

PHUKET MARINE BIOLOGICAL CENTER

Phuket, Thailand

RESEARCH BULLETIN NO. 4

**A CHECKLIST OF THE MARINE BRACHYURA IN
THE REFERENCE COLLECTION AT PMBC, THAILAND**

by

Steen Lundoer



PUBLISHED BY THE CENTER

Phuket, 1974

A CHECKLIST OF THE MARINE BRACHYURA IN THE REFERENCE COLLECTION AT PMBC, THAILAND

By STEEN LUNDOER

Phuket Marine Biological Center, Phuket

The following list includes marine Brachyura collected in the vicinity of Phuket Island, situated off the western coast of peninsular Thailand. All the specimens of listed species have been deposited in the reference collection of the Phuket Marine Biological Center. Whenever possible, each species is represented by one male and one female, and polytypic species are represented by as many types as possible, for example, the different types of the male chelipeds in the genus *Uca*. Where duplicates exist, they have been deposited in the Zoological Museum in Copenhagen.

The collection comprises a total of 182 species from the following groups: Dromiacea 1, Oxystomata 7, Oxyrhyncha 16, Portunidae 20, Xanthidae 60, Goneplacidae 3, Pinnotheridae 1, Ocypodidae 34, Grapsidae 33, Gecarcinidae 2, and Hapalocarcinidae 5.

As indicated by the groupings, species from the mangrove swamp and the muddy shore environments are best represented (families Ocypodidae and Grapsidae), this collection being representative for the area. Crabs from rocky shores, coral reefs and especially from subtidal environments are less well represented in the collection. To make the collection generally representative for the area about another 100 species should be added.

In connection with the reference collection, black and white photographic prints (if possible, always of the male), have been made of all the species. These prints have been catalogued to serve as a basic tool for preliminary identification of species caught in the area, where the reference collection together with literature will

serve as the last steps in the identification. A copy of the catalogue is deposited in the Zoological Museum in Copenhagen.

The nomenclature and the classifications used follow those of the checklist of R. Serene (Serene, 1968), but amendments by authors since 1968 are taken into consideration. For the Ocypodidae and the Grapsidae, the classification by Serene (1974) has been used.

Regarding the identification of the species in the reference collection, most of these have been carried out either directly by R. Serene or with the help of his key (Serene, 1974).

Rathbun (1910) recorded 205, and Serene (1966) added another five species of Brachyura from Thai waters. The present list adds another 128 species not previously recorded from Thailand, thus bringing the total number of brachyuran species recorded from Thai waters to a total of 338.

The prevailing biotops for the species observed while collecting in the area are indicated in the list by the following signs :

- SS = sandy shore
- SMS = sandy muddy shore
- MS = muddy shore
- M = mangrove forest area
- MW = mangrove forest, on wood
- H = high tide level
- T = terrestrial
- CR = coral reef
- RS = rocky shore
- ST = subtidal

CHECKLIST OF MARINE BRACHYURA IN PMBC COLLECTION

BRACHYURA Borradaile, 1907

DROMIACEA de Haan, 1839

DROMIDAE Alcock, 1899

+ *Dromia dehaani* Rathbun, 1923

OXYSTOMATA H. Milne Edwards, 1834

DORIPPIDAE Dana, 1852

+ *Dorippe frascone* (Herbst, 1785) ST

CALAPPIDAE Alcock, 1896

CALAPPINAE Alcock, 1896

+ *Calappa hepatica* (L., 1758) SMS-ST
 D *C. lophos* (Herbst, 1785) ST

MATUTINAE Alcock, 1896

Matuta lunaris (Forsk., 1775) SMS-ST
M. banksi Leach, 1817 SMS-ST

LEUCOSIIDAE Dana, 1852

EBALIINAE Stimpson, 1852

+ *Ebalia malefactorix* Kemp, 1915 SMS

PHILYRINAE Rathbun, 1937

+ D *Philyra scabriuscula granulosa* Ihle, 1918 SS

OXYRHYNCHA Latreille, 1803

MEJIDAE Samonelle, 1819

INACHINAE Alcock, 1895

+ D *Camposcia retusa* Latreille, 1829 CR

+ *Acheus fissifrons* (Haswell, 1879) ST

ACHANTONYCHINAE Alcock, 1895

Menaethius monoceros (Latreille, 1825) CR

PISINAE Alcock, 1895

+ *Hyastenus aries* (Latreille, 1825) ST

+ = Not recorded in Thailand before.

