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## **A Brief Review on Marine Shelled Mollusca (Gastropoda and Bivalvia) Record in Malaysia**

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### **ABSTRACT**

Though marine science has received much attention in Malaysia in the recent years, marine mollusc studies are still overseen by many researchers. The lacks of basic information such as diversity data and species check list make it impossible to assess the rate of population lost among marine molluscs. To date, no published information on the actual number of marine shelled molluscan species exist in Malaysian waters. The single largest record and collection come from Purchon collected between 1973 and 1974. A large collection of marine molluscs was made along the coastal line of West Malaysia and Purchon found 301 species (52 families) of marine gastropods and 154 species (37 families) of marine bivalves over a 14 months period. However, little progress has been made since then. At present, only 581 species marine gastropods and bivalves are documented (384 species from class Gastropoda and 197 species from class Bivalvia) in Malaysian waters from various sources. Some data are unpublished and some remained as internal circulation document. The current researches on marine mollusc diversity are incomprehensive and focus only on small geographical area and limited habitat. Besides, central depository facilities such as a natural history museum where researchers could deposit their collections and hold records for the diversity of marine shelled mollusc in Malaysia are still unavailable. These shortcomings and the lack of trained taxonomist have contributed to the weak database of marine molluscs studies.

**Key words:** Marine mollusc, diversity

### **INTRODUCTION**

Marine mollusc is a diverse group of invertebrate including Class Gastropoda, Bivalvia, Polyplacophora and Cephalopoda. It can be found in almost any typical marine and freshwater ecosystems. The earliest writings on the natural history of mollusc are the fragmentary writings of Aristotle in the fourth century before the Christian era (Dance, 1986). Although Aristotle's *Natural history of animals* was not well organized and not intended to be a descriptive zoology, but his writings on the biology and morphology continued to inspire generations after him until the Curious Age in the 16th century.

In Malaysia, mollusc taxonomy studies started from the study of land snails by the British in pre-independence era. Explorers rushed to the hills, limestone caves and forest to record their findings and some of their early works were published in The Bulletin of the Raffles Museum (now The Raffles Bulletin of Zoology) between 1930's to 1960's (Robson, 1932; Laidlaw, 1932, 1937, 1940; Van Jutting, 1949, 1950, 1952; Purchon and Enoch, 1954; Tweedie, 1961; Pathansali, 1963; Berry, 1965).

One of the first marine mollusc diversity surveys in Malaysia was conducted on the east and west coast of Peninsular Malaysia and Singapore (Purchon and Purchon, 1981; Way and Purchon, 1981; Morris and Purchon, 1981). Purchon conducted a 14-month field trip collecting specimens from 40 stations around Peninsular Malaysia. The collection gathered by him from various sources were sent to Britain and identified by the curators of British Natural History Museum, London. Specimens of 301 species from class Gastropoda and 154 species from class Bivalvia were deposited at the British Natural History Museum as museum type collection.

**Current status:** The marine mollusc diversity study in Malaysia is normally carried out as a side product of other projects due to the lack of direct funding. Researchers' record was mostly derived from what they seen and collected during other parallel field survey. Table 1 shows a significant difference in specimens found between an intensive diversity study (Purchon and Purchon, 1981) and other diversity studies in Malaysia (Arshad *et al.*, 2001; Kee Alfian *et al.*, 2005; Tan *et al.*, 2008; Wong *et al.*, 2008; Zaidi *et al.*, 2008). Most of the recent studies were done in shorter period and focus on specific area and ecosystem which are less intensive and extensive as compared to Purchon and Purchon, 1981. Besides *in situ* visual identification, some specimens were brought back to the laboratory for taxonomic confirmation. Unlike Purchon and Purchon, 1981, lack of proper documentation made it impossible for specimen re-examination and confirmation on its identification. In addition, there are still various marine ecosystems such as mangrove and mudflat that were not intensively surveyed.

Through our recent efforts on the collection of scientific writings and compilation of marine shelled mollusca in Malaysia, a total of 581 species is listed (384 species from class Gastropoda and 206 species from class Bivalvia). The validity of each species was check with World Register of Marine Species (WoRMS), SeaLifeBase Portal and The Taiwan Malacofauna Database. The complete species list is displayed in Table 2. However, due to the lack of proper specimen storage and documentation, some of the specimens are no available for reexamination. Most of the collection

Table 1: Comparison of data between Purchon and Purchon, 1981 and other diversity studies conducted by local scientist recently

Location	Substrates	Results	References
East and west coasts of Malaysia	Intertidal, sandy beach, rocky shore, mangrove, shallow reef, shallow and deep sandy bottom, trawler 'trash fish'	Gastropod 301 species (52 families) Bivalve 154 species (37)	Purchon and Purchon (1981)
Pulau Redang, Terengganu	Intertidal	Gastropod 48 species (15) Bivalve 9 species (6)	Aziz <i>et al.</i> (2001)
Teluk Tekek, Pulau Tioman, Pahang	Coral Reefs, Rubbles and sand	Gastropod 15 species (12) Bivalve 12 species (7) Nudibranch 6 species (2)	Kee Alfian <i>et al.</i> (2005) <sup>5</sup>
Southwest Pulau Tioman, Pahang	Coral Reefs, Rubbles and sand	Gastropod 24 species (13) Bivalve 15 species (11) Nudibranch 12 species (5)	Wong <i>et al.</i> (2008)
Pulau Aur, Johor	Coral Reefs	Gastropod 9 species (7) Bivalve 13 species (6)	Tan <i>et al.</i> (2008) <sup>10</sup>
Merambong Shoal, Johor	Seagrass bed	Gastropod 27 species (12) Bivalve 23 species (9)	Zaidi <i>et al.</i> (2008) <sup>16</sup>
Pulau Mabul, Sabah	Coral Reefs	Gastropod and Bivalves 89 species (30)	*Unpublished data

\*Unpublished data collected by author

Table 2: List of marine shelled mollusc species in Malaysia.

Class	Subclass	Superfamily	Family	Species	Name in original text	References
Gastropoda	Patellogastropoda	Patelloidea	Patellidae	<i>Cellana radiata</i>	(Born 1778)	Way and Purchon (1981) <sup>15</sup>
				<i>Cellana radiata radiata</i>	(Bor 1778)	Way and Purchon (1981) <sup>15</sup>
				<i>Cellana testudinaria</i>	(L. 1758)	Way and Purchon (1981) <sup>15</sup>
				<i>Patella flexuosa</i>	Quoy and Gaimard 1834	Way and Purchon (1981) <sup>15</sup>
		Lottoidea	Lottiidae	<i>Patelloida saccharina</i>	(L. 1758)	Way and Purchon (1981) <sup>15</sup>
Vetigastropoda	Haliotoidea	Haliotoidea	Haliotidae	<i>Haliotis ovina</i>	Gmelin 1791	Arshad <i>et al.</i> (2001)
				<i>Haliotis varia</i>	L. 1758	Way and Purchon (1981) <sup>15</sup>
		Fissurelloidea	Fissurellidae	<i>Diodora singaporensis</i>	(Reeve 1850)	Way and Purchon (1981) <sup>15</sup>
		Trochoidea	Trochidae	<i>Chrysostoma paradoxum</i>	(Born 1780)	Way and Purchon (1981) <sup>15</sup>
				<i>Clanculus atropurpureus</i>	(Gould 1849)	Way and Purchon (1981) <sup>15</sup>
				<i>Clanculus margaritarius</i>	(Philippi 1847)	Way and Purchon (1981) <sup>15</sup>
				<i>Euchelus atratus</i>	(Gmelin 1791)	Way and Purchon (1981) <sup>15</sup>
				<i>Euchelus quadricarinata</i>	(Holten 1803)	Arshad <i>et al.</i> (2001)
				<i>Euchelus tricingulatus</i>	(A. Adams 1851)	Way and Purchon (1981) <sup>15</sup>
				<i>Monilae callifera</i>	Lamarck 1840	Arshad <i>et al.</i> (2001)
				<i>Monodonta labio</i>	(L. 1758)	Way and Purchon (1981) <sup>15</sup>
				<i>Stomatella auricula</i>	(Lamarck 1816)	Arshad <i>et al.</i> (2001), Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Astraea heliotropium</i>	(Martyn 1784)	Way and Purchon (1981) <sup>15</sup>
				<i>Astraea cf. petrosum</i>	(Marten 1792)	Personal collections 17
				<i>Astraea rhodostoma</i>	Lamarck 1822	Way and Purchon (1981) <sup>15</sup>
				<i>Astridium calcar</i>	(L. 1758)	Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Lunella cinerea</i>	(Born 1778)	Way and Purchon (1981) <sup>15</sup>
				<i>Tectus pyramis</i>	(Born 1778)	Way and Purchon (1981) <sup>15</sup> , Personal collections 17
				<i>Turbo (Lunatic) marmoratus</i>	L. 1758	Arshad <i>et al.</i> (2001) and Way and Purchon (1981) <sup>15</sup>
				<i>Turbo (Marmorostoma) argyrostomus</i>	L. 1758	Way and Purchon (1981) <sup>15</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Turbo (Marmarostoma) bruneus</i> (Röding 1791)	<i>Turbo bruneus</i> (Röding 1798)	Arshad <i>et al.</i> (2001), Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Turbo (Marmarostoma) chrysostrabus</i> (L. 1758)	<i>Turbo chrysostrabus</i> (L. 1758)	Way and Purchon (1981) <sup>15</sup> , Personal collections 17
				<i>Turbo (Turbo) petholatus</i> L. 1758	<i>Turbo petholatus</i> L. 1758	Kee Alfian <i>et al.</i> (2005) Personal collections 17
			Trochidae	<i>Gibbula cineraria</i> (L. 1758)	<i>Trochus lineatus</i> da Costa 1778	Arshad <i>et al.</i> (2001)
				<i>Trochus maculatus</i> L. 1758		Jambari <i>et al.</i> (2000), Way and Purchon (1981) <sup>15</sup> Zaidi <i>et al.</i> (2008) <sup>16</sup> and Personal collections 17
				<i>Trochus niloticus</i> L. 1767		Arshad <i>et al.</i> (2001) Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Umbonium vestiarium</i> (L. 1758)		Arshad <i>et al.</i> (2001) and Way and Purchon (1981) <sup>15</sup>
		Angarioidea	Angariidae	<i>Angaria delphinus</i> (L. 1758)		Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
Neritimorpha		Neritoidea	Neritidae	<i>Cithon oudamensis</i> (Lesson 1831)		Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Dostia violacea</i> (Gmelin 1791)		Way and Purchon (1981) <sup>15</sup>
				<i>Nerita albicilla</i> L. 1758		Arshad <i>et al.</i> (2001), Jambari <i>et al.</i> (2000), Kee Alfian <i>et al.</i> (2005) and Way and Purchon (1981) <sup>15</sup>
				<i>Nerita articulata</i>		Jambari <i>et al.</i> (2000)
				<i>Nerita balteata</i>		Arshad <i>et al.</i> (2001)
				<i>Nerita birmanica</i>		Berry (1972), Lim (1963) <sup>7</sup> and Sasekumar (1974) <sup>11</sup>
				<i>Nerita chamaeleon</i> L. 1758		Arshad <i>et al.</i> (2001), Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Nerita costata</i> Gmelin 1791		Way and Purchon (1981) <sup>15</sup>
				<i>Nerita lineata</i> Gmelin 1791		Way and Purchon (1981) <sup>15</sup>
				<i>Nerita planospira</i> Anton 1839		Way and Purchon (1981) <sup>15</sup>
				<i>Nerita polita</i> L. 1758		Arshad <i>et al.</i> (2001), Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Nerita reticulata</i> Karsten 1789		Way and Purchon (1981) <sup>15</sup>
				<i>Nerita squamulata</i> Le Guillou 1841		Jambari <i>et al.</i> (2000)
				<i>Nerita undata</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Neritina violacea</i> (Gmelin 1791)		Arshad <i>et al.</i> (2001) and Jambari <i>et al.</i> (2000)
				<i>Neritina ziczac</i> Lamarek 1822		Way and Purchon (1981) <sup>15</sup>
Caenogastropoda		Cerithioidea	Turritellidae	<i>Turritella duplicata</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Turritella exoleta</i> (L. 1758)		Personal collections 17
				<i>Turritella terebra</i>		Way and Purchon (1981) <sup>15</sup>
		Cerithioidea	Moduliidae	<i>Modulus tectum</i> (Gmelin 1791)		Personal collections 17
			Batillariidae	<i>Batillaria zonatis</i> (Bruguière 1792)		Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
		Cerithioidea	Planaxidae	<i>Planaxis sulcatus</i> (Born 1791)		Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Sermyla riqueti</i> (Grateloup 1840)		Way and Purchon (1981) <sup>15</sup>
		Potamididae		<i>Terebralia sulcata</i> Born 1778		Lim (1963) <sup>7</sup>
				<i>Telescopium telescopium</i> (L. 1758)		Berry (1972), Jambari <i>et al.</i> (2000), Lim (1963) <sup>7</sup> , Sasekumar (1974) <sup>11</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Telescopium</i> sp.		Sasekumar (1974) <sup>11</sup>
				<i>Cerithidea cingulata</i> (Gmelin 1791)		Arshad <i>et al.</i> (2001), Berry (1972), Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Cerithidea obtusa</i> (Lamarck 1822)		Jambari <i>et al.</i> (2000), Lim (1963) <sup>7</sup> , Sasekumar (1974) <sup>11</sup> and Way and Purchon (1981) <sup>15</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Cerithidea ornata</i> (A. Adams 1854)		Berry (1972) and Jambari <i>et al.</i> (2000)
				<i>Cerithiopsilla djadjariensis</i> (Martin 1899)		Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
	Cerithioidea		Cerithiidae	<i>Cerithium breviculum</i> Sowerby 1834		Way and Purchon (1981) <sup>15</sup>
				<i>Cerithium chemnitzianum</i> (Filsbry 1901)		Way and Purchon (1981) <sup>15</sup>
				<i>Cerithium columna</i> Sowerby 1834		Way and Purchon (1981) <sup>15</sup>
				<i>Cerithium corallium</i> Kiener 1841		Lim (1963) <sup>7</sup>
				<i>Cerithium echinatum</i> Lamarek 1822		Tan <i>et al.</i> (2008) <sup>14</sup>
				<i>Cerithium cf. moniliferus</i> Kiener 1842		Way and Purchon (1981) <sup>15</sup>
				<i>Cerithium nodulosum</i> Bruguiere 1792		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cerithium obeliscus</i> Bruguiere		Personal collections 17
				<i>Cerithium obesum</i> Sowerby 1855		Way and Purchon (1981) <sup>15</sup>
				<i>Cerithium patulum</i> Sowerby 1855		Lim (1963) <sup>7</sup>
				<i>Cerithium trailii</i> Sowerby 1855		Way and Purchon (1981) <sup>15</sup>
				<i>Cerithium zonatus</i> Wood 1828		Way and Purchon (1981) <sup>15</sup>
				<i>Clypeomorus batillariaeformis</i>		Jambari <i>et al.</i> (2000) and Personal collections 17
				Habe and Kosuge 1966		Personal collections 17
				<i>Clypeomorus bifasciata</i> (Sowerby 1855)		Jambari <i>et al.</i> (2000)
				<i>Clypeomorus pellucida</i>		Jambari <i>et al.</i> (2000)
				<i>Faunus ater</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Rhinoclavis aspera</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Rhinoclavis fasciata</i> (Bruguiere 1792)	<i>Rhinoclavis fasciatus</i> (Bruguiere 1792)	Way and Purchon (1981) <sup>15</sup>
				<i>Rhinoclavis sinensis</i> (Gmelin 1791)		Way and Purchon (1981) <sup>15</sup>
				<i>Rhinoclavis vertagus</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
Littorinacea		Littorinidae		<i>Echinolittorina angustior</i> (Mörch 1876)	<i>Littorina carinifera</i> Menke 1830	Arshad <i>et al.</i> (2001), Berry (1972), Jambari <i>et al.</i> (2000), Lim (1963) <sup>7</sup> , Rosewater (1970) <sup>9</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Littoraria articulata</i> (Philippi 1846)		Jambari <i>et al.</i> (2000)
				<i>Littoraria pallescens</i> (Philippi 1846)		Jambari <i>et al.</i> (2000)

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Littoraria scabra</i> L. 1758		Arshad <i>et al.</i> (2001), Berry (1972), Rosewater (1970) <sup>9</sup> and Sasekumar (1974) <sup>11</sup>
				<i>Littoraria scabra scabra</i> L. 1758	<i>Littorina scabra scabra</i> L. 1758	Way and Purchon (1981) <sup>15</sup>
				<i>Littoraria undulata</i> (Gray 1839)		Arshad <i>et al.</i> (2001), Berry (1972), Jambari <i>et al.</i> (2000) <sup>7</sup> , Rosewater (19709), Sasekumar (1974) <sup>11</sup> , Way and Purchon (1981) <sup>15</sup>
				<i>Littorina intermedia</i> Philippi 1847	<i>Littorina intermedia</i>	Jambari <i>et al.</i> (2000)
				<i>Littorina melanostoma</i> Gray 1839		Arshad <i>et al.</i> (2001), Berry (1972), Jambari <i>et al.</i> (2000), Lim (1963) <sup>8</sup> , Rosewater (1970) <sup>9</sup> , Sasekumar (1974) <sup>11</sup> , Way and Purchon (1981) <sup>15</sup>
				<i>Nodilittorina (Granulittorina) vidua</i> (Gould 1859)		Jambari <i>et al.</i> (2000)
				<i>Nodilittorina leucosticta biangulata</i> (von Martens 1897)		Rosewater (1970) <sup>9</sup>
				<i>Nodilittorina millegrana</i> (Philippi 1848)		Rosewater (1970) <sup>9</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Nodilittorina pyramidalis</i> (Q and G. 1833)	Way and Purchon (1981) <sup>15</sup>	
				<i>Nodilittorina pyramidalis pyramidalis</i> (Q and G. 1833)		Rosewater (1970) <sup>9</sup>
				<i>Nodilittorina trochooides</i> (Gray 1839)		Jambari <i>et al.</i> (2000)
				<i>Peasella</i> sp.		Jambari <i>et al.</i> (2000)
				<i>Tectarius pogodus</i> (L. 1758)		Personal collections 17
	Epitonioidae	Epitoniidae		<i>Epitonium scalare</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Epitonium</i> sp.		Way and Purchon (1981) <sup>15</sup>
		Janthinidae		<i>Janthina globosa</i> Swainson 1822	<i>Janthina prolongata</i> Blainville 1822	Way and Purchon (1981) <sup>15</sup>
	Vanikoroidea	Vanikoridae		<i>Vanikoro cancellata</i> Reeve		Way and Purchon (1981) <sup>15</sup>
				<i>Vanikoro ligata</i> (Récluz 1843)		Way and Purchon (1981) <sup>15</sup>



Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
	Calyptraeoidea	Calyptraeidae	Calyptraeidae	<i>Calyptraea extintorium</i> (Lamarck 1822)		Way and Purehon (1981) <sup>15</sup>
				<i>Crepidula walshi</i> Reeve 1859		Way and Purehon (1981) <sup>15</sup>
	Xenophoroidea	Xenophoridae	Xenophoridae	<i>Xenophora solaris</i> (L. 1764)	<i>Haliphoebus solaris</i> (L. 1767)	Way and Purehon (1981) <sup>15</sup>
				<i>Tugurium indicum</i> (Reeve 1842)		Way and Purehon (1981) <sup>15</sup>
	Stromboidea	Strombidae	Strombidae	<i>Lambis chiragra</i> (L. 1758)	<i>Lambis chiragra chiragra</i> (L. 1758)	Tan <i>et al.</i> (2008) <sup>14</sup> and Way and Purehon (1981) <sup>15</sup>
				<i>Lambis lambis</i> (L. 1758)		Kee Alfian <i>et al.</i> (2006), Way and Purehon (1981) <sup>15</sup> and Personal collections 17
				<i>Lambis scorpius</i> (L. 1758)		Personal collections 17
				<i>Lambis scorpius indomaris</i> Abbott 1961		Way and Purehon (1981) <sup>15</sup>
				<i>Strombus dilatatus</i> Swainson 1821	<i>Strombus dilatatus dilatatus</i> Swainson 1821	Way and Purehon (1981) <sup>15</sup>
				<i>Strombus aurisdianae aurisdianae</i> L. 1758		Way and Purehon (1981) <sup>15</sup>
				<i>Strombus canarium</i> L. 1758		Way and Purehon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Strombus decorus decorus</i> (Röding 1798)		Way and Purehon (1981) <sup>15</sup>
				<i>Strombus epidromis</i> L. 1758		Way and Purehon (1981) <sup>15</sup>
				<i>Strombus labiatus</i> Röding 1798		Arshad <i>et al.</i> (2001)
				<i>Strombus lentiginosus</i> L. 1758		Personal collections 17
				<i>Strombus luhuanus</i> L. 1758		Way and Purehon (1981) <sup>15</sup>
				<i>Strombus marginatus</i> L. 1758	<i>Strombus marginatus</i> <i>marginatus</i> L. 1758 <sup>15</sup>	Way and Purehon (1981) <sup>15</sup>
				<i>Strombus marginatus</i> <i>robustus</i> Sowerby 1874 <sup>15,16</sup>		Way and Purehon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Strombus marginatus succinctus</i> <sup>16</sup>		Zaidi <i>et al.</i> , 2008 <sup>16</sup>
				<i>Strombus urceus</i> L. 1758		Way and Purehon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Strombus variabilis</i> Swainson 1820	<i>Strombus variabilis variabilis</i> Swainson 1820 <sup>15</sup>	Arshad <i>et al.</i> (2001) and Way and Purehon (1981) <sup>15</sup>
				<i>Strombus vittatus</i> L. 1758		Arshad <i>et al.</i> (2001)
				<i>Strombus vittatus vittatus</i> L. 1758		Way and Purehon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Terebellum terebellum</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Tibia fusus</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
	Cypraeoidea	Cypraeidae		<i>Cypraea annulus</i> L. 1758		Way and Purchon (1981) <sup>15</sup> , Zaidi <i>et al.</i> (2008) <sup>16</sup> and Personal collections 17
				<i>Cypraea arabica immanis</i> (Schilder and Schilder)		Personal collections 17
				<i>Cypraea arabica</i> L. 1758		Arshad <i>et al.</i> (2001) and Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea argus</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea asellus</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea bistrinotata</i> Schilder and Schilder 1937		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea caputserpentis</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea carneola</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea caurica</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea cribraria</i> L. 1758		Tan <i>et al.</i> (2008) <sup>14</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea cylindrica</i> Born 1778		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea erosa</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea erronea</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea helvola</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea hirundo</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea isabella</i> L. 1758		Arshad <i>et al.</i> (2001) and Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea kieneri</i> Hidalgo 1906		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea lamarchii</i> Gray 1825		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea lynx</i> L. 1758		Way and Purchon (1981) <sup>15</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Cypraea mappa</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea mauritiana</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea militaris</i> Gmelin 1790		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea moneta</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea nucleus</i> L. 1758		Personal collections 17
				<i>Cypraea onyx</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Cypraea ovum</i> Gmelin 1791		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Cypraea pulchra</i> Gray 1824		Personal collections 17
				<i>Cypraea pyriformis</i> Gray 1824		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea quadrimaculata</i> Gray 1824		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea talpa</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea tigris</i> L. 1758		Arshad <i>et al.</i> (2001), Tan <i>et al.</i> (2008) <sup>14</sup> , Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Cypraea ventriculus</i> Lamarck 1810		Personal collections 17
				<i>Cypraea vitellus</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Cypraea waltheri</i> Sowerby 1832		Way and Purchon (1981) <sup>15</sup>
	Velutinoidea	Triviidae		<i>Trivia oryza</i> (Lamarck 1810)		Way and Purchon (1981) <sup>15</sup>
	Cypraeoidea	Ovulidae		<i>Ovula ovum</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Pseudosimnia</i> sp.		Tan <i>et al.</i> (2008) <sup>14</sup>
				<i>Volva volva</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
	Naticoidae	Naticidae		<i>Eunaticina papilla</i> (Gmelin 1791)		Way and Purchon (1981) <sup>15</sup>
				<i>Natica antoni</i> Philippi 1851		Way and Purchon (1981) <sup>15</sup>
				<i>Natica euzona</i> Récluz 1844		Way and Purchon (1981) <sup>15</sup>
				<i>Natica lineata</i> (Röding 1798)		Arshad <i>et al.</i> (2001) and Way and Purchon (1981) <sup>15</sup>
				<i>Natica maculosa</i> Lamarck 1822		Way and Purchon (1981) <sup>15</sup>
				<i>Natica tigrina</i> (Röding 1798)		Arshad <i>et al.</i> (2001), Jambhari <i>et al.</i> (2000) and Zaidi <i>et al.</i> (2008) <sup>16</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Natica vitellus</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Notochelis gualteriana</i> Récluz 1844		Jamhari <i>et al.</i> (2000)
				<i>Policines cf. melanostomoides</i> (Q. and G. 1833)		Way and Purchon (1981) <sup>15</sup>
				<i>Policines mammilla</i> (L. 1758)	<i>Policines tumidus</i> (Swainson 1840)	Jamhari <i>et al.</i> (2000), Kee Alfian <i>et al.</i> (2005) and Way and Purchon (1981) <sup>15</sup>
				<i>Policines melanostomus</i> (Gmelin 1791)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Policines albumen</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Policines didyma</i> (Röding 1798)		Way and Purchon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Policines mammatus</i> (Röding 1798)		Way and Purchon (1981) <sup>15</sup>
				<i>Policines melanostomoides</i> (Q. and G. 1833)		Way and Purchon (1981) <sup>15</sup>
				<i>Policines povisianus</i> (Récluz 1844)		Way and Purchon (1981) <sup>15</sup>
				<i>Policines pyriformis</i> (Récluz 1844)		Arshad <i>et al.</i> (2001)
				<i>Policines</i> sp.		Way and Purchon (1981) <sup>15</sup>
				<i>Simum neritoideum</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Simum planulatus</i> (Récluz, 1843)		Way and Purchon (1981) <sup>15</sup>
				<i>Cassis cornuta</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
		Tonnoidea	Cassidae			
				<i>Phalium areola</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Phalium bandatum</i> (Perry 1811)		Way and Purchon (1981) <sup>15</sup>
				<i>Phalium bisulcatum</i> (Schuber and Wagner 1829)		Way and Purchon (1981) <sup>15</sup>
				<i>Phalium glaucum</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
			Bursidae	<i>Bufo naria rana</i> (L. 1758)	<i>Bursa rana</i> (L. 1758)	Way and Purchon (1981) <sup>15</sup>
				<i>Bursa granularis</i> (Röding, 1798)		Personal collections 17
				<i>Bursa lamarkii</i> Deshayes		Personal collections 17
				<i>Bursa lampas</i> Linnaeus	<i>Bursa rubeta</i> (L. 1758)	Personal collections 17
				<i>Colubrellina granularis</i> (Röding 1798)		Way and Purchon (1981) <sup>15</sup>
			Ranelidae	<i>Cymatium (Septa) pileare</i> (L. 1758)	<i>Cymatium pileare</i> (L. 1758)	Personal collections 17
				<i>Cymatium flaveolum</i> (Röding 1798)		Personal collections 17
				<i>Cymatium hepaticum</i> (Röding 1798)		Personal collections 17

