; Thompson and Horikoshi 1982: tab. 1; RSS Wu 1982: tab. 1; Morton and Morton 1983: 94, fig. 7.4(6).
*Charybdis* (*Goniosoma*) *cruciata* — Shen 1932a: 38, text-fig. 6, pl. 8; Shen 1940a: 221.
*Charybdis feriatus* — Hill et al. 1975: 82; Morton 1976: 103; Hill et al. 1978: 114; Morton 1979b: tab. 7.1, figs. 7.1, 7.5a; Morton and Morton 1983: 143; Davie 1992b: tab. 1; RSS Wu and Shin 1998: 108; SY Lee and Leung 1999: tab. 2; Blackmore and Rainbow 2000: app. 1; B Chan and Leung 2002: 24, fig. 2D; Lui et al. 2007: tab. 1; Wong et al. 2021: 45, fig. 82, pl. 16A.
*Charybdis feriata* — Morton 1988: 28, pl. 6.
*Charybdis* (*Charybdis*) *feriatus* — Leung et al. 2004: 89, 1 unnumb. fig.

*Taxonomy*: Leene (1938: as *C. cruciata*), Holthuis (1962), Wee and Ng (1995), Apel and Spiridonov (1998).

*Type locality*: Ambon, Indonesia (lectotype designated by Holthuis 1962).

*Type*: Status and whereabouts unknown: now considered lost (Apel and Spiridonov 1998).

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Madagascar, Gulf of Aden, Persian/Arabian Gulf, Arabian Sea, Bay of Bengal, to Southeast and East Asia to Japan, and Australia (see Apel and Spiridonov (1998)); exotic species in the Mediterranean (Abelló and Hispano 2006; Galil 2011).

*Habitat*: Subtidal; substrates of sand or sandy mud, or in shallow rocky or coral reefs; depths 10 to 40 m, also reaching down to 118 m (Yang et al. 2012); juveniles found symbiotic under bells of jellyfish (Morton 1988).

*Remarks*: The name *Cancer feriata* Linnaeus, 1758 (a name established making reference to a *Cancer Marinus Lævis* in Rumphius 1705), was resolved by Holthuis (1962), who designated the specimen figured in the work of G.E. Rumphius (1705: pl. 6P) as the lectotype (see also Holthuis 1959). The type material from Ambon, Indonesia, however, is believed no longer extant (Apel and Spiridonov 1998; Davie 2002). The species is now recognized as the senior synonym of *Cancer sexdentatus* Herbst, 1783, *Ca. crucifer* Fabricius, 1792 and *Ca. cruciata* Herbst, 1794.

### *Charybdis granulata* (De Haan, 1833) #

*Charybdis granulata* — Stimpson 1858a: 39; Stimpson 1907: 82; Wong et al. 2021: 46, fig. 83, pl. 16B.
*Charybdis* (*Charybdis*) *natator* — Leung et al. 2004: 93, 1 unnumb. fig. [not *Cancer natator* Herbst, 1794].

*Taxonomy*: Sakai (1976), Crosnier (1984b), Wee and Ng (1995), Yang et al. (2012).

*Type*: Lectotype ♂ RMNH D 468 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to West Pacific: East Africa, East India, Singapore, East Asia to Japan, to eastern Australia (Crosnier 1984b; Wee and Ng 1995; Ng and Davie 2002; Ahyong and Lee 2005).

*Habitat*: Subtidal; substrates rocky or sandy; depths 15 to 35 m (Yang et al. 2012).

### *Charybdis hellerii* (A. Milne-Edwards, 1867) #

*Charybdis* (*Goniosoma*) *merguiensis* — Alcock 1899: 55; Gordon 1931: 527; Shen 1940a: 221.
*Charybdis hellerii* — Davie 1992b: tab. 1; Blackmore and Rainbow 2000: app. 1; Wong et al. 2021: 47, fig. 84, pl. 16C.

*Taxonomy*: Leene (1938), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Lectotype ♂ MNHN B.761 S (designated by Apel and Spiridonov 1998; see also Dessouassi et al. 2019)

*Type locality*: New Caledonia.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, East Africa, Red Sea, Persian Gulf, Arabian Gulf, Bay of Bengal, Southeast and East Asia to Japan, and Australia; alien species in the Mediterranean (Galil 2011), New Zealand (Ahyong and Wilkens 2011), Northwest and Southwest Atlantic (Dineen et al. 2001; Ruiz et al. 2011; Tavares 2011), West Africa (Dessouassi et al. 2019) and likely Hawaii (Edmondson 1954; Castro 2011).

*Habitat*: Intertidal to subtidal; under rocks, or shallow pits with seagrasses, or within coral reefs (Yang et al. 2012).

### *Charybdis hongkongensis* Shen, 1934 #

*Charybdis* (*Goniohellenus*) *hongkongensis* Shen, 1934: 46, text-figs. 11, 12; Shen 1940a: 222.
*Charybdis hongkongensis* — Wong et al. 2021: 48, fig. 85, pl. 16D.

*Taxonomy*: Shen (1934), Leene (1938), Wee and Ng (1995).

*Type*: Holotype ♂ ZMFMIB No. 12585: status unknown.

*Type locality*: Hong Kong.

*Distribution*: West Pacific: Banda Sea and Sulawesi, Indonesia, to Peninsular Malaysia, Thailand, South China and Taiwan (Yang et al. 2012).

*Habitat*: Subtidal; substrates sandy or sandy-muddy; depths 30 to 400 m (Yang et al. 2012).

### *Charybdis japonica* (A. Milne-Edwards, 1861) #

*Charybdis sexdentata* — Stimpson 1858a: 39; Stimpson 1907: 81.
*Charybdis japonica* — Gee 1926: 161 [list; "near Hong Kong"]; Hill et al. 1975: 48; Morton 1976: 103; Hill et al. 1978: 92; Melville and Morton 1983: 18, 1 unnumb. fig. (19); Morton and Morton 1983: fig. 7.4(2); Davie 1992b: tab. 1; ZG Huang and Lin 1993: app.; SY Lee and Leung 1999: tab. 2; Wong et al. 2021: 48, fig. 86, pl. 16E.

*Taxonomy*: Shen (1932b), Leene (1938), Yang et al. (2012).

*Type*: Lectotype ♂ RMNH D 461; paralectotypes in RMNH, NSMT, KPMNH, MNHN, NHMD, MNHN, NHM and USNM (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Western Indian Ocean to East Asia: Red Sea, west of Peninsular Malaysia, coasts of China, Korea and Japan (Leene 1937; Stephenson 1972a b; Yang et al. 2012); exotic species in the Mediterranean (Galil 2011) and New Zealand (Ahyong and Wilkens 2011).

*Habitat*: Intertidal to subtidal; substrates of seagrass, mud, sand or rocks, to depths of 50 m (Yang et al. 2012).

### *Charybdis lucifera* (Fabricius, 1798) #

*Charybdis lucifera* — B Chan and Leung 2002: 24, fig. 2F; Lui et al. 2007: tab. 1; Wong et al. 2021: 49, fig. 87, pl. 16F.
*Charybdis* (*Charybdis*) *lucifera* — Leung et al. 2004: 91, 1 unnumb. fig.

*Taxonomy*: Leene (1938), Wee and Ng (1995), Apel and Spiridonov (1998).

*Type*: Syntypes in ZMK and NHMD (Zimsen 1964).

*Type locality*: "In oceano indico"; probably Tharangambadi (= Tranquebar), India (Apel and Spiridonov 1998).

*Distribution*: Western Indian Ocean to West Pacific: from Red Sea, Pakistan, India, Sri Lanka, Southeast and East Asia to Japan, and Australia (Apel and Spiridonov 1998).

*Habitat*: Subtidal; substrates sandy-muddy or of rocky reefs; depths 5 to 100 m (J-F Huang and Yu 1997).

### *Charybdis miles* (De Haan, 1835) #

*Charybdis miles* — Stimpson 1858a: 39; Stimpson 1907: 82; Gee 1926: 161 [list]; Stephenson and Rees 1968b: 92, figs. 1A, E, 2A, pl. 12A; Morton and Morton 1983: fig. 7.4(3); Wong et al. 2021: 50, fig. 88, pl. 17A.
*Charybdis* (*Goniosoma*) *miles* — Gordon 1931: 527; Shen 1940a: 221.

*Taxonomy*: Leene (1938), Stephenson and Rees (1968b), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type locality*: Japan, locality unspecified.

*Type*: Lectotype ♂ RMNH D 465, paralectotypes in RMNH, NHM and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Distribution*: Arabian Sea to West Pacific: from Gulf of Oman, India, Southeast and East Asia to Japan, and Australia (Yang et al. 2012).

*Habitat*: Subtidal; substrates of sandy mud, muddy sand or soft mud; depths 10 to 160 m (Yang et al. 2012).

### *Charybdis natator* (Herbst, 1794) #

*Charybdis natator* — Gee 1926: 161 [list; part?]; Blackmore and Rainbow 2000: app. 1; Lui et al. 2007: tab 1; Wong et al. 2021: 51, fig. 89, pl. 17B.
*Charybdis* (*Goniosoma*) *natator* — Shen 1932a: 40, text-figs. 7, 8, pl. 9a; Shen 1940a: 221.

*Taxonomy*: Sakai (1976), Wee and Ng (1995), Apel and Spirodonov (1998), Yang et al. (2012).

*Type locality*: "Das Veterland ist Ostindien", could be east coast of India or the Indo-Malayan Archipelago (Apel and Spiridonov 1998).

*Type*: Status unknown (not found in ZMB by Apel and Spiridonov 1998 by K Sakai 1999).

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Madagascar, Red Sea, Persian Gulf, Arabian Sea, Bay of Bengal, Southeast and East Asia to Japan, and Australia (Apel and Spiridonov 1998).

*Habitat*: Subtidal; substrates of sand or sandy mud; depths 30 to 310 m (Yang et al. 2012).

*Remarks*: Past local records of *C. natator* (since Gee 1926) might include *C. granulata* (De Haan, 1833). The latter species was long considered a junior synonym of *C. natator* until Sakai (1976) showed both being distinct (see also Wee and Ng 1995).

### *Charybdis orientalis* Dana, 1852 #

(Figs. 16, 37E)

*Charybdis orientalis* — present record.

*Taxonomy*: Leene (1938), Stephenson et al. (1957), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Syntype in MCZ (Apel and Spiridonov 1998).

*Type locality*: Caldera Bay, Mindanao, the Philippines.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, Arabian Sea and Bay of Bengal, Southeast and East Asia to Japan, and Australia, probably also French Polynesia (Apel and Spiridonov 1998; Yang et al. 2012).

*Habitat*: Subtidal; rocky substrates of sand, pebbles or with aquatic vegetation; depths 10 to 30 m (Yang et al. 2012).

*Remarks*: This species is a new record for the fauna of Hong Kong.

### *Charybdis truncata* (Fabricius, 1798) #

*Charybdis truncata* — Stimpson 1858a: 39; Stimpson 1907: 82; Shin and Thompson 1982: app.; Morton and Morton 1983: fig. 7.4(4); Davie 1992b: tab. 1; Mackie et al. 1993: app.; Blackmore and Rainbow 2000: app. 1.; SY Lee et al. 2000: tab. 3.; B Chan and Leung 2002: 24; Wong et al. 2021: 52, fig. 90, pl. 17C.
*Charybdis* (*Goniohellenus*) *ornata* — Alcock 1899: 64.
*Charybdis* (*Goniohellenus*) *truncatus* — Balss 1922b: 103; Gordon 1931: 527; Shen 1934: 49, text-figs. 13, 14.
*Charybdis* (*Goniohellenus*) *truncata* — Shen 1940a: 222.

*Taxonomy*: Shen (1934), Leene (1938), Crosnier (1962), Wee and Ng (1995), Yang et al. (2012).

*Type*: Syntypes in NHMD (Zimsen 1964; see also Rathbun 1902).

*Type locality*: "Habitat in Oceano Indico", probably Tharangambadi (= Tranquebar), India (Fransen et al. 1997).

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Maldives, India, Sri Lanka, Myanmar, Southeast and East Asia, and Australia (Yang et al. 2012).

*Habitat*: Subtidal; substrates of sandy-mud, soft mud, muddy sand or coarse sand; depths 7 to 107 m (Yang et al. 2012).

### *Charybdis vadorum* Alcock, 1899 #

*Charybdis* (*Goniohellenus*) *sinensis* Gordon 1930: 522; Gordon 1931: 534, text-figs. 11, 12(c, d, d'); Shen 1934: 44, text-figs. 9, 10.
*Charybdis* (*Goniohellenus*) *vadorum* — Shen 1940a: 222.
*Charybdis vadorum* — Shin and Thompson 1982: app.; Thompson and Horikoshi 1982: tab. 1; RSS Wu 1982: tab. 1; Shin 1990: tab. 2; Ong Che and Morton 1991: tab. 1; Davie 1992b: tab. 1; RSS Wu and Shin 1998: 112; SY Lee and Leung 1999: tab. 2; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Wong et al. 2021: 53, fig. 91, pl. 17D.

*Taxonomy*: Chopra (1935), Leene (1938), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Lectotype ♂ in ZSI, which G1 figured in text-figure 13 c, d in Chopra (1935) (designated by Apel and Spiridonov 1998).

*Type locality*: Indo-Burmese coast of the Bay of Bengal.

*Distribution*: Eastern Indian Ocean to South China

Sea: Bay of Bengal, Southeast and East Asia to South China (Apel and Spiridonov 1998).

*Habitat*: Subtidal; substrates of sandy mud, soft mud, muddy sand or coarse sand; depths 10 to 90 m (Yang et al. 2012).

### *Charybdis variegata* (Fabricius, 1798) #

*Charybdis* (*Goniosoma*) *variegata* — Alcock 1899: 60; Gordon 1931: 527; Shen 1940a: 222.
*Charybdis variegata* — Balss 1922b: 104; Gee 1926: 161 [list]; Davie 1992b: tab. 1; SY Lee and Leung 1999: tab. 2; Blackmore and Rainbow 2000: app. 1; SY Lee et al. 2000: tab. 3; Wong et al. 2021: 94, fig. 92, pl. 17E.

*Taxonomy*: Shen (1937b), Leene (1938), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Lectotype ♂ and paralectotypes in NHMD (designated by Apel and Spiridonov 1998).

*Type locality*: "In oceano indico"; probably Tharangambadi (= Tranquebar), India (Apel and Spiridonov 1998).

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Madagascar, Red Sea, Pakistan, India, Southeast and East Asia to Japan, and northern Australia (Yang et al. 2012).

*Habitat*: Subtidal; substrates muddy or sandy; depths 10 to 80 m (Yang et al. 2012).

### *Goniosupradens acutifrons* (De Man, 1879) #

(Figs. 17, 37F)

*Charybdis* cf. *miles* — Morton and Ruxton 1992: 50, 1 unnumb. fig.; Morton and Harper 1995: 46, pl. 24B; Morton and Ruxton 1997: 51, 1 unnumb. fig. [not *Portunus* (*C.*) *miles* De Haan, 1835].
*Goniosupradens acutifrons* — present record.

*Taxonomy*: Leene (1936 1938), Crosnier and Thomassin (1974), Yang et al. (2012).

*Type*: Holotype ♂ RMNH D 448 (Fransen et al. 1997).

*Type locality*: Timor, Indonesia.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Tanzania, Phuket (Thailand), to Southeast and East Asia to Japan, and Solomon Islands (Yang et al. 2012).

*Habitat*: Subtidal; rocky or coral reefs; depths 5 to 30 m (Yang et al. 2012).

*Remarks*: This species is a new record for the fauna of Hong Kong.

### *Lissocarcinus arkati* Kemp, 1923

*Lissocarcinus arkati* — Gordon 1931: 527, 533; Shen 1940a: 219.

*Taxonomy*: Chopra (1935), Sakai (1939), Crosnier (1962), Yang et al. (2012).

*Type*: Syntype ♀ ♀ ZSI C 693/1 (original text).

*Type locality*: Sandheads off mouth of River Hooghly (as Hughli River), western Bengal, India.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Bay of Bengal, to Southeast and East Asia to Japan, and Queensland (Australia).

*Habitat*: Subtidal; substrates sandy-mud, soft mud or broken shells; depths 10 to 67 m (Yang et al. 2012).

### *Lissocarcinus orbicularis* Dana, 1852

*Lissocarcinus orbicularis* — Markham 1982: 357; Markham 1992: tab. 1 [list]; Li 2003: 153 [no new specimens].

*Taxonomy*: Sakai (1939), Crosnier (1962), Spiridonov (1999), Yang et al. (2012).

*Type*: Presumably lost.

*Type locality*: Ovalau, Fiji.

*Distribution*: Western Indian Ocean to Central Pacific: South Africa, Madagascar, Red Sea, India and Sri Lanka, to Southeast and East Asia to Japan, and Australia, New Caledonia, Fiji, Hawaii and Tuamotu.

*Habitat*: Subtidal; commensal with holothurian *Holothuria* (*Halodeima*) *atra* Jaeger, 1833, *H.* (*Stauropora*) *pervicax* Selenka, 1867 and *Bohadschia argus* Jaeger, 1833, in respiratory tree or cloaca of hosts, on various substrates (Spiridonov 1999).

### *Thalamita chaptalii* (Audouin, 1826)

*Thalamita chaptalii* — Shen 1940a: 223.

*Taxonomy*: Stephenson and Hudson (1957), Crosnier (1962), Wee and Ng (1995), Yang et al. (2012).

*Type*: Status unknown.

*Type locality*: Red Sea.

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar, Red Sea, India, Sri Lanka, Southeast and East Asia to Taiwan, to Australia, New Caledonia, Solomon Islands and Tahiti (Stephenson 1972a; Yang et al. 2012).

*Habitat*: Subtidal; among crevices of coral reefs or beneath rocks; depths 5 to 40 m (Yang et al. 2012).

### *Thalamita imparimana* Alcock, 1899

*Thalamita imparimana* — Stephenson and Rees 1967: 78, fig. 28, pl. 7A [China Sea, vicinity Hong Kong, 21°46'N, 114°47'E].

*Taxonomy*: Stephenson and Rees (1967), Serène and Soh (1976: as *T. muusi*), Yang et al. (2012).

*Type*: Syntypes probably in ZSI.

*Type locality*: Ganjam Coast, India.

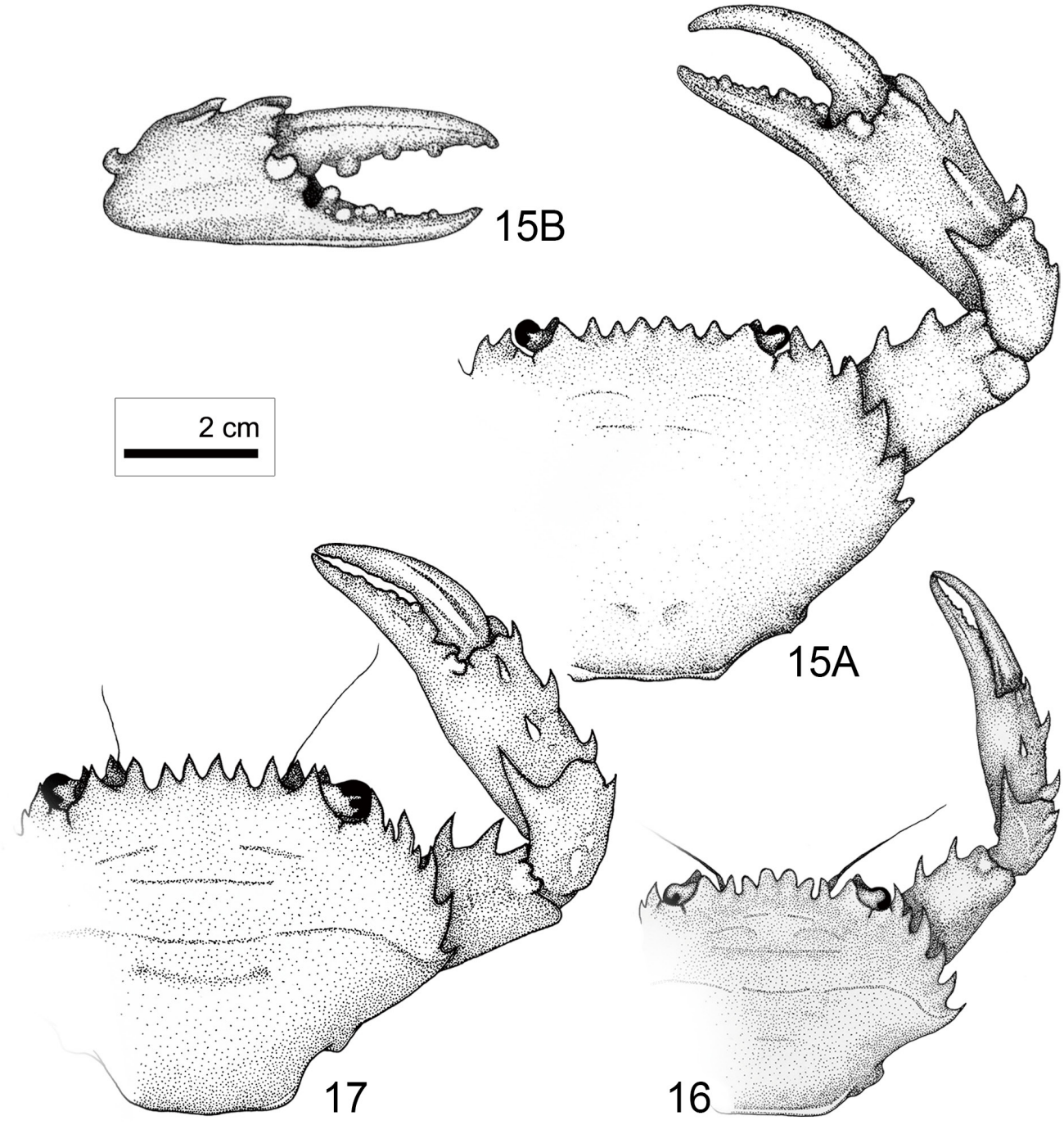
*Distribution*: Eastern Indian Ocean to South China Sea: Northeastern India, Phuket (Thailand), the Philippines, South China.

*Habitat*: Subtidal; on substrates sandy or beneath coral reefs; depths 53 to 69 m (Yang et al. 2012).

### ***Thalamita picta* Stimpson, 1858**

*Thalamita picta* — Thompson and Horikoshi 1982: tab. 1; Thompson et al. 1982: tab. 1; RSS Wu 1982: tab. 1; Morton and Morton 1983: 94, fig. 7.4(1); RSS Wu and Shin 1998: tab. 1.

*Taxonomy*: Stephenson and Hudson (1957),




**Figs. 15–17.** *Charybdis annulata* (Fabricius, 1798) (male, 80.3 × 54.1 mm, Shui Hau): A, carapace and cheliped; B, right chela. 16, *Charybdis orientalis* Dana, 1852 (male, 59.2 × 35.7 mm, Shelter Island): carapace and cheliped. 17, *Goniosupradens acutifrons* (De Man, 1879) (male, 81.8 × 52.2 mm, Bluff Island): carapace and cheliped.

Crosnier (1962), Garth (1965), Chen (1975), Wee and Ng (1995), Yang et al. (2012).

*Type*: Presumably lost.

*Type locality*: Oshima (as Ousima), Japan.

*Distribution*: Western Indian Ocean to East Pacific: from East Africa, Red Sea, India, Southeast and East Asia to Japan, towards Australia, New Caledonia, Marshall Islands, Hawaii, Tuamotu, Samoa and Clipperton Island.

*Habitat*: Intertidal and subtidal; in rocky or coral reefs (Yang et al. 2012).

*Remarks*: This species is commonly reported associated with corals reefs (see cited works under Taxonomy above). Considering the habitat, some local records appear in need of verification: Thompson and Horikoshi (1982), Thompson et al. (1982), RSS Wu (1982) and RSS Wu and Shin (1998) all reporting material of this species sampled from Tolo Channel (trawled from gravelly benthic substrates).

### *Thalamita sima* H. Milne Edwards, 1834 #

*Thalamita sima* — Stimpson 1858a: 39; Alcock 1899: 81; Stimpson 1907: 83, pl. 11(2); Gee 1926: 161 [list; "near Hong Kong"]; Gordon 1931: 527; Shen 1934: 54, text-figs. 17, 18; Shen 1940a: 223; Davie 1992b: tab. 1; Mackie et al. 1993: app.; Blackmore and Rainbow 2000: app. 1; Wong et al. 2021: 56, fig. 94, pl. 18A.

*Taxonomy*: Stephenson and Hudson (1957), Wee and Ng (1995), Apel and Spiridonov (1998), Yang et al. (2012).

*Type*: Probably in MNHN, status unknown (Apel and Spiridonov 1998).

*Type locality*: Coromandel Coast, Southeast India.

*Distribution*: Western Indian Ocean to Central Pacific: from East Africa, Red Sea, India, Sri Lanka, Southeast and East Asia to Japan, Australia, New Caledonia, New Zealand and Hawaii (Yang et al. 2012).

*Habitat*: Intertidal and subtidal; on sandflats, substrates muddy, or muddy-sandy, to depths of 50 m (Yang et al. 2012).

### *Thranita crenata* (Rüppell, 1830) #

*Thalamita crenata* — Stimpson 1907: 84, pl. 10(6, 6a); Gordon 1931: 527; Shen 1940a: 223; Davie 1992b: tab. 1; BKK Chan and Caley 2003: 86, 2 unnumb. figs.; Wong et al. 2021: 55, fig. 93, pl. 17F.

*Thranita crenata* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Stephenson and Hudson (1957: as *Thalamita*), Crosnier (1962: as *Thalamita*), Wee and Ng (1995: as *Thalamita*), Yang et al. (2012: as *Thalamita*).

*Type locality*: Southern Red Sea.

*Type*: Lectotype ♂ SMF 5611, and paratypes in SMF and RMNH (designated by Apel and Spiridonov 1998).

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, Gulf of Oman, Pakistan, India, Southeast and East Asia to Japan, to Australia, New Caledonia, Tonga, Tuamotu, and Hawaii.

*Habitat*: Intertidal and subtidal; locally not uncommon beneath rocks on gravelly sandflats.

### *Thranita danae* (Stimpson, 1858) #

*Thalamita danae* — Stimpson 1858a: 39; Stimpson 1907: 85, pl. 11(1, 1a); Gee 1926: 161 [list]; Shen 1934: 52, text-figs. 15, 16; Shen 1940a: 222; Morton and Harper 1995: 43, fig. 6(34); Wee and Ng 1995: 73, figs. 37A–C, 38A–C, 39A–C, 40A, B, 41A–D, 42A–I; Morton and Ruxton 1997: 1 unnumb. fig. (22); VCS Lai et al. 2006: 65, 3 unnumb. figs.

*? Thalamita stimpsoni* — Alcock 1899: 80.

*? Scylla serrata* — Morton 1979a: fig. 6.20g.

*Taxonomy*: Stephenson and Hudson (1957: as *Thalamita*), Stephenson (1972b: as *Thalamita*), Wee and Ng (1995: as *Thalamita*), Yang et al. (2012: as *Thalamita*).

*Type*: Neotype ♂ NHM 1986.848 (designated by Wee and Ng 1995).

*Type locality*: Tolo Harbour, Hong Kong (neotype).

*Distribution*: Western Indian Ocean to West Pacific: from East Africa, Red Sea, India, Southeastand East Asia to Japan, Australia, New Caledonia, Marshall Islands, Fiji and Samoa.

*Habitat*: Intertidal and subtidal; among rocky reefs, or on substrates of sand or muddy sand.

*Remarks*: While the species *T. danae* Stimpson, 1858 and *T. stimpsoni* A. Milne-Edwards, 1871 are merely distinguished by relative size of the fourth anterolateral tooth (Stephenson and Hudson 1957), the character is regarded as age-dependent, and the decision of synonymizing *T. stimpsoni* under *T. danae* as presented in Stephenson (1972b) and Wee and Ng (1995) is followed. Another closely similar species, *T. foresti* Crosnier, 1962, was reported by Stephenson and Rees (1967: p. 75) based on material from "Sabtan I., China Sea, vicinity Hong Kong" collected during the Albatross Philippine Expedition in 1908. The site was probably now Sabtang of the Batanes Islands, recorded to be around 20°46'N, 120°52'E (US Bureau of Fisheries 1910) within the Luzon Strait, therefore cannot be considered as fauna of Hong Kong.

### ***Thranita pelsarti*** **(Montgomery, 1931)** [#]

(Figs. 18, 37G)

*? Thalamita danae* — Morton and Harper 1995: 46, pl. 24C [not *T. danae* Stimpson, 1858].
*Thalamita pelsarti* — Tsang et al. 2020: 72, 2 unnumb. figs.

*Taxonomy*: Wee and Ng (1995: as *Thalamita*), Crosnier (2002: as *Thalamita*), Yang et al. (2012: as *Thalamita*).

*Type*: Syntypes in NHM 1931.7.24.41-42 (Crosnier 2002).

*Type locality*: Pelsaert (= Pelsart) and Long Islands, Abrolhos Islands, Australia.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: verified from Abrolho Islands, Australia, Indonesia, Malaysia and Singapore, Vietnam, South China, Taiwan and Japan (Crosnier 2002; Yang et al. 2012).

*Habitat*: Intertidal and subtidal; close to shores, on substrates muddy or rocky, also common among coral reefs (Yang et al. 2012).

*Remarks*: This species had long been considered synonymous under *Cancer prymna* Herbst, 1803, until resurrected by Wee and Ng (1995) (see also Crosnier (2002)). Appearing rather common among coral communities in Hong Kong, very likely *T. pelsarti* has been confounded under past local records of *T. prymna*. Morphological distinctions between *T. pelsarti* and *T. prymna* s. str. have been elaborated in detail by Wee and Ng (1995) and recently by Y.-H. Huang and Shih (2021). The latter work showed, however, molecular evidences based on the mitochondrial *COI* marker showing substantial but intraspecific level of divergences differences, and both species as well as *T. tenuipes* (Borradaile, 1902) constitute a thus far unresolved species complex (Y-H Huang and Shih 2021). We herein list both taxa as distinct species.

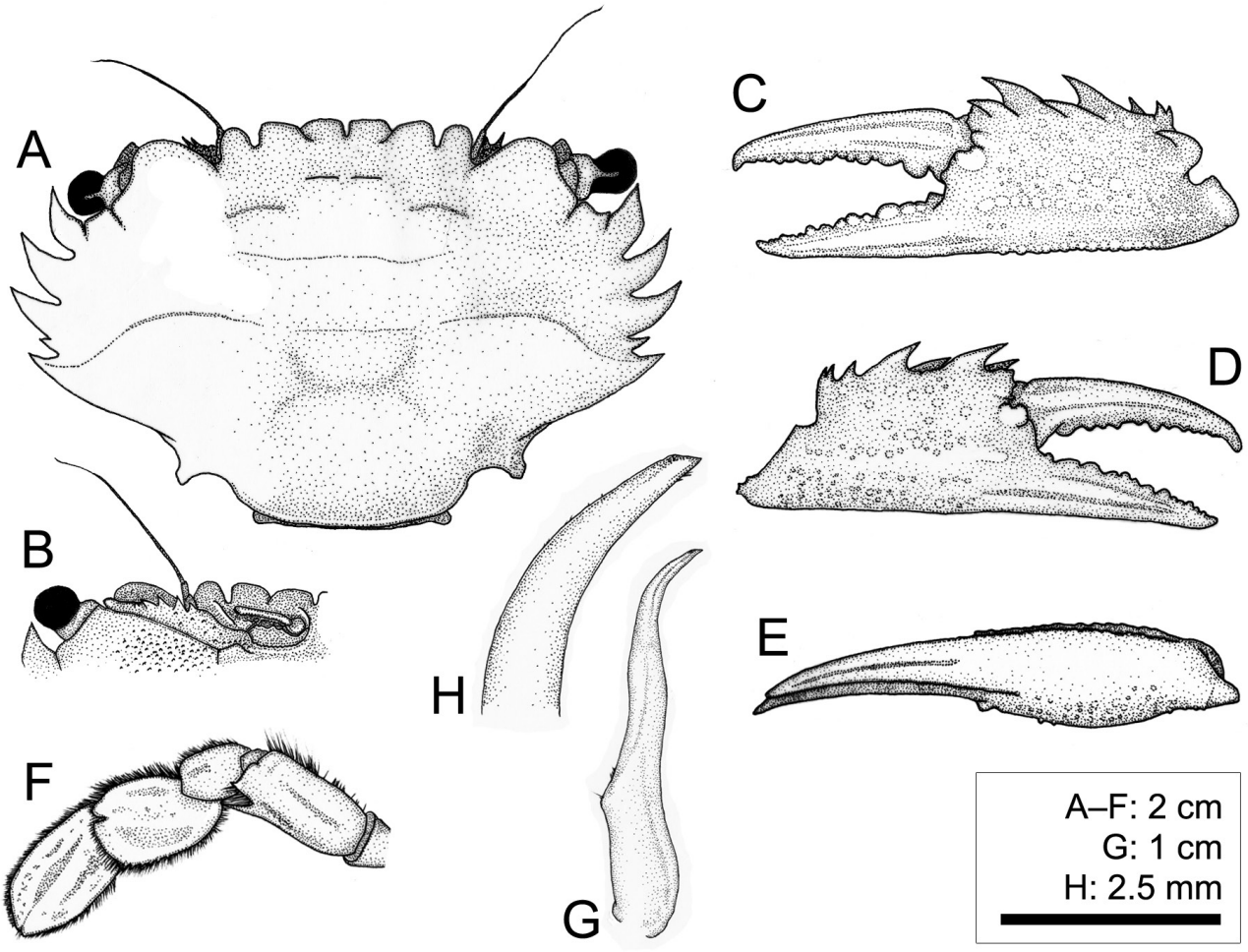



**Fig. 18.** *Thranita pelsarti* (Montgomery, 1931) (male, 54.8 × 33.6 mm, Sharp Island): A, carapace; B, basal antennal segment; C, left chela, external view; D, left chela, internal view; E, left chela, ventral view; F, left P5; G, left G1, mesial view; H, tip of left G1, mesial view. Structure A partially denuded.

### ***Thranita prymna*** **(Herbst, 1803)**

*Thalamnita prymna* — Hill et al. 1975: 59; Morton 1976: 100; Hill et al. 1978: 83; Morton 1979a: 115, fig. 6.15; Morton 1979b: 136, tab. 7.1.

*Thalamita prymna* — Shin and Thompson 1982: app.; Morton and Morton 1983: 94, fig. 7.3(11).

*Taxonomy*: Crosnier (1962: as *Thalamita*), Wee and Ng (1995: as *Thalamita*); Yang et al. (2012: as *Thalamita*).

*Type*: Neotype ♂ NHM 1890.10.20.51-52 (designated by Wee and Ng 1995).

*Type locality*: Tuticorin, Southeast India (neotype).

*Distribution*: Western Indian Ocean to West Pacific: verified records from Madagascar, East Africa, India, Andaman Islands, Malaysia, Singapore, South China, Japan, and Australia (Wee and Ng 1995).

*Habitat*: Intertidal and subtidal; among rocky or coral reefs (Yang et al. 2012).

*Remarks*: Many past records under this name appeared to be composite (Wee and Ng 1995; Apel and Spiridonov 1998; Yang et al. 2012), and local records probably also include *T. pelsarti* (see Remarks under *T. pelsarti* above).

### ***Thranita spinicarpa*** **(Wee & Ng, 1995)** [#]

(Figs. 19, 38A)

*Thranita spinicarpa* — present record.

*Taxonomy*: Wee and Ng (1995: as *Thalamita*), Yang et al. (2012: as *Thalamita*).

*Type*: Holotype ♂ ZRC 1993.7202 and paratypes in ZRC.

*Type locality*: Sentosa, Singapore.

*Distribution*: South China Sea: Singapore, and South China.

*Habitat*: Intertidal and subtidal; among rocky or coral reefs (Yang et al. 2012).

*Remarks*: This species is a new record for the fauna of Hong Kong.

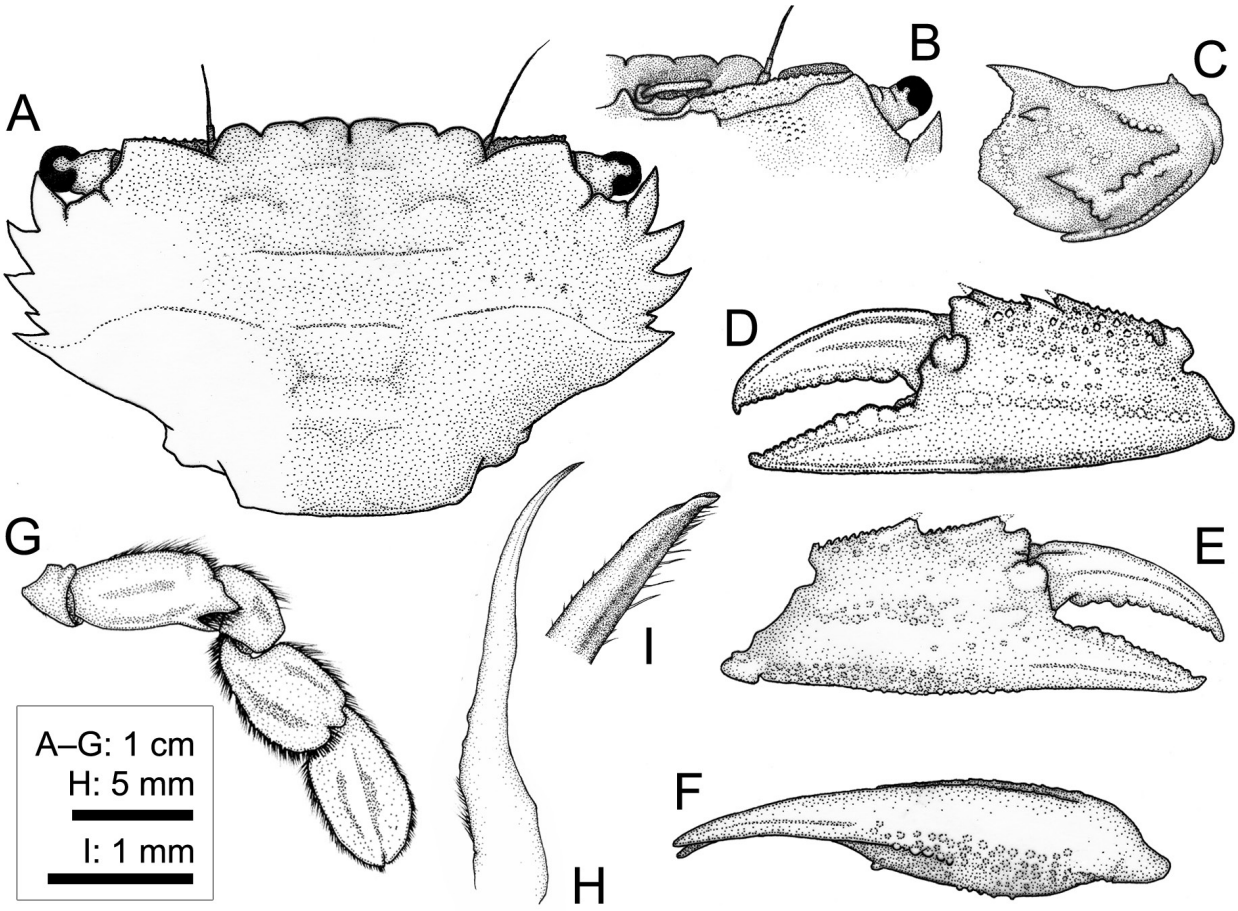



**Fig. 19.** *Thranita spinicarpa* (Wee & Ng, 1995) (male, 54.6 × 33.1 mm, Fung Wong Wat): A, carapace; B, basal antennal segment; C, left cheliped carpus, external view; D, left chela, external view; E, left chela, internal view; F, left chela, ventral view; G, right P5; H, left G1, mesial view; I, tip of left G1, mesial view. Structure A denuded.

## Superfamily Potamoidea Ortmann, 1896
## Family Potamonidae Ortmann, 1896
## Subfamily Potamiscinae Bott, 1970

### *Cryptopotamon anacoluthon* (Kemp, 1918) #

*Potamon* (*Potamon*) *anacoluthon* Kemp, 1918; 243, fig. 5; Gee 1926: 161 [list]; Shen 1940a: 229.
*Potamon anacoluthon* — Hill et al. 1975: 48; Hill et al. 1978: 67.
*Potamon hongkongensis* — Hill and Phillipps 1981: 144, pl. 49d. [not *Potamon* (*P.*) *hongkongensis* Shen, 1940(b)].
*Cryptopotamon anacoluthon* — Ng and Dudgeon 1992: 749, figs. 3B, 4, 5; Dudgeon and Corlett 1994: 53, fig. 6D, pl. 22; Dudgeon 1999: 181, fig. 4.21D; Fellowes et al. 2002: tab. 2 [list]; Dudgeon 2003: 60, 3 unnumb. figs.; Stanton et al. 2017: 9787, figs. 1, 2.
*Sinolapotamon anacoluthon* — Dai 1999: 152, fig. 79, pl. 9(6); Shih et al. 2009: tab. 1.

*Taxonomy*: Ng and Dudgeon (1992), Dai (1999: as *Sinolapotamon*).

*Type*: Syntypes in ZSI 9475/10 (Kemp 1918; Shen 1940a).

*Type locality*: The Peak, Hong Kong.

*Distribution*: Probably endemic to Hong Kong and nearby Shenzhen.

*Habitat*: Freshwater, upper-course streams of gravelly substrate (Ng and Dudgeon 1992); often found on substrates below running waters of moderate flow, fully aquatic and reluctant to stay, even briefly, out of water.