D = Duplicates deposited at the Zoological Museum in Copenhagen.

+ D	<i>Doclea ovis</i> (Herbst, 1788)	ST
+	<i>D. alcocki</i> Laurie, 1906	ST
	<i>Phalangipus longipes</i> (L., 1767)	ST
	MEJINAE Alcock, 1895	
+ D	<i>Schizophrys aspera</i> (H., Milne Edwards, 1834)	CR
	MITHRACINAE Balss, 1929	
+	<i>Micippa philyra</i> (Herbst, 1803)	CR
	PARTHENOPIDAE Miers, 1879	
	PARTHENOPINAE Miers, 1879	
	<i>Parthenope (Parthenope) longimanus</i> (L., 1764)	ST
	<i>P. (Platylambrus) echinatus</i> (Herbst, 1790)	ST
	<i>P. (Rhinolambrus) pelagicus</i> (Ruppel, 1830)	ST
+	<i>Daldorfia horrida</i> (L., 1758)	CR
	AETHRINAE Dana, 1852	
+	<i>Cryptopodia angulata</i> H. Milne Edwards and Lucas, 1841	ST
	EUMEDONINAE Miers, 1879	
	<i>Zebrida adamsi</i> White, 1847	ST
	<i>Rhabdonotus pictus</i> A. Milne Edwards, 1878	ST
	BRACHYRHYNCHA Borradaile, 1907	
	PORTUNIDAE Rafinesque, 1815	
	PORTUNINAE Stephenson and Campbell, 1960	
	<i>Scylla serrata</i> (Forsk., 1755)	MS-M
+ D	<i>Portunus (Hellenus) pulchricristatus</i> (Gordon, 1931)	ST
	<i>P. (Hellenus) tenuipes</i> (de Haan, 1835)	ST
	<i>P. (Portunus) pelagicus</i> (L., 1758)	ST-SMS
	<i>P. (Portunus) sanguinolentus</i> (Herbst, 1783)	ST-SMS
+	<i>P. (Monomia) argentatus</i> White, 1847	ST-SMS
D	<i>P. (Monomia) gladiator</i> (F., 1798)	ST
+	<i>P. (Achelous) orbicularis</i> (Richters, 1880)	SMS near RS or CR
+	<i>P. (Achelous) orbitosinus</i> Rathbun, 1911	SMS near RS or CR
D	<i>Thalamita crenata</i> (Latreille, 1829)	MS-SMS
+	<i>T. spinimana</i> Dana, 1852	SMS near RS or CR
+ D	<i>T. stimpsoni</i> A. Milne Edwards, 1861	SMS near RS or CR
	<i>Charybdis (Charybdis) cruciata</i> Herbst, 1794	ST
+	<i>C. (Charybdis) merguiensis</i> (de Man, 1887)	SMS near RS or CR
D	<i>C. (Charybdis) lucifera</i> (F., 1798)	ST
	<i>C. (Charybdis) variegata</i> (F., 1798)	ST
	<i>C. (Charybdis) natator</i> (Herbst, 1794)	ST

- + D *Charybdis (Goniohellenus) truncata* (F., 1798) ST
 + D *C. (Goniosupradens) acutifrons* (de Man, 1879) ST

PODOPHTHALMINAE Borradaile, 1900

- D *Podophthalmus vigil* (F., 1798) ST

XANTHIDAE Alcock, 1898

XANTHINAE Ortmann, 1898

- + D *Carpilius maculatus* (L., 1758) CR
 + *C. convexus* (Forsk., 1775) CR
 + *Liomera stimpsoni* (A. Milne Edwards, 1865) CR
 + D *L. cinctimana* (White, 1847) CR
 + D *L. larvis* Milne Edwards, 1873 CR
 + D *L. bella* (Dana, 1852) CR
 + D *Zozymodes cavipes* (Dana, 1852) CR
 + *Platypodia helleri* Kossmann, 1877) CR
 + D *P. semigranosa* (Heller, 1861) CR
 + D *P. alcocki* Buitendijk, 1941 CR
 D *Atergatis floridus* (L., 1767) CR
 + D *A. reticulatus* de Haan, 1835 CR
 + D *A. roseus* (Ruppel, 1830) CR
 D *Leptodius exaratus* (A. Milne Edwards, 1834) RS
 D *L. sanguineus* (H. Milne Edwards, 1834) RS
 + D *Xanthias lamarecki* (H. Milne Edwards, 1834) CR
 + D *X. punctatus* (H. Milne Edwards, 1834) CR
 + D *Galene bispinosa* (Herbst, 1794) ST

