



我国近海海洋综合调查与评价专项成果
“十二五”国家重点图书出版规划项目

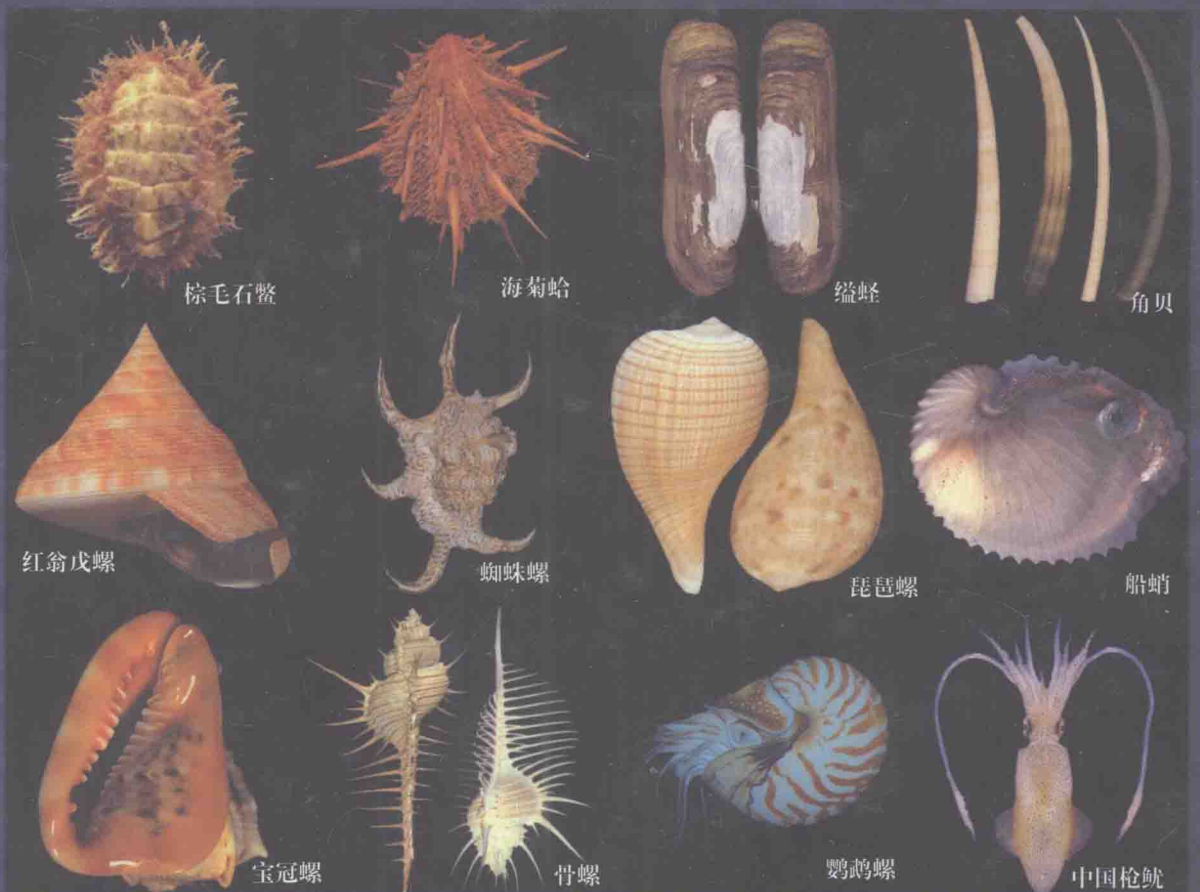
中国海洋物种和图集 下卷

中国海洋生物图集

主编 黄宗国 林 茂

第四册

动物界 (2)
软体动物门



海洋出版社

中国海洋物种和图集 下卷
The Living Species and Their Illustrations in China's Seas (Part II)

中国海洋生物图集

AN ILLUSTRATED GUIDE TO SPECIES IN CHINA'S SEAS

主编 黄宗国 林 茂
Editors-in-Chief Huang Zongguo Lin Mao

第四册

Vol. 4

动物界 (2)
软体动物门

海洋出版社

2012年·北京

内 容 简 介

《中国海洋物种和图集》是“我国近海海洋综合调查与评价”(908专项)成果集成任务(908-ZC-II-02)的成果,也是《中国海洋生物种类与分布》(1994年初版、2001年英文版、2008年增订版)的延续与深入;是至今收录中国海洋物种最多、图文并茂的书;是国内外44家单位的112位专家共同劳动结晶。

这部书分上、下两卷。上卷《中国海洋物种多样性》,含28 000余种物种,分上、下两册。下卷《中国海洋生物图集》,含1.8万物种的原色图或黑白图,分8册。按五界分类编排,与上卷的物种相呼应。供海洋、水产及涉海人员参考应用。

“The Living Species and Their Illustrations in China's Seas” is the achievement of the “Chinese Offshore Investigation and Assessment” and is also an expanded continuation of “Marine Species and Their Distributions in China's Seas” (first published in 1994, English version in 2001, revised and expanded version in 2008), covering the largest number of marine species and is the best illustrated and most comprehensive among similar works in China. This book is the product of the collective effort of 112 people (national and international experts) from 44 organizations participated.

This treatise comprises two parts. Part I, “The Living Species in China's Seas”, covers more than 28 000 species in two volumes. Part II, “An Illustrated Guide to Species in China's Seas”, comprises 8 volumes of color and black and white illustrations of 18 000 species arranged according to the five-kingdom classification scheme, with correspondence to the species list published in Part I. This 10-volume book intended for reference by personnel in the marine, aquaculture and maritime industries.

图书在版编目(CIP)数据

中国海洋生物图集. 第四册 / 黄宗国, 林茂主编. —北京: 海洋出版社, 2012.5
ISBN 978-7-5027-8203-0

I. ①中… II. ①黄… ②林… III. ①海洋生物—中国—图集 IV. ①Q178.53-64

中国版本图书馆CIP数据核字(2012)第024213号

责任编辑: 钱晓彬

责任印刷: 赵麟芬

海洋出版社 出版发行

<http://www.oceanpress.com.cn>

北京市海淀区大慧寺路8号 邮编: 100081

厦门九盏灯文化传播有限公司设计制作

北京画中画印刷有限公司印刷 新华书店北京发行所经销

2012年5月第1版 2012年5月第1次印刷

开本: 889mm X 1194mm 1/16 印张: 22.5

字数: 900千字 定价: 260.00元

发行部: 62132549 邮购部: 68038093 总编室: 62114335

海洋版图书印、装错误可随时退换

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序

《中国海洋物种和图集》这部书，分上、下两卷10册。

上卷《中国海洋物种多样性》，记载2.8万余种，分上、下两册。

下卷《中国海洋生物图集》，刊出1.8万物种的形态图，分8册。

上卷是《中国海洋生物种类与分布》1994年初版、英文版和2008年增订版的继续和深入。由原有的2.2万余种增加至2.8万余种，每种包括原有的中名、学名、订名人、地理分布和参考文献号；本书增加了订名年份、联合国粮农组织的英文名以及在下卷的相应图号。

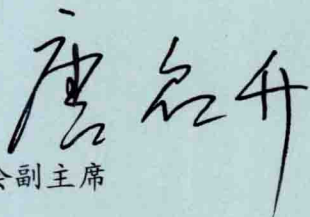
下卷《中国海洋生物图集》刊载1.8万物种的（2.5万种次）原色或点线形态图和部分生态生物学图。从原核生物界至动物界，约2 800个图版。每种力求刊出颜色和形态等的分类特征，便于鉴定分类使用，同时顾及到美观和节省篇幅。8个分册独立编页码、图号和属名及中名索引，便于查找。

这部书体现了全面、科学和实用；收集了19世纪以来国内外已记录的中国海洋物种，尽量删除淡水种和化石种。用当今最经常应用的生物五界分类法编排，界或门以下的分类阶元，尽量尊重各门类专家的意见，求同存异；也注意连续性和稳定性。本书力求对物种分类、鉴定，生态生物学研究，环保和外贸、商检人员有帮助。

这部书图文并茂，在国内是首次，国际上也不多见；以往各大门类中已有一些图鉴及名录，但本书集成出版和未出版的各门类名录和形态图，是创新的体现。

这部书是国内外专家集体劳动的结晶：主持单位多年来深入开展这项研究，并组织了国内外许多专家共同研究。这次就有112位编委，包括中国内地、台湾、香港及英国和澳大利亚的专家。

这部书的出版，将进一步促进中国海洋物种多样性的研究，推动这个领域的科技进步。



中国科学技术协会副主席

中国工程院院士

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2010年7月19日

Preface

“The Living Species and Their Illustrations in China's Seas” comprises 10 volumes in two parts.

Part I, entitled “The Living Species in China's Seas”, reports more than 28 000 species in two volumes.

Part II, entitled “An Illustrated Guide to Species in China's Seas”, comprises 8 volumes and publishes morphological diagrams and plates covering 18 000 species.

Part I is the in-depth continuation of “Marine Species and Their Distribution in China's Seas” (first published in 1994), its English edition and the revised and improved edition published in 2008. The total number of species reported has increased to more than 28 000, with the original Chinese name, scientific name, authority, geographical distribution and references provided for each species. Also in this version, the date of first description and the English common name adopted by the United Nations Food and Agricultural Organisation are reported, together with a plate number for cross-referencing with part II.

Part II presents colour plates and line drawings of the morphological and selected ecological habit at illustrations of 18 000 species, with a total of 25 000 species. Twenty-eight hundred illustrations describe organisms from prokaryotic kingdom to animal kingdom. To facilitate identification and taxonomic research, distinguishing features including colouration and morphology of each species are highlighted, while consideration is also given to overall presentation and economy of space. Separate page and plate numbering as well as indices to scientific name of genus and Chinese names of species are provided in each of the eight volumes to aid searches.

This comprehensive book is comprehensive and has high scientific and practical values. All marine species recorded from China's Seas by the national and international literature since the 19th century have been incorporated, while effort is made to remove fossil species. Taxonomic arrangement follows the popular five-kingdom approach; Taxonomic units adopted below kingdom or phylum are the result of considered decisions based on the views of the respective authorities, with particular reference to the issues of continuity and stability of nomenclature. This book strives to be a valuable asset to species identification and taxonomy, ecological research, as well as personnel involved in environmental protection, foreign trade and quarantine work.

This comprehensive and well-illustrated treatise is not only the first one in China, but also a rare effort internationally. While there exist pictorial guides and checklists for the major groups, this collation of published and unpublished checklists and morphological diagrams of the various groups is an embodiment of innovation.

This treatise also crystallizes the collective effort of national and overseas experts, bearing the fruit of many years of in-depth research by the coordinating unit as well as the collaboration of many national and international experts. This effort is reflected by the 112-member editorial team, which includes experts from the mainland, Taiwan, Hong Kong, as well as Britain and Australia.

The publication of this book will further enhance research on the marine biodiversity of China and promote the progress of science and technology in this field.

Professor Tang Qi-sheng

19th July 2010

前 言

在“我国近海海洋综合调查与评价”(908专项)成果集成任务(908-ZC-II-02)的支持下,来自两岸三地44家研究所、院校和相关海洋机构的112位科学家,基于908专项调查研究成果,共同完成了《中国海洋物种和图集》上卷和下卷的编纂。《中国海洋物种和图集》上卷由《中国海洋物种多样性》上册和下册组成;《中国海洋物种和图集》下卷由《中国海洋生物图集》第一册至第八册组成。这部书也是《中国海洋生物种类与分布》(1994年初版、2001年英文版、2008年增订版)的延续与深入,体现了全面、科学和实用。

《中国海洋生物图集》中的每个物种以形态图为主,少数种还辅以生态和生物学自然景观图;物种形态图含原色图和黑白点线图,两者异曲同工,都是为了实用,也注意美观。除原核生物界以生化(DNA、RNA、同工酶等)为主要手段进行分类鉴定、仅给出部分图外,其他4个界,从科以上阶元都有形态图。若该分类阶元物种数少,或者是经济种和有害种,尽量全部编图。有些物种,还同图刊载原色图和分类特征图。

采用了国内外已出版的大量论文和著作,包括已出版的《中国动物志》和《中国海藻志》以及一些专科论著,如:金德祥1965年、1982年和1991年的中国海洋硅藻,曾呈奎1983年的中国常见海藻原色512种。齐钟彦等的中国海贝1661种原色图。徐凤山等2008年的中国海产双壳类图志916种原色图。陈天任等1986年的台湾原色对虾图鉴、1993年的龙虾、2007年的寄居蟹、2008年的虾蛄、2009年的蔓足类等。刘锡兴2001年的污损苔虫1190种电镜图。沈世杰等1993年的台湾鱼类志2028种原色图。马敬能(Mackinnon, J.) 2000年的中国鸟类野外手册。也参考了日本的几本图志:濑川宗吉1974年的原色日本海藻图鉴、内海富士夫1964年的原色日本海岸动物图鉴、山路勇1976年的日本海洋浮游生物图鉴、Sakai 1976年的日本及附近海蟹类、时冈隆等2000年的新日本动物图鉴。

在各大类的图集前,包括界、门、纲及部分目,都有中、英文简介,概述其进化地位、主要形态特征、经济意义,列表展示各类图件的种数、图号和页码,便于读者概览和查找。列出全部图件使用的文献名称和网址,以尊重作者的开创性劳动。图版按五界分类系统、从低等到高等、分8册,各册独立编排图版号、页码和属名及中名索引。各册的原色图和黑白图按分类系统混合编排。查找物种,可通过各册索引,也可通过上卷各物种后面的图号。鉴定物种时还可通过所列文献进一步查找原始文献。

图件的初步编排由黄晓松和吴小柳执行,正式图版由史劲松完成。英文翻译由张肇坚、李成业负责。

对入编图件的所有作者、绘图和摄影者深表谢意,有这些图件才有本图集。因主编学识所限和影像讯息的时代限制,存在缺点敬希指正。

主 编

2010年10月于厦门

Introduction

“The Living Species and Their Illustrations in China's Seas” including two parts is the achievement of the “Chinese Offshore Investigation and Assessment”. This effort is reflected by 112 contributors from 44 organizations participated, which includes experts from the mainland, Taiwan, Hong Kong, as well as Britain and Australia. Part I, entitled “The Living Species in China's Seas”, comprises 2 volumes. Part II, entitled “An Illustrated Guide to Species in China's Seas”, comprises 8 volumes. “The Living Species and Their Illustrations in China's Seas” is also an expanded continuation of “Marine Species and Their Distributions in China's Seas” (first published in 1994, English version in 2001, revised and expanded version in 2008). This compendium embodies comprehensiveness, as well as scientific rigor and application values.

In “An Illustrated Guide to Species in China's Seas”, morphological illustration forms the main description of each species, but complementary ecological and biological natural history illustrations are also provided for selected species. Both black and white as well as colour diagrams are included, with the common goal of high practical and aesthetic quality. Apart from a reliance on biochemical (DNA, RNA, allozymes, etc.) traits as the main approach to classifying and identifying prokaryotic kingdom (thus only a limited number of illustrations for this kingdom), taxa above family in the other four Kingdoms are all illustrated with morphological diagrams. Effort was made to ensure diagrams are available for species-poor, commercially important, or pest taxa. Colour plates and illustrations showing distinguishing taxonomic features are included in the same diagrams for selected species.

A large number of journal articles and other published works from national and international sources have been consulted, including published volumes of “ Fauna Sinaca” and Flora “ Algarum Marinarum Sinicarum” , and specialised treatises.

Chinese and English introductions summarising the evolutionary position, major morphological features and economic value precede the illustrated guide for every kingdom, phylum and class, and selected order for all major taxa. Tables display the number of species, plate and page numbers for each plate to assist browsing and searching by the reader. All references cited in the guide are listed to acknowledge the innovation effort of all authors. The 8-volume guide is arranged from the low to high taxa according to the five-kingdom classification scheme. Independent plate numbers, page numbers, scientific name of genus and Chinese names of species are provided in each volume. Colour and black and white diagrams are arranged in mixed order in each volume. Searches for individual species can be made using the index to each volume, or the plate numbers provided with taxa descriptions in the part I . Relevant primary literature can be found in the reference list for species identification.

This illustrated guide owes its existence to the plates and illustrations drawn and photographed by many authors, to whom gratitude is acknowledged. Comments on any shortcomings and errors due to the editor-in-chief's lack of knowledge or historical constraints in imaging technology would be appreciated.

Editors-in-Chief
Xiamen, October 2010

目次 CONTENTS

动物界 ANIMALIA (2)

软体动物门 Mollusca	1
多板纲 Polyplacophora 图4.1-4.2, 21 spp.	2
双壳纲 Bivalvia	5
大中型种 图4.3-4.18	6
一般种	
古多齿亚纲 Palaeotaxodonta 图4.19-4.22, 40 spp.	22
隐齿亚纲 Cryptodonta 图4.22, 2 spp.	25
翼形亚纲 Pteriomorpha 图4.22-4.43, 289 spp.	25
异齿亚纲 Heterodonta 图4.44-4.89, 530 spp.	47
异韧带亚纲 Anomalodesmata 图4.89-4.94, 54 spp.	92
掘足纲 Scaphopoda 图4.95-4.97, 39 spp.	98
腹足纲 Gastropoda	102
前鳃亚纲 (大、中型种) Prosobranchia 图4.98-4.117, 51 spp.	104
前鳃亚纲 (中、小型种) Prosobranchia 图4.118-4.206, 1068 spp.	124
后鳃亚纲 Opisthobranchia 图4.207-4.232	213
肺螺亚纲 Pulmonata 图4.232, 5 spp.	238
浮游腹足类 图4.233-4.241, 61 spp.	239
南沙表层沉积物的微型腹足类 图4.242-4.273, 174 spp.	248
头足纲 Cephalopoda 图4.274-4.312, 110 spp.	280
属名、中名索引 Index	320
1-8册总目次 Total contents	349

软体动物门 Phylum MOLLUSCA

软体动物俗称贝类。身体柔软，不分节，通常由头部、足部、躯干部（或内脏囊）、外套膜和贝壳5部分构成，种数仅次于节肢动物，为动物界的第二大门，已记载超过11.5万种。各类的形态差别很大，分7个纲，除无板纲（Aplacophora）和单板纲（Monoplacophora）外，其他5个纲如下所示，将分5部分进一步介绍。

软体动物是鱼、虾、贝、藻等主要渔业对象之一，供食用、药用和做工艺品。有害贝类包括船底、码头和管道的污损和钻孔生物，也有些种有毒或成为寄生虫的宿主，吃紫菜、海带等养殖藻类的幼苗。

图集按下表依序编排，5个纲分别进一步介绍。

纲 Class	亚纲或目 Subclass or Order
多板纲 Polyplacophora	新有甲目 Neoloricata
掘足纲 Scaphopoda	角贝目 Dentaliida, 梭角贝目 Gadilida
腹足纲 Gastropoda	前鳃亚纲 Prosobranchi, 后鳃亚纲 Disthobranchia, 肺螺亚纲 Pulmonata
双壳纲 Bivalvia	蛎螂目 Solemyoidea, 胡桃蛤目 Nuculoida, 蚶目 Arcoidea, 贻贝目 Mytiloidea, 珍珠贝目 Pterioidea, 帘蛤目 Veneroidea, 海螂目 Myoidea, 笋螂目 Pholadmyoidea
头足纲 Cephalopoda	鹦鹉贝目 Nautiloidea, 乌贼目 Sepiida, 微鳍乌贼目 Idiospiida, 耳乌贼目 Sepiolida, 鱿鱼目 Teuthoidea, 八腕目 Octopoda, 幽灵蛸目 Vampromorpha

Phylum Mollusca has a soft body without segmentation. Body is divided into five regions, namely head, foot, visceral mass, mantle and shell. After Arthropoda, Mollusca is the second largest Phylum under Kingdom Animalia with more than 115 000 species. There are seven classes among which morphology is very different. Except Classes Aplacophora and Monoplacophora, other five classes are shown below and each of them will be introduced separately.

Same as fish, shrimp and algae, mollusks is a major target for fisheries as food, drugs and handicrafts. Harmful mollusks include biofouling fouling and burrowing species on hulls, piers and pipes. Some are toxic or as host of parasites whereas others feed on young cultured seaweeds such as Porphyra and Laminaria.

The atlas is arranged in the order below with five classes being introduced separately.

参考文献 References

- 1 张玺, 齐钟彦. 贝类学纲要. 北京: 科学出版社, 1961: 387, 2原色图版.
- 2 蔡英亚, 张英, 魏若飞. 贝类学概论 (修订版). 1995: 327.
- 3 Qi Z Y et al., Seashells of China. Beijing: Ocean Press, 2004: 418, Plates 193.

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多板纲 Class POLYPLACOPHORA

多板纲身体有8块板状贝壳，贝壳不能覆盖整个身体，贝壳和外套膜边缘之间裸露的部分叫环带。环带的表面有角质层或生有石灰质鳞片、骨针或角质毛。神经系统由围绕食道的环状神经中枢和向后派生的2对神经索组成，以往本纲称双神经纲。全部海生，世界约600种，营底栖生活，从潮间带至5 000m水深处都有记录，以宽大的足部和环带附着。中国海已记录40种，图集刊出19种外部形态图及4种表示板状贝壳和环带派生物及齿舌等解剖图。

The body has eight shell plates which cannot cover the whole body. The area between the shell plates and the mantle margin is called girdle. The surface of girdle has cuticle or is decorated with calcareous scales, spicules or cuticular hairs. The nervous system consists of a nerve ring which surrounds the oesophagus and two pairs of posterior nerve cords arising from the nerve ring. This gives the old name for this Class Amphineura. All are marine benthic species. About 600 species were recorded in the world and are distributed from intertidals downwards to 5 000 m. Using the muscular foot and girdle, they can cling to the rocks powerfully. There are 40 species in China's Seas. This atlas has included diagrams showing the external morphology of 19 species and anatomical diagrams of 4 species illustrating the radula, shell plates and decorations of the girdle.

参考文献 References

- 1 Qi Z G. et al., Seashells of China. Beijing: Ocean Press, 2004: 418. Plates 193.
- 2 Van Belle R. A. On a small collection of chitons from Hong Kong (Mollusca: Polyplacophora). //Proceedings of the first international Workshop on the Malacofauna of Hong Kong and Southern China. 1983: 33-35.
- 3 Van Bell R. A. Supplementary notes on Hong Kong Chitons (Mollusca: Polyplacophora) .// Proceeding of the marine flora and fauna of Hong Kong and Southern China,1983: 469-483.

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低粒鳞侧石鳖 体长10mm *Lepitochiton rugatus* 网纹鬃毛石鳖 体长15mm *Mopalia retifera* 史氏鬃毛石鳖 体长50mm *M. schrencki* 日本宽板石鳖 *Placiphorella japonica* 红条毛肤石鳖 体长28mm *Acanthochiton rubrolineatus*



白珠毛肤石鳖 体长14mm *A. bednalli* 异毛肤石鳖 *A. dissimilis* 盾形毛肤石鳖 *A. scutigera* 地氏毛肤石鳖 体长50mm *A. defilippi* 眼形隐板石鳖 体长67mm *Cryptoplax oculata*

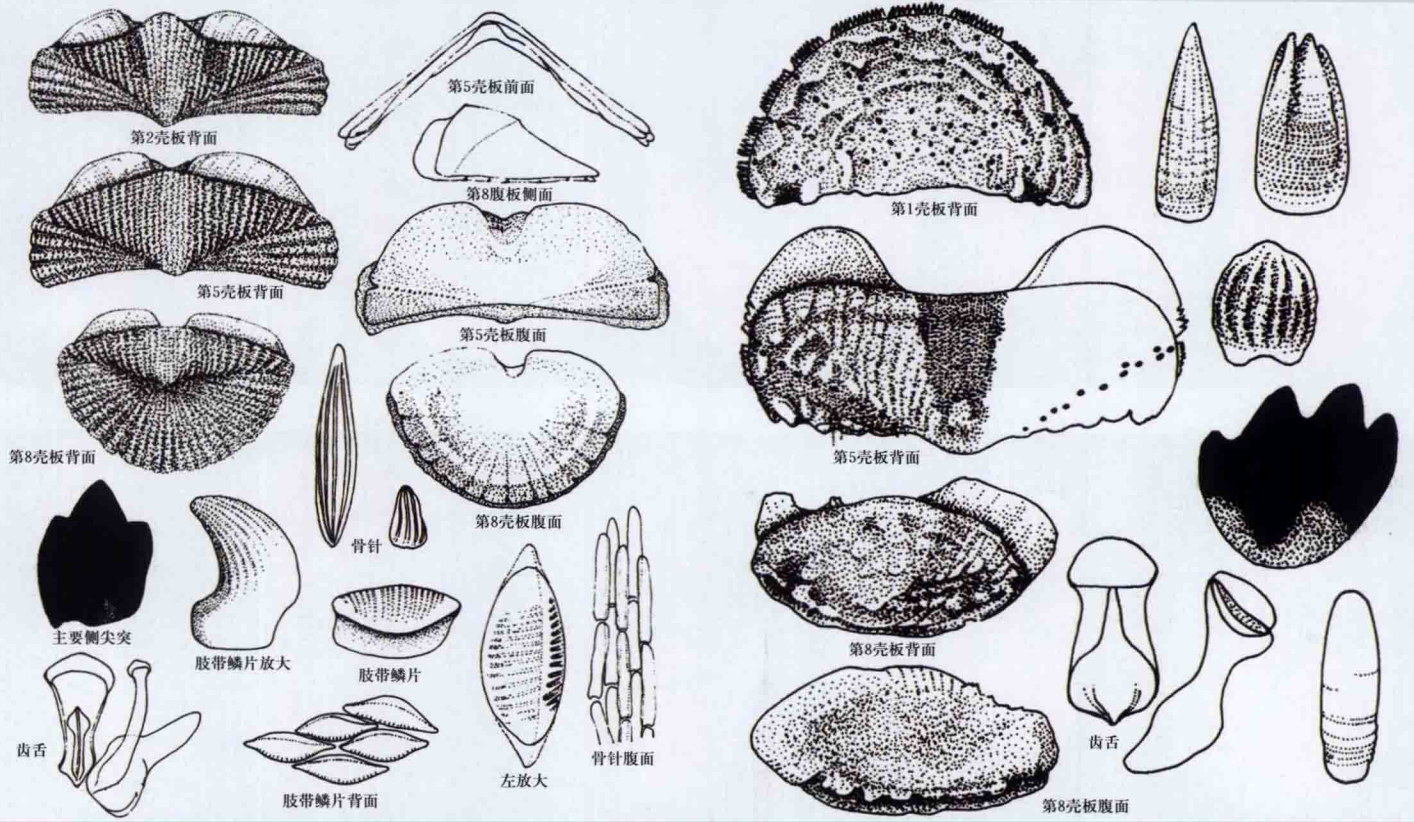


幼形隐板石鳖 体长56mm *C. larvaeformis* 细长隐板石鳖 体长88mm *C. eleoti* 朝鲜鳞带石鳖 体长22mm *Leptidozona coreanica* 日本鳞带石鳖 *L. nipponica* 函馆铗石鳖 体长22mm *Ischnochiton hakodadensis*

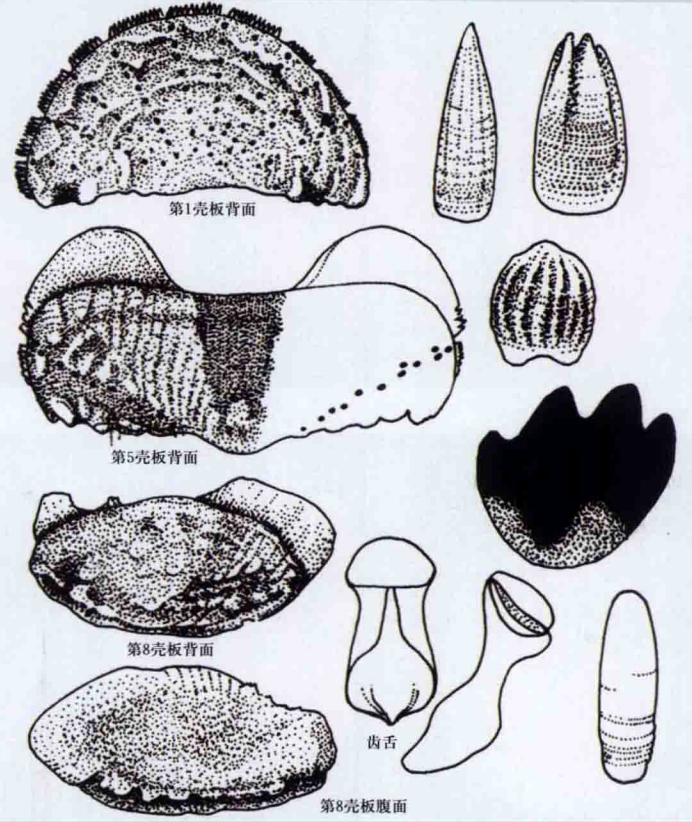


花斑铗石鳖 体长53mm *I. comptus* 日本花棘石鳖 *Liolophura japonica* 体长75mm 秀丽石鳖 *Lucilina amanda* 体长33mm 平濑锦石鳖 体长35mm *Onithochiton hirasei*

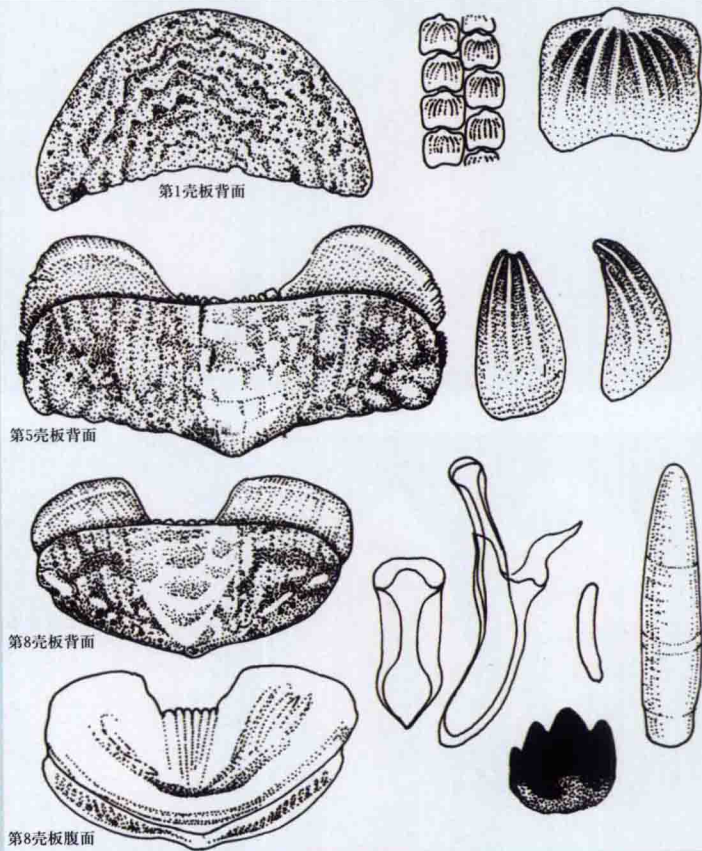
图4.1 多板纲 新有甲目 (1)
Polyplacophora Neoloricata



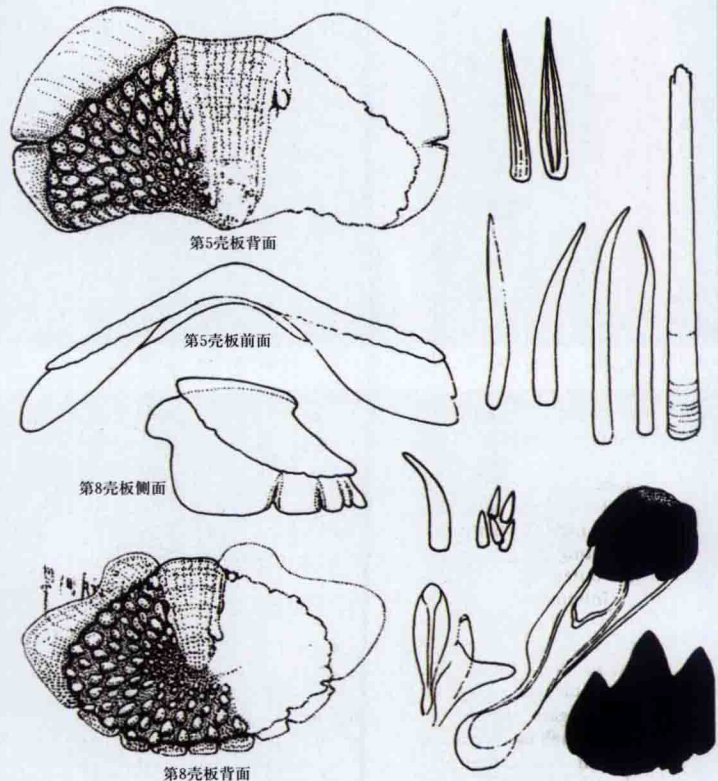
圣诞鳞带石蟹 *Lepidozoa christiaensis*



云斑石蟹 *Tonicia (Lucilina) sp.*



香港锦石蟹 *Onithochiton sp.*



杓壳背石蟹 *Notoplax doerleini*

图4.2 多板纲 新有甲目 (2)
Polyplacophora Neoloricata

双壳纲 Class BIVALVIA

双壳纲身体左右侧偏，有左、右两壳。鳃通常呈瓣状，故又名瓣鳃纲（Lamellibranchia）。头部退化，足部发达呈斧状，俗称蛤。从潮间带至5800m都有发现，栖息方式包括栖于泥沙中、固着、凿穴和寄生或共生。世界约记录1.5万种；其中4/5生活于海洋，1/5生活于淡水。中国记录千种以上，按文献刊出916种，隶于5个亚纲，11个目或总科，75科。

图类 Types	种数 No. of species	图版号 Plates	页码 Pages
大中型种	26科94 spp.	4.3-4.18	6-21
中小型种			
古多齿亚纲Palaeotaxodonta	4科40 spp.	4.19-4.22	22-25
隐齿亚纲Cryptodonta	1科2 spp.	4.22	25
翼形亚纲Pteriomorpha	21科289 spp.	4.22-4.43	25-46
异齿亚纲Heterodonta	38科530 spp.	4.44-4.89	47-92
异韧带亚纲Anomalodesmata	11科54 spp.	4.89-4.94	92-97

The body is laterally compressed with right and left valves. Gills are lamella-like, so this Class is also called Lamellibranchia. The head is reduced; foot is well-developed and hatchet-like. They are commonly called clams. They are distributed from intertidals down to 5 800 metres. They may burrow in sediments, attach to hard surface, or bore in a substrate, and be parasitic or mutualistic. About 15 000 species were recorded worldwide with 4/5 of them being marine species and another 1/5 being freshwater species. More than a thousand species were recorded in China and 916 species are introduced in this album. They belong to 5 subclasses, 11 orders or superfamilies and 75 families.

The species are grouped according to their sizes and divided into two categories including large to medium size and small size.

参考文献 References

- 1 徐凤山, 张素萍, 王少青. 中国海产双壳类图志. 北京: 科学出版社, 2008: 366.
- 2 Q. Zhongyan (齐钟彦) Seashells of China. Beijing: Ocean Press, 2004: 418. Plates 193.

双壳纲基本上按徐凤山、张素萍, 王少青, 2008, 编辑.

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鳞片扭蚶 *Trisidos kiyonoi* 67.0mm



扭蚶 *T. tortuosa* 98.0mm



半扭蚶 *T. semitorta* 99.5mm



紫贻贝 *Mytilus galloprovincialis* 90.0mm

厚壳贻贝 *M. coruscus* 140.0mm

图4.3 双壳纲 翼形亚纲 蚶科 贻贝科 (1) (双壳纲 仿徐凤山,张素萍,王少青,2008)

Bivalvia Pteriomorpha Arcoidea Mytilidae



翡翠贻贝 *Perna viridis* 100.0mm



光石蛭 *Lithophaga teres* 100.0mm



安的列斯石蛭 *L. antillarum* 140.0mm



金石蛭 *L. zitteliana* 71.0mm



肥大石蛭 *L. obesa* 90.0mm



偏顶蛤 *Modiolus modiolus* 100.0mm

图4.4 双壳纲 翼形亚纲 贻贝科 (2)
Bivalvia Pteriomorpha Mytilidae



菲律宾偏顶蛤 *Modiolus philippinarum* 90.0mm



麦氏偏顶蛤 *M. metcalfei* 70.0mm



栉江珧 *Atrina pectinata* 335.0mm



旗江珧 *A. vexillum* 300.0mm



羽状江珧 *A. penna* <200.0mm



图4.5 双壳纲 翼形亚纲 贻贝科 (3) 江珧科 (1)
Bivalvia Pteriomorphia Mytilidae Pinnidae