*Remarks*: The status of the monotypic genus *Cryptopotamon* Ng and Dudgeon, 1992 has been questioned. This genus shares close resemblance with *Sinolapotamon* Tai & Sung, 1975, but characterized by a more depressed carapace with well-developed epibranchial teeth and distinct epigastric crests (carapace swollen with epibranchial teeth and epigastric crests absent in *Sinolapotamon*) (cf. Ng 2000a; Ng et al. 2008). The two genera, however, share a similarly shaped male first gonopod. Dai (1999) treated both genera as synonyms, and both are genetically close (see Shih et al. 2009; Zhu et al. 2010). Lu et al. (2003) recently described a new species, *Sinolapotamon cirratum* from Guangxi in China. Examining also *S. anacoluthon* (Kemp, 1918) sampled from Yangtaishan, Shenzhen, a site relatively near Hong Kong, they argued that both are very close based on genetic data. Ng and Dudgeon (1992) established *Cryptopotamon* for Kemp's (1918) species, but Lu et al. (2023) noted that several of the characters used may be only of value at the specific level. While this is true and the genetic differences between *Sinalopotamon* Tai & Sung, 1975, and *Cryptopotamon* are close, morphologically, the carapaces of the *Sinolapotamon* species further to the west in Guangxi (*S. auriculatum* Zhu, Naruse & Zhou, 2009, *S. palmatum* Zhu, Naruse & Zhou, 2009, and *S. patellifer* (Wu, 1934) [type species]) are nevertheless much more convex and smoother, compared to *C. anacoluthon* and *S. cirratum*, with the cristae far less developed. For this reason, we prefer to keep the two genera separate for the time being. We have seen specimens of *Sinolapotamon cirratum*, and we do agree that it is very close to *Cryptopotamon anacoluthon*. However, we are of the opinion this species should be placed in *Cryptopotamon* instead.

### *Nanhaipotamon aculatum* Dai, 1997 #

*Isolapotamon* (*Nanhaipotamon*) *formosanum globosum* — Bott 1968a: 125 [part: Hong Kong material only], fig. 10a, b [not *Potamon* (*Geothelphusa*) *globosum* Parisi, 1916].
*Nanhaipotamon formosanum globosum* — Bott 1970b: 196 [part: Hong Kong material only], pls. 41(84) [not *Potamon* (*Geothelphusa*) *globosum* Parisi, 1916].
*Nanhaipotamon aculatum* Dai, 1997: 232, fig. 11, pl. 2(5); Dai 1999: 124, fig. 62, pl. 7(3).

*Taxonomy*: Dai (1997 1999).

*Type*: Holotype ♂ MMü 1225/1 in ZSM.

*Type locality*: Hong Kong.

*Distribution*: Probably endemic to Hong Kong and nearby regions of Shenzhen.

*Habitat*: Freshwater; in burrows on stream banks of altitudes 20 to 100 m (Dai 1999).

*Remarks*: This species was described from one male specimen among the collections of freshwater crabs deposited in the Munich, Germany (ZSM) by Dai (1997) and characterized by the male first gonopod having the mesial subdistal lobe produced as a rounded protrusion (Dai 1997: fig. 11(4, 5)). This form matched illustrations by Bott (1968a 1970b), erroneously under the name *I.* (*N.*) *formosanum globosum* (see Dai (1999); Yeo and Naruse (2007)).

In treating freshwater decapods from Shenzhen, C. Huang and Mao (2021) reported on *N. aculatum* and *N. hongkongense*, which were readily identified by their distinct coloration in field (respectively bluish and reddish), showing a distinct west and east distribution immediate north of Hong Kong, with no overlap in between (tab. 1, C Huang and Mao 2021). This observation can possibly correspond to observations in Hong Kong, where bluish crabs were seen only in sites in northwestern New Territories, whereas those from elsewhere in the territory showing colorations along a gradient of red. However, near Tai Tong, Yuen Long, both bluish and reddish crabs had been sampled (KJHW, unpublished data).

Examining both forms, which show considerable variations in G1 morphologies, particularly of the subdistal lobe, which varies from a rounded protrusion,

to a relatively broad, wing-like structure in some reddish forms, we remain uncertain in the precise identification of *N. aculatum* (see Remarks under *N. hongkongense* below). We keep this record for Hong Kong until ongoing studies on this species can be completed.

### *Nanhaipotamon hongkongense* (Shen, 1940) #

*Potamon* (*Potamon*) *hongkongensis* Shen, 1940a: 229 [*nomen nudum*].
*Potamon* (*Potamon*) *hongkongensis* Shen, 1940b: 255, figs. 1–5.
*Potamon globosum* — Pretzmann 1963: 367 [not *Potamon* (*Geothelphusa*) *globosum* Parisi, 1916].
*Potamon hongkongensis* — Hill et al. 1975: 48; Hill et al. 1978: 67; Morton and Morton 1983: 214, fig. 11.4(1).
*Potamon anacoluthon* — Hill and Phillipps 1981: 146, pl. 49e. [not *Potamon* (*P.*) *anacoluthon* Kemp, 1918].
*Nanhaipotamon hongkongense* — Ng and Dudgeon 1992: 744, figs. 1, 2, 3A; Dudgeon and Corlett 1994: 53, fig. 6C, pl. 21; Dai 1997: 224, fig. 7, pl. 2(1); Dai 1999: 118, fig. 58, pl. 6(7); Dudgeon 1999: 181, fig. 4.21C; Fellowes et al. 2002: tab. 2 [list]; Dudgeon 2003: 60, 3 unnumb. figs.; Stanton et al. 2018: 11157, figs. 1, 2.

*Taxonomy*: Ng and Dudgeon (1992), Dai (1997 1999).

*Type*: Neotype ♂ ZRC 1991.1776 (designated by Dai 1997).

*Type locality*: Nai Chung stream, near Ma On Shan, New Territories, Hong Kong (neotype).

*Distribution*: Probably endemic to South China: Hong Kong and nearby regions of Shenzhen.

*Habitat*: Freshwater; secondary forest above 100 m above sea level (Ng and Dudgeon 1992). These crabs prefer pools of slow-flowing water, often with fallen foliage, under secondary forests with rather tall and dense vegetation cover. Numerous individuals can be found under rock fragments and among crevices of igneous bedrock, to banks of muddy or gritty sediments. The crabs are largely nocturnal, and often spotted at burrow openings. During and shortly after torrential rains, crabs are occasionally found in waterlogged patches.

*Remarks*: The first *Nanhaipotamon* species recognized from the vicinity of the Pearl River Delta was *Potamon hongkongensis* Shen, 1940 collected from an unspecified locality in Hong Kong (Shen 1940b), the type material of which is considered lost and the species had remained poorly known for many decades. Based on material from several localities (Nai Chung, Tai Po Kau, and Victoria Peak), Ng and Dudgeon (1992) redescribed *N. hongkongense* in detail. A.-Y. Dai (1999), in her revision of the genus, designated a large male specimen from Nai Chung as neotype of *N. hongkongense*, and described a new species, *N. aculatum*, the latter previously reported as *I.* (*N.*) *formosanum globosum* by Bott (1968a 1970b; see Remarks on *N. aculatum* above).

In recent surveys of *Nanhaipotamon* in Hong Kong, material we collected from various localities shows substantial variation in the live coloration and G1 morphology. The morphology of the G1 has likewise been shown to be quite variable in other congeneric species, such as *N. guangdongense* Dai, 1997 (fig. 7, C Huang et al. 2018), *N. macau* Huang, Wong & Ahyong, 2018 (fig. 5C–E, C Huang et al. 2018) and *N. aculatum* (fig. 4A–C, C Huang and Mao 2021); so is the case in *N. hongkongense* (fig. 4D–F, C Huang and Mao 2021; KJHW, unpublished data).

Preliminary genetic analyses performed by the third author showed, based on our local material so far acquired, *Nanhaipotamon* in vicinity of Hong Kong comprise multiple genetically distinct lineages (see also C Huang et al. 2021). One of these is represented by material from Lamma Island and Lantau Island, marginally distinguishable by subtle but discernable morphological features in addition to those of the gonopods. This study is now in progress.

## Superfamily Trapezioidea Miers, 1886
## Family Tetraliidae Castro, Ng & Ahyong, 2004

### *Tetralia glaberrima* (Herbst, 1790)

*Tetralia glaberrima* — Stimpson 1858a: 35; Stimpson 1907: 74; Gee 1926: 163 [list]; Shen 1940a: 228 [no new specimens].

*Taxonomy*: Galil (1988: as *T. fulva*), Castro (1997: as *T. fulva*), Castro et al. (2004).

*Type*: Neotype ♂ MNHN-B 25234 (designated by Castro et al. 2004).

*Type locality*: Heron Island, Queensland, Australia (neotype).

*Distribution*: Western Indian Ocean to Central Pacific: across the Indo-Pacific except the Hawaiian Islands (Castro et al. 2004; Castro 2011).

*Habitat*: Intertidal and subtidal; obligate to branching *Acropora* corals (Galil 1988; Trautwein 2007).

*Remarks*: Live color patterns are important characters in species identifications in many trapeziid crabs. Stimpson's (1907) description of this coral-obligate species as "pale yellowish, or flesh-color. Eyes dark", from "in crevices among madrepores taken below low-water mark in a bay on the east side of Hongkong Island" (see also his citation of Dana 1855: pl. 16(3) indicates that his record is probably what is today *T. glaberrima* (see live coloration by Castro (1997) as *T. fulva*; also Castro et al. 2004). This name, however, had long been applied to represent multiple forms (Ortmann 1897a; Patton 1966; Galil 1988) and various

new species with similar color patterns have also been recently identified from the West Pacific (Trautwein 2007). We cannot verify the accuracy of Stimpson's record; suffice to say we have not seen specimens referrable to this taxon from Hong Kong as yet.

## Superfamily Xanthoidea Macleay, 1838
## Family Xanthidae Macleay, 1838
## Subfamily Actaeinae Alcock, 1898

### *Actaea pura* Stimpson, 1858 #

*Actæa pura* Stimpson, 1858a: 32; Stimpson 1907: 44. pl. 5(7).
*Actaea granulata* — Alcock 1898: 151 [part: Hong Kong material only]; Gee 1926: 162 [list] [not *A. granulata* Audouin, 1826].
*Actaea savignyi* — Odhner 1925: 52 [part: Hong Kong material only]; Shen 1940a: 226 [not *Cancer savignii* H. Milne Edwards, 1834].
*Actaea savignyi* var. *pura* — Gordon 1931: 528.
*Actaea savignyi pura* — Shen 1940a: 226.
*Actaea pura* — Guinot 1976: 217, fig. 29b, pl. 11(1, 1a, 2, 3); Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 273; Davie 1992b: tab. 1; Wong et al. 2021: 57, fig. 95, pl. 18B.

*Taxonomy*: Guinot (1976).

*Type*: Neotype ♀ in NHM 1930.12.2 142-143 (designated by Guinot 1976).

*Type locality*: Hong Kong (neotype).

*Distribution*: South China: so far reliably from Hong Kong only (Guinot 1976).

*Habitat*: Intertidal and shallow subtidal; among fouling, or on sandy or gravelly substrates.

### *Actaeodes mutatus* Guinot, 1976 #

*Actaeodes areolatus* — Horikoshi and Takeda 1982: tab. 1.

*Taxonomy*: Guinot (1976).

*Type*: Presumably lost (original types of *Actæa areolata* Dana, 1852; see Remarks below).

*Type locality*: Sulu Sea or Balabac Strait.

*Distribution*: Eastern Indian Ocean to Central Pacific: Mergui Archilepago, Singapore, Thailand, South China, southern Japan, to northern Australia and French Polynesia (Odhner 1925; Davie 2002; Iwasa-Arai et al. 2015).

*Habitat*: Intertidal and subtidal; associated with coral reefs, locally in cracks of dead coral blocks.

*Remarks*: Based on collections of the USEE, Dana (1852a) described *Actæa areolata* from Sulu Sea or the Balabac Strait, the Philippines (Dana 1852a: p. 73; 1852b: p. 162; 1855: pl. 8(1)) and *Actæodes areolatus* from Raraka Island, Tuamotu (1852a: p. 77; 1852b: p. 194; 1855: pl. 9(8)). The identity of the Tuamotu species, *Actæodes areolatus* Dana, 1852, however, was not regarded as an *Actaeodes sensu stricto* by Guinot (1976), then treated as a *species inquirenda*, and is at present under *Actaea*, pending further revisions (Ng et al. 2008). The Philippine species (*Actæa areolata* Dana, 1852) is relatively well understood and was later referred to *Actaeodes* Dana, 1851 by Guinot (1976). This transfer, however, created a homonymy, and the Philippine taxon received a new name, *Actaeodes mutatus.* The record of "*Actæa areolata*" in Horikoshi and Takeda (1982) from Hong Kong is here referred to *Actaeodes mutatus* instead.

### *Actaeodes tomentosus* (H. Milne Edwards, 1834)

*Acteodes tomemtosus* — Stimpson 1858a: 32; Stimpson 1907: 44.
*Actaea tomentosa* — Gee 1926: 162 [list]; Shen 1940a: 226 [no new specimens].

*Taxonomy*: Sakai (1939), Guinot (1976), Serène (1984).

*Type*: Lectotype ♀ and paralectotype in MP-B2257S in MNHN (designated by Guinot 1976).

*Type locality*: Indian Ocean.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, India and Sri Lanka, Southeast and East Asia to Japan, towards Australia, New Caledonia, Palau, Marshall, and Hawaii (Serène 1984).

*Habitat*: Intertidal and subtidal; in crevices of rocks or on coral reefs (Dai and Yang 1991).

### *Epiactaea nodulosa* (White, 1848)

*Actaea nodulosa* — Gordon 1931: 528; Shen 1940a: 226.
*Epiactaea nodulosa* — Clark et al. 2008: 921.

*Taxonomy*: Odhner (1925: as *Actaea*), Serène (1984).

*Type*: Syntype NHM 1939.5.8.14 (photo examined by Odhner 1925; NHM Data Portal).

*Type locality*: Mauritius.

*Distribution*: Western Indian Ocean to Central Pacific: Madagascar, Reunion, Mauritius, Aldabra, Red Sea, South China Sea, Ogasawara (Japan) to Hawaii (Odhner 1925; Takeda and Kurata 1976 1984; Serène 1984; Castro 2011).

*Habitat*: Subtidal; of depths 25 to 90 m (Castro 2011).

### *Epiactaea margaritifera* (Odhner, 1925) #
(Figs. 20, 38B, C)

*Epiactaea margaritifera* — present record.

*Taxonomy*: Guinot (1958a: as *Actaea*), Serène (1984), Deb (1989: as *Actaea*).

*Type*: Holotype ♀ MP-B6788 in MNHN (Serène 1984).

*Type locality*: Aden, Red Sea.

*Distribution*: Western Indian Ocean to West Pacific: Red Sea, Pakistan and Sri Lanka, Singapore, Gulf of Thailand, South China, Kei Islands (Indonesia), and Torres Strait (Serène 1984; Deb 1989).

*Habitat*: Intertidal and subtidal; under rock fragments.

*Remarks*: *Epiactaea* Serène, 1984 includes three species: *E. bullifera* (Alcock, 1898), *E. nodulosa* (White, 1848) (recorded locally, see above) and *E. margaritifera* (Odhner, 1925) (Ng et al. 2008). The local intertidal form, not uncommon along sheltered shores, is identified as *E. margaritifera* (Odhner, 1925) by (1) its pearl-shaped tubercles of similar sizes which are well separated all over the carapace (Figs. 20A, 38B, C); (2) possession of a tripartite 3M region (Fig. 20A); and (3) the male thoracic sternites and pleon are covered with low granules instead of vermicular excavations (Fig. 20E, F) (cf. Alcock 1898; Serène 1984). This species is a new record for the fauna of Hong Kong.

### ***Gaillardiellus orientalis*** **(Odhner, 1925)** [#]

*Actaea ruppelli* var. *orientalis* Odhner, 1925: 46, pl. 3(7).
*Gaillardiellus orientalis* — Guinot 1976: 255, fig. 43B, pl. 16(2).

*Taxonomy*: Shen (1937a: as *Actaea rüppelli orientalis*), Sakai (1939: as *Actaea rüppelli orientalis*), Guinot (1976).

*Type*: Syntype ♂ in NHMD (Guinot 1976).

*Type locality*: Hong Kong.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Northwest Australia, Phuket (Thailand), Singapore, to East Asia to Japan (Guinot 1976; Sakai 1976; Dai and Yang 1991; Ng and Clark 1994; Ho et al. 2000; Ng and Davie 2002; Hosie et al. 2015).

*Habitat*: Shallow subtidal; substrates rocky or weedy (Dai and Yang 1991).

*Remarks*: Odhner (1925) described this taxon as a variety of *Actaea ruppelli* based on material from Japan and Hong Kong, noting which characterized by soft setal tufts, less protruded margins of carapace and

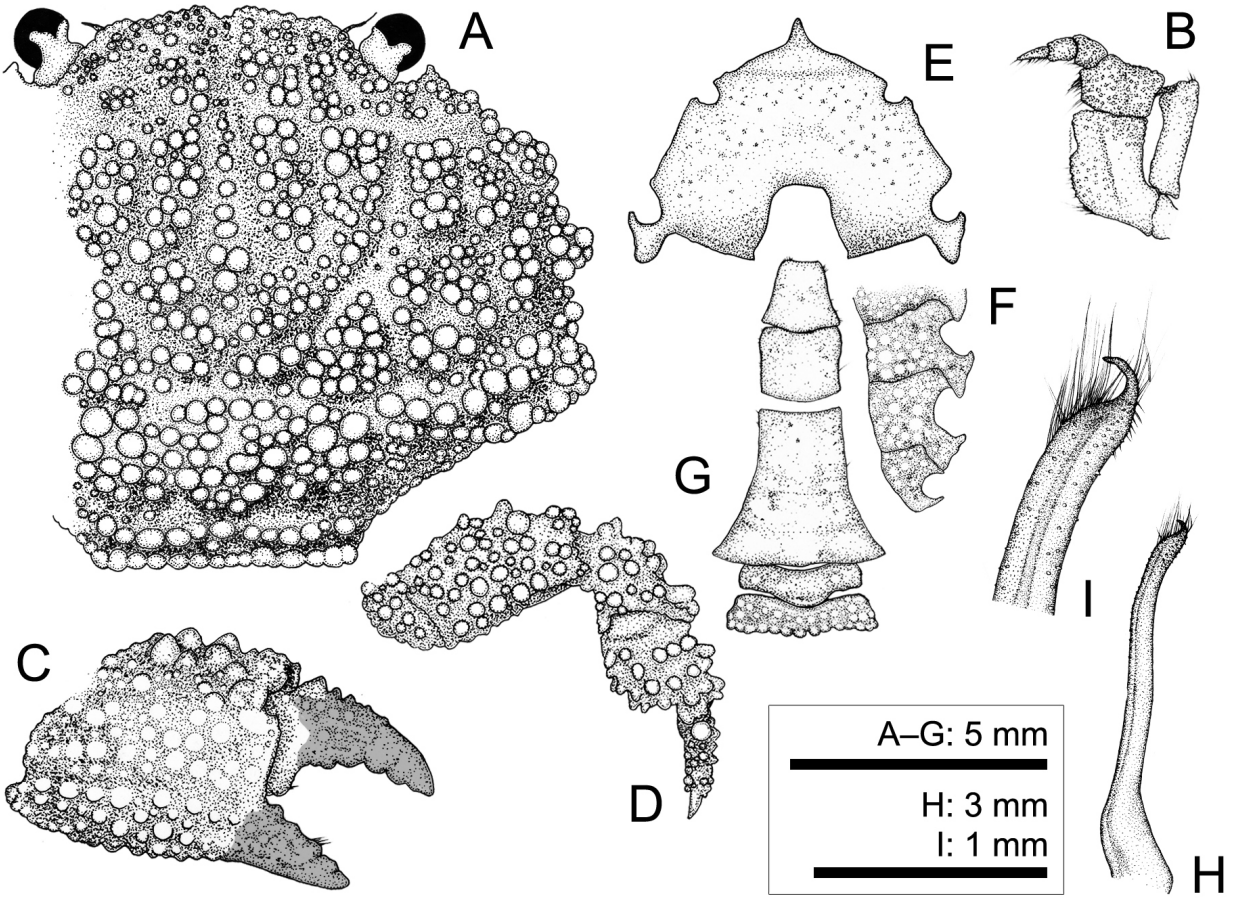



**Fig. 20.** *Epiactaea margaritifera* (Odhner, 1925) (male, 14.5 × 8.7 mm, Starfish Bay): A, carapace; B, maxilliped 3; C, right chela; D, right P5; E, thoracic sternites 3 to 4; F, thoracic sternites 5 to 7; G, pleon; H, left G1, mesial view; I, tip of left G1, mesial view. Structure A denuded.

cardiac region indistinctly separated. *Actaea ruppelli* var. *orientalis* was raised as a full species by Guinot (1976). These two species, namely *Gaillardiellus orientalis* and *G. rueppelli*, are nevertheless extremely resembling. Serène (1984: 117) had separated both using relative width of carapace (*rueppelli* 1.35 times of cl vs. *orientalis* 1.4), form of grooves separating regions on carapace (broad and shallow vs. narrow and deeper); granulation (relatively small and few in *rueppelli* vs. coarse and numerous and *orientalis*); and absence (*rueppelli*) or presence (*orientalis*) of plumose setal tufts. Among these two, the first author (KJHW) had only examined local material identifiable as *G. orientalis*, which characterized by the iconic pale yellowish longish setal tufts, and a live coloration of nearly entirely crimson-red (see *e.g.*, Sakai 1976; Takeda 1982).

### *Gaillardiellus rueppelli* (Krauss, 1843)

*Actaea pilosa* Stimpson, 1858a: 31; Stimpson 1907: 46, pl. 5(6); Gee 1926: 162 [list].
*Actaea ruppelli* — Odhner 1925: 45, fig. 4, pl. 3(6).
*Actaea rüppellii* — Shen 1940a: 226.
*Paractaea ruppelii* — Blackmore and Rainbow 2000: app. 1.

*Taxonomy*: Odhner (1925: as *Actaea*), Sakai (1939: as *Actaea*), Guinot (1976), Serène (1984), S-k Lee et al. (2012).

*Type*: Holotype ♂ SMNS 797 (Guinot 1976).

*Type locality*: Natal, South Africa.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Mauritius, Sri Lanka, Mergui Archipelago, Southeast and East Asia to Japan, New Guinea, Australia, New Caledonia, Marshall and Gilbert Islands, Fiji, Samoa, Caroline Island and Tahiti (Odhner 1925).

*Habitat*: Subtidal; substrates sandy or rocky; depths 15 to 30 m (Dai and Yang 1991).

*Remarks*: See Remarks under *G. orientalis* above.

### *Novactaea pulchella* (A. Milne-Edwards, 1865) [#]
(Figs. 21, 38D)

*Novactaea pulchella* — present record.

*Taxonomy*: Sakai (1939: as *Actaea*), Guinot (1976), Serène (1984).

*Type*: Holotype ♀ in MNHN (Guinot 1976; Serène 1984).

*Type locality*: Reunion Island.

*Distribution*: Possibly western Indian Ocean to West Pacific: known with certainty from Reunion Island, likely also across the Indo-West Pacific, to South China, Taiwan, Japan, Vietnam and Indonesia (Guinot 1976; Serène 1984).

*Habitat*: Intertidal and shallow subtidal; under rock fragments on a gritty substrate.

*Remarks*: This species is a new record for the fauna of Hong Kong.

### *Pseudoliomera helleri* (A. Milne-Edwards, 1865)

*Actæa helleri* — Gordon 1931: 527.
*Actaea helleri* — Shen 1940a: 226.

*Taxonomy*: Guinot (1969a), Serène (1984), Maenosono (2018).

*Type*: Syntypes probably in MNHN.

*Type locality*: Unknown.

*Distribution*: Western Indian Ocean to West Pacific: Madagascar, Seychelles, Mauritius, Red Sea, Sri Lanka, to Southeast and East Asia to Japan, Enewetak Atoll, Australia, and Kermadec Islands (Odhner 1925; Takeda and Kurata 1976; Serène 1984; Garth et al. 1987; Deb 1989; Dai and Yang 1991; Nomura et al. 1996; Davie 2002; Takeda and Webber 2006).

*Habitat*: Subtidal; under rocks and pebbles; depths 15 to 35 m (Dai and Yang 1991).

## Subfamily Banareiinae Števčić, 2005

### *Banareia subglobosa* (Stimpson, 1858)

*Actaea subglobosa* Stimpson, 1858a: 33; Stimpson 1907: 45, pl. 5(5); Odhner 1925: 75, pl. 4(19); Shen 1940a: 226.
*Banareia subglobosa* — Balss 1922b: 123.
*Actaea* (? *Banareia*) *subglobosa* — Gee 1926: 162 [list].

*Taxonomy*: Odhner (1925: as *Actaea*), Sakai (1939: as *A.* (*Banareia*)), Serène (1962), Guinot (1976).

*Type*: Probably lost.

*Type locality*: Hong Kong.

*Distribution*: South China Sea and East Asia: Vietnam, South China, Taiwan and Japan (Guinot 1976).

*Habitat*: Subtidal; collected by dredging, within a mass of *Spoggodia* coral (Stimpson 1907), or commensal with soft coral *Nephthya* (Sakai 1939).

## Subfamily Chlorodiellinae Ng & Holthuis, 2007

### *Chlorodiella nigra* (Forskål, 1775) [#]

*Chlorodiella nigra* — Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 273, fig. 12.9(10).

*Taxonomy*: Forest and Guinot (1961), Chen and Lan (1978), Serène (1984).

*Type*: Status unknown (Davie 2002).

*Type locality*: Djeddah, Red Sea.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, Bay of Bengal, South China Sea and South China to Indonesia and Australia, Palau, Tonga, Fiji, Samoa, Tahiti and Hawaii (Serène 1984).

*Habitat*: Intertidal and subtidal; rocky or coral reefs (Dai and Yang 1991).

### ***Pilodius granulatus* Stimpson, 1858** #

*Pilodius granulatus* Stimpson, 1858a: 32; Stimpson 1907: 58, pl. 7(2); Gee 1926: 163 [list]; Morton 1976: 98; Morton 1979a: 113; Horikoshi and Takeda 1982: tab. 1; Clark and Galil 1993: 1133, figs. 5A–G, 33A, 41B.

*Taxonomy*: Clark and Galil (1993).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: West Pacific: northeastern Australia, Indonesia, Palau, Singapore, the Philippines, to South China (Clark and Galil 1993).

*Habitat*: Subtidal; associated with coral reefs (Davie 2002).

### ***Pilodius miersi* (Ward, 1936)** #

(Figs. 22, 38E)

*Pilodius miersi* — present record.

*Taxonomy*: Clark and Galil (1993), SH Lee and Ko (2011).

*Type*: Holotype ♂ QM W745, and paratypes in NHM and AM (Davie 2002).

*Type locality*: Lindeman Islands, Queensland, Australia.

*Distribution*: West Pacific: northeastern Australia, Singapore, Vietnam, South China, Korea and Japan (Clark and Galil 1993; SH Lee and Ko 2011).

*Habitat*: Subtidal; locally on coarse sandy substrates under boulders near coral communities.

*Remarks*: This species is a new record for the fauna of Hong Kong.

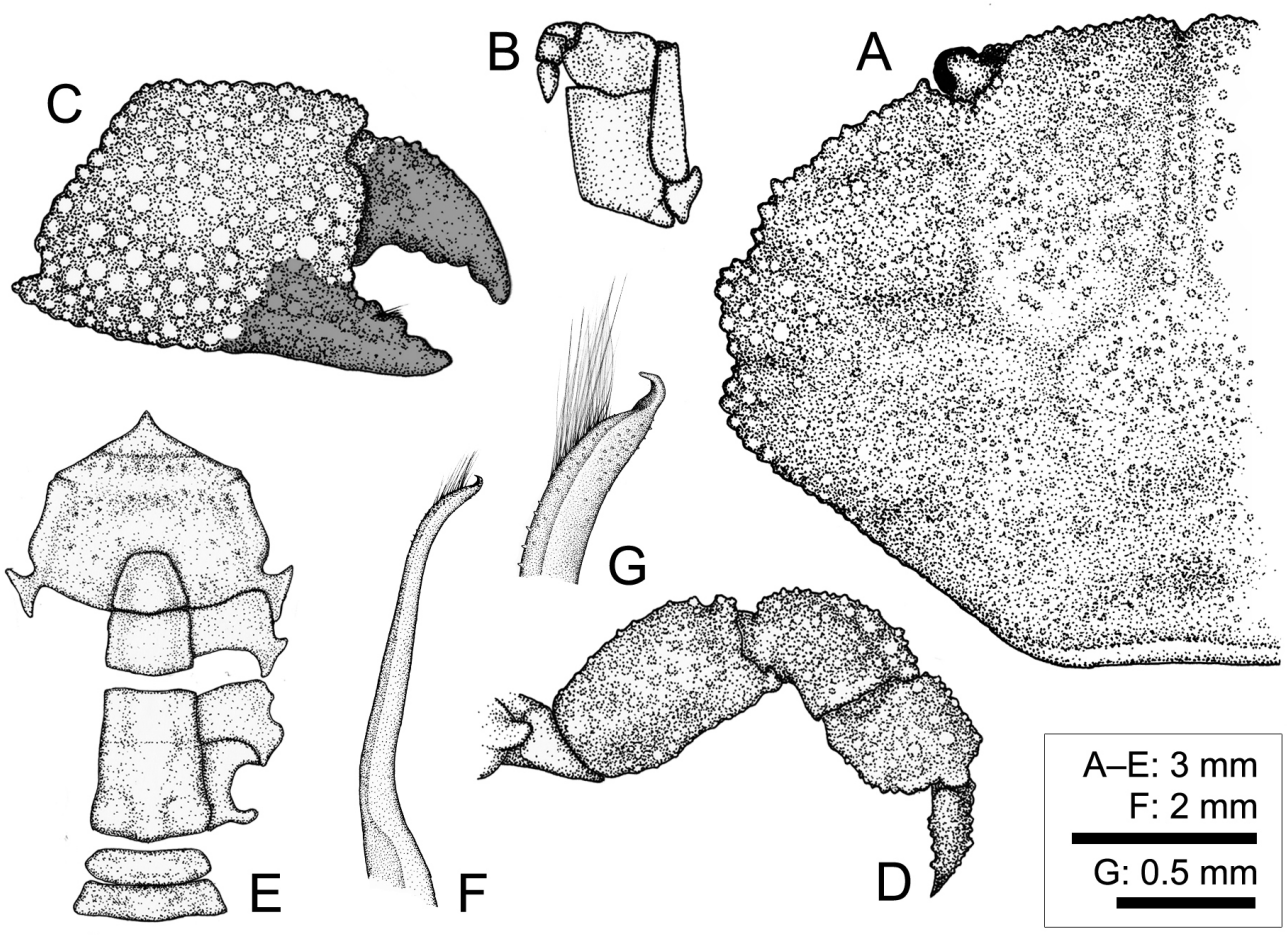



**Fig. 21.** *Novactaea pulchella* (A. Milne-Edwards, 1865) (male, 15.1 × 10.4 mm, Starfish Bay): A, carapace; B, maxilliped 3; C, right chela; D, right P5; E, thoracic sternites and pleon; F, left G1, mesial view; G, tip of left G1, mesial view. Structures A, C to E denuded.

## Subfamily Cymoinae Alcock, 1898

### *Cymo melanodactylus* Dana, 1852 #

*Cymo melanodactylus* — Stimpson 1858a: 34; Stimpson 1907: 59; Shen 1940a: 226 [no new specimens].
*Cymo memanodactylus* — Gee 1926: 162 [list].

*Taxonomy*: Sakai (1939), Serène (1984), Holthuis (1993), Brösing et al. (2014).

*Type*: Syntype ♂ RMNH D 42164 (Holthuis 1993; Fransen et al. 1997).

*Type locality*: Java, Indonesia.

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar, Seychelles, Mauritius, Red Sea, Bay of Bengal, to Southeast and East Asia to Japan, and Australia, Gilbert Islands, Fiji, Samoa, Tahiti and Tuamotu (Serène 1984).

*Habitat*: Subtidal; associated with coral reefs (Dai and Yang 1991).

## Subfamily Etisinae Ortmann, 1893

### *Etisus anaglyptus* H. Milne Edwards, 1834 #

(Figs. 23, 38F)

*Etisus anaglyptus* — present record.

*Taxonomy*: Sakai (1939: as *E.* (*Etioides*)), Serène (1984).

*Type*: Possibly in MNHN (Davie 2002).

*Type locality*: "habite l'australasie": in Australasia.

*Distribution*: Western Indian Ocean to West Pacific: from Madagascar, Somalia, Red Sea, Persian/Arabian Gulf, to Phuket (Thailand), Southeast and East Asia to Japan, and Australia (Serène 1984; Galil and Vannini 1990; Dai and Yang 1991; Ng and Davie 2002).

*Habitat*: Intertidal and shallow subtidal; under stones (Dai and Yang 1991).

*Remarks*: This species is a new record for the fauna of Hong Kong.

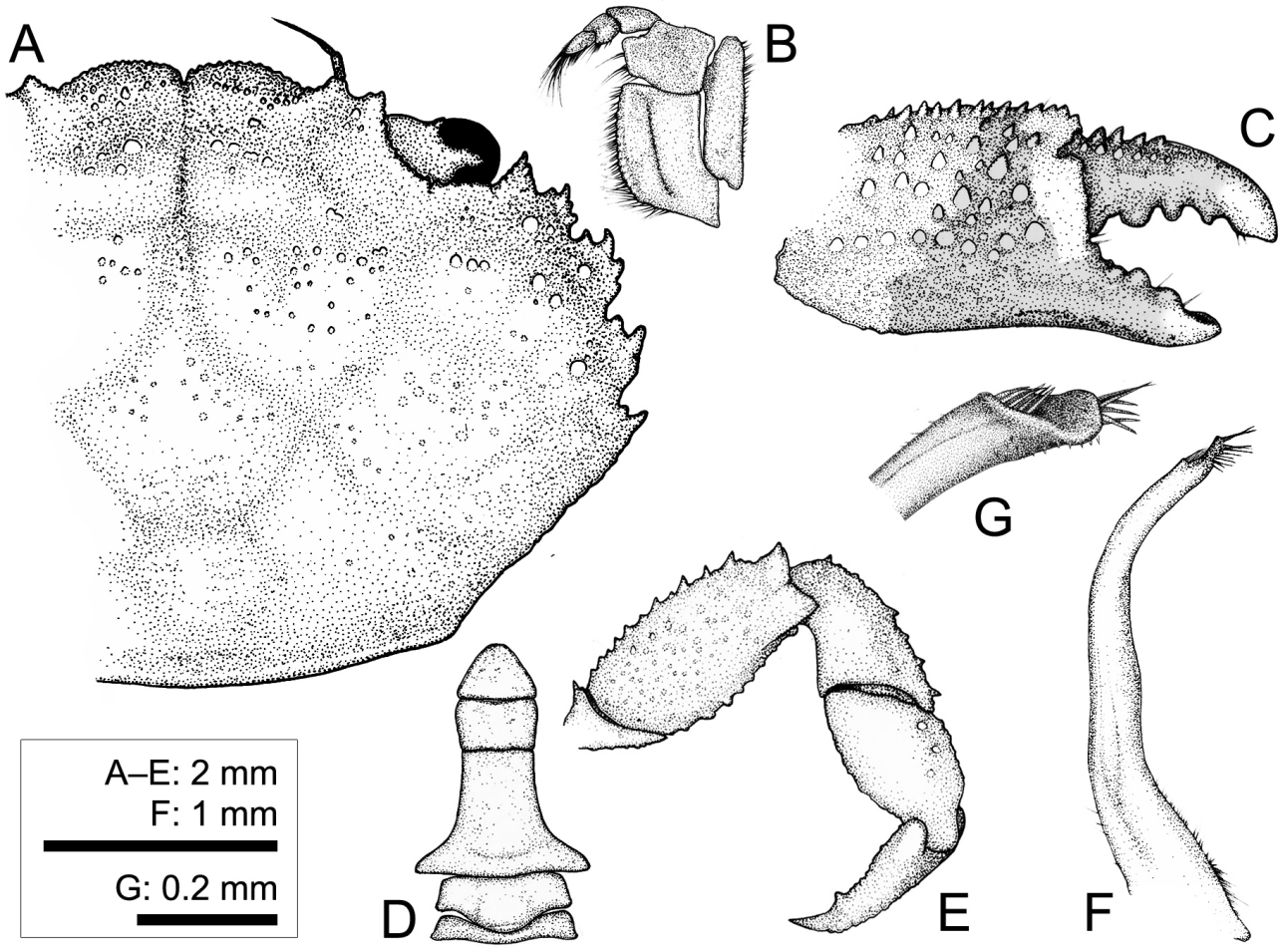



**Fig. 22.** *Pilodius miersi* (Ward, 1936) (male, 7.7 × 5.4 mm, Bluff Island): A, carapace; B, maxilliped 3; C, right chela; D, right P5; E, pleon; F, left G1, mesial view; G, tip of left G1, mesial view. Structures A to D denuded.

### ***Etisus laevimanus*** **Randall, 1840** [#]

*Etisus laevimanus* — Gordon 1931: 528; Shen 1940a: 225 [no new specimens]; Morton and Morton 1983: fig. 12.9(10).

*Taxonomy*: Sakai (1939), Serène (1984).

*Type*: Syntypes ANSP CA3070 (Spamer and Bogan 1993).

*Type locality*: Hawaii.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Red Sea, Persian/Arabian Gulf, Arabian Sea, of Bengal, Singapore, East Asia to Japan, and Indonesia, Australia, New Caledonia, Gilbert Islands, Vanuatu, Fiji, Samoa, Tuamotu and Hawaii (Serène 1984).

*Habitat*: Intertidal and subtidal; locally common among crevices or under rocks fragments.

## Subfamily Euxanthinae Alcock, 1898

### ***Medaeops granulosus*** **(Haswell, 1882)** [#]

*Medaeus granulosus* — Gordon 1931: 543, text-figs. 19, 22A; Shen 1940a: 224.

*? Medaeus noelensis* — Thompson and Shin 1983: tab. 4 [not *Medaeus noelensis* Ward, 1934).

*Medaeops granulosus* — Poon 2000: 12.

*Taxonomy*: Gordon (1931), Forest and Guinot (1961), Guinot (1967a), Serène and Umali (1972), Mendoza et al. (2009).

*Type*: Lectotype ♀ in AM P40834 (designated by Mendoza et al. 2009).

*Type locality*: Port Denison, Western Australia.

*Distribution*: Eastern Indian Ocean and West Pacific: Western to northeastern Australia, Singapore, the Philippines, South China, Taiwan, Japan (Dai and Yang 1991; Davie 2002; Mendoza et al. 2009).

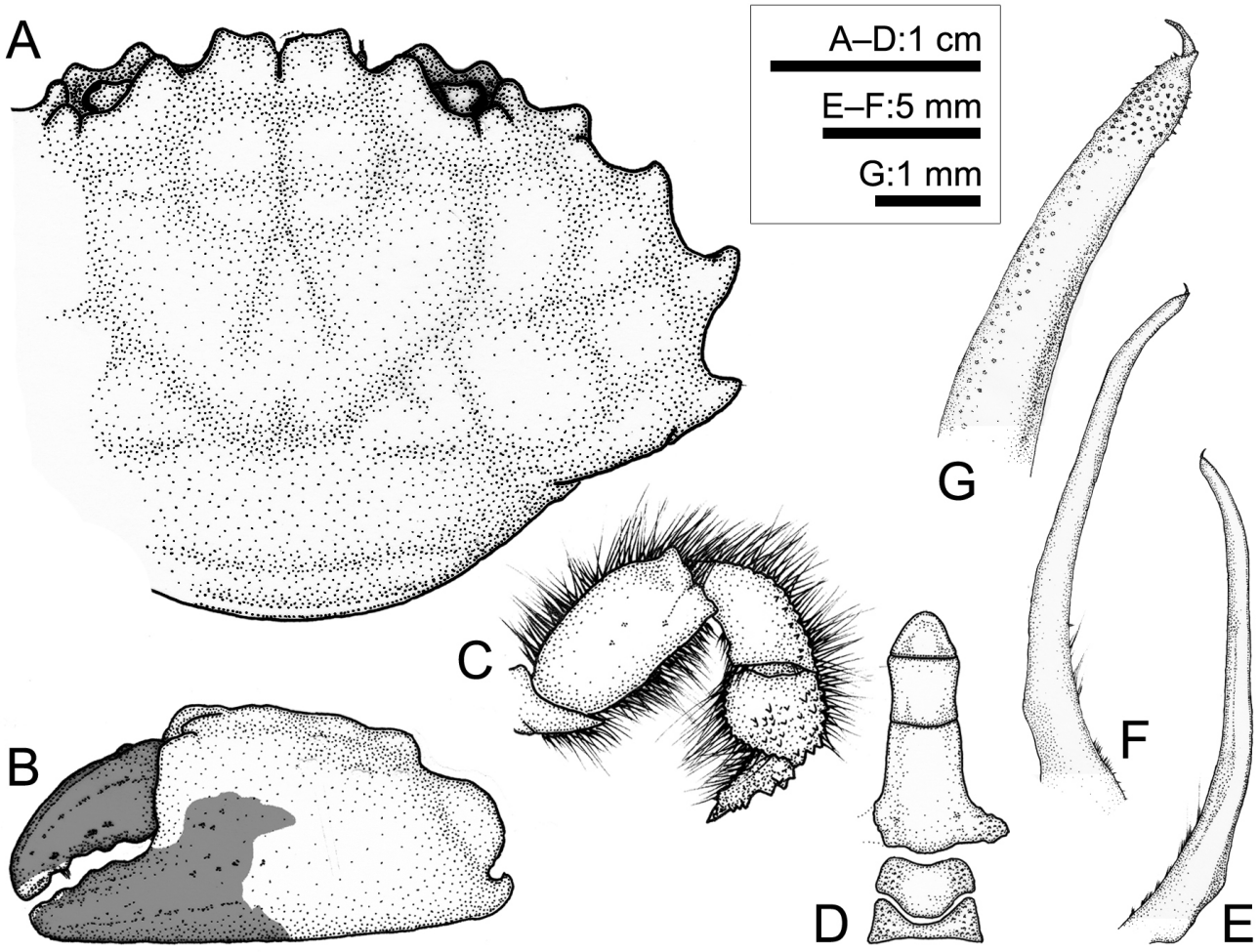



**Fig. 23.** *Etisus anaglyptus* H. Milne Edwards, 1834 (male, 41.0 × 27.1 mm, Shelter Island): A, carapace; B, major chela; C, right P5; D, pleon; E, left G1, mesial view; F, left G1, lateral view; G, tip of left G1, lateral view.

