

Shallow-water Marine Shells from Kenting National Park, Taiwan

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Abstract. From 1993 to 2003, marine shells were collected by scuba diving and snorkeling to a depth of 20 m from the reef areas of Kenting National Park, Taiwan. In total, 371 species in 71 families were collected. Eighteen species were newly recorded from Taiwan. A review of previous studies identified 242 species in 53 families. We concluded that a total of 470 species in 73 families of marine shells have been reported from the coast of Kenting National Park. This species composition has a 40.7% similarity to that of northeastern Taiwan. Most species belong to the warm Kuroshio Current type. Color figures of 226 species are presented in this paper.

Key words: Marine shells, Kenting National Park, Taiwan.

INTRODUCTION

The southern tip of Taiwan is Kenting National Park. The substrate along the park is mainly coral reef and several sandy beaches. The warm Kuroshio (Japan) Current from nearby Philippines moves northward along the east coast of Taiwan, passing the southern Taiwan.

Although abundant marine shells inhabit the tropical coast of Kenting National Park, knowledge of the shell fauna is limited. Yang (1980), Chang (1985), and Chang and Chen (1987) survey the marine invertebrates in these areas listing many shell species. No paper focusing on marine shells from Kenting National Park is available.

This paper presents a ten-year collection of marine shells from this site. The marine shell fauna from Kenting National park are reviewed and tabulated. Figures of collected specimens are presented in this paper.

MATERIALS AND METHODS

From 1993 to 2003, marine shells were collected at irregular intervals by scuba diving and snorkeling to a depth of 20 m in Kenting National Park, Taiwan (Fig. 1) by the staff of the National Museum of Natural Science, Taichung, Taiwan.

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Fig. 1. Map showing the tip of southern Taiwan and study sites. A = Wanlitung (萬里桐), B = Sunhai (山海), C = Hungtsai (紅柴), D = Maobitou (貓鼻頭), E = Leidashih (雷打石), F = Houbihu (後壁湖), G = Nanwang (南灣), H = Hsiaowang (小灣), I = Chuanfanshih (船帆石), J = Hsiangchiaowang (香蕉灣), K = Aoluanpi (鵝鑾鼻).

Both shells and living animals were collected at low tide during the day and night. The living animals were frozen, then preserved in 75% alcohol. All specimens were deposited in the National Museum of Natural Science (NMNS), Taichung, Taiwan.

Identification of these specimens followed Habe (1977, 1989), Abbott and Dance (1998), Lai (1986, 1987, 1990, 1998), Springsteen and Leobrera (1986), Kira (1989), Habe and Ito (1991), Habe and Kosuge (1991), Bieler (1993), Wilson (1993, 1994), Okutani (1996, 2000), Higo et al. (1999, 2001). The Chinese names of the shells were based primarily on Wu (1999).

RESULTS AND DISCUSSION

A total of 371 species in 71 families of shallow water shells were collected (Table 1). Among these, 18 species are new records from Taiwan (Table 1). Color figures of 145 species are presented in Lee and Chao (2003), figures of the remaining 226 species were included in this paper (plates 1-5).

Previous surveys (Yang, 1980; Chang, 1985; Chang and Chen, 1987) list a total of 242 species in 53 families of marine shells from this site. All shells were collected from intertidal areas to a depth of 20 m. As no figures present in these publications and specimens are not deposited in museums or institutions, it is difficult to verify these species.

From our collections and review of previous surveys, we concluded that a total of 470 species in 73 families of marine shells was reported from the reef areas of Kenting National Park. Of these species, 40.7% are also found in habitats in northeastern Taiwan (Lee and Chao, 2003). Habitats in northeastern Taiwan include sandy beaches, pebbles, limestone rocks, and small areas of coral reefs. Most species found in both southern and northeastern Taiwan belong to the warm Kuroshio Current type.

Even though 470 species of marine shells have now been recorded from Kenting National Park, the record of its shell fauna is still incomplete. The east coast of Kenting National Park has not been investigated. Systematic collection and investigation on the east coast are needed.

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Table 1. Published marine shells from northeastern Taiwan, but not captured by the present authors.

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
GASTROPODA 腹足綱			
Haliotidae 鮑螺科			
<i>Haliotis asinina</i> Linnaeus, 1758 驚耳鮑螺	t	-5, O	
<i>Haliotis diversicolor</i> Reeve, 1846 九孔螺	t	-3, O	+
<i>Haliotis varia</i> Linnaeus, 1758 瘤鮑螺	t	-3, O	+
Fissurellidae 裂螺科			
<i>Emarginula variegata</i> (A. Adams, 1852) 彩色裂螺	t	intertidal, R	+
<i>Scutus sinensis</i> (Blainville, 1825) 鴨嘴螺	t	-3, O	+
Nacellidae 花笠螺科			
<i>Cellana radiata</i> (Born, 1778) 車輪笠螺	t	intertidal, O	
<i>Cellana toreuma</i> (Reeve, 1855) 花笠螺	1,t	intertidal, A	+
Patellidae 笠螺科			
<i>Scutellastra flexuosa</i> Quoy & Gaimard, 1834 星笠螺	1,3,t	intertidal, O	+
Lottiidae 青螺科			
<i>Nipponacmea schrenckii</i> (Lischke, 1868) 花青螺	t	intertidal, C	+
<i>Patelloidea saccharina</i> (Linnaeus, 1758) 鵝足青螺	1		+
<i>Patelloidea striata</i> (Quoy & Gaimard, 1834) 射線青螺	1		+
Trochidae 鐘螺科			
<i>Clanculus clanguloides</i> (Wood, 1828) 彩珠鐘螺	t	intertidal, R	
<i>Clanculus denticulatus</i> (Gray, 1827) 鐵珠鐘螺	t	intertidal, R	+
<i>Clanculus margaritarius</i> (Philippi, 1846) 小草苺鐘螺	t	intertidal, R	
<i>Diloma piperina</i> (Philippi, 1849) 胡椒鐘螺	t	intertidal, O	
<i>Monodonta labio confusa</i> (Linnaeus, 1758) 圓草蓆鐘螺	t	intertidal, A	+
<i>Monodonta perplexa</i> Pilsbry, 1889 扭鐘螺	t	intertidal, O	+
<i>Omphalius nigerrima</i> (Gmelin, 1791) 膽孔黑鐘螺	t	intertidal, O	+
<i>Stomatella impertusa</i> (Burrow, 1815) 小廣口螺	t	-5, R	
<i>Stomatella planulata</i> Lamarck, 1816 廣口螺	t	-3, R	
<i>Tectus conus</i> (Gmelin, 1791) 紅斑鐘螺	1		
<i>Tectus niloticus</i> (Linnaeus, 1767) 牛蹄鐘螺	1		
<i>Tectus pyramis</i> (Born, 1778) 銀塔鐘螺	1,2,3		+
<i>Trochus chloromphalus</i> Adams, 1853 綠臍鐘螺	t	intertidal, O	
<i>Trochus hanleyanus</i> Reeve, 1842 細紋鐘螺	t	intertidal, O	+
<i>Trochus maculatus</i> Linnaeus, 1758 花斑鐘螺	1,2,3,t	intertidal, R	+
<i>Trochus sacellus</i> Philippi, 1854 齒輪鐘螺	1,2,t	intertidal, C	+
<i>Trochus stellatus</i> Gmelin, 1791 血斑鐘螺	2,3,t	intertidal, C	
Turbinidae 蟻螺科			
<i>Angaria delphinus</i> (Linnaeus, 1758) 棘冠螺	2,3,t	-1, C	+

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Astralium haematragum</i> (Mende, 1829) 白星螺	t	-1, O	+
<i>Dentarene sarcina</i> Irecale, 1929 鍊珠花冠螺	t	intertidal, R	
<i>Guildfordia triumphans</i> (Philippi, 1841) 星螺	1		
<i>Phasianella solida</i> (Born, 1780) 雉螺	t	intertidal, R	
<i>Turbo argyrostomus</i> Linnaeus, 1758 銀口螺旋螺	1,t	intertidal, R	
<i>Turbo brunneus</i> Röding, 1798 虎斑螺旋螺	1		
<i>Turbo chrysostomus</i> Linnaeus, 1758 金口螺旋螺	1,3,t	-1, O	
<i>Turbo cinerea</i> (Born, 1778) 美珠螺	1,t	-1, O	+
<i>Turbo coronata</i> (Gmelin, 1791) 珠螺	1,t	-1, C	+
<i>Turbo granulata</i> (Gmelin, 1791) 瘤珠螺	t	-1, O	
<i>Turbo marmoratus</i> Linnaeus, 1758 夜光螺旋螺	1		
<i>Turbo petholatus</i> Linnaeus, 1758 貓眼螺旋螺	1,3,t	-2, R	
<i>Turbo setosus</i> Gmelin, 1791 圓螺旋螺	1,t	-2, R	+
<i>Turbo sparverius</i> Gmelin, 1791 臺灣螺旋螺	t	-3, O	
<i>Turbo stenogyrus</i> Fischer, 1873 高腰螺旋螺	t	-2, O	+
Neritidae 蟹螺科			
<i>Clithon faba</i> (Sowerby, 1836) 豆石蟹螺	t	intertidal, C	+
<i>Nerita albicilla</i> Linnaeus, 1758 漁舟蟹螺	1,3,t	intertidal, A	+
<i>Nerita chamaeleon</i> Linnaeus, 1758 大圓蟹螺	1,t	intertidal, O	+
<i>Nerita costata</i> Gmelin, 1791 黑肋蟹螺	1,t	intertidal, A	+
<i>Nerita exuvia</i> Linnaeus, 1758 浮雕蟹螺	t	intertidal, R	
<i>Nerita incerta</i> Philippi, 1844 黑玉蟹螺	1,t	intertidal, R	+
<i>Nerita insculpta</i> Récluz, 1842 虛線蟹螺	1		+
<i>Nerita japonica</i> (Dunker, 1860) 日本蟹螺	3,t	intertidal, R	
<i>Nerita ocellata</i> Le Guillou, 1841 滑圓蟹螺	1		+
<i>Nerita plicata</i> Linnaeus, 1758 白肋蟹螺	1,3,t	intertidal, A	+
<i>Nerita polita</i> Linnaeus, 1758 玉女蟹螺	1,3,t	intertidal, A	+
<i>Nerita reticulata</i> Karsten, 1789 紅唇蟹螺	1,t	intertidal, O	+
<i>Nerita squamulata</i> Le Guillou, 1841 花圓蟹螺	t	intertidal, O	
<i>Nerita undata</i> Linnaeus, 1758 粗紋蟹螺	1,3,t	intertidal, A	+
Septariidae 壁蟹螺科			
<i>Septaria porcellana</i> (Linnaeus, 1758) 壁蟹螺	t	intertidal, O	+
Neritopsidae 珍珠蟹螺科			
<i>Neritopsis radula</i> (Linnaeus, 1758) 珍珠蟹螺	1,3,t	-2, R	
Cerithiidae 蟹守螺科			
<i>Cerithium columnum</i> Sowerby, 1834 塔蟹守螺	t	intertidal, C	
<i>Cerithium echinatum</i> Lamarck, 1822 棘蟹守螺	t	intertidal, C	
<i>Cerithium egenum</i> Gould, 1849 斑紋蟹守螺	t	intertidal, R	
<i>Cerithium interstriatum</i> Sowerby, 1855 田隴蟹守螺	t	intertidal, R	
<i>Cerithium lifuensis</i> Melvill & Standen, 1895 太平洋蟹守螺	t	intertidal, R	
<i>Cerithium nesioticum</i> Pilsbry & Vanatta, 1906 淡斑蟹守螺	t	intertidal, O	+
<i>Cerithium punctatum</i> Bruguière, 1792 芝麻蟹守螺 = <i>C. alveolus</i> Hombron & Jacquinot, 1852	2,3,t	intertidal, C	
<i>Cerithium traillii</i> Sowerby, 1855 珠環蟹守螺	t	intertidal, C	
<i>Clypeomorus bifasciatus</i> (Sowerby, 1855) 白甚蟹守螺	2,3,t	intertidal, O	+
<i>Clypeomorus brevis</i> (Quoy & Gaimard, 1834) 白斑蟹守螺	t	intertidal, R	
<i>Clypeomorus chemnitzianus</i> (Pilsbry, 1901) 桑椹蟹守螺	2,3,t	intertidal, C	+
<i>Clypeomorus nymphus</i> Houbrick, 1985 蜈蚣蟹守螺 = <i>C. sejunctus</i> (Iredale, 1929) = <i>C. pupa</i> (Sowerby II, 1865)	2,3		