ACTAEINAE Alcock, 1898

- + *Actaea modesta* (de Man, 1888) CR
 + *A. polyacantha* (Heller, 1861) CR
 + D *A. speciosa* (Dana, 1852) CR
 + D *Actaeodes tomentosus* (H. Milne Edwards, 1834) CR
 + D *A. hirsutissima* (Ruppel, 1830) CR
 + *Pseudoliomera granosimana* (A. Milne Edwards, 1865) CR

CHLORODINAE Alcock, 1898

- + *Etisus utilis* Lucas, 1852 CR
 + D *E. laevimanus* Randall, 1839 CR
 + *E. frontalis* Dana, 1852 CR
 + D *Pilodius areolatus* (H. Milne Edwards, 1834) CR
 D *P. nigrocrinitus* Stimpson, 1858 CR
 + *P. scabriculus* Dana, 1852 CR
 + D *P. pugil* Dana, 1852 CR

+ D	<i>Phymodius monticulosus</i> (Dana, 1852)	CR
+	<i>P. nitidus</i> (Dana, 1852)	CR
	<i>Chlorodiella nigra</i> (Forskal, 1775)	CR
+ D	<i>C. cytherea</i> (Dana, 1852)	CR
+ D	<i>C. laevisissima</i> (Dana, 1852)	CR
D	<i>Cymo melanodactylus</i> (de Haan, 1835)	CR

MENIPPINAE Ortman, 1899

+ D	<i>Ozius granulosus</i> de Man, 1879	RS-CR
+ D	<i>O. rugulosus</i> Stimpson, 1858	MS-M
+ D	<i>Epixanthus corrosus</i> A. Milne Edwards, 1873	SMS-H
D	<i>E. frontalis</i> (H. Milne Edwards, 1834)	
+	<i>E. dentatus</i> (White, 1847)	M
+ D	<i>Baptozius vinosus</i> (H. Milne Edwards, 1834)	MS-M
+ D	<i>Eriphia sebana</i> (Shaw and Nodlee, 1803)	RS-CR
D	<i>E. smithi</i> Mac Leay, 1838	RS-CR
+	<i>E. scabricula</i> Dana, 1852	RS
+	<i>Maldivia triangulata</i> (Borradaile, 1902)	CR

PILUMNINAE Alcock, 1898

D	<i>Pilumnus longicornis</i> Hilgendorf, 1878	CR
	<i>P. vespertilio</i> (F., 1793)	CR
+	<i>Actumnus obesus</i> Dana, 1852	CR
+	<i>A. carinatus</i> Bouvier, 1915	CR
+ D	<i>Glabropilumnus laevimanus</i> (Dana, 1852)	CR
+	<i>G. seminudus</i> (Miers, 1884)	CR
+ D	<i>Heteropanope glabra</i> Stimpson, 1858	MW
D	<i>H. changensis</i> (Rathbun, 1909)	CR
+ D	<i>Pilumnopeus makiana</i> (Rathbun, 1929)	CR

TRAPEZIINAE Miers, 1886

D	<i>Trapezia cymodoce</i> (Herbst, 1801)	CR
+ D	<i>T. areolata</i> Dana, 1852	CR
D	<i>Tetralia glaberrima</i> (Herbst, 1799)	CR
+	<i>Quadrella</i> sp. Dana, 1851	

GONEPLACIDAE Dana, 1852

CARCINOPLACINAE H. Milne Edwards, 1852

+	<i>Viaderiana typica</i> Ward, 1942	CR
+ D	<i>V. striata</i> (de Man, 1888)	CR

RHIZOPINAE Stimpson, 1858

Typhlocarcinus nudus Stimpson, 1858

PINNOTHERIDAE Alcock, 1900

sp.?