*Habitat*: Intertidal and subtidal; substrates near shore of rock or stone (Dai and Yang 1991).

*Remarks*: The only local record of *Medaeus noelensis* Ward, 1934, reported in Thompson and Shin (1983), collected from benthic fauna from sludges of the Victoria Harbour, is doubtful and is probably *Medaeops granulosus*. *Medaeus noelensis* (now in the genus *Danielea* Ng & Clark, 2003) is found in intertidal habitats and among rubble in rock pools (Ng and Clark 2003; Mendoza et al. 2014).

### *Paramedaeus simplex* (A. Milne-Edwards, 1873)

*Paramedaeus simplex* — Horikoshi and Takeda 1982: tab. 1.

*Taxonomy*: Guinot (1967a), Serène and Umali (1972), Takeda (1976), Serène (1984), Ng and Clark (2002).

*Type*: Type material in Musée Godeffroy No. 5817c (original text), at present whereabouts and status unknown.

*Type locality*: Madagascar.

*Distribution*: Western Indian Ocean to Central Pacific: Madagascar, Seychelles, Red Sea, to Indonesia, the Philippines, Ryukyus (Japan), New Caledonia, Guam, Hawaii (Ng and Clark 2002).

*Habitat*: Intertidal and shallow subtidal, under rubble (Ng and Clark 2002).

## Subfamily Kraussiinae Ng, 1993

### *Palapedia integra* (De Haan, 1835)

*Kraussia integra* — Gordon 1931: 527; Shen 1940a: 223 [no new specimens].

*Kraussia nitida* — Morton and Harper 1995: 37 [not *Kraussia nitida* Stimpson, 1858].

*Paralepida nitida* — Morton and Harper 1997: tab. 4, pl. 1L [not *K. nitida* Stimpson, 1858].

*Taxonomy*: Sakai (1939: as *Kraussia*), Serène (1972: as *Kraussia*), Ng (1993), Ko and Takeda (1999).

*Type*: Holotype ♀ RMNH D 42202 (Yamaguchi and Baba 1993; Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean and West Pacific: Northwestern Australia, Indonesia, Gilbert Islands; South China, Taiwan, Japan (Buitendijk 1960; Serène 1972); records in Hawaii remained doubtful (Sakai 1976; Castro 2011).

*Habitat*: Intertidal and subtidal; in sand or under rocks (Dai and Yang 1991).

*Remarks*: Morphological differences between *P. integra* (De Haan, 1835) and *P. nitida* (Stimpson, 1858) include morphology of the carapace: that of *P. integra* being broader, frontal region visible as four obscure lobes, while the carapace of *P. nitida* is slightly longer than broad and the front has four distinct triangular lobes (cf. Sakai 1976: pl. 101(3). The local record is based on material collected around Cape d'Aguilar presented in Morton and Harper (1997: pl. 1L) which conforms to *P. integra*.

## Subfamily Liomerinae Sakai, 1976

### *Liomera caelata* (Odhner, 1925)

*Liamera caelata* — J Jiang and Zhou 1982: 681.

*Taxonomy*: Odhner (1925: as *Carpilodes*), Takeda and Koyama (1974), Takeda (1976).

*Type*: Holotype in NHM; paratypes in NHMD, NHM and UUZM (original text).

*Type locality*: Macclesfield Bank, South China Sea.

*Distribution*: Eastern Indian Ocean to West Pacific: Cocos (Keeling) Islands, South China Sea, Japan, Palau, Kai and Murray Islands (Odhner 1925; Davie 2002).

*Habitat*: Subtidal; associated with shallow coral reefs (Sakai 1976).

*Remarks*: The only record of this reef-associated species from China and adjacent seas was that of Odhner (1925) from Macclesfield Bank in South China Sea, and no material was further reported despite decades of sampling efforts (Dai and Yang 1991; Yang et al. 2008). The only local record from mussel-ascidian / algal zone (low intertidal zone) along Tolo Harbour presented by J. Jiang and Zhou (1982) remains uncertain. We treat it as a doubtful record.

### *Liomera laevis* (A. Milne-Edwards, 1873)

*Liomera laevis* — Horikoshi and Takeda 1982: tab. 1.

*Taxonomy*: Odhner (1925: as *Carpilodes*), Sakai (1939: as *Carpilodes*), Takeda (1976), Chen and Lan (1978).

*Type*: Syntype probably in MNHN (Davie 2002).

*Type locality*: New Caledonia.

*Distribution*: Eastern Indian Ocean to Central Pacific: Cocos (Keeling) Islands, Phuket (Thailand), Southeast to East Asia to Japan; off northwestern Australia, Timor Sea, New Caledonia, Fiji and Moorea Islands (Odhner 1925; Sakai 1976; Davie 2002; Ng and Davie 2002).

*Habitat*: Subtidal; in coral reefs in shallow waters (Sakai 1976).

### *Liomera margaritata* (A. Milne-Edwards, 1873)

*Liomera margaritata* — Horikoshi and Takeda 1982: tab. 1.

*Taxonomy*: Odhner (1925: as *Carpilodes*), Sakai (1939: as *Carpilodes*), Serène (1984), SH Lee and Ko (2011).

*Type*: Syntype probably in MNHN (Davie 2002).

*Type locality*: New Caledonia.

*Distribution*: Western Indian Ocean to West Pacific: Madagascar, Somalia, Red Sea, India, Mergui Islands, Southeast and East Asia to Japan, New Guinea, Australia, New Caledonia and Samoa (Serène 1984; Dai and Yang 1991; Davie 2002).

*Habitat*: Intertidal and shallow subtidal; in rocky or coral reefs (Davie 2002).

### *Liomera venosa* (H. Milne Edwards, 1834) #

*Liomera venosa* — Horikoshi and Takeda 1982: tab. 1; Morton and Morton 1983: 273, fig. 12.9(14).

*Taxonomy*: Odhner (1925: as *Carpilodes*), Sakai (1939: as *Carpilodes*), Takeda (1976), Serène (1984).

*Type*: Holotype ♂ MP-B 2350 sec in MNHN (Serène 1984).

*Type locality*: Unknown; probably Mauritius (Davie 2002).

*Distribution*: Eastern Indian Ocean to Central Pacific: Mergui Archipelago, Phuket (Thailand), Singapore, Vietnam, South China, Taiwan, Japan, to Palau, Indonesia, Australia, New Caledonia, and Tahiti; record in western Indian Ocean remained doubtful (Odhner 1925; Serène 1984; Poupin 1996; Ng and Davie 2002).

*Habitat*: Intertidal and subtidal; along rocky shores, under stones or in crevices of rocks, to depths of 30 m (Sakai 1976).

## Subfamily Xanthinae MacLeay, 1838

### *Demania reynaudii* (H. Milne Edwards, 1834) #
(Figs. 24, 39A)

*? Xantho reynaudi* — Morton and Morton 1983: 273, fig. 12.9(11).
*Demania reynaudii* — present record.

*Taxonomy*: Guinot (1979), Garth and Ng (1985), Ng and Yang (1989).

*Type*: Holotype ♀ MP-B3027S in MNHN (Guinot 1979).

*Type locality*: "mer des Indes": Indian Ocean, precise locality unspecified.

*Distribution*: Indian Ocean to Southeast and East Asia: Indian Ocean (type locality), Vietnam, the Philippines, South China, Taiwan and Japan (Ng and Yang 1989).

*Habitat*: Subtidal; associated with coral or rocky reefs.

*Remarks*: *Xantho reynaudii* H. Milne Edwards, 1834 and *X. scaberrima* Walker, 1887 had long considered synonymous since Odhner (1925). Various past records in the region, including works of Sakai (1939), Buitendijk (1950) and Takeda and Miyake (1969a), had adopted this synonymy (see Garth and Ng 1985), until Guinot (1969a 1979) separated them. Both species had been recorded in local literature. The local record of *X. reynaudii* by Morton and Morton (1983) is based on a sketch of the animal (fig. 12.9(11)), but it is too schematic to be precisely identified. However, we have recently examined material identified as *D. reynaudii* from off Clear Water Bay, hence confirming its presence in the territorial seas. A large male individual (76.6 × 52.5 mm) is herein illustrated.

The present species had been reported to be poisonous to humans if ingested (Alcala et al. 1988; Tsai et al. 1997), and this is probably also true for *D. scaberrima* (see Garth and Alcala 1977).

### *Demania scaberrima* (Walker, 1887) #

*Lophoxanthus scaberrimus* — Balss 1922b: 126; Gee 1926: 163 [list]; Shen 1940a: 224.
*Demania scaberrima* — Blackmore and Rainbow 2000: app. 1; Wong et al. 2021: 58, fig. 96, pl. 18C.

*Taxonomy*: Guinot (1979), Garth and Ng (1985), Ng and Yang (1989).

*Type*: Syntype probably in NHM (original text; Johnson 1970).

*Type locality*: Singapore.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: East India, Andaman Sea, Montebello Island (Australia), to South China Sea and East Asia to Japan (Garth and Ng 1985; Jones and Berry 2000).

*Habitat*: Subtidal; near shore substrates, rocky or sandy; depths 15 to 35 m (Dai and Yang 1991).

*Remarks*: Likely to be a toxic species; see Remarks under *D. reynaudii* above.

### *Leptodius affinis* (De Haan, 1835) #

*Chlorodius exaratus* — Stimpson 1858a: 34 [part: see Remarks below] [not *Chlorodius exaratus* H. Milne Edwards, 1834].
*Leptodius exaratus* — Balss 1922b: 127; Shen 1940a: 224; BKK Chan et al. 2005: 1, fig. 2 [not *C. exaratus* H. Milne Edwards, 1834].

*Xantho exaratus* — Gordon 1931: 528, 544, text-figs. 20, 22B [not *C. exaratus* H. Milne Edwards, 1834].
*Leptodius affinis* — S-k Lee et al. 2013: 192, figs. 3, 4E–I; Bravo et al. 2021: tab. 2.

*Taxonomy*: Sakai (1939: as *Xantho* (*Leptodius*) *exaratus*), S-k Lee et al. (2013).

*Type*: Lectotype ♀ RMNH D 44644 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997; S-k Lee et al. 2013).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean to Central Pacific: Laccadive Sea, Phuket (Thailand), Southeast and East Asia to Japan, to Indonesia and Australia, New Caledonia, Palau, Mariana, Caroline, Marshall, Gilbert Islands, and Fiji, Samoa, to Tuamotu (S-k Lee et al. 2013).

*Habitat*: Intertidal and shallow subtidal; along rocky or pebbly shore, under stones and crevices of rocks, or in coral reefs.

*Remarks*: *Leptodius exaratus* (H. Milne Edwards, 1834) *sensu stricto* has been verified to be found only in the western Indian Ocean, Persian/Arabian Gulf and Red Sea, and records eastwards under this name belong to *L. affinis* instead (S-k Lee et al. 2013). After the publication of preliminary results on collections from the NPEE (1858a) as "*Chlorodius exaratus*", Stimpson (1907) presented detailed diagnosis of nine varieties (*a* to *i*), among which two, namely *h*, *latus* and *i*, *granulosus*, were recorded from Hong Kong. According to S.-k. Lee et al. (2013), these represented, respectively, now *L. sanguineus* (H. Milne Edwards, 1834) *L. philippinensis* Ward, 1941, or *Macromedaeus distinguendus* (De Haan, 1835). These two records are listed as separated entries below.

### ***Leptodius davaoensis* Ward, 1941** [#]

(Fig. 39B, inset)

*Leptodius davaoensis* — present record.

*Taxonomy*: Ward (1941), Yuan et al. (2021).
*Type*: Holotype ♂ AMNH-8347 (Ward 1941).

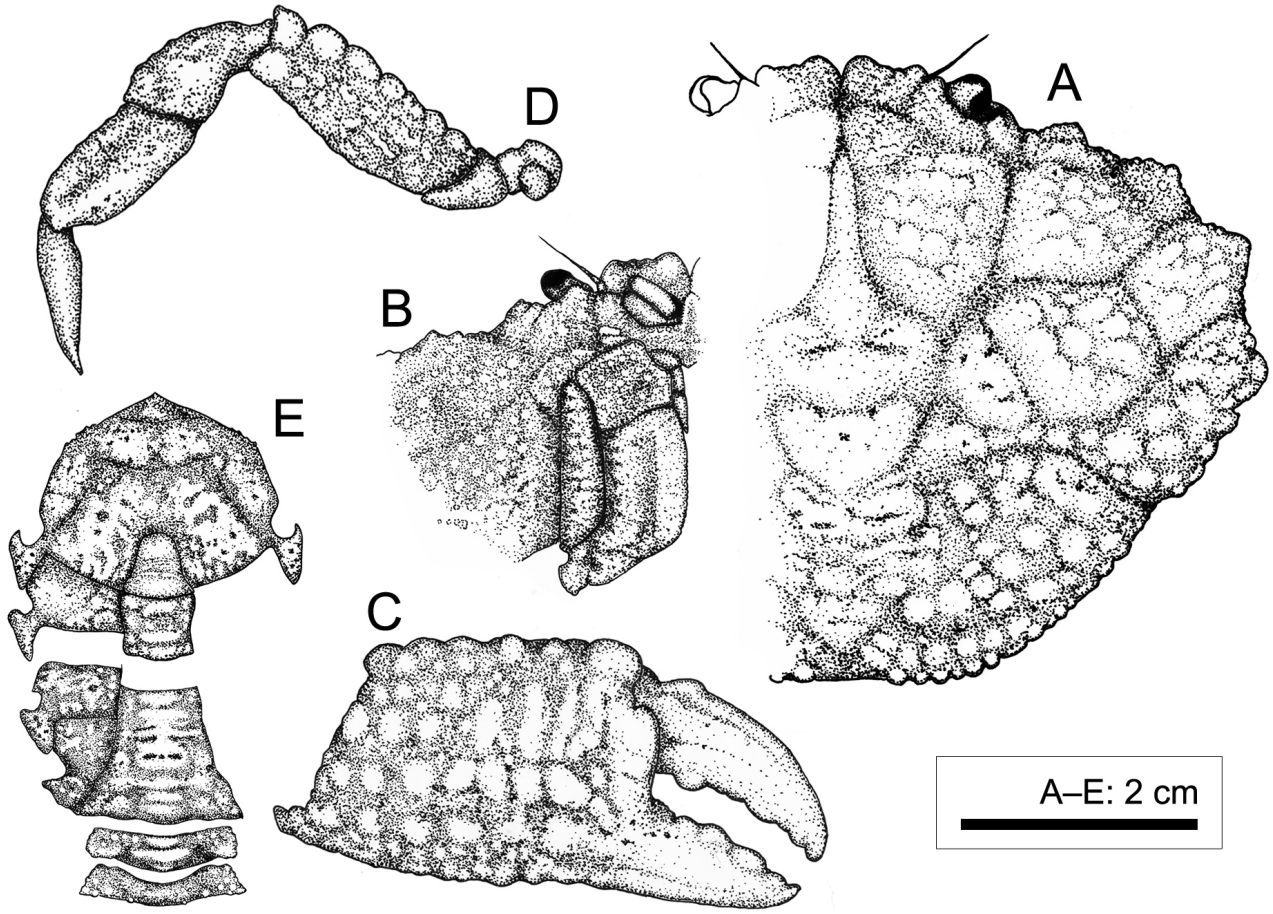



**Fig. 24.** *Demania reynaudii* (H. Milne Edwards, 1834) (male, 72.6 × 52.5 mm, off Clear Water Bay): A, carapace; B, frontal region and maxilliped 3, ventral view; C, right chela; D, left P5; E, thoracic sternites and pleon.

*Type locality*: Davao, the Philippines.

*Distribution*: Southeast and East Asia: from Micronesia (Kosrae Island), Lombok (Indonesia), to Malaysia and Singapore, the Philippines, and South China (Yuan et al. 2021).

*Habitat*: Intertidal and subtidal: beneath or among rock fragments in sheltered shores.

*Remarks*: Taxonomy of the present species remained poorly known. Locally, this species is not rare along semi-sheltered sandflats and shallow subtidal habitats adjacent to coral communities, and identification of relevant material has been confirmed by J.C.E. Mendoza (ZRC). This species has recently been reported from Hainan (Yuan et al. 2021), and the presence in Hong Kong is not unexpected. Images showing live coloration of overall habitus and external surface of chela, is provided herein. This species is a new record for the fauna of Hong Kong.

### *Leptodius gracilis* (Dana, 1852) #

*Chlorodius gracilis* — Stimpson 1858a: 32; Stimpson 1907: 56.
*Leptodius gracilis* — Gee 1926: 163 [list: "near Hong Kong"]; Shen 1940a: 225 [no new specimens].

*Taxonomy*: Sakai (1939: as *Xantho* (*Leptodius*)), Forest and Guinot (1961), Serène (1984).

*Type*: Presumably lost.

*Type locality*: Wake Island, Central Pacific.

*Distribution*: Western Indian Ocean to Central Pacific: East Africa, Mauritius, Seychelles, Red Sea, to Phuket (Thailand), to South China Sea and Japan, and Palau, Indonesia, Marshall and Gilbert Islands, Samoa, Tuamotu and Hawaii (Buitendijk 1960; Serène 1984).

*Habitat*: Intertidal and shallow subtidal; along rocky shores or coral reefs.

### *Leptodius sanguineus* (H. Milne Edwards, 1834)

*? Chlorodius exaratus* var. h, *latus* Stimpson, 1907: 55, pl. 6(9).
*? Leptodius latus* — Shen 1940a: 225 [no new specimens].

*Taxonomy*: Sakai (1939: as *Xantho* (*Leptodius*)), Serène (1984).

*Type*: Syntypes probably in MNHN (Davie 2002).

*Type locality*: Mauritius.

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Madagascar, Mauritius, Red Sea, Persian/Arabian Gulf, Indian Ocean, to Southeast and East Asia, towards Palau, Indonesia, Australia, New Caledonia, Fiji, Samoa, Tuamotu and Hawaii (Buitendijk 1960; Serène 1984).

*Habitat*: Intertidal and subtidal; rocky shores under stones, in crevices of rocks or shallow waters on coral reefs (Dai and Yang 1991).

*Remarks*: Following the comments by S-k Lee et al. (2013), we tentatively place the record of var. *latus* described in Stimpson (1907) under *L. sanguineus* (see Remarks under *L. affinis* above).

### *Liagore rubromaculata* (De Haan, 1835) #

*Liagore rubromaculata* — Alcock 1898: 93 [part: Hong Kong material only]; Kemp 1923: 408 [part: Hong Kong material only]; Gee 1926: 163 [list]; Gordon 1931: 528; Shen 1940a: 223; Morton and Morton 1983: 273, fig. 12.9(12); Blackmore and Rainbow 2000: app. 1; Wong et al. 2021: 59, fig. 97, pl. 18D.

*Taxonomy*: Sakai (1939), Guinot (1971), Ng and Chen (2004b).

*Type*: Lectotype ♂ RMNH D 42221 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: West Pacific: Queensland (Australia), Indonesia, Vietnam, South China, Taiwan, and Japan (Guinot 1971; Ng et al. 2001; Davie 2002).

*Habitat*: Subtidal; in coral reefs or near rocky coast; depths 15 to 30 m (Dai and Yang 1991).

### *Macromedaeus adelus* Mendoza, 2021 #

(Fig. 25A–D)

*Xantho distinguendus* — Gordon 1931: 528, 543, text-figs. 21, 22C; Forest and Guinot 1961: 57, pl. 1(3).
*Macromedaeus adelus* — present record.

*Taxonomy*: Mendoza (2021).

*Type*: Holotype ♂ ZRC 2017.0465 and paratypes in ZRC.

*Type locality*: Punggol End, Singapore.

*Distribution*: South China Sea: so far from Singapore (Mendoza 2021) and South China (present study).

*Habitat*: Intertidal; middle to low tidal levels, under rock fragments.

*Remarks*: In describing *Macromedaeus adelus* from Singapore and providing an overview of the genus, Mendoza (2021) revisited Buitendijk's (1960) doubts about the identities of *Xantho distinguendus* reported by Gordon (1931), in comparison with then syntypes of *C.* (*X.*) *distinguendus*. Gordon (1931) commented on the morphological similarities in the specimens of *Medaeops granulosus* (as *Medaeus*), *Leptodius affinis* (as *Xantho exaratus*) and *Macromedaeus distinguendus* (as *Xantho*) collected from Hong Kong. The material of the latter species was described as "(g)ranulation of chelipeds almost obsolete", "(u)pper margin of merus of walking-legs not crested" and "(carpus and propodus of walking-legs) hardly any trace of the granulation"

(p. 544). The morphologies of the chelae and ambulatory legs described as such differ substantially with that of *M. distinguendus*, which are common along intertidal mudflats of Hong Kong (Fig. 25E–H).

The second author recently reexamined material deposited at the NHM previously examined by Gordon, with the catalogue number NHM 1930.12.2.150, collected by Barney from Hong Kong. The lot comprises three males (two adults, one juvenile) and nine females (three ovigerous). A large male (10.0 × 6.2 mm) is illustrated herein. In comparison with *M. distinguendus*, which is common in Japan, Korea and North China (Fig. 25E; *e.g.*, Shen 1932b; Sakai 1939 1976; Kim 1973; Yuan et al. 2022), both adult males of Gordon's material have ambulatory legs with carpi and propodi not crested (Fig. 25D; vs. Fig. 25H), and frontal lobes medially separated by a deep V-shaped cleft (Fig. 25A; vs. Fig. 25E). The surface of the major chela in these specimens is externally granular on upper half and nearly smooth on lower portion (Fig. 25B), in contrast with *M. distinguendus* being entirely coarsely granular and dorsally rugose (Fig. 25F). The features observed in Gordon's (1931) material confirm the presence of *M. adelus* in Hong Kong. *Macromedaeus distinguendus*, as Serène (1984) noted (p. 178), appears to be distributed in the Sino-Japanese area in temperate-subtropical East

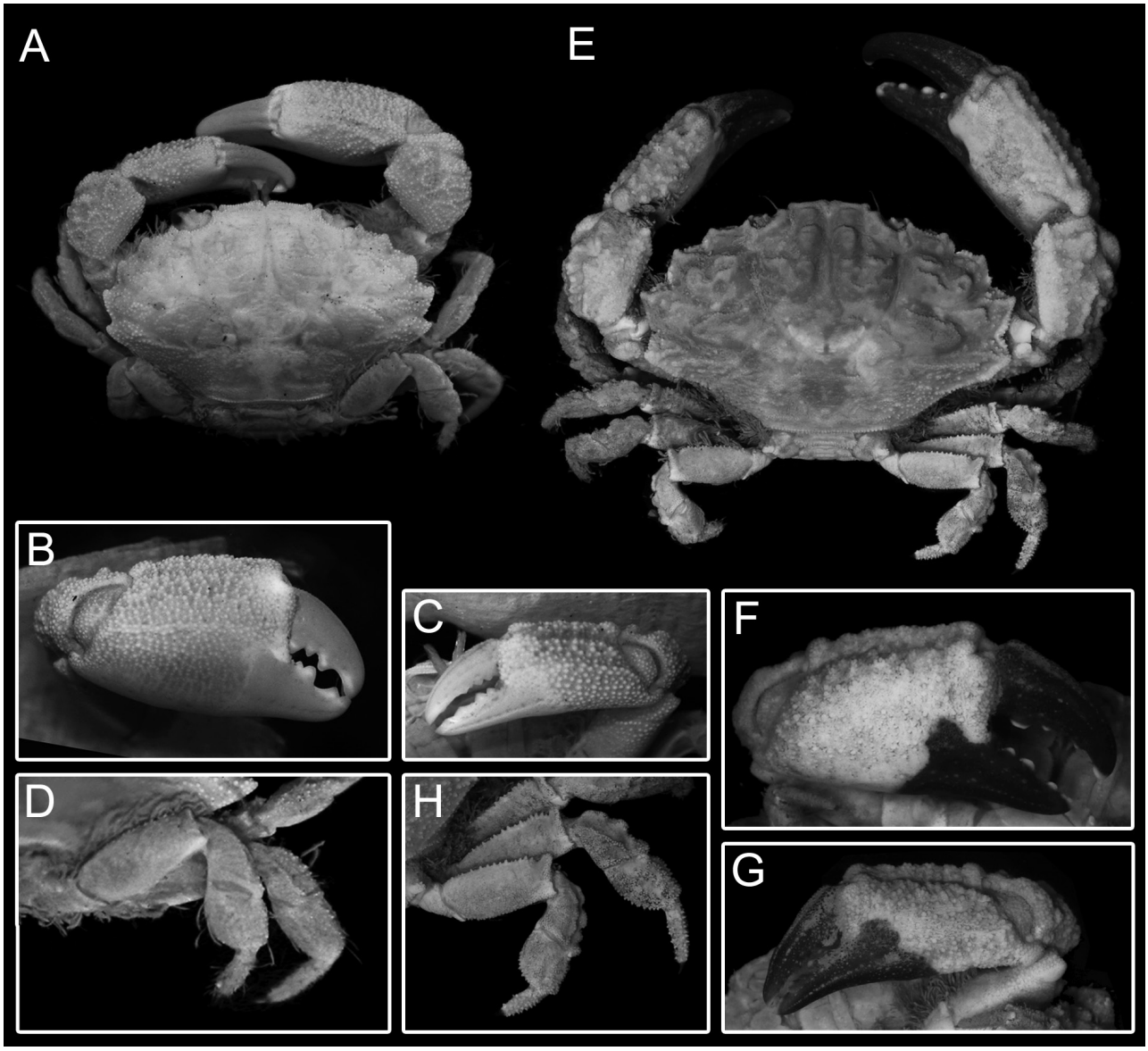



**Fig. 25.** *Macromedaeus adelus* Mendoza, 2021 (male, 10.0 × 6.2 mm, Hong Kong; in NHM 1930.12.2.150): A, overall habitus; B, major chela; C, minor chela; D, P4 and P5. *Macromedaeus distinguendus* (De Haan, 1835) (male, 27.4 × 17.4 mm, Tung Chung): E, overall habitus; F, major chela; G, minor chela; H, P4 and P5.

Asia.

Concerning the two recently described, and apparently tropical *M. adelus* and *M. hainanensis* Yuan, Jiang & Sha, 2022, both showing overlapping geographical reported thus far (from northern South China Sea towards the equatorial Southeast Asia), recent studies by the second author (PKLN) and J.C.E. Mendoza (ZRC) has concluded both names being synonyms, with *M. adelus* enjoying priority, that *M. adelus* published on 5 November 2021 while *M. hainanensis* was released on 18 January 2022. Our present comparisons agree with this. Nevertheless, the presence of both sub-tropical to temperate (*M. distinguendus*) and tropical (*M. adelus*) lineages in Hong Kong is not surprising.

### *Macromedaeus distinguendus* (De Haan, 1835) [#]

(Fig. 25E–H)

*Chlorodius distinguendus* — Stimpson 1858a: 34.
*? Xantho distinguendus* — Alcock 1898: 113 [part?].
*? Chlorodius exaratus* var. *i*, *granulosus* Stimpson 1907: 56, pl. 6(3).
*? Leptodius exaratus* var. *granulosus* — Gee 1926: 163 [list].
*? Leptodius granulosus* — Shen 1940a: 225 [no new specimens].
*Xanthodius distinguendus* — Shen 1940a: 224.
*Macromedaeus distinguendus* — Blackmore and Rainbow 2000: app. 1; Poon 2000: 12.

*Taxonomy*: Shen (1932b; as *Xantho*), Sakai (1939: as *Xantho*), Forest and Guinot (1961: as *Xantho*), Guinot (1967c).

*Type*: Lectotype ♂ RMNH D 44657 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Probably only in East Asia (Serène 1984): so far confirmed from coasts of China from Guangdong and Shandong, Korea, and Kyushu, Japan (Mendoza 2021).

*Habitat*: Intertidal; under stones or in crevices of rocks (Dai and Yang 1991).

*Remarks*: Following indications by S.-k. Lee et al. (2013), records of *Chlorodius exaratus* var. *granulosus* described in Stimpson (1907) are tentatively placed under *M. distinguendus*. The resolution of the actual identities of the various forms recognized by Stimpson (1858b 1907) from East Asia will require more collections and comparisons of characters (see also Remarks under *Leptodius affinis* and *M. adelus* above).

## Subfamily Zosiminae Alcock, 1898

### *Atergatis dilatatus* De Haan, 1835

*Atergatis dilatatus* — Shen 1940a: 224.

*Taxonomy*: Buitendijk (1960), Serène (1984), Holthuis (1993).

*Type*: Holotype RMNH D 44480 (Holthuis 1993; Fransen et al. 1997).

*Type locality*: "ex Mari Chinensi originem ducunt": Chinese seas.

*Distribution*: Eastern Indian Ocean to West Pacific: Sri Lanka and Bay of Bengal, Southeast and East Asia to Japan, Queensland (Australia), New Caledonia and Samoa (Serène 1984; Davie 2002; Ng and Davie 2002; Richer de Forges and Ng 2006).

*Habitat*: Shallow subtidal; associated with coral reef (Davie 2002).

### *Atergatis floridus* (Linnaeus, 1767) [#]

*Atergatis floridus* — Morton and Morton 1983: 273, fig. 12.9(7).

*Taxonomy*: Ng and Davie (2007).

*Type*: Neotype ♀ ZRC 1999.0332 (designated by Ng and Davie 2007).

*Type locality*: Pulau Seringat, Singapore (neotype).

*Distribution*: West to Central Pacific: verified from Singapore, the Philippines, Taiwan, Guam, Indonesia, New Guinea and Australia (Ng and Davie 2007), and Hawaii (Castro 2011).

*Habitat*: Intertidal and subtidal; associated with coral reefs in shallow waters (Dai and Yang 1991).

*Remarks*: The present species was reported to be toxic with tetrodotoxin and paralytic shellfish toxin (Noguchi et al. 1983; Llewellyn and Endean 1991; Tsai et al. 1997).

### *Atergatis integerrimus* (Lamarck, 1818) [#]

*Atergatis integerrimus* — Stimpson 1858a: 32; Stimpson 1907: 42; Gee 1926: 162 [list]; Gordon 1931: 528; Shen 1940a: 224.
*Etisus* sp. — Morton and Ruxton 1997: 1 unnumb. fig. (23).

*Taxonomy*: Sakai (1939), Buitendijk (1960), Serène (1984).

*Type*: Status unknown (Davie 2002).

*Type locality*: Unknown.

*Distribution*: Western Indian Ocean to West Pacific: from East Africa, Mauritius, Persian/Arabian Gulf, India, Andaman and Mergui Islands, Phuket (Thailand), Southeast and East Asia to Japan, Australia, New Caledonia and Samoa (Serène 1984).

*Habitat*: Subtidal; on rocky substrates, of 10 to 30 m deep (Dai and Yang 1991).

### *Atergatis latissimus* (H. Milne Edwards, 1834)

*? Atergatis frontalis* — Shen 1940a: 224.

*Taxonomy*: Sakai (1939: as *A. latissimus frontalis*),

Tweedie (1947), Serène (1984).

*Type*: Holotype ♀ MNHN 4125 (Serène 1984).

*Type locality*: Australia (as Nouvelle-Hollande).

*Distribution*: Western Indian Ocean to Central Pacific: from Madagascar, Mauritius, Christmas Island, to South China and Japan, to Sumatra and Marshall Islands (Serène 1984).

*Habitat*: Shallow subtidal; coral reef-associated (Sakai 1976).

*Remarks*: C.-J. Shen (1940a) listed four species of *Atergatis* for Hong Kong. Of these, species *A. frontalis* (De Haan, 1835) is now regarded as a junior synonym of *A. latissimus* (H. Milne Edwards, 1834) (Tweedie 1947; Serène 1984; Davie 2002; Ng et al. 2008), a decision we follow herein (though note reservations expressed by De Man 1926).

The record of "*A. frontalis*" by Shen (1940a), however, has some problems. This author, in the same year, listed also this species in a checklist of South China (Shen 1940c), citing De Man's (1879: 85) record from Amoy (= Xiamen), noting also that he "examined some specimens from Hongkong". This record from Amoy, however, was later shown to be *A. reticulatus* De Haan, 1835 instead (De Man 1926). The unanswered questions are whether Shen (1940a) followed De Man's (1879) original record of "*A. frontalis*" in listing the species and missed or misread his later correction of the identification (De Man 1926), and/or he actually had examined specimens of both species himself. As both species occur in the western Pacific, we retain both of Shen's (1940a) records of *A. reticulatus* and *A. frontalis* (= *A. latissimus*) for the moment.

### *Atergatis reticulatus* (De Haan, 1835)

*Atergatis reticulatus* — Gordon 1931: 528; Shen 1940a: 224.

*Taxonomy*: Sakai (1939), Buitendijk (1960).

*Type*: Lectotype ♀ in RMNH D 944, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South China, Taiwan, Korea and Japan.

*Habitat*: Intertidal and subtidal; in crevices of rocks, to depths of 20 m (Dai and Yang 1991).

*Remarks*: See Remarks under *A. latissimus* above.

### *Atergatopsis germaini* A. Milne-Edwards, 1865 [#]
(Figs. 26, 39C)

*Atergatopsis germaini* — present record.

*Taxonomy*: Buitendijk (1960), Sakai (1976).

*Type*: Syntypes in MNHN and probably also RMNH (Buitendijk 1960; Guinot 1964).

*Type locality*: Côn Sơn Island (as Poulo-Condore), Vietnam.

*Distribution*: West Pacific: New Guinea, the Philippines, Vietnam, East Asia to Japan (Buitendijk 1960; Sakai 1976; S-k Lee et al. 2008).

*Habitat*: Shallow subtidal; rocky reefs near coral communities.

*Remarks*: This species had been reported to be toxic, containing human-lethal levels of paralytic shellfish poison by Tsai et al. (1996). This species is a new record for the fauna of Hong Kong.

### *Lophozozymus pictor* (Fabricius, 1798) [#]

*Lophozozymus epheliticus* — Shen 1940a: 224.

*Taxonomy*: Sakai (1976), Ng and Holthuis (1993), Ng and Chia (1997).

*Type*: Lectotype ♂ ZMUC 109-1 (now NHMD) (designated by Ng and Chia 1997).

*Type locality*: Unknown.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Western Australia, Southeast and East Asia to Japan (Ng and Chia 1997).

*Habitat*: Intertidal and subtidal; under rocks or in crevices of coral reefs, to depths of 30 m (Dai and Yang 1991).

*Remarks*: The local record of *L. epheliticus* by Shen (1940a), which cited Miers (1880) and *L. octodentatus* in Alcock (1898), should be referred to as *L. pictor* (cf. Ng and Chia 1997). Like several members of this subfamily, the present species had been reported to be toxic, with tetrodotoxin and paralytic shellfish poison in its tissues (Chia et al. 1993; Tsai et al. 1995).

## Subsection Thoracotremata Guinot, 1977
## Superfamily Cryptochiroidea Paul'son, 1875
## Family Cryptochiridae Paul'son, 1875

### *Cryptochirus coralliodytes* Heller, 1860 [#]

*Cryptochirus coralliodytes* — Wong et al. 2023: 9, figs. 5A, 8.

*Taxonomy*: Fize and Serène (1957: as *Troglocarcinus* (*Favicola*) *rugosus*), Takeda and Tamura (1981: as *Favicola rugosa*); Kropp (1988a).

*Type*: Lectotype ♀ in NMW; paralectotype ♂ in MNHN (designated by Kropp 1988a).

*Type locality*: Red Sea.

*Distribution*: Western Indian Ocean to Central Pacific: from Red Sea to Phuket (Thailand), Vietnam (Fize and Serène 1957), South China, Taiwan and West

and Central Pacific islands (Kropp 1988a; Ng and Davie 2002; Wei et al. 2006; Wong et al. 2023).

*Habitat*: Shallow subtidal: in domiciles within corals of multiple genera of the Merulinidae (previous Indo-Pacific records of the "Faviidae"), including *Goniastrea* (Fize and Serène 1957; Wei et al. 2006), *Paragoniastrea* (Wei et al. 2006), and *Platygyra* (Fize and Serène 1957; Kropp 1988a; Van der Meij and Nieman 2016).

### *Lithoscaptus doughnut* Wong, Tsao, Qiu & Chan, 2023 #

*Lithoscaptus doughnut* Wong, Tsao, Qiu & Chen, 2023: 19, figs. 4A–C, 5D; Claassen et al. 2024: 68, figs. 4, 5.

*Taxonomy*: Wong et al. (2023).

*Type*: Holotype ♀ in ASIZCR.

*Type locality*: Basalt Island, Sai Kung, Hong Kong.

*Distribution*: Western Indian Ocean to West Pacific: Red Sea, Maldives, Indonesia, South China (Hong Kong) and Okinawa, Japan (Claassen et al. 2024).

*Habitat*: Shallow subtidal: in domiciles on *Plesiastrea peroni* Milne Edwards and Haime, 1857 of the Plesiastreidae, and *Cyphastrea chalcidicum* (Forskål, 1775) of the Merulinidae (Claassen et al. 2024).

### *Lithoscaptus paradoxus* A. Milne-Edwards, 1862 #

*Lithoscaptus paradoxus* — Wong et al. 2023: 15, figs. 2, 5B, C, 9.

*Taxonomy*: Kropp (1988a).

*Type*: Lectotype ♀ in MNHN-IU-2014-19834 (designated by Kropp 1988a).

*Type locality*: Reunion Island.

*Distribution*: Western Indian Ocean to Central Pacific: Reunion Island to Vietnam, South China (Hong Kong), Taiwan, Indonesia, and West Pacific Islands towards French Polynesia (Kropp 1988a; Paulay et al. 2003; Poupin 2005; Richer de Forges and Ng 2006; Wei et al. 2006; Van der Meij and Nieman 2016; Wong et al. 2023).

*Habitat*: Shallow subtidal: in domiciles within corals of the Merulinidae, in multiple genera

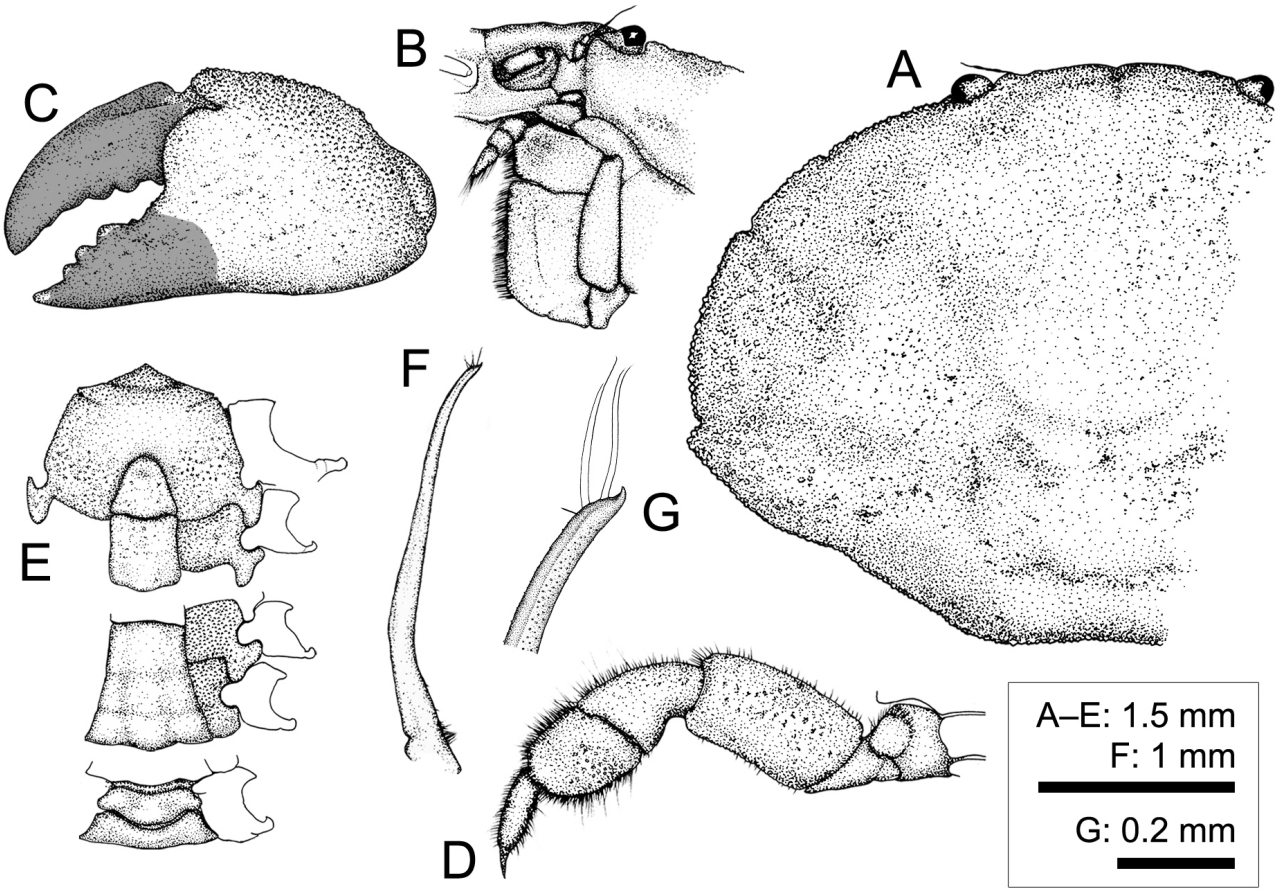



**Fig. 26.** *Atergatopsis germaini* A. Milne-Edwards, 1865 (male, 64.4 × 43.8 mm, off Kau Sai Chau): A, carapace; B, frontal region and maxilliped 3, ventral view; C, left chela; D, left P5; E, thoracic sternites and pleon; F, left G1, mesial view; G, tip of left G1, mesial view.

including *Cyphastrea*, *Dipsastreae*, *Favites* (Fize and Serène 1957), *Goniastrea* (Fize and Serène 1957; Kropp 1988a), *Paragoniastrea* (Wei et al. 2006; as *Goniastrea*), and *Platygyra* (Kropp 1988a; Van der Meij and Nieman 2016).