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Clypeomorus purpurastoma</i> Houbbrick, 1985 紫口蟹守螺	t	intertidal, C	
<i>Clypeomorus subbreviscula</i> (Oostingh, 1925) 中廣蟹守螺	2,3		
<i>Rhinoclavis sinensis</i> (Gmelin, 1791) 中華蟹守螺	t	intertidal, C	+
<i>Royella sinon</i> (Bayle, 1880) 白塔蟹守螺	t	intertidal, R	
Siliquariidae 蚕蚓螺科			
<i>Siliquaria cumingii</i> (Mörch, 1860) 蚕蚓螺	t	-5, O	+
Planaxidae 芝麻螺科			
<i>Planaxis labiosa</i> A. Adams, 1853 金絲芝麻螺	t	-1, C	+
<i>Planaxis sulcatus</i> (Born, 1778) 芝麻螺	t	-1, A	+
<i>Supplanaxis niger</i> (Quoy et Gaimard, 1833) 黑芝麻螺	3		
Potamididae 海蟾科			
<i>Cerithidea cingulata</i> (Gmelin, 1791) 桤海蟾	t	intertidal, A	
<i>Cerithidea rhizophorarum</i> A. Adams, 1855 網目海蟾	3		
Modulidae 壺螺科			
<i>Modulus tectum</i> (Gmelin, 1791) 壺螺	t	-3, O	
Littorinidae 玉黍螺科			
<i>Echininus cumingii spinulosus</i> (Philippi, 1847) 棘玉黍螺	t	intertidal, O	
<i>Littorina coccina</i> (Gmelin, 1791) 草莓玉黍螺	1,t	intertidal, A	
<i>Littorina pintado</i> (Wood, 1828) 細點玉黍螺	t	intertidal, A	
<i>Littorina scabra</i> (Linnaeus, 1758) 粗紋玉黍螺	1,t	intertidal, A	+
<i>Littorina undulata</i> Gray, 1839 波紋玉黍螺	1,t	intertidal, A	+
<i>Nodilittorina radiata</i> (Souleyet in Eydoux & Souleyet, 1852) 細粒玉黍螺	1,t	intertidal, C	+
<i>Nodilittorina trochoides</i> (Gray, 1839) 顆粒玉黍螺	1,t	intertidal, C	+
<i>Nodilittorina vidua</i> (Gould, 1859) 臺灣玉黍螺	1,t	intertidal	+
<i>Tectarius coronatus</i> Valenciennes, 1832 金塔玉黍螺	1		
<i>Tectarius pagodus</i> (Linnaeus, 1758) 巨塔玉黍螺	1		
Rissoidae 廐眼螺科			
<i>Zebina tridentata</i> (Michaud, 1836) 三齒廌眼螺	t	-1, R	
Strombidae 凤凰螺科			
<i>Lambis chiragra</i> (Linnaeus, 1758) 水字螺	1,2,3,t	-10, R	
<i>Lambis crocata</i> (Link, 1807) 金黃蜘蛛螺	1		
<i>Lambis lambis</i> (Linnaeus, 1758) 蜘蛛螺	1,t	-8, R	
<i>Lambis millepeda</i> Linnaeus, 1758 千足蜘蛛螺	1		
<i>Lambis scorpius</i> (Linnaeus, 1758) 蟹螺	1,2,3,t	-5, R	+
<i>Lambis truncata</i> (Humphrey, 1843) 駱駝螺	1		
<i>Strombus aurisdianae</i> Linnaeus, 1758 紋袖鳳凰螺	2,3,t	-5, R	
<i>Strombus bulla</i> (Röding, 1798) 紅袖鳳凰螺	1		
<i>Strombus canarium</i> Linnaeus, 1758 水晶鳳凰螺	1,t	-5, R	
<i>Strombus dentatus</i> Linnaeus, 1758 三齒鳳凰螺	t	-5, R	
<i>Strombus gibberulus</i> Linnaeus, 1758 駝背鳳凰螺	1		
<i>Strombus labiatus</i> (Röding, 1798) 百肋鳳凰螺	t	-3, R	
<i>Strombus latissimus</i> Linnaeus, 1758 閩唇鳳凰螺	1		
<i>Strombus lentiginosus</i> Linnaeus, 1758 粗瘤鳳凰螺	1,t	-3, R	
<i>Strombus luhuanus</i> Linnaeus, 1758 紅嬌鳳凰螺	1,t	-2,R	
<i>Strombus microurceus</i> (Kira, 1959) 小花瓶鳳凰螺	t	-2, O	
<i>Strombus mutabilis</i> Swainson, 1821 花瓶鳳凰螺	1,2,3,t	-1,O	+
<i>Strombus pipus</i> (Röding, 1798) 黑唇鳳凰螺	1		
<i>Strombus sinuatus</i> Humphrey, 1786 紫袖鳳凰螺	1		

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Strombus thersites</i> Swainson, 1823 厚唇鳳凰螺	1		
<i>Strombus urceus</i> Linnaeus, 1758 黑嘴鳳凰螺	1		
<i>Terebellum terebellum</i> (Linnaeus, 1758) 飛彈螺	1		
Cypraeidae 寶螺科			
<i>Cypraea annulus</i> Linnaeus, 1758 金環寶螺	1,2,3,t	intertidal, A	
<i>Cypraea arabica</i> Linnaeus, 1758 阿拉伯寶螺	1,2,3,t	intertidal, A	+
<i>Cypraea argus</i> Linnaeus, 1758 百眼寶螺	t	-2, R	
<i>Cypraea asellus</i> Linnaeus, 1758 漮標寶螺	1,t	-1, O	+
<i>Cypraea bistrinotata</i> Schilder & Schilder, 1937 花珠寶螺	t	-1, R	
<i>Cypraea caputserpentis</i> Linnaeus, 1758 雪山寶螺	1,2,3,t	intertidal, A	+
<i>Cypraea carneola</i> Linnaeus, 1758 紫口寶螺	2,3,t	intertidal, A	+
<i>Cypraea caurica</i> Linnaeus, 1758 清齒寶螺	t	-2, O	+
<i>Cypraea childreni</i> Gray, 1825 金蛹寶螺	3		
<i>Cypraea chinensis</i> Gmelin, 1791 中華寶螺	1,t	-2, R	
<i>Cypraea cibraria</i> Linnaeus, 1758 花鹿寶螺	1,t	intertidal, R	+
<i>Cypraea erosa</i> Linnaeus, 1758 腰斑寶螺	t	intertidal, A	+
<i>Cypraea errores</i> Linnaeus, 1758 愛龍寶螺	2,t	intertidal, A	+
<i>Cypraea felina</i> Gmelin, 1791 花貓寶螺	t	intertidal, C	
<i>Cypraea fimbriata</i> Gmelin, 1791 紫端寶螺	t	intertidal, A	
<i>Cypraea helvola</i> Linnaeus, 1758 紅花寶螺	1,3,t	intertidal, A	+
<i>Cypraea isabella</i> Linnaeus, 1758 雨絲寶螺	2,3,t	-2, O	+
<i>Cypraea labrolineata</i> Gaskoin, 1849 梨皮寶螺	t	-2, A	
<i>Cypraea lynx</i> Linnaeus, 1758 山貓寶螺	1,2,3,t	intertidal, C	
<i>Cypraea mappa</i> Linnaeus, 1758 地圖寶螺	1		
<i>Cypraea mauritiana</i> Linnaeus, 1758 龜甲寶螺	1,t	-3, R	+
<i>Cypraea moneta</i> Linnaeus, 1758 黃寶螺	1,2,3,t	intertidal, A	+
<i>Cypraea nucleus</i> Linnaeus, 1758 痘瘍寶螺	2,3,t	intertidal, O	
<i>Cypraea poraria</i> Linnaeus, 1758 紫花寶螺	2,3,t	intertidal, C	
<i>Cypraea pulchella</i> Swainson, 1823 黑齒寶螺	1		
<i>Cypraea staphylaea</i> Linnaeus, 1758 獐皮寶螺	t	intertidal, R	
<i>Cypraea stolidia</i> Linnaeus, 1758 塊斑寶螺	t	intertidal, R	
<i>Cypraea talpa</i> Linnaeus, 1758 酒桶寶螺	t	intertidal, R	
<i>Cypraea teres</i> Gmelin, 1791 黑痣寶螺	t	intertidal, R	
<i>Cypraea tigris</i> Linnaeus, 1758 黑星寶螺	1,3,t	intertidal, O	+
<i>Cypraea ursellus</i> Gmelin, 1791 肥熊寶螺	t	intertidal, R	
<i>Cypraea vitellus</i> Linnaeus, 1758 白星寶螺	1,t	-2, O	+
Hippocoridae 頂蓋螺科			
<i>Cheilea equestris</i> (Linnaeus, 1758) 風鈴晃蓋螺	t	-3, R	+
<i>Hipponix foliacea</i> (Quoy & Gaimard, 1835) 環蓋螺	t	intertidal, C	+
<i>Hipponix trigona</i> (Gmelin, 1791) 毛蓋螺	t	intertidal, O	+
<i>Hipponix conica</i> (Schumacher, 1817) 頂蓋螺	t	intertidal, A	
Crepidulidae 舟螺科			
<i>Crepidula walshi</i> (Reeve, 1859) 扁舟螺	t	-3, R	
Vanikoridae 白雕螺科			
<i>Vanikoro cancellata</i> (Lamarck, 1822) 布紋白雕螺	t	intertidal, R	
<i>Vanikoro gueriniana</i> Récluz, 1845 精緻白雕螺	t	intertidal, R	
Ovulidae 海兔螺科			
<i>Calpurnus verrucosus</i> (Linnaeus, 1758) 玉兔螺	1,3		
<i>Ovula ovum</i> (Linnaeus, 1758) 海兔螺	1,2,3,t	-3, R	+

