

Shallow-water Marine Shells from Northeastern Taiwan

Shu-Chuan Lee and Shyh-Min Chao*

Department of Zoology, National Museum of Natural Science, Taichung, Taiwan 404, R.O.C.

(Received August 22, 2003; Accepted October 28, 2003)

Abstract. From 1995 to 2002, marine shells were collected by scuba diving and snorkeling to a depth of 20 m from northeastern Taiwan. In total, 208 species in 52 families were collected. Among them, five species are newly record from Taiwan. In addition, a revised list of 272 species in 65 families is tabulated from previous studies. To date, a total of 340 species in 67 families of marine shells has been reported from northeastern Taiwan, with 98% similarity to those of Japan, and 66% to those of the Philippine Islands. Most of these species belong to the warm Kuroshio Current type. Color figures of the 208 species collected in this study are presented in this paper.

Key words: Fauna, Marine shells, Taiwan.

INTRODUCTION

The substrates along the coast of northeastern Taiwan are complicated, including sandy beaches, pebbles, limestone rocks, and small areas of coral reefs. The cold current from the north which moves along the mainland Chinese coast mixes with a branch of the warm Kuroshio (Japan) Current from the equator near the coast of northern Taiwan. The nutritious waters support abundant marine creatures on the coast of northeastern Taiwan.

Knowledge of the marine shell fauna from northeastern Taiwan is limited. Tan *et al.* (1980), Tan *et al.* (1986), and Jeng *et al.* (2000) published a total of 272 species in 65 families from these areas (Table 2). Most of them were collected from intertidal areas to a depth of 20 m, and a few were collected by trawl. Except for Tan *et al.* (1980), only species names are listed in the other reports. As these specimens are not deposited in museums or institution, it is difficult to verify these species.

From 1995 to 2002, marine shells were collected at irregular intervals by scuba diving and snorkeling to a depth of 20 m along the coast of northeastern Taiwan by the staff of the National Museum of Natural Science, Taichung, Taiwan (Fig. 1). Shells were collected during low tide during the day and night. Both shells and living animals were collected.

Identification of these specimens follows Cernohorsky (1976), Habe (1977, 1989), Abbott and Dance (1986), Lai (1986, 1987, 1990, 1998),

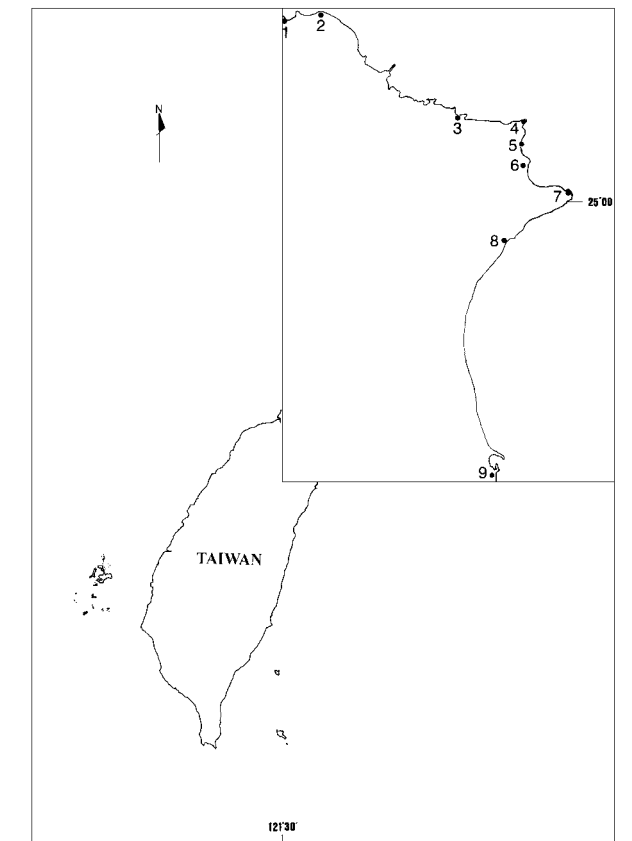


Fig. 1. Map showing northeastern Taiwan and study sites. 1 = Linsunpi (鱗山鼻), 2 = Shihmentung (石門洞), 3 = Wanghaihsiang (望海巷), 4 = Pitouchiao (鼻頭角), 5 = Lungtung (龍洞), 6 = Aoti (澳底), 7 = Makang (馬崗), 8 = Tahsi (大溪), 9 = Nanfanggao (南方澳).

*Corresponding author. E-mail: chaosm@mail.nmns.edu.tw

Springsteen and Leobrera (1986), Kira (1989), Habe and Ito (1991), Habe and Kosuge (1991), Bieler (1993), Wilson (1993, 1994), and Okutani (1996, 2000). The Chinese names of the shells are based primarily on Wu (1999). Specimens are deposited in the National Museum of Natural Science.

Totally 208 species in 52 families of shallow water shells were collected (Table 1). Five species, *Emarginula imaizumi* Dall 1926 (Fissurellidae), *Pseudoliotia astericus* (Gould 1859) (Vitrinellidae), *Calpurnus lacteus lacteus* (Lamarck 1810) (Ovulidae), *Apicalia habei* Waren 1981 (Eulimidae), and *Aspidopholas yoshimurai* Kuroda & Teramachi 1930 (Pholadidae), are first records from Taiwan. To date, a total of 340 species in 67 families of marine shells has been reported from northeastern Taiwan, with 98% similarity to those of south Japan, and 66% to those of the Philippine Islands. The marine shell fauna of northeastern Taiwan belongs to the warm Kuroshio Current type.

The climate of northeastern Taiwan is subtropical, which is similar to southern Japan. However the Philippines has a tropical climate. It is reasonable that the shell fauna of northeastern Taiwan is close to that of southern Japan. In addition, the shell fauna investigation of southern Japan is more complete than that of the Philippines.

Although 340 species of marine shells have now been recorded from northeastern Taiwan, the shell fauna has not been thoroughly investigated. Most of the collections are limited to depths of less than 20 m. Only six species in the family Cancellariidae were collected by trawls (Table 2) (Jeng *et al.* 2000). Although a few color handbooks illustrate some deep-water shells from this area (Lai 1990, 1998), information on the exact localities and depths is lacking. Systematic collections and investigations focusing on deep-sea species are recommended for further study.

ACKNOWLEDGEMENTS

The authors would like to thank Mr. K. S. Lee and Mr. H.T. Hung for their help with the fieldwork. We are grateful to Mr. T.C. Lan and Mr. K.Y. Lai for critical suggestions and comments. This work was supported by grants from the National Museum of Natural Science (NMNS).

REFERENCES

- Abbott, R.T. and S.P. Dance. 1986. Compendium of seashells. Odyssey Publishing, Hong Kong.
- Bieler, R. 1993. Architectonicidae of the Indo-Pacific (Mollusca, Gastropoda). Abhandlungen Naturwissenschaftlichen Vereins in Hamburg.
- Habe, T. 1977. Systematics of Mollusca in Japan: Bivalvia and Scaphopoda. Hokuryukan, Tokyo.
- Habe, T. 1989. Colored illustrations of the shells of Japan (Vol. 2). Hoikusha, Osaka, Japan.
- Habe, T. and K. Ito. 1991. Shells of the world in color (Vol. 1): the northern Pacific. Hoikusha, Osaka, Japan.
- Habe, T. and S. Kosuge. 1991. Shells of the world in color (Vol. 2): the tropical Pacific. Hoikusha, Osaka, Japan.
- Jeng, M.S., K.C. Shao, F.L. Feng, C.H. Tseng, and S.H. Wu. 2000. Investigation and monitoring of the nature resources from the northeast coast, Taiwan (V). Northeast Coast National Science Area Administration Press, Taipei, Taiwan.
- Kira, T. 1989. Colored illustrations of the shells of Japan (Vol. 1). Hoikusha, Osaka, Japan.
- Lai, K.Y. 1986. Marine gastropods of Taiwan (I). Taiwan Museum Publishing, Taipei, Taiwan. (in Chinese)
- Lai, K.Y. 1987. Marine gastropods of Taiwan (II). Taiwan Museum Publishing, Taipei, Taiwan. (in Chinese)
- Lai, K.Y. 1990. Mollusks from Taiwan (I). Vacation Publications, Taipei, Taiwan. (in Chinese)
- Lai, K.Y. 1998. Mollusks from Taiwan (II). Vacation Publications, Taipei, Taiwan. (in Chinese)
- Okutani, T. 1996. Illustrations of animals and plants (VIII): Shells. Sekaibun-ka-sha, Tokyo.
- Okutani, T. 2000. Marine mollusks in Japan. Tokai Univ. Press Publishing, Tokyo.
- Springsteen, F.J. and F.M. Leobrera. 1986. Shells of the Philippines. Carfel Seashell Museum, Manila, the Philippines.
- Tan, T.H., C.C. Wang, and C.H. Chen. 1980. The gastropod and bivalve fauna in intertidal area of northeast part of Taiwan. Bull. Mal. R.O.C. 7: 33-71.
- Tan, T.H., J.Y. Pai, and K.C. Hsia. 1986. A survey on seashells (Gastropod and Bivalva) of northeastern coast, Taiwan, R.O.C. Bull. Mal. R.O.C. 12: 27-47.
- Willson, B. 1993. Australian marine shells (Vol. 1). Odyssey Publishing, Kallaroo, Australia.
- Willson, B. 1994. Australian marine shells (Vol. 2). Odyssey Publishing, Kallaroo, Australia.
- Wu, W.L. 1999. Latin-Chinese/Chinese-Latin dictionary of seashell names. Fisheries Publishing, Keelung, Taiwan.

Table 1. The marine shells collected from northeastern Taiwan by the present authors

Taxa	Number	Depth (m)
GASTROPODA 腹足綱		
Nacellidae 花笠螺科		
<i>Cellana grata</i> (Gould, 1859) 斗笠螺	R	intertidal
<i>Cellana toreuma</i> (Reeve, 1855) 花笠螺	A	intertidal
Patellidae 笠螺科		
<i>Scutellastra flexuosa</i> Quoy et Gaimard, 1834 星笠螺	C	intertidal
Lottiidae 青螺科		
<i>Nipponacmea schrenckii</i> (Lischke, 1868) 花青螺	O	intertidal
<i>Patelloida saccharina</i> (Linnaeus, 1758) 鵝足青螺	O	intertidal
<i>Patelloida straita</i> (Quoy et Gaimard, 1834) 射線青螺	O	intertidal
Haliotidae 鮑螺科		
<i>Haliotis diversicolor</i> (Reeve, 1846) 九孔螺	O	intertidal
<i>Haliotis varia</i> (Linnaeus, 1758) 瘤鮑螺	O	intertidal
Fissurellidae 裂螺科		
* <i>Emarginula imaizumi</i> Dall, 1926 射線裂螺	R	-1
<i>Emarginula variegata</i> (A. Adams, 1852) 彩色裂螺	R	intertidal
<i>Scutus sinensis</i> (Blainville, 1825) 鴨嘴螺	O	intertidal
Trochidae 鐘螺科		
<i>Chlorostoma argyrostoma</i> (Gmelin, 1791) 黑鐘螺	C	intertidal
<i>Chlorostoma turbinata</i> (A. Adams, 1853) 頭巾黑鐘螺	R	intertidal
<i>Clanculus denticulatus</i> (Gray, 1827) 鐵珠鐘螺	R	intertidal
<i>Clanculus margaritarius</i> (Philippi, 1846) 小草莓鐘螺	R	intertidal
<i>Eurytrochus cognatus</i> (Pilsbry, 1903) 紅頂鐘螺	R	intertidal
<i>Monodonta labio confusa</i> (Tapprone-Canefri, 1874) 圓草蓆鐘螺	R	intertidal
<i>Monodonta perplexa</i> Pilsbry, 1889 扭鐘螺	C	intertidal
<i>Omphalius nigerrima</i> (Gmelin, 1791) 臍孔黑鐘螺	A	intertidal
<i>Tectus pyramis</i> (Born, 1778) 銀塔鐘螺	R	intertidal
<i>Trochus hanleyanus</i> Reeve, 1842 細紋鐘螺	O	intertidal
<i>Trochus maculatus</i> Linnaeus, 1758 花斑鐘螺	O	intertidal
<i>Trochus sacellus</i> Philippi, 1854 齒輪鐘螺	O	intertidal
<i>Umbonium suturale</i> (Lamarck, 1822) 臺灣蝸螺	R	intertidal
Turbinidae 蝾螺科		
<i>Angaria delphinus</i> Linnaeus, 1758 棘冠螺	R	intertidal
<i>Astraeum haematragum</i> (Menke, 1829) 白星螺	O	intertidal
<i>Turbo cinerea</i> (Born, 1778) 美珠螺	R	intertidal
<i>Turbo coronata</i> (Gmelin, 1818) 珠螺	A	intertidal
<i>Turbo setosus</i> Gmelin, 1791 圓蝾螺	R	intertidal
<i>Turbo stenogyrus</i> Fischer, 1873 高腰蝾螺	C	intertidal
Neritidae 蜚螺科		
<i>Clithon chlorostoma</i> (Broderip, 1832) 金口石蜚螺	O	intertidal