### *Lithoscaptus scottae* Wong, Tsao, Qiu & Chan, 2023 #

*Lithoscaptus scottae* Wong, Tsao, Qiu & Chen, 2023: 24, figs. 3, 5F–H, 12.

*Taxonomy*: Wong et al. (2023).

*Type*: Holotype ♀ and paratypes in ASIZCR.

*Type locality*: Pak Lap Tsai, Sai Kung, Hong Kong.

*Distribution*: So far from type locality only.

*Habitat*: Shallow subtidal: in domiciles on *Coelastrea aspera* (Verrill, 1866) and *Favites pentagona* (Esper, 1790) of the Merulinidae.

### *Neotroglocarcinus hongkongensis* (Shen, 1936)

*Cryptochirus hongkongensis* Shen, 1936b: 23, pl. 1; Shen 1940a: 231; Kropp 1988b: 868, figs. 1d–f, 2e–h [no new specimens].

*Taxonomy*: Fize and Serène (1957: as *N. monodi*), Takeda and Tamura (1980: as *N. monodi*), Kropp (1988b 1990), Wei et al. (2006).

*Type*: Status unknown (Kropp 1988b 1990).

*Type locality*: Hong Kong.

*Distribution*: West Pacific: so far from Indonesia, Singapore, Vietnam, South China, Taiwan, and Ryukyus (Japan) (Serène 1966; Takeda and Tamura 1980; Kropp 1990 1994; Wei et al. 2006).

*Habitat*: In domiciles within corals of the Dendrophyllidae: *Turbinaria mesenterina* (Lamarck, 1816), *T. nidifera* (Bernard, 1896) (= now *T. bifrons* Brüggemann, 1877) and *Duncanopsammia peltata* (Esper, 1790); forming crescent-shaped openings, sheltered by a canopy-like structure (Fize and Serène 1957; Takeda and Tamura 1980; Wei et al. 2006).

### *Pseudocryptochirus viridis* Hiro, 1938

*Pseudocryptochirus viridis* — Van der Meij 2012: tab. 2 [domicile only: citing Scott 1984: pl. 42B].

*Taxonomy*: Hiro (1938), Utinomi (1944), Kropp (1988b 1990), Van der Meij (2012).

*Type*: Whereabouts and status unknown (Kropp 1988b 1990).

*Type locality*: Tanabe Bay, Wakayama, Japan.

*Distribution*: West Pacific: South China (Hong Kong), Taiwan, Ryukyus, Japan, to Vietnam, Malaysia (Sabah), Indonesia, Micronesia (Palau and Guam), Marshall Islands, northeastern Australia, and New Caledonia (Van der Meij 2012).

*Habitat*: In domiciles within corals of the Dendrophyllidae: including *Turbinaria frondens* (Dana, 1846), *T. mesenterina* (Lamarck, 1816), *T.* cf. *patula* (Dana, 1846), *T. reniformis* Bernard, 1896 and *T. stellulata* (Lamarck, 1816); domicile as shallow, crescent-shaped depression (Van der Meij 2012).

*Remarks*: The present species was reported by Van der Meij (2012) based on an image showing a gall crab dwelling on scleractinian coral *Turbinaria mesenterina* (Lamarck, 1816) shown in Scott (1984). In an email communication, S. Van der Meij (University of Groningen, the Netherlands) kindly confirmed the record, adding a slight possibility that the illustrated dwelling may belong to *Neotroglocarcinus dawydoffi* (Fize and Serène, 1956) instead of *P. viridis* (the two species overlap in host records). We follow her original identification for now.

### *Xynomaia sheni* (Fize & Serène, 1956) #

*Xynomaia sheni* species complex — Wong et al. 2023: 26, figs. 4E, F, 5I, J, 14.

*Taxonomy*: Fize & Serène (1957: as *Troglocarcinus* (*T.*) *sheni*).

*Type*: Syntypes probably at Institute of Oceanography in Nha Trang, Vietnam; status unknown.

*Type locality*: Nhatrang, Vietnam.

*Distribution*: Eastern Indian Ocean to West Pacific: from Thailand (Phuket), Vietnam, South China (Hong Kong), Malaysia (Sabah), Indonesia, to Mariana Islands and Guam (Serène 1966; Fize and Serène 1957; Kropp 1990; Ng and Davie 2002; Paulay et al. 2003; Van der Meij and Reijnen 2014; Van der Meij and Nieman 2016; Wong et al. 2023).

*Habitat*: In domiciles within corals, recorded hosts include *Pectinia lactuca* (Pallas, 1766), *P. paeonia* (Dana, 1846) and *Mycedium elephantotus* (Pallas, 1766) (Merulinidae) and *Oxypora lacera* (Verrill, 1864) (Lobophylliidae) (Fize and Serène 1957; Kropp 1990; Van der Meij and Reijnen 2014; Van der Meij and Nieman 2016). Local material reported by Wong et al. (2023) was collected from *Coelastrea aspera* (Verrill, 1866) of the Merulinidae.

*Remarks*: Given its small size and conservative morphological features, precise identifications of *Xynomaia* have been difficult. Among relevant groups, molecular data shows material identified as *Xynomaia* being composite (Van der Meij and Nieman 2016), whereas local material identified as such comprise of at least two distinct operational taxonomic units

(OTUs). This identification remains tentative before possibly extant types and/or topographic material can be examined (see Wong et al. 2023).

## Superfamily Grapsoidea Macleay, 1838
## Family Grapsidae Macleay, 1838

### *Grapsus albolineatus* Latreille, in Milbert, 1812 #

*Grapsus strigosus* — Stimpson 1858b: 102; Stimpson 1907: 118; Gee 1926: 164 [list]; Gordon 1931: 528; Shen 1940a: 238.
*Grapsus longipes* Stimpson, 1858b: 102; Stimpson 1907: 119.
*Grapsus albolineatus* — Banerjee 1960: 147, figs. 1c, 2o, p, 3a, f; Hill et al. 1975: 54; Morton 1976: 97; Hill et al. 1978: 76; Morton 1979a: 112, fig. 6.12; Hill and Phillipps 1981: 148, pl. 50b; Morton and Morton 1983: 42, fig. 4.4(2); Morton and Harper 1995: 51, figs. 7(9), 9(2); Williams 2003: 92, 2 unnumb. figs.; VCS Lai et al. 2006: 55, 3 unnumb. figs.

*Taxonomy*: Sakai (1939: as *G. strigosus*), Banerjee (1960), Crosnier (1965), Holthuis (1977).

*Type*: Syntypes probably in MNHN: status unknown (Holthuis 1977).

*Type locality*: Mauritius (as l'Ile-de-France).

*Distribution*: Western Indian Ocean to Central Pacific: from South Africa, Red Sea to Suez, Arabian Sea and Bay of Bengal, Southeast to East Asia reaching Japan, northern Australia, and east to Samoa and Hawaii (Banerjee 1960).

*Habitat*: Intertidal and shallow subtidal; agile herbivores on rocky shores.

*Remarks*: The species *G. longipes* Stimpson, 1858 has long been considered synonymous with *G. strigosus* (Herbst, 1799) by Rathbun (in Stimpson 1907) and Sakai (1939). The name *Cancer strigosus* Herbst, 1799, however, is a homonym of *Cancer strigosus* Linnaeus, 1761 (now *Galathea strigosus*, an Atlantic squat lobster; see Ahyong et al. 2017). Banerjee (1960) showed that the next available name being *Grapsus albolineatus* Lamarck, 1818. This name was established as "*Grapse albolineata*" by Latreille in Milbert, 1812, thus senior to Lamarck's species (Ng et al. 2008).

### *Metopograpsus frontalis* Miers, 1880 #

*? Metopograpsus messor* — Shen 1940a: 238; Morton 1979a: 121; ZG Huang and Mak 1982: app.; Morton and Morton 1983: 227, fig. 11.11(1); Poon and Chan 2001: 20 [not *Cancer messor* Forskål, 1775].
*Metagrapsus* species — Hill and Phillipps 1981: 148, pl. 50f.
*Metopograpsus frontalis* — Morton and Morton 1983: 93, fig. 7.3(2); VCS Lai et al. 2006: 56, 2 unnumb. figs.; Bravo et al. 2021: tab. 2.
*Metopograpsus latifrons* — Tam and Wong 2000: 115, 2 unnumb. figs. [not *Grapsus latifrons* White, 1847].

*Taxonomy*: Tweedie (1949: as *gracilipes*), Banerjee (1960).

*Type*: Lectotype ♂ NHM 1880.6 (designated by Banerjee 1960).

*Type locality*: Celebes, Makassar, Indonesia.

*Distribution*: Eastern Indian Ocean to West Pacific: Sri Lanka, Singapore, South China, Indonesia, Australia and New Guinea (Banerjee 1960; Yang et al. 2008).

*Habitat*: Intertidal; under rock fragments along gravelly shores, often associated with freshwater discharge, sometimes under mangroves.

*Remarks*: In reporting "*M. messor*" from Hong Kong, Shen (1940a) cited the treatment of *M. messor* in De Man (1888b), which was later described as *M. messor* var. *gracilipes* by De Man (1891). Banerjee (1960) later showed that *M. gracilipes* De Man, 1891 is a junior synonym of *M. frontalis* Miers, 1880.

### *Metopograpsus quadridentatus* Stimpson, 1858 #

*Metopograpsus quadridentatus* Stimpson, 1858b: 102; Stimpson 1907: 115, pl. 16(2); Koelbel 1897: 713; Gordon 1931: 528; Shen 1940a: 238; Banerjee 1960: 192, figs. 5g, 6i; ZG Huang and Lin 1993: app.; BKK Chan 2001: tab. 2; VCS Lai et al. 2006: 56, 1 unnumb. fig.; Bravo et al. 2021: tab. 2.
*Metapograpsus quadridentatus* — Morton 1976: 105.

*Taxonomy*: Tweedie (1949), Banerjee (1960).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: Indian Ocean and West Pacific: Singapore to South China, Indonesia, northern Australia, New Guinea (Banerjee 1960; Davie 2002).

*Habitat*: Intertidal; under rock fragments along gravelly shores, often associated with freshwater discharge, sometimes under mangroves.

## Family Percnidae Števčić, 2005

### *Percnon sinense* Chen, 1977 #
(Figs. 27, 39D)

*? Percnon affine* — Hill et al. 1975: 54; Morton 1976: 97; Hill et al. 1978: 76 [not *Acanthopus affine* H. Milne Edwards, 1853].
*? Percnon planissimum* — Hill et al. 1978: 114; Hill and Phillipps 1981: 148, pl. 50d [not *Cancer planissimum* Herbst, 1804].
*Percnon affinis* — Morton 1979a: 112, fig. 6.12; Morton and Morton 1983: 42, fig. 4.4(3), pl. 1A; Morton and Harper 1995: 57, fig. 9(4) [not *Acanthopus affine* H. Milne Edwards, 1853].
*Percnon sinense* — present record.

*Taxonomy*: Chen (1977).

*Type*: Holotype ♂ and paratypes in IOCAS (Chen 1977).

*Type locality*: Sanya, Hainan, China.

*Distribution*: South China, and southern Taiwan (W-J Chen and Lo 2014).

*Habitat*: Intertidal and shallow subtidal; crevices, often lodged underside of boulders, along exposed rocky shores.

*Remarks*: Illustrations of *Percnon* species provided by Hill and Phillipps (1981: pl. 50d; as *P. planissimum*), Morton and Morton (1983, pl. 1A: as *P. affinis*) and Morton and Harper (1995: fig. 9(4); as *P. affinis*) are nearly identical, and very likely represent the same species. The identification to *P. affine* (H. Milne Edwards, 1853) is incorrect as their specimens do not have the diagnostic, large basal setal patch on the basal part of the chelae (cf. Crosnier 1965; McLay 1989). Recently we have acquired local material of *P. sinense*, identified readily by the dorsally spinose P5 coxa (Fig. 27D). The coloration of an adult male specimen (Fig. 39D) closely matches the above cited local records. As such, we believe these past records also represent *P. sinense*.

## Family Plagusiidae Dana, 1851

### G*uinusia dentipes* (De Haan, 1835)

*Plagusia dentipes* — Morton and Morton 1983: 42.

*Taxonomy*: Sakai (1939: as *Plagusia*), Griffin (1973b: as *Plagusia*), Schubart and Cuesta (2010).

*Type*: Lectotype ♂ in RMNH D 123, and paratypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: West to East Pacific: Taiwan, Korea,

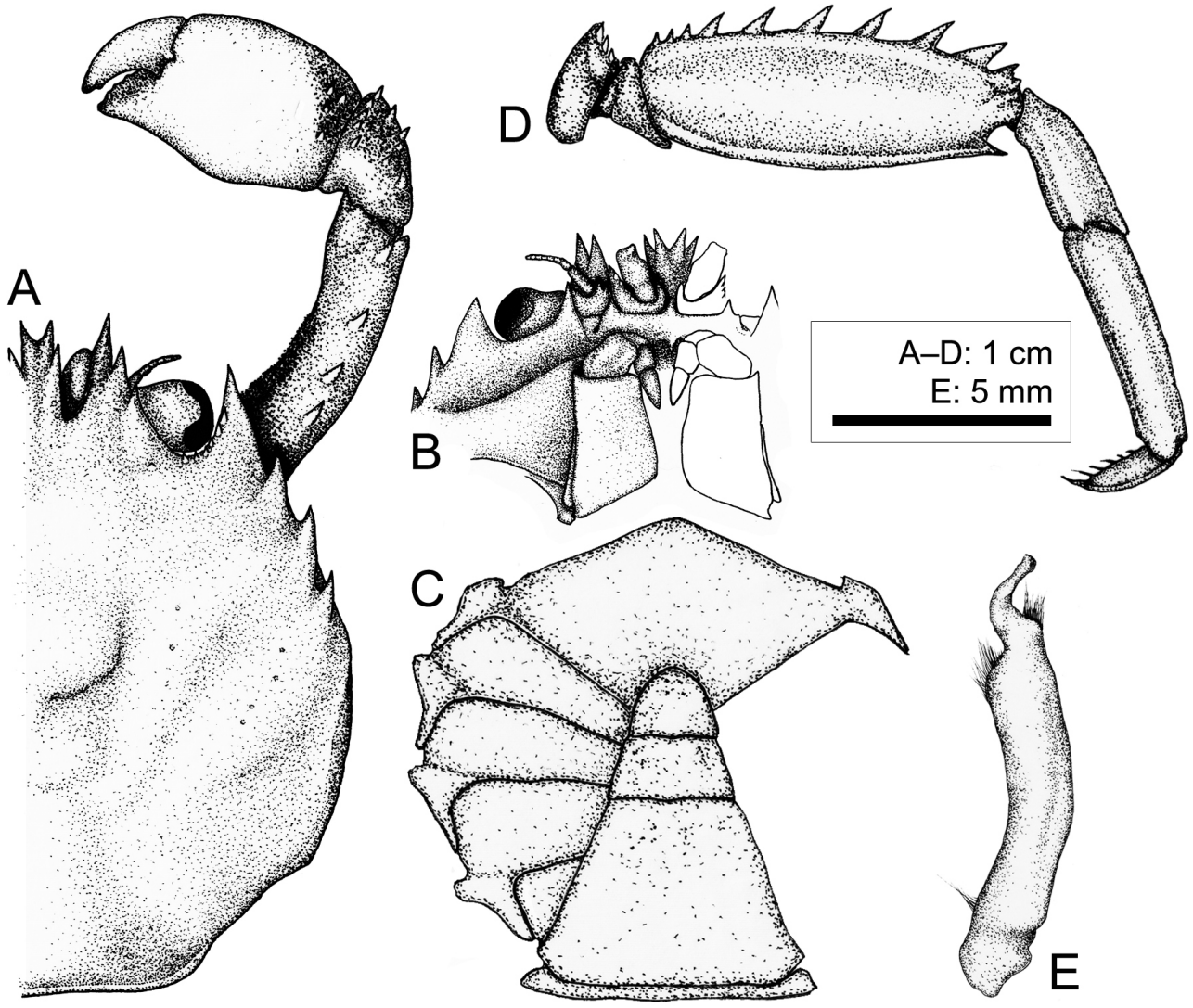



**Fig. 27.** *Percnon sinense* Chen, 1977 (male, 28.1 × 30.2 mm, off High Island): A, carapace and cheliped; B, frontal region and maxilliped 3, ventral view; C, sternum and pleon; D, right P5; E, right G1, ventral view. Structures A, B and D denuded.

Japan; North and Northeast Australia, Lord Howe, Norfolk, Kermadec Islands, and Easter Island (Griffin 1973b).

*Habitat*: Subtidal, to depths of 30 m (Ng et al. 2001).

### *Plagusia squamosa* (Herbst, 1790) #

*Plagusia orientalis* Stimpson, 1858b: 103; Stimpson 1907: 122.
*Plagusia depressa* — Stimpson 1858b: 103; Stimpson 1907: 123; Gee 1926: 164 [list]; Williams 2003: 92, 2 unnumb. figs. [not *Cancer depressa* Fabricius, 1775].
*Plagusia tuberculata* — Gee 1926: 164 [list]; Hill et al. 1975: 54; Morton 1976: 97; Hill et al. 1978: 76; Morton 1979a: 112, fig. 6.12; Hill and Phillipps 1981: 148, pl. 50c.
*Plagusia depressa tuberculata* — Shen 1940a: 238 [no new specimens]; Morton and Morton 1983: 42, fig. 4.4(1).
*Plagusia depressa squamosa* — Shen 1940a: 239.

*Taxonomy*: Dawson (1987: as *P. depressa tuberculata*), Schubart and Ng (2000), Maenosono (2015).

*Type*: Lectotype ♂ ZMB HERBST 0498, and paralectotypes in ZMB (designated by K Sakai 1999; see also Schubart and Ng 2000).

*Type locality*: East Indies.

*Distribution*: Western Indian Ocean to East Pacific: from South Africa and Madagascar, Red Sea, to southern California, and possibly Chile (Davie 2002).

*Habitat*: Intertidal and shallow subtidal; along rocky reefs, also as rafting species (Schubart et al. 2001).

*Remarks*: All records of *P. tuberculata* Lamarck, 1818 and *P. orientalis* Stimpson, 1858 in the Indo-Pacific, should be considered conspecific with and junior synonyms of *P. squamosa* (Herbst, 1790) (Schubart and Ng 2000).

## Family Sesarmidae Dana, 1851

### *Chiromantes haematocheir* (De Haan, 1833) #

*Holometopus haematocheir* — Stimpson 1858b: 106; Heller 1865: 66; Stimpson 1907: 137; Soh 1978: 10, pl. 2e.
*Sesarma haematocheir*, *var*. — Bürger 1893: 614, pl. 21(3).
*Sesarma* (*Holometopus*) *haematocheir* — Balss 1922b: 155; Gordon 1931: 528; Shen 1940a: 237.
*Sesarma haematocheir* — Gee 1926: 164 [list].
*Holometopus serenei* Soh, 1978: 13, figs. c, d, pls. 1b, e, 2f; Morton and Morton 1983: 214, fig. 11.4(3); Naruse and Ng 2008: 8.
*Chiromantes haematocheir* — Fong et al. 2005: 59, 3 unnumb. figs.; WPW Kwok and Tang 2005: 3, fig. 8; Naruse and Ng 2008: 4, figs. 1–4; Bravo et al. 2021: tab. 2.
*Chiromantes sereni* — WPW Kwok and Tang 2005: 3, fig. 9.

*Taxonomy*: Sakai (1939: as *Sesarma* (*Holometopus*)), Naruse and Ng (2008).

*Type*: Lectotype ♂ RMNH D 160, paralectotypes in RMNH, NHM and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997; Naruse and Ng 2008).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: Coasts of China, Taiwan, Korea and Japan.

*Habitat*: Freshwater and terrestrial; under rock fragments on banks of freshwater streams, also under supratidal vegetation.

*Remarks*: *Holometopus serenei* Soh, 1978, previously reported to be endemic to Hong Kong, were shown to be juveniles of *C. haematocheir* (Naruse and Ng 2008; Schubart and Ng 2020). See also Remarks under *Orisarma dehaani* below.

### *Clistocoeloma nobile* B.Y. Lee, N.K. Ng & Ng, 2023 #

(Figs. 28, 39E, F)

*Clistocoeloma* sp. — Fong et al. 2005: 60, 3 unnumb. figs.
*Clistocoeloma villosum* — Bravo et al. 2021: tab. 2. [not *Sesarma villosum* A. Milne-Edwards, 1869].

*Taxonomy*: Komai et al. (2004: as *C. villosum*), S-k Lee et al. (2010: as *C. villosum*), BY Lee et al. (2023).

*Type*: Lectotype ♂ ZRC 2022.0980 and paratypes in ZRC.

*Type locality*: St. John's Island, Singapore.

*Distribution*: West Pacific: Singapore, Sumatra (Indonesia), the Philippines, New Guinea and Caroline Islands, to South China, Taiwan, South Korea and Japan (BY Lee et al. 2023).

*Habitat*: Supratidal; among rock fragments, rather compact, under shades of mangroves.

*Remarks:* The previously understood "*Clistocoeloma villosum*" was reported to be widespread in the Indo-Pacific, but recently shown by B.Y. Lee and colleagues to comprise three distinct species. Both *C. villosum* (A. Milne-Edwards, 1869) *sensu stricto*, and *C. suvaense* Edmondson, 1951, were shown to have rather restricted geographical distributions, from respectively Samoa and Fiji (BY Lee et al. 2023). Past records of "*C. villosum*" in the region of West Pacific are referred to their new species, *C. nobile*, instead.

### *Clistocoeloma sinense* Shen, 1933 #

*? Clistocoeloma merguiensis* — Melville and Morton 1983: 12, 1 unnumb. fig.; SY Lee 1993: tab. 1.
*? Clistocoeloma merguiense* — Morton and Morton 1983: 227, fig. 11.11(10).
*Cleistocoeloma sinensis* — SY Lee and Leung 1999: 72, pl. 16.
*Clistocoeloma* sp. — WPW Kwok and Tang 2005: 3, fig. 2.
*? Clistocoeloma* cf. *merguiense* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Shen (1933), Hsueh and Huang (1996).

*Type*: Holotype ♂ in ZMFMIB: status unknown; paratype ♂ NHM 1933.4.6.1 (NHM Data Portal).

*Type locality*: Ningbo, Zhejiang (as Ningpoo, Chekiang), China.

*Distribution*: East Asia: South China, Taiwan and Japan (Hsueh and Huang 1996; Rahayu and Takeda 2000; Yang et al. 2008).

*Habitat*: Supratidal; among rock fragments, under shades of mangroves.

*Remarks*: *Clistocoeloma merguiense* De Man, 1888(b) has been reported widespread in the Indo-West Pacific, while *C. sinense* was previously only reported from Zhejiang, China (Dai and Yang 1991). Later *C. sinensis* was reported from Taiwan (Hsueh and Huang 1996), and Japan (Rahayu and Takeda 2000), while some past records of *C. merguiense* in the region probably represent *C. sinense* instead (as with Taiwanese records in Ng et al. 2001). Local records of *C. merguiense* probably represent *C. sinense* instead. The late Si-Liang Yang and Ai-Yun Dai were revising the East Asian *Clistocoeloma* shortly before they passed away and included specimens they had from Hong Kong and southern China. The second author has on hand a copy of their unfinished manuscript which records three species from this area (two of which are supposedly new). Fresh collections should be made to ascertain how many species are actually present in southern China.

### *Episesarma versicolor* (Tweedie, 1940) #

*Episesarma versicolor* — VCS Lai 1999a: 8; WPW Kwok and Tang 2005: 2, fig. 3; Bravo et al. 2021: tab. 2.

*Taxonomy*: Dai and Song (1977: as *Neoepisesarma* (*Neoepisesarma*)), Ng (1998), BY Lee et al. (2015).

*Type*: Lectotype ♂ NHM 1947.8.9.3, and paralectotype ♀ in NHM (designated by BY Lee et al. 2015).

*Type locality*: Singapore.

*Distribution*: Eastern Indian Ocean to South China Sea: Southeastern India, Phuket (Thailand), Singapore, Peninsular Malaysia and Borneo, to South China (Yang et al. 2008; BY Lee et al. 2015; Manikantan et al. 2016).

*Habitat*: Supratidal and intertidal; among rocks under shades of mangroves.

### *Fasciarma fasciatum* (Lanchester, 1900) #

*Chiromanthes fasciatum* — Soh 1978: 10, pl. 2b; Morton 1979a: 121; Morton and Morton 1983: 214, fig. 11.4(5).

*Perisesarma fasciata* — Fong et al. 2005: 62, 3 unnumb. figs.; WPW Kwok and Tang 2005: 3, fig. 14.

*Fasciarma fasciatum* — Shahdadi and Schubart 2017: 24, figs. 3F, 4F, 5F, 6F, 7F, 8F, 9F, 10F, 11F, 15; Bravo et al. 2021: tab. 2.

*Taxonomy*: Tweedie (1936: as *Sesarma* (*Chiromantes*)), Shahdadi and Schubart (2017).

*Type*: Lectotype ♂ NHM 1900.10.22.274

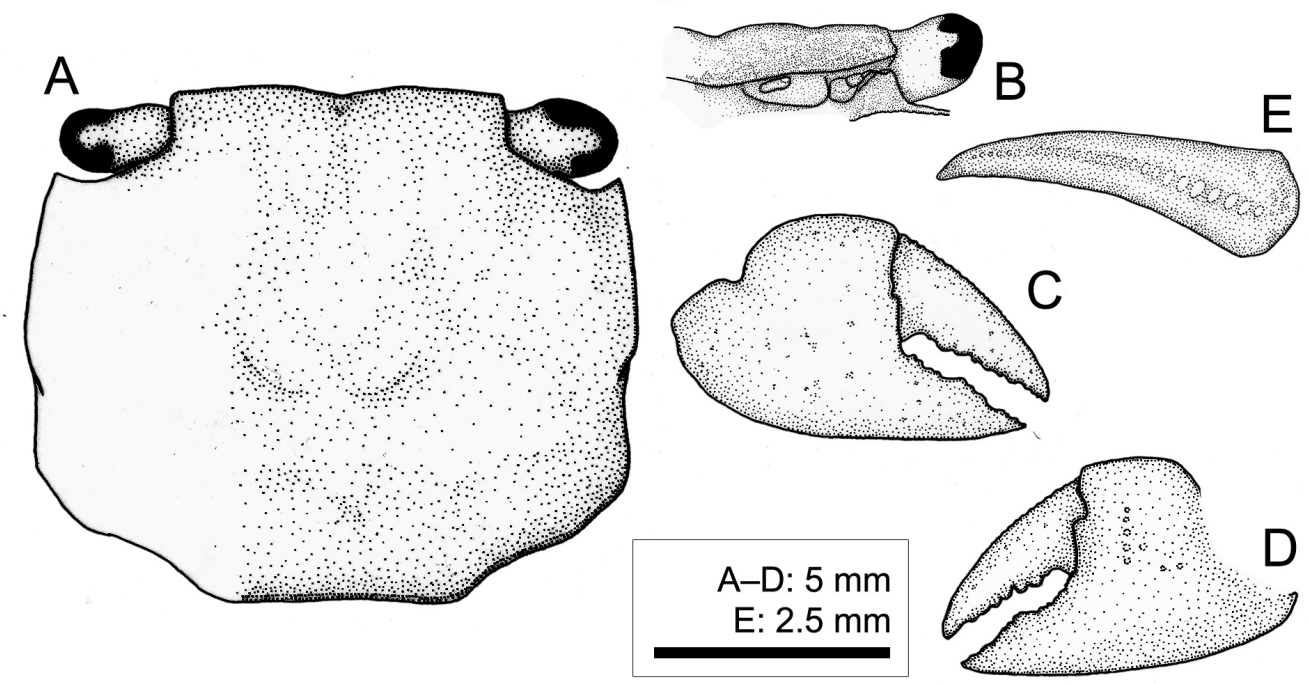



**Fig. 28.** *Clistocoeloma nobile* B.Y. Lee, N.K. Ng & Ng, 2023 (male, 13.1 × 11.9 mm, Yung Shue O): A, carapace; B, orbital, anterior view; C, right chela, external view; D, right chela, internal view; E, right cheliped dactylus, dorsal view. Structures A and B denuded.

(designated by Shahdadi and Schubart 2017).

*Type locality*: Singapore.

*Distribution*: South China Sea: Peninsular Malaysia, Singapore, Gulf of Thailand, Borneo and South China (Dai and Yang 1991).

*Habitat*: Supratidal; under rocks beneath shades of coastal vegetation.

*Remarks*: In describing subgenera *Parasesarma* and *Perisesarma*, De Man (1895) defined the former as having the lateral margin entire, while the latter has an epibranchial tooth after the extra-orbital tooth. Subsequently, however, this distinction between the two taxa was long considered unreliable (Shen 1932b; Tweedie 1940; von Hagen 1978), and both genera were shown to be non-monophyletic groups (Shahdadi and Schubart 2017). As such, *Perisesarma* has been restricted to its type species *Pe. dusumieri* H. Milne Edwards, 1853. The West African species were included in new genus, *Guinearma*; *Pe. fasciatum* transferred into another new genus, *Fasciarma*; and all others referred to *Parasesarma* (Shahdadi and Schubart 2017).

### *Haberma tingkok* Cannicci & Ng, 2017 #

*Haberma tingkok* Cannicci & Ng, 2017: 68, figs. 1–5; Bravo et al. 2021: tab. 2.

*Taxonomy*: Cannicci and Ng (2017).

*Type*: Holotype ♂ ZRC 2016.620, and paratypes in ZRC, SWIMS and MZUF.

*Type locality*: Ting Kok mangroves, Tai Po, Hong Kong.

*Distribution*: South China: so far from Hong Kong only.

*Habitat*: Intertidal; tree-climbing on mangroves *Kandelia obovata* Sheue, Liu & Yong, 2003 and *Aegiceras corniculatum* (L.) Blanco, 1837, at heights 1.5 to 1.8 m above substrate (Cannicci and Ng 2017).

### *Nanosesarma minutum* (De Man, 1887) #

*Sesarma* (*Sesarma*) *gordoni* Shen, 1935: 27, text-fig. 7; Shen 1940a: 236.

*Sesarma minutum* — Hill et al. 1975: 59; Morton 1976: 103.

*Nanosesarma minutum* — Soh 1978: 10, pl. 3a; Hill et al. 1978: 84; J Jiang and Zhou 1982: 676; ZG Huang and Mak 1982: app.; Melville and Morton 1983: 18, 19 (1 un-numb. fig.); Morton and Morton 1983: 93, figs. 7.3(8), 9.4(8); Britton 1990: tab. 1; Ong Che and Morton 1992: 222; ZG Huang and Lin 1993: app.; Morton and Harper 1995: 54, fig. 8(23); Z Huang et al. 1999: tab. 1; VCS Lai et al. 2006: 61, 2 unnumb. figs.; Bravo et al. 2021: tab. 2.

*Nanosesarma gordoni* — Ong Che and Morton 1992: tab. 1.

*Taxonomy*: Shen (1935: as *Sesarma* (*S.*) *gordoni*), Sakai (1939: as *S.* (*S.*) *gordoni*), Serène and Soh (1970).

*Type*: Syntype probably in ZMG ("Zoologischen Museums in Göttingen"; De Man 1888a): status unknown. The ZMG collections have been incorporated into the SMF.

*Type locality*: Island of Edam near Jakarta, Indonesia.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Phuket (Thailand), Singapore, Indonesia, China, Taiwan and Japan; exotic species in New Zealand (Ahyong and Wilkens 2011) and Hawaii (Davie 1998; Carlton and Eldredge 2009; Castro 2011), possibly through ballast waters (Brockerhoff and McLay 2011).

*Habitat*: Intertidal; among fouling or oyster clumps.

*Remarks*: The species *Sesarma* (*Sesarma*) *gordoni* has been considered to be a junior synonym of *minutum* by various authors (Serène and Soh 1970; Davie 1998; Naderloo and Türkay 2009). Records of *S. minutum* in the Indian Ocean have been shown to be *N. sarii* Naderloo and Türkay, 2009 (Persian/Arabian Gulf to Pakistan) and *N. jousseaumei* (Nobili, 1906) (Madagascar, Tanzania to Persian/Arabian Gulf) (Holthuis 1977; Naderloo and Türkay 2009) instead.

### *Nanosesarma pontianacense* (De Man, 1895) #

(Figs. 29, 40A)

*Nanosesarma pontianacense* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Serène (1967: as *N. tweediei*), Dai and Song (1977).

*Type*: No longer extant: holotype ♀ in Naturhistorischen Museums in Lübeck (original text), but original collections destroyed in WWII (Sabaj 2016).

*Type locality*: Pontianak, Sarawak, Indonesia.

*Distribution*: Eastern Indian Ocean to South China Sea: From Phuket (Thailand) to Singapore, Malaysia, Borneo, Vietnam, and South China (Serène 1967; Ng and Davie 2002).

*Habitat*: Intertidal; among oyster clumps on rocks.

*Remarks*: The present species was recently reported in a press release by the Nature Conservacy, based on specimens collected on oyster reefs at Lau Fau Shan, northwestern New Territories (online resource: https://www.tnc.org.hk/en-hk/what-we-do/hong-kong-projects/a-tiny-crab-in-hong-kong-is-showing-big-promise-for-oyster-reefs/; accessed March 2020). We herein provide illustrations of specimens previously collected from Tung Chung. The second author has examined specimens from Hong Kong, and they are conspecific with material from Southeast Asia. The types are no longer extant and a neotype will be need to

be designated as this peculiar species will to be referred to its own genus at a later date (see also Ng et al. 2008: 224).

### *Neosarmatium indicum* (A. Milne-Edwards, 1868) #

*Neosarmatium punctatum* — Morton 1976: 105; Soh 1978: 10, pl. 3b; Morton and Morton 1983: 214, fig. 11.4(6) [not *Metagrapsus punctatus* A. Milne-Edwards, 1873].
*Neosarmatium indicum* — Davie 1994: 43, figs. 1E, F, 4, 17; Bravo et al. 2021: tab. 2.
*Neosarmatium smithi* — WPW Kwok and Tang 2005: 3, fig. 6.

*Taxonomy*: Davie (1994), Ng et al. (1997).

*Type*: Lectotype ♂ MNHN-B10927 (designated by Davie 1994).

*Type locality*: Sulawesi, Indonesia.

*Distribution*: Southeast and East Asia: Indonesia, Singapore, Borneo (Malaysia), the Philippines to South China (Davie 2002; Schubart and Ng 2002).

*Habitat*: Supratidal; under tidal and freshwater influences, in deep burrows on muddy substrates.

*Remarks*: Material reported as *N. punctatum* in Soh (1978) was verified to represent *N. indicum* instead (Davie 1994).

### *Orisarma dehaani* (H. Milne Edwards, 1853) #

*Sesarma dehaani* — Stimpson 1858b: 106; Stimpson 1907: 134; SY Lee 1993: 203; TH Lui et al. 2002: app. 2.
*Holometopus dehaani* — Hill et al. 1975: 77; Hill et al. 1978: 108; Soh 1978: 10, pl. 2d; Morton 1979a: 121; Morton and Morton 1983: fig. 11.4(4).
*Sesarma* (*Holometopus*) *dehaani* — SY Lee and Leung 1999: 61, pl. 2.
*Sesarma plicata* — Tam and Wong 2000: 125, 2 unnumb. figs.
*Chiromantes dehaani* — WPW Kwok and Tang 2005: 3, fig. 7; Komai and Ng 2013: 540.
*Orisarma dehaani* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Shen (1932b: as *Sesarma* (*Holometopus*)), Komai and Ng (2013: as *Chiromantes*), Schubart and Ng (2020).

*Type*: Lectotype RMNH D 157, and paralectotypes in RMNH, NHM, NHMD and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997; Komai and Ng 2013).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: Coasts of China, Taiwan, Korea and Japan.

*Habitat*: Supratidal; burrowing along muddy riverbanks or under shades of coastal vegetation.

*Remarks*: Various authors have noted that *Chiromantes* Gistel, 1848 was polyphyletic (Ng and

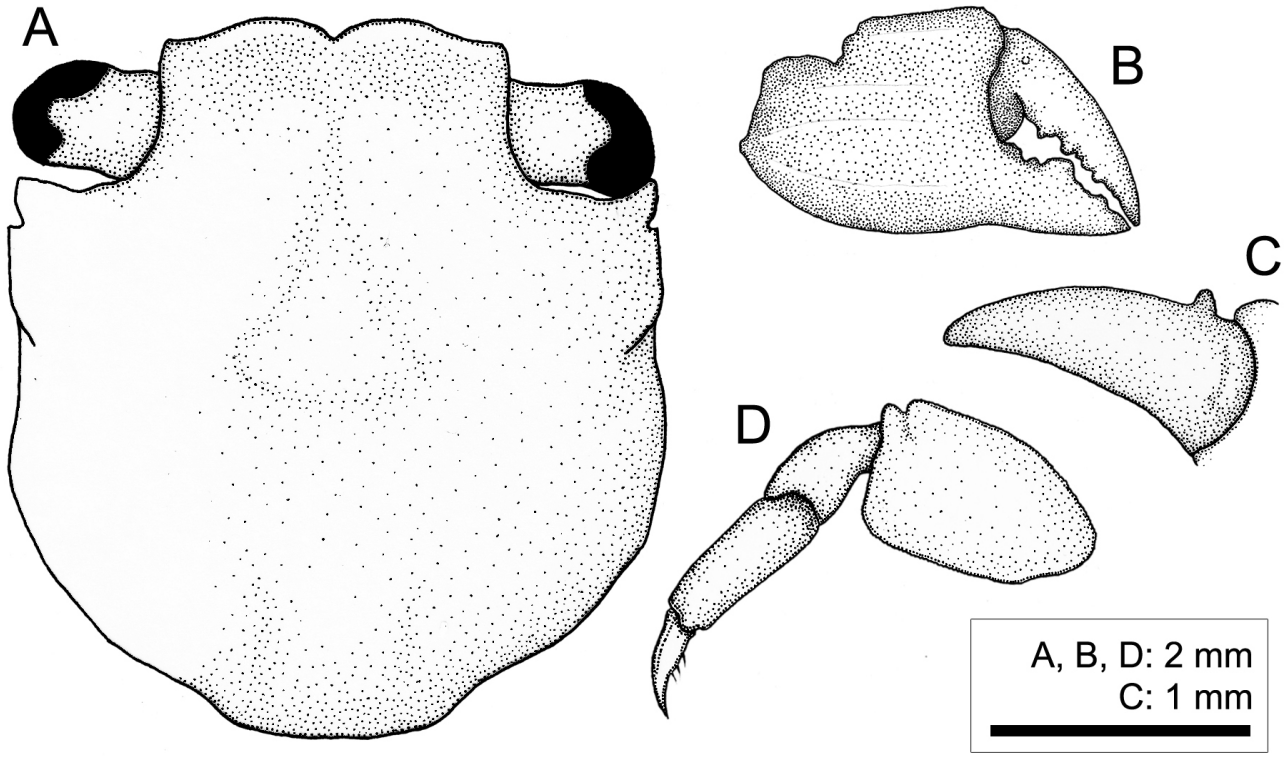



**Fig. 29.** *Nanosesarma pontianacense* (De Man, 1895) (male, 5.3 × 6.4, Tung Chung): A, carapace; B, right chela; C, right cheliped dactylus, dorsal view; D, left P5. All structures denuded.

Liu 1999; Ng et al. 2008; Komai and Ng 2013), with the taxonomic value of the form of lateral margin of carapace, *i.e.*, presence or absence of tooth behind extra-orbital angle, as adopted by Serène and Soh (1970) in genera classification, being questioned (as with *Perisesarma* and *Parasesarma*, cf. Shahdadi and Schubart 2017). *Chiromantes* and *Pseudosesarma* were recently revised by Schubart and Ng (2020), and a number of East Asian species, including the locally present *C. dehaani*, *P. patshuni*, *Sesarmops sinensis* and *S. intermedia*, have been transferred to *Orisarma*.

### *Orisarma intermedium* (De Haan, 1835)

*Sesarma intermedia* — Stimpson 1858b: 105; Heller 1865: 64; Stimpson 1907: 133; Morton 1979a: 118.
*Sesarma intermedium* — Gee 1926: 164 [list]; Hill et al. 1975: 65; Hill et al. 1978: 92.
*Sesarma* (*Sesarma*) *intermedia* — Gordon 1931: 528; Shen 1940a: 236.
*Sesarmops intermedium* — Soh 1978: 11, pl. 4b.
*Orisarma intermedium* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Sakai (1939: as *Sesarma* (*Sesarma*)), Schubart and Ng (2020).

*Type*: Lectotype RMNH D 165, and probable paralectotype in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Mergui Islands, Indonesia, to South China, Taiwan, Korea and Japan (De Man 1888b; Sakai 1976).

*Habitat*: Supratidal; along banks of stream banks leading to the shore, rather tolerant to freshwater.

*Remarks*: See Remarks under *Orisarma dehaani* above.

### *Orisarma patshuni* (Soh, 1978) #

*Pseudosesarma patshuni* Soh, 1978: 14, figs. e, f, pls. 1c, f, 3f; Morton and Morton 1983: 214, fig. 11.4(7); WPW Kwok and Tang 2005: 3, fig. 16.
*Orisarma patshuni* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Soh (1978: as *Pseudosesarma*), Schubart and Ng (2020).

*Type*: Holotype ♂ BM 1976:108 in NHM, and paratypes probably in ZRC.

*Type locality*: Shui Hau, Lantau Island, Hong Kong.

*Distribution*: South China, probably near estuaries of Pearl River: so far reported from Macau and Hong Kong, and Dapeng District, Shenzhen (Huang and Mao 2021).

*Habitat*: Supratidal; on among rock fragments along stream backs leading to the shore, appears rather tolerant to freshwater.

*Remarks*: See Remarks under *Orisarma dehaani* above.

### *Orisarma sinense* (H. Milne Edwards, 1853) #

*Sesarma sinensis* — Stimpson 1858b: 105; Stimpson 1907: 133; Gee 1926: 165 [list]; Morton 1979a: fig. 6.19; SY Lee 1993: tab. 1.
*Seasarma* (*Sesarma*) *sinensis* — Shen 1931b: 196, text-fig. 13, pl. 14(2, 3).
*Sesarma* (*Sesarma*) *sinensis* — Shen 1940a: 236.
*Sesarmops sinensis* — Morton 1976: 105; Soh 1978: 11, pl. 4c; Morton 1979a: 121; Morton and Morton 1983: 158, fig. 11.11(12); Fong et al. 2005: 63, 3 unnumb. figs.; WPW Kwok and Tang 2005: 3, figs. 15, 18a, 20.
*Sesarma* (*Sesarmops*) *sinensis* — SY Lee and Leung 1999: 61, pl. 1.

*Taxonomy*: Shen (1931b: as *Seasarma* (*Sesarma*)), Schubart and Ng (2020).

*Type*: Syntype ♂ in MNHN (see De Man 1887; Schubart and Ng 2020).

*Type locality*: "Mers de Chine": China, locality unspecified.

*Distribution*: South China: from Guangdong to Zhejiang (Dai and Yang 1991).

*Habitat*: Supratidal and intertidal; burrowing along muddy banks.

*Remarks*: See Remarks under *Chiromantes dehaani* above.

### *Parasesarma affine* (De Haan, 1837) #

*Sesarma* (*Parasesarma*) *plicata* — Balss 1922b: 155; Shen 1940a: 236 [not *Ocypode plicatum* Latreille, 1803].
*Sesarma plicata* — Gee 1926: 165 [list] [not *Ocypode plicatum* Latreille, 1803].
*Parasesarma affinis* — Soh 1978: 10, pl. 3c; Morton and Morton 1983: fig. 11.5; SY Lee 1993: tab. 1; WPW Kwok and Tang 2005: 3, figs. 12, 21.
*? Parasesarma plicatum* — Hill et al. 1975: 77; Morton 1976: 100; Hill et al. 1978: 108; Soh 1978: 11, pl. 3e; Morton and Morton 1983: fig. 10.3(1) [not *Ocypode plicatum* Latreille, 1803].
*Sesarma* (*Parasesarma*) *affinis* — SY Lee and Leung 1999: 62, pl. 4.
*Parasesarma pictum* — So and Lui 2007: 35, 4 unnumb. figs.
*Parasesarma affine* — Rahayu and Ng 2010: 8, figs. 5–7; Bravo et al. 2021: tab. 2.

*Taxonomy*: Rahayu and Ng (2010).

*Type*: Lectotype ♂ RMNH D 129, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997; Rahayu and Ng 2010).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Taiwan, Korea and Japan (Rahayu and Ng 2010).

*Habitat*: Supratidal; under limited tidal influences, in burrows, sometimes under shades of coastal

vegetation.

*Remarks*: The taxonomy of the *Parasesarma plicatum*-group was revised by Rahayu and Ng (2010) and past records in East Asia under the name "*P. plicatum*" represent *P. affine* instead, with *P. plicatum sensu stricto* now known to be restricted to localities around Indian Ocean and Southeast Asia.

### *Parasesarma continentale* Shih, Hsu & Li, 2023 #

*Sesarma bidens* — Heller 1865: 64 [part]; Bürger 1893: 628; Stimpson 1907: 134 [part; material from Hong Kong only]; Gee 1926: 164 [list]. [not *Grapsus* (*Pachysoma*) *bidens* De Haan, 1835].
*Sesarma* (*Chiromantes*) *bidens* — Gordon 1931: 528; Tam and Wong 2000: 115, 2 unnumb. figs.
*Sesarma* (*Perisesarma*) *bidens* — Shen 1940a: 237.
*Chiromanthes bidens* — Hill et al. 1975: 48; Morton 1976: 103; Hill et al. 1978: 92; Morton 1979a: 118; Soh 1978: 10, pl. 2a; Melville and Morton 1983: 11, 1 unnumb. fig. (12); Morton and Morton 1983: 220, fig. 11.11(8), pl. 19D; SY Lee 1993: tab. 1.
*Sesarma* (*Perisesarma*) *bidens* — SY Lee and Leung 1999: 64, pl. 5.
*Perisesarma bidens* — BKK Chan 2001: tab. 2; Poon 2002: 15, fig. 1; Fong et al. 2005: 61, 4 unnumb. figs.; WPW Kwok and Tang 2005: 3, fig. 13; So and Lui 2007: 34, 3 unnumb. figs; Bravo et al. 2021: tab. 2.
*Parasesarma continentale* Shih, Hsu & Li, 2023: 11, figs. 4, 7F–H, 9C, D, 10D, 11D, 12B.

*Taxonomy*: Shahdadi and Schubart (2017; on "*Perisesarma*"); Shih et al. (2023).

*Type*: Holotype ♂ NCHUZOOL 17065, and paratypes in NCHUZOOL and ZRC.

*Type locality*: Lieyu, Kinmen, Taiwan.

*Distribution*: Vietnam and South China: shores of Vietnam, Hainan, Hong Kong, to Kinmen, Matzu and Fujian (Shih et al. 2023).

*Habitat*: Supratidal and intertidal, among rock fragments, often under shades of mangroves.

*Remarks*: See remarks under *Fasciarma fasciatum* above.

The species "*Perisesarma bidens*" was recorded from a good wealth of literature from various localities along the West Pacific, including Hong Kong. This was recently shown to be a species complex comprise of at least five lineages, each warrant species-level status, with Taiwan situated at a point of overlap (Shahdadi et al. 2022). Based on molecular and morphological evidences, these lineages are now recognized as separate species: *P. bidens* (De Haan, 1835) *sensu stricto* from Korea and the Japanese Archipelago, as south as Iriomote; *P. cricotum* Rahayu and Davie, 2002 from Indonesia and Philippines; *P. sanguimanus* Li, Shih & Ng, 2019 and *P. insulare* Shih, Hsu & Li, 2023 from Taiwan to Philippines; *P. chiahsiang* Shih, Hsu & Li, 2023 from Taiwan, especially Penghu Islands; and *P. continentale* along shores of Vietnam to South China (Shih et al. 2023). These species show subtle morphological distinctions, as well as distinctive live colorations (Shih et al. 2023). So far only *P. continentale* is found in Hong Kong.

### *Parasesarma maipoense* (Soh, 1978)

*Chiromanthes maipoensis* Hill et al. 1975: 77 [*nomen nudum*].
*Chiromanthes maipoensis* Morton 1976: 105 [*nomen nudum*].
*Chiromanthes maipoensis* Soh, 1978: 11, figs. a, b, pls. 1a, d, 2c; Hill et al. 1978: 108; Melville and Morton 1983: 11, 2 unnumb. figs. (13, 14); Morton and Morton 1983: fig. 11.11(3); SY Lee 1993: tab. 1.
*Sesarma* (*Perisesarma*) *maipoensis* — SY Lee and Leung 1999: 65, pl. 6.
*Sesarma* (*Chiromanthes*) *maipoensis* — Markham 1990: 560; Li 2003: 154 [no new specimens].
*Sesarma maipoensis* — Markham 1992: tab. 1 [list].
*Perisesarma maipoense* — Ng et al. 2010a: 239, figs. 1–4.

*Taxonomy*: Soh (1978: as *Chiromanthes*), Ng et al. (2010a: as *Perisesarma*), Shahdadi and Schubart (2017).

*Type*: Holotype ♂ BM 1976:106 in NHM, paratypes in ZRC (Ng et al. 2010a).

*Type locality*: Mai Po marshes near Shum Chun River, Hong Kong.

*Distribution*: Vietnam and South China: northern Vietnam, Macau and Hong Kong (Ng et al. 2010a).

*Habitat*: Supratidal; on raised levees of drainage channels and drier bunds, or in the mangrove littoral zone (Ng et al. 2010a).

*Remarks*: See remarks under *Fasciarma fasciatum* above. This species was long believed to a Hong Kong endemic until the species was also found in northern Vietnam (Ng et al. 2010a) and probably has a wider range than is known. Earlier use of this name in the literature was seen in faunal checklist compiled by Hill et al. (1975 1978), and an overview of mangrove crabs by Morton (1976). In both treatments, however, no diagnoses or descriptions were provided, hence considered as a *nomen nudum*.

### *Parasesarma pictum* (De Haan, 1835) #

*Sesarma picta* — Bürger 1893: 626.
*Sesarma* (*Parasesarma*) *picta* — Gordon 1931: 528; Shen 1940a: 237.
*Parasesarma pictum* — Hill et al. 1975: 77; Morton 1976: 100; Hill et al. 1978: 92, 108; Soh 1978: 11, pl. 3d; Morton 1979a: 121, fig. 6.17; Morton and Morton 1983: 87, fig. 7.3(1), pl. 6; Britton 1990: tab. 1; WPW Kwok and Tang 2005: 3, fig. 11; VCS Lai et al. 2006: 60, 2 unnumb. figs.; Bravo et al. 2021: tab. 2.
*Sesarma pictum* — Choi 1992: 901.

*Taxonomy*: Shen (1932b: as *Sesarma* (*Parasesarma*)), Sakai (1939: as *Sesarma* (*Parasesarma*)), Maenosono and Naruse (2015).

*Type*: Lectotype ♂ RMNH D 45168, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Korea, Taiwan, Ryukyus and Japan (Sakai 1976; Yang et al. 2008); the Indonesian record (from Celebes), presented in De Man (1887 1888b) was listed with doubt later in 1895 (De Man 1895: p. 185), and excluded by Widyastuti and Rahayu (2016).

*Habitat*: Supratidal and intertidal; in along relatively sheltered rocky shores or in tide pools, and along shores of rock fragments.

### *Parasesarma tripectinis* Shen, 1940 #

*Parasesarma erythrodactylum* — Poon and Chan 2001: 20.
*Parasesarma tripectinis* — Rahayu and Ng 2005: 177; Bravo et al. 2021: tab. 2.

*Taxonomy*: Shen (1940b: as *Sesarma* (*Parasesarma*)), Davie (1993: as *P. acis*), Rahayu and Ng (2005), Maenosono and Naruse (2015).

*Type*: Whereabouts and status unknown.

*Type locality*: Jimei, Fujian (as Tsimei, Fukien), China.

*Distribution*: East Asia: coasts of China, Taiwan and Japan (Dai and Yang 1991; Davie 1993).

*Habitat*: Supratidal to intertidal, usually in the upper zones; among coast vegetation and foliage, or under rocks.

### *Parasesarma ungulatum* (H. Milne Edwards, 1853)

*Parasesarma ungulatum* — Rahayu and Ng 2010: 11, figs. 8–10; Bravo et al. 2021: tab. 2.

*Taxonomy*: Rahayu and Ng (2010).

*Type*: Lectotype ♂ MNHN BP 3694 (designated by Rahayu and Ng 2010).

*Type locality*: Sulawesi, Indonesia.

*Distribution*: Southeast and East Asia: Indonesia, Singapore, Malaysia, Thailand, to South China (Rahayu and Ng 2010).

*Habitat*: Supratidal to intertidal; under mangroves.

### *Sarmatium germaini* (A. Milne-Edwards, 1869) #

*Sarmatium germanii* — Hill et al. 1975: 77; Hill et al. 1978: 108.
*Sarmatium germaini* — Soh 1978: 11, pl. 4a; Morton 1979a: 121; Morton and Morton 1983: 227, fig. 11.11(4); Bravo et al. 2021: tab. 2.

*Taxonomy*: Serène and Soh (1971), Davie (1992c).

*Type*: Lectotype ♀ MP-B3668 and paralectotypes in MNHN (designated by Davie 1992c).

*Type locality*: Côn Sơn Island (as Poulo condore), southern Vietnam, South China Sea.

*Distribution*: West Pacific: northern Australia, Malaysia, Singapore, the Philippines, Vietnam and South China (Davie 1992c).

*Habitat*: Supratidal and intertidal; in burrows under shades of mangroves, some 10 m inland from the creek bank (Davie 1992c).

### *Sarmatium striaticarpus* Davie, 1992

*Sarmatium striaticarpus* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Davie (1992c).

*Type*: Holotype ♂ ZRC 1970.1.23.14; and paratype ♀ in USNM.

*Type locality*: Johore Straits.

*Distribution*: South China Sea and East Asia: Singapore and Malaysia, the Philippines; Hong Kong (South China), to southern Okinawa (Davie 1992c; CGS Tan and Ng 1994; Bravo et al. 2021).

*Habitat*: Intertidal; associated with mangrove swamps (Davie 1992c).

### *Sinosesarma tangi* (Rathbun, 1931) #

*Sesarma tangi* — SY Lee 1993: tab. 1.
*Sesarma* (*Holometopus*) *tangi* — SY Lee and Leung 1999: 62, pl. 3.
*Chiromantes tangi* — WPW Kwok and Tang 2005: 3, fig. 10.
*Sinosesarma tangi* — Ng et al. 2019: 4, figs. 1–5; Bravo et al. 2021: tab. 2.

*Taxonomy*: Ng and Liu (1999: as *Chiromantes*), Schubart and Ng (2002: as *Neosarmatium*), Ng et al. (2019).

*Type*: Holotype ♂ USNM 61875 (Ng and Liu 1999; Schubart and Ng 2002; Ng et al. 2019).

*Type locality*: Guantao, near Fuzhou, Fujian (as Foochow, Fukien), China.

*Distribution*: Vietnam and South China: northern Vietnam, Hong Kong and Fujian.

*Habitat*: Supratidal to intertidal; burrowing near bases of trees in the interior of mangrove forests (SY Lee and Leung 1999; Ng et al. 2019).

## Family Varunidae H. Milne Edwards, 1853
## Subfamily Asthenognathinae Stimpson, 1858

### *Asthenognathus hexagonum* Rathbun, 1909 #

*Asthenognathus hexagonum* — Wong et al. 2021: 60, fig. 98a–c, pl. 18E.

*Taxonomy*: W Jiang et al. (2007), Yang and Tang

(2008).

*Type*: Holotype ♀ probably in NHMD (original text).

*Type locality*: North of Koh Kong, Gulf of Thailand.

*Distribution*: South China Sea: Gulf of Thailand, the Philippines and South China (Rathbun 1910; Serène and Soh 1976; Yang and Tang 2008).

*Habitat*: Subtidal; muddy substrates; depths 8 to 26 m (Yang and Tang 2008).

### *Asthenognathus inaequipes* Stimpson, 1858 #

*Asthenognathus inaequipes* — Ong Che and Morton 1991: tab. 1; Wong et al. 2021: 63, fig. 98d–f, pl. 18F.

*Taxonomy*: De Man (1907), Sakai (1939), W Jiang et al. (2007).

*Type*: Presumably lost.

*Type locality*: "prop oras orientales insulæ "niphon"; lat. Bor. 38°": seas off now Sendai, Japan.

*Distribution*: East Asia: coasts of China, Korea, Japan (Sakai 1976; W Jiang et al. 2007; SH Lee et al. 2010).

*Habitat*: Subtidal; substrates of mud or sandy mud; depths 7 to 50 m (W Jiang et al. 2007); also reported to be collected from dwelling of holothurian *Protankyra bidentata* (Woodward & Barrett, 1858) (SH Lee et al. 2010).

## Subfamily Cyclograpsinae H. Milne Edwards, 1853

### *Chasmagnathus convexus* De Haan, 1835 #

*Chasmagnathus convexus* — Balss 1922b: 154; Gee 1926: 164 [list]; Gordon 1931: 528; Shen 1940a: 235; Hill et al. 1978: errata; Morton 1979a: 121; SY Lee and Leung 1999: 66, pl. 7; Fong et al. 2005: 58, 4 unnumb. figs.; WPW Kwok and Tang 2005: 3, figs. 1, 17b, 18b, 19b, 22; K Sakai et al. 2006: 10, figs. 7–13; Bravo et al. 2021: tab. 2.

*Tiomanium mortoni* Hill et al. 1975: 77 [*nomen nudum*]; Hill et al. 1978: 108.

*Chasmagnathus convexum* — Melville and Morton 1983: 11, 2 unnumb. figs. (12, 14); Morton and Morton 1983: pl. 19E; SY Lee 1993: tab. 1.

*Taxonomy*: Sakai (1939), K Sakai et al. (2006).

*Type*: Lectotype ♂ RMNH D 213, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South China, Taiwan, Korea and Japan (K Sakai et al. 2006).

*Habitat*: Supratidal and intertidal; in burrows under shades of mangroves.

*Remarks*: The names *Tiomanium mortoni* and *T. shumchunensis* appeared in a faunal checklist compiled by Hill et al. (1975 1978) but no diagnoses or comparisons were furnished for both taxa; they are therefore nomina nuda. In an errata sheet attached to the revised version of the checklist (Hill et al. 1978), these two names were indicated to instead represent *Chasmagnathus convexus* and *Helice tientsinensis*, respectively.

### *Cyclograpsus incisus* Shen, 1940

*? Cyclograpsus punctatus* — Stimpson 1858b: 105; Stimpson 1907: 132; Gee 1926: 164 [list]; Shen 1940a: 236 [no new specimens] [not *C. punctatus* H. Milne Edwards, 1837].

*Cyclograpsus incisus* Shen 1940a: 236 [*nomen nudum*].

*Cyclograpsus incisus* Shen, 1940b: 259, figs. 10–16.

*Taxonomy*: Shen (1940b).

*Type*: Status unknown.

*Type locality*: Aberdeen, Hong Kong.

*Distribution*: South China: so far from Guangdong only.

*Habitat*: Intertidal (Dai and Yang 1991).

*Remarks*: *Cyclograpsus punctatus* H. Milne Edwards, 1837 has been recorded from an exceptionally wide geographic range, and the records almost certainly belong to complex of different species with *C. punctatus sensu stricto* found only in Chile and South Africa (Campbell and Griffin 1966; Griffin 1968b). Griffin (1968b) suggested that local records by Stimpson (1858b 1907) are *C. incisus*, a poorly understood species (see also Dai and Yang 1991). His recommendation is followed here.

### *Cyclograpsus intermedius* Ortmann, 1894 #

*Cyclograpsus intermedius* — Morton and Morton 1983: 93, fig. 7.3(5).

*Taxonomy*: Sakai (1939).

*Type*: Syntypes in MZS 1294 (Komai 1999).

*Type locality*: Amani-Oshima (Ryukyu, Japan), and Indian Ocean (locality unspecified).

*Distribution*: Indo-West Pacific: Indian Ocean, and South China, Taiwan, Korea and Japan (Ortmann 1894).

*Habitat*: Intertidal; beneath boulders and rock fragments.

### *Helicana doerjesi* K. Sakai, Türkay & Yang, 2006

*Helicana doerjesi* — Bravo et al. 2021: tab. 2.

*Taxonomy*: K Sakai et al. (2006); Shih and Suzuki (2008).

*Type*: Holotype ♂ SMF-8667; paratypes in ZIAS, BNHM, ZMH, USNM, SMF and ZIRAS.

*Type locality*: Mailiao, western Taiwan.

*Distribution*: East Asia: Southern to Central China, and west coast of Taiwan (K Sakai et al. 2006; Shih and Suzuki 2008).

*Habitat*: Intertidal; estuarine mudflats associated with mangroves.

### *Helice latimera* Parisi, 1918 #

*? Helice tridens* — Koelbel 1897: 711; Gee 1926: 164 [list]; Morton and Morton 1983: 227, fig. 11.11(7); SY Lee 1993: tab. 1 [not *H. tridens* De Haan, 1835].

*Helice tridens pingi* — Shen 1940a: 236.

*? Tiomanium shumchunensis* Hill et al. 1975: 77 [*nomen nudum*]; Hill et al. 1978: 108.

*? Helice tientsinensis* — Hill et al. 1978: errata [not *H. tientsinensis* Rathbun, 1931].

*Helice latimera* — SY Lee and Leung 1999: 66, pl. 8; K Sakai et al. 2006: 20, figs. 18, 22, 26, 30, 31; Bravo et al. 2021: tab. 2.

*Taxonomy*: K Sakai et al. (2006).

*Type*: Holotype ♀ MCSNM Nr. 1651 (K Sakai and Yatsuzuka 1980; Froglia and Grippa 1986).

*Type locality*: China, locality unspecified.

*Distribution*: Vietnam and South China: northern Vietnam and South China.

*Habitat*: Intertidal; under beds of common reed *Phragmites australis* (SY Lee and Leung 1999).

*Remarks*: On the name *Tiomanium shumchunensis*, see Remarks under *Chasmagnathus convexus* above. The record of "*H. tientsinensis*" is likely to be *H. latimera* instead; with K. Sakai et al. (2006) and Shih and Suzuki (2008) showing that the former species is distributed in North China and Korea instead.

### *Helice* sp.

*Helice* sp. — SY Lee and Leung 1999: 67, pl. 9.

*Remarks*: Based on material collected from the Mai Po Marshes, S.Y. Lee and Leung (1999) reported two species of *Helice*: *H. latimera* Parisi, 1918, and another form as *Helice* sp. The latter form, as commented by the late Prof. A.-Y. Dai, being "still obscure and may represent a new species". Unfortunately, their treatment on Hong Kong sesarmid crabs (cited as "Lee, Dai and Chen, in press") has never been published. This material is now in the collection of the Queensland Museum and will be re-examined and studied at a later date (S.Y. Lee, Peter Davie, pers. comm.). We retain this species record for the time being.

### *Metaplax elegans* De Man, 1888

*Metaplax elegans* — Gordon 1931: 528; Shen 1940a: 236; Davie 1992a: 352, pl. 2B; SY Lee and Leung 1999: 68, pl. 11; WPW Kwok and Tang 2005: 3, fig. 4.

*Taxonomy*: De Man (1888b), Davie (1992a), Shih et al. (2019).

*Type*: Syntypes RMNH D 13 (Fransen et al. 1997), NHM 1886.52 (NHM Data Portal), and probably also in ZSI (as Indian Museum, Calcutta in original text).

*Type locality*: Mergui Archipelago, Myanmar.

*Distribution*: Eastern Indian Ocean and South China Sea: East India, Mergui Archipelago, Phuket (Thailand), Malaysia, to South China and Taiwan (Shih et al. 2019).

*Habitat*: Intertidal; on mudflats under mangroves.

### *Metaplax longipes* Stimpson, 1858 #

(Fig. 30)

*Metaplax longipes* Stimpson, 1858b: 97; Koelbel 1897: 711, pl. 1(1–4); Stimpson 1907: 99; Gee 1926: 164 [list]; Gordon 1931: 528; Shen 1940a: 236; Shih et al. 2019: 9, figs. 2D–F, 4, 7E–H; Bravo et al. 2021: tab. 2.

*Macrophthalmus boteltobagoe* — Bones 1982: 691, pls. 1, 2c, d; Morton and Morton 1983: 156 [not *Ma. boteltobgoe* Sakai, 1939].

*Metaplax takahasii* — Davie 1992a: 352, pl. 2A; SY Lee and Leung 1999: 69.

*? Metaplax longipes* — SY Lee 1993: tab. 1; SY Lee and Leung 1999: 68, pl. 10; WPW Kwok and Tang 2005: 3, figs. 5, 19a; So and Lui 2007: 36.

*Taxonomy*: Stimpson (1907), Shih et al. (2019).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: South China Sea and East Asia: northern Vietnam, South China, and west coast of Taiwan (Shih et al. 2019).

*Habitat*: Intertidal; on mudflat along fringes of mangroves, often associated with estuarine conditions.

*Remarks*: See remarks under *Metaplax tredecim* below. Local records of "*Macrophthalmus boteltobagoe*" require some discussion. This species was reported by Bones (1982) from Tong Fuk Miu Wan, and Morton and Morton (1983) from Shui (as Shiu) Hau, both sites on of sheltered sandflats on Lantau Island. The reported habitat was very different from earlier reports of *Ma. boteltobagoe sensu stricto*: dwelling in burrows on rocky shores of limestone substrates, from various sites in the Ryukyus, Japan (Kosuge 1991; Kosuge and Davie 2001), and possibly also at Lanyu Island (as Kôtôsyo), Taiwan, where the species was described (Sakai 1939). We agree with Shih et al. (2015) that on the basis of the reported habitat, this record is not true *Ma. boteltobagoe*.

The illustrations of Bones' (1982) record (pls. 1, 2c, d), in any case, substantially differ from the figures of *Ma. boteltobagoe* Sakai, 1939, and *Ma.*

*holthuisi* Serène, 1973(b). Compared to figures of both species in Kosuge and Davie (2001): (1) the local specimen measured approximately 1.9 × 1.4 cm, which is substantially larger than both *Macrophthalmus* species (cw. generally less than 1 cm: see Kosuge and Davie 2001); (2) the extraorbital tooth in the local specimen appears truncated to squarish (Bones 1982: pl. 2c, d; reproduced as Fig. 26A, B), whereas in both *Macrophthalmus* species, it is triangular, rather protruding, and slightly to distinctly acute; and (3) in the local specimen, it is devoid of any traces of fine setae or tomentum on the inner surfaces of the fingers of the chela (Bones 1982: fig. 2d; reproduced as Fig. 26B). As such, this record is neither *Ma. boteltobagoe* nor *Ma. holthuisi*.

Bones' (1982) species closely resembles *Metaplax* in having the cheliped and fringes of the carapace nearly naked and the ambulatory legs are markedly more slender and elongated. The anterolateral lobes of Bones' (1982) taxon, being truncate, quadrate and not clearly protruding, actually agree with of *Me. longipes*, a common species along the shores of Lantau Island. We provide images of an adult male specimen of *Me. longipes*, size 18.2 × 13.5 mm from Tung Chung, for comparison in figure 30C, D. As such, we are confident Bones' (1982) "*Macrophthalmus boteltobagoe*" is *Me. longipes* instead.

### ***Metaplax tredecim* Tweedie, 1950 #**

*Metaplax tredecim* — Shih et al. 2019: 16, figs. 2J–L, 6, 7M–P; Bravo et al. 2021: tab. 2.

*Taxonomy*: Tweedie (1950), Shih et al. (2019).

*Type*: Holotype ♂ ZRC 1971.10.13.1 (Davie and Nguyen 2003).

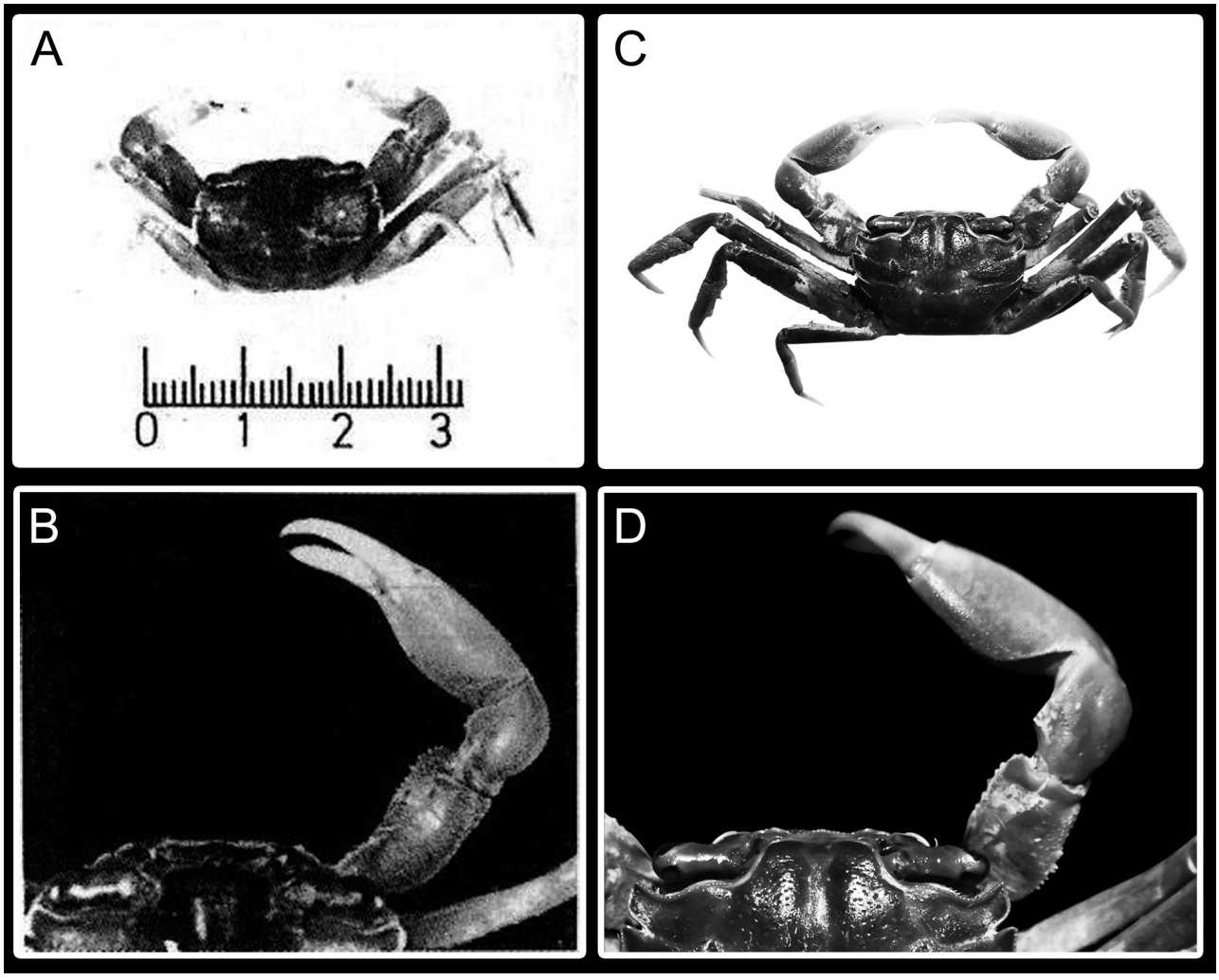



**Fig. 30.** *Metaplax longipes* Stimpson, 1858. A, B: reproduction of illustrations as "*Macrophthalmus boteltobagoe*" by Bones (1982: pls. 2c, d), with permission from the Hong Kong University Press; C, D: male, 18.2 × 13.5 mm, Tung Chung).

*Type locality*: Labuan, Borneo.

*Distribution*: Southeast and East Asia: northern Borneo, Vietnam, to South China (Shih et al. 2019).

*Habitat*: Intertidal; on mudflat along fringes of mangroves, often on substrates of coarse sands.

*Remarks*: Based on published records, three *Metaplax* species have been reported locally: *M. elegans*, *M. longipes*, and *M. takahasii* (Davie 1992a). Recently, Shih et al. (2019) showed *M. takahasii* Sakai, 1939 is a junior synonym of *M. longipes* Stimpson, 1858, and had been incorrectly represented as "*M. takahasii*" in Davie (1992a). The third species present was identified as *M. tredecim* Tweedie, 1950. The presence in Hong Kong (South China) may mark the northern limit of this essentially Southeast Asian species.

## Subfamily Gaeticinae Davie & N.K. Ng, 2007

### *Gaetice depressus* (De Haan, 1833) #

*Platygrapsus depressus* — Stimpson 1858b: 104; Stimpson 1907: 128.
*Platynotus depressus* — Heller 1865: 60.
*Gaetice depressus* — Balss 1922b: 150; Gordon 1931: 528; Shen 1940a: 238; J Jiang and Zhou 1982: 681; Markham 1992: tab. 1 [list]; Morton and Harper 1995: 43, fig. 6(3); Poon and Chan 2001: 21; VCS Lai et al. 2006: 59, 3 unnumb. figs.; Davie and NK Ng 2007: 262, figs. 4–6; Bravo et al. 2021: tab. 2.
*Goetice depressus* — Gee 1926: 164 [list]; Markham 1982: 361; Li 2003: 153 [no new specimens].
*Hemigrapsus goetica* — Hill et al. 1975: 59.
*Goetica depressa* — Hill et al. 1978: 84.
*Gaetice depressa* — Morton and Morton 1983: 93, figs. 7.3(6), 7.12(10); BKK Chan 2001: tab. 2.

*Taxonomy*: Sakai (1939), Davie and NK Ng (2007).

*Type*: Lectotype RMNH D 1226, and paralectotypes in RMNH and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Taiwan, Korea and Japan (Sakai 1976).

*Habitat*: Intertidal; under rock fragments.

### *Gaetice ungulatus* Sakai, 1939

*Gaetice ungulatus* — Davie and NK Ng 2007: 264.

*Taxonomy*: Sakai (1939).

*Type*: Whereabouts and status unknown.

*Type locality*: Okinawa, Japan.

*Distribution*: East Asia: coasts of China, Taiwan and Japan (Davie and NK Ng 2007).

*Habitat*: Intertidal; under small rocks, substrates of coral-sand, close to river mouths (Davie and NK Ng 2007).

### *Sestrostoma toriumii* (Takeda, 1974) #

*Acmaeopleura toriumii* — Davie 1992a: 350.
*Sestrostoma toriumii* — Davie and NK Ng 2007: 267.

*Taxonomy*: Itani et al. (2002: as *Acmaeopleura*), Davie and NK Ng (2007), S Lee et al. (2013).

*Type*: Holotype ♂ NSMT-Cr 971.

*Type locality*: Onagawa Bay, Miyagi, Japan.

*Distribution*: East Asia: South China, Korea and Japan.

*Habitat*: Intertidal; substrates of coarse gritty sand, in burrows of mud shrimp *Upogebia major* (De Haan, 1841) or inn-keeper worm *Ochetostoma erythrogrammon* Leuckart and Ruppell, 1828 (Davie and NK Ng 2007).

## Subfamily Varuninae H. Milne Edwards, 1853

### *Eriocheir hepuensis* Dai, 1991 #

*Eriocheir hepuensis* — Wong et al. 2021: 64, fig. 99, pl. 19A.

*Taxonomy*: Guo et al. (1997), Naser et al. (2012).

*Type*: Holotype ♂ AS GX899024A in IZCAS (Guo et al. 1997).

*Type locality*: Hepu, Guangxi, China.

*Distribution*: South China from Guangxi to Fujian (Guo et al. 1997) and northern Vietnam (Clark et al. 2023); exotic species in Persian/Arabian Gulf (Naser et al. 2012; Naderloo 2014 2017).

*Habitat*: Freshwater to estuarine shallow seas, catadromous.

*Remarks*: Two female specimens morphologically identifiable as *E. hepuensis* Dai, 1991 were collected from the local western estuarine waters (Wong et al. 2021). See also Remarks under *E. japonica* below.

### *Eriocheir japonica* (De Haan, 1835) #

*Eriocheir japonicus* — Gordon 1931: 528; Shen 1940a: 237; Dudgeon 1999: 178, fig. 4.21A; Dudgeon 2003: 60, 3 unnumb. figs.
*? Eriocheir sinensis* — Hill et al. 1975: 48; Hill et al. 1978: 67; Morton 1979a: 121; Morton 1979b: tab. 7.1, fig. 7.5b; Hill and Phillipps 1981: 146, pl. 49f; Morton and Morton 1983: 214, fig. 11.4(2).
*Eriocheir japonica* — T-Y Chan et al. 1995: 302, figs. 1A, 2C, 3C; Guo et al. 1997: 460, figs. 5, 6c, 6f, 7c; Yam et al. 2002: 18; Wong et al. 2021: 65, fig. 100, pl. 19B.

*Taxonomy*: T-Y Chan et al. (1995), Guo et al. (1997), Naser et al. (2012), Ng et al. (2017a).

*Type*: Lectotype ♂ MNHN 3382, and

paralectotypes in RMNH, NHM, NHMD and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997; Guo et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: South China, Taiwan, Korea and Japan.

*Habitat*: Freshwater to estuarine shallow seas, catadromous; often submerged, on substrates of rock fragments, covered with foliage or aquatic vegetation.

*Remarks*: The taxonomic understanding of *Eriocheir* species from South China shows some disagreement between morphological and molecular identification approaches. The present taxon from Hong Kong, which is not uncommon in local fresh water, intertidal and shallow marine habitats, is morphologically clearly identifiable as *E. japonica* (De Haan, 1835) (cf. Guo et al. 1997). The available genetic data, however, suggests individuals from South China (including Hong Kong and Macau) form a clade associated with *E. hepuensis* Dai, 1991 (cf. Naser et al. 2012). This matter was recently elaborated in detail by Ng et al. (2017a), and we report the local material as *E. japonica*, separate from the morphologically distinct *E. hepuensis* treated above.

### *Hemigrapsus penicillatus* (De Haan, 1835) #

(Fig. 40C, D, inset)

*? Heterograpsus penicillatus* — Stimpson 1858b: 104 [part: Hong Kong material only]; Stimpson 1907: 126 [part: Hong Kong material only].

*? Brachynotus penicillatus* — Koelbel 1897: 712, pl. 1(5, 6); Gordon 1931: 552.

*? Hemigrapsus penicillatus* — Gee 1926: 164; Shen 1940a: 237; Morton and Morton 1983: 246, fig. 11.18(13); VCS Lai et al. 2006: 57, 3 unnumb. figs.

*Hemigrapsus penicillatus* — Bravo et al. 2021: tab. 2; present record.

*Taxonomy*: Asakura and Watanabe (2005), Mingkid et al. (2006).

*Type*: Lectotype ♂ RMNH D 200, and paralectotypes in RMNH and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997); the type lots contain individual(s) of *H. takanoi* (Asakura and Watanabe 2005).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: verified from various localities in Taiwan, Japan, Korea and Pacific coast of Russia (Asakura and Watanabe 2005; S Lee et al. 2013; Marin 2013; Ng et al. 2017a); possible distribution in China remains to be verified; and doubtfully from Hawaii (Castro 2011).

*Habitat*: Intertidal; under boulders on mudflats, estuaries, lagoons and sheltered beaches (Asakura and Watanabe 2005).

*Remarks*: Past records under the name *Hemigrapsus penicillatus* (De Haan, 1835) were demonstrated by Asakura and Yamaguchi (2005) to consist of *H. penicillatus sensu stricto* and the morphologically similar *H. takanoi* Asakura & Yamaguchi, 2005, both species originally described from Japan. These two species differ more consistently, in larger males, by the size of setal patch in relation to the chela, and configuration of pigmentation on external maxillipeds, pterygostomian region, and, in some cases, the anterior thoracic sternites and pleon (see also Mingkid et al. 2006; Marin 2013).

Using these criteria to examine the local material, we also recognize two subtly distinct forms: from eastern sites (*e.g.*, in vicinity of Tolo Channel) where the setal patch on the male chela is relatively smaller, being approximately half of the chela height (Fig. 40D inset), the chela is externally covered by sparse dark dots with those on the third maxillipeds and pterygostomian regions slightly larger (Fig. 40D); whereas material from western sites (*e.g.*, around Lantau Island), have a comparatively larger setal patch on the male chela and the external surface is grayish but not spotted (Fig. 40F inset), with the third maxillipeds and pterygostomian region covered with relatively smaller dark dots (Fig. 40F). This distinctness of both forms is supported by preliminary molecular results (HTS, unpublished data).

These two forms are tentatively identified as *H. penicillatus* (eastern: Fig. 40C, D, inset) and *H. takanoi* (western: Fig. 40E, F, inset). They, however, differ slightly from their respective Japanese and Northeast Asian counterparts. For *H. penicillatus*, the local form had never been observed to be decorated with dark round spots as large, and the dark spots do not extend to the anterior thoracic sternites and pleon, as shown by Asakura and Yamaguchi (2005: figs. 8–10) and Marin (2013: fig. 2). As for *H. takanoi*, the local form has a relatively inflated chela palm with the external surface unspotted (vs. less inflated with with numerous scattered small dark dots; Asakura and Yamaguchi 2005: fig. 3; Marin 2013: fig. 1). As such, more morphological and molecular investigations are needed to be done on these two taxa in Hong Kong.

### *Hemigrapsus takanoi* Asakura & Watanabe, 2005 #

(Fig. 40E, F, inset)

*Hemigrapsus takanoi* — present record.

*Taxonomy*: Asakura and Watanabe (2005), Mingkid et al. (2006), S Lee et al. (2013), Ng et al. (2017a).

*Type*: Holotype ♂ CBM-ZC 8039, and paratypes in CBM.

*Type locality*: Estuary of Okamoto-gawa, Tomiura,

Chiba, Japan.

*Distribution*: East Asia: South China (so far from Hong Kong), Korea, Japan, and Pacific shore of Russia (Asakura and Watanabe 2005; S Lee et al. 2013; Marin 2013); invasive species in the northeastern Atlantic (Dauvin et al. 2009; Markert et al. 2014; Wood et al. 2015).

*Habitat*: Intertidal; substrates muddy to of coarse sand, often under larger rock fragments.

*Remarks*: See Remarks under *H. penicillatus* above. This species is a new record for the fauna of Hong Kong.

### *Hemigrapsus sanguineus* (De Haan, 1835) #

*Heterograpsus sanguineus* — Stimpson 1858b: 104; Stimpson 1907: 126.

*Brachynotus sanguineus* — Koelbel 1897: 712, pl. 1(7); Gordon 1931: 528.

*Hemigrapsus sanguineus* — Gee 1926: 164 [list]; Shen 1940a: 237; Hill et al. 1975: 54, 59; Hill et al. 1978: 76, 84; Morton 1979a: 112, figs. 6.12, 6.15; Morton 1979b: 136, tab. 7.1; Hill and Phillipps 1981: 148, pl. 50e; Morton and Morton 1983: 93, fig. 7.3(3); Morton and Harper 1995: 43, fig. 6(12); Williams 2003: 94, 2 unnumb. figs.; VCS Lai et al. 2006: 58, 3 unnumb. figs.

*Taxonomy*: Shen (1932b), Sakai (1939).

*Type*: Lectotype ♂ in RMNH D 42132, and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Korea, Taiwan and Japan; invasive species along shores of European (Breton et al. 2002; Dauvin and Dufossé 2011) and Atlantic North America (McDermott 1998; Blakeslee et al. 2017).

*Habitat*: Intertidal; under larger rock fragments in semi-sheltered rocky shores.

### *Neoeriocheir leptognathus* (Rathbun, 1913) #

*Neoeriocheir leptognathus* — Wong et al. 2021: 65, fig. 101, pl. 19C.

*Taxonomy*: Sakai (1983b), NK Ng et al. (1999).

*Type*: Holotype ♀ USNM 45567 (NK Ng et al. 1999).

*Type locality*: Shanghai, China.

*Distribution*: East Asia: coasts of China to Korea: from Hainan to Yellow Sea (NK Ng et al. 1999).

*Habitat*: Intertidal and shallow subtidal; on estuarine muddy substrates.

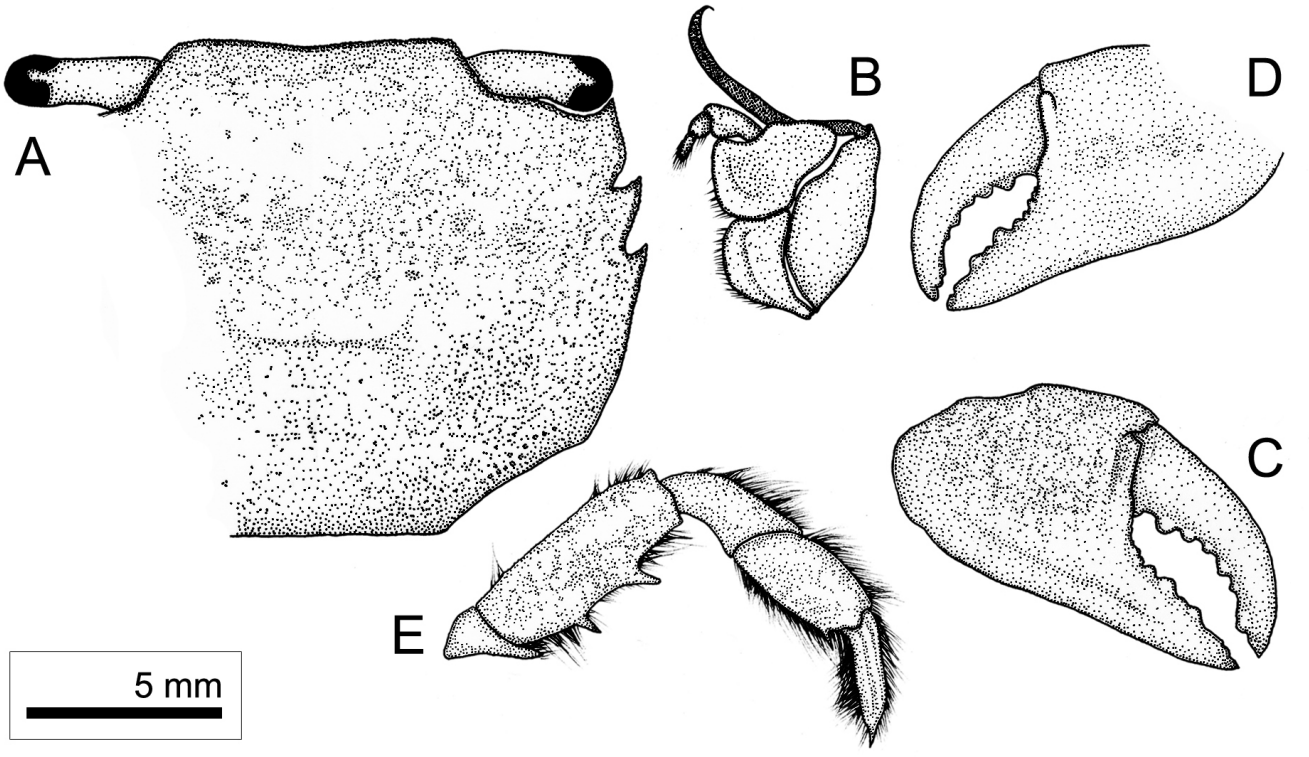



**Fig. 31.** *Parapyxidognathus ongia* Hsu & Shih, 2024 (male, 16.6 × 12.9 mm, Tai Tam): A, carapace; B, maxilliped 3; C, right chela, external view; D, right chela, internal view; E, right P5.

### ***Parapyxidognathus ongia*** **Hsu & Shih, 2024** [#]
(Figs. 31, 40B)

*Parapyxidognathus ongia* — present record.

*Taxonomy*: Hsu and Shih (2024).

*Type*: Holotype ♂ NCHUZOOL-17208 and paratype ♀ in NCHUZOOL.

*Type locality*: Toucheng, Yilan, Taiwan.

*Distribution*: West Pacific and East Asia: southern China (Hainan and Hong Kong), Taiwan, the Philippines and New Caledonia.

*Habitat*: Supratidal to freshwater; among rock fragments submerged in freshwater streams near the shore.

*Remarks*: This species is a new record for the fauna of Hong Kong.

### ***Varuna litterata*** **(Fabricius, 1798)** [#]

*? Varuna litterata* — Stimpson 1858b: 103; Heller 1865: 51; Doflein 1902: 664; Stimpson 1907: 124; Gee 1926: 165 [list]; Shen 1940a: 238; TH Lui et al. 2002: app. 2.
*Varuna litterata* — Wong et al. 2021: 65, fig. 102a–c, pl. 19D.

*Taxonomy*: Hwang and Takeda (1986), Ng (1998), Cai and Ng (2001).

*Type*: Lectotype ♀ UZMC 120-1, and paralectotypes in NHMD (designated by Ng 1988b; see also Zimsen 1964).

*Type locality*: "in India orientali", probably Tharangambadi (= Tranquebar), India.

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Madagascar, to India, Christmas Island, Indonesia, East Asia to Japan, and eastern Australia (Cai and Ng 2001).

*Habitat*: Intertidal to freshwater; migratory species between shallow seas, intertidal habitats and freshwater streams.

*Remarks*: See Remarks under *V. yui* below.

### ***Varuna yui*** **Hwang & Takeda, 1986** [#]

*? Varuna litterata* — Morton and Morton 1983: 227, fig. 11.11(2); SY Lee 1993: tab. 1; So and Lui 2007: 37, 4 unnumb. figs.
*Varuna yui* — Davie 1992a: 350; SY Lee and Leung 1999: 70, pl. 13; Wong et al. 2021: 65, fig. 102d–h, pl. 19E; Bravo et al. 2021: tab. 2.

*Taxonomy*: Hwang and Takeda (1986), Ng (1998), Cai and Ng (2001).

*Type*: Holotype ♂ in NSMT, and paratypes in NSMT, NTM, BNHM, PNM, AM, AHF (now in LACM), USNM, NHM, MNHN, RMNH, SMF (Hwang and Takeda 1986).

*Type locality*: Datong (as Da-Taung) Village, Yilan, Taiwan.

*Distribution*: Southeast and East Asia: Indonesia, Singapore, Peninsular Malaysia, Thailand, Vietnam, South China and Taiwan.

*Habitat*: Supratidal to freshwater; shore swamps of much freshwater influences, to freshwater streams.

*Remarks*: *Varuna* H. Milne Edwards, 1830 was long regarded as monotypic until the description of *V. yui* Hwang & Takeda, 1986, and Davie (1992a) was correct in pointing out that many past records of *V. litterata* should instead be referred to *V. yui*. We have examined local material of both species, and *V. yui* remains the far more common taxon (Wong et al. 2021).

## Superfamily Ocypodoidea Rafinesque, 1815
## Family Camptandriidae Stimpson, 1858

### ***Baruna sinensis*** **C.G.S. Tan & Huang, 1995** [#]
(Figs. 32, 41A, B)

*Baruna sinensis* — present record.

*Taxonomy*: CGS Tan and Huang (1995), Shih et al. (2015).

*Type*: Holotype ♂ ZRC 1995.928, and paratypes in ZRC and AS (= IZCAS).

*Type locality*: Beimen (as Pei-men), Tainan, Taiwan.

*Distribution*: East China: South China and Taiwan.

*Habitat*: Intertidal; in estuaries on sandy or muddy substrates (CGS Tan and Huang 1995), or in oyster clumps on estuarine sandflats.

*Remarks*: This species is a new record for the fauna of Hong Kong.

### ***Camptandrium sexdentatum*** **Stimpson, 1858**

*Camptandrium sexdentatum* Stimpson, 1858b: 107; Stimpson 1907: 138, pl. 17(4); Gee 1926: 165 [list]; Shen 1935: 30, text-fig. 8A; Shen 1940a: 234.

*Taxonomy*: Shen (1932b), Sakai (1939), CGS Tan and Ng (1999), Shih et al. (2015).

*Type*: Neotype ♂ AS 01912a in IZCAS (designated by CGS Tan and Ng 1999).

*Type locality*: Hainan, China (neotype).

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: from East India, Phuket (Thailand), to Indonesia, Peninsular Malaysia, South China, Taiwan and Japan (CGS Tan and Ng 1999; Shih et al. 2015).

*Habitat*: Intertidal and subtidal; on mudflats or dredged from subtidal muddy substrates (CGS Tan and Ng 1999).

### ***Cleistostoma dilatatum*** **(De Haan, 1833)**

*Cleistocoeloma dilatatum* — ZG Huang and Lin 1993: app.; SY Lee and Leung 1999: tab. 1.

*Taxonomy*: Shen (1932b), Sakai (1939), Guinot and Crosnier (1963), Manning and Holthuis (1981).

*Type*: Holotype ♀ RMNH D 42159 (Yamaguchi and Baba 1993; Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Korea and Japan.

*Habitat*: Intertidal; burrowing on mudflats, constructing cone-shaped towers (TW Kim et al. 2011).

### ***Moguai elongatum*** **(Rathbun, 1931)**

*Camptandrium elongatum* — Shen 1935: 33, text-figs. 8C, 10; Shen 1940a: 234.

*Taxonomy*: CGS Tan and Ng (1999), Naruse (2005), Shih et al. (2015).

*Type*: Holotype ♀ USNM 61876.

*Type locality*: Liuwudian (as Liuwutien), Fujian, China.

*Distribution*: East Asia: South China and Ishigaki, Ryukyus (Dai and Yang 1991; Naruse 2005; Hsueh and Ng 2008).

*Habitat*: Intertidal; on mudflats.

### ***Mortensenella forceps*** **Rathbun, 1909 #**

*Mortensenella forceps* — Hill et al. 1978: 151; Morton and Morton 1983: 177, fig. 9.14; Manning and Morton 1987: 547, figs. 2, 4C; Morton 1988: 42, pls. 10, 33.

*Asthenognathus inaequipes* — Morton and Morton 1983: 204.

*Taxonomy*: Dai et al. (1980), Manning and Morton (1987).

*Type*: Holotype ♂ probably in NHMD (original text).

*Type locality*: Koh Chang, Thailand.

*Distribution*: South China Sea: Gulf of Thailand and South China (Manning and Morton 1987).

*Habitat*: Intertidal; commensal in burrows of sipunculid *Siphonosoma cumanense* (Keferstein,

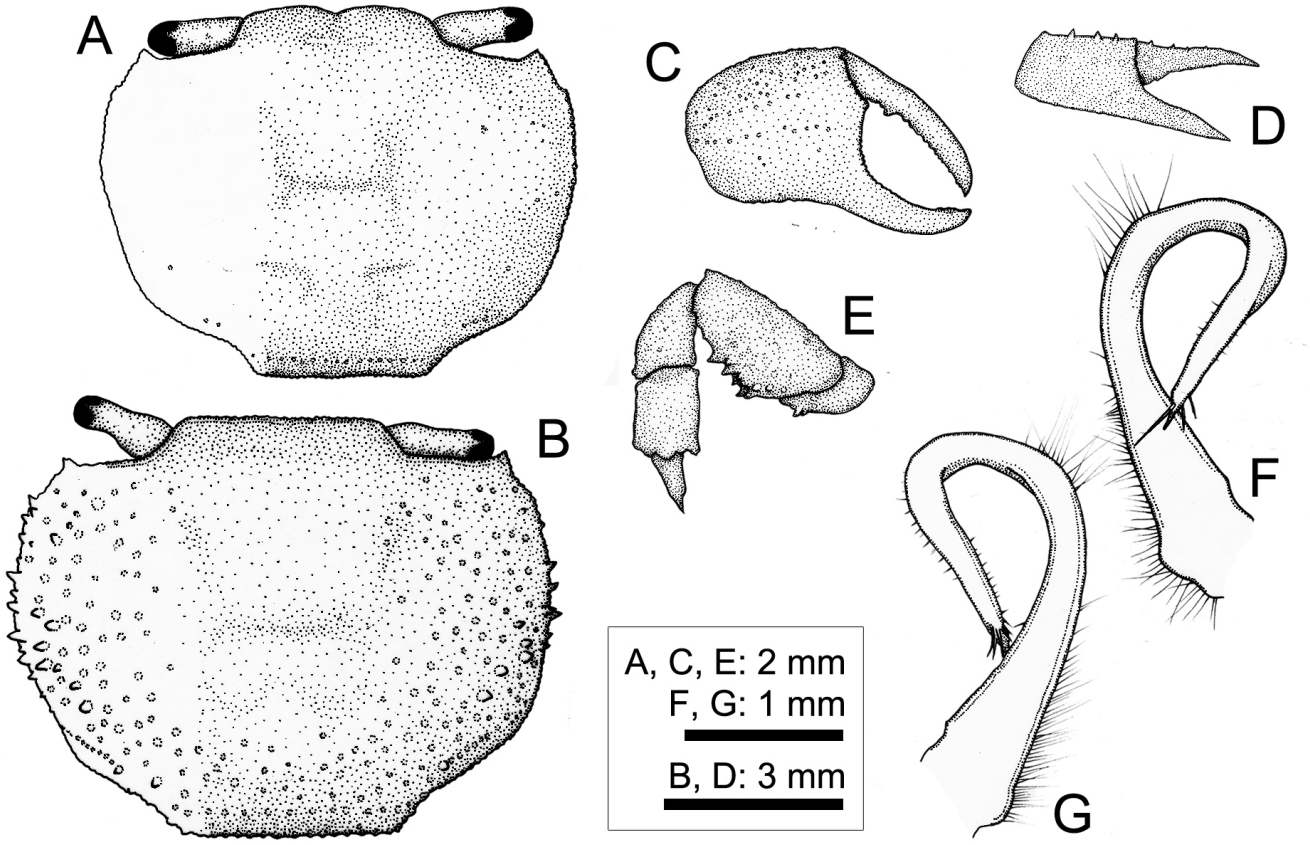



**Fig. 32.** *Baruna sinensis* C.G.S. Tan & Huang, 1995: male (6.2 × 4.7, Tung Chung): A, carapace; C, chela; E, left P5; F, left G1, mesial view; G, left G1, lateral view; female (7.2 × 6.5 mm, Tung Chung): B, carapace; D, chela. Structures A to E denuded.

1867), polychaetes *Ochetostoma erythrogrammon* Leuckart and Rüppell, 1828 and *Listriolobus sorbillans* (Lampert, 1883), and holothurian *Patinapta ooplax* (von Marenzeller, 1882) (Morton and Morton 1983; Manning and Morton 1987; Anker et al. 2005; Kosuge 2009).

### *Paracleistostoma crassipilum* Dai, Yang, Song & Chen, 1986

*Paracleistostoma crassipilum* — SY Lee and Leung 1999: 72, pl. 15.

*Taxonomy*: Dai et al. (1986).

*Type*: Holotype ♂ and paratypes in AS (now IZCAS).

*Type locality*: Qiongshan, Hainan, China.

*Distribution*: South China: so far from Hainan and Hong Kong.

*Habitat*: Intertidal; on mudflats.

### *Paracleistostoma depressum* De Man, 1895

*Paracleistostoma depressum* — Shen 1940a: 234.
*Paracleistosoma depressum* — SY Lee 1993: tab. 1; SY Lee and Leung 1999: 71, pl. 14.

*Taxonomy*: Gordon (1931), Manning (1991).

*Type*: Syntypes NHM 1930.3.29.1-3 (Gordon 1931).

*Type locality*: Penang, Peninsular Malaysia, and Pontianak, west coast of Borneo.

*Distribution*: South China Sea: Peninsular Malaysia, Singapore, Borneo, South China and Taiwan.

*Habitat*: Intertidal; on mudflats of very fine soft mud (Manning 1991).

## Family Dotillidae Stimpson, 1858
## Subfamily Dotillinae Stimpson, 1858

### *Dotilla wichmanni* De Man, 1892 #

*Dotilla wichmanii* — Shen 1940a: 233.
*Dotilla wichmanni* — Davie 1992a: 348; Hui and Wong 2019: 522; Bravo et al. 2021: tab. 2.

*Taxonomy*: Kemp (1918 1919a), Shih et al. (2015).

*Type*: Syntypes RMNH D 1279, RMNH D 2623 (Fransen et al. 1997).

*Type locality*: Estuary near Tello, Makassar, Indonesia.

*Distribution*: Eastern Indian Ocean to West Pacific: Andaman Islands, Singapore, Peninsular Malaysia, Borneo, Indonesia to South China.

*Habitat*: Intertidal; in burrows on exposed sandy beaches.

### *Ilyoplax formosensis* Rathbun, 1921 #

(Figs. 33, 41C)

*Ilyoplax formosensis* — present record.

*Taxonomy*: Sakai (1939), Shih et al. (2015).

*Type*: Holotype ♂ USNM 54473 (original text).

*Type locality*: near now Lujhou (= Luzhou), New Taipei City, Taiwan (as Washoushu, Taihoku, Formosa).

*Distribution*: South China Sea and East Asia: Vietnam, South and East China, and Taiwan (Shih et al. 2015).

*Habitat*: Intertidal; on muddy substrates under shades of mangroves, with substantial freshwater influences.

*Remarks*: The type species of *Ilyoplax* Stimpson, 1858, *I. tenella* Stimpson, 1858, is poorly known. The type material of *I. tenella* was collected in Whampoa, South China, along the banks of the Canton River, and presumed lost in the Great Chicago Fire in 1871 (Stimpson 1907; Deiss and Manning 1981). The description of *I. tenella* (text only) is not to modern standards although the gist seems to fit best with the known morphology of *I. formosensis* Rathbun, 1921 (Rathbun 1921; Serène and Lundoer 1974; Shih et al. 2015). The local record of *I. tenella* was included by Shen (1940a), who cited that of Stimpson (1858b) from Whampoa, with no additional material accessed. Recently we have obtained material of *I. formosensis* from near Tsim Bei Tsui and reported herein. In the current circumstance, as we cannot be sure about the possible synonymy of these two species, we opt to keep both as distinct entries. This species is a new record for the fauna of Hong Kong.

### *Ilyoplax ningpoensis* Shen, 1940 #

*Ilyoplax ningpoensis* — Davie 1992a: 349; SY Lee 1993: tab. 1.
*? Ilyoplax* spp. — So and Lui 2007: 33, 1 unnumb. fig [largest image].
*Ilyoplax formosensis* — Bravo et al. 2021: tab. 2. [not *I. formosensis* Rathbun, 1921].

*Taxonomy*: Shen (1940b).

*Type*: Status unknown.

*Type locality*: Ningbo, Zhejiang (as Ningpo, Chekiang), China.

*Distribution*: South China Sea and East Asia: northern Vietnam and South China (Dai and Yang 1991; Kosuge et al. 1997).

*Habitat*: Intertidal; on mudflats of rather plastic or fluid substrates.

*Remarks*: Three sequences from local material identified as "*I. formosensis*" by Bravo et al. (2021; MZ832065, MZ832066, MX832067) were shown to

cluster with *I. ningpoensis* (MZ067805, MZ067807), instead of *I. formosensis* from South China (MZ067854, MZ067855 and MZ073755), and Chiayi, Taiwan (HTS, unpublished data). As such, we consider this record instead represents *I. ningpoensis*, a species also present in Hong Kong.

### *Ilyoplax pingi* Shen, 1932

*Ilyoplax pingi* — SY Lee and Leung 1999: 73, pl. 17.

*Taxonomy*: Shen (1932b).

*Type*: Holotype ♂ ZMFMIB No. 7515: status unknown.

*Type locality*: Yanghokou, now Bohai Bay (as Peichihli Bay), China.

*Distribution*: East Asia: coasts of China and Korea (HS Kim 1973; Dai and Yang 1991).

*Habitat*: Intertidal; on mudflats (Wada et al. 1997).

### *Ilyoplax serrata* Shen, 1931

*Ilyoplax serrata* — SY Lee 1993: tab. 1; SY Lee and Leung 1999: 73, pl. 18.

*Taxonomy*: Shen (1931c), Shih et al. (2015).

*Type*: Holotype ♂ ZMFMIB No. 8599: status unknown.

*Type locality*: Xiamen (as Amoy), China.

*Distribution*: South China Sea and East Asia: Peninsular Malaysia, Vietnam to South and East China (Shih et al. 2015).

*Habitat*: Intertidal; on sandflats.

### *Ilyoplax tansuiensis* Sakai, 1939

*Ilyoplax tansuiensis* — SY Lee 1993: tab. 1; SY Lee and Leung 1999: 73.

*Taxonomy*: Sakai (1939), Shih et al. (2015).

*Type*: Whereabouts and status unknown.

*Type locality*: Danshuei (as Tansui), Taipei, Taiwan.

*Distribution*: South China Sea and East Asia: northern Vietnam, South China and Taiwan (Shih et al. 2015).

*Habitat*: Intertidal; under shades of mangroves.

### *Ilyoplax tenella* Stimpson, 1858

*Ilyoplax tenella* — Shen 1940a: 234 [no new specimens].
*? Ilyoplax tenella* — Morton and Morton 1983: 185.

*Taxonomy*: Stimpson (1858b 1907).

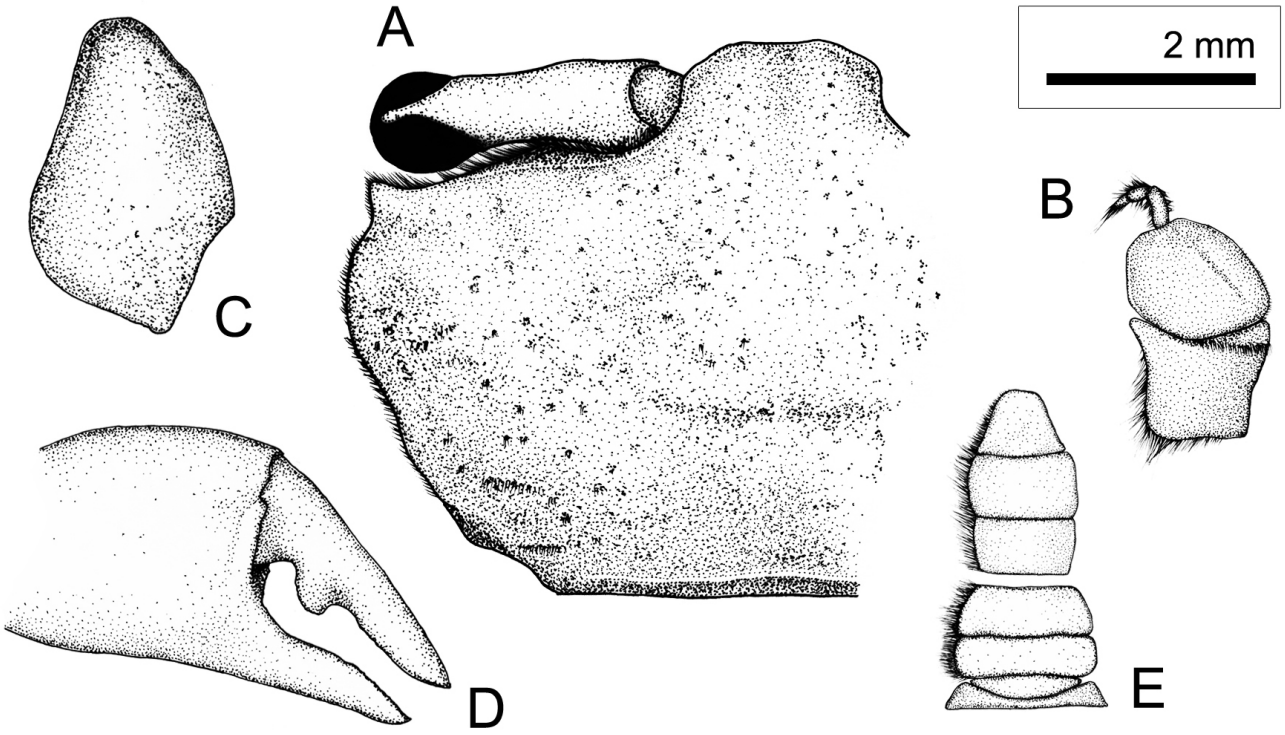



**Fig. 33.** *Ilyoplax formosensis* Rathbun, 1921 (male, 8.0 × 5.3 mm, Tsim Bei Tsui): A, carapace; B, maxilliped 3; C, right cheliped carpus; D, right chela; E: pleon.

*Type*: Presumably lost.

*Type locality*: Huangpu (as Whampoa), Guangdong, China.

*Distribution*: South China: only from the type locality (see Remarks under *I. formosensis* above).

*Habitat*: Intertidal; in burrows in the mud along brackish waters (Stimpson 1907).

*Remarks*: See Remarks under *I. formosensis* above.

### *Scopimera bitympana* Shen, 1930

*Scopimera bitympana* — Davie 1992a: 349.

*Taxonomy*: Shen (1930 1932b), Sakai (1939), Shih et al. (2015).

*Type*: Holotype ♂ ZMFMIB No. 6392: status unknown; paratype ♂ in MCSNM (Froglia and Grippa 1986)

*Type locality*: Eastern Gulf of Bohai Sea (as Peitaiho (east)), North China.

*Distribution*: East Asia: coasts of China, Taiwan and Korea.

*Habitat*: Intertidal; in burrows on sandflats, substrates of finer sand, along relatively exposed sandy shores.

### *Scopimera curtelsona* Shen, 1936 #

*Scopimera curtelsona* — Hui and Wong 2019: 522, figs. 2, 3.

*Taxonomy*: Shen (1936c), Wong et al. (2011), Hui and Wong (2019).

*Type*: Syntypes in ZMFMIB No. 12707: status unknown.

*Type locality*: Xincun (as New Town Bay), Hainan, China.

*Distribution*: South China: Hainan and Hong Kong.

*Habitat*: Intertidal; in burrows on sandflats.

*Remarks*: In interpreting past records of the genus, Hui and Wong (2019) demonstrated misidentification of *S. curtelsona* under other names among local material remained unlikely. This record represents a recent introduction to Hong Kong in the recent decade or so.

### *Scopimera globosa* (De Haan, 1835)

*?Scopimera globosa* — Koelbel 1897: 713; Gee 1926: 165 [list]; Gordon 1931: 528; Shen 1940a: 233; Morton 1976: 102; Morton and Morton 1983: 185, fig. 10.3(6); Choi 1992: 901.

*Taxonomy*: Shen (1932b), Sakai (1939), Wong et al. (2010a).

*Type*: Lectotype ♂ in RMNH D 282 and paralectotypes in RMNH (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East China: coasts of China, Korea and Japan (Sakai 1976).

*Habitat*: Intertidal; in burrows on slightly exposed sandflats of fine substrates.

*Remarks*: The present species had been recorded in Hong Kong by Koelbel (1897) and several authors (see above). Shen (1935), when comparing local material against that from Japan, concluded the past local records instead represented *S. tuberculata* Stimpson, 1858. The species *S. tuberculata* had been considered a junior synonym of *S. globosa* since Koelbel (1897) (see also Sakai 1939). Intriguingly enough, in his checklist of the local brachyuran fauna, under *Scopimera*, Shen (1940a) listed both *S. globosa* and *S. tuberculata*. The record of *S. tuberculata* by Shen, however, represents *S. intermedia* Balss, 1934 instead (see Remarks of *Scopimera intermedia* below). For Shen's (1940a) record of *S. globosa*, despite the absence of reliable local material reported or examined in recent decades, and the published literature suggesting it is only reliably known in North China, Korea and Japan (Shih et al. 2015), there remains the possibility that this temperate species had distributed as far south as Hong Kong in past decades (Hui and Wong 2019). As such, it is provisionally retained in the fauna of Hong Kong, albeit with doubt. Older records of this species, probably not readily verifiable, are retained as above.

### *Scopimera intermedia* Balss, 1934 #

*Scopimera tuberculata* — Shen 1935: 36, text-figs. 14, 15; Shen 1940a: 233.

*Scopimera intermedia* — Hill et al. 1975: 65; 1978: 92; Morton 1979a: 118; Hill and Phillipps 1981: 152, pl. 51b; Morton and Morton 1983: 153, fig. 9.4(4, 5); Shea 1992: tab. 2; KJH Wong et al. 2010a: 48, figs. 1c, d, 2c, d, 3d–f, 4c, d; Hui and Wong 2019: 522; Bravo et al. 2021: tab. 2.

*Scopimera globosa* — BKK Chan 2001: 24; BKK Chan and Caley 2003: 88, 3 unnumb. figs.; Fong et al. 2005: 54, 2 unnumb. figs [upper and lower left only].

*Taxonomy*: Serène and Moosa (1981), Wong et al. (2010a), Shih et al. (2015).

*Type*: Whereabouts and status unknown.

*Type locality*: Johore, Peninsular Malaysia.

*Distribution*: Southeast and East Asia: Indonesia, Peninsular Malaysia, Borneo, Vietnam, South China and Taiwan.

*Habitat*: Intertidal; in burrows on sandflats, substrates of coarser sand, or somewhat gritty.

*Remarks*: *Scopimera tuberculata* Stimpson, 1858 (type locality Shimoda, Japan) has long been

regarded as junior synonym of *S. globosa* De Haan, 1835 (since Koelbel 1897). Shen's (1935) local record of *S. tuberculata*, provided with rather precise illustrations (and his comparison with Japanese material of *S. globosa*), matches with material of *S. intermedia* we collected from Hong Kong, western Taiwan and Singapore (the latter proximal to type locality, Johore; Wong et al. 2010a).

### *Tmethypocoelis ceratophora* (Koelbel, 1897) #

*Dioxippe ceratophora* Koelbel, 1897: 714, pl. 1(8–12).
*Tympanomerus ceratophora* — Gordon 1931: 528.
*Tmethypocoelis ceratophora* — Shen 1935: 35, text-figs. 11–13; Shen 1940a: 233; Hill et al. 1975: 71; Hill et al. 1978: 92, 100; Morton 1979a: 121; Morton and Morton 1983: 185, fig. 10.3(2); Choi 1992: 901; Shea 1992: tab. 2; Davie and Kosuge 1995: 210, figs. 1A, C, E, 2A, B; BKK Chan 2001: tab. 2, fig. 1c; BKK Chan and Caley 2003: 90, 3 figs.; Fong et al. 2005: 55, 3 unnumb. figs.; Bravo et al. 2021: tab. 2.

*Taxonomy*: Shen (1935), Davie and Kosuge (1995), Shih et al. (2015).

*Type*: Whereabouts and status unknown.

*Type locality*: Hong Kong.

*Distribution*: East Asia: South China and Taiwan (Shih et al. 2015).

*Habitat*: Intertidal; sandflats or under shades of mangroves, substrates of coarse or gritty sand.

## Subfamily Sheniinae Ng, Clark & Cuesta, 2010

### *Shenius anomalus* (Shen, 1935)

*Camptandrium anomalum* Shen, 1935: 31, text-figs. 8B, 9; Shen 1940a: 234.
*Shenius anomalus* — Ng et al. 2010b: 1534, figs. 1–10.

*Taxonomy*: Serène and Umali (1972), Ng et al. (2010b).

*Type*: Holotype ♂ CAS CB-02060a, and paratype ♀ in IZCAS (Ng et al. 2010b).

*Type locality*: Tai Po, Hong Kong.

*Distribution*: South China Sea: Singapore, Peninsular Malaysia, to South China (Ng et al. 2010b).

*Habitat*: Intertidal; exclusively in mangroves, under planks, wood or rafts on sandy mud (Ng et al. 2010b).

## Family Macrophthalmidae Dana, 1851
## Subfamily Ilyograpsinae Števčić, 2005

### *Ilyograpsus paludicola* (Rathbun, 1909)

*Ilyograpsus paludicola* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Komai and Wada (2008).

*Type*: Holotype ♀ ZMUC 7692 (Komai and Wada 2008).

*Type locality*: Laem Ngop (as Lem Ngob), Gulf of Thailand.

*Distribution*: West Pacific: Labuan (Malaysia), Singapore, Indonesia, Vietnam, to Hong Kong (South China), to northern Australia and New Caledonia (Komai and Wada 2008; Bravo et al. 2021).

*Habitat*: Intertidal; associated with mangroves, on tidal flats and in estuarine habitats.

## Subfamily Macrophthalminae Dana, 1851

*Remarks*: The subgeneric classification of the genus *Macrophthalmus* Desmarest, 1823, as presented in Barnes (1967), Komai et al. (1995) and Ng et al. (2008) has been challenged by molecular phylogenetic data (Horii et al. 2001; Kitaura et al. 2006), and is still in need of revision. We follow Shih et al. (2015) in omitting subgeneric indications for the time being.

For the local record of *M. boteltobagoe* presented by Bones (1982), see Remarks under *Metaplax longipes* above.

### *Macrophthalmus abbreviatus* Manning & Holthuis, 1981 #

*Macrophthalmus dilatatus* — Shen 1940a: 235; Morton 1979a: 121.
*Macrophthalmus abbreviatus* — Davie 1992a: 348 [key]; SY Lee and Leung 1999: 73.

*Taxonomy*: Tesch (1915: as *M. dilatatus*), Shen (1932b: as *M. dilatatus*), Sakai (1939: as *M. dilatatus*), Shih et al. (2015).

*Type*: Lectotype ♂ RMNH D 299, and paralectotype in RMNH and MNHN (designated by Yamaguchi and Baba 1993; see also Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: Indonesia, coasts of China, Taiwan, Korea and Japan.

*Habitat*: Intertidal; waterlogged substrates on sandflats or mudflats.

### *Macrophthalmus banzai* Wada & K. Sakai, 1989

*Macrophthalmus banzai* Wada & K Sakai, 1989: 133, figs. 1, 2; Davie 1992a: 348 [key]; SY Lee and Leung 1999: 73.

*Taxonomy*: Wada and K Sakai (1989), Shih et al. (2015).

*Type*: Holotype ♂ SMF 17923, and paratypes in

SMF, SMBL, USNM, MNHN, RMNH and AM.

*Type locality*: Samusaura, Shirahama, Wakayama, Japan.

*Distribution*: East Asia: coasts of China, Taiwan, Korea and Japan.

*Habitat*: Intertidal; waterlogged substrates on mudflats.

### *Macrophthalmus convexus* Stimpson, 1858 #

*Macrophthalmus convexus* — Gordon 1931: 528; Shen 1940a: 235; Barnes 1970: 222; Morton 1976: 103; Bones 1982: 689, pl. 2a, b; Melville and Morton 1983: 11, 1 unnumb. fig. (12); Morton and Morton 1983: 156; Davie 1992a: 348 [key]; SY Lee 1993: tab. 1; Poupin 1997: fig. 3E; SY Lee and Leung 1999: 73; Bravo et al. 2021: tab. 2.

*Macrophthalmus* spp. — Fong et al. 2005: 52, 3 unnumb. figs.

*Taxonomy*: Komai et al. (1995), Davie (2012), Shih et al. (2015).

*Type*: Probably lost.

*Type locality*: Ryukyu Islands (as Loo Choo Isles), Japan.

*Distribution*: Western Indian Ocean to Central Pacific: from Mauritius, India, Myanmar, Thailand, Peninsular Malaysia, South China Sea and East Asia, to Indonesia, Australia, New Caledonia, Fiji, French Polynesia and Hawaii (Shih et al. 2015).

*Habitat*: Intertidal; in shallow burrows on sandy-muddy substrates.

### *Macrophthalmus definitus* Adams & White, 1849

*Macrophthalmus teschi* — Gordon 1931: 549.

*Macrophthalmus definitus* — Shen 1940a: 234; Bones 1982: 691: pl. 3a, b; Morton and Morton 1983: 157; Shin 1990: tab. 2; Davie 1992a: 348 [key]; SY Lee and Leung 1999: 73; Bravo et al. 2021: tab. 2.

*Macrophthalmus* (*Mareotis*) *definitus* — Barnes 1970: 232.

*Taxonomy*: Barnes (1967 1970), Komai et al. (1995), Shih et al. (2015).

*Type*: Holotype NHM 43.6 (Barnes 1970).

*Type locality*: The Philippines.

*Distribution*: Eastern Indian Ocean to West Pacific: Phuket (Thailand), Peninsular Malaysia, the Philippines, South China, Taiwan, Ryukyus, and Indonesia to the Solomon Islands (Shih et al. 2015).

*Habitat*: Intertidal; in burrows on very soft substrates on mudflats near mangrove swamps (Komai et al. 1995).

*Remarks*: Based on unpublished notes by C.-J. Shen deposited at the British Museum, the local record of "*M. teschi*" in Gordon (1931) represents the present species instead (Barnes 1970).

### *Macrophthalmus dentatus* Stimpson, 1858

*Macrophthalmus dentatus* Stimpson, 1858b: 97; Stimpson 1907: 96, pl. 15(1); Gee 1926: 165 [list]; Shen 1940a: 235 [no new specimens]; Davie 1992a: 348 [key].

*Taxonomy*: Barnes (1971), Davie (2012).

*Type*: Presumably lost.

*Type locality*: Hong Kong.

*Distribution*: West Pacific: Queensland (Australia), Timor, Gulf of Thailand and South China (Davie 2012).

*Habitat*: Subtidal; coastal substrates of muddy sand; depths 8 to 20 m (Davie 2002).

### *Macrophthalmus depressus* Rüppell, 1830

*Macrophthalmus depressus* — Shen 1940a: 235.

*Taxonomy*: Crosnier (1965: *M. depressus sensu stricto*), Barnes (1970), Naderloo et al. (2011).

*Type*: Syntypes RMNH D 42227 (see Fransen et al. 1997).

*Type locality*: Northern Red Sea.

*Distribution*: Western Indian Ocean to Arabian Sea: South and East Africa, Madagascar, Red Sea, Persian/Arabian Gulf, Pakistan and western India (Naderloo et al. 2011).

*Habitat*: Intertidal; on muddy and sandy-muddy substrates.

*Remarks*: The local record of *M. depressus* Rüppell, 1830 was from Shen (1940a), who cited Alcock (1900b) whose material was from Mergui and Aden. Specimens from Mergui were later separated and described as *M. teschi* by Kemp (1919b), whereas the species *M. depressus* Rüppell, 1830 *sensu stricto* was subsequently restricted to the Indian Ocean and Red Sea (Stephensen 1946; Holthuis 1958; Crosnier 1965; Barnes 1970; Naderloo et al. 2011). The record of *M. depressus* from Hong Kong thus appears rather unlikely (Davie 1992b) but is retained here for the moment with doubt.

### *Macrophthalmus erato* De Man, 1888 #

*Macrophthalmus erato* — Koelbel 1897: 716, pl. 1(13, 14); Shen 1940a: 235; Davie 1992a: 347 [key]; Komai et al. 1995: 105; Bravo et al. 2021: tab. 2.

*Taxonomy*: Tesch (1915), Barnes (1970), Davie (2012), Shih et al. (2015).

*Type*: Syntypes in NHM 1886.52 (NHM Data Portal).

*Type locality*: Mergui Archipelago.

*Distribution*: Eastern Indian Ocean to West Pacific: Bay of Bengal, Peninsular Malaysia, Gulf of

Thailand, South China and Taiwan, to Indonesia and northern Australia (Davie 2012; Shih et al. 2015).

*Habitat*: Intertidal; substrates of fine sand or mud, near or under shades of mangroves.

### *Macrophthalmus latreillei* (Desmarest, 1822) #

*Macrophthalmus serratus* — Stimpson 1858b: 97; Stimpson 1907: 96, pl. 13(3); Gee 1926: 165 [list].
*Macrophthalmus latreillei* — Gordon 1931: 528; Shen 1940a: 234; Morton and Morton 1983: 157, fig. 11.12(4); Ong Che and Morton 1991: tab. 1; Davie 1992a: 348 [key]; Davie 1992b: tab. 1; SY Lee and Leung 1999: 73; Wong et al. 2021: 66, fig. 103, pls. 19F, 20A.
*Macrophthalmus* (*Venitus*) *latreillei* — Barnes 1970: 236.
*Macrophthalmus latreille* — Bones 1982: 691, pl. 3c, d; Morton and Scott 1989: 140, fig. 11.
*Macrophthalmus latreilli* — Blackmore and Rainbow 2000: app. 1.
*Venitus latreillei* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Barnes (1967 2010), Davie (2012), Shih et al. (2015).

*Type*: Syntypes probably in MNHN (Davie 2002).

*Type locality*: "Indes orientales".

*Distribution*: Western Indian Ocean to West Pacific: from South Africa, Madagascar, to India, Southeast and East Asia to Japan, New Caledonia and Australia (Davie 2012; Shih et al. 2015).

*Habitat*: Intertidal and shallow subtidal; substrates of soft mud in estuaries.

*Remarks*: Although *M. serratus* Adams & White, 1849 was still listed as a valid taxon (as in Ng et al. 2008), this species has been regarded a junior synonym of *M. latreillei* (Desmarest, 1822) (Barnes 1967 1977) or "... as being synonyms of species within this group" (p. 44, Barnes 2010). The local record by Stimpson (1858b 1907) is thus placed under that of the better understood *M. latreillei*. We follow Davie (2012) in recognizing this species under the genus *Macrophthalmus*.

### *Macrophthalmus pacificus* Dana, 1851 #

*Macrophthalmus pacificus* — Gordon 1931: 528; Shen 1940a: 235; Davie 1992a: 348 [key]; Bravo et al. 2021: tab. 2.
*Macrophthalmus* (*Mareotis*) *pacificus* — Barnes 1970: 232.

*Taxonomy*: Barnes (1967), Komai et al. (1995), Davie (2012).

*Type*: Presumably lost.

*Type locality*: Upolu, Samoa.

*Distribution*: Arabian Sea to West Pacific: Western India to Phuket (Thailand), Southeast and East Asia reaching Ryukyus (Japan), and New Guinea, northwestern to eastern Australia, Solomon Islands and Samoa (Komai et al. 1995; Davie 2012).

*Habitat*: Supratidal to intertidal: on mudflats under shades of mangroves, with substantial freshwater influences.