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Volva volva volva</i> (Linnaeus, 1758) 長菱角螺	1		
Triviidae 蜈螺科			
<i>Proterato callosa</i> (A. Adams et Reeve, 1850) 厚石榴螺	3		
<i>Trivia oryza</i> (Lamarck, 1810) 白米蛹螺	t	-2, O	
Naticidae 玉螺科			
<i>Natica gualteriana</i> Récluz, 1844 小灰玉螺	t	intertidal, O	
<i>Polinices</i> sp.	t	-3, R	
<i>Polinices flemingianus</i> (Récluz, 1844) 膽孔白玉螺	t	-3, O	
* <i>Polinices vavaosi</i> (Reeve, 1855) 瓦氏白玉螺	t	-3, O	
<i>Polinices melanostomus</i> (Gmelin, 1791) 黑唇玉螺 = <i>Mammilla opaca</i> (Récluz, 1851)	3,t	-2, C	
<i>Polinices sebae</i> (Récluz, 1844) 白鼠玉螺	t	-2, O	
<i>Polinices simiae</i> (Deshayes, 1838) 花帶玉螺	t	-2, O	
Tonnidae 鶴螺科			
<i>Malea pomum</i> (Linnaeus, 1758) 粗齒鶴螺	1,t	-3, R	
<i>Tonna canaliculata</i> (Linnaeus, 1758) 平凹鶴螺	t	-5, R	
<i>Tonna chinensis</i> (Dillwyn, 1817) 中華鶴螺	1		
<i>Tonna marginata</i> (Philippi, 1845) 花點鶴螺	1		
<i>Tonna perdix</i> (Linnaeus, 1758) 鶴螺	1,t	intertidal, O	+
Bursidae 蛙螺科			
<i>Bursa bufonia</i> (Gmelin, 1791) 蟾蜍蛙螺	t	-2, C	+
<i>Bursa cruentata</i> (Sowerby, 1841) 血跡蛙螺	t	-2, O	
<i>Bursa granularis</i> (Röding, 1798) 果粒蛙螺	2,3,t	-1, A	+
<i>Bursa rosa</i> (Perry, 1811) 紫口蛙螺	t	-3, R	
<i>Bursa tuberosissima</i> (Reeve, 1844) 突瘤蛙螺	t	-2, O	
<i>Tutufa bubo</i> (Linnaeus, 1758) 大白蛙螺	t	-5, R	
<i>Tutufa rubeta</i> (Röding, 1798) 金口蛙螺	t	-3, O	+
Cassidae 唐冠螺科			
<i>Casmaria erinaceus</i> (Linnaeus, 1758) 小疊螺	t	-3, R	
<i>Cassis cornuta</i> (Linnaeus, 1758) 唐冠螺	t	-3, R	
<i>Cypraeocassis rufa</i> (Linnaeus, 1758) 萬寶螺	1		
<i>Phalium decussatum</i> (Linnaeus, 1758) 布紋疊螺	t	-3, R	
Ranellidae 法螺科			
<i>Charonia tritonis</i> (Linnaeus, 1758) 大法螺	1,3		
<i>Cymatium aquatile</i> (Reeve, 1844) 矮毛法螺	t	-2, C	
<i>Cymatium muricinum</i> (Röding, 1798) 紅口法螺	t	-3, R	
<i>Cymatium nicobaricum</i> (Röding, 1798) 金口法螺	t	-3, R	+
<i>Cymatium pileare</i> (Linnaeus, 1758) 毛法螺	3,t	-2, A	
<i>Cymatium rubeculum</i> (Linnaeus, 1758) 豔紅美法螺	3,t	-2, O	
Personidae 扭法螺科			
<i>Distorsio anus</i> (Linnaeus, 1758) 扭法螺	t	-3, intertidal	
<i>Distorsio reticulata</i> (Linnaeus, 1758) 毛扭法螺	1		
Epitoniidae 海螄螺科			
* <i>Amaea nebulodermata</i> (Azuma, 1972) 薄肋海螄螺	t	-8, R	
* <i>Epitonium bullatum</i> (Sowerby, 1844) 泡泡海螄螺	t	-3, R	
<i>Gyrosscala lamellosa</i> (Lamarck, 1822) 小海螄螺	t	-2, A	+
Eulimidae 瓷螺科			
<i>Balcis major</i> (Sowerby, 1834) 大瓷螺	t	-2, O	
<i>Melanella grandis</i> (A. Adams, 1854 in H. & A. Adams, 1853) 白瓷螺	3	+	

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Melanella cumingii</i> (A. Adams in H. & A. Adams, 1853) 卡明氏瓷螺	t	-2, O	
* <i>Melanella flexuosa</i> (A. Adams in H. & A. Adams, 1853) 彎唇瓷螺	t	-2, R	
Muricidae 骨螺科			
<i>Chicoreus brunneus</i> (Link, 1807) 黑千手螺	1,t	intertidal, A	+
<i>Chicoreus palmarosae</i> (Lamarck, 1822) 玫瑰千手螺	1		+
<i>Chicoreus ramosus</i> (Linnaeus, 1758) 大千手螺	2,3,t	-3, O	+
<i>Chicoreus torrefactus</i> (Sowerby, 1841) 千手螺	1,t	-2, C	+
<i>Cronia margariticola</i> (Broderip, 1833) 穰結螺	1,2,3,t	intertidal, A	+
<i>Drupa clathrata</i> (Lamarck, 1816) 寬口岩螺	2		
<i>Drupa grossularia</i> (Röding, 1798) 金口岩螺	1,2,3,t	-1, R	+
<i>Drupa morum</i> Röding, 1798 紫口岩螺	1,2,3,t	-1, A	+
<i>Drupa ricinus</i> (Linnaeus, 1758) 黃齒岩螺	1,2,3,t	-1, A	+
<i>Drupa ricinus hadari</i> Emerson & Cernohorsky, 1973 白齒岩螺			
= <i>D. albolabris</i> (Blainville, 1832)	2,3,t	-1, R	
<i>Drupa rubusidaeus</i> Röding, 1798 玫瑰岩螺	1,t	-1, A	+
<i>Drupella concatenata</i> (Lamarck, 1822) 鏈結螺	t	intertidal, C	
<i>Drupella cornus</i> (Röding, 1798) 白結螺	2,3,t	intertidal, C	
<i>Ergalatex contractus</i> (Reeve, 1846) 粗肋結螺	2,3,t	intertidal, O	+
<i>Homalocantha anatomica</i> (Perry, 1811) 銀杏螺	t	-3, R	+
<i>Maculotriton serriale</i> (Deshayes in Laborde & Linant, 1834) 秀峰結螺	t	intertidal, O	+
<i>Mancinella aculeata</i> Deshayes, 1844 鐵斑岩螺			
= <i>Thais savignyi</i> (Deshayes in Lamarck, 1844)			
= <i>Mancinella distinguenda</i> (Dunker & Zelebor, 1866)	1,2,3,t	intertidal, A	+
<i>Mancinella echinata</i> (Blainville, 1832) 棘岩螺	2,3,t	-1, R	+
<i>Mancinella echinulata</i> (Lamarch, 1822) 金唇岩螺	t	-2, R	
<i>Mancinella hippocastanum</i> (Linnaeus, 1758) 冠岩螺	2,t	intertidal, O	
<i>Mancinella mancinella</i> (Linnaeus, 1758) 金絲岩螺	t	-1, O	+
<i>Mancinella tuberosa</i> Röding, 1798 角岩螺	1,3,t	-1, O	+
<i>Morula anaxeres</i> (Kiener, 1835) 白瘤結螺	t	intertidal, O	+
<i>Morula granulata</i> (Duclos, 1832) 結螺	1,2,3,t	intertidal, A	+
* <i>Morula musiva</i> (Kiener, 1835) 斑結螺	2,3,t	-1, R	
<i>Muricodrupa fenestrata</i> (Blainville, 1832) 窓結螺	t	-1, O	
<i>Muricodrupa fiscella</i> (Gmelin, 1791) 編織結螺			
= <i>M. funiculus</i> (Wood, 1828)	2,3,t	-1, R	
<i>Muricodrupa fusca</i> (Küster, 1862) 褐結螺	2,3		
<i>Nassa francolina</i> (Bruguière, 1789) 平滑橄欖螺	3		
<i>Nassa sertata</i> (Bruguière, 1798) 橄欖螺	t	-1, R	+
<i>Pascula lefevriana</i> (Tapparone-Canefri, 1880) 小結螺			
= <i>P. paucimaculata</i> Sowerby, 1903	2		
<i>Phrygiomurex sculptilis</i> (Reeve, 1844) 彫孔結螺	t	-1, R	
<i>Purpura panama</i> (Röding, 1798) 羅螺			
= <i>P. rudolphi</i> (Lamarck, 1818)	1	+	
* <i>Spinidrupa euracantha</i> (A. Adams, 1853) 壯棘結螺	t	-1, R	
* <i>Thais squamigera</i> (Deshayes in Belanger, 1832) 鱗棘結螺	t	-1, R	
<i>Thais armigera</i> (Link, 1807) 大岩螺	2,3,t	-1, C	+
<i>Thais clavigera</i> (Kuster, 1858) 虎岩螺	1,2,3,t	intertidal, A	+

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Thais marginatra</i> (Blainville, 1832) 屋瓦岩螺	t	-1, O	
Coralliophilidae 珊瑚螺科			
<i>Coralliophila bulbiformis</i> Conrad, 1837 粗皮珊瑚螺	t	-2, O	
<i>Coralliophila neritoidea</i> (Lamarck, 1816) 紫口珊瑚螺	t	-2, C	+
<i>Magilus lamarchii</i> (Deshayes, 1863) 瘦長珊瑚礁螺	t	-2, R	
<i>Magilus antiquatus</i> Montfort, 1810 珊瑚礁螺	t	-2, C	
<i>Magilus striatus</i> (Ruppel, 1835) 橄欖珊瑚礁螺	t	-2, R	
<i>Quoyula madreporarum</i> (Sowerby, 1832) 廣口珊瑚螺	3,t	-1, C	+
Turbinellidae 拳螺科			
<i>Vasum ceramicum</i> (Linnaeus, 1758) 長拳螺	2,3,t	-1, R	+
<i>Vasum turbinellum</i> (Linnaeus, 1758) 短拳螺	2,3,t	-1, R	+
Columbellidae 麥螺科			
* <i>Aesopus clausiliformis</i> (Kiener, 1834) 煙管麥螺	t	-1, R	
<i>Euplica varians</i> (Sowerby, 1832) 肩瘤麥螺	t	intertidal, R	
<i>Mitrella tenuis</i> (Gaskoin, 1851)	3		
<i>Pyrene punctata</i> (Bruguire, 1789) 紅麥螺	t	-1, R	+
<i>Pyrene testudinaria</i> (Link, 1807) 麥螺	t	intertidal, C	+
<i>Pyrene turturina</i> (Lamarck, 1822) 球麥螺	t	-1, R	
<i>Pyrene scripta</i> (Lamarck, 1822) 花麥螺	t	intertidal, O	+
<i>Sulcomitrella monodonta</i> (Habe, 1958)	3		
Nassariidae 織紋螺科			
<i>Niotha albescens</i> (Dunker, 1846) 黑頂織紋螺	t	intertidal, R	
<i>Niotha distorta</i> (A. Adams, 1852) 波浪織紋螺	t	-1, R	
<i>Zeuxis castus</i> (Gould, 1850) 花織紋螺	t	intertidal, C	
<i>Zeuxis margaritiferus</i> Dunker, 1847 尖頭織紋螺	t	intertidal, O	
<i>Telasco velatus</i> (Gould, 1850) 彈頭織紋螺	t	intertidal, O	+
<i>Zeuxis olivaceus</i> (Bruguière, 1789) 橄欖織紋螺	3		
<i>Zeuxis smithii</i> (Marrat, 1877) 史氏織紋螺	t	intertidal, R	
Buccinidae 峨螺科			
<i>Babylonia formosae</i> (Sowerby, 1866) 臺灣鳳螺	1		
<i>Buccinum opisoplectum</i> Dall, 1907 後旋峨螺	2,3		
<i>Buccinum zelotes</i> Dall, 1907 旋塔峨螺	3		
<i>Cantharus fumosus</i> (Dillwyn, 1817) 焦黃峨螺	t	intertidal, C	+
<i>Cantharus pulchra</i> (Reeve, 1846) 豔美峨螺	1,t	intertidal, O	
<i>Cantharus undosus</i> (Linnaeus, 1758) 粗紋峨螺	2,3,t	intertidal, C	+
<i>Engina lineata</i> (Reeve, 1846) 小斑馬峨螺	t	intertidal, O	
<i>Engina mendicaria</i> (Linnaeus, 1758) 斑馬峨螺	1,2,3		
<i>Engina zepa</i> (Duclos, 1840) 細小斑馬峨螺	t	intertidal, O	
<i>Engina zonalis</i> (Lamarck, 1822) 正斑馬峨螺	t	intertidal, C	
<i>Japeuthria cingulata</i> (Reeve, 1847) 褐線峨螺	t	intertidal, C	
<i>Pisania ignea</i> (Gmelin, 1791) 火燄峨螺	t	intertidal, C	
<i>Pollia mollis</i> (Gould, 1860) 莫利斯峨螺	2,3		
Colubrariidae 布紋螺科			
<i>Colubraria cumingii</i> (Dohrn, 1861) 卡明氏布紋螺	t	-3, R	
Fasciolariidae 旋螺科			
<i>Latirolagena smaragdula</i> (Linnaeus, 1758) 釣錘旋螺	3		
<i>Latirus craticulatus</i> (Linnaeus, 1758) 紅斑塔旋螺	3,t	-1, O	
<i>Latirus nodatus</i> Gmelin, 1791 粗瘤旋螺(juvenile)	t	-1, R	
<i>Latirus polygonus</i> (Gmelin, 1791) 多稜旋螺	t	-2, R	+

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Peristernia australiensis</i> (Reeve, 1847) 澳洲旋螺	3		
<i>Peristernia nassatula</i> (Lamarck, 1822) 紫口旋螺	3,t	intertidal, C	+
<i>Pleuroploca filamentosa</i> (Röding, 1798) 赤旋螺	3,t	-3, R	
Olividae 檵螺科			
<i>Oliva annulata</i> (Gmelin, 1791) 寶島榧螺	1,t	-2, O	
<i>Oliva duclosi</i> Reeve, 1850 杜氏榧螺	1		
<i>Oliva sericea</i> (Röding, 1798) 錦綢榧螺	1,t	-3, R	
Harpidae 楊桃螺科			
<i>Harpa amouretta</i> Röding, 1798 小楊桃螺	t	-1, O	
Mitridae 筆螺科			
<i>Cancilla isabella</i> (Swainson, 1831) 白筆螺	t	-1, R	
<i>Imbricaria punctata</i> (Swainson, 1821) 小芋筆螺	t	-1, O	
<i>Mitra ambigua</i> Swainson, 1829 問題筆螺	2,3		
<i>Mitra cardinalis</i> (Gmelin, 1791) 圓鯉筆螺	1,t	-3,R	
<i>Mitra chrysalis</i> Reeve, 1844 蟸形筆螺	2,3,t	intertidal, R	
<i>Mitra coronata</i> Lamarck, 1811 花環筆螺	t	intertidal, C	
<i>Mitra decurtata</i> Reeve, 1844 腰帶筆螺	2,3,t	intertidal, C	+
<i>Mitra edentula</i> Swainson, 1823 無齒筆螺	t	intertidal, R	
<i>Mitra eremitarum</i> (Röding, 1798) 縱斑筆螺	t	intertidal, C	
<i>Mitra ferruginea</i> Lamarck, 1811 粗斑筆螺	2,3,t	intertidal, C	
<i>Mitra imperialis</i> Röding, 1798 帝王筆螺	t	intertidal, O	
<i>Mitra litterata</i> Lamarck, 1811 火燄筆螺	1,2,3,t	intertidal, O	+
<i>Mitra mitra</i> (Linnaeus, 1758) 錦鯉筆螺	1,t	-3, O	
<i>Mitra papalis</i> (Linnaeus, 1758) 大紅牙筆螺	1		
<i>Mitra paupercula</i> (Linnaeus, 1758) 大燄筆螺	1,2,3,t	-1, O	
<i>Mitra pellisserpentis</i> Reeve, 1844 檸檬筆螺	t	-2, R	+
<i>Mitra pica</i> (Dillwyn, 1817) 細焰筆螺	2		
<i>Mitra retusa</i> Lamarck, 1811 短燄筆螺	2,3,t	intertidal, C	
<i>Mitra scutulata</i> (Gmelin, 1791) 花燄筆螺	2,3,t	intertidal, O	+
<i>Mitra stictica</i> (Link, 1807) 紅牙筆螺	1,t	-2, O	
* <i>Mitra ticaomica</i> (Reeve, 1844) 橡實筆螺	t	intertidal, R	
<i>Mitra turgida</i> Reeve, 1845 黃雕筆螺	t	-1, R	
<i>Pterygia crenulata</i> (Gmelin, 1791) 彈頭筆螺	t	intertidal, R	+
<i>Pterygia dactylus</i> (Linnaeus, 1767) 姆指筆螺	t	-2, R	
<i>Pterygia nucea</i> (Gmelin, 1791) 橄欖球筆螺	t	-2, R	
<i>Pterygia sinensis</i> (Reeve, 1844) 中華筆螺	t	-2, R	
<i>Strigatella assimilis</i> (Pease, 1868) 白嘴筆螺	t	-2, R	
Costellariidae 虎筆螺科			
<i>Vexillum aemula</i> (E. A. Smith, 1879)	3		
<i>Vexillum cancellarioides</i> (Anton, 1839) 白櫛蛹筆螺	t	intertidal, R	+
<i>Vexillum curvilaratum</i> (Sowerby II, 1874) 黑蛹筆螺 = <i>V. formosense</i> (Sowerby, 1890)	1		
* <i>Vexillum daedala</i> (Reeve, 1845) 裝飾蛹筆螺	t	-2, R	
* <i>Vexillum leucodesma</i> (Reeve, 1845) 白環蛹筆螺	t	intertidal, O	
<i>Vexillum pacificum</i> (Reeve, 1845) 太平洋蛹筆螺	t	-2, O	
* <i>Vexillum pardalis</i> (Küster, 1840) 花豹蛹筆螺	t	intertidal, R	
<i>Vexillum patriarchalis</i> (Gmelin, 1791) 教皇帽蛹筆螺	t	intertidal, R	
<i>Vexillum taeniatum</i> (Lamarck, 1811) 紅蛹筆螺 = <i>V. orbatum</i> (Link, 1808)	1		

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Zierliana ziervogeli</i> (Gmelin, 1791) 鐵齒蛹筆螺	t	-2, R	
Conidae 芋螺科			
<i>Conus arenatus</i> Hwass, 1792 紋身芋螺	t	-1, R	
<i>Conus aulicus</i> Linnaeus, 1758 宮廷芋螺	3		
<i>Conus australis</i> Holten, 1802 長芋螺	1		
<i>Conus balteatus</i> Sowerby, 1833 瘤肩芋螺	t	-1, O	
<i>Conus capitaneus</i> Linnaeus, 1758 船長芋螺	2,3,t	-2, C	
<i>Conus catus</i> Hwass, 1792 貓芋螺	2,3,t	-1, O	
<i>Conus chaldeus</i> Röding, 1798 小斑芋螺	2,3,t	intertidal, C	
<i>Conus coffeeae</i> Gmelin, 1791 咖啡芋螺	t	intertidal, R	+
<i>Conus coronatus</i> Gmelin, 1791 花冠芋螺	2,3,t	intertidal, A	+
<i>Conus distans</i> Hwass, 1792 長距芋螺	t	intertidal, R	
<i>Conus ebraeus</i> Linnaeus, 1758 斑芋螺	1,2,3,t	intertidal, A	+
<i>Conus flavidus</i> Lamarck, 1810 紫霞芋螺	2,3,t	intertidal, C	+
<i>Conus fulgetrum</i> Sowerby, 1834 草蓆芋螺	t	intertidal, O	
<i>Conus kinoshitai</i> (Kuroda, 1956) 木下芋螺	1		
<i>Conus litteratus</i> Linnaeus, 1758 字碼芋螺	2,3,1		
<i>Conus lividus</i> Hwass, 1792 晚霞芋螺	2,3,t	intertidal, A	+
<i>Conus marmoreus</i> Linnaeus, 1758 大理石芋螺	3		
<i>Conus miles</i> Linnaeus, 1758 柳絲芋螺	2,3,t	intertidal, C	+
<i>Conus miliaris</i> Hwass in Bruguere, 1792 百萬芋螺	t	intertidal, R	
<i>Conus monachus</i> Linnaeus, 1758 花瑪瑙芋螺	2,3,t	intertidal, O	+
<i>Conus musicus</i> Hwass, 1792 樂譜芋螺	2,3,t	intertidal, C	+
<i>Conus parvulus</i> Link, 1807 桔梗芋螺	t	-2, R	
<i>Conus pauperculus</i> Sowerby I, 1834 五線譜芋螺	2		
<i>Conus pulicarius</i> Hwass, 1792 芝麻芋螺	t	intertidal, O	
<i>Conus rattus</i> Hwass, 1792 鼠芋螺	2,3,t	intertidal, A	
<i>Conus sponsalis</i> Hwass, 1792 花環芋螺	2,3,t	intertidal, A	+
<i>Conus stramineus</i> Lamarck, 1810 稻草芋螺	t	intertidal, R	
<i>Conus textile</i> Linnaeus, 1758 織錦芋螺	t	-2, C	+
<i>Conus tulipa</i> Linnaeus, 1758 鬱金香芋螺	t	-2, O	
<i>Conus varius</i> Linnaeus, 1758 雲朵芋螺	t	intertidal, R	
<i>Conus vexillum</i> Gmelin, 1791 旗幟芋螺	t	-2, O	+
<i>Conus vitulinus</i> Hwass, 1792 小牛芋螺	2,3,t	-2, R	
Turridae 捲管螺科			
<i>Paradrillia consimilis</i> (E. A. Smith, 1879)	3		
* <i>Tylotiella obliquata</i> (Reeve, 1865) 斜瘤捲管螺	t	intertidal, R	
Terebridae 筒螺科			
<i>Hastula albula</i> (Menke, 1843) 磨筒螺	3		
<i>Hastula penicillata</i> (Hinds, 1844) 鉛筆筒螺	t	-5, R	
<i>Terebra affinis</i> Gray, 1834 錦絲筒螺	t	-5, R	
<i>Terebra crenulata</i> (Linnaeus, 1758) 花牙筒螺	t	-2, C	
<i>Terebra dimidiata</i> (Linnaeus, 1758) 紅筒螺	t	-5, R	
<i>Terebra subulata</i> (Linnaeus, 1767) 黑斑筒螺	t	-5, R	
Architectonicidae 車輪螺科			
<i>Heliaetus areola</i> (Gmelin, 1791) 高腰車輪螺	t	-5, O	+
<i>Psilaxis radiatus</i> (Röding, 1798) 輻射車輪螺	t	-1, R	
Hydatinidae 泡螺科			
<i>Hydatina physis</i> (Linnaeus, 1758) 密紋泡螺	3,t	-10, R	

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
Bullidae 梗螺科			
<i>Bulla vernicosa</i> Gould, 1859 梗螺	t	-10, O	+
Aplisidae 海鹿螺科			
<i>Aplysia dactylomela</i> Rang, 1828	3		
<i>Aplysia kurodai</i> (Baba, 1937)	3		
<i>Aplysia oculifera</i> Adams & Reeve, 1850	3		
<i>Dolabella auricularia</i> (Lightfoot, 1786) 龍骨海鹿螺	3		
Siphonariidae 松螺科			
<i>Siphonaria atra</i> Quoy & Gainard, 18321 黑松螺	t	intertidal, C	+
<i>Siphonaria laciniosa</i> (Linnaeus, 1758) 花松螺	t	intertidal, C	
Eulobiidae 耳螺科			
<i>Melampus flavus</i> (Gmelin, 1791) 金黃耳螺	t	intertidal, O	
BIVALVIA 二枚貝綱			
Arcidae 魁蛤科			
<i>Acar plicata</i> (Dillwyn, 1817) 小白魁蛤	t	intertidal, R	
<i>Anadara pilula</i> (Reeve, 1843) 球毛蚶	t	intertidal, C	
<i>Arca avellana</i> Lamarck, 1819 船魁蛤	t	intertidal, C	
<i>Arca navicularis</i> Bruguière, 1789 鷺翼魁蛤	t	intertidal, R	
<i>Arca ventricosa</i> Lamarck, 1819 鞋魁蛤	1,3,t	intertidal, O	
<i>Arcopsis symmetrica</i> (Reeve, 1844) 土豆魁蛤	t	intertidal, O	
<i>Barbatia cometa</i> (Reeve, 1844) 窄鬚魁蛤	3		
<i>Barbatia decussata</i> (Sowerby, 1833) 鬚魁蛤	1,3,t	intertidal, A	+
<i>Barbatia fusca</i> (Bruguire, 1789) 紅鬚魁蛤	1,3,t	intertidal, A	
<i>Barbatia stearnsii</i> (Pilsbry, 1895)	1,3		
<i>Hawaiarca yamamotoi</i> Sakurai et Habe, 1961 山本魁蛤	3		
Mytilidae 膜菜蛤科			
<i>Botula silicula</i> (Lamarck, 1819) 拇指膜菜蛤	t	intertidal, R	
<i>Lithophaga lima</i> (Lamy, 1919) 粗石蜊	t	intertidal, R	
<i>Lithophaga lithura</i> Pilsbry, 1905 鉛石蜊	t	intertidal, R	
<i>Lithophaga zittelliana</i> Dunker, 1882 金石蜊	t	intertidal, R	
<i>Modiolus agripetus</i> Iredale, 1939 紫雲雀膜菜蛤	3		
<i>Modiolus auriculatus</i> (Krauss, 1848) 雲雀膜菜蛤(墾偏頂蛤)	t	intertidal, C	+
<i>Modiolus metcalfei</i> (Hanley, 1843) 土嘴瓜膜菜蛤	t	intertidal, A	
<i>Modiolus philippinarum</i> (Hanley, 1843) 菲律賓膜菜蛤	t	intertidal, O	+
<i>Musculus cupreus</i> (Gould, 1816) 邊網膜菜蛤	t	-2, O	+
<i>Mytilus edulis</i> Linnaeus, 1758 食用膜菜蛤	1		
<i>Septifer bilocularis</i> (Linnaeus, 1758) 孔雀蛤膜菜蛤	3,t	intertidal, O	
<i>Septifer excisus</i> (Wiegmann, 1837) 白孔雀蛤膜菜蛤	t	intertidal, O	+
<i>Septifer virgatus</i> (Wiegmann, 1837) 紫孔雀蛤膜菜蛤	t	intertidal, C	+
Pteriidae 鶯蛤科			
<i>Pinctada fucata</i> Gould, 1850	1,3		
<i>Pinctada margaritifera</i> (Linnaeus, 1758) 黑蝶珍珠蛤	1,t	-5, C	+
<i>Pinctada martensi</i> (Dunder, 1873) 馬丁氏珍珠蛤	t	-5, R	+
<i>Pteria avicula</i> (Holten, 1802) 黑鶯蛤	3		
<i>Pteria brevialata</i> (Dunker, 1872) 朱紅鶯蛤	1,3,t	-10, O	
<i>Pteria loveni</i> (Dunker, 1872) 大肚鶯蛤	1,3		
* <i>Pteria peasei</i> (Dunker, 1872) 皮亞氏鶯蛤	t	-10, R	
<i>Pteria penguin</i> (Röding, 1798) 企鵝鶯蛤	1		
Isognomonidae 障泥蛤科			

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Isognomon ephippium</i> (Linnaeus, 1758) 馬鞍障泥蛤	1,3,t	intertidal, O	
<i>Isognomon isognomum</i> (Linnaeus, 1758) 太平洋障泥蛤	t	intertidal, O	
<i>Isognomon legumen</i> (Gmelin, 1791) 白障泥蛤	3,t	intertidal, C	
<i>Isognomon nucleus</i> Lamarck, 1819 小障泥蛤	t	intertidal, O	+
<i>Isognomon perna</i> (Linnaeus, 1767) 花紋障泥蛤	3,t	intertidal, C	+
Pinnidae 江珧蛤科			
<i>Atrina pectinata</i> Linnaeus, 1767 牛角江珧蛤			
= <i>P. japonica</i> Reeve	1,t	-10, C	
<i>Atrina vexillum</i> (Born, 1778) 黑旗江珧蛤	t	-10, R	
<i>Pinna muricata</i> Linnaeus, 1758 尖角江珧蛤	1,3,t	-2, C	+
<i>Streptopinna saccata</i> (Linnaeus, 1758) 袋狀江珧蛤	3,t	-10, O	
Limidae 狐蛤科			
<i>Lima vulgaris</i> Link, 1807 大白狐蛤	t	-5, O	
<i>Limaria fragilis</i> (Gmelin, 1791) 薄片狐蛤	t	-5, O	
Pectinidae 海扇蛤科			
<i>Chlamys farreri</i> (Jones et Preston, 1904) 法爾海扇蛤			
= <i>C. nipponensis</i> Kuroda, 1932	1		
<i>Gloripallium pallium</i> (Linnaeus, 1758) 油畫海扇蛤	t	-10, R	
<i>Pedum spondyloideum</i> (Gmelin, 1791) 海菊海扇蛤	3		
<i>Semipallium tigris</i> (Lamarck, 1819) 虎斑海扇蛤	t	-10, R	
Spondylidae 海菊蛤科			
<i>Spondylus barbatus</i> Reeve, 1856 山羊海菊蛤	t	-5, R	
<i>Spondylus barbatus cruentus</i> Lischke, 1868	1		
<i>Spondylus nicobaricus</i> Schreibers, 1793 紫斑海菊蛤	t	-5, O	+
<i>Spondylus sinensis</i> Schreibers, 1793 中華海菊蛤	1		
<i>Spondylus squamosus</i> Schreibers, 1793 魚鱗海菊蛤			
= <i>S. ducalis</i> Röding, 1798	1		+
<i>Spondylus varius</i> Sowerby, 1827 賽水海菊蛤	3		
<i>Spondylus versicolor</i> Schreibers, 1793 黃金海菊蛤	3		
Glyphaeidae 碜磲牡蠣科			
<i>Hyotissa hyotis</i> (Linnaeus, 1758) 碜磲牡蠣	1		
Ostreidae 牡蠣科			
<i>Lopha cristagalli</i> (Linnaeus, 1758) 鋸齒牡蠣	1,3,t	-5, R	+
<i>Ostrea sinensis</i> Gmelin, 1791 中華牡蠣	t	intertidal, R	
<i>Saccostrea mordax</i> (Gould, 1850) 黑齒牡蠣	3,t	intertidal, C	+
Lucinidae 滿月蛤科			
* <i>Anodontia</i> sp.	t	-10, R	
<i>Codakia paytenorum</i> (Iredale, 1937) 紅唇滿月蛤	3		
* <i>Codakia punctata</i> (Linnaeus, 1758) 胭脂滿月蛤	t	-10, O	
<i>Codakia tigerina</i> (Linnaeus, 1758) 滿月蛤	3,t	-10, C	+
<i>Epikodakia bella</i> (Conrad, 1837) 美姬滿月蛤	t	-10, O	
*Montacutidae 寄生蛤科			
* <i>Barrimysia cumingii</i> (A.Adams, 1856) 卡明氏寄生蛤	t	intertidal, R	
Carditidae 算盤蛤科			
<i>Cardita leana</i> Dunker, 1860 灰算盤蛤	3,t	intertidal, O	+
<i>Cardita variegata</i> Bruguière, 1792 算盤蛤	t	-3, O	+
Chamidae 偏口蛤科			
<i>Chama limbula</i> Lamarck, 1819 紫緣偏口蛤	t	-5, O	+
<i>Chama pacifica</i> Broderip, 1834 太平洋偏口蛤	t	-10, O	

Table 1. (Continued)

Taxa	Kenting	Depth (m) & Abundance	NE Taiwan
<i>Chama reflexa</i> Reeve, 1846 半紫偏口蛤	3		
<i>Pseudochama retroversa</i> (Lischke, 1870) 反轉偏口蛤	3		
Cardiidae 鳥尾蛤科			
<i>Regozara flava</i> (Linnaeus, 1758) 黃邊鳥尾蛤	t	-10, R	
<i>Vasticardium compunctum</i> (Kira, 1959) 黑斑鳥尾蛤	t	-5, R	
<i>Vasticardium elongatum</i> (Bruguière, 1789) 長鳥尾蛤	t	-10, R	
<i>Vasticardium enode</i> (Sowerby, 1841) 滑肋鳥尾蛤	1		
Tridacnidae 墉磲蛤科			
<i>Hippopus hippopus</i> (Linnaeus, 1758) 菱墉磲蛤	1		
<i>Tridacna gigas</i> (Linnaeus, 1758) 巨墉磲蛤	1		
<i>Tridacna maxima</i> (Röding, 1798) 長墉磲蛤 = <i>T. elongata</i> (Lamarck, 1819)	1,3,t	-10, C	
<i>Tridacna squamosa</i> Lamarck, 1819 鱗墉磲蛤	1,t	-10, R	
Tellinidae 櫻蛤科			
* <i>Cyclotellina remies</i> (Linnaeus, 1758) 滿月櫻蛤	t	-5, O	
<i>Scutarcopagia scobinata</i> (Linnaeus, 1758) 錐紋櫻蛤	3,t	-2, A	
<i>Tellina palatam</i> (Iredale, 1929) 波紋櫻蛤	3,t	-3, C	+
<i>Tellinella virgata</i> Linnaeus, 1758) 日光櫻蛤	t	-5,O	
Psammobiidae 紫雲蛤科			
<i>Asaphis violascens</i> (Forskal, 1775) 紫晃蛤	3,t	intertidal, C	+
<i>Hiatula diphos</i> (Linnaeus, 1771) 西施舌	t	-3, C	
Trapeziidae 船蛤科			
<i>Coralliophaga coralliophaga</i> (Gmelin, 1791) 珊瑚船蛤	t	-5, R	
<i>Trapezium bicarinatum</i> (Schumacher, 1817) 棱船蛤	t	-3, O	
<i>Trapezium liratum</i> (Reeve, 1843) 紫斑船蛤	t	intertidal, O	
<i>Trapezium oblongum</i> (Linnaeus, 1758) 方形船蛤	t	-5, O	
Veneridae 簾蛤科			
<i>Anomalocardia squamosa</i> (Linnaeus, 1758) 歪簾蛤	t	intertidal, O	
<i>Dosinia sinensis</i> (Gmelin, 1791) 環文蛤	t	intertidal,O	
<i>Gafrarium dispar</i> (Dillwyn, 1817) 枝條簾蛤	t	-3, O	+
<i>Gafrarium pectinatum</i> (Linnaeus, 1758) 斜肋縱簾蛤	3		
<i>Gafrarium tumidum</i> Röding, 1798 厚殼縱簾蛤	3,t	-3, O	+
<i>Meretrix lyrata</i> (Sowerby II, 1851) 紋肋文蛤	3		
<i>Periglypta chemnitzi</i> (Hanley, 1844) 千妮簾蛤	t	-3, O	
<i>Periglypta puerpera</i> (Linnaeus, 1771) 圓球簾蛤(皺紋蛤)	3,t	-3, O	+
<i>Periglypta reticulata</i> (Linnaeus, 1758) 山水簾蛤	3,t	-3, O	+
<i>Ruditapes philippinarum</i> (Adams & Reeve, 1850) 菲律賓簾蛤	t	-3, C	+

The symble “*” present new record; “+” represent recorded species; t = this paper; 1 = Yang (1980); 2 = Chang and Chen (1987); 3 = Chang (1985); A = Abundant, more than 20 specimens collected; C = common, 10-19 specimens collected; O = occasional, 5-9 specimens collected; R = rare, less than 5 specimens collected.

墾丁國家公園淺海的海貝

李淑娟 趙世民

國立自然科學博物館動物學組

本文表列在1993年到2003年，於墾丁國家公園海域所採獲的71科371種水深20公尺以內的海生貝類，其中18種為台灣新記錄種。本文並回顧及表列其它研究所記錄的53科242種。至目前為止，墾丁國家公園海域的海貝共記錄73科470種，主要是黑潮型的貝種，和臺灣東北角海域有40.7%的相似性。本研究亦包含部份（226種）的彩色圖片。

關鍵詞：海貝，臺灣，墾丁國家公園。

PLATE 1

1. *Haliotis asinina* Linnaeus, 1758 驢耳鮑螺 (74mm)
2. *Cellana radiata* (Born, 1778) 車輪笠螺 (21mm)
3. *Clanculus clanguloides* (Wood, 1828) 彩珠鐘螺 (9mm)
4. *Diloma piperina* (Philippi, 1849) 胡椒鐘螺 (6mm)
5. *Stomatella impertusa* (Burrow, 1815) 小廣口螺 (6mm)
6. *Stomatella planulata* Lamarck, 1816 廣口螺 (22mm)
7. *Trochus chloromphalus* Adams, 1853 綠臍鐘螺 (20mm)
8. *Trochus stellatus* Gmelin, 1791 血斑鐘螺 (20mm)
9. *Dentarene sarcina* Irccale, 1929 錦珠花冠螺 (5mm)
10. *Phasianella solida* (Born, 1780) 雉螺 (11mm)
11. *Turbo argyrostomus* Linnaeus, 1758 銀口蠚螺 (68mm)
12. *Turbo chrysostomus* Linnaeus, 1758 金口蠚螺 (55mm)
13. *Liotina granulata* (Gmelin, 1791) 瘤珠螺 (21mm)
14. *Turbo petholatus* Linnaeus, 1758 貓眼蠚螺 (41mm)
15. *Turbo sparverius* Gmelin, 1791 臺灣蠚螺 (79mm)
16. *Nerita exuvia* Linnaeus, 1758 浮雕蟹螺 (19mm)
17. *Nerita japonica* Dunker, 1860 日本蟹螺 (7mm)
18. *Nerita squamulata* Le Guillou, 1841 花圓蟹螺 (21mm)
19. *Neritopsis radula* (Linnaeus, 1758) 珍珠蟹螺 (18mm)
20. *Cerithium columna* Sowerby, 1834 塔蟹守螺 (36mm)
21. *Cerithium echinatum* Lamarck, 1822 棘蟹守螺 (54mm)
22. *Cerithium egenum* Gould, 1849 斑紋蟹守螺 (8mm)
23. *Cerithium interstriatum* Sowerby, 1855 田隴蟹守螺 (18mm)
24. *Cerithium lifuense* Melvill & Standen, 1895 太平洋蟹守螺 (21mm)
25. *Cerithium punctatum* Bruguière, 1792 芝麻蟹守螺 (8mm)
26. *Cerithium traillii* Sowerby II, 1855 珠環蟹守螺 (16mm)
27. *Clypeomorus brevis* (Quoy & Gaimard, 1834) 白斑蟹守螺 (21mm)
28. *Clypeomorus purpurastoma* Houbbrick, 1985 紫口蟹守螺 (25mm)
29. *Royella sinon* (Bayle, 1880) 白塔蟹守螺 (18mm)
30. *Cerithidea cingulata* (Gmelin, 1791) 桤海蜷 (25mm)
31. *Modulus tectum* (Gmelin, 1791) 壺螺 (15mm)
32. *Echininus cumingii spinulosus* (Philippi, 1847) 棘玉黍螺 (16mm)
33. *Littorina coccina* (Gmelin, 1791) 草莓玉黍螺 (8mm)
34. *Littorina pintado* (Wood, 1828) 細點玉黍螺
35. *Zebina tridentata* (Michaud, 1836) 三齒廕眼螺 (9mm)
36. *Lambis chiragra* (Linnaeus, 1758) 水字螺(juvenile) (96mm)
37. *Lambis lambis* (Linnaeus, 1758) 蜘蛛螺 (146mm)
38. *Lambis scorpius* (Linnaeus, 1758) 蟹螺(juvenile) (67mm)
39. *Strombus aurisdianae* Linnaeus, 1758 紅袖鳳凰螺 (66mm)
40. *Strombus canarium* Linnaeus, 1758 水晶鳳凰螺 (52mm)
41. *Strombus dentatus* Linnaeus, 1758 三齒鳳凰螺 (37mm)
42. *Strombus labiatus* (Röding, 1798) 百肋鳳凰螺 (35mm)
43. *Strombus lentiginosus* Linnaeus, 1758 粗瘤鳳凰螺 (78mm)
44. *Strombus luhuanus* Linnaeus, 1758 紅嬌鳳凰螺 (56mm)
45. *Strombus microurceus* (Kira, 1959) 小花瓶鳳凰螺 (18mm)
46. *Cypraea annulus* Linnaeus, 1758 金環寶螺 (25mm)
47. *Cypraea argus* Linnaeus, 1758 百眼寶螺 (78mm)
48. *Cypraea bistrinotata* Schilder & Schilder, 1937 花珠寶螺 (13mm)
49. *Cypraea chinensis* Gmelin, 1791 中華寶螺 (41mm)
50. *Cypraea felina* Gmelin, 1791 花貓寶螺 (15mm)

PLATE 1

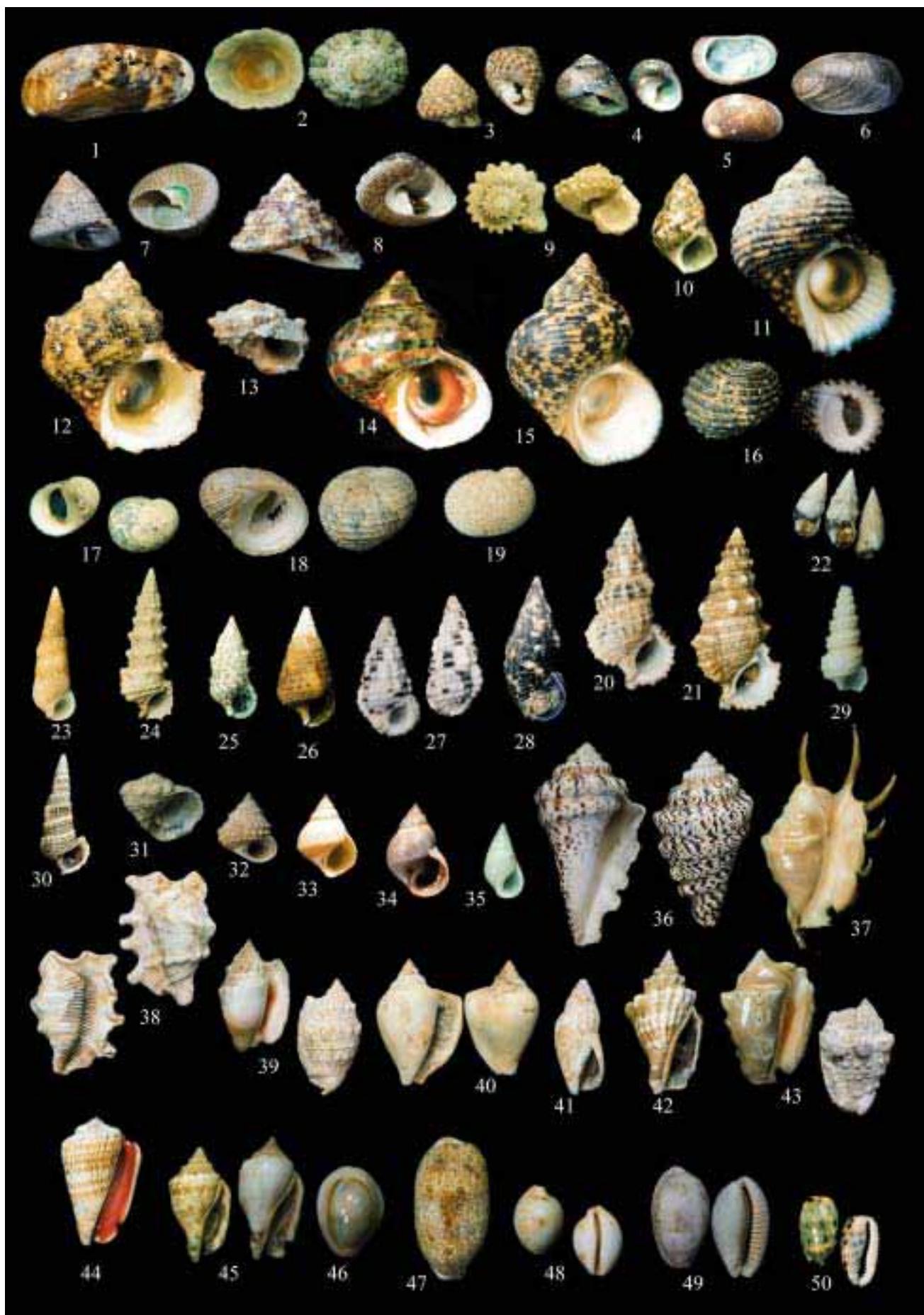


PLATE 2

51. *Cypraea fimbriata* Gmelin, 1791 紫端寶螺 (10mm)
52. *Cypraea labrolineata* Gaskoin, 1849 梨皮寶螺 (29mm)
53. *Cypraea lynx* Linnaeus, 1758 山貓寶螺 (35mm)
54. *Cypraea nucleus* Linnaeus, 1758 痘瘡寶螺 (20mm)
55. *Cypraea poraria* Linnaeus, 1758 紫花寶螺 (17mm)
56. *Cypraea staphylaea* Linnaeus, 1758 马皮寶螺 (14mm)
57. *Cypraea stolidia* Linnaeus, 1758 塊斑寶螺 (23mm)
58. *Cypraea talpa* Linnaeus, 1758 酒桶寶螺 (70mm)
59. *Cypraea teres* Gmelin, 1791 黑痣寶螺 (25mm)
60. *Cypraea ursellus* Gmelin, 1791 肥熊寶螺 (15mm)
61. *Sabia conica* (Schumacher, 1817) 頂蓋螺 (18mm)
62. *Siphopatella walshi* (Reeve, 1859) 扁舟螺 (19mm)
63. *Vanikoro cancellata* (Lamarck, 1822) 布紋白雕螺 (17mm)
64. *Vanikoro gueriniana* Récluz, 1845 精緻白雕螺 (10mm)
65. *Trivia oryza* (Lamarck, 1810) 白米蛹螺 (8mm)
66. *Natica gualteriana* Récluz, 1844 小灰玉螺 (17mm)
67. *Polinices* sp. (35mm)
68. *Polinices flemingianus* (Récluz, 1844) 膽孔白玉螺 (23mm)
- 69.**Polinices vavaosi* (Reeve, 1855) 瓦氏白玉螺 (36mm)
70. *Polinices melanostomus* (Gmelin, 1791) 黑唇玉螺 (38mm)
71. *Polinices sebae* (Récluz, 1844) 白鼠玉螺 (28mm)
72. *Polinices simiae* (Deshayes, 1838) 花帶玉螺 (23mm)
73. *Malea pomum* (Linnaeus, 1758) 粗齒鶲螺 (36mm)
74. *Tonna canaliculata* (Linnaeus, 1758) 平凹鶲螺 (49mm)
75. *Bursa cruentata* (Sowerby, 1841) 血跡蛙螺 (31mm)
76. *Bursa rosa* (Perry, 1811) 紫口蛙螺 (45mm)
77. *Bursa tuberosissima* (Reeve, 1844) 突瘤蛙螺 (39mm)
78. *Tutufa bubo* (Linnaeus, 1758) 大白蛙螺 (88mm)
79. *Casmaria erinaceus* (Linnaeus, 1758) 小鬚螺 (28mm)
80. *Cassis cornuta* (Linnaeus, 1758) 唐冠螺 (juvenile) (75mm)
81. *Phalium decussatum* (Linnaeus, 1758) 布紋鬘螺 (24mm)
82. *Cymatium aquatile* (Reeve, 1844) 矮毛法螺 (71mm)
83. *Cymatium muricinum* (Röding, 1798) 紅口法螺 (47mm)
84. *Cymatium pileare* (Linnaeus, 1758) 毛法螺 (60mm)
85. *Cymatium rubeculum* (Linnaeus, 1758) 豔紅美法螺 (29mm)
86. *Distorsio anus* (Linnaeus, 1758) 扭法螺 (41mm)
- 87.**Epitonium bullatum* (Sowerby, 1844) 泡泡海螄螺 (19mm)
- 88.**Amaea nebulodermata* (Azuma, 1972) 薄肋海螄螺 (15mm)
89. *Balcis major* (Sowerby, 1834) 大瓷螺 (24mm)
90. *Melanella cumingii* (A. Adams in H. & A. Adams, 1853) 卡明氏瓷螺 (27mm)
- 91.**Melanella flexuosa* (A. Adams in H. & A. Adams, 1853) 彎唇瓷螺 (18mm)
92. *Drupa ricinus hadari* Emerson & Cernohorsky, 1973 白齒岩螺 (19mm)
93. *Drupella concatenata* (Lamarck, 1822) 鏈結螺 (28mm)
94. *Drupella cornus* (Röding, 1798) 白結螺 (37mm)
95. *Mancinella echinulata* (Lamarch, 1822) 金唇岩螺 (37mm)
96. *Mancinella hippocastanum* (Linnaeus, 1758) 冠岩螺 (43mm)

PLATE 2

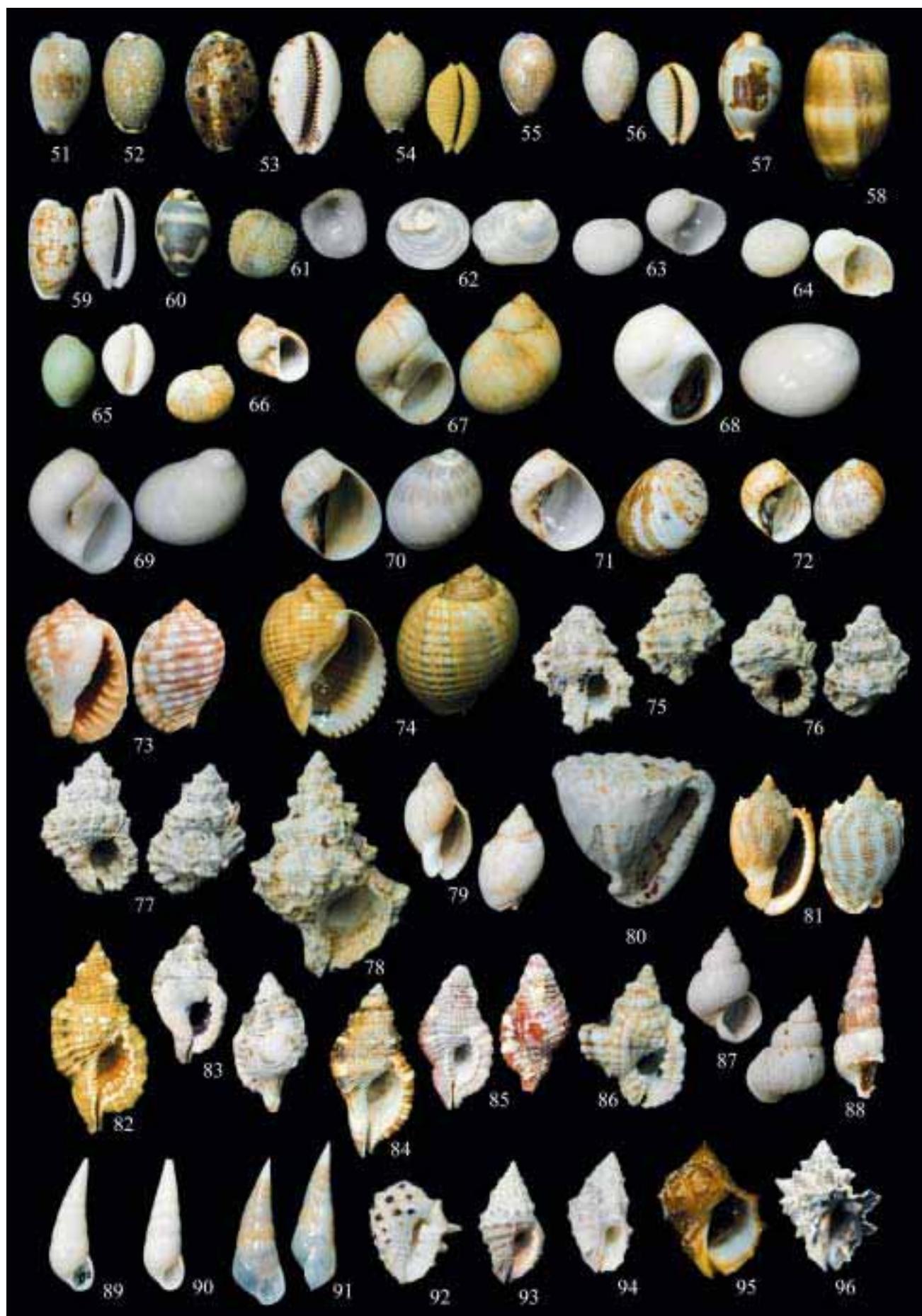


PLATE 3

- 97.**Morula musiva* (Kiener, 1835) 斑結螺(10mm)
98. *Morula fenestrata* (Blainville, 1832) 窗結螺(29mm)
99. *Muricodrupa fiscella* (Gmelin, 1791) 編織結螺(25mm)
100. *Phrygiomurex sculptilis* (Reeve, 1844) 彫孔結螺(21mm)
- 101.**Spinidrupa euracantha* (A. Adams, 1853) 壯棘結螺(30mm)
- 102.**Thais squamigera* (Deshayes in Belanger, 1832) 鱗棘結螺(24mm)
103. *Thais marginatra* (Blainville, 1832) 屋瓦結螺(24mm)
104. *Coralliophila bulbiformis* Conrad, 1837 粗皮珊瑚螺(34mm)
105. *Magilus lamarchii* (Deshayes, 1863) 瘦長珊瑚礁螺(19mm)
106. *Magilus antiquatus* Montfort, 1810 珊瑚礁螺(21mm)
107. *Magilus striatus* (Ruppel, 1835) 橄欖珊瑚礁螺(24mm)
- 108.**Aesopus clausiliformis* (Kiener, 1834) 煙管麥螺(11mm)
109. *Euplica varians* (Sowerby, 1832) 肩瘤麥螺(8mm)
110. *Pyrene turturina* (Lamarck, 1822) 球麥螺(11mm)
111. *Nassarius albescens* (Dunker, 1846) 黑頂織紋螺(17mm)
112. *Neotha distorta* (A.Adams, 1852) 波浪織紋螺(26mm)
113. *Nassarius castus* (Gould, 1850) 花織紋螺(24mm)
114. *Nassarius margaritiferus* Dunker, 1847 尖頭織紋螺(28mm)
115. *Zeuxis smithii* (Marrat, 1877) 史氏織紋螺(26mm)
116. *Pollina pulchra* (Reeve, 1846) 豔美峨螺(23mm)
117. *Engina lineata* (Reeve, 1846) 小斑馬峨螺(9mm)
118. *Engina zepa* (Duclos, 1840) 細小斑馬峨螺(7mm)
119. *Engina zonalis* (Lamarck, 1822) 正斑馬峨螺(11mm)
120. *Japeuthria cingulata* (Reeve, 1847) 褐線峨螺(29mm)
121. *Pisania ignea* (Gmelin, 1791) 火燄峨螺(25mm)
122. *Colubraria cumingii* (Dohrn, 1861) 卡明氏布紋螺(27mm)
123. *Latirus craticulatus* (Linnaeus, 1758) 紅斑塔旋螺(35mm)
124. *Latirus nodatus* Gmelin, 1791 粗瘤旋螺(juvenile)(32mm)
125. *Pleuroplaca filamentosa* (Röding, 1798) 赤旋螺(130mm)
126. *Oliva annulata* (Gmelin, 1791) 寶島榧螺(44mm)
127. *Oliva sericea* (Röding, 1798) 錦綢榧螺(55mm)
128. *Harpa amouretta* Röding, 1798 小楊桃螺(37mm)
129. *Cancilla isabella* (Swainson, 1831) 白筆螺(32mm)
130. *Imbricaria punctata* (Swainson, 1821) 小芋筆螺(17mm)
131. *Mitra cardinalis* (Gmelin, 1791) 圓鯉筆螺(67mm)
132. *Mitra chrysalis* (Reeve, 1844) 蛆形筆螺(18mm)
133. *Mitra coronata* Lamarck, 1811 花環筆螺(26mm)
134. *Mitra edentula* Swainson, 1823 無齒筆螺(35mm)
135. *Mitra eremitarum* (Röding, 1798) 縱斑筆螺(62mm)
136. *Mitra ferruginea* Lamarck, 1811 粗斑筆螺(48mm)
137. *Mitra imperialis* Röding, 1798 帝王筆螺(51mm)
138. *Mitra mitra* (Linnaeus, 1758) 錦鯉筆螺(75mm)
139. *Mitra paupercula* (Linnaeus, 1758) 大談筆螺(25mm)
140. *Mitra retusa* Lamarck, 1811 短談筆螺(27mm)
141. *Mitra stictica* (Link, 1807) 紅牙筆螺(62mm)
- 142.**Mitra ticaonica* (Reeve, 1844) 橡實筆螺(23mm)
143. *Mitra turgida* (Reeve, 1844) 黃雕筆螺(16mm)
144. *Pterygia dactylus* (Linnaeus, 1758) 姆指筆螺(41mm)
145. *Pterygia nucea* (Gmelin, 1791) 橄欖球筆螺(44mm)

PLATE 3



PLATE 4

146. *Pterygia sinensis* (Reeve, 1844) 中華筆螺 (23mm)
 147. *Strigatella assimilis* (Pease, 1868) 白嘴筆螺 (15mm)
 148.**Vexillum daedala* (Reeve, 1845) 裝飾蛹筆螺 (12mm)
 149.**Vexillum leucodesma* (Reeve, 1845) 白環蛹筆螺 (14mm)
 150. *Vexillum pacificum* (Reeve, 1845) 太平洋蛹筆螺 (13mm)
 151.**Vexillum pardalis* (Küster, 1840) 花豹蛹筆螺 (12mm)
 152. *Vexillum patriarchalis* (Gmelin, 1791) 教皇帽蛹筆螺 (15mm)
 153. *Zierliana ziervogeli* (Gmelin, 1791) 鐵齒蛹筆螺 (25mm)
 154. *Conus arenatus* Hwass, 1792 紋身芋螺 (35mm)
 155. *Conus balteatus* Sowerby, 1833 瘤肩芋螺 (37mm)
 156. *Conus capitaneus* Linnaeus, 1758 船長芋螺 (52mm)
 157. *Conus catus* Hwass, 1792 貓芋螺 (30mm)
 158. *Conus chaldeus* Röding, 1798 小斑芋螺 (27mm)
 159. *Conus distans* Hwass, 1792 長距芋螺 (33mm)
 160. *Conus fulgetrum* Sowerby, 1834 草蓆芋螺 (23mm)
 161. *Conus miliaris* Hwass in Bruguière, 1792 百萬芋螺 (33mm)
 162. *Conus parvulus* Link, 1807 桔梗芋螺 (38mm)
 163. *Conus pulicarius* Hwass, 1792 芝麻芋螺 (35mm)
 164. *Conus rutilus* Hwass, 1792 鼠芋螺 (43mm)
 165. *Conus stramineus* Lamarck, 1810 稻草芋螺 (46mm)
 166. *Conus tulipa* Linnaeus, 1758 鬱金香芋螺 (45mm)
 167. *Conus varius* Linnaeus, 1758 雲朵芋螺 (31mm)
 168. *Conus vitulinus* Hwass, 1792 小牛芋螺 (51mm)
 169.**Tylotiella obliquata* (Reeve, 1865) 斜瘤捲管螺 (22mm)
 170. *Hastula penicillata* (Hinds, 1844) 鉛筆筍螺 (31mm)
 171. *Terebra affinis* Gray, 1834 錦絲筍螺 (31mm)
 172. *Terebra crenulata* (Linnaeus, 1758) 花牙筍螺 (77mm)
 173. *Terebra dimidiata* (Linnaeus, 1758) 紅筍螺 (90mm)
 174. *Terebra subulata* (Linnaeus, 1767) 黑斑筍螺 (71mm)
 175. *Psilaxis radiatus* (Röding, 1798) 輻射車輪螺 (18mm)
 176. *Hydatina physis* (Linnaeus, 1758) 密紋泡螺 (35mm)
 177. *Siphonaria laciniosa* (Linnaeus, 1758) 花松螺 (13mm)
 178. *Melampus flavus* (Gmelin, 1791) 金黃耳螺 (18mm)
 179. *Acar plicata* (Dillwyn, 1817) 小白魁蛤 (19mm)
 180. *Anadara pilula* (Reeve, 1843) 球毛蚶 (23mm)
 181. *Arca avellana* Lamarck, 1819 船魁蛤 (17mm)
 182. *Arca navicularis* Bruguière, 1789 鷹翼魁蛤 (46mm)
 183. *Arca ventricosa* Lamarck, 1819 鞋魁蛤 (38mm)
 184. *Arcopsis symmetrica* (Reeve, 1844) 土豆魁蛤 (19mm)

PLATE 4



PLATE 5

185. *Barbatia fusca* (Bruguiere, 1789) 紅鬚魁蛤 (35mm)
 186. *Botula silicula* (Lamarck, 1819) 姆指殼菜蛤 (22mm)
 187. *Lithophaga lima* (Lamy, 1919) 粗石蜊 (17mm)
 188. *Lithophaga lithura* Pilsbry, 1905 鉛石蜊 (24mm)
 189. *Lithophaga zittelliana* Dunker, 1882 金石蜊 (26mm)
 190. *Modiolus metcalfei* (Hanley, 1843) 土嘴瓜殼菜蛤 (35mm)
 191. *Septifer bilocularis* (Linnaeus, 1758) 孔雀殼菜蛤 (19mm)
 192. *Pteria brevialata* (Dunker, 1872) 朱紅鶯蛤 (76mm)
 193.**Pteria peasei* (Dunker, 1872) 皮亞氏鶯蛤 (102mm)
 194. *Isognomon ephippium* (Linnaeus, 1758) 馬鞍障泥蛤 (41mm)
 195. *Isognomon isognomum* (Linnaeus, 1758) 太平洋障泥蛤 (95mm)
 196. *Isognomon legumen* (Gmelin, 1791) 白障泥蛤 (65mm)
 197. *Atrina pectinata* Linnaeus, 1767 牛角江珧蛤 (125mm)
 198. *Atrina vexillum* (Born, 1778) 黑旗江珧蛤 (160mm)
 199. *Streptopinna saccata* (Linnaeus, 1758) 袋狀江珧蛤 (85mm)
 200. *Lima vulgaris* Link, 1807 大白狐蛤 (77mm)
 201. *Limaria fragilis* (Gmelin, 1791) 薄片狐蛤 (28mm)
 202. *Gloripallium pallium* (Linnaeus, 1758) 油畫海扇蛤 (33mm)
 203. *Semipallium tigris* (Lamarck, 1819) 虎斑海扇蛤 (18mm)
 204. *Spondylus barbatus* Reeve, 1856 山羊海菊蛤 (63mm)
 205. *Ostrea sinensis* Gmelin, 1791 中華牡蠣 (83mm)
 206.**Anodontia* sp. (48mm)
 207.**Codakia punctata* (Linnaeus, 1758) 胭脂滿月蛤 (36mm)
 208. *Epikodakia bella* (Conrad, 1837) 美姬滿月蛤 (18mm)
 209.**Barrimysia cumingii* (A. Adams, 1856) 卡明氏寄生蛤 (29mm)
 210. *Chama pacifica* Broderip, 1834 太平洋偏口蛤 (23mm)
 211. *Regozora flavum* (Linnaeus, 1758) 黃邊鳥尾蛤 (41mm)
 212. *Vasticardium compunctum* Kira, 1959 黑斑鳥尾蛤 (31mm)
 213. *Vasticardium elongatum* (Bruguière, 1789) 長鳥尾蛤 (37mm)
 214. *Tridacna maxima* (Röding, 1798) 長硘碟蛤 (77mm)
 215. *Tridacna squamosa* Lamarck, 1819 鱗硘碟蛤 (72mm)
 216.**Cyclotellina remedies* (Linnaeus, 1758) 滿月櫻蛤 (53mm)
 217. *Scutarcopagia scobinata* (Linnaeus, 1758) 錐紋櫻蛤 (50mm)
 218. *Tellinella virgata* (Linnaeus, 1758) 日光櫻蛤 (38mm)
 219. *Hiatula diphos* (Linnaeus, 1771) 西施舌 (73mm)
 220. *Coralliophaga coralliophaga* (Gmelin, 1791) 珊瑚船蛤 (11mm)
 221. *Trapezium bicarinatum* (Schumacher, 1817) 積船蛤 (35mm)
 222. *Trapezium liratum* (Reeve, 1843) 紫斑船蛤 (16mm)
 223. *Trapezium oblongum* (Linnaeus, 1758) 方形船蛤 (36mm)
 224. *Anomalocardia squamosa* (Linnaeus, 1758) 歪簾蛤 (32mm)
 225. *Dosinia sinensis* (Gmelin, 1791) 環文蛤 (28mm)
 226. *Periglypta chemnitzi* (Hanley, 1844) 千妮簾蛤 (27mm)

PLATE 5