Table 1. (Continued)

Taxa	Number	Depth (m)
<i>Clithon corona</i> (Linnaeus, 1758) 小皇冠蜑螺	R	intertidal
<i>Clithon faba</i> (Sowerby, 1836) 豆石蜑螺	C	intertidal
<i>Clithon retropicta</i> (v. Martens, 1879) 石蜑螺	C	intertidal
<i>Clithon sowerbiana</i> (Récluz, 1842) 沙氏石蜑螺	R	intertidal
<i>Nerita albicilla</i> Linnaeus, 1758 漁舟蜑螺	A	intertidal
<i>Nerita bensoni</i> Récluz, 1850 賓森氏蜑螺	R	intertidal
<i>Nerita chamaeleon</i> Linnaeus, 1758 大圓蜑螺	O	intertidal
<i>Nerita costata</i> Gmelin, 1791 黑肋蜑螺	C	intertidal
<i>Nerita incerta</i> (Busch, 1844) 黑玉蜑螺	R	intertidal
<i>Nerita insculpta</i> Récluz, 1842 虛線蜑螺	R	intertidal
<i>Nerita ocellata</i> Le Guillou, 1841 滑圓蜑螺	O	intertidal
<i>Nerita plicata</i> Linnaeus, 1758 白肋蜑螺	A	intertidal
<i>Nerita polita</i> Linnaeus, 1758 玉女蜑螺	C	intertidal
<i>Nerita reticulata</i> Karsten, 1789 紅唇蜑螺	R	intertidal
<i>Nerita undata</i> Linnaeus, 1758 粗紋蜑螺	C	intertidal
Septariidae 壁蜑螺科		
<i>Septaria porcellana</i> (Linnaeus, 1758) 壁蜑螺	O	intertidal
Certhiidae 蟹守螺科		
<i>Cerithium nesioticum</i> Pilsby et Vanatta, 1906 淡斑蟹守螺	R	intertidal
<i>Cerithium zonatum</i> (Wood, 1828) 褐帶蟹守螺	R	intertidal
<i>Clypeomorus batillariaeformis</i> Habe et Kosuge, 1966 海蜷蟹守螺	C	intertidal
<i>Clypeomorus bifasciatus</i> (Sowerby, 1855) 白萆蟹守螺	O	intertidal
<i>Clypeomorus chemnitziana</i> (Pilsbry, 1901) 桑椹蟹守螺	O	intertidal
<i>Rhinoclavis sinensis</i> (Gmelin, 1791) 中華蟹守螺	R	intertidal
Siliquariidae 蚯蚓螺科		
<i>Siliquaria cumingi</i> (Moersch, 1860) 蚯蚓螺	R	intertidal
<i>Siliquaria trochlearis</i> Moersch, 1860 小如意蚯蚓螺	R	intertidal
Planaxidae 芝麻螺科		
<i>Planaxis labiosa</i> (A. Adams, 1853) 金絲芝麻螺	O	intertidal
<i>Planaxis sulcatus</i> (Born, 1778) 芝麻螺	A	intertidal
Batillariidae 小海蜷科		
<i>Batillaria sordida</i> (Gmelin, 1791) 黑瘤海蜷	A	intertidal
Littorinidae 玉黍螺科		
<i>Littoraria scabra</i> (Linnaeus, 1758) 粗紋玉黍螺	A	intertidal
<i>Littoraria undulata</i> (Gray, 1839) 波紋玉黍螺	A	intertidal
<i>Nodilittorina radiata</i> (Souleyetin in Eydoux & Souleyet, 1852)		
細粒玉黍螺	C	intertidal
<i>Nodilittorina trochoides</i> (Gray, 1839) 顆粒玉黍螺	A	intertidal
<i>Nodilittorina vidua</i> (Gould, 1859) 臺灣玉黍螺	C	intertidal
Vitrinellidae 滑輪螺科		
* <i>Pseudoliotia astericus</i> (Gould, 1859) 繁縷齒輪螺	R	-1
Strombidae 鳳凰螺科		
<i>Lambis scorpius</i> (Linnaeus, 1758) 蠍螺	R	-3
<i>Strombus mutabilis</i> Swainson, 1821 花瓶鳳凰螺 (juvenile)	O	intertidal

Table 1. (Continued)

Taxa	Number	Depth (m)
Hipponicidae 頂蓋螺科		
<i>Cheilea equestris</i> (Linnaeus, 1758) 風鈴兒蓋螺	R	-3
<i>Hipponix foliacea</i> (Quoy et Gaimard, 1835) 環蓋螺	R	intertidal
<i>Hipponix trigona</i> (Gmelin, 1791) 毛蓋螺	R	intertidal
Vermetidae 蛇螺科		
<i>Serpulorbis imbricatus</i> (Dunker, 1860) 大蛇螺	R	-3
Ovulidae 海兔螺科		
* <i>Calpurnus lacteus lacteus</i> (Lamarck, 1810) 白玉兔螺	R	-3
<i>Ovula ovum</i> (Linnaeus, 1758) 海兔螺	R	-1
<i>Pseudosimnia margarita</i> (Sowerby, 1828) 珍珠海兔螺	R	-3
Cypraeidae 寶螺科		
<i>Cypraea arabica</i> Linnaeus, 1758 阿拉伯寶螺	C	intertidal
<i>Cypraea asellus</i> Linnaeus, 1758 浮標寶螺	O	intertidal
<i>Cypraea caputserpentis</i> Linnaeus, 1758 雪山寶螺	A	intertidal
<i>Cypraea carneola</i> Linnaeus, 1758 紫口寶螺	C	intertidal
<i>Cypraea caurica</i> Linnaeus, 1758 清齒寶螺	R	intertidal
<i>Cypraea cicercula</i> Linnaeus, 1758 繡珠寶螺	R	intertidal
<i>Cypraea clandestina</i> Linnaeus, 1758 銀絲寶螺	R	intertidal
<i>Cypraea cribraria</i> Linnaeus, 1758 花鹿寶螺	R	intertidal
<i>Cypraea erosa</i> Linnaeus, 1758 腰斑寶螺	C	intertidal
<i>Cypraea erroneus</i> Linnaeus, 1758 愛龍寶螺	O	intertidal
<i>Cypraea gracilis</i> Gaskoin, 1849 小眼寶螺	R	intertidal
<i>Cypraea helvola</i> Linnaeus, 1758 紅花寶螺	C	intertidal
<i>Cypraea isabella</i> Linnaeus, 1758 雨絲寶螺	O	intertidal
<i>Cypraea mauritiana</i> Linnaeus, 1758 龜甲寶螺	R	intertidal
<i>Cypraea moneta</i> Linnaeus, 1758 黃寶螺	A	intertidal
<i>Cypraea onyx</i> Linnaeus, 1758 瑪瑙寶螺	R	intertidal
<i>Cypraea tigris</i> Linnaeus, 1758 黑星寶螺	R	intertidal
<i>Cypraea vitellus</i> Linnaeus, 1758 白星寶螺	R	intertidal
Bursidae 蛙螺科		
<i>Bursa bufonia</i> (Gmelin, 1791) 蟾蜍蛙螺 (juvenile)	R	intertidal
<i>Bursa granularis</i> (Röding, 1798) 果粒蛙螺	O	intertidal
<i>Tutufa rubeta</i> (Linnaeus, 1758) 金口蛙螺	R	-2
Tonnidae 鶉螺科		
<i>Tonna perdix</i> (Linnaeus, 1758) 鶉螺	R	-2
Ranellidae 法螺科		
<i>Cymatium cutaceum</i> (Lamarck, 1816) 鶉法螺	O	intertidal
<i>Cymatium lotorium</i> (Linnaeus, 1758) 象鼻法螺	R	-3
<i>Cymatium mundum</i> (Gould, 1849) 小白法螺	R	-3
<i>Cymatium nicobaricum</i> (Roeding, 1798) 金口法螺	R	-2
<i>Cymatium pyrum</i> (Linnaeus, 1758) 大象法螺	R	-3
<i>Cymatium succinctum</i> (Linnaeus, 1771) 燈籠法螺	R	-3
Janthinidae 紫螺科		
<i>Janthina globosa</i> (Swainson, 1822) 琉璃紫螺	R	intertidal

Table 1. (Continued)

Taxa	Number	Depth (m)
Epitoniidae 海蝸螺科		
<i>Gyroscala lamellosa</i> (Lamarck, 1822) 小海蝸螺	R	intertidal
Eulimidae 瓷螺科		
* <i>Apicalia habei</i> Waren, 1981 波部瓷螺	R	-3
<i>Balcis grandis</i> (A. Adams, 1854) 白瓷螺	R	-1
Muricidae 骨螺科		
<i>Chicoreus brunneus</i> (Link, 1807) 黑千手螺	C	intertidal
<i>Chicoreus palmarosae</i> (Lamarck, 1822) 玫瑰千手螺	R	-3
<i>Chicoreus ramosus</i> (Linnaeus, 1758) 大千手螺	R	-3
<i>Chicoreus torrefactus</i> Sowerby, 1841 千手螺	C	intertidal
<i>Coralliophila erosa</i> (Roeding, 1798) 大肚珊瑚螺	R	-1
<i>Coralliophila neritoidea</i> (Lamarck, 1816) 紫口珊瑚螺	O	-1
<i>Cronia margariticola</i> (Broderip, 1833) 稜結螺	C	intertidal
<i>Drupa grossularia</i> Roeding, 1798 金口岩螺	O	intertidal
<i>Drupa morum</i> Roeding, 1798 紫口岩螺	C	intertidal
<i>Drupa ricina</i> (Linnaeus, 1758) 黃齒岩螺	C	intertidal
<i>Drupa rubusidaeus</i> Roeding, 1798 玫瑰岩螺	O	intertidal
<i>Drupella eburnea</i> (Küster, 1862) 牙白結螺	O	intertidal
<i>Ergalatax contractus</i> (Reeve, 1846) 粗肋結螺	R	intertidal
<i>Habromorula borealis</i> (Pilsbry, 1904) 紫口棘結螺	R	intertidal
<i>Homalocantha anatomica</i> (Perry, 1811) 銀杏螺	R	-3
<i>Maculotrion serrialis</i> (Deshayes, 1834) 秀峰結螺	R	intertidal
<i>Mancinella aculeata</i> Deshayes, 1844 鐵斑岩螺	C	intertidal
<i>Mancinella echinata</i> (Blainville, 1832) 棘岩螺	R	-1
<i>Mancinella mancinella</i> (Linnaeus, 1758) 金絲岩螺	R	intertidal
<i>Mancinella tuberosa</i> (Roeding, 1798) 角岩螺	R	intertidal
<i>Morulaanaxeres</i> (Kiener, 1834) 白瘤結螺	R	intertidal
<i>Morula granulata</i> (Duclos, 1924) 結螺	A	intertidal
<i>Morula uva</i> (Roeding, 1798) 草莓結螺	R	intertidal
<i>Nassa sarta</i> Bruguiere, 1789 橄欖螺	R	intertidal
<i>Purpura panama</i> (Roeding, 1798) 羅螺	R	-2
<i>Quoyula madreporara</i> (Sowerby, 1824) 廣口珊瑚螺	O	-1
<i>Rapa incurva</i> (Dunker, 1835) 小洋蔥螺	R	-3
<i>Thais armigera</i> (Link, 1807) 大岩螺	O	-1
<i>Thais clavigera</i> (Kuster, 1860) 蚶岩螺	A	intertidal
<i>Thais luteostoma</i> (Holten, 1802) 黑痣岩螺	R	intertidal
Turbinellidae 拳螺科		
<i>Vasum ceramicum</i> (Linnaeus, 1758) 長拳螺	R	-3
<i>Vasum turbinellum</i> (Linnaeus, 1758) 短拳螺	R	-2
Columbellidae 麥螺科		
<i>Pyrene punctata</i> (Bruguiere, 1789) 紅麥螺	R	intertidal
<i>Pyrene testudinaria</i> (Link, 1806) 麥螺	A	intertidal
<i>Pyrene versicolor</i> (Sowerby, 1832) 花麥螺	C	intertidal
Nassariidae 織紋螺科		

Table 1. (Continued)

Taxa	Number	Depth (m)
<i>Telasco velatus</i> (Gould, 1850) 彈頭織紋螺	R	intertidal
Buccinidae 峨螺科		
<i>Cantharus fumosus</i> (Dillwyn, 1817) 焦黃峨螺	C	intertidal
<i>Cantharus undosus</i> (Linnaeus, 1758) 粗紋峨螺	C	intertidal
<i>Neptunea arthritica cumingii</i> (Crosse, 1862) 大風車峨螺	R	intertidal
Fasciolaridae 旋螺科		
<i>Latirus polygonus</i> (Gmelin, 1791) 多稜旋螺	R	intertidal
<i>Peristernia nassatula</i> (Lamarck, 1822) 紫口旋螺	C	intertidal
<i>Pleuroploca glabra</i> (Dunker, 1882) 光滑赤旋螺	R	-3
<i>Pleuroploca trapezium paeteli</i> (Strebel, 1912) 大赤旋螺	R	-1
Mitridae 筆螺科		
<i>Mitra decurtata</i> (Reeve, 1844) 腰帶筆螺	A	intertidal
<i>Mitra fraga</i> Quoy et Gaimard, 1833 草莓筆螺	R	intertidal
<i>Mitra litterata</i> (Lamarck, 1811) 火焰筆螺	A	intertidal
<i>Mitra pellisserpentis</i> Reeve, 1844 檸檬筆螺	R	intertidal
<i>Mitra scutulata</i> (Gmelin, 1792) 花焰筆螺	A	intertidal
<i>Pterygia crenulata</i> (Gmelin, 1791) 彈頭筆螺	R	intertidal
Costellariidae 蝸筆螺科		
<i>Pusia cancellarioides</i> (Anton, 1839) 白槓蝸筆螺	R	intertidal
Conidae 芋螺科		
<i>Conus coffeae</i> Gmelin, 1791 咖啡芋螺	R	intertidal
<i>Conus coronatus</i> Gmelin, 1791 花冠芋螺	O	intertidal
<i>Conus ebraeus</i> Linnaeus, 1758 斑芋螺	C	intertidal
<i>Conus flavidus</i> Lamarck, 1810 紫霞芋螺	O	intertidal
<i>Conus fulmen</i> Reeve, 1833 玳瑁芋螺 (juvenile)	R	intertidal
<i>Conus geographus</i> Linnaeus, 1758 殺手芋螺	R	intertidal
<i>Conus lividus</i> Hwass, 1792 晚霞芋螺	C	intertidal
<i>Conus miles</i> Linnaeus, 1758 柳絲芋螺	O	intertidal
<i>Conus monachus</i> Linnaeus, 1758 花瑪瑙芋螺	R	intertidal
<i>Conus musicus</i> Hwass, 1792 樂譜芋螺	O	intertidal
<i>Conus quercinus</i> Lightfoot, 1786 蠟黃芋螺	R	-2
<i>Conus sponsalis</i> Hwass, 1792 花環芋螺	O	intertidal
<i>Conus textile</i> Linnaeus, 1758 織錦芋螺	R	-2
<i>Conus vexillum</i> Gmelin, 1791 旗幟芋螺	R	-3
Architectonicidae 車輪螺科		
<i>Heliacus areola</i> (Gmelin, 1791) 高腰小輪螺	R	-2
Bullidae 棗螺科		
<i>Bulla vernicosa</i> Gould, 1859 棗螺	R	-2
Siphonariidae 松螺科		
<i>Siphonaria atra</i> Quoy et Gaimard, 1832 黑松螺	C	intertidal
<i>Siphonaria japonica</i> (Donovan, 1834) 網紋松螺	O	intertidal
<i>Siphonaria sirius</i> (Pilsbry, 1894) 菊松螺	R	intertidal
Arcidae 魁蛤科		
<i>Barbatia decussata</i> (Sowerby, 1833) 鬍魁蛤	C	intertidal

Table 1. (Continued)

Taxa	Number	Depth (m)
Mytilidae 殼菜蛤科		
<i>Modiolus auriculatus</i> (Krauss, 1848) 雲雀殼菜蛤	C	intertidal
<i>Modiolus philippinarum</i> (Hanley, 1843) 菲律賓殼菜蛤	O	intertidal
<i>Musculus cupreus</i> (Gould, 1861) 邊網殼菜蛤	R	-2
<i>Septifer excisus</i> (Wiegmann, 1837) 白孔雀殼菜蛤	R	intertidal
<i>Septifer virgatus</i> (Wiegmann, 1837) 紫孔雀殼菜蛤	C	intertidal
Pteriidae 鵞蛤科		
<i>Pinctada margaritifera</i> (Linnaeus, 1758) 黑蝶珍珠蛤	C	-1
<i>Pinctada martensii</i> (Dunker, 1873) 馬丁氏珍珠蛤	R	-2
Isognomonidae 障泥蛤科		
<i>Isognomon nucleus</i> (Lamarck, 1819) 小障泥蛤	C	intertidal
<i>Isognomon perna</i> (Linnaeus, 1758) 花紋障泥蛤	C	intertidal
Pinnidae 江珧蛤科		
<i>Pinna muricata</i> Linnaeus, 1758 尖角江珧蛤	C	intertidal
Spondylidae 海菊蛤科		
<i>Spondylus barbatus</i> Reeve, 1856 山羊海菊蛤	R	-3
<i>Spondylus squamosus</i> Schreibers, 1793 魚鱗海菊蛤	R	-3
<i>Spondylus nicobaricus</i> Schreibers, 1793 紫斑海菊蛤	R	-2
Ostreidae 牡蠣科		
<i>Crassostrea gigas</i> (Thunberg, 1793) 大牡蠣	A	intertidal
<i>Lopha cristagalli</i> (Linnaeus, 1758) 鋸齒牡蠣	R	-2
<i>Ostrea</i> sp.	R	intertidal
<i>Saccostrea mordax</i> (Gould, 1850) 黑齒牡蠣	A	intertidal
Lucinidae 滿月蛤科		
<i>Codakia tigerina</i> (Linnaeus, 1758) 滿月蛤	R	-3
Carditidae 算盤蛤科		
<i>Cardita leana</i> Dunker, 1860 灰算盤蛤	R	intertidal
<i>Cardita variegata</i> Bruguiere, 1792 算盤蛤	R	intertidal
Chamidae 偏口蛤科		
<i>Chama ambigua</i> Lischke, 1870 迷樣偏口蛤	R	-2
<i>Chama iostoma</i> Conrad, 1839 紫緣偏口蛤	R	-1
Tellidae 櫻蛤科		
<i>Quidnipagus palatam</i> (Iredale, 1929) 波紋櫻蛤	C	intertidal
Psammobiidae 紫雲蛤科		
<i>Asaphis dichotoma</i> Anton, 1838 紫晃蛤	C	intertidal
Veneridae 簾蛤科		
<i>Gafrarium dispar</i> (Dillwyn, 1817) 枝條縱簾蛤	R	intertidal
<i>Gafrarium tumidum</i> Roeding, 1798 厚殼縱簾蛤	R	intertidal
<i>Periglypta puerpera</i> (Linnaeus, 1771) 圓球簾蛤	R	-3
<i>Periglypta reticulata</i> (Linnaeus, 1758) 山水簾蛤	R	intertidal
<i>Ruditapes philippinarum</i> (Adams et Reeve, 1850) 菲律賓簾蛤	O	intertidal
<i>Venus toreuma</i> Gould, 1850 維納斯簾蛤	R	-2
Pholadidae 鷓蛤科		
* <i>Aspidopholas yoshimurai</i> Kuroda & Teramachi, 1930 棲管鷓蛤	R	intertidal

Table 1. (Continued)

Taxa	Number	Depth (m)
<i>Jouannetia cumingii</i> (Sowerby, 1849) 鈴蛤	R	intertidal
<i>Martesia striata</i> (Linnaeus, 1758) 細紋鷓蛤	R	intertidal

The symbol "*" represent new record for Taiwan. A = Abundant; more than 20 specimens were collected. C = common; 5-19 specimens were collected. R = rare; less than 5 specimens were collected.

Table 2. Published marine shells from northeastern Taiwan, but not captured by the present authors.

Taxa	NE Taiwan	Japan	Philippine
GASTROPODA 腹足綱			
Nacellidae 花笠螺科			
<i>Cellana grata</i> (Gould, 1859) 斗笠螺	t,1,3	+	+
<i>Cellana radiata</i> Born, 1778 車輪笠螺	1,3	+	+
<i>Cellana testudinaria</i> (Linnaeus, 1758) 龜甲笠螺	1,3	+	+
<i>Cellana toreuma</i> (Reeve, 1855) 花笠螺	t,1,2,3	+	
Patellidae 笠螺科			
<i>Scutellastra flexuosa</i> Quoy et Gaimard, 1834 星笠螺	t,1,2,3	+	+
Lottiidae 青螺科			
<i>Acmaea concinna</i> Lischke, 1870 高青螺	1,3	+	
<i>Acmaea heroldi</i> Dunker, 1861 花邊青螺	1,2	+	
<i>Acmaea pygmaea</i> Dunker, 1860 花帽青螺	1,2,3	+	
<i>Nipponacmea schrenckii</i> (Lischke, 1868) 花青螺	t,1,2,3	+	
<i>Patelloida saccharina</i> (Linnaeus, 1758) 鵝足青螺	t,1,2,3	+	
<i>Patelloida straita</i> (Quoy et Gaimard, 1834) 射線青螺	t,1	+	+
Haliotidae 鮑螺科			
<i>Haliotis asinina</i> Linnaeus, 1758 驢耳鮑螺	1	+	+
<i>Haliotis diversicolor</i> (Reeve, 1846) 九孔螺	t,1,2,3	+	
<i>Haliotis ovina</i> (Gmelin, 1791) 圓鮑螺	1,2	+	+
<i>Haliotis varia</i> (Linnaeus, 1758) 瘤鮑螺	t,1,3	+	
Fissurellidae 裂螺科			
<i>Emarginula imaizumi</i> Dall, 1926 射線裂螺	t	+	
<i>Emarginula variegata</i> (A. Adams, 1852) 彩色裂螺	t,1,2,3	+	
<i>Scutus sinensis</i> (Blainville, 1825) 鴨嘴螺	t,1,2,3	+	
Trochidae 鐘螺科			
<i>Chlorostoma argyrostoma</i> (Gmelin, 1791) 黑鐘螺	t,1,2,3		
<i>Chlorostoma turbinata</i> (A. Adams, 1853) 頭巾黑鐘螺	t	+	
<i>Clanculus denticulatus</i> (Gray, 1827) 鐵珠鐘螺	t	+	+
<i>Clanculus margaritarius</i> (Philippi, 1846) 小草莓鐘螺	t,1,2,3	+	
<i>Diloma suavis</i> (Philippi, 1849) 綠彩鐘螺	1,2	+	
<i>Eurytrochus cognatus</i> (Pilsbry, 1903) 紅頂鐘螺	t	+	+
<i>Monodonta labio</i> (Linnaeus, 1758) 草蓆鐘螺	1,2,3	+	+
<i>Monodonta labio confusa</i> (Tapprone-Canefri, 1874) 圓草蓆鐘螺	t,3	+	
<i>Monodonta perplexa</i> Pilsbry, 1889 扭鐘螺	t	+	
<i>Omphalius nigerrima</i> (Gmelin, 1791) 臍孔黑鐘螺	t,1,3	+	
<i>Tectus pyramis</i> (Born, 1778) 銀塔鐘螺	t,1,3	+	+
<i>Trochus hanleyanus</i> Reeve, 1842 細紋鐘螺	t,1	+	

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Trochus histrio</i> Reeve, 1848 山形鐘螺	1	+	
<i>Trochus maculatus</i> Linnaeus, 1758 花斑鐘螺	t,1,2,3	+	+
<i>Trochus sacellum</i> Philippi, 1854 齒輪鐘螺	t,1,3	+	
<i>Trochus stellatus</i> Gmelin, 1790 血斑鐘螺	1	+	+
<i>Umbonium suturale</i> (Lamarck, 1822) 臺灣蝟螺	t,3	+	
Turbinidae 蝟螺科			
<i>Angaria delphinus</i> Linnaeus, 1758 棘冠螺	t,1,3	+	+
<i>Astraea haematragum</i> (Menke, 1829) 白星螺	t,1,2,3	+	+
<i>Phasianella solida</i> (Born, 1780) 雉螺	1,2	+	+
<i>Turbo cinerea</i> (Born, 1778) 美珠螺	t	+	+
<i>Turbo coronata</i> (Gmelin, 1818) 珠螺	t,1,2,3	+	
<i>Turbo granulata</i> (Gmelin, 1791) 瘤珠螺	1,2,3	+	
<i>Turbo brunneus</i> Röding, 1798 虎斑蝟螺	1,2	+	+
<i>Turbo setosus</i> Gmelin, 1791 圓蝟螺	t	+	
<i>Turbo stenogyrus</i> Fischer, 1873 高腰蝟螺	t,1,2,3	+	+
Neritidae 蜑螺科			
<i>Clithon chlorostoma</i> (Broderip, 1832) 金口石蜑螺	t	+	
<i>Clithon corona</i> (Linnaeus, 1758) 小皇冠蜑螺	t	+	+
<i>Clithon faba</i> (Sowerby, 1836) 豆石蜑螺	t	+	
<i>Clithon retropicta</i> (v. Martens, 1879) 石蜑螺	t	+	
<i>Clithon sowerbiana</i> (Récluz, 1842) 沙氏石蜑螺	t	+	
<i>Nerita albicilla</i> Linnaeus, 1758 漁舟蜑螺	t,1,2,3	+	+
<i>Nerita bensoni</i> Récluz, 1850 賓森氏蜑螺	t	+	
<i>Nerita chamaeleon</i> Linnaeus, 1758 大圓蜑螺	t,1,3	+	+
<i>Nerita costata</i> Gmelin, 1791 黑肋蜑螺	t,1,2,3	+	+
<i>Nerita helicinoides</i> Reeve, 1855 扭腰蜑螺	2	+	+
<i>Nerita incerta</i> (Busch, 1844) 黑玉蜑螺	t	+	
<i>Nerita insculpta</i> Récluz, 1842 虛線蜑螺	t	+	
<i>Nerita ocellata</i> Le Guillou, 1841 滑圓蜑螺	t,1,3	+	
<i>Nerita plicata</i> Linnaeus, 1758 白肋蜑螺	t,1,2,3	+	+
<i>Nerita polita</i> Linnaeus, 1758 玉女蜑螺	t,1,3	+	+
<i>Nerita reticulata</i> Karsten, 1789 紅唇蜑螺	t,1,3	+	+
<i>Nerita undata</i> Linnaeus, 1758 粗紋蜑螺	t,3	+	+
Septariidae 壁蜑螺科			
<i>Septaria porcellana</i> (Linnaeus, 1758) 壁蜑螺	t	+	+
Certhiidae 蟹守螺科			
<i>Certhium kobelti</i> (Dunker, 1877) 蟋蟀蟹守螺	1,3	+	+
<i>Certhium nesioticum</i> Pilsby et Vanatta, 1906 淡斑蟹守螺	t,1,3	+	
<i>Certhium zonatum</i> (Wood, 1828) 褐帶蟹守螺	t,1,2,3	+	+
<i>Clypeomorus batillariaeformis</i> Habe et Kosuge, 1966 海蝨蟹守螺	t	+	+
<i>Clypeomorus bifasciatus</i> (Sowerby, 1855) 白莖蟹守螺	t,1,2,3	+	+
<i>Clypeomorus chemnitziana</i> (Pilsbry, 1901) 桑椹蟹守螺	t	+	+
<i>Clypeomorus humilis</i> (Dunker, 1861) 黑項鍊蟹守螺	1	+	+
<i>Rhinoclavis sinensis</i> (Gmelin, 1791) 中華蟹守螺	t,1,3	+	+

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
Siliquariidae 蚯蚓螺			
<i>Siliquaria cumingi</i> (Moerch, 1860) 蚯蚓螺	t,1,3	+	
<i>Siliquaria trochlearis</i> Moerch, 1860 小如意蚯蚓螺	t	+	
Planaxidae 芝麻螺科			
<i>Planaxis labiosa</i> (A. Adams, 1853) 金絲芝麻螺	t,2	+	
<i>Planaxis sulcatus</i> (Born, 1778) 芝麻螺	t,1,3	+	+
Fossaridae 小堡螺科			
<i>Fossarus trochleris</i> A. Adams, 1853 滑車小堡螺	1,2	+	
Batillariidae 小海蝨科			
<i>Batillaria sordida</i> (Gmelin, 1791) 黑瘤海蝨	t		
<i>Batillaria zonalis</i> (Bruguier, 1792) 燒酒海蝨	1,3	+	
Littorinidae 玉黍螺科			
<i>Littoraria scabra</i> (Linnaeus, 1758) 粗紋玉黍螺	t,1,2	+	+
<i>Littoraria undulata</i> (Gray, 1839) 波紋玉黍螺	t,1,2,3	+	
<i>Nodilittorina radiata</i> (Souleyet in Eydoux & Souleyet, 1852) = <i>granularis</i> Gray, 1839 細粒玉黍螺	t,1,2	+	
<i>Nodilittorina trochoides</i> (Gray, 1839) 顆粒玉黍螺	t,1,2,3	+	
<i>Nodilittorina vidua</i> (Gould, 1859) 臺灣玉黍螺	t,1,2,3	+	
Vitrinellidae 滑輪螺科			
<i>Pseudoliotia astericus</i> (Gould, 1859) 繁縷齒輪螺	t	+	
Strombidae 鳳凰螺科			
<i>Lambis crocata</i> (Link, 1807) 金黃蜘蛛螺	1,3	+	+
<i>Lambis scorpius</i> (Linnaeus, 1758) 蠍螺	t,1,3	+	+
<i>Strombus bulla</i> (Röding, 1798) 紅袖鳳凰螺	1,3	+	+
<i>Strombus mutabilis</i> Swainson, 1821 花瓶鳳凰螺	t,1,2,3	+	+
Hipponicidae 頂蓋螺科			
<i>Cheilea equestris</i> (Linnaeus, 1758) 風鈴兒蓋螺	t	+	+
<i>Hipponix foliacea</i> (Quoy et Gaimard, 1835) 環蓋螺	t,1,3	+	+
<i>Hipponix trigona</i> (Gmelin, 1791) 毛蓋螺	t,1,2,3	+	
<i>Sabia conica</i> (Schumacher, 1817) 頂蓋螺	1,3	+	+
Vermetidae 蛇螺科			
<i>Dendropoma maximum</i> (Sowerby, 1825) 有蓋蛇螺	1	+	
<i>Serpulorbis imbricatus</i> (Dunker, 1860) 大蛇螺	t,1	+	
Ovulidae 海兔螺科			
<i>Calpurnus lacteus semistriatus</i> (Pease, 1862) 乳白海兔螺	1,3	+	+
<i>Calpurnus lacteus lacteus</i> (Lamarck, 1810) 白玉兔螺	t	+	+
<i>Calpurnus verrucosus</i> (Linnaeus, 1758) 玉兔螺	1	+	+
<i>Ovula costellata</i> Lamarck, 1810 紫口海兔螺	1	+	+
<i>Ovula ovum</i> (Linnaeus, 1758) 海兔螺	t,1,2,3	+	+
<i>Phenacovolva brevirostris</i> (Schmacher, 1817) 短菱角螺	1	+	+
<i>Pseudosimnia margarita</i> (Sowerby, 1828) 珍珠海兔螺	t	+	
<i>Pseudosimnia</i> sp.	1		
<i>Volva volva habei</i> (Oyama, 1961) 菱角螺	1,2,3	+	+
Cypraeidae 寶螺科			

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Cypraea annulus</i> Linnaeus, 1758 金環寶螺	1,2,3	+	+
<i>Cypraea arabica</i> Linnaeus, 1758 阿拉伯寶螺	t,1,2,3	+	+
<i>Cypraea asellus</i> Linnaeus, 1758 浮標寶螺	t,1,2,3	+	+
<i>Cypraea caputserpentis</i> Linnaeus, 1758 雪山寶螺	t,1,2,3	+	+
<i>Cypraea carneola</i> Linnaeus, 1758 紫口寶螺	t,1,2,3	+	+
<i>Cypraea caurica</i> Linnaeus, 1758 清齒寶螺	t,1,3	+	+
<i>Cypraea chinensis</i> Gmelin, 1791 中華寶螺	1,3	+	+
<i>Cypraea cicercula</i> Linnaeus, 1758 繡珠寶螺	t	+	+
<i>Cypraea clandestina</i> Linnaeus, 1758 銀絲寶螺	t,1,3	+	+
<i>Cypraea cribraria</i> Linnaeus, 1758 花鹿寶螺	t,1,3	+	+
<i>Cypraea erosa</i> Linnaeus, 1758 腰斑寶螺	t,1,3	+	+
<i>Cypraea erronea</i> Linnaeus, 1758 愛龍寶螺	t,1,2,3	+	+
<i>Cypraea fimbriata</i> Gmelin, 1793 紫端寶螺	1,3	+	+
<i>Cypraea gracilis</i> Gaskoin, 1849 小眼寶螺	t,1,2,3	+	+
<i>Cypraea helvola</i> Linnaeus, 1758 紅花寶螺	t,1,2,3	+	+
<i>Cypraea hirundo</i> Linnaeus, 1758 大熊寶螺	1,3	+	+
<i>Cypraea isabella</i> Linnaeus, 1758 雨絲寶螺	t,1,2,3	+	+
<i>Cypraea labrolineata</i> Gaskoin, 1849 梨皮寶螺	1,2,3	+	+
<i>Cypraea lutea</i> Gmelin, 1791 雙線寶螺	1,2,3	+	+
<i>Cypraea mauritiana</i> Linnaeus, 1758 龜甲寶螺	t	+	+
<i>Cypraea moneta</i> Linnaeus, 1758 黃寶螺	t,1,2,3	+	+
<i>Cypraea nucleus</i> Linnaeus, 1758 疙瘩寶螺	1,2,3	+	+
<i>Cypraea onyx</i> Linnaeus, 1758 瑪瑙寶螺	t,1,3	+	+
<i>Cypraea poraria</i> Linnaeus, 1758 紫花寶螺	1,2	+	+
<i>Cypraea talpa</i> Linnaeus, 1758 酒桶寶螺	1,3	+	+
<i>Cypraea tigris</i> Linnaeus, 1758 黑星寶螺	t,1,2,3	+	+
<i>Cypraea vitellus</i> Linnaeus, 1758 白星寶螺	t,1,2,3	+	+
<i>Cypraea ziczac</i> Linnaeus, 1758 箭頭寶螺	1	+	+
Triviidae 蝸螺科			
<i>Trivirostra oryza</i> (Lamarck, 1810) 白米蝸螺	1,3	+	+
Bursidae 蛙螺科			
<i>Bursa bufonia</i> (Gmelin, 1791) 蟾蜍蛙螺	t,1,3	+	+
<i>Bursa granularis</i> (Röding, 1798) 果粒蛙螺	t,1,3	+	+
<i>Tutufa bufo</i> (Röding, 1798)= <i>Bursa lissostoma</i> Smith, 1914 紅口蛙螺	1,3	+	+
<i>Tutufa rubeta</i> (Linnaeus, 1758) 金口蛙螺	t,1	+	+
Ficidae 枇杷螺科			
<i>Ficus ficus</i> (Linnaeus, 1758) = <i>subintermedius</i> d'Orbigny, 1852 小枇杷螺	1,3	+	+
Tonnidae 鶉螺科			
<i>Tonna olearium</i> (Linnaeus, 1758) 栗色鶉螺	1,3	+	+
<i>Tonna perdix</i> (Linnaeus, 1758) 鶉螺	t,1,3	+	+
Ranellidae 法螺科			
<i>Charonia lampas sauliae</i> (Reeve, 1844) 白法螺	1,3	+	

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Charonia tritonis</i> (Linnaeus, 1758) 大法螺	1,3	+	+
<i>Cymatium aquatile</i> (Reeve, 1844) 矮毛法螺	1,2	+	+
<i>Cymatium cutaceum</i> (Lamarck, 1816) 鶉法螺	t	+	+
<i>Cymatium lotorium</i> (Linnaeus, 1758) 象鼻法螺	t,1,3	+	+
<i>Cymatium mundum</i> (Gould, 1849) 小白法螺	t,1	+	
<i>Cymatium nicobaricum</i> (Röding, 1798) 金口法螺	t	+	+
<i>Cymatium pileare</i> (Linnaeus, 1758) 毛法螺	1,3	+	+
<i>Cymatium pyrum</i> (Linnaeus, 1758) 大象法螺	t,1,3	+	+
<i>Cymatium rubeculum</i> (Linnaeus, 1758) 豔紅美法螺	1,3	+	+
<i>Cymatium succinctum</i> (Linnaeus, 1771) 燈籠法螺	t,1,3	+	+
Personidae 扭法螺科			
<i>Distorsio anus</i> (Linnaeus, 1758) 扭法螺	1,3	+	+
Cerithiopsidae 蟹窩螺科			
<i>Notoseila laqueata</i> (Gould, 1861) 千層塔蟹窩螺	2	+	
Triphoridae 左錐螺科			
<i>Mastonia rubra</i> (Hinds, 1843) 豔珠左錐螺	2	+	+
Janthinidae 紫螺科			
<i>Janthina globosa</i> (Swainson, 1822) 琉璃紫螺	t	+	
<i>Janthina janthina</i> (Linnaeus, 1758) 紫螺	1,2,3	+	
Epitoniidae 海蝸螺科			
<i>Gyroscala lamellosa</i> (Lamarck, 1822) = <i>Epitonium perplexa</i> (Pease, 1867) 小海蝸螺	t,1,2,3	+	+
Eulimidae 瓷螺科			
<i>Apicalia habei</i> Waren, 1981 波部瓷螺	t	+	
<i>Balcis grandis</i> (A. Adams, 1854) 白瓷螺	t	+	
<i>Balcis luchuana</i> (Pilsbry, 1901) 琉球瓷螺	1,3		
<i>Balcis martini</i> (A. Adams, 1854) 馬丁瓷螺	1,2	+	
Muricidae 骨螺科			
<i>Chicoreus brunneus</i> (Link, 1807) 黑千手螺	t,1,2,3	+	+
<i>Chicoreus palmarosae</i> (Lamarck, 1822) 玫瑰千手螺	t	+	+
<i>Chicoreus ramosus</i> (Linnaeus, 1758) 大千手螺	t,1,3	+	
<i>Chicoreus torrefactus</i> Sowerby, 1841 千手螺	t,1,3	+	+
<i>Coralliophila erosa</i> (Roeding, 1798) 大肚珊瑚螺	t	+	+
<i>Coralliophila bulbiformis</i> (Conrad, 1837) 粗皮珊瑚螺	t,1,3	+	
<i>Coralliophila neritoidea</i> (Lamarck, 1816) 紫口珊瑚螺	t,1,3	+	+
<i>Cronia aspera</i> (Lamarck, 1799) 散瘤結螺	1,3		
<i>Cronia margariticola</i> (Broderip, 1833) 稜結螺	t,1,3	+	+
<i>Drupa grossularia</i> Röding, 1798 金口岩螺	t	+	+
<i>Drupa morum</i> Röding, 1798 紫口岩螺	t,1	+	+
<i>Drupa ricina</i> (Linnaeus, 1758) 黃齒岩螺	t,1,2,3	+	+
<i>Drupa rubusidaeus</i> Röding, 1798 玫瑰岩螺	t,1,3	+	+
<i>Drupella cornus</i> (Röding, 1798) 白結螺	1,2,3	+	+
<i>Drupella eburnea</i> (Küster, 1862) 牙白結螺	t	+	
<i>Ergalatax contractus</i> (Reeve, 1846) 粗肋結螺	t,1	+	

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Habromorula borealis</i> (Pilsbry, 1904) 紫口棘結螺	t	+	+
<i>Homalocantha anatomica</i> (Perry, 1811) 銀杏螺	t	+	+
<i>Maculotrion serrialis</i> (Deshayes, 1834) 秀峰結螺	t,1,2	+	+
<i>Magilus antiquus</i> Montfort, 1810 珊瑚礁螺	1,3	+	+
<i>Mancinella hippocastanum</i> (Linnaeus, 1758) 冠岩螺	1,2,3	+	
<i>Mancinella aculeata</i> Deshayes, 1844 鐵斑岩螺	t,1,2,3	+	
<i>Mancinella echinata</i> (Blainville, 1832) 棘岩螺	t	+	
<i>Mancinella mancinella</i> (Linnaeus, 1758) 金絲岩螺	t,1,3	+	+
<i>Mancinella tuberosa</i> (Röding, 1798) 角岩螺	t,1,3	+	+
<i>Marchia bipinnata</i> (Reeve, 1845) 小犁芭蕉螺	1,3	+	+
<i>Morulaanaxeres</i> (Kiener, 1834) 白瘤結螺	t,1,2,3	+	+
<i>Morula biconica</i> (Blainville, 1832) 雙錐棘結螺	1,2,3	+	+
<i>Morula granulata</i> (Duclos, 1924) 結螺	t,1,2,3	+	+
<i>Morula uva</i> (Röding, 1798) 草莓結螺	t	+	+
<i>Nassa francolina</i> (Bruguere, 1789) 平滑橄欖螺	1,2	+	+
<i>Nassa sarta</i> Bruguere, 1789 橄欖螺	t,1,3	+	+
<i>Purpura panama</i> (Röding, 1798) 羅螺	t,1,3	+	+
<i>Quoyula madreporara</i> (Sowerby, 1824) 廣口珊瑚螺	t	+	
<i>Rapa incurva</i> (Dunker, 1835) 小洋蔥螺	t	+	+
<i>Thais armigera</i> (Link, 1807) 大岩螺	t	+	+
<i>Thais clavigera</i> (Kuster, 1860) 蚵岩螺	t,1,2,3	+	
<i>Thais luteostoma</i> (Holten, 1802) 黑痣岩螺	t,1,2,3	+	
Turbinellidae 拳螺科			
<i>Vasum ceramicum</i> (Linnaeus, 1758) 長拳螺	t,1,3	+	+
<i>Vasum turbinellum</i> (Linnaeus, 1758) 短拳螺	t,1,3	+	+
Columbellidae 麥螺科			
<i>Euplica turturina</i> Duclos, 1835 球麥螺	1,3	+	
<i>Pyrene punctata</i> (Bruguere, 1789) 紅麥螺	t,1,2,3	+	+
<i>Pyrene testudinaria</i> (Link, 1806) 麥螺	t,1,2,3	+	+
<i>Pyrene versicolor</i> (Sowerby, 1832)= <i>scripta</i> Lamarck, 1822 花麥螺	t,1,2,3	+	+
Nassariidae 織紋螺科			
<i>Alectrion glans</i> (Linnaeus, 1758) 金絲織紋螺	1	+	+
<i>Nassarius papillosus</i> (Linnaeus, 1758) 疣織紋螺	1	+	+
<i>Niotha acuticosta</i> (Montrouzier, 1864) 不倒翁織紋螺	1,2	+	
<i>Niotha albescens</i> (Dunker, 1846) 黑頂織紋螺	1,3	+	+
<i>Niotha conoidalis</i> (Deshayes, 1832)	1,2,3	+	+
= <i>variegata</i> (A. Adams, 1852) 球織紋螺			
<i>Niotha fidus</i> (Reeve, 1853) 果粒織紋螺	1,3	+	
<i>Reticunassa pauperus</i> (Gould, 1850)	1,2	+	+
= <i>dermesdina</i> (Gould, 1860) 胎色織紋螺			
<i>Telasco reeveana</i> (Dunker, 1847) 芮氏織紋螺	1,3	+	
<i>Telasco velata</i> (Gould, 1850) 彈頭織紋螺	t		
<i>Telasco sufflatus</i> (Gould, 1860) 素面織紋螺	1,2	+	+
Buccinidae 峨螺科			

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Clivipollia fragaria</i> (Wood, 1828)= <i>carolinae</i> Kiener, 1844 似筆峨螺	1,2,3	+	
<i>Cantharus fumosus</i> (Dillwyn, 1817) 焦黃峨螺	t,1,2,3	+	+
<i>Cantharus undosus</i> (Linnaeus, 1758) 粗紋峨螺	t,2,3	+	+
<i>Engina lineata</i> (Reeve, 1846) 小斑馬峨螺	1,2,3	+	
<i>Engina mendicaria</i> (Linnaeus, 1758) 斑馬峨螺	1,3	+	+
<i>Enzinopsis zonalis</i> (Lamarck, 1822) 正斑馬峨螺	1,3	+	
<i>Neptunea arthritica cumingii</i> (Crosse, 1862) 大風車峨螺	t	+	
<i>Phos senticosus</i> (Linnaeus, 1758) 木賊峨螺	1,3	+	
<i>Pisania ignea</i> (Gmelin, 1791) 火焰峨螺	1,3	+	+
<i>Polia pulchra</i> (Reeve, 1846) 豔美峨螺	1,3	+	+
Fascioliidae 旋螺科			
<i>Latirolagena smaragdula</i> (Linnaeus, 1758) 釣錘旋螺	1,3	+	+
<i>Latirus polygonus</i> (Gmelin, 1791) 多稜旋螺	t,1,3	+	+
<i>Peristernia nassatula</i> (Lamarck, 1822) 紫口旋螺	t,1	+	+
<i>Pleuroploca glabra</i> (Dunker, 1882) 光滑赤旋螺	t	+	
<i>Pleuroploca trapezium paeteli</i> (Strebel, 1912) 大赤旋螺	t,1,3	+	
Olividae 榧螺科			
<i>Oliva caerulea</i> Röding, 1798 紫口榧螺	1,3	+	+
<i>Oliva lignaria</i> Marrat, 1868 蠟燭榧螺	1,3		+
Harpidae 楊桃螺科			
<i>Harpa major</i> Röding, 1798 大楊桃螺	1,3	+	+
Mitridae 筆螺科			
<i>Mitra clathrus</i> (Gmelin, 1791) 布紋筆螺	1,3	+	+
<i>Mitra decurtata</i> (Reeve, 1844) 腰帶筆螺	t,1,3	+	+
<i>Mitra ferruginea</i> (Lamarck, 1811) 粗斑筆螺	1,3	+	+
<i>Mitra fraga</i> Quoy et Gaimard, 1833 草莓筆螺	t	+	+
<i>Mitra litterata</i> (Lamarck, 1811) 火焰筆螺	t,1,3	+	+
<i>Mitra papilio</i> (Link, 1807) 蝶斑筆螺	1,3	+	+
<i>Mitra paupercula</i> (Linnaeus, 1758)	1,2	+	+
= <i>zebra</i> (Lamarck, 1811) 大焰筆螺			
<i>Mitra pellisserpentis</i> Reeve, 1844 檸檬筆螺	t,1,3	+	+
<i>Mitra proscissa</i> (Reeve, 1844) 褐雕筆螺	2	+	
<i>Mitra retusa</i> (Lamarck, 1811) 短焰筆螺	1,3	+	+
<i>Mitra scutulata</i> (Gmelin, 1792) 花焰筆螺	t,1,3	+	+
<i>Pterygia crenulata</i> (Gmelin, 1791) 彈頭筆螺	t	+	+
Costellariidae 蝸筆螺科			
<i>Pusia cancellarioides</i> (Anton, 1839) 白椶蝸筆螺	t	+	+
<i>Pusia consanguinea</i> (Reeve, 1845) 桑椶蝸筆螺	1,3	+	+
<i>Pusia lubens</i> (Reeve, 1845) 浮彫蝸筆螺	1,3	+	
Cancellariidae 核螺科			
<i>Cancellaria asperella</i> (Lamarck, 1822) 金剛核螺	1	+	+
<i>Cancellaria sinensis</i> (Reeve, 1856) 中華核螺	1	+	+
<i>Cancellaria spengleriana</i> (Deshayes, 1830) 衣裳核螺	1	+	

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Fusiaphera macrospira</i> (A. Adams et Reeve, 1850) 高塔核螺	1	+	
<i>Fusiaphera tosaensis</i> Habe, 1961 土佐塔核螺	1	+	
<i>Scalptia crenifera</i> (Sowerby, 1833) 積鱗核螺	1	+	+
<i>Scalptia scalariformis</i> (Lamarck, 1822) 折紋核螺	1	+	+
<i>Trigonostoma antiquata</i> (Hinds, 1843) 古董核螺	1	+	
Conidae 芋螺科			
<i>Conus arenatus</i> Hwass, 1792 紋身芋螺	1,3	+	+
<i>Conus capitaneus</i> Linnaeus, 1758 船長芋螺	1	+	+
<i>Conus characteristicus</i> Fischer, 1807 唐草芋螺	1,3	+	+
<i>Conus coffeae</i> Gmelin, 1791 咖啡芋螺	t	+	+
<i>Conus coronatus</i> Gmelin, 1791 花冠芋螺	t,1,2,3	+	+
<i>Conus ebraeus</i> Linnaeus, 1758 斑芋螺	t,1,2,3	+	+
<i>Conus flavidus</i> Lamarck, 1810 紫霞芋螺	t,1,2,3	+	+
<i>Conus fulmen</i> Reeve, 1833 玳瑁芋螺 (juvenile)	t	+	+
<i>Conus geographus</i> Linnaeus, 1758 殺手芋螺	t	+	+
<i>Conus lividus</i> Hwass, 1792 晚霞芋螺	t,1,2,3	+	+
<i>Conus miles</i> Linnaeus, 1758 柳絲芋螺	t,1,3	+	+
<i>Conus monachus</i> Linnaeus, 1758 花瑪瑙芋螺	t	+	+
<i>Conus musicus</i> Hwass, 1792 樂譜芋螺	t,1,2,3	+	+
<i>Conus mustelinus</i> Hwass, 1792 鼬鼠芋螺	1,3	+	+
<i>Conus quercinus</i> Lightfoot, 1786 蠟黃芋螺	t	+	+
<i>Conus sieboldii</i> Reeve, 1848 西寶芋螺	1	+	
<i>Conus sponsalis</i> Hwass, 1792 花環芋螺	t	+	+
<i>Conus striatus</i> Linnaeus, 1758 細線芋螺	1,3	+	+
<i>Conus terebra</i> Born, 1778 竹筍芋螺	1,3	+	+
<i>Conus tessulatus</i> Born, 1778 紅磚芋螺	1,3	+	+
<i>Conus textile</i> Linnaeus, 1758 織錦芋螺	t,1,2,3	+	+
<i>Conus vexillum</i> Gmelin, 1791 旗幟芋螺	t,1,3	+	+
Turridae 捲管螺科			
<i>Inquisitor jeffreysi</i> (E. A. Smith, 1875) 傑夫瑞氏捲管螺	1,3	+	
<i>Turridrupa cincta</i> (Lamarck, 1822) 彈簧捲管螺	1,3	+	
Terebridae 筍螺科			
<i>Terebra areolata</i> (Link, 1807) 褐斑筍螺	1,3	+	+
Architectonicidae 車輪螺科			
<i>Heliacus areola</i> (Gmelin, 1791) 高腰小輪螺	t	+	+
<i>Heliacus variegatus</i> Gmelin, 1791 繩紋車輪螺	1,2	+	
Hydatinidae 泡螺科			
<i>Hydatina amplustre</i> (Linnaeus, 1758) 玫瑰泡螺	1	+	
<i>Hydatina physis</i> (Linnaeus, 1758) 密紋泡螺	1,2,3	+	
Bullidae 棗螺科			
<i>Bulla vernicosa</i> Gould, 1859 棗螺	t,1,2,3	+	+
Siphonariidae 松螺科			
<i>Siphonaria atra</i> Quoy et Gaimard, 1832 黑松螺	t,1,3	+	+
<i>Siphonaria japonica</i> (Donovan, 1834) 網紋松螺	t,1,2,3	+	+

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
<i>Siphonaria laciniosa</i> (Linnaeus, 1758) 花松螺	1,3	+	+
<i>Siphonaria sirius</i> (Pilsbry, 1894) 菊松螺	t,1,2,3	+	+
BIVALVIA 二枚貝綱			
Arcidae 魁蛤科			
<i>Arca ventricosa</i> Lamarck, 1819 鞋魁蛤	1,3	+	+
<i>Barbatia bicolorata</i> Dillwyn, 1817 紅鬚魁蛤	1,2,3	+	
<i>Barbatia decussata</i> (Sowerby, 1833) 鬚魁蛤	t,1,2,3	+	
Mytilidae 殼菜殼科			
<i>Modiolus agripetus</i> Iredale, 1939	t,1,2,3	+	
= <i>auriculatus</i> (Krauss, 1848) 雲雀殼菜蛤			
<i>Modiolus philippinarum</i> (Hanley, 1843) 菲律賓殼菜蛤	t	+	+
<i>Modiolus</i> sp. 長杜鵑蛤	1,2		
<i>Musculus cupreus</i> (Gould, 1861) 邊網殼菜蛤	t,1,2,3	+	
<i>Septifer bilocularis</i> (Linnaeus, 1758) 孔雀殼菜蛤	1,2,3	+	+
<i>Septifer excisus</i> (Wiegmann, 1837) 白孔雀殼菜蛤	t,1,3		
<i>Septifer keenae</i> Nomura, 1936 金氏孔雀殼菜蛤	1,2	+	
<i>Septifer</i> sp. 長姬蛤	1,2		
<i>Septifer virgatus</i> (Wiegmann, 1837) 紫孔雀殼菜蛤	t,1,2,3	+	
Pteriidae 鶯蛤科			
<i>Pinctada margaritifera</i> (Linnaeus, 1758) 黑蝶珍珠蛤	t,1,3	+	+
<i>Pinctada martensii</i> (Dunker, 1872)	t,1,2,3	+	
= <i>radiata</i> (Leach, 1814) 馬丁氏珍珠蛤			
<i>Pteria breviaalata</i> (Dunker, 1872) 朱紅鶯蛤	1,3	+	
Isognomonidae 障泥蛤科			
<i>Isognomon ephippium</i> (Linnaeus, 1758) 馬鞍障泥蛤	1,3	+	
<i>Isognomon nucleus</i> (Lamarck, 1819) 小障泥蛤	t	+	
<i>Isognomon perna</i> (Linnaeus, 1758) 花紋障泥蛤	t,1,3	+	
Pinnidae 江珧蛤科			
<i>Atrina kinoshitai</i> Habe, 1953 簍衣江珧蛤	1,2	+	
<i>Atrina vexillum</i> (Born, 1778) 黑旗江珧蛤	1,3	+	+
<i>Pinna muricata</i> Linnaeus, 1758 尖角江珧蛤	t,1,3	+	+
<i>Streptopinna saccata</i> (Linnaeus, 1758) 袋狀江珧蛤	1,2	+	+
Limidae 狐蛤科			
<i>Lima vulgaris</i> (Link, 1807) 大白狐蛤	1,3	+	+
Spondylidae 海菊蛤科			
<i>Spondylus barbatus</i> Reeve, 1856 山羊海菊蛤	t,1,3	+	+
<i>Spondylus candidus</i> Lamarck, 1819 銼面海菊蛤	1,3	+	+
<i>Spondylus squamosus</i> Schreibers, 1793 魚鱗海菊蛤	t	+	+
<i>Spondylus nicobaricus</i> Schreibers, 1793 紫斑海菊蛤	t	+	
Ostreidae 牡蠣科			
<i>Crassostrea gigas</i> (Thunberg, 1793) 大牡蠣	t	+	+
<i>Lopha cristagalli</i> (Linnaeus, 1758) 鋸齒牡蠣	t,1	+	+
<i>Ostrea</i> sp.	t		
<i>Saccostrea mordax</i> (Gould, 1850) 黑齒牡蠣	t,1,3	+	

Table 2. (Continued)

Taxa	NE Taiwan	Japan	Philippine
Lucinidae 滿月蛤科			
<i>Codakia tigerina</i> (Linnaeus, 1758) 滿月蛤	t	+	+
<i>Epikodakia bella</i> (Conrad, 1837)	1,3	+	
= <i>divergens</i> (Philippi, 1850) 美姬滿月蛤			
Carditidae 算盤蛤科			
<i>Cardita leana</i> Dunker, 1860 灰算盤蛤	t,1,3	+	
<i>Cardita variegata</i> Bruguiere, 1792 算盤蛤	t	+	+
Chamidae 偏口蛤科			
<i>Chama ambigua</i> Lischke, 1870 迷樣偏口蛤	t,1,3	+	
<i>Chama limbula</i> Lamarck, 1819	t,1,3	+	+
= <i>iostoma</i> Conrad, 1839 紫緣偏口蛤			
Tridacnidae 磚磔蛤科			
<i>Tridacna maxima</i> (Röding, 1798) 長磚磔蛤	1,3	+	+
Tellidae 櫻蛤科			
<i>Quidnipagus palatam</i> (Iredale, 1929) 波紋櫻蛤	t,1	+	
Psammobiidae 紫雲蛤科			
<i>Asaphis dichotoma</i> Anton, 1838 紫晃蛤	t,1,2,3	+	
Veneridae 簾蛤科			
<i>Gafrarium dispar</i> (Dillwyn, 1817) 枝條縱簾蛤	t,1,3	+	
<i>Gafrarium divaricatum</i> (Gmelin, 1791) 歧紋簾蛤	1,3	+	+
<i>Gafrarium tumidum</i> Röding, 1798 厚殼縱簾蛤	t	+	+
<i>Meretrix meretrix</i> (Linnaeus, 1758) 台灣文蛤	1	+	+
<i>Periglypta puerpera</i> (Linnaeus, 1771) 圓球簾蛤	t	+	
<i>Periglypta reticulata</i> (Linnaeus, 1758) 山水簾蛤	t,1,2,3	+	+
<i>Ruditapes philippinarum</i> (Adams et Reeve, 1850) 菲律賓簾蛤	t,1,3	+	
<i>Venus toreuma</i> Gould, 1850 維納斯簾蛤	t,1,3	+	
Gastrochaenidae 開腹蛤科			
<i>Gastrochaena cuneiformis</i> Spengler, 1783 開腹蛤	1,3	+	
Pholadidae 鷓鴣蛤科			
<i>Aspidopholas yoshimurai</i> Kuroda & Teramachi, 1930 棲管鷓鴣蛤	t	+	
<i>Jouannetia cumingii</i> (Sowerby, 1849) 鈴蛤	t	+	
<i>Martesia striata</i> (Linnaeus, 1758) 細紋鷓鴣蛤	t	+	

The symbol “+” represent recorded species; t = this paper; 1 = Jeng *et al.* (2000); 2 = Tan *et al.* (1980); 3 = Tan *et al.* (1986).

臺灣東北角淺海的海貝

李淑娟 趙世民

國立自然科學博物館 動物學組

本文記錄在1995年到2002年於臺灣東北角採獲的52科208種水深20公尺以內的海生貝類，其中5種為臺灣新記錄種。本文並回顧及表列其它研究所記錄的65科272種。至目前為止，臺灣東北角的海貝共67科340種，主要是黑潮型的貝種，和日本南部有98%的相似性，和菲律賓有66%相似性。本研究所採獲的208種的彩色圖片亦包含在本文中。

關鍵詞：動物誌，海貝，臺灣。

PLATE 1

1. *Cellana grata* (Gould, 1859) 斗笠螺 (25mm)
2. *Cellana toreuma* (Reeve, 1855) 花笠螺 (40mm)
3. *Scutellastra flexuosa* Quoy et Gaimard, 1834 星笠螺 (28mm)
4. *Nipponacmea schrenckii* (Lischke, 1868) 花青螺 (18mm)
5. *Patelloida saccharina* (Linnaeus, 1758) 鵝足青螺 (25mm)
6. *Patelloida straita* (Quoy et Gaimard, 1834) 射線青螺 (31mm)
7. *Haliotis diversicolor* (Reeve, 1846) 九孔螺 (82mm)
8. *Haliotis varia* (Linnaeus, 1758) 瘤鮑螺 (48mm)
9. **Emarginula imaizumi* Dall, 1926 射線裂螺 (7mm)
10. *Emarginula variegata* (A. Adams, 1852) 彩色裂螺 (9mm)
11. *Scutus sinensis* (Blainville, 1825) 鴨嘴螺 (33mm)
12. *Chlorostoma argyrostoma* (Gmelin, 1791) 黑鐘螺 (37mm)
13. *Chlorostoma turbinata* (A. Adams, 1853) 頭巾黑鐘螺 (14mm)
14. *Clanculus denticulatus* (Gray, 1827) 鐵珠鐘螺 (18mm)
15. *Clanculus margaritarius* (Philippi, 1846) 小草莓鐘螺 (12mm)
16. *Eurytrochus cognatus* (Pilsbry, 1903) 紅頂鐘螺 (5mm)
17. *Monodonta labio confusa* (Tapprone-Canefri, 1874) 圓草蓆鐘螺 (20mm)
18. *Monodonta perplexa* Pilsbry, 1889 扭鐘螺 (17mm)
19. *Omphalius nigerrima* (Gmelin, 1791) 臍孔黑鐘螺 (18mm)
20. *Tectus pyramis* (Born, 1778) 銀塔鐘螺 (60mm)
21. *Trochus hanleyanus* Reeve, 1842 細紋鐘螺 (35mm)
22. *Trochus maculatus* Linnaeus, 1758 花斑鐘螺 (40mm)
23. *Trochus sacellum* Philippi, 1854 齒輪鐘螺 (23mm)
24. *Umbonium suturale* (Lamarck, 1822) 臺灣蝟螺 (4mm)

PLATE 1

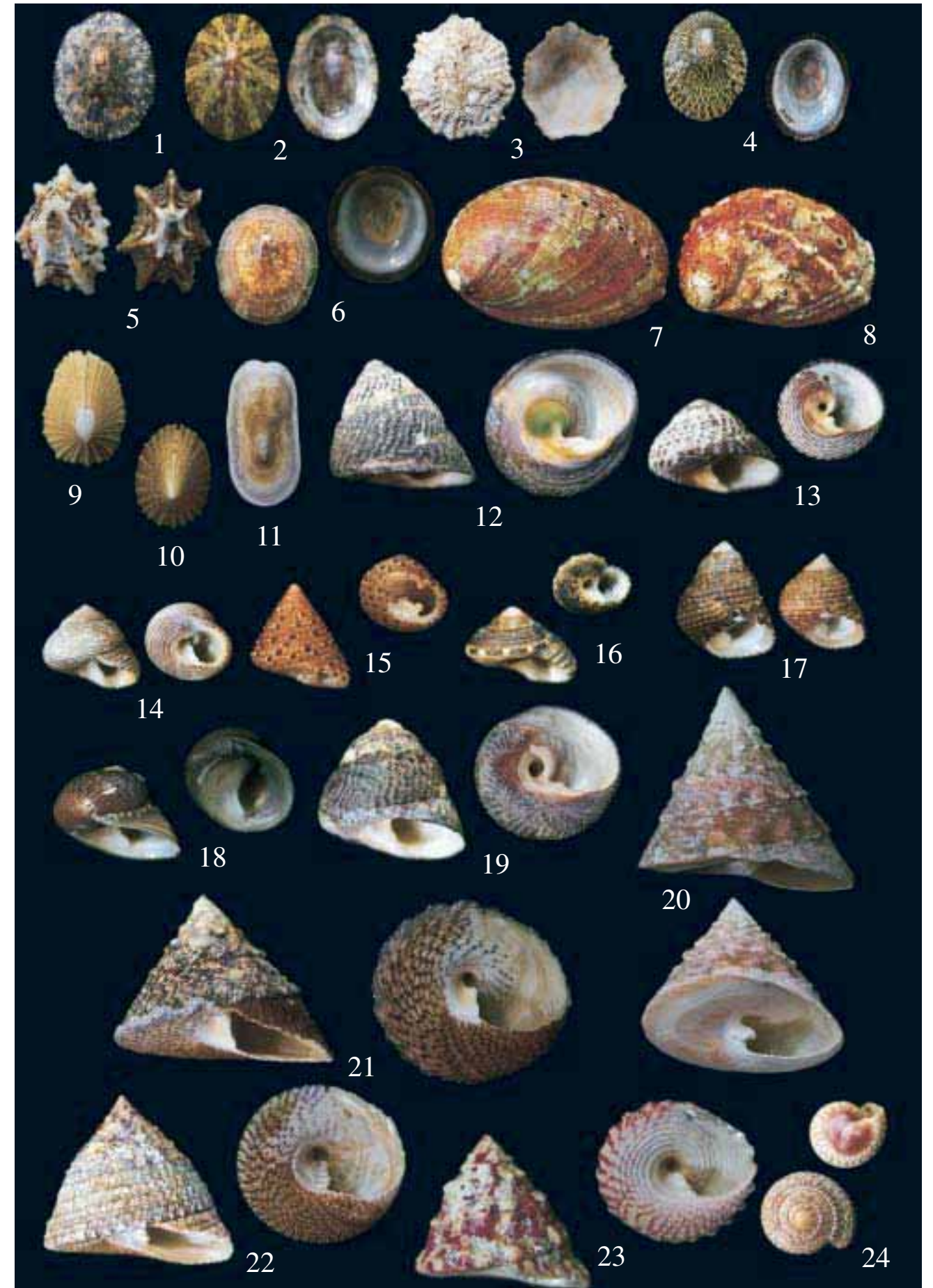


PLATE 2

25. *Angaria delphinus* Linnaeus, 1758 棘冠螺 (22mm)
26. *Astraliu haematragum* (Menke, 1829) 白星螺 (18mm)
27. *Turbo cinerea* (Born, 1778) 美珠螺 (20mm)
28. *Turbo coronata* (Gmelin, 1818) 珠螺 (24mm)
29. *Turbo setosus* Gmelin, 1791 圓螯螺 (45mm)
30. *Turbo stenogyrus* Fischer, 1873 高腰螯螺 (25mm)
31. *Clithon chlorostoma* (Broderip, 1832) 金口石蠶螺 (11mm)
32. *Clithon corona* (Linnaeus, 1758) 小皇冠蠶螺 (15mm)
33. *Clithon faba* (Sowerby, 1836) 豆石蠶螺 (11mm)
34. *Clithon retropicta* (v. Martens, 1879) 石蠶螺 (20mm)
35. *Clithon sowerbiana* (Récluz, 1842) 沙氏石蠶螺 (9mm)
36. *Nerita albicilla* Linnaeus, 1758 漁舟蠶螺 (18mm)
37. *Nerita bensoni* Récluz, 1850 賓森氏蠶螺 (7mm)
38. *Nerita chamaeleon* Linnaeus, 1758 大圓蠶螺 (25mm)
39. *Nerita costata* Gmelin, 1791 黑肋蠶螺 (18mm)
40. *Nerita incerta* (Busch, 1844) 黑玉蠶螺 (14mm)
41. *Nerita insculpta* Récluz, 1842 虛線蠶螺 (15mm)
42. *Nerita ocellata* Le Guillou, 1841 滑圓蠶螺 (17mm)
43. *Nerita plicata* Linnaeus, 1758 白肋蠶螺 (17mm)
44. *Nerita polita* Linnaeus, 1758 玉女蠶螺 (20mm)
45. *Nerita reticulata* Karsten, 1789 紅唇蠶螺 (11mm)
46. *Nerita undata* Linnaeus, 1758 粗紋蠶螺 (17mm)
47. *Septaria porcellana* (Linnaeus, 1758) 壁蠶螺 (24mm)
48. *Cerithium nesioticum* Pilsby et Vanatta, 1906 淡斑蟹守螺 (17mm)
49. *Cerithium zonatum* (Wood, 1828) 褐帶蟹守螺 (23mm)
50. *Clypeomorus batillariaeformis* Habe et Kosuge, 1966 海蝨蟹守螺 (25mm)
51. *Clypeomorus bifasciatus* (Sowerby, 1855) 白甚蟹守螺 (24mm)
52. *Clypeomorus chemnitziana* (Pilsbry, 1901) 桑椹蟹守螺 (30mm)
53. *Rhinoclavis sinensis* (Gmelin, 1791) 中華蟹守螺 (52mm)

PLATE 2



PLATE 3

54. *Siliquaria cumingi* (Moerch, 1860) 蚯蚓螺 (33mm)
 55. *Siliquaria trochlearis* Moerch, 1860 小如意蚯蚓螺 (18mm)
 56. *Planaxis labiosa* (A. Adams, 1853) 金絲芝麻螺 (7mm)
 57. *Planaxis sulcatus* (Born, 1778) 芝麻螺 (18mm)
 58. *Batillaria sordida* (Gmelin, 1791) 黑瘤海蝿 (35mm)
 59. *Littoraria scabra* (Linnaeus, 1758) 粗紋玉黍螺 (16mm)
 60. *Littoraria undulata* (Gray, 1839) 波紋玉黍螺 (15mm)
 61. *Nodilittorina radiata* (Souleyet in Eydoux & Souleyet, 1852) 細粒玉黍螺 (8mm)
 62. *Nodilittorina trochoides* (Gray, 1839) 顆粒玉黍螺 (8mm)
 63. *Nodilittorina vidua* (Gould, 1859) 臺灣玉黍螺 (9mm)
 64.**Pseudoliotia astericus* (Gould, 1859) 繁縷齒輪螺 (2mm)
 65. *Lambis scorpius* (Linnaeus, 1758) 蠍螺 (125mm)
 66. *Strombus mutabilis* Swainson, 1821 花瓶鳳凰螺 (juvenile) (23mm)
 67. *Hipponix foliacea* (Quoy et Gaimard, 1835) 環蓋螺 (14mm)
 68. *Hipponix trigona* (Gmelin, 1791) 毛蓋螺 (14mm)
 69. *Cheilea equestris* (Linnaeus, 1758) 風鈴兒蓋螺 (33mm)
 70. *Serpulorbis imbricatus* (Dunker, 1860) 大蛇螺 (18mm)
 71.**Calpurnus lacteus lacteus* (Lamarck, 1810) 白玉兔螺 (11mm)
 72. *Ovula ovum* (Linnaeus, 1758) 海兔螺 (69mm)
 73. *Pseudosimnia margarita* (Sowerby, 1828) 珍珠海兔螺 (15mm)
 74. *Cypraea arabica* Linnaeus, 1758 阿拉伯寶螺 (54mm)
 75. *Cypraea asellus* Linnaeus, 1758 浮標寶螺 (17mm)
 76. *Cypraea caputserpentis* Linnaeus, 1758 雪山寶螺 (32mm)
 77. *Cypraea carneola* Linnaeus, 1758 紫口寶螺 (52mm)
 78. *Cypraea caurica* Linnaeus, 1758 清齒寶螺 (38mm)
 79. *Cypraea cicercula* Linnaeus, 1758 繡珠寶螺 (20mm)
 80. *Cypraea clandestina* Linnaeus, 1758 銀絲寶螺 (17mm)
 81. *Cypraea cribraria* Linnaeus, 1758 花鹿寶螺 (17mm)
 82. *Cypraea erosa* Linnaeus, 1758 腰斑寶螺 (34mm)
 83. *Cypraea erronea* Linnaeus, 1758 愛龍寶螺 (31mm)
 84. *Cypraea gracilis* Gaskoin, 1849 小眼寶螺 (17mm)
 85. *Cypraea helvola* Linnaeus, 1758 紅花寶螺 (23mm)
 86. *Cypraea isabella* Linnaeus, 1758 雨絲寶螺 (35mm)
 87. *Cypraea mauritiana* Linnaeus, 1758 龜甲寶螺 (96mm)
 88. *Cypraea moneta* Linnaeus, 1758 黃寶螺 (24mm)
 89. *Cypraea onyx* Linnaeus, 1758 瑪瑙寶螺 (35mm)
 90. *Cypraea tigris* Linnaeus, 1758 黑星寶螺 (101mm)
 91. *Cypraea vitellus* Linnaeus, 1758 白星寶螺 (63mm)

PLATE 3



PLATE 4

92. *Bursa bufonia* (Gmelin, 1791) 蟾蜍蛙螺 (juvenile) (56mm)
 93. *Bursa granularis* (Röding, 1798) 果粒蛙螺 (55mm)
 94. *Tutufa rubeta* (Linnaeus, 1758) 金口蛙螺 (115mm)
 95. *Tonna perdx* (Linnaeus, 1758) 鶉螺 (107mm)
 96. *Cymatium cutaceum* (Lamarck, 1816) 鶉法螺 (54mm)
 97. *Cymatium lotorium* (Linnaeus, 1758) 象鼻法螺 (115mm)
 98. *Cymatium mundum* (Gould, 1849) 小白法螺 (18mm)
 99. *Cymatium nicobaricum* (Röding, 1798) 金口法螺 (71mm)
 100. *Cymatium pyrum* (Linnaeus, 1758) 大象法螺 (110mm)
 101. *Cymatium succinctum* (Linnaeus, 1771) 燈籠法螺 (52mm)
 102. *Janthina globosa* (Swainson, 1822) 琉璃紫螺 (13mm)
 103. *Gyroscaia lamellosa* (Lamarck, 1822) 小海蝸螺 (27mm)
 104. **Apicalia habei* Waren, 1981 波部瓷螺 (9mm)
 105. *Balcis grandis* (A. Adams, 1854) 白瓷螺 (18mm)
 106. *Chicoreus ramosus* (Linnaeus, 1758) 大千手螺 (120mm)
 107. *Chicoreus brunneus* (Link, 1807) 黑千手螺 (63mm)
 108. *Chicoreus palmarosae* (Lamarck, 1822) 玫瑰千手螺 (120mm)
 109. *Chicoreus torrefactus* Sowerby, 1841 千手螺 (115mm)
 110. *Coralliophila erosa* (Roeding, 1798) 大肚珊瑚螺 (30mm)
 111. *Coralliophila neritoidea* (Lamarck, 1816) 紫口珊瑚螺 (33mm)
 112. *Cronia margaritica* (Broderip, 1833) 稜結螺 (28mm)
 113. *Drupa grossularia* Röding, 1798 金口岩螺 (31mm)
 114. *Drupa morum* Röding, 1798 紫口岩螺 (45mm)
 115. *Drupa ricina* (Linnaeus, 1758) 黃齒岩螺 (28mm)
 116. *Drupa rubusidaeus* Röding, 1798 玫瑰岩螺 (27mm)
 117. *Drupella eburnea* (Küster, 1862) 牙白結螺 (24mm)
 118. *Ergalatax contractus* (Reeve, 1846) 粗肋結螺 (31mm)
 119. *Habromorula borealis* (Pilsbry, 1904) 紫口棘結螺 (20mm)
 120. *Homalocantha anatomica* (Perry, 1811) 銀杏螺 (49mm)
 121. *Maculotrion serrialis* (Deshayes, 1834) 秀峰結螺 (9mm)
 122. *Mancinella aculeata* Deshayes, 1844 鐵斑岩螺 (34mm)
 123. *Mancinella echinata* (Blainville, 1832) 棘岩螺 (37mm)
 124. *Mancinella mancinella* (Linnaeus, 1758) 金絲岩螺 (52mm)
 125. *Mancinella tuberosa* (Röding, 1798) 角岩螺 (49mm)
 126. *Morulaanaxeres* (Kiener, 1834) 白瘤結螺 (12mm)
 127. *Morula granulata* (Duclos, 1924) 結螺 (24mm)
 128. *Morula uva* (Röding, 1798) 草莓結螺 (17mm)
 129. *Nassa sarta* Bruguiere, 1789 橄欖螺 (41mm)
 130. *Purpura panama* (Röding, 1798) 羅螺 (35mm)
 131. *Quoyula madreporara* (Sowerby, 1824) 廣口珊瑚螺 (27mm)
 132. *Rapa incurva* (Dunker, 1835) 小洋蔥螺 (26mm)

PLATE 4

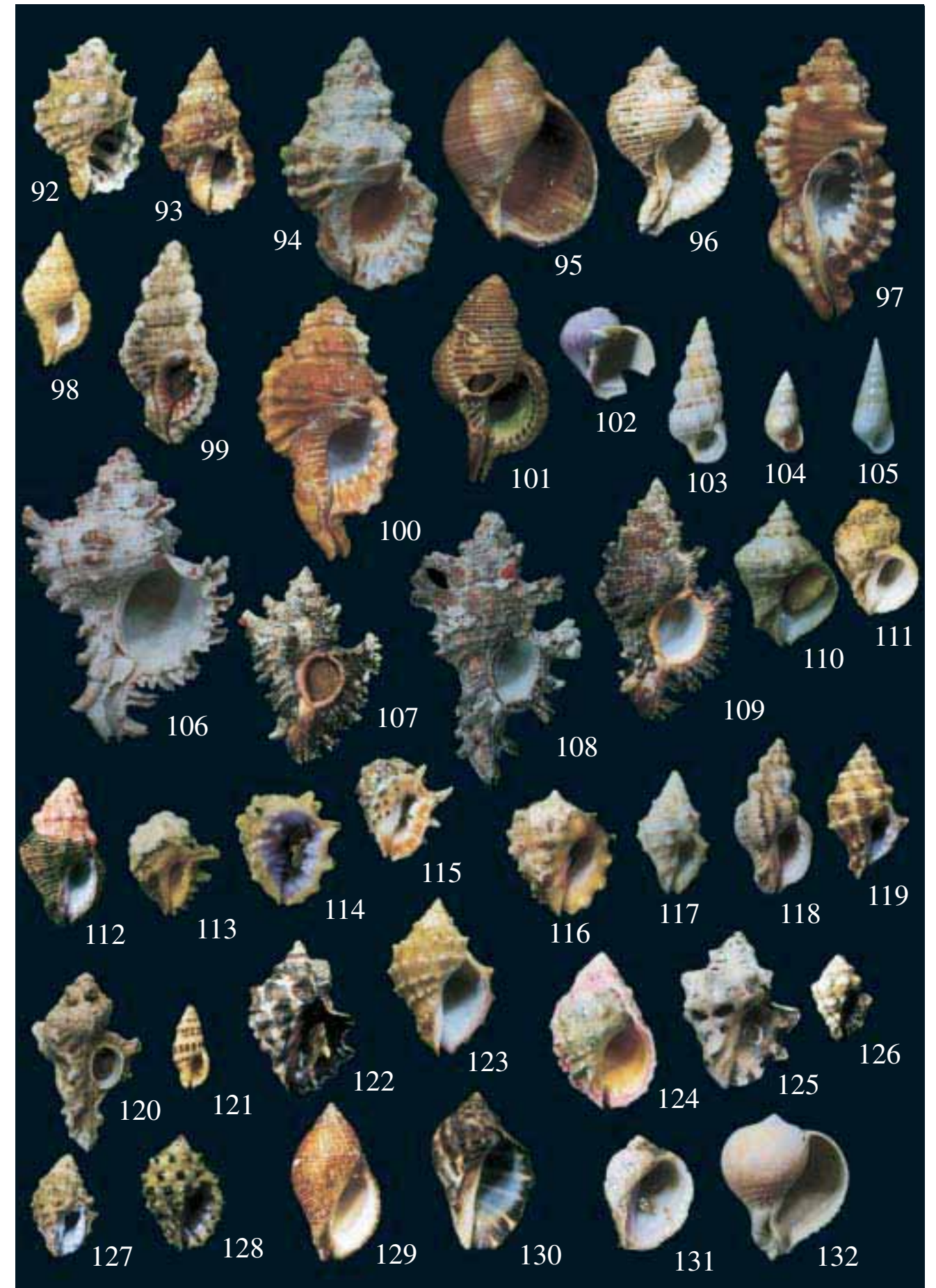


PLATE 5

133. *Thais armigera* (Link, 1807) 大岩螺 (75mm)
 134. *Thais clavigera* (Kuster, 1860) 蚵岩螺 (20mm)
 135. *Thais luteostoma* (Holten, 1802) 黑痣岩螺 (45mm)
 136. *Vasum ceramicum* (Linnaeus, 1758) 長拳螺 (62mm)
 137. *Vasum turbinellum* (Linnaeus, 1758) 短拳螺 (58mm)
 138. *Pyrene punctata* (Bruguiere, 1789) 紅麥螺 (15mm)
 139. *Pyrene testudinaria* (Link, 1806) 麥螺 (15mm)
 140. *Pyrene versicolor* (Sowerby, 1832) 花麥螺 (15mm)
 141. *Telasco velata* (Gould, 1850) 彈頭織紋螺 (25mm)
 142. *Cantharus fumosus* (Dillwyn, 1817) 焦黃峨螺 (34mm)
 143. *Cantharus undosus* (Linnaeus, 1758) 粗紋峨螺 (29mm)
 144. *Neptunea arthritica cumingii* (Crosse, 1862) 大風車峨螺 (98mm)
 145. *Latirus polygonus* (Gmelin, 1791) 多稜旋螺 (86mm)
 146. *Peristernia nassatula* (Lamarck, 1822) 紫口旋螺 (32mm)
 147. *Pleuroploca glabra* (Dunker, 1882) 光滑赤旋螺 (128mm)
 148. *Pleuroploca trapezium paeteli* (Strebel, 1912) 大赤旋螺 (139mm)
 149. *Mitra decurtata* (Reeve, 1844) 腰帶筆螺 (24mm)
 150. *Mitra fraga* Quoy et Gaimard, 1833 草莓筆螺 (17mm)
 151. *Mitra litterata* (Lamarck, 1811) 火焰筆螺 (23mm)
 152. *Mitra pellisserpentis* Reeve, 1844 檸檬筆螺 (22mm)
 153. *Mitra scutulata* (Gmelin, 1792) 火焰筆螺 (34mm)
 154. *Pterygia crenulata* (Gmelin, 1791) 彈頭筆螺 (27mm)
 155. *Pusia cancellarioides* (Anton, 1839) 白椶蝸筆螺 (18mm)
 156. *Conus coffeae* Gmelin, 1791 咖啡芋螺 (42mm)
 157. *Conus coronatus* Gmelin, 1791 花冠芋螺 (28mm)
 158. *Conus ebraeus* Linnaeus, 1758 斑芋螺 (33mm)
 159. *Conus flavidus* Lamarck, 1810 紫霞芋螺 (46mm)
 160. *Conus fulmen* Reeve, 1833 玳瑁芋螺 (juvenile) (27mm)
 161. *Conus geographus* Linnaeus, 1758 殺手芋螺 (104mm)
 162. *Conus lividus* Hwass, 1792 晚霞芋螺 (36mm)
 163. *Conus miles* Linnaeus, 1758 柳絲芋螺 (63mm)
 164. *Conus monachus* Linnaeus, 1758 花瑪瑙芋螺 (52mm)
 165. *Conus musicus* Hwass, 1792 樂譜芋螺 (13mm)
 166. *Conus quercinus* Lightfoot, 1786 蠟黃芋螺 (41mm)
 167. *Conus sponsalis* Hwass, 1792 花環芋螺 (19mm)
 168. *Conus textile* Linnaeus, 1758 織錦芋螺 (60mm)
 169. *Conus vexillum* Gmelin, 1791 旗幟芋螺 (105mm)

PLATE 5



PLATE 6

170. *Heliacus areola* (Gmelin, 1791) 高腰小輪螺 (6mm)
 171. *Bulla vernicosa* Gould, 1859 黍螺 (24mm)
 172. *Siphonaria atra* Quoy et Gaimard, 1832 黑松螺 (23mm)
 173. *Siphonaria japonica* (Donovan, 1834) 網紋松螺 (17mm)
 174. *Siphonaria sirius* (Pilsbry, 1894) 菊松螺 (26mm)
 175. *Barbatia decussata* (Sowerby, 1833) 鬚魁蛤 (50mm)
 176. *Modiolus auriculatus* (Krauss, 1848) 雲雀殼菜蛤 (32mm)
 177. *Modiolus philippinarum* (Hanley, 1843) 菲律賓殼菜蛤 (30mm)
 178. *Musculus cupreus* (Gould, 1861) 邊網殼菜蛤 (22mm)
 179. *Septifer excisus* (Wiegmann, 1837) 白孔雀殼菜蛤 (11mm)
 180. *Septifer virgatus* (Wiegmann, 1837) 紫孔雀殼菜蛤 (38mm)
 181. *Pinctada margaritifera* (Linnaeus, 1758) 黑蝶珍珠蛤 (49mm)
 182. *Pinctada martensii* (Dunker, 1873) 馬丁氏珍珠蛤 (54mm)
 183. *Isognomon nucleus* (Lamarck, 1819) 小障泥蛤 (17mm)
 184. *Isognomon perna* (Linnaeus, 1758) 花紋障泥蛤 (45mm)
 185. *Pinna muricata* Linnaeus, 1758 尖角江珧蛤 (86mm)
 186. *Spondylus barbatus* Reeve, 1856 山羊海菊蛤 (50mm)
 187. *Spondylus squamosus* Schreibers, 1793 魚鱗海菊蛤 (78mm)
 188. *Spondylus nicobaricus* Schreibers, 1793 紫斑海菊蛤 (37mm)
 189. *Crassostrea gigas* (Thunberg, 1793) 大牡蠣 (33mm)
 190. *Lopha cristagalli* (Linnaeus, 1758) 鋸齒牡蠣 (56mm)
 191. *Ostrea* sp. (125mm)
 192. *Saccostrea mordax* (Gould, 1850) 黑齒牡蠣 (64mm)
 193. *Codakia tigerina* (Linnaeus, 1758) 滿月蛤 (50mm)
 194. *Cardita leana* Dunker, 1860 灰算盤蛤 (17mm)
 195. *Cardita variegata* Bruguiere, 1792 算盤蛤 (29mm)
 196. *Chama ambigua* Lischke, 1870 迷樣偏口蛤 (90mm)
 197. *Chama limbula* Lamarck, 1819 紫緣偏口蛤 (68mm)
 198. *Quidnipagus palatam* (Iredale, 1929) 波紋櫻蛤 (31mm)
 199. *Asaphis dichotoma* Anton, 1838 紫晃蛤 (67mm)
 200. *Gafrarium dispar* (Dillwyn, 1817) 枝條縱簾蛤 (31mm)
 201. *Gafrarium tumidum* Röding, 1798 厚殼縱簾蛤 (30mm)
 202. *Periglypta puerpera* (Linnaeus, 1771) 圓球簾蛤 (58mm)
 203. *Periglypta reticulata* (Linnaeus, 1758) 山水簾蛤 (40mm)
 204. *Ruditapes philippinarum* (Adams et Reeve, 1850) 菲律賓簾蛤 (27mm)
 205. *Venus toreuma* Gould, 1850 維納斯簾蛤 (28mm)
 206.**Aspidopholas yoshimurai* Kuroda & Teramachi, 1930 棲管鷗蛤 (14mm)
 207. *Jouannetia cumingii* (Sowerby, 1849) 鈴蛤 (16mm)
 208. *Martesia striata* (Linnaeus, 1758) 細紋鷗蛤 (17mm)

PLATE 6