### *Macrophthalmus tomentosus* Eydoux & Souleyet, 1842 #

*Macrophthalmus* (*Mareotis*) *tomentosus* — Davie 1992a: 346, pl. 1A, B; SY Lee and Leung 1999: 73; Bravo et al. 2021: tab. 2.

*Taxonomy*: Barnes (1970), Komai et al. (1995), Shih et al. (2015).

*Type*: Syntype probably in MNHN.

*Type locality*: Manila, the Philippines.

*Distribution*: Eastern Indian Ocean to West Pacific: from Mergui Archipelago, Phuket (Thailand), Peninsular Malaysia, the Philippines, South China, Taiwan, to Indonesia and New Caledonia (Shih et al. 2015).

*Habitat*: Intertidal; on mudflats of very soft substrates with some freshwater influences.

## Subfamily Tritodynamiinae Števčić, 2005

### *Tritodynamia dilatata* Yang & Sun, 1996 #

*Tritodynamia dilatata* — Wong et al. 2021: 66, fig. 104, pl. 20B; Ng and Ho 2023: 210.

*Taxonomy*: Yang and Sun (1996), Naruse and Ng (2010).

*Type*: Holotype ♂ BNHM-J96037.

*Type locality*: Off east coast of Guangdong, China.

*Distribution*: South China: Guangdong and Fujian.

*Habitat*: Subtidal; on sandy substrates of depths less than 20 m.

*Remarks*: Ng and Ho (2023: 210) discussed the taxonomy of *T. dilatata* and *T. longipropoda* Dai, in Dai, Feng, Song & Cheng, 1980, both of which were described from Guangdong in southern China and suggested that they may be synonymous. The two species can only be separated by differences in the ambulatory leg proportions, and they noted that other characters used by Dai et al. (1980) *T. longipropoda* from *T. dilatata* are subjected to variation. The material from Hong Kong examined by Ng and Ho (2023: 201) was incorrectly listed under *T. longipropoda* by these authors.

### *Tritodynamia horvathi* Nobili, 1905

*Tritodynamia horvathi* — Morton and Morton 1983: 204, fig. 9.13(6a).

*Taxonomy*: Shen (1932b), Sakai (1939).

*Type*: Syntypes in HNHM and MRSN.

*Type locality*: Kobe, Japan.

*Distribution*: East Asia: North China, Korea and Japan (Yang et al. 2008).

*Habitat*: Intertidal to subtidal; commensal with polychaete worm *Loimia medusa* (Savigny, in Lamarck, 1818) (Morton and Morton 1983).

### *Tritodynamia rathbunae* Shen, 1932

*Tritodynamia rathbuni* — Morton and Morton 1983: 204, fig. 9.13(3a).

*Taxonomy*: Shen (1932b), Sakai (1939).

*Type*: Holotype ♂ ZMFMIB No. 4913: status unknown.

*Type locality*: Yantai (as Chefoo), Shandong, China.

*Distribution*: East Asia: coasts of China, Korea, and Japan (Yang et al. 2008).

*Habitat*: Intertidal to subtidal; commensal with polychaete worm *Mesochaetopterus japonicus* Fujiwara, 1934 (Morton and Morton 1983).

## Family Mictyridae Dana, 1851

### *Mictyris brevidactylus* Stimpson, 1858 #

*Mictyris longicarpus* — Ortmann 1894: 748 [part: Hong Kong material only]; Gordon 1931: 528; Shen 1940a: 231; Morton and Morton 1983: 153, fig. 9.4(6); Tam and Wong 2000: 116, 2 unnumb. figs.; BKK Chan and Caley 2003: 88, 2 unnumb. figs.; Fong et al. 2005: 51, 11 unnumb. figs.

*Mictyris brevidactylus* — Stimpson 1907: 103, pl. 13(5) [part: Hong Kong material only]; Davie et al. 2010: 94, figs. 2B, 3, 4G, H.

*Myctiris brevidactylus* — Gee 1926: 165 [list]; Bravo et al. 2021: tab. 2.

*Dotilla myctiroides* — Hill et al. 1975: 65; Hill et al. 1978: 92; Morton 1979a: 118, fig. 6.18r.

*Myctris longicarpus* — Morton 1976: 102, fig. 55c.

*Dotilla mycteroides* — Hill and Phillipps 1981: 152, pl. 51c.

*Taxonomy*: Takeda (1978), Davie et al. (2010).

*Type*: Neotype ♂ WAM-237-80 (designated by Davie et al. 2010).

*Type locality*: Tong Fuk, Lantau, Hong Kong (neotype).

*Distribution*: South China Sea and East Asia: northern Vietnam, South China and Taiwan.

*Habitat*: Intertidal; on sheltered sandy shores or mudflats.

*Remarks*: The soldier crab *M. brevidactylus* Stimpson, 1858 in East Asia has long been in synonymy *M. longicarpus* Latreille, 1806, but the latter species is now recognized as being present only in the Southern Hemisphere (Takeda 1978). Stimpson's (1858b 1907) *Mictyris brevidactylus* is based on material from Hong Kong (South China) and Ryukyus, Japan. Specimens from the Ryukyus have been recognized as distinct and described as *M. guinotae* Davie, Shih & Chan, 2010 (Davie et al. 2010).

## Family Ocypodidae Rafinesque, 1815
## Subfamily Gelasiminae Miers, 1886

*Remarks*: Traditional understanding of distinct lineages of ghost crabs ("Ocypodinae") and fiddler crabs ("Ucinae") has been challenged, and "fiddler crabs" (or *Uca sensu lato*) have been shown to be paraphyletic (Shih et al. 2016a). Revised classification presented in Shih et al. (2016a), showing Ocypodinae Rafinesque, 1815 now containing ghost crab *Ocypode* Fabricius, 1798 (circumtropical), *Uca* Leach, 1814 *sensu stricto* (Americas) and *Afruca* Crane, 1975 (eastern Atlantic region) (the latter two being fiddler crab genera), and Gelasiminae Miers, 1886 accommodating all other fiddler crab genera, under which all subgeneric ranks raised to full generic status, is herein followed.

### *Austruca lactea* (De Haan, 1835) #

*Gelasimus lacteus* — Stimpson 1858b: 100; Stimpson 1907: 108; Shen 1940a: 231.

*Gelasimus lactens* — Koelbel 1897: 717.

*Uca lactea* — Gordon 1931: 528; Hill et al. 1975: 65; Morton 1976: 102, fig. 55g; Hill et al. 1978: 92; Morton 1979a: 118, figs. 6.18o, 6.19; Morton and Morton 1983: 153, fig. 10.3(4); Choi 1992: 901; Jones and Morton 1994: 28, fig. 6A–I, pls. 2G, H, 3E, F; BKK Chan and Caley 2003: 92, 2 unnumb. figs.; Fong et al. 2005: 56, 1 unnumb. fig.; WPW Kwok and Tang 2006: 4, figs. 10, 11; So and Lui 2007: 31, 5 unnumb. figs.; Shih et al. 2010b: 10.

*Uca* (*Celuca*) *lactea lactea* — Crane 1975: 300, figs. 19A, 54J, JJ, 69E, pl. 40A, B.

*Uca* (*Celuca*) *lactea* — SY Lee and Leung 1999: 71.

*Uca lactea annulipes* — Tam and Wong 2000: 117, 2 unnumb. figs.

*Austruca lactea* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Sakai (1939: as *Gelasimus*), Crane (1975: as *U.* (*Celuca*) *lactea lactea*), Naderloo et al. (2010: as *U.* (*Austruca*)), Shih et al. (2015).

*Type*: Lectotype ♂ RMNH D 254, and paralectotypes in RMNH, SMF, ZMG, NHMD, MNHN (designated by Crane 1975; see also Yamaguchi and Baba 1993, Fransen et al. 1997, Naderloo et al. 2010).

*Type locality*: Japan, locality unspecified.

*Distribution*: South China Sea and East Asia: northern Vietnam, South China, Taiwan, Korea and Japan (Shih et al. 2010b 2022).

*Habitat*: Intertidal; in burrows on mudflats, preferring coarser substrates.

### *Gelasimus borealis* (Crane, 1975) #

*Gelasimus vocans* — Stimpson 1858b: 99 [part: Hong Kong material only]; Stimpson 1907: 104 [part: Hong Kong material only]; Koelbel 1897: 717. [not *Cancer vocans* Linnaeus, 1758].
*Uca marionis* — Gee 1926: 165 [list]; Morton 1979a: 118, fig. 6.17.
*Uca marionis* var. *nitidus* — Gordon 1931: 528.
*Gelasimus marionis* — Shen 1940a: 232.
*Gelasimus marionis nitidus* — Shen 1940a: 232.
*Uca* (*Thalassuca*) *vocans borealis* Crane, 1975: 90, fig. 64A; SY Lee and Leung 1999: 71.
*Uca vocans* — Hill et al. 1975: 48; Morton 1976: 102; Hill et al. 1978: 92; Morton 1979a: 121; Melville and Morton 1983: 11, 1 unnumb. fig. (13); Morton and Morton 1983: 184, fig. 11.11(5). [not *Cancer vocans* Linnaeus, 1758].
*Uca gaimardi* — Hill et al. 1975: 77; Hill et al. 1978: 107; Hill and Phillipps 1981: 152, pl. 51a. [not *Gelasimus Gaimardi* H. Milne Edwards, 1852 = *G. crassipes* White, 1847].
*Uca gaimardii* — Morton 1976: 103. [not *Gelasimus Gaimardi* H. Milne Edwards, 1852 = *G. crassipes* White, 1847].
*Uca borealis* — Jones and Morton 1994: 22, fig. 4A–I, pls. 2E, F, 3A, B; BKK Chan and Caley 2003: 92, 3 unnumb. figs.; Fong et al. 2005: 56, 1 unnumb. fig.; WPW Kwok and Tang 2006: 4, figs. 6, 7; So and Lui 2007: 30, 4 unnumb. figs.; Shih et al. 2010a: 52; 2010b: 8.
*Uca vocans vocans* — Tam and Wong 2000: 118, 2 unnumb. figs. [not *Cancer vocans* Linnaeus, 1758].
*Gelasimus borealis* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Crane (1975: as *U.* (*Thalassuca*) *vocans borealis*), Shih et al. (2015).

*Type*: Holotype ♂ USNM 137669, and paratypes in USNM.

*Type locality*: Hong Kong.

*Distribution*: South China Sea and East Asia: northern Vietnam, South China, Taiwan and Japan (Shih et al. 2010b 2022).

*Habitat*: Intertidal; on mudflats, prefers coarse or gritty sand.

*Remarks*: So far seven species have been recognized in the "*Uca vocans* species complex" (Crane 1975; Shih et al. 2010a; Rosenberg 2019), while only two have been reliably reported from coasts of South China—the locally common *G. borealis* from Guangxi, Hainan to Fujian, whereas *G. vocans sensu stricto* ascertained from Hainan, with northern distributinal limit unclear (Shih et al. 2010b). As such, older records of *vocans*, including those by Stimpson and Koelbel, might instead represent, or at least include the locally common *G. borealis*.

*Gelasimus marionis* Desmarest, 1823 was indicated by Holthuis (1959) to be a junior synonym of *Cancer vocans* Linnaeus, 1758. Shen (1940a) reported two distinct forms, namely *G. marionis* and *G. m. nitidus*, both citing the work by Alcock (1900b). In the dichotomous key provided by Alcock, these two forms are distinguished by form of crest on internal surface of male cheliped, and shape of pollex along cutting margin (p. 353, Alcock 1900b). This distinction, however, reflects simultaneous brachychelous and leptochelous conditions commonly found in a single population of *Gelasimus vocans sensu lato*, and we place both entries under *G. borealis*.

As for "*U. gaimardii*", this name is now considered synonymous with *Paraleptuca crassipes* (Crane 1975). However, Hill and Phillipps (1981, pl. 51a) presented a peculiar illustration under this name that seems to show features of two fiddler crab species: the form of male cheliped, externally tubercular and pollex scalloped, corresponds with *G. borealis*, but the grayish carapace bearing dark transverse bands (discernable in the printed copy of their book), resembles *P. splendida*. We place this record under *G. borealis* herein.

### *Paraleptuca splendida* (Stimpson, 1858) #

*Gelasimus splendidus* Stimpson, 1858b: 99; Alcock 1900b: 355; Stimpson 1907: pl. 14(2).
*Uca splendida* — Gee 1926: 165 [list].
*Uca gaimardi* — Gordon 1931: 528.
*Gelasimus gaimardi* — Shen 1940a: 232.
*Uca* (*Amphiuca*) *chlorophthalmus crassipes* — Crane 1975: 101 [part: Hong Kong material only], figs. 13G, 14B, BB; SY Lee and Leung 1999: 71.
*Uca chlorophthalmus crassipes* — Choi 1992: 901; Tam and Wong 2000: 117, 2 unnumb. figs.
*Uca chlorophthalmus* — Morton and Morton 1983: 184, fig. 10.3(3).
*Uca chlorophthalmus* — SY Lee 1993: tab. 1.
*Uca crassipes* — Jones and Morton 1994: 26, fig. 5A–J, pl. 3C, D; BKK Chan and Caley 2003: 92, 2 unnumb. figs.; Fong et al. 2005: 57, 1 unnumb. figs.; WPW Kwok and Tang 2006: 4, figs. 8, 9; So and Lui 2007: 32, 4 unnumb. figs.; Shih et al. 2010b: 9.
*Uca chloropthamalus* — BKK Chan 2001: 24, fig. 1b.
*Uca* (*Paraleptuca*) *splendida* — Shih et al. 2012: 34, figs. 2–4, 6, 7C.
*Paraleptuca splendida* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Shih et al. (2012: as *Uca* (*Paraleptuca*); 2015).

*Type*: Neotype ♂ ZRC 2012.0143 (designated by Shih et al. 2012).

*Type locality*: Tai Tam, Hong Kong (neotype).

*Distribution*: South China Sea and East Asia: Central Vietnam to South China, Taiwan, and Ryukyus (Japan) (Shih et al. 2012 2016b 2022).

*Habitat*: Supratidal to intertidal; in burrows on salt marshes, substrates of coarse sands and rock fragments, rather compact, covered by coastal vegetation.

*Remarks*: Crane (1975) recognized two distinct subspecies in her *Uca* (*Amphiuca*) *chlorophthalmus*: *chlorophthalmus* from the western Indian Ocean along eastern Africa, and *crassipes* from the western and central Pacific (Shih et al. 2013). *Gelasimus gaimardi* H. Milne Edwards, 1852 is a junior synonym of *G. crassipes* White, 1847 according to Crane (1975). Among material identified as *crassipes*, Crane (1975)

noted in some larger specimens from Hong Kong, the morphology of distal tip of the G1 was aberrant being "strikingly longer", and suggested *G. splendidus* Stimpson, 1858 "would certainly have been kept to designate at least a subspecies" (p. 99). She, however, observed too much variation, especially in smaller specimens, to be sure. Stimpson's (1858b) species was eventually resurrected by Shih et al. (2012) based on morphological and molecular approaches.

### *Tubuca acuta* (Stimpson, 1858) #

*Uca mani* — Gordon 1931: 528.
*Gelasimus manii* — Shen 1940a: 232.
*Gelasimus urvillei* — Shen 1940a: 232.
*Uca* (*Deltuca*) *acuta acuta* — Crane 1975: 25, fig. 61B, pl. 1E–H.
*Uca acuta* — SY Lee 1993: tab. 1; Jones and Morton 1994: 12, fig. 1A–K, pls. 1A, B, 2A, B; So and Lui 2007: 27, 3 unnumb. figs.; Shih et al. 2010b: 3, fig. 2A–D.
*Uca* (*Deltuca*) *acuta* — SY Lee and Leung 1999: 70.
*Tubuca acuta* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Crane (1975: as *U.* (*Deltuca*) *acuta acuta*), Shih et al. (2010b: as *Uca*; 2015).

*Type*: Neotype ♂ USNM 137665 (designated by Crane 1975).

*Type locality*: Castle Peak area, Kowloon, Hong Kong (neotype).

*Distribution*: South China Sea and East Asia: northern Vietnam, South China, and Taiwan (Shih et al. 2015 2022).

*Habitat*: Intertidal; on estuarine mudflats, often associated with vegetation.

*Remarks*: *Uca manii* Rathbun, 1909 was a name given to replace the record of *Gelasimus acutus* reported from the Mergui Islands by De Man (1888b), which later synonymized under *Gelasimus forcipatus* Adams and White, 1849 by Crane (1975).

*Gelasimus urvillei* H. Milne Edwards, 1852 is shown to be an eastern African species (Shih et al. 2018), despite type locality listed "Vanikoro" (= now Vanuatu), which probably erroneous (Crane 1975). Both species are unlikely to be present in Hong Kong, and we follow Shih et al. (2010b) in considering these as *U. acuta* (now *Tubuca*).

### *Tubuca arcuata* (De Haan, 1835) #

*Gelasimus arcuatus* — Shen 1940a: 231.
*Uca* (*Deltuca*) *arcuata* — Crane 1975: 44, figs. 8C, 9C, 61J, pl. 5A–F; SY Lee and Leung 1999: 70.
*Uca arcuata* — Melville and Morton 1983: 11, 1 unnumb. fig. (13); Morton and Morton 1983: 184, fig. 11.11(6), pl. 19H; SY Lee 1993: tab. 1; Jones and Morton 1994: 13, fig. 2A–J, pls. 1C, D, 2C, D; Tam and Wong 2000: 116, 2 unnumb. figs.; Fong et al. 2005: 56, 1 unnumb. fig.; WPW Kwok and Tang 2006: 4, figs. 4, 5; So and Lui 2007: 28, 3 unnumb. figs.; Shih et al. 2010b: 7, fig. 2E, F.
*Uca acuta* — WPW Kwok and Tang 2006: 4, fig. 2.
*Tubuca arcuata* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Shen (1932b), Crane (1975: as *U.* (*Deltuca*) *arcuata*), Shih et al. (2015 2016b).

*Type*: Lectotype ♂ RMNH D 243, and paralectotypes in RMNH, NHM, NHMD, MNHN (designated by Crane 1975; see also Yamaguchi and Baba 1993; Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: South China Sea and East Asia: northern Vietnam, coasts of China, Taiwan, Korea and Japan (Shih et al. 2015 2016b 2022).

*Habitat*: Intertidal; on estuarine mudflats, substrates of soft mud.

### *Tubuca coarctata* (H. Milne Edwards, 1852)

*Tubuca coarctata* — Jimenez et al. 2024: 182, figs. 3A, B, 4A, B, 5.

*Taxonomy*: Crane (1975: as *U.* (*Deltuca*) *coarctata coarctata*), Shih et al. (2015 2016b).

*Type*: Lectotype ♂ and paralectotypes in MNHN (designated by Crane 1975).

*Type locality*: Odessa, Ukraine (possible mislabeling; Crane 1975).

*Distribution*: West Pacific: the Philippines, Indonesia, to South China, Taiwan and Okinawa, to New Guinea and northern and northeastern Australia (Crane 1975; Shih et al. 2015 2016b).

### *Tubuca dussumieri* (H. Milne Edwards, 1852)

*? Gelasimus dussumieri* — Shen 1940a: 232 [no new specimens].
*Uca* (*Deltuca*) *dussumieri dussumieri* — Dai et al. 1986: 421, fig. 233(1–4).
*Uca* (*Deltuca*) *dussumieri* — Dai and Yang 1991: 461, fig. 233(1–4).
*Uca dussumieri* — Shih et al. 2010b: 9 [no new specimens].
*Tubuca dussumieri* — Jimenez et al. 2024: 182, figs. 3C–H, 4C–F, 6.

*Taxonomy*: Crane (1975: as *U.* (*Deltuca*) *dussumieri dussumieri*), Shih et al. (2015).

*Type*: Lectotype ♂ in MNHN (designated by Crane 1975).

*Type locality*: Samarang, Java, Indonesia.

*Distribution*: West Pacific: New Guinea, Indonesia, Philippines, South China (Hong Kong), Taiwan and Ryukyus (Crane 1975; Shih et al. 2016b).

*Habitat*: Intertidal; on muddy substrates with coarse sediments, sometimes near shades of vegetation (Shih et al. 2015).

*Remarks*: Despite report from "Guangdong" by Dai et al. (1986) and Dai and Yang (1991), presences of this species along shores of South China remained

unverified (Shih et al. 2010b). However, as pointed out by the late Prof. S.-L. Yang (pers. comm. to HTS), the illustrated specimen from "Guangdong" was actually collected from Hong Kong, with no precise date or data otherwise known (see Shih et al. 2010b). Throughout excursions spanning the 2010s, no occurrence of this species was encountered. Recent investigations, however, show the species to occur locally in small populations (Jimenez et al. 2024), and herein included.

### *Tubuca paradussumieri* (Bott, 1973) #

*? Uca dusummieri* — Hill et al. 1975: 77; Morton 1976: 105; Hill et al. 1978: 107; Morton 1979a: 121; SY Lee 1993: tab. 1.
*Uca paradussumieri* — Jones and Morton 1994: 18, fig. 3A–H, pl. 1E, F; WPW Kwok and Tang 2006: 4, figs. 1, 12, 13; So and Lui 2007: 29, 4 unnumb. figs.; Shih et al. 2010b: 10, fig. 3A–D.
*Uca* (*Deltuca*) *paradussumieri* — SY Lee and Leung 1999: 70.
*Uca acuta* — WPW Kwok and Tang 2006: 4, fig. 3.
*Tubuca paradussumieri* — Bravo et al. 2021: tab. 2.

*Taxonomy*: Crane (1975: as *U.* (*Deltuca*) *dussumieri spinata*), Shih et al. (2010b: as *Uca*; 2015).

*Type*: Holotype ♂ in SMF 5650, paratypes in SMF, NHMD, ZSM.

*Type locality*: Bengal.

*Distribution*: Eastern Indian Ocean to South China Sea: from Bay of Bengal, Thailand, Peninsular Malaysia, Borneo, Sumatra (Indonesia), to Vietnam, South China and Taiwan (Shih et al. 2015 2022).

*Habitat*: Intertidal; on estuarine mudflats, substrates of soft mud, often under shades of mangroves.

## Subfamily Ocypodinae Rafinesque, 1815

### *Ocypode ceratophthalmus* (Pallas, 1772) #

*Ocypode ceratophthalma* — Stimpson 1858b: 100; Stimpson 1907: 108, pl. 7(2); George 1982: 187, pl. 2; Morton and Morton 1983: 141, fig. 9.4(1, 2); ECK Wong 1990: 150; Choi 1992: 901; BKK Chan and Caley 2003: 90, figs. 1–3; BKK Chan et al. 2006: 44, fig. 1a.
*Ocypoda ceratophthalma* — Gordon 1931: 528; Shen 1940a: 232.
*Ocypode gaimardi* Hill, Gott & Morton, 1975: 65 [*nomen nudum*]; Hill, Gott, Morton & Hodgkiss, 1978: 92 [*nomen nudum*]; Morton 1976: 101; Morton 1979a: 118; Hill and Phillipps 1981: 152, pl. 51d.
*Ocypode ceratophthalmus* — Hill et al. 1975: 65; Morton 1976: 101; Hill et al. 1978: 92; Morton 1979a: 118, fig. 6.18e; Hill and Phillipps 1981: 152, pl. 51e; Fong et al. 2005: 53, 5 unnumb. figs.; K Sakai and Türkay 2013: 685, figs. 1D–I, 10, 32; Bravo et al. 2021: tab. 2.

*Taxonomy*: George and Knott (1965), K Sakai and Türkay (2013), Shih et al. (2015).

*Type*: Whereabouts and status unknown.

*Type locality*: India (George and Knott 1965).

*Distribution*: Western Indian Ocean to East Pacific: from South Africa, Madagascar, India, Southeast and East Asia, to Australia and New Caledonia, towards Samoa, Hawaii and Clipperton Island (K Sakai and Türkay 2013).

*Habitat*: Intertidal; in deep tube-like burrows along exposed sandy shores (BKK Chan et al. 2006).

*Remarks*: We are unable to trace identities of the name "*Ocypode gaimardi*" as presented in Hill et al. (1975 1978), Morton (1976 1979a) and Hill and Phillipps (1981) elsewhere in the literature. In the latter work, a guidebook, color illustrations under this name (pl. 51d) clearly depict a juvenile ghost crab undoubtedly identifiable as *O. ceratophthalmus*.

Throughout the vast geographical distribution of this species, based on sequences of the mitochondrial *COI* marker, Ma et al. (2018) recently showed this species shows substantial genetic structuring in the Indo-Pacific. There are three major genetically distinct clades: east, central and west clades in the Indo-Pacific (Ma et al. 2018). The population in Hong Kong belongs to the central clade as presented by Ma et al. (2018). B.K.K. Chan and colleagues (2006) investigated burrow morphologies of juvenile and adults of *O. certatophthalmus* in Hong Kong.

### *Ocypode mortoni* George, 1982 #

*? Ocypoda stimpsoni* — Shen 1940a: 233.
*? Ocypode stimpsoni* — Hill et al. 1975: 65; Hill et al. 1978: 92; Morton 1979a: 118, fig. 6.17.
*Ocypode mortoni* George, 1982: 187, figs. 1C, 2C, pl. 3; Morton and Morton 1983: 141, fig. 8.7(3); Wong et al. 2012: 75, figs. 3–6; K Sakai and Türkay 2013: 722, figs. 3E, 20, 42.

*Taxonomy*: George (1982), Wong et al. (2012), K Sakai and Türkay (2013).

*Type*: Holotype ♂ WAM 2-81, and paratypes in WAM.

*Type locality*: Sai Wan, eastern new Territories, Hong Kong.

*Distribution*: East Asia: South China and southern Japan (K Sakai and Türkay 2013).

*Habitat*: Intertidal; in burrows along exposed sandy shores.

*Remarks*: *Ocypode stimpsoni* Ortmann, 1897(b) and *O. mortoni* are morphologically close, identified primarily by the latter possessing ocular stylets in adults (Wong et al. 2012; K Sakai and Türkay 2013), and live coloration — *O. stimpsoni* dark orange-reddish when undisturbed, whereas *O. mortoni* is always a dull yellow and whitish in life. Along coasts of China, the southern distributional limit of the temperate *O. stimpsoni* had been recorded to be Zhejiang (Y Chen 1991). Although

we cannot exclude the possibility that *O. stimpsoni* is or was present in Hong Kong, we are more inclined to suspect that Shen, in examining material from Hong Kong (1940a) and earlier from Hainan (1936c), had confounded the tropical form, later described as *O. mortoni*, under *O. stimpsoni*. We have surveyed local sandy shores for the past decade, but no *O. stimpsoni* has ever been reliably encountered. Moreover, it is difficult to believe that a conspicuous reddish *Ocypode* crab would have been missed by naturalists and locals. As such, we exclude it from the fauna of Hong Kong.

### *Ocypode sinensis* Dai, Song & Yang, 1985 #

*Ocypode cordimana* — Stimpson 1858b: 100 [part]; Stimpson 1907: 110, pl. 15(2); Gee 1926: 165 [list]; George 1982: 187, pl. 1. [not fig. 2A]; Morton and Morton 1983: 141; Choi 1992: 901; BKK Chan and Caley 2003: 90, fig. 4. [not *O. cordimanus* Latreille, 1818].

*Ocypoda cordimana* — Balss 1922b: 142 [part]; Shen 1940a: 232.

*Ocypode sinensis* Dai, Song & Yang, 1985: 372, figs. 8–12, pl. 1(3–6); J-F Huang et al. 1998: 943, figs. 1a, 2a, c, e, g, 3a, c, e, f, 4a, c–e; Bravo et al. 2021: tab. 2.

*Taxonomy*: Dai et al. (1985), J-F Huang et al. (1998), Shih et al. (2015).

*Type*: Holotype ♂ BNHM J97088b, and paratypes in BNHM and IZAS (= IZCAS) (J-F Huang et al. 1998).

*Type locality*: Jinyindao, Xisha (= Paracel) Islands, South China Sea.

*Distribution*: Eastern Indian Ocean to South China Sea and East Asia: East India, Christmas Island, Peninsular Malaysia, Borneo, the Philippines, South China, Taiwan and Japan.

*Habitat*: Supratidal; in deep burrows along exposed sandy shores, often among low coastal vegetation.

*Remarks*: The widespread *O. cordimanus* Latreille, 1818 is repeatedly reported throughout the entire Indo-West Pacific region. Older local records under this name had probably included (or entirely representing) another similar species later described from South China as *O. sinensis* Dai, Song & Yang, 1985. K. Sakai and Türkay (2013) treated *O. sinensis* merely as a juvenile of *O. cordimanus* but the available morphological and molecular evidence indicates both are distinct species (J-F Huang et al. 1998; Wong et al. 2012; Shih et al. 2015). We have no reliable reports of *O. cordimanus sensu stricto* in Hong Kong as yet.

## Family Xenophthalmidae Stimpson, 1858
## Subfamily Anomalifrontinae Rathbun, 1931

### *Anomalifrons lightana* Rathbun, 1931 #

(Figs. 34, 41D)

*Anomalifrons lightana* — Khot et al. 2019: 1343.

*Taxonomy*: Rathbun (1931), Serène and Umali (1972), Khot et al. (2019).

*Type*: Holotype ♂ USNM 61878.

*Type locality*: Guantou, near Fuzhou, Fujian, China.

*Distribution*: Southeast and East Asia: Peninsular Malaysia, northern Vietnam to South China (Rathbun 1931; Serène and Umali 1972; Wada 2019).

*Habitat*: Intertidal to subtidal; on sandy-muddy substrates, with substantial freshwater infleunces.

## Subfamily Xenophthalminae Stimpson, 1858

### *Neoxenophthalmus obscurus* (Henderson, 1893) #

*Neoxenophthalmus obscurus* — Shin 2000: tab. 1; Shin et al. 2003: tab. 3; Shin et al. 2004: 130, tab. 2; Wong et al. 2021: 66, fig. 105, pl. 20C.

*Taxonomy*: Rathbun (1910: as *Xenophthalmus*), Serène and Umali (1972).

*Type*: Holotype ♀ BM 88.34 in NHM (Sankarankutty 1969; Schmitt et al. 1973).

*Type locality*: Gulf of Martaban, Myanmar.

*Distribution*: Eastern Indian Ocean to South China Sea: East India, Myanmar, Thailand, South China and Taiwan.

*Habitat*: Subtidal; on sandy-muddy substrates at shallow depths.

### *Xenophthalmus pinnotheroides* White, 1846 #

*Xenophthalmus pinnotheroides* — Stimpson 1858b: 107; Stimpson 1907: 141; Gee 1926: 164 [list]; Shen 1940a: 230; Ong Che and Morton 1991: tab. 1; Shin 2000: tab. 1; Wong et al. 2021: 66, fig. 106, pl. 20D.

*Taxonomy*: Rathbun (1910), Shen (1937a), Serène and Umali (1972).

*Type*: Syntypes BM 43.6 (Sankarankutty 1969; Schmitt et al. 1973); NHM White 3 759. a-c (NHM Data Portal).

*Type locality*: The Philippines.

*Distribution*: Eastern Indian Ocean to West Pacific: southeastern India, Thailand, the Philippines, China, Japan, Indonesia and Queensland (Australia) (Schmitt et al. 1973).

*Habitat*: Subtidal; substrates sandy-muddy at shallow depths.

## Superfamily Pinnotheroidea De Haan, 1833
## Family Pinnotheridae De Haan, 1833
## Subfamily Pinnothereliinae Alcock, 1900

### *Indopinnixa mortoni* Davie, 1992

*Indopinnixa mortoni* Davie, 1992a: 354, fig. 1A–G.

*Taxonomy*: Davie (1992a).
*Type*: Holotype ♂ QM W16480, and paratype ♀ in QM.
*Type locality*: Hoi Ha Wan, New Territories, Hong Kong.
*Distribution*: So far South China only.
*Habitat*: Intertidal; in burrows of sandy-mud substrates between rocks, commensal in mud tubes of large capitellid polychaetes (Davie 1992a).

### *Indopinnixa sipunculana* Manning & Morton, 1987

*Pinnixa rathbuni* — Morton and Morton 1983: 78.
*Indopinnixa sipunculana* Manning & Morton, 1987: 544, figs. 1, 3C; Morton 1988: 40, pl. 9.

*Taxonomy*: Manning and Morton (1987).
*Type*: Holotype ♂ USNM 221697, and paratype ♀ in USNM.
*Type locality*: Tai Tam, Hong Kong.
*Distribution*: So far from Hong Kong only.
*Habitat*: Intertidal; on mudflats, commensal in burrows of the sipuculan worm *Sipunculus nudus* Linnaeus, 1766 (Manning and Morton 1987).

### *Pinnixa balanoglossana* Sakai, 1934

*Pinnixa balanoglossana* — Morton and Morton 1983: 204, fig. 9.13(5a).

*Taxonomy*: Sakai (1934 1939).
*Type*: Whereabouts and status unknown.

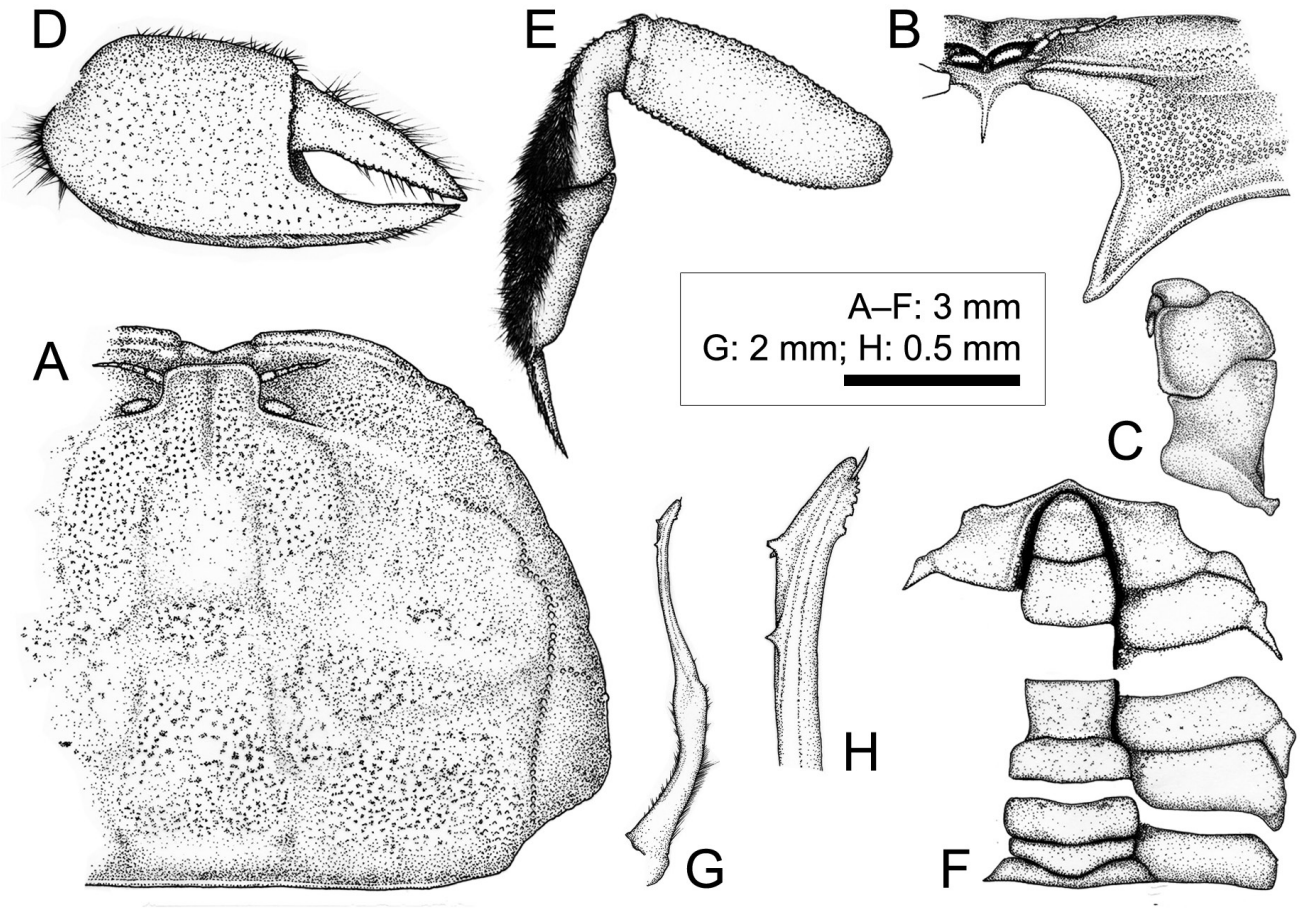



**Fig. 34.** *Anomalifrons lightana* Rathbun, 1931 (male, 12.7 × 8.9 mm, Tung Chung): A, carapace; B, frontal region, ventral view; C, maxilliped 3; D, right chela; E, left P4; F, thoracic sternites and pleon; G, left G1, mesial view; H, tip of left G1, mesial view. Structures A to C denuded.

*Type locality*: Momotori, Ise Bay, Japan.

*Distribution*: East Asia: endemic to Japan (Sakai 1976; Watanabe 2012); probably also in Hong Kong (Morton and Morton 1983).

*Habitat*: Intertidal; on mudflats, commensal with acorn worm *Balanoglossus misakiensis* Kuwano, 1902 (Sakai 1934; Morton and Morton 1983).

### *Pinnixa penultipedalis* Stimpson, 1858

*Pinnixa penultipedalis* Stimpson, 1858b: 54; Stimpson 1907: 143; Gee 1926: 163 [list]; Shen 1940a: 230.

*Taxonomy*: Stimpson (1907), Sakai (1976), Manning and Morton (1987), Naruse and Maenosono (2012).

*Type*: Probably lost.

*Type locality*: Hong Kong.

*Distribution*: East Asia: probably only South China (Hong Kong) (see Remarks below).

*Habitat*: Subtidal; among dead shells on muddy substrates in 10 fathoms (about 18.3 m) (Stimpson 1907).

*Remarks*: The present species was described from a single female specimen reported by Stimpson (1858b), as having a very broad carapace (2.11 times as broad as long), the dorsal surface being smooth and glossy, and posterior extremity with transverse ridge. The species, however, has never been figured and the types are almost certainly lost. Ortmann (1894: pl. 23(7)) and Shen (1937a: text-fig. 10a) subsequently reported the species from Nagasaki, Japan, and Tsangkou (near Qingdao), Shandong, China, respectively. Both records are considered doubtful: the Japanese record by Ortmann (1894) has a relatively narrower carapace, whereas the record from North China, as indicated in Manning and Morton (1987), apart from a very pronounced transverse cardiac ridge, lacks any transverse ridge on posterior part of the carapace. A recent report of one male specimen from Oki Islands, Sea of Japan by Yamaguchi and Konishi (2004: fig. 1A) shows a specimen with a carapace width to length ratio of approximately 1.95 (4.18 mm × 2.14 mm) and is narrower than in the original description. As suggested by Naruse and Maenosono (2012), we believe none of these records actually represent *P. penultipedalis sensu stricto*.

## Subfamily Pinnotherinae De Haan, 1833

### *Amusiotheres obtusidentatus* (Dai, Feng, Song & Chen, 1980)

*Pinnotheres obtusidentatus* — Pregenzer and Morton 1990: 656, fig. 4.

*Amusiotheres obtusidentatus* — Ng and Ho 2016: 742, figs. 1–8.

*Taxonomy*: Dai et al. (1980: as *Fabia*), Ng and Ho (2016), Ng and Ngo (2022).

*Type*: Holotype ♀ IZAS CS 01546a, no. 14270 in IZCAS (Ng and Ho 2016).

*Type locality*: Beihai, Guangxi, China.

*Distribution*: South China Sea: southern Thailand, Vietnam, South China, and western Taiwan (Ng and Ho 2016; Ng and Ngo 2022).

*Habitat*: Subtidal; commensal with or parasite of bivalve *Amusium pleuronectes* (Linnaeus, 1758) (see Ng and Ho 2016).

### *Arcotheres atrinae* (Sakai, 1939)

*Pinnotheres sinensis atrinae* — Markham 1990: 560; Markham 1992: tab. 1 [list]; Li 2003: 153 [no new specimens].

*Taxonomy*: Sakai (1939: *Pinnotheres sinensis atrinae*), Ng et al. (2017b).

*Type*: Whereabouts and status unknown.

*Type locality*: Kii Peninsula, Japan.

*Distribution*: East Asia: endemic to Japan (Schmitt et al. 1973; Sakai 1976), probably also in South China (Hong Kong) (above cited report).

*Habitat*: Subtidal; commensal with or parasite of bivalve *Atrina japonica* (Reeve, 1858) on sandy substrates (Sakai 1939).

### *Arcotheres cyclinus* (Shen, 1932)

*Pinnotheres cyclinus* — Morton and Morton 1983: 202, fig. 9.9(7A).
*Pinnotheres obscurus* — Pregenzer and Morton 1990: 653 [part], fig. 3A, B.

*Taxonomy*: Shen (1932b), Sakai (1939), Ng et al. (2017b).

*Type*: Syntypes ♀ ♀ in IOCAS.

*Type locality*: Xingcun (as Hsingtsun), Shandong, China.

*Distribution*: East Asia: coasts of China, Taiwan, Korea and Japan.

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, including *Cyclina sinensis* (Gmelin, 1791), *Meretrix meretrix* (Linnaeus, 1758), *Barbatia virescens* (Reeve, 1844), *Geloina erosa* (Solander, 1786), on substrates of sand and mud, or attached to rocks (Shen 1932b; Sakai 1939; Morton and Morton 1983).

*Remarks*: *Pinnotheres cyclinus* Shen, 1932(b) was placed under *Arcotheres* Manning, 1993 by Ng et al. (2017b), a decision we follow. We also consider material reported as *P. obscurus* in Pregenzer and Morton (1990) included *P. cyclinus*. See Remarks under

*P. obscurus* below.

### *Arcotheres sinensis* (Shen, 1932) #

*Pinnotheres sinensis* — Morton and Morton 1983: 202, fig. 11.18(10); Morton 1988: 82, pl. 25; Pregenzer and Morton 1990: 657.