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Cymatium lotorium</i> (L. 1758)		Personal collections 17
				<i>Cymatium nicobaricum</i> (Röding 1798)		Personal collections 17
				<i>Cymatium tenuiliratum</i> (Lischke 1873)		Personal collections 17
				<i>Cymatium vespaceum</i> Lamarek 1822		Personal collections 17
				<i>Distorsio decussata</i> (Valenciennes 1832)		Personal collections 17
				<i>Distorsio reticulata</i> (Röding 1798)		Way and Purrehon (1981) <sup>15</sup>
				<i>Gyrineum natator</i> (Röding 1798)		Jamhari <i>et al.</i> (2000) and Way and Purrehon (1981) <sup>15</sup>
				<i>Gyrineum pussillum</i> (Broderip 1833)		Personal collections 17
				<i>Ranularia caudata</i> Gmelin	<i>Ranularia caudatum</i> (Gmelin 1791)	Way and Purrehon (1981) <sup>15</sup>
				<i>Ranularia exilis</i> (Reeve, 1844)		Way and Purrehon (1981) <sup>15</sup>
				<i>Septa pileare</i> (L. 1758)		Way and Purrehon (1981) <sup>15</sup>
			Tonnidae	<i>Tonna dolium</i> (L. 1758)		Way and Purrehon (1981) <sup>15</sup>
				<i>Tonna olearium</i> Bruguière		Way and Purrehon (1981) <sup>15</sup>
				<i>Tonna sulcosa</i> (Born 1778)		Way and Purrehon (1981) <sup>15</sup>
				<i>Tonna tessellata</i> (Lamarck 1816)		Way and Purrehon (1981) <sup>15</sup>
			Ficoidea	<i>Ficus ficus</i> (Linnaeus, C. 1758)	<i>Ficus ficoides</i> (Lamarck 1822)	Way and Purrehon (1981) <sup>15</sup>
				<i>Ficus gracilis</i> (Sowerby, G. B. (I) 1825)		Way and Purrehon (1981) <sup>15</sup>
			Muricoidea	<i>Chicoreus (Rhizophorimurex) capucinus</i> Lamarek 1822		Berry (1972), Jamhari <i>et al.</i> (2000) and Sasakumar (1974) <sup>11</sup>
				<i>Chicoreus (Triplex) brunneus</i> (Link 1807)		Jamhari <i>et al.</i> (2000) <sup>17</sup>
				<i>Chicoreus (Triplex) insularum</i> (Eilsbry 1921)		Tan <i>et al.</i> (2008) <sup>14</sup>
				<i>Chicoreus (Triplex) torrefactus</i> (Sowerby 1841)		Way and Purrehon (1981) <sup>15</sup>
				<i>Chicoreus inflatus</i> (Lamarck 1822)	<i>Chicoreus ramosus</i> (L. 1758)	Way and Purrehon (1981) <sup>15</sup>
				<i>Cronia (Cronia) amygdala</i> (Kiener 1835)		Way and Purrehon (1981) <sup>15</sup>
				<i>Cronia fiseella</i> (Gmelin 1791)		Way and Purrehon (1981) <sup>15</sup>
				<i>Drupa (Drupina) glossularia</i> Röding 1798	<i>Drupa grossularia</i>	Personal collections 17
				<i>Drupa musiva</i>		Jamhari <i>et al.</i> (2000)
				<i>Drupa ochrostoma</i> (de Blainville 1832)	<i>Mancinella mancinella</i> (L. 1758)	Way and Purrehon (1981) <sup>15</sup>
				<i>Drupa ricinus</i> (L. 1758)		Personal collections 17
				<i>Drupa ricinus ricinus</i> (L. 1758)	<i>Drupa rubusidaeus</i>	Personal collections 17

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Drupella cornus</i> (Röding 1798)		Personal collections 17
				<i>Drupella rugosa</i> (Born 1778)		Kee Alfian <i>et al.</i> (2005), Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Ergalatax margariticola</i> (Broderip, in Broderip and Sowerby 1833)	<i>Cronia margariticola</i>	Jamبارi <i>et al.</i> (2000)
				<i>Haustellum haustellum</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Moricodrupa funiculatus</i> (Wood 1828)		Way and Purchon (1981) <sup>15</sup>
				<i>Morula (Habromorula) spinosa</i> (H. and A. Adams 1853)		Arshad <i>et al.</i> (2001), Kee Alfian <i>et al.</i> (2005) <sup>5</sup> , Tan <i>et al.</i> (2008) <sup>14</sup> , Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Morula (Morula) musiva</i> (Kiener, 1835)		Jamبارi <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Morula squamosa</i> Pease 1867	<i>Thais squamosa</i> <sup>4</sup>	Arshad <i>et al.</i> (2001) and Jamبارi <i>et al.</i> (2000)
				<i>Murex cf. trapa</i> Röding 1798		Way and Purchon (1981) <sup>15</sup>
				<i>Murex occa</i> Sowerby 1834		Way and Purchon (1981) <sup>15</sup>
				<i>Murex trapa</i> Röding 1798		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Naquetia capucina</i> (Röding 1798)		Way and Purchon (1981) <sup>15</sup>
				<i>Pterynotus pinnatus</i> (Swainson 1822)	<i>Murex martinianus</i> Reeve 1845	Lim (1963) <sup>7</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Purpura bufo</i> (Lamarck 1822)		Way and Purchon (1981) <sup>15</sup>
				<i>Rapana rapiformis</i> (Von Born 1778)		Way and Purchon (1981) <sup>15</sup>
				<i>Thais (Mancinella) alouina</i> (Röding 1798)	<i>Mancinella alouina</i>	Personal collections 17
				<i>Thais (Mancinella) echinata</i> (Blainville 1832)		Arshad <i>et al.</i> (2001)
				<i>Thais (Thaisella) gradata</i> (Jonas 1846)		Kee Alfian <i>et al.</i> (2005) and Way and Purchon (1981) <sup>15</sup>
				<i>Thais (Thaisella) malayensis</i> (Tan and Sigurdsson (1996)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
						Jamبارi <i>et al.</i> (2000)

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Thais (Thaisella) pinangensis</i> (Tan and Sigurdsson (1996)		Tan and Sigurdsson (1996) <sup>13</sup>
				<i>Thais (Thaisella) rufotincta</i> (Tan and Sigurdsson (1996)		Tan and Sigurdsson (1996) <sup>13</sup>
				<i>Thais (Thaisella) vissofi</i> (Petit 1852)		Berry (1972), Lim (1968) <sup>7</sup> , Sasekumar (1974) <sup>11</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Thais (Thalassa) savignyi</i> (Deshayes 1844)		Way and Purchon (1981) <sup>15</sup>
				<i>Thais bitubercularis</i>	<i>Manicella bitubercularis</i> (Lamarck 1822)	Way and Purchon (1981) <sup>15</sup>
				<i>Thais carinifera</i> (Lamarck 1822)		Way and Purchon (1981) <sup>15</sup>
				<i>Thais clavigera</i> (Küster 1859)		Tan and Sigurdsson (1990) <sup>12</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Thais kieneri</i>		Jambari <i>et al.</i> (2000)
	Mitridae			<i>Mitra (Nebularia) ferruginea</i> Lamarck 1811	Personal collections 17	
				<i>Mitra (Nebularia) fraga</i> Quoy and Gaimard 1833		<i>Mitra fraga</i> Q. and G (1833) Jambari <i>et al.</i> (2000) and Way and Purchon (1981) <sup>15</sup>
				<i>Mitra (Strigatella) scutulata</i> (Gmelin 1791)	<i>Mitra scutulata</i> Gmelin (1791)	Way and Purchon (1981) <sup>15</sup>
				<i>Mitra eremitarum</i> Röding 1798	<i>Mitra achusia</i>	Personal collections 17
				<i>Mitra mitra</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
	Costellariidae			<i>Vexillum (Vexillum) coccineum</i> (Reeve 1844)	<i>Vexillum coccinea</i> Reeve (1844)	Way and Purchon (1981) <sup>15</sup>
				<i>Vexillum (Costellaria) sanguisuga</i> (L. 1758)	<i>Vexillum sanguisugum</i> (L. 1758)	Kee Aflhan <i>et al.</i> (2005) and Way and Purchon (1981) <sup>15</sup>
				<i>Vexillum (Vexillum) melongena</i> (Lamarck 1811)	<i>Vexillum melongena</i> (Lamarck 1811)	Way and Purchon (1981) <sup>15</sup>
				<i>Vexillum crebriliratum</i> (Reeve 1844)		Way and Purchon (1981) <sup>15</sup>
				<i>Vexillum, cf. curviliratum</i> (Sowerby 1874)		Way and Purchon (1981) <sup>15</sup>
	Vasidae			<i>Vasum ceramicum</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Vasum turbinellus</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
	Harpidae			<i>Harpa articularis</i> Lamarck 1822		Way and Purchon (1981) <sup>15</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Harpa major</i> Röding 1798	<i>Harpa major</i> Röding 1798	Way and Purchon (1981) <sup>15</sup> and Personal collections 17
			Volutidae	<i>Cymbiola (Cymbiola) vespertilio</i> L. 1758	<i>Cymbiola (Aulicina) vespertilio</i> L. 1758	Arshad <i>et al.</i> (2001) <sup>1</sup>
				<i>Cymbiola (Cymbiola) nobilis</i> Lightfoot 1786	<i>Cymbiola nobilis</i> Lightfoot 1786	Way and Purchon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Melo melo</i> (Lightfoot 1786)		Way and Purchon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
			Marginellidae	<i>Cryptospira elegans</i> (Gmelin 1791)		Way and Purchon (1981) <sup>15</sup>
				<i>Cryptospira tricincta</i> (Hinds 1844)		Way and Purchon (1981) <sup>15</sup>
				<i>Cryptospira ventricosa</i> (Fischer 1807)		Way and Purchon (1981) <sup>15</sup>
			Coralliophiliidae	<i>Coralliophila neritoidea</i> (Lamarck 1816)		Kee Alfian <i>et al.</i> (2005) and Tan <i>et al.</i> (2008) <sup>14</sup>
			Buccinoidea	<i>Astyris lunata</i> (Say 1826)	<i>Columbella duclosiana</i> Sowerby 1844	Berry (1972), Sasekumar (1974) <sup>11</sup> and Way and Purchon (1981) <sup>15</sup>
				<i>Euplica scripta</i> (Lamarck 1822)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Mitrella</i> sp.		Jambari <i>et al.</i> (2000)
				<i>Pyrene flava</i> Bruguiere		Personal collections 17
				<i>Pyrene ocellata</i> Link		Way and Purchon (1981) <sup>15</sup>
				<i>Pyrene scripta</i> (Lamarck 1822)	<i>Pyrene versicolor</i> (Sowerby 1832) <sup>16</sup>	Way and Purchon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pyrene testudinaria</i>		Way and Purchon (1981) <sup>15</sup>
				<i>Zafra</i> sp.		Jambari <i>et al.</i> (2000)
			Buccinidae	<i>Babylonia spirata</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Cantharus forticosatus</i> (Reeve 1846)		Way and Purchon (1981) <sup>15</sup>
				<i>Cantharus fumosus</i> (Dillwyn 1817)		Way and Purchon (1981) <sup>15</sup>
				<i>Cantharus tranquebaricus</i>		Way and Purchon (1981) <sup>15</sup>
				<i>Cantharus undosus</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Engina armillata</i> (Reeve 1846)		Way and Purchon (1981) <sup>15</sup>
				<i>Engina mendicaria</i> (L. 1758)		Way and Purchon (1981) <sup>15</sup>
				<i>Engina zepa</i> (Duclos 1883)		Jambari <i>et al.</i> (2000)
				<i>Hindsia nivea</i> (A. Adams 1851)		Way and Purchon (1981) <sup>15</sup>



Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Phos senticosus</i>		Arshad <i>et al.</i> (2001) and Way and Purrehon (1981) <sup>15</sup>
				<i>Pisania ignea</i> (Gmelin 1790)		Way and Purrehon (1981) <sup>15</sup>
				<i>Pseudoneptunea varicosa</i> (Kiener 1840)		Way and Purrehon (1981) <sup>15</sup>
		Melongenidae		<i>Pugilina ternatana</i> (Gmelin 1791)	<i>Hemifusus ternatanus</i> (Gmelin 1791) <sup>15</sup>	Way and Purrehon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pugilina cochlidium</i> (L. 1758)	<i>Melongena pugilina</i> (Born 1778) <sup>15</sup>	Way and Purrehon (1981) <sup>15</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
		Nassaridae		<i>Nassarius (Niotha) venusta</i>		Jamari <i>et al.</i> (2000)
				<i>Nassarius albescens</i> (Dunker 1846)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Nassarius cf. crenulatus</i> (Lamarck 1816)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius foveolatus</i> (Dunker 1847)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius glandiosa</i>		Berry (1972)
				<i>Nassarius globosus</i> (Q. and G. 1833)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius jacksonianus</i> (Q. and G. 1833)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius livescens</i> (Philippi 1848)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius olivaceus</i> (Bruguière 1789)		Berry (1972) and Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius pullus</i> (L. 1758)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius quadrasii</i> (Hidalgo 1904)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius ravidus</i> (A. Adams 1851)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius teretiusculus</i> (A. Adams 1851)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius velatus</i> (Coulter 1850)		Way and Purrehon (1981) <sup>15</sup>
				<i>Nassarius venustus</i> (Dunker 1847)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
	Fasciolaridae			<i>Fasciolaria filamentosa</i> Lamarck 1822		Way and Purrehon (1981) <sup>15</sup>
				<i>Fasciolaria trapezium</i> (L. 1758)		Way and Purrehon (1981) <sup>15</sup>
				<i>Fusinus novae-hollandiae</i> Reeve 1848		Way and Purrehon (1981) <sup>15</sup>
				<i>Lairus medicanicus</i>		Personal collections 17
				Hertlein and Strong 1951		
				<i>Lairus turritus</i> (Gmelin 1791)		Personal collections 17
				<i>Olivia annulata</i> Gmelin 1791		Personal collections 17
	Olivoidae			<i>Olivia bulbosa</i> (Röding 1798)	<i>Olivia gebbosa</i> (Born 1778)	Way and Purrehon (1981) <sup>15</sup>
				<i>Olivia elegans</i> Lamarck 1810		Way and Purrehon (1981) <sup>15</sup>



Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Conus marmoreus</i> L. 1758		Tan <i>et al.</i> (2008) <sup>14</sup> , Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Conus miles</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Conus militaris</i> Hwass in Bruguière 1792		Way and Purchon (1981) <sup>15</sup>
				<i>Conus mus</i> Hwass in Bruguière 1792		Personal collections 17
				<i>Conus mustelinus</i> Hwass in Bruguière 1792		Way and Purchon (1981) <sup>15</sup>
				<i>Conus nussatella</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Conus ochroleucus</i> Gmelin 1791	<i>Conus eburneus</i> Hwass in Bruguière 1792	Way and Purchon (1981) <sup>15</sup>
				<i>Conus pennaceus</i> Born 1778	<i>Conus episcopus</i> Hwass in Bruguière 1792	Way and Purchon (1981) <sup>15</sup>
				<i>Conus planorbis</i> Born 1778		Personal collections 17
				<i>Conus pulicarius</i> Hwass in Bruguière 1792		Way and Purchon (1981) <sup>15</sup>
				<i>Conus quercinus sensu</i> Lightfoot 1786	<i>Conus quercinus</i> Lightfoot 1786	Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Conus stramineus</i> Lamarck 1810		Way and Purchon (1981) <sup>15</sup>
				<i>Conus striatus</i> L. 1758		Way and Purchon (1981) <sup>15</sup>
				<i>Conus tessulatus</i> Born 1778		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Conus textile</i> L. 1758		Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Conus vexillum</i> Gmelin 1791		Personal collections 17
				<i>Conus virgo</i> L. 1758		Kee Alfian <i>et al.</i> (2005), Way and Purchon (1981) <sup>15</sup> and Personal collections 17
				<i>Conus voluminalis</i> Reeve 1843	<i>Conus macaracae</i> Bernardi 1857	Way and Purchon (1981) <sup>15</sup>
		Terebridae		<i>Hastula albula</i> (Menke 1843)		Way and Purchon (1981) <sup>15</sup>
				<i>Hastula cf. traili</i> (Deshayes 1859)		Way and Purchon (1981) <sup>15</sup>
				<i>Hastula nitida</i> (Hinds 1844)		Way and Purchon (1981) <sup>15</sup>
				<i>Terebra amilis</i> Röding 1798		Way and Purchon (1981) <sup>15</sup>
				<i>Terebra areolata</i> (Link 1807)		Way and Purchon (1981) <sup>15</sup>
				<i>Terebra babylonica</i> Lamarck 1822		Way and Purchon (1981) <sup>15</sup> and Personal collections 17

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Terebra cf. iriseriata</i> Gray 1834		Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra commaculata</i> Gmelin 1791		Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra dimidiata</i> L. 1758		Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra duplicata</i> L. 1758		Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra maculata</i> (L. 1758)		Arshad <i>et al.</i> (2001), Kee Alfian <i>et al.</i> (2005) and Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra spectabilis</i> Hinds 1843		Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra subulata</i> (L. 1767)		Way and Purrehon (1981) <sup>15</sup>
				<i>Terebra undulata</i> Gray 1834		Arshad <i>et al.</i> , 2001
	Rissooidea	Assimineidae		<i>Assiminea (Ovassiminea) brevicula</i> (Pfeiffer 1854)		Jambari <i>et al.</i> (2000)
			Iravadiidae	<i>Iravadia bombayana</i> Stoliczka		Jambari <i>et al.</i> (2000)
Heterobranchia	Architectonicoidea		Architectonidae		<i>Architectonica perspectiva</i> (L. 1758)	Way and Purrehon (1981) <sup>15</sup>
		Ellobioidea	Ellobiidae	<i>Auriculastra subula</i> (Quoy and Gaimard 1832)		Berry (1972)
Bivalvia	Protobranchia	Nuculanoidea	Nuculanidae	<i>Nuculana bellula</i> (A. Adams 1856)		Morris and Purrehon (1981) <sup>8</sup>
	Pteriomorpha	Arcoidae		<i>Anadara antiquata</i> (L. 1758)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Anadara globosa</i> (Reeve 1843)		Arshad <i>et al.</i> (2001)
				<i>Anadara granosa</i> (L. 1758)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Arca avellana</i> Lamarck 1819		Morris and Purrehon (1981) <sup>8</sup>
				<i>Arca boucardi</i> Jousseume 1894		Kee Alfian <i>et al.</i> (2005) <sup>5</sup> and Tan <i>et al.</i> (2008) <sup>14</sup>
				<i>Arca navicularis</i> Bruguière 1789		Morris and Purrehon (1981) <sup>8</sup>
				<i>Arca ventricosa</i> Lamarck 1819		Personal collections 17
				<i>Barbatia bistrigata</i> (Dunker 1853)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Barbatia foliata</i> (Forsskal 1775)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Barbatia fusca</i> (Bruguière 1789)	<i>Barbatia amygdalumstomum</i> (Röding 1798) <sup>17</sup>	Morris and Purrehon (1981) <sup>8</sup> and Personal collections 17
				<i>Barbatia helbingii</i> (Bruguière 1789)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Scapharca cornea</i> (Reeve 1844)		Zaidi <i>et al.</i> (2008) <sup>16</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Scapharca inaequivalvis</i> (Bruguière 1789)		Morris and Purchon (1981) <sup>8</sup> And Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Scapharca indica</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Trisidos tortuosa</i> (L. 1758)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
			Cucullaeidae	<i>Cucullaea concamerata</i> (Martini 1777)		Morris and Purchon (1981) <sup>8</sup>
			Mytilidae	<i>Arcuatula arcuata</i> (Hanley 1843)		Morris and Purchon (1981) <sup>8</sup>
				<i>Brachidontes variabilis</i> (Krauss 1848)		Morris and Purchon (1981) <sup>8</sup>
				<i>Gregariella striatula</i> (Hanley 1843)		Morris and Purchon (1981) <sup>8</sup>
				<i>Lithophaga malaccana</i> (Reeve 1857)		Morris and Purchon (1981) <sup>8</sup>
				<i>Lithophaga nasuta</i> (Philippi 1846)		Morris and Purchon (1981) <sup>8</sup>
				<i>Lithophaga teres</i> (Philippi 1846)		Morris and Purchon (1981) <sup>8</sup>
				<i>Modiolus aratus</i> (Dunker 1856)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Modiolus philippinarum</i> Hanley 1843		Morris and Purchon (1981) <sup>8</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Perna viridis</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Septifer bilocularis</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Septifer excisus</i> (Wiegmann 1837)		Morris and Purchon (1981) <sup>8</sup>
			Isognomonidae	<i>Isognomon alatus</i> (Gmelin 1791)		Personal collections 17
				<i>Isognomon dentifer</i> (Krauss 1848)		Morris and Purchon (1981) <sup>8</sup>
				<i>Isognomon ephippium</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Isognomon isognomon</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Isognomon perna</i> (L. 1767)		Morris and Purchon (1981) <sup>8</sup>
			Pinnidae	<i>Atrina pectinata</i> (L. 1767)		Idris <i>et al.</i> (2007), Morris and Purchon (1981) <sup>8</sup> , Tan <i>et al.</i> (2008) <sup>14</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Atrina vexillum</i> (Born 1778)		Arshad <i>et al.</i> (2001), Idris <i>et al.</i> (2007), Morris and Purchon (1981) <sup>8</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>

Table 2. Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Pinna bicolor</i> Gmelin 1791	<i>Pinna atropurpurea</i> <sup>2</sup>	Idris <i>et al.</i> (2007) Morris and Purchon (1981) <sup>8</sup> , Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pinna deltodes</i> (Menke 1848)		Idris <i>et al.</i> (2007), Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pinna incurva</i> Gmelin 1791		Idris <i>et al.</i> (2007), Morris and Purchon (1981) <sup>8</sup> and Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pinna muricata</i> L. 1758		Idris <i>et al.</i> (2007) <sup>16</sup>
		Pteriidae		<i>Electroma alacorui</i> (Dillwyn 1817)		Morris and Purchon (1981) <sup>8</sup>
				<i>Pinctada margaritifera</i> (L. 1758)		Arshad <i>et al.</i> (2001), Kee Alfian <i>et al.</i> (2005), Morris and Purchon (1981) <sup>8</sup> , Tan <i>et al.</i> (2008) <sup>14</sup> and Personal collections 17
				<i>Pinctada radiata</i> (Leach 1814)		Morris and Purchon (1981) <sup>8</sup> , Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pteria abicular</i>		Tan <i>et al.</i> (2008) <sup>14</sup>
				<i>Pteria colymbus</i> (Röding 1798)		Personal collections 17
				<i>Pteria penguin</i> (Röding 1798)		Kee Alfian <i>et al.</i> (2005)
		Malleidae		<i>Malleus albus</i> Lamarck 1819		Kee Alfian <i>et al.</i> (2005), Morris and Purchon (1981) <sup>8</sup> , Zaidi <i>et al.</i> (2008) <sup>16</sup> and Personal collections 17
				<i>Malleus malleus</i> (L. 1758)		
				<i>Malleus regula</i> (Forskål 1775)		Morris and Purchon (1981) <sup>8</sup>
	Pectinoidea	Pectinidae		<i>Amusium pleuronectes</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Chlamys senatoria</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Chlamys tranquebaria</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Chlamys varia</i> (Linné 1758)	<i>Pecten varius</i>	Personal collections 17
				<i>Decatopecten plica</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Mimivola pyxidata</i> (Born 1778)	<i>Pecten pyxidatus</i> (Born 1778)	Morris and Purchon (1981) <sup>8</sup>
				<i>Pecten flabellatus</i> Lamarck 1819		Morris and Purchon (1981) <sup>8</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Pecten spondyloideum</i> (Gmelin 1791)		Kee Alfian <i>et al.</i> (2005), Morris and Purehon (1981) <sup>8</sup> , Tan <i>et al.</i> (2008), Tan <i>et al.</i> (2008) <sup>14</sup> and Personal collections 17
		Spondyliidae		<i>Spondylus barbatus</i> Reeve 1856		Morris and Purehon (1981) <sup>8</sup> , Tan <i>et al.</i> (2008) <sup>14</sup>
				<i>Spondylus gussonii</i> Costa O.G. 1829		Personal collections 17
				<i>Spondylus nicobaricus</i> Schreibers 1793	<i>Spondylus hystrix</i> Röding 1798	Kee Alfian <i>et al.</i> (2005) and Morris and Purehon (1981) <sup>8</sup>
				<i>Spondylus squamosus</i> Schreibers 1793	<i>Spondylus ducalis</i>	Personal collections 17
	Plicatulioidea		Plicatulidae	<i>Plicatula plicata</i> (L. 1767)		Morris and Purehon (1981) <sup>8</sup>
	Anomoiidea		Anomoiidae	<i>Anomia cytaeum</i> Gray 1849		Morris and Purehon (1981) <sup>8</sup>
				<i>Enigmionia aenigmatica</i> Sowerby		Morris and Purehon (1981) <sup>8</sup>
			Placunidae	<i>Placuna ephippium</i> (Philipson 1788)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Placuna placenta</i> (L. 1758)		Morris and Purehon (1981) <sup>8</sup>
	Limoiidea		Limidae	<i>Ctenoides scabra</i> (Born 1778)	<i>Lima scabra</i>	Personal collections 17
				<i>Lima lima</i> (L. 1758)		Morris and Purehon (1981) <sup>8</sup>
				<i>Limaria fragilis</i> (Gmelin 1791)		Morris and Purehon (1981) <sup>8</sup>
	Ostreioidea		Ostreidae	<i>Alectryonella plicatula</i> (Gmelin 1791)		Morris and Purehon (1981) <sup>8</sup>
				<i>Crassostrea gigas</i> (Thunberg 1793)		Lam and Morton (2009) <sup>6</sup>
				<i>Dendostrea foium</i> (L. 1758)		Lam and Morton (2009) <sup>6</sup>
				<i>Hyotissa hyotis</i> (L. 1758)		Morris and Purehon (1981) <sup>8</sup> , and Tan <i>et al.</i> (2008) <sup>14, 17</sup>
				<i>Hyotissa imbricata</i> (Lamarck 1819)		Lam and Morton (2009) <sup>6</sup>
				<i>Hyotissa numisma</i> (Lamarck 1819)		Morris and Purehon (1981) <sup>8</sup>
				<i>Lopha cristagalli</i> (L. 1758)		Kee Alfian <i>et al.</i> (2005), Tan <i>et al.</i> (2008) <sup>14</sup> and Personal collections 17
				<i>Ostrea denselamellosa</i> Lischke 1869		Morris and Purehon (1981) <sup>8</sup>
				<i>Ostrea palmipes</i> Sowerby 1871		Morris and Purehon (1981) <sup>8</sup>
				<i>Planostrea pestigris</i> (Hanley 1846)		

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Saccostrea cucullata</i> (Born 1778)	<i>Saccostrea cucullata</i> (Born 1778)	Arshad <i>et al.</i> (2001), Lam and Morton (2009) <sup>8</sup> and Morris and Purchon (1981) <sup>8</sup>
				<i>Saccostrea echinata</i> (Quoy and Gaimard 1836)		Morris and Purchon (1981) <sup>8</sup>
				<i>Saccostrea mordax</i> (Gould 1850)		Lam and Morton (2009) <sup>8</sup>
Heterodonta	Chamoidea	Chamidae		<i>Chama lazarus</i> L. 1758		Morris and Purchon (1981) <sup>8</sup>
				<i>Chama pacifica</i> (Broderip 1834)		Morris and Purchon (1981) <sup>8</sup>
				<i>Chama spinosa</i> Broderip 1834		Morris and Purchon (1981) <sup>8</sup>
		Galeommatoidae		Galeommatidae	<i>Scintilla ambigua</i> (Deshayes 1855)	Morris and Purchon (1981) <sup>8</sup>
				<i>Scintilla philippinensis</i> Deshayes 1856		Morris and Purchon (1981) <sup>8</sup>
	Cardioidea	Cardiidae		<i>Corculum cardissa</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Fragum subretusum</i> (Sowerby 1841)		Morris and Purchon (1981) <sup>8</sup>
				<i>Fulvia papyracea</i> (Bruguière 1789)		Morris and Purchon (1981) <sup>8</sup>
				<i>Laevicardium attenuatum</i> (Sowerby 1841)		Morris and Purchon (1981) <sup>8</sup>
				<i>Laevicardium australe</i> (Sowerby 1841)		Morris and Purchon (1981) <sup>8</sup>
				<i>Trachycardium elongatum</i> (Bruguière, 1789)	Morris and Purchon (1981) <sup>8</sup>	
				<i>Trachycardium flavum</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Trachycardium leucostoma</i> Born		Morris and Purchon (1981) <sup>8</sup>
				<i>Vepricardium asiaticum</i> (Bruguière 1789)		Morris and Purchon (1981) <sup>8</sup>
				<i>Vepricardium multispinosum</i> (Sowerby 1838)		Morris and Purchon (1981) <sup>8</sup>
	Cardioidea	Tridacnidae		<i>Hippopus hippopus</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Tridacna (Chametrachea) crocea</i> Lamarek 1819	<i>Tridacna crocea</i> Lamarek (1819)	Kee Alfian <i>et al.</i> (2005), Morris and Purchon (1981) <sup>8</sup> and Personal collections 17
				<i>Tridacna (Chametrachea) maxima</i> (Röding 1798)	<i>Tridacna maxima</i> Röding 1798	Kee Alfian <i>et al.</i> (2005), Morris and Purchon (1981) <sup>8</sup> , Tan <i>et al.</i> (2008) <sup>14</sup> and Personal collections 17



Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Tridacna squamosa</i> Lamarck 1819		Kee Alfian <i>et al.</i> (2005), Morris and Purrehon (1981) <sup>8</sup> , Tan <i>et al.</i> (2008) <sup>14</sup> and Personal collections 17
	Mactroidea		Mactridae	<i>Heterocarcia gibbosula</i> Stolizcka 1871		Morris and Purrehon (1981) <sup>8</sup>
				<i>Lutraria rhynchaena</i> Jones		Morris and Purrehon (1981) <sup>8</sup>
				<i>Mactra incongrua</i> Deshayes 1854		Morris and Purrehon (1981) <sup>8</sup>
				<i>Mactra lilacea</i> Lamarck 1818		Morris and Purrehon (1981) <sup>8</sup>
				<i>Mactra mera</i> Reeve 1853		Morris and Purrehon (1981) <sup>8</sup>
		Mesodesmatidae		<i>Atactodea glabrata</i> (Gmelin 1791)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Caecella horsfeldi</i> Gray 1853		Morris and Purrehon (1981) <sup>8</sup>
				<i>Davila plana</i> (Hanley 1843)		Morris and Purrehon (1981) <sup>8</sup>
	Galeommatoidea		Lasaeidae		<i>Raeta pulchella</i> (Adams and Reeve 1830)	Morris and Purrehon (1981) <sup>8</sup>
	Solenoida		Solenidae	<i>Pharella acutidens</i> (Broderip and Sowerby 1829)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Pharella javanica</i> (Lamarck 1818)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Solen lamarkii</i> Deshayes 1839		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Solen vagina</i> L. 1758	<i>Solen brevis</i> Hanley 1842	Morris and Purrehon (1981) <sup>8</sup>
			Cultellidae	<i>Cultellus lacteus</i> (Spengler 1794)		Morris and Purrehon (1981) <sup>8</sup>
	Tellinoidea		Pharidae	<i>Pharella javanica</i> (Lamarck 1818)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Siliqua albida</i> (Adams and Reeve 1850)		Morris and Purrehon (1981) <sup>8</sup>
			Tellinidae	<i>Tellina remies</i> L. 1758	<i>Cyclotellina remies</i> (L. 1758)	Morris and Purrehon (1981) <sup>8</sup>
				<i>Macoma gubernaculum</i> (Hanley 1844)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Moerella lux</i> (Hanley 1844)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Pinguicellina pudica</i> (Hanley 1844)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Tellina scobinata</i> L. 1758	<i>Scutarcopagia scobinata</i> (L. 1758)	Morris and Purrehon (1981) <sup>8</sup>
				<i>Tellinella spengleri</i> (Gmelin 1791)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Tellimides sulcatina</i> (Deshayes 1854)		Morris and Purrehon (1981) <sup>8</sup>
				<i>Quidnipagus palatum</i> (Iredale 1929)		Morris and Purrehon (1981) <sup>8</sup>
		Donacidae		<i>Donax cuneatus</i> L. 1758		Morris and Purrehon (1981) <sup>8</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Donax faba</i>	Chemnitz in Schröter 1782	Arshad <i>et al.</i> (2001) and Morris and Purchon (1981) <sup>8</sup>
				<i>Donax incarnatus</i>	Chemnitz in Schröter 1782	Morris and Purchon (1981) <sup>8</sup>
				<i>Donax variabilis</i>	Say 1822	
			Psammobiidae	<i>Asaphis deflorata</i>	(L. 1758)	Morris and Purchon (1981) <sup>8</sup>
				<i>Gari amethystus</i>	(Wood 1815)	Morris and Purchon (1981) <sup>8</sup>
				<i>Orbicularia orbiculata</i>	(Wood 1828)	Morris and Purchon (1981) <sup>8</sup>
				<i>Psammotellina minor</i>	(Deshayes 1854)	Morris and Purchon (1981) <sup>8</sup>
				<i>Psammotellina tenuis</i>	(Deshayes 1854)	Morris and Purchon (1981) <sup>8</sup>
				<i>Soletellina violacea</i>	(Lamarck 1818)	Morris and Purchon (1981) <sup>8</sup>
			Semelidae	<i>Semele sinensis</i>	A. Adams 1853	Morris and Purchon (1981) <sup>8</sup>
				<i>Theora lata</i>	(Hinds 1843)	Morris and Purchon (1981) <sup>8</sup>
			Solecurtidae	<i>Solecurtus philippinarum</i>	Dunker	Morris and Purchon (1981) <sup>8</sup>
			Trapezidae	<i>Trapezium bicarinatum</i>	(Schumacher 1817)	Morris and Purchon (1981) <sup>8</sup>
			Corbiculoidea	<i>Corbicula solidula</i>	Prime 1861	Morris and Purchon (1981) <sup>8</sup>
				<i>Polymesoda erosa</i>	(Lightfoot 1786)	Morris and Purchon (1981) <sup>8</sup>
				<i>Geloina coaxans</i>	(Gmelin 1791)	Morris and Purchon (1981) <sup>8</sup>
			Veneroidea	<i>Amiantis grata</i>	(Deshayes 1853)	Morris and Purchon (1981) <sup>8</sup>
				<i>Anigona lamellaris</i>	Schumacher 1817	Morris and Purchon (1981) <sup>8</sup>
				<i>Callanaitis calophylla</i>	(Philippi 1836)	Morris and Purchon (1981) <sup>8</sup>
				<i>Circe scripta</i>	(L. 1758)	Morris and Purchon (1981) <sup>8</sup>
				<i>Clausinella chlorotica</i>	(Philippi 1849)	Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Dosinia biscocta</i>	(Reeve 1850)	Morris and Purchon (1981) <sup>8</sup>
				<i>Dosinia cretacea</i>	(Reeve 1850)	Morris and Purchon (1981) <sup>8</sup>
				<i>Dosinia dilecta</i>	A. Adams 1855	Morris and Purchon (1981) <sup>8</sup>
				<i>Dosinia histrio</i>	(Gmelin 1784)	Morris and Purchon (1981) <sup>8</sup>
				<i>Gafrarium discors</i>	(Gmelin 1791)	Morris and Purchon (1981) <sup>8</sup>
				<i>Gafrarium dispar</i>	(Dillwyn 1817)	Arshad <i>et al.</i> (2001) and Morris and Purchon (1981) <sup>8</sup>
				<i>Gafrarium divaricatum</i>	(Gmelin 1791)	Morris and Purchon (1981) <sup>8</sup>
				<i>Gafrarium pectinatum</i>	(L. 1758)	Morris and Purchon (1981) <sup>8</sup>
				<i>Gafrarium tumidum</i>	Rödning 1798	Morris and Purchon (1981) <sup>8</sup>

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Katelaysia hiantina</i> (Lamarck 1818)	<i>Marcia hiantina</i> (Lamarck 1818)	Morris and Purchon (1981) <sup>8</sup>
				<i>Katelaysia japonica</i> (Gmelin 1791)	<i>Marcia japonica</i> (Gmelin 1791)	Morris and Purchon (1981) <sup>8</sup>
				<i>Lioconcha castrensis</i> (L. 1758)		Personal collections 17
				<i>Marcia marmorata</i> (Lamarck 1818)		Morris and Purchon (1981) <sup>8</sup>
				<i>Marcia opima</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Meretrix lusoria</i> (Röding 1798)		Morris and Purchon (1981) <sup>8</sup>
				<i>Meretrix lyrata</i> (Sowerby 1851)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Meretrix meretrix</i> (L. 1758)		Arshad <i>et al.</i> (2001) and Morris and Purchon (1981) <sup>8</sup>
				<i>Paphia alapapilionis</i> Röding, 1798		Personal collections 17
				<i>Paphia euglypta</i> (Philippi 1847)		Morris and Purchon (1981) <sup>8</sup>
				<i>Paphia rotundata</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Paphia textile</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Paphia undulata</i> (Born 1780)		Morris and Purchon (1981) <sup>8</sup>
				<i>Pelecycora trigona</i> (Reeve 1853)		Morris and Purchon (1981) <sup>8</sup>
				<i>Periglypta puerpera</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Periglypta reticulata</i> (L. 1758)		Morris and Purchon (1981) <sup>8</sup>
				<i>Pitar affinis</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Placamen tiara</i> (Dillwyn 1817)		Zaidi <i>et al.</i> (2008) <sup>16</sup>
				<i>Protapes gallus</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
				<i>Ruditapes philippinarum</i> (Adams and Reeve 1850)	<i>Tapes philippinarum</i>	Morris and Purchon (1981) <sup>8</sup> and Adams and Reeve (1850)
				<i>Ruditapes variegatus</i> (Sowerby 1852)	<i>Tapes variegata</i> Sowerby 1850	Arshad <i>et al.</i> (2001)
				<i>Sunetta contempta</i> Smith 1891		Morris and Purchon (1981) <sup>8</sup>
				<i>Tapes literata</i> L.	<i>Tapes literatus</i> (L. 1758)	Morris and Purchon (1981) <sup>8</sup>
				<i>Tapes punciiferus</i> (Lamarck 1818)		Morris and Purchon (1981) <sup>8</sup>
				<i>Timoclea scabra</i> (Hanley 1844)		Morris and Purchon (1981) <sup>8</sup>
			Petricolidae	<i>Petricola lapicida</i> (Gmelin 1791)		Morris and Purchon (1981) <sup>8</sup>
			Glaucomidae	<i>Glaucomone virens</i> (L. 1767)		Morris and Purchon (1981) <sup>8</sup>
			Corbulidae	<i>Corbula albuginosa</i> Hinds 1843		Morris and Purchon (1981) <sup>8</sup>
		Myoidea				

Table 2: Continue

Class	Subclass	Superfamily	Family	Species	Name in original text	References
				<i>Corbula crassa</i> Reeve 1843		Morris and Purrehon (1981) <sup>§</sup>
				<i>Corbula modesta</i> Hinds 1843		Morris and Purrehon (1981) <sup>§</sup>
				<i>Corbula tunicata</i> Hinds 1843		Morris and Purrehon (1981) <sup>§</sup>
		Gastrochaenoidea		Gastrochaenidae	<i>Gastrochaena cuneiformis</i> Spengler 1783	Morris and Purrehon (1981) <sup>§</sup>
				<i>Gastrochaena cymbium</i> Spengler 1783		Morris and Purrehon (1981) <sup>§</sup>
		Pholadoidea	Pholadidae	<i>Jouannetia globulosa</i> (Q. and G. 1835)		Morris and Purrehon (1981) <sup>§</sup>
				<i>Martesia striata</i> (L. 1758)		Morris and Purrehon (1981) <sup>§</sup>
				<i>Pholas orientalis</i> Gmelin 1791		Morris and Purrehon (1981) <sup>§</sup>
		Carditoidea	Carditidae	<i>Begonia semiorbiculata</i> (L. 1758)		Personal collections 17
				<i>Cardita variegata</i> Bruguière 1792		Morris and Purrehon (1981) <sup>§</sup>
	Paleoheterodonta		Unionidae	<i>Ensidens ingallianus</i> (Lea 1852)		Morris and Purrehon (1981) <sup>§</sup>

Remarks: Validity of names is based on database of World Register of Marine Species (WoRMS), SeaLifeBase Portal and The Taiwan Malacofauna Database. Species names that are listed as Malaysian records but not listed in the databases are marked as asterisk. Source of references for Table 2

was done by Purchon and Purchon (1981) and the specimens are currently stored in British Natural History Museum.

The number of species from these available documents seems far too small than the total number of described marine shelled mollusc. Based on essentially non-overlapping regional checklist by Bouchet (2006), 52,525 species of marine molluscs were documented while WoRMS has recorded 28,055 valid marine mollusc species so far and the list is still growing. In 2004, the Panglao Marine Biodiversity Project- PANGLAO 2004, that involved 70 participants from 16 countries has put the small Panglao Island of Philippines on the world map by discovering about 5,000-6,000 species of marine molluscs in this 40-day expedition (Bouchet *et al.*, 2009). Located in the same high biodiversity region, Malaysia should be able to contribute valuable data or even possible discovery of new species. In recent years, foreign scientists have been collecting and documenting the marine mollusc found in Malaysian waters (Tan and Sigurdsson, 1990, 1996; Lam and Morton, 2009). Tan and Sigurdsson (1996) even described a new species base on the specimen from Penang and named it *Thais pinangensis* (Muricidae). The development of marine shelled mollusc taxonomy in Malaysia is still measured eventhough this country is blessed with rich and high biodiversity resources.

**Addressing the problem:** What is the urgency in diversity study? In order for Malaysia to address the biodiversity issues, there is an urgent need for a depository centre with sufficient space and facilities and curators. Good storage facilities and reliable database network facility should also be established. Besides specimen deposit facility, there is an urgent need of well-trained taxonomists in Malaysia. The study of taxonomy in Malaysia only started in the 1970's with the establishment of local universities. However, marine mollusc taxonomy has never become the centre of interest in any of the present university. With the advancement in biotechnology and molecular-level studies in recent years, many scientists realised that marine organisms could provide great resources for these studies. But the lack of database information on species diversity could be a drawback for these studies since we do not even fully know the extent of species in our aquatic ecosystem. The lack of funding in supporting taxonomy study is another factor that limits the proliferation of marine-shelled mollusca diversity study. From sample collection to specimen storage, sufficient long-term grant support is needed.

## DISCUSSION

With a total of 4,675 km of coastline (Peninsular Malaysia 2,068km, East Malaysia 2,607 km), there are still much undocumented habitat in our seas. Marine-shelled mollusc is a massive group that definitely needs more than a handful of scientist to work on it. With the lack of exposure, it would be hard to attract young enthusiast to gain interest in mollusc taxonomic study. Currently in Malaysia, there is no facility for such exposure. Museums in Malaysia focus more on cultural collection but lack of biodiversity and natural history collection.

One will never know what he lost if he never know what he had. There are 42 islands in Malaysia which are declared as Marine Parks, but without the biodiversity data, one will never know whether the marine protected areas are well maintained and protected. With the rate that animal species are becoming extinct increasing every day, the need of cataloging marine shelled mollusc is urgent.

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