OCYPODIDAE Ortman, 1894

OCYPODINAE Dana, 1851

D	<i>Ocypode ceratophthalmus</i> (Pallas, 1872)	SS-H
+ D	<i>Uca coarctata</i> (H. Milne Edwards, 1852)	MS
+ D	<i>U. angustifrons</i> (de Man, 1891)	MS
+ D	<i>U. tetragonon</i> (Herbst, 1799)	muddy rocks
+ D	<i>U. vocans</i> (L., 1758)	SMS
D	<i>U. mani</i> (Rathbun, 1909)	MS
+ D	<i>U. dussumieri</i> (H. Milne Edwards, 1852)	MS
+ D	<i>U. rosea</i> (Tweedie, 1937)	MS
D	<i>U. annulipes</i> (H. Milne Edwards, 1852)	SMS
+ D	<i>U. triangularis</i> (A. Milne Edwards, 1873)	MS

SCOPIMERINAE Alcock, 1900

+ D	<i>Scopimera pilula</i> Kemp, 1919	SS
+ D	<i>S. proxima</i> Kemp, 1919	SS
+ D	<i>Dotilla myctiroides</i> (H. Milne Edwards, 1852)	SMS
+	<i>Dotillopsis brevitarsis</i> (de Man, 1888)	MS-M
+ D	<i>Ilyoplax orientalis</i> (de Man, 1888)	MS-M
+ D	<i>I. obliquus</i> Tweedie, 1935	MS-M
D	<i>I. lingulatus</i> (Rathbun, 1909)	MS-M
+ D	<i>I. punctatus</i> Tweedie, 1935	MS-M
+ D	<i>I. delsmani</i> de Man, 1926	MS-M
+ D	<i>I. integer</i> (Tesh, 1918)	soft rocks

CAMPTANDRINAE Stimpson, 1858

+ D	<i>Leipocten sordidulum</i> Kemp, 1915	MS
+ D	<i>Tylodiplax tetratylophora</i> de Man, 1895	MS-M
+ D	<i>Paracleistostoma microcheirum</i> Tweedie, 1937	MS
+	<i>P. depressum</i> de Man, 1895	MS

MACROPHALMINAE Dana, 1852

+ D	<i>Macrophthalmus transversus</i> (Latreille, 1817)	SMS
	<i>M. verreauxi</i> H. Milne Edwards, 1848	SMS
+ D	<i>M. brevis</i> (Herbst, 1804)	SMS
+ D	<i>M. laevimanus</i> H. Milne Edwards, 1852	SMS
+ D	<i>M. parvimanus</i> Guerin, 1834	SMS
D	<i>M. convexus</i> Stimpson, 1858	SMS
+ D	<i>M. (Mareotis) tomentosus</i> Souleyet, 1841	MS
+ D	<i>M. (Mareotis) definitus</i> Adams and White, 1848	MS
+ D	<i>M. (Mareotis) pacificus</i> Dana, 1851	MS

+ D *M. (Mopsocarsinus) bosci* Audouin and Savigny, 1825 SMS

GRAPSIDAE Dana, 1852

GRAPSINAE Dana, 1852

D *Grapsus tenuicristatus* Herbst, 1793 RS
+ *Pachygrapsus planifrons* de Man, 1888 RS
+ D *P. minutus* A. Milne Edwards, 1873 RS
D *Metopograpsus latifrons* (White, 1847) MW
+ D *M. thukuar* (Owen, 1839) MW
+ D *M. oceanicus* (Jacquinot, 1853)
+ D *M. quadridentatus* Stimpson, 1858

VARUNINAE Alcock, 1900

+ D *Ptychognathus barbatus* (A. Milne Edwards, 1873)
Varuna litterata (F., 1798)

SESARMINAE Dana, 1852

+ D *Nanosesarma andersoni* (de Man, 1887) MW
+ *N. batavicum* (Moreira, 1903) MW
D *N. minutum* (de Man, 1887) RS
+ *N. pontianacensis* (de Man, 1895)
Neopisesarma mederi (H. Milne Edwards, 1854) M
+ D *N. singaporensis* Tweedie, 1940 M
+ D *N. versicolor* (Tweedie, 1940) M
+ D *N. palawanensis* (Rathbun, 1914) M
+ D *Chiromanthes dussumieri* (H. Milne Edwards, 1853) M
+ D *C. onychophorum* (de Man, 1895) M
D *C. haswelli* (de Man, 1887) M
+ *C. eumolpe* (de Man, 1895) M
+ D *C. darwinensis* (Campbell, 1967) M
+ *C. indiarum* (de Man, 1902) M
+ *Neosarmatium meinerti* (de Man, 1887) M
+ *Sesarmoides kraussi* (de Man, 1887) M
D *Parasesarma plicatum* (Latreille, 1806) M-H
+ *P. lepidum* (Tweedie, 1950) M
+ D *P. melissum* de Man, 1887 M
+ D *Clistocoeloma merguensis* de Man, 1888 M
+ D *Metaplax crenulata* (Gerstaecker, 1856) MS
+ D *M. distinctus* H. Milne Edwards, 1852 MS
+ D *M. elegans* de Man, 1888 MS

PLAGUSIINAE Dana, 1852

+ *Percnon planissimum* (Herbst, 1804) RS

GEGARCINIDAE Dana, 1852

+	<i>Cardisoma carnifex</i> (Herbst, 1794)	T
+	<i>Gegarcoidea humei</i> (Wood-Mason, 1873)	T

HAPALOCARCINIDAE Calman, 1900

+	D	<i>Cryptochirus coralliodytes</i> Heller, 1861	CR
+	D	<i>Pseudocryptochirus crescentus</i> (Edmonson, 1925)	CR
+		<i>P. sheni</i> (Fize and Serene, 1955)	CR
+	D	<i>Troglocarcinus heimi</i> Fize and Serene, 1955	CR
+		<i>Favicola rugosum</i> (Edmonson, 1933)	CR

REFERENCES

- BARNES, R.S.K., 1970, The species of *Macrophthalmus* (Crustacea, Brachyura) in the collections of the British Museum (Natural History). *Bull. Br. Mus. Nat. Hist. (Zool)* **20**(7) : 203-251.
- CAMPBELL, B.M. and STEPHENSON, W., 1970, The sublittoral Brachyura (Crustacea, Decapoda) of Moreton Bay. *Mem. Qd. Mus.* **15**(4) : 235-301.
- CHUANG, S.H., 1961, *On Malayan shores*. Muwu Shosa, Singapore.
- MACNAE, W., 1968, A general account of the fauna and flora of mangrove swamps and forests in the Indo-West Pacific Region, *Adv. mar. Biol.*, **6** : 73-270.
- MACNAE, W. and KALK, M., 1969, *A natural history of Ishaka Island, Moçambique*. Witwatersrand Univ. Press, Johannesburg.
- RATHBUN, M.J., 1910, The Danish Expedition to Siam, 1890-1907. 5. The Brachyura, *K. Danske Vidensk. Selsk. Skr. Serie* **7**(4) : 303-67.
- SAKAI, T., 1965, *The Crabs of Sagami Bay*. Maruzen, Tokyo.
- SERENE, R., 1966, Notes on the Brachyura of the marine fauna of Thailand. *Research project no. 18/1 Appl. Sci. Res. Crop. of Thailand.*, Bangkok.
- SERENE, R., 1968, The Brachyura of the Indo-West Pacific region. *Singapore Nat. Acad. Sci. Special publication* **1** : 33-112.
- SERENE, R., 1974, Keys for the Brachyuran fauna of the mangrove of the Indo-Pacific region. *Phuket Mar. Biol. Center Res. Bull.* **3**.
- SERENE, R. and SOH, C.L., 1967, Note on the five largest species of *Sesarma* crabs in Malaysia and Singapore. *Malay. Nat. J.* **20**(1-2) : 27-30.
- SHEN, CHIA-JUI, 1937, Notes on a collection of swimming crabs (Portunidae) from Singapore. *Bull. Raffles Mus.* **13** : 96-139.

TWEEDIE, M.W.F., 1937, On the crabs of the family Ocypodidae in the collection of the Raffles Museum. *Bull. Raffles Mus.* **13** : 140-170.

TWEEDIE, M.W.F., 1950, The fauna of the Cocos-Keeling Islands, Brachyura and Stomatopoda. *Bull. Raffles Mus.* **22** : 105-148.

TWEEDIE, M.W.F., 1950, Notes on Grapsoid crabs from the Raffles Museum. *Bull. Raffles Mus.* **23** : 310-316.

(Manuscript received October 11, 1973)