*Taxonomy*: Shen (1932b: as *Pinnotheres*), Sakai (1939: as *Pinnotheres*), Takeda and Konishi (1988: as *Pinnotheres*).

*Type*: Holotype ♀ ZMFMIB No. 8756: status unknown.

*Type locality*: Qingdao (as Tsingtao), Shangdong, China.

*Distribution*: East Asia: coasts of China, Taiwan, Korea and Japan.

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, including *Barbatia virescens* (Reeve, 1844), *Chlamys farreri* (Jones & Preston, 1904), *Megallana gigas* (Thunberg, 1793), *Meretrix lusoria* (Röding, 1798), *Modiolus auriculatus* (Krauss, 1848), *Mytilis edulis* Linnaeus, 1758, *M. unguiculatus* Valenciennes, 1858, *Perna viridis* (Linnaeus, 1758), *Ruditapes philippinarum* (Adams & Reeve, 1850) and *Venerupis aspera* (Quoy & Gaimard, 1835), on substrates of sand and mud, or attached to rock surfaces (Sakai 1976; Pregenzer and Morton 1990).

*Remarks*: Reports of this species from India by Sethuramalingam and Khan (1991), Ravichandran and Kannupandi (2007) and Kannappan et al. (2012) are doubtful and probably belong to another species. As discussed by Ahyong and Ng (2007) and Ng and Ahyong (2022), *A. sinensis* is morphologically similar to *A. alcocki* (Rathbun, 1909) and the taxonomy of the two species (as well as allied taxa) will need to be reappraised. The reported variety of hosts used by *A. sinensis* is also suspicious—some are probably incorrect and there may be more taxa mixed under what has been identified as "*A. sinensis*".

### *Arcotheres excussus* (Dai, Feng, Song & Chen, 1980)

*Pinnotheres obscurus* — Pregenzer and Morton 1990: 653 [part], fig. 3C, D.
*Arcotheres excussus* — Ng and Ngo 2022: 276, figs. 4, 5.

*Taxonomy*: Dai et al. (1980), Ng and Ngo (2022).

*Type*: Holotype ♀ and paratype ♀♀ HN 5803132 in IZASB (now IZCAS).

*Type locality*: Xincun Bay, Hainan, China.

*Distribution*: Vietnam and East Asia: South China, and Taiwan (Ng and Ngo 2022).

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, including *Gafrarium* sp. and *Marcia hiantina* (Lamarck, 1818) (Dai et al. 1980), and *Anadara kagoshimensis* (Tokunaga, 1906) (Arcidae) (Ng and Ngo 2022); on muddy or sandy substrates.

*Remarks*: Ng and Ngo (2022) examined the types of *Pinnotheres excussus* and referred the species to *Arcotheres* Manning, 1993 (*sensu* Manning 1993b; Ng and Ahyong 2022). See also Remarks under *P. obscurus*.

### *Durckheimia caeca* Bürger, 1895

*Durckheimia caeca* — Pregenzer and Morton 1990: 650, fig. 1.

*Taxonomy*: Ahyong and Ng (2005 2007).

*Type*: Holotype ♀ SMF-ZMG 166 (Ahyong and Ng 2005 2007).

*Type locality*: Palau.

*Distribution*: West Pacific: South China, Okinawa, Amami and Kii Islands (Ryukyus, Japan), and Palau (Pregenzer and Morton 1990; Ahyong and Ng 2005).

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, including *Lima vulgaris* (Link, 1807) and *Chama reflexa* Reeve, 1846, on rock surfaces (Ahyong and Ng 2005).

### *Pinnotheres dilatatus* Shen, 1932

*Pinnotheres dilatatus* — Morton and Morton 1983: 202.

*Taxonomy*: Shen (1932b).

*Type*: Holotype ♀ ZMFMIB No. 8757: status unknown.

*Type locality*: Huangdao (as Hwangtao), Shandong, China.

*Distribution*: East Asia: North China (Schmitt et al. 1973) and Hong Kong.

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, hosts including *Gafrarium tumidum* Röding, 1798 (Morton and Morton 1983) and *Ruditapes variegatus* (G. B. Sowerby II, 1852) (Shen 1932b, on sandy substrates.

### *Pinnotheres gordonae* Shen, 1932

*Pinnotheres gordoni* — Pregenzer and Morton 1990: 651, fig. 2.

*Taxonomy*: Shen (1932b).

*Type*: Holotype ♂ ZMFMIB No. 8760: status unknown.

*Type locality*: Qingdao, China.

*Distribution*: North China (Shen 1932b).

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, hosts including *Pinna bicolor* Gmelin, 1791 (Pregenzer and Morton 1990), *Ruditapes*

*variegatus* (G. B. Sowerby II, 1852) and "a kind of oyster" (Shen 1932b).

*Remarks*: Female specimens of this species have never been reported (Schmitt et al. 1973). Japanese record of this species reported in Sakai (1939) had been verified to be males of *Arcotheres sinensis* instead (Sakai 1976).

### *Pinnotheres haiyangensis* Shen, 1932

*Pinnotheres haiyangensis* — Pregenzer and Morton 1990: 653.

*Taxonomy*: Shen (1932b).

*Type*: Holotype ♀ in IOCAS.

*Type locality*: Xingcun (as Hsingtsun), Shandong, China.

*Distribution*: East Asia: coasts of China.

*Habitat*: Commensal with or parasite of bivalves, hosts including *Laternula marilina* (Reeve, 1863) (Shen 1932b), and *L. truncata* (Lamarck, 1818) (Pregenzer and Morton 1990).

### *Pinnotheres luminatus* Dai, Feng, Song & Chen, 1980

*Pinnotheres luminatus* — Pregenzer and Morton 1990: 653.

*Taxonomy*: Dai et al. (1980).

*Type*: Holotype ♀ HN 5814875 and paratype ♀♀ HN 5814881 in IZASB (now IZCAS).

*Type locality*: Xinying, Hainan, China.

*Distribution*: South China: Hainan and Hong Kong.

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, host including *Asaphis violascens* (Forsskål in Niebuhr, 1775) (formerly *A. dichotoma*) (Dai et al. 1980), and *Hiatula diphos* (Linnaeus, 1771) (Pregenzer and Morton 1990), on muddy and sandy substrates.

### *Pinnotheres obscurus* Stimpson, 1858

*Pinnotheres obscurus* Stimpson, 1858b: 108; Stimpson 1907: 141; Gee 1926: 163 [list]; Shen 1940a: 230 [no new specimens]; Pregenzer and Morton 1990: 653.

*Taxonomy*: Stimpson (1907), Schmitt et al. (1973), Pregenzer and Morton (1990).

*Type*: Probably lost.

*Type locality*: Hong Kong.

*Distribution*: South China: Hong Kong only (see Remarks below).

*Habitat*: Symbiont or parasite of bivalves.

*Remarks*: The present species was originally described based on a single female holotype, collected "in portu "Hong Kong", now believed lost, and the species remains poorly known (Stimpson 1907; Schmitt et al. 1973). The original descriptions are unfortunately too schematic to offer any precise identification. This name, however, was applied to numerous specimens from Hong Kong by Pregenzer and Morton (1990), who argued that *P. cyclinus* Shen, 1932 and *P. excussus* Dai, Feng, Song & Chen, 1980 are synonymous with *P. obscurus* Stimpson, 1858, the differences observed only representing intraspecific variation. In contrast, Dai et al. (1980) and Dai and Yang (1991) had treated both *P. cyclinus* and *P. excussus* as distinct, valid species, symbiotic in different host bivalve genera, and both were referred to a separate genus, *Arcotheres* Manning, 1993 (Ng et al. 2017b; Ng and Ngo 2022). In any case, as the evidence for the possible synonymy of *P. obscurus* with either *P. cyclinus* or *P. excussus* is still weak, we opt to keep these taxa as distinct.

### *Pinnotheres parvulus* Stimpson, 1858

*Pinnotheres parvulus* Stimpson, 1858b: 108 [in mari Sinensi, lat. bor. 23°]; Stimpson 1907: 142.

*Taxonomy*: Sakai (1939).

*Type*: Presumably lost.

*Type locality*: Seas of China at latitude 23°N (near Hong Kong).

*Distribution*: East Asia: South China, Taiwan and Japan (Lin 1949; Schmitt et al. 1973; Ng et al. 2017a).

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, host including *Meroë quadrata* (Stimpson 1858b 1907), *Pecten albicans* (Schröter, 1802), *Saxidomus purpurata* (Sowerby II, 1852) (Sakai 1976).

*Remarks*: Originally recorded from seas of South China (at 23°N), proximal to Hong Kong, and previous authors (*e.g.*, Sakai 1939) had listed this species as part of the fauna of Hong Kong.

### *Pinnotheres pholadis* De Haan, 1835

*Pinnotheres affinis* — Morton and Morton 1983: 202; Pregenzer and Morton 1990: 650.

*Taxonomy*: Shen (1932b: as *P. affinis*), Sakai (1939).

*Type*: Syntypes RMNH D 42276 (now only mouthparts extant; Yamaguchi and Baba 1993; Fransen et al. 1997).

*Type locality*: Japan, locality unspecified.

*Distribution*: East Asia: coasts of China, Korea and Japan (Schmitt et al. 1973; Pregenzer and Morton

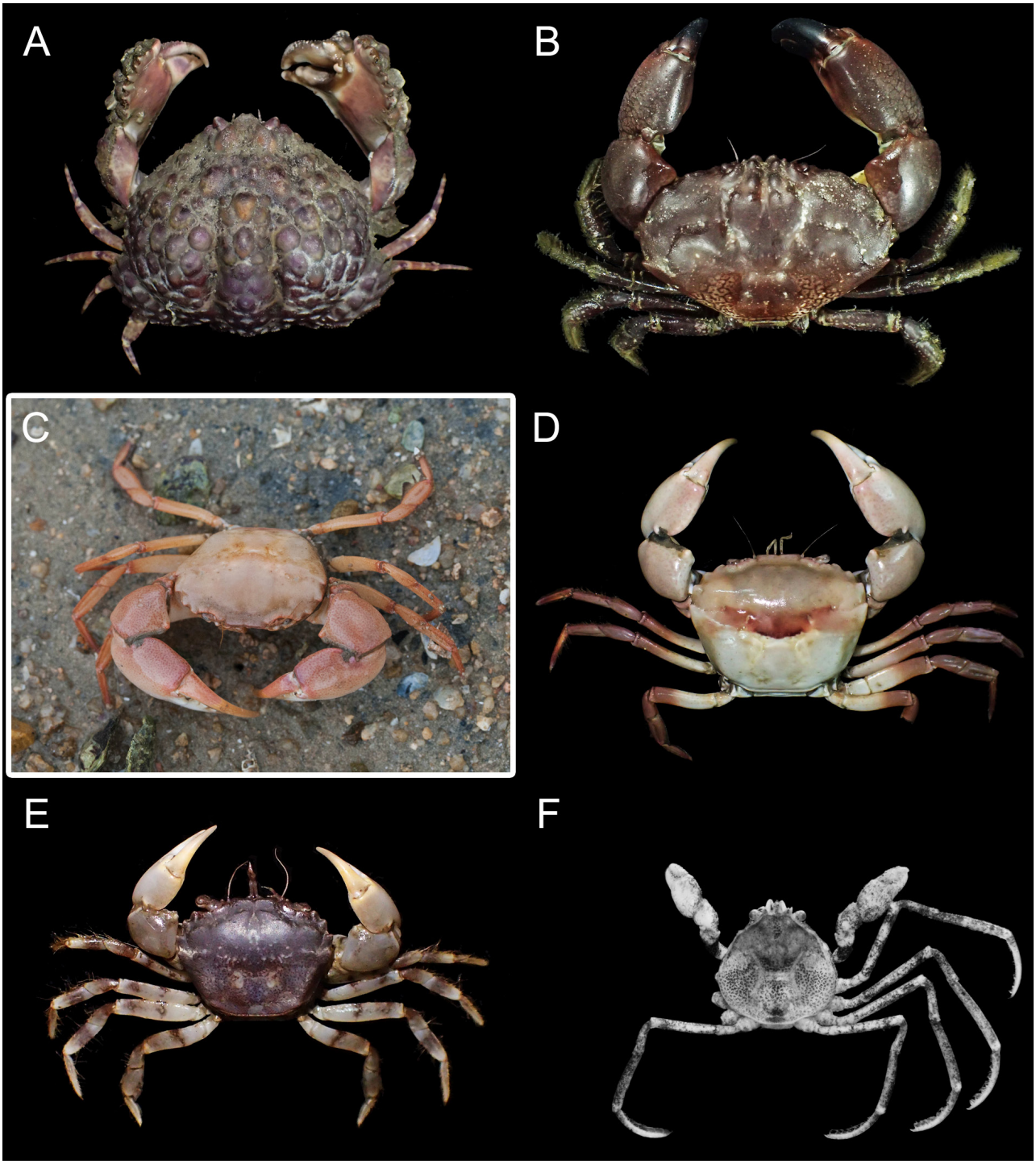



**Fig. 35.** Overall habitus. A, *Calappa capellonis* Laurie, 1906 (female, 62.2 × 47.4 mm, off Kau Sai Chau); B, *Menippe rumphii* (Fabricius, 1798) (male, 54.2 × 36.8 mm, off Wong Shek Pier); C–E, *Eucrate tripunctata* Campbell, 1969 (C, male, 34.2 × 27.2 mm, Starfish Bay; D, male, 39.8 × 32.0 mm, near Lai Chi Chong; E, male, 15.1 × 11.9 mm, Starfish Bay); F, *Neorhynchoplax introversa* (Kemp, 1917) (male, 3.2 × 3.4 mm, Mai Po Marshes). Specimen shown in A after one week of refrigeration; F partially denuded, preserved coloration.

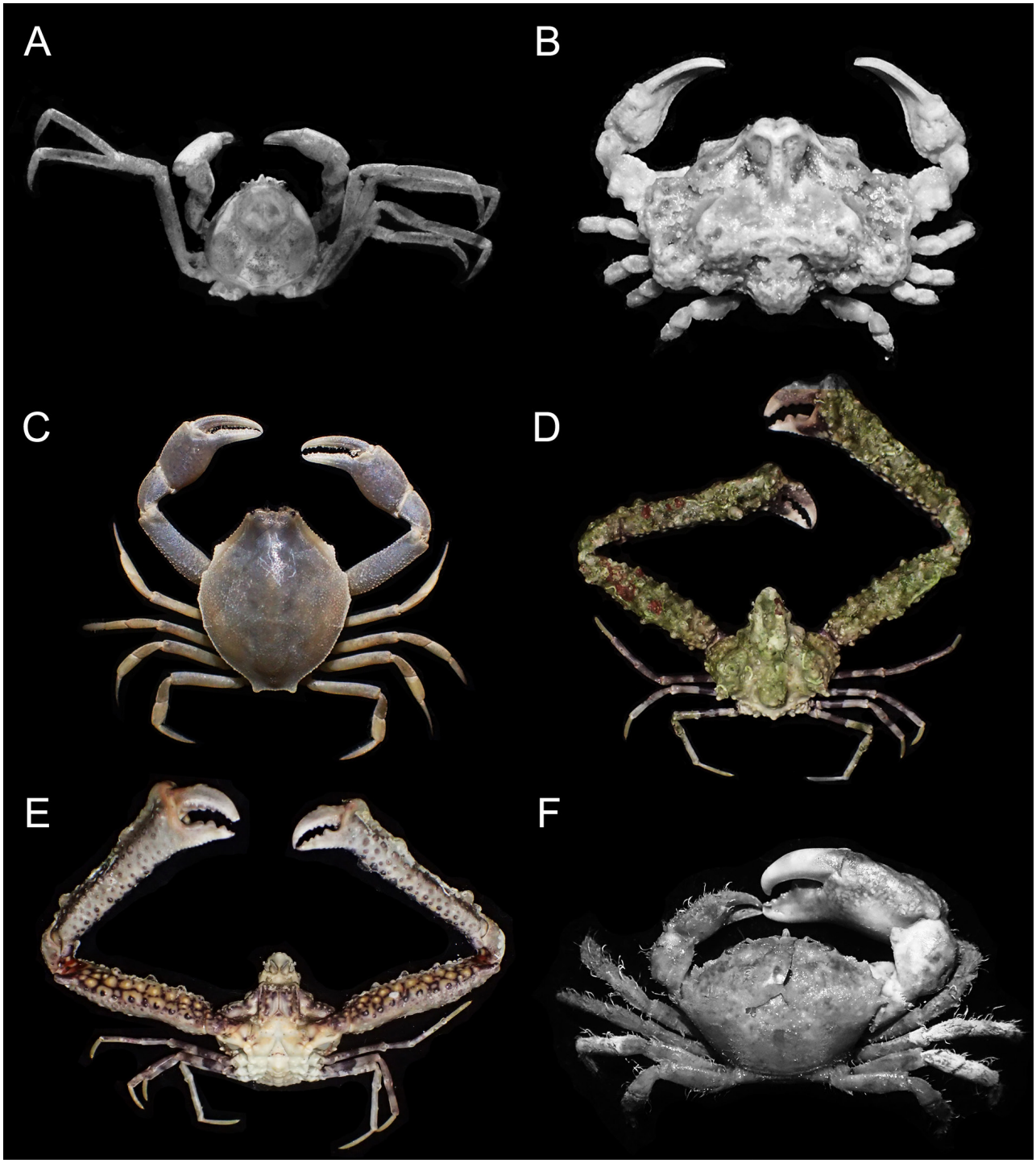



**Fig. 36.** Overall habitus. A, *Neorhynchoplax sinensis* (Shen, 1932) (male, 2.7 × 3.0 mm, Lower Pak Nai); B, *Alox somphos* C.G.S. Tan & Ng, 1995 (male, 14.7 × 9.9 mm, Shelter Island); C, *Ovilyra fuliginosa* (Targioni Tozzetti, 1877) (male, 9.2 × 11.2 mm, Lower Pak Nai); D, E, *Rhinolambrus lippus* (Lanchester, 1902) (male, 36.0 × 33.8 mm, Clear Water Bay; D, dorsal view (overall algae-covered); E, ventral view); F, *Aniptumnus quadridentatus* (De Man, 1895) (male, 16.1 × 10.6 mm, off Castle Peak). A, B and F preserved coloration; D algae-covered; A and F partially denuded.

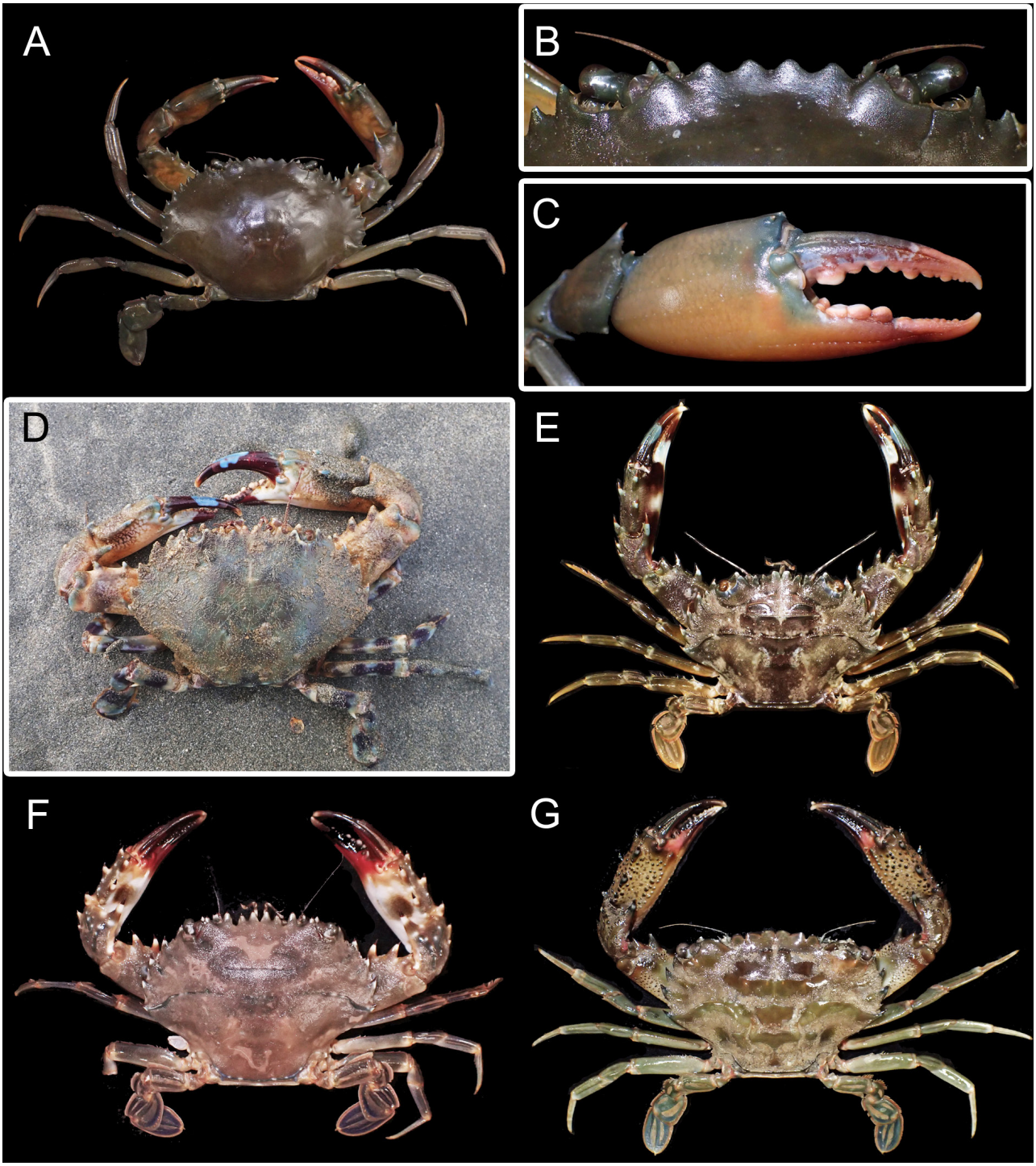



**Fig. 37.** A, D–G, overall habitus; B, frontal margin; C, right chela. A–C, *Scylla olivacea* (Herbst, 1796) (male, 103.5 × 69.3 mm, off Kau Sai Chau); D, *Charybdis annulata* (Fabricius, 1798) (male, 80.3 × 54.1 mm, Shui Hau); E, *Charybdis orientalis* Dana, 1852 (male, 59.2 × 35.7 mm, Shelter Island); F, *Goniosupradens acutifrons* (De Man, 1879) (male, 81.8 × 52.2 mm, Bluff Island); G, *Thranita pelsarti* (Montgomery, 1931) (male, 67.7 × 39.5 mm, Bluff Island).

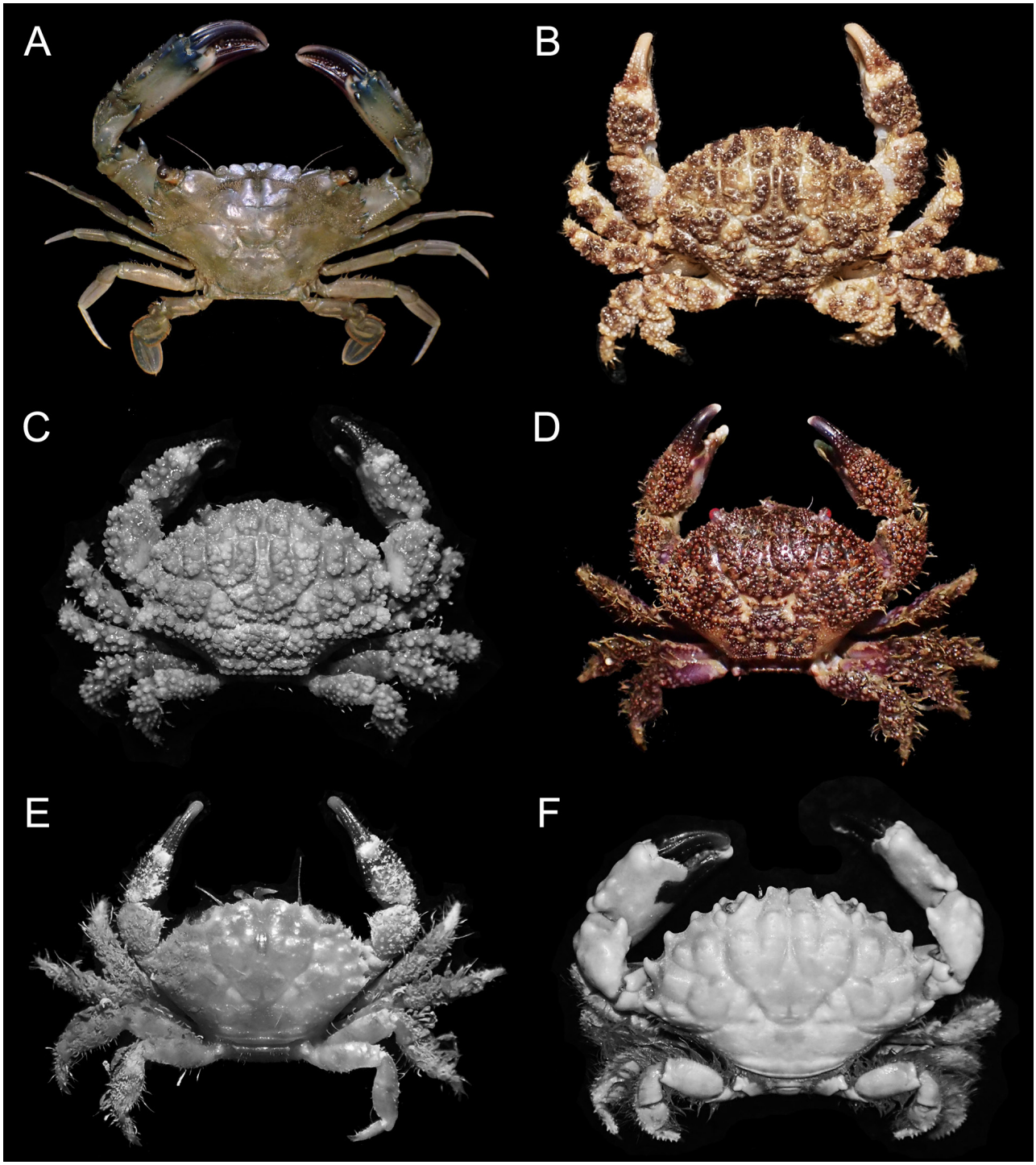



**Fig. 38.** Overall habitus. A, *Thranita spinicarpa* (Wee & Ng, 1995) (male, 44.6 × 27.6 mm, Starfish Bay); B, C, *Epiactaea margaritifera* (Odhner, 1925) (B, male, 13 × 9 mm, Lung Mei; C, male, 14.5 × 8.7 mm, Starfish Bay); D, *Novactaea pulchella* (A. Milne-Edwards, 1865) (male, 20.3 × 14.3 mm, Crescent Island); E, *Pilodius miersi* (Ward, 1936) (male, 7.7 × 5.4 mm, Bluff Island); F, *Etisus anaglyptus* H. Milne Edwards, 1834 (male, 41.0 × 27.1 mm, Shelter Island). C, E and F preserved coloration.

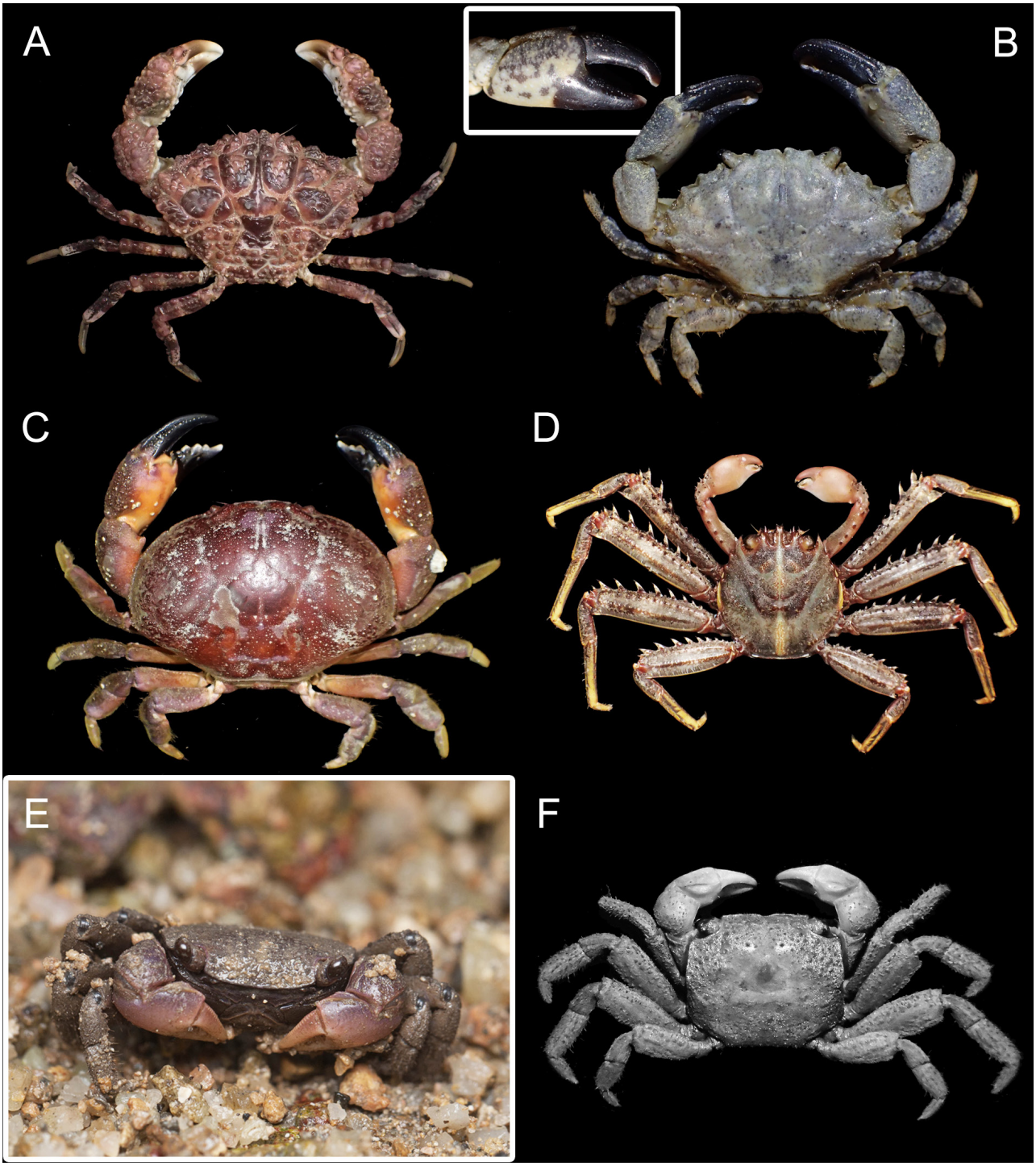



**Fig. 39.** A–D, F, Overall habitus. A, *Demania reynaudii* (H. Milne Edwards, 1834) (male, 72.6 × 52.5 mm, off Clear Water Bay); B, inset, *Leptodius davaoensis* Ward, 1941 (male, 19.4 × 12.3 mm, Starfish Bay); C, *Atergatopsis germaini* A. Milne-Edwards, 1865 (male, 64.4 × 43.8 mm, off Kau Sai Chau). D, *Percnon sinense* Chen, 1977 (male , 28.1 × 30.2 mm, off High Island); E, F *Clistocoeloma nobile* B.Y. Lee, N.K. Ng & Ng, 2023 (male, 16.5 × 12.0 mm, To Gwa Peng). F preserved coloration.

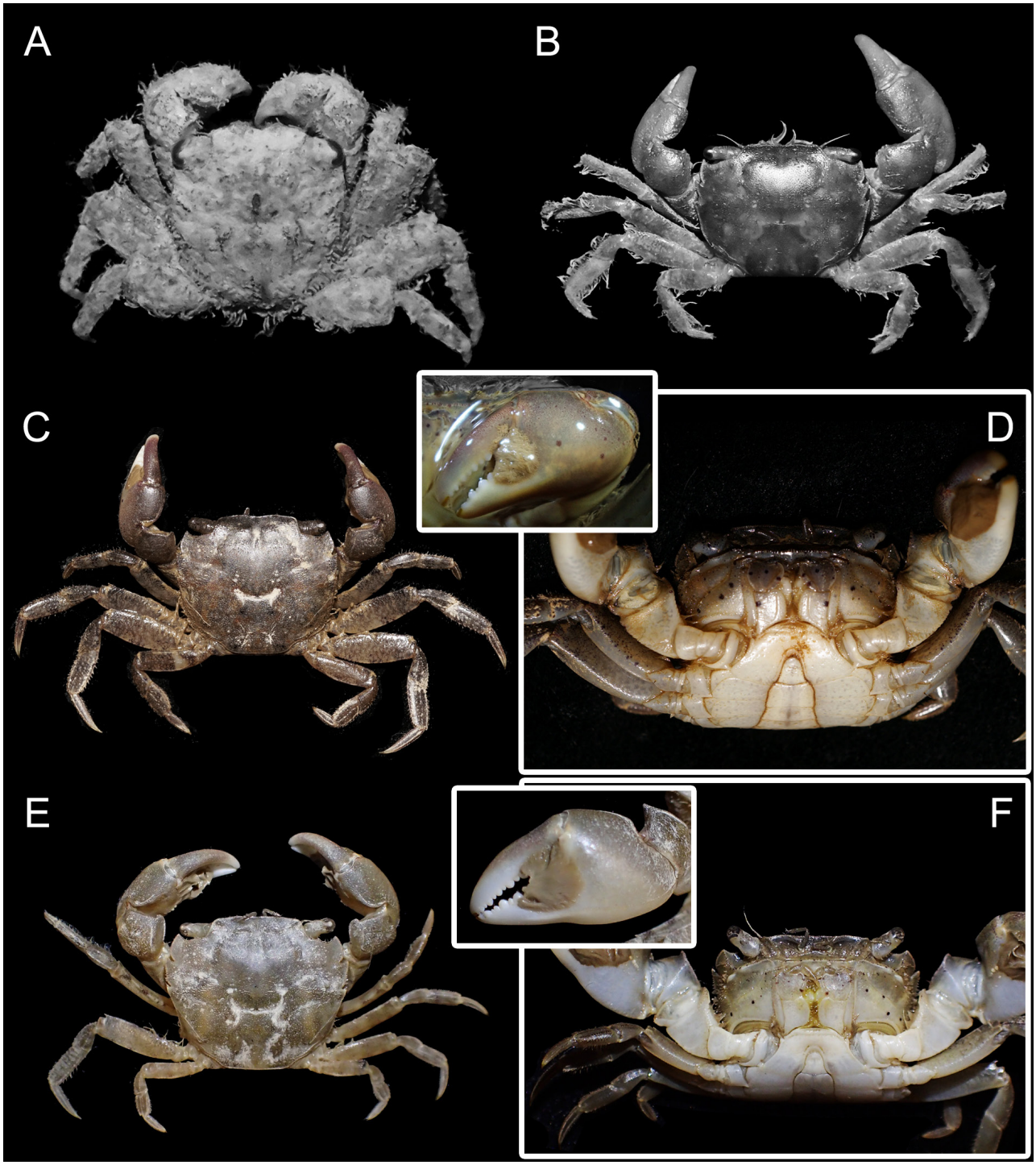



**Fig. 40.** A, B, C, E, overall habitus; D, F, ventral view. A, *Nanosesarma pontianacense* (De Man, 1895) (male, 5.3 × 6.4 mm, Tung Chung); B, *Parapyxidognathus ongia* Hsu & Shih, 2024 (male, 16.6 × 12.9 mm, Tai Tam); C, D, inset, *Hemigrapsus penicillatus* (De Haan, 1835) (male, 16.3 × 14.6 mm, Lung Mei); E, F, inset, *Hemigrapsus takanoi* Asakura & Watanabe, 2005 (male, 19.1 × 16.7 mm, Tung Chung). A and B preserved coloration.

1990).

*Habitat*: Intertidal to subtidal; commensal with or parasite of bivalves, host including *Chlamys hastata* (G. B. Sowerby II, 1842), *Mactra chinensis* Philippi, 1846, *M. quadrangularis* Reeve, 1854, *M. antiquata* Spengler, 1802, *Magallana gigas* (Thunberg, 1793), *Marcia japonica* (Gmelin, 1791), *Mimachlamys crassicostata* (Sowerby II, 1842), *Mytilus edulis* Linnaeus, 1758, *Ostrea denselamellosa* Lischke, 1869 and *Pecten albicans* (Schröter, 1802), on substrates of mud or sand, or attached to rock surfaces (Shen 1932b; Sakai 1976; Pregenzer and Morton 1990).

*Remarks*: As noted in Pregenzer and Morton (1990), morphological descriptions under the name "*P. affinis*" differ: one originally described by Bürger (1895) is now as *Nepinnotheres affinis* (Manning 1993a; Ahyong and Ng 2007), while that of the same name by Shen (1932b) is *P. pholadis* De Haan, 1835 instead (Sakai 1976). The morphology of the local material matches *P. pholadis* (Pregenzer and Morton 1990).

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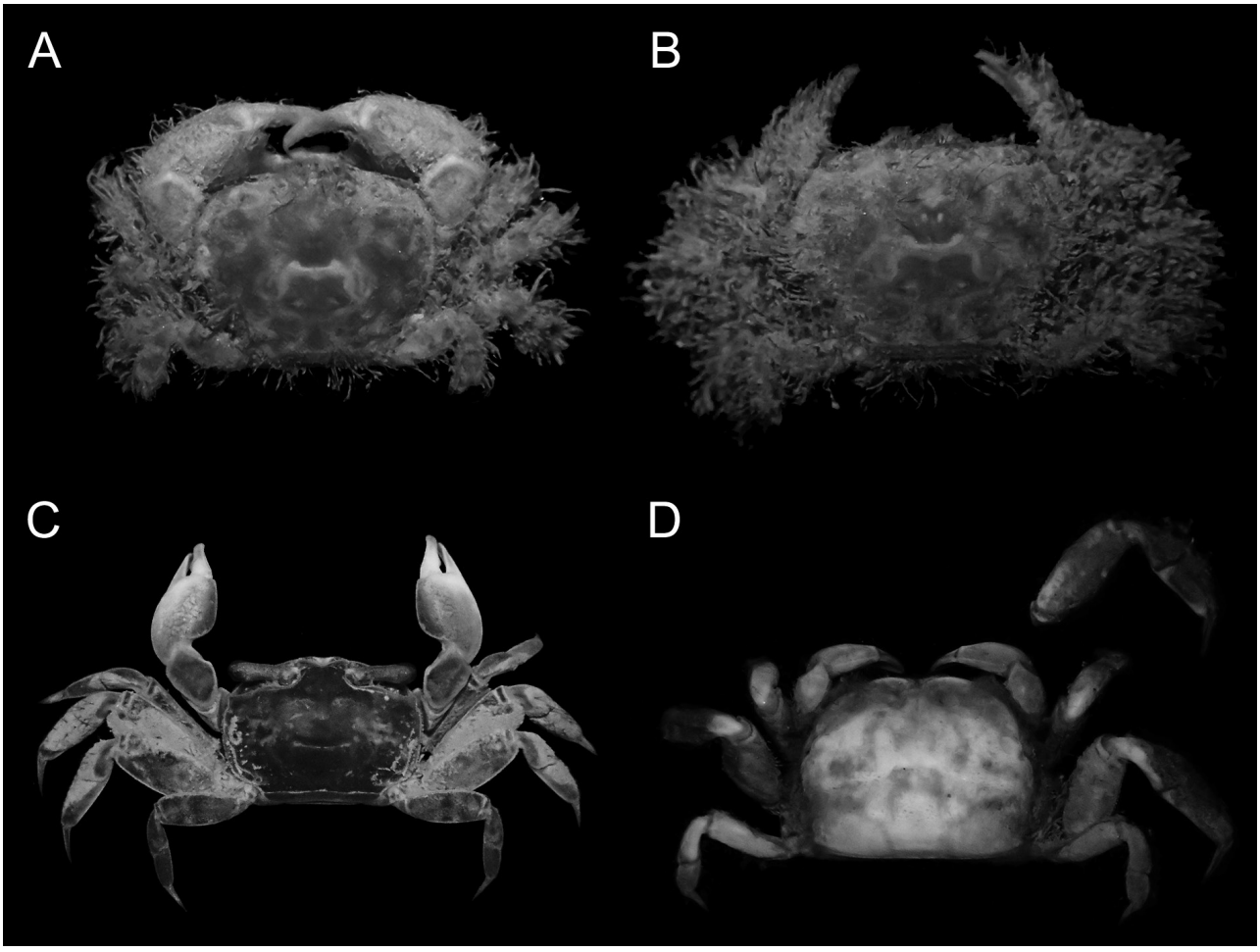


**Fig. 41.** Overall habitus. A, B, *Baruna sinensis* C.G.S. Tan & Huang, 1995 (A, male, 6.2 × 4.7 mm; B, 7.2 × 6.5 mm, Tung Chung); C, *Ilyoplax formosensis* Rathbun, 1921 (male, 8.0 × 5.3 mm, Tsim Bei Tsui); D, *Anomalifrons lightana* Rathbun, 1931 (male, 12.7 × 8.9 mm, Tung Chung). All preserved coloration.

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## Supplementary materials

**Appendix 1.** Brachyuran records from vicinity of Hong Kong reported by William Stimpson (1857 1858a b c d 1907). (download)

**Appendix 2.** List of mentioned names of authors and biologists of Asian ethnic origins, and titles of old Chinese texts, in English and Chinese. Last names of authors are indicated as capital letters. (download)

**Appendix 3.** List of brachyuran material collected from the 1950s to 1980s, deposited at the Aberdeen Fisheries Office (formerly Hong Kong Fisheries Research Station) of AFCD. Data have been retrieved and updated from https://www.hk-fish.net/english/specimen_catalogue/introduction.html (accessed Aug 2021). Taxonomic references are provided for species not recorded in the present report following formats of section 3.3. (download)

**Appendix 4.** Acronyms of museums and institutes where type material of local taxa is deposited. (download)

**Appendix 5.** List of illustrated specimens and respective depository. (download)