

MOLLUSCS FROM BEACHES ON BALI, LOMBOK, SUMBAWA, AND KOMODO ISLANDS , INDONESIA

Jorgen Hylleberg
Aarhus University, Department of Marine Ecology, Finlandsgade 14,
8200 Aarhus N, Denmark

ABSTRACT

A total of 131 taxa of gastropods, bivalves and cephalopods were recorded by participants in the 9th TMMP Congress and Workshop. The material does not represent a systematic collection; rather the identifications reflect a limited number of study sites and taxonomic interests of the participants. The families Conidae, Littorinidae, Neritidae, Muricidae, and Olividae are well represented among the gastropods, and Cardiidae is well represented among the bivalves. Only 3 taxa (all cardiids) were recorded on all 4 islands; 10 species of gastropods (littorinids and lottidids) were recorded on both sides of the strait between Bali and Lombok (Wallace's Line), while the remaining taxa were recorded either to the east or the west of this strait.

INTRODUCTION

Whenever an opportunity appeared, Mollusca were collected and identified during the 9th TMMP Congress and Workshop, 18-29 August 1998 in Indonesia. Most collections were made on Lombok and Komodo, while collections were rather sporadic on Sumbawa and Bali (Fig. 1).

Hence, the material does not represent a systematic collection along the shores, which otherwise would be very desirable. Records were mainly made during short stays at the sites, often where the bus incidentally stopped.

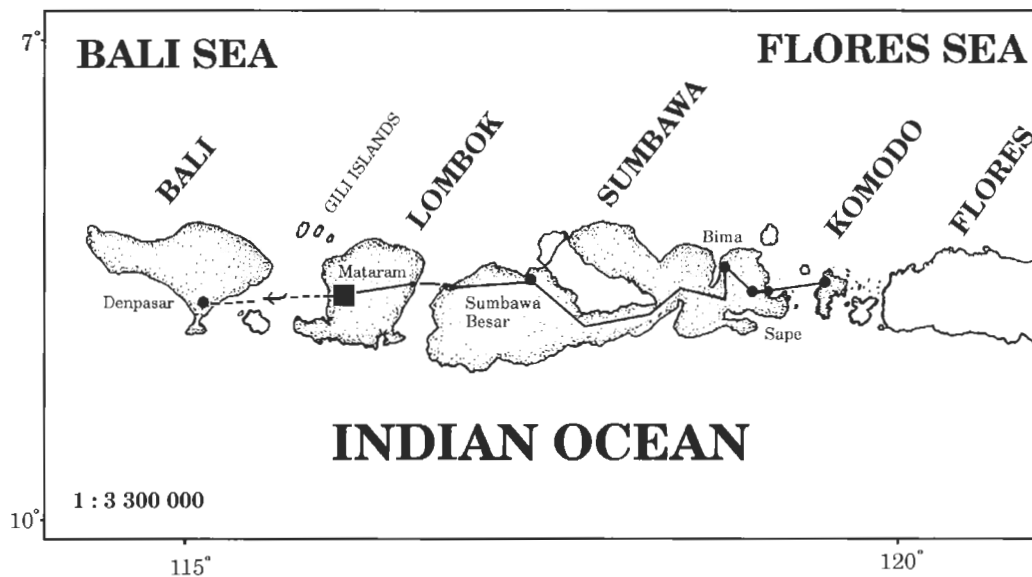


Figure 1. The study area in Indonesia. Samples were collected on Bali, Lombok (including the Gili Islands), Sumbawa, and Komodo. Travel from Lombok eastward to Komodo by bus and ferry. From Lombok (Mataram city) westward to Bali (Denpasar) by air.

Many of the taxa are from the intertidal zone, while a few species have been observed subtidally during snorkelling (e.g. around the Gili Islands north of Lombok). However, many subtidal taxa were encountered because shells were washed up on the beaches, probably during storms.

The identified material is biased towards taxonomic interests of the participants. This bias can be considered a weakness because the checklist only gives a glimpse of the incredible biodiversity of these Indonesian islands. However, an advantage is that the names are reliable, and we really need verified records from the area. I submit the data in the form of a checklist based on information I received from participants (alphabetical order, last part of the name as written according to the country traditions): Farnis Boneka, UNSRAT, Manado, Indonesia - Nguyen Chinh, RIA 3, Nha Trang, Vietnam - Kathe R. Jensen, Zoological

Museum of Copenhagen, Denmark - Alan Kohn, University of Washington, USA - Markus Lasut, UNSRAT, Manado, Indonesia - Jaruwat Nabhitabhata, Department of Fisheries, Thailand - Anuwat Nateewathana, Department of Fisheries, Thailand - David Reid, British Museum of Natural History, UK - Tan Koh Siang, National University of Singapore - Bernard Tursch, University Libre, Brussels, Belgium - Jacques Vidal, Muséum National d'Histoire Naturelle, Paris, France.

CHECKLIST

The checklist indicates family, species & authorship followed by the localities: (1) Bali, (2) Lombok, (3) Sumbawa, (4) Komodo. The last column shows identifiers of Prosobranchia, Opisthobranchia, Bivalvia and Cephalopoda; (0) = no record. Families are listed in alphabetical order.

Taxonomic account	1	2	3	4	Identifier(s)
GASTROPODA					
PROSOBRANCHIA					
CERITHIDAE					
<i>Rhinoclavis vertagus</i> (Linné, 1758)	0	0	+	0	Jorgen Hylleberg
<i>Pseudovertagus aluco</i> (Linne, 1758)	0	0	+	0	Farnis Boneka
<i>Terebralia sulcata</i> (Bruguiere, 1792)	+	0	0	0	Farnis Boneka
COLUMBELLIDAE					
<i>Pyrene testudinaria</i> Link, 1807	+	0	0	0	Farnis Boneka
CONIDAE					
<i>Conus coronatus</i> Gmelin	0	+	0	0	Alan Kohn
<i>Conus figulinus</i> L.	0	+	0	+	Alan Kohn
<i>Conus imperialis</i> L.	0	+	0	0	Alan Kohn
<i>Conus flavidus</i> Lamarck	0	+	0	0	Alan Kohn
<i>Conus lividus</i> Hwass	0	+	0	0	Alan Kohn
<i>Conus rattus</i> Hwass	0	+	0	0	Alan Kohn
<i>Conus coffeae</i> Gmelin	0	+	0	0	Alan Kohn
<i>Conus musicus</i> Hwass	0	+	0	0	Alan Kohn
<i>Conus boeticus</i> Reeve	0	+	0	0	Alan Kohn
<i>Conus planorbis</i> Born	0	+	0	0	Alan Kohn
<i>Conus striolatus</i> Kiener	0	+	0	0	Alan Kohn
CORALLIOPHILIDAE					
<i>Rapa rapa</i> (L.)	0	0	0	+	Hylleberg, Reid,

COSTELLARIIDAE					
<i>Vexillum rugosum</i> (Gmelin, 1791)	0	0	+	0	Farnis Boneka
CYMATIDAE					
<i>Cymatium lotorium</i> Linne, 1758	+	0	0	0	Farnis Boneka
CYPRAEIDAE					
<i>Cypraea caputserpentis</i> (Linné, 1758)	+	0	0	+	Hylleberg, Boneka
<i>Cypraea moneta</i> (Linné, 1758)	+	0	0	0	Jorgen Hylleberg
<i>Cypraea annulus</i> (Linné, 1758)	+	0	0	0	Jorgen Hylleberg
<i>Cypraea lynx</i> (Linné, 1758)	+	0	0	0	Jorgen Hylleberg
<i>Cypraea limacina</i> Lamarek 1810	+	0	0	0	Farnis Boneka
<i>Cypraea tigris</i> L.	0	0	0	+	David Reid
<i>Cypraea staphylaea</i> L.	+	0	0	0	David Reid
FISSURELLIDAE					
<i>Hemitoma pauhi</i> (Quoy & Gaimard, 1834)	0	+	0	0	David Reid
<i>Scutus unguis</i> (Linnaeus)	+	+	0	+	A. Kohn, D. Reid
HALIOTIDAE					
<i>Haliotis squamata</i> Reeve	+	0	0	0	David Reid
LOTTIIDAE					
<i>Patelloida saccharina</i> (L.)	+	+	0	0	D. Reid, J. Hylleberg
<i>Patelloida striata</i> Quoy & Gaimard, 1834	0	+	0	0	David Reid
LITTORINIDAE					
<i>Peasiella fasciata</i> Reid & Mak, 1998	0	+	0	0	David Reid
<i>Peasiella conoidalis</i> (Pease, 1868)	0	+	0	0	David Reid
<i>Peasiella roepstorffiana</i> (Nevill, 1885)	0	+	0	+	David Reid
<i>Littoraria carinifera</i> (Menke, 1830)	0	+	0	0	David Reid
<i>Littoraria intermedia</i> (Philippi, 1846)	+	+	+	0	D. Reid, F. Boneka
<i>Littoraria lutea</i> (Philippi, 1847)	0	+	0	0	David Reid
<i>Littoraria scabra</i> (Linne, 1758)	+	+	+	0	D. Reid, F. Boneka
<i>Littoraria pallescens</i> (Philippi, 1846)	+	+	+	0	D. Reid, F. Boneka
<i>Littoraria undulata</i> (Gray, 1839)	+	+	0	0	D. Reid, F. Boneka
<i>Nodilittorina millegrana</i> (Philippi, 1848)	+	+	0	0	D. Reid, F. Boneka
<i>Nodilittorina sundaica</i> (Altena, 1945)	+	+	0	0	David Reid
<i>Nodilittorina trochoides</i> (Gray, 1839)	+	+	0	0	Reid, Boneka
<i>Nodilittorina vidua</i> (Gould, 1859)	+	+	0	0	D. Reid, F. Boneka
<i>Tectarius tectumpersicum</i> (L.)	0	0	+	0	David Reid
MURICIDAE					
<i>Morula anaxares</i> (Kiener, 1836)	0	+	0	0	Tan Koh Siang
<i>Morula ceylonica</i> (Dall, 1923)	0	+	0	0	Tan Koh Siang
<i>Morula fusca</i> (Küster, 1862)	0	+	0	0	Tan Koh Siang
<i>Morula granulata</i> (Duclos, 1832)	0	+	0	0	Tan Koh Siang
<i>Morula margariticola</i> (Broderip, 1833)	0	+	0	0	Tan Koh Siang
<i>Morula purpureocincta</i> (Preston, 1909)	0	+	0	0	Tan Koh Siang
<i>Thais distinguenda</i> (Dunker & Zelebor, 1866)	0	+	0	0	Tan Koh Siang
<i>Thais marginatra</i> (Blainville, 1832)	0	+	0	0	Tan Koh Siang
<i>Thais muricoides</i> (Blainville, 1832)	0	+	0	0	Tan Koh Siang
<i>Thais squamosa</i> (Pease, 1868)	0	+	0	0	Tan Koh Siang
<i>Thais turbinoides</i> (Blainville, 1832)	0	+	0	0	Tan Koh Siang
<i>Drupa (Drupina) grossularia</i> Röding, 1798	0	+	0	0	Tan Koh Siang

NACELLIDAE					
<i>Cellana testudinaria</i> (Linnaeus, 1758)	0	+	0	+	J. Hylleberg, D. Reid
<i>Cellana radiata orientalis</i> (Pilsbry 1891)	+	0	0	0	David Reid
NASSARIDAE					
<i>Nassarius gaudiosus</i> (Hinds, 1844)	0	+	0	0	Farnis Boneka
NATICIDAE					
<i>Mamilla melanostoma</i> (Gmelin, 1791)	0	+	0	+	Markus Lasut
<i>Polinices (Polinices) mammilla</i> (L.)	0	+	+	0	Markus Lasut
NERITIDAE					
<i>Nerita albicilla</i> Linne, 1758	0	+	+	+	D. Reid, F. Boneka
<i>Nerita antiquata</i> Recluz, 1841	0	0	+	+	David Reid
<i>Nerita costata</i> Gmelin, 1791	0	+	0	0	David Reid
<i>Nerita chamaeleon</i> L.	0	+	0	0	David Reid
<i>Nerita exuvia</i> L.	0	+	0	+	David Reid
<i>Nerita georgina</i> Recluz, 1841	0	+	0	0	David Reid
<i>Nerita histrio</i> L.	0	+	0	0	David Reid
<i>Nerita planospira</i> Anton, 1839	0	+	0	0	David Reid
<i>Nerita plicata</i> Linné, 1758	+	+	0	+	D. Reid, J. Hylleberg F. Boneka
<i>Nerita polita</i> Linné, 1758	0	+	0	+	D. Reid, J. Hylleberg
<i>Nerita reticulata</i> Karsten, 1789	0	0	+	+	David Reid
<i>Nerita undata</i> L.	0	0	+	+	David Reid
<i>Neritina reticulata</i> Sowerby, 1838	0	+	0	0	David Reid
<i>Smaragdia souverbiana</i> (Montrouzier, 1863)	0	+	0	0	David Reid
OLIVIDAE					
<i>Oliva bulbiformis</i> Duclos, 1840	+	0	0	0	Bernard Tursch
<i>Oliva carneola</i> (Gmelin, 1791)	+	0	0	0	Bernard Tursch
<i>Oliva elegans</i> Lamarck, 1811	0	+	0	0	Bernard Tursch
<i>Oliva oliva</i> (Linnaeus, 1758)	0	+	0	0	Bernard Tursch
<i>Oliva reticulata</i> (Röding, 1798)	+	+	0	+	Bernard Tursch
<i>Oliva sericea</i> (Röding, 1798)	0	+	0	0	Bernard Tursch
<i>Oliva tigriddella</i> Duclos, 1835	0	0	+	0	Bernard Tursch
<i>Oliva todosina</i> Duclos, 1835	+	0	0	0	Bernard Tursch
OVULIDAE					
<i>Calpurnus verrucosus</i> (L.) [On soft coral]	0	0	0	+	A. Kohn, D. Reid
PATELLIDAE					
<i>Scutellastra flexuosa</i> (Quoy & Gaimard, 1834)	0	+	0	0	David Reid
PLANAXIDAE					
<i>Planaxis sulcatus</i> (Born, 1778)	0	+	0	0	Farnis Boneka
STROMBIDAE					
<i>Strombus aurisdianae</i> Linné, 1758	0	0	+	0	Jorgen Hylleberg
<i>Lambis lambis</i> (L.)	0	+	0	0	Alan Kohn
<i>Strombus erythrinus</i> Dillwyn, 1817	0	+	0	0	Farnis Boneka
TEREBRIDAE					
<i>Terebra nebulosa</i> Sowerby	0	0	0	+	Jorgen Hylleberg
TONNIDAE					
<i>Tonna cepa</i> (Röding, 1798)	+	0	0	0	Farnis Boneka

TROCHIDAE

<i>Trochus maculatus</i> Linné, 1758	0	+	0	+	Jorgen Hylleberg
<i>Tectus fenestratus</i> (Gmelin, 1791)	0	+	0	+	Farnis Boneka
<i>Monodonta labio</i> (Linne, 1758)	0	0	0	+	Farnis Boneka
<i>Monodonta canalifera</i> Lamarck, 1816	0	+	0	0	David Reid

TURBINIDAE

<i>Lunella cinerea</i> (Born, 1778)	0	0	0	+	D. Reid, F. Boneka
<i>Turbo petholatus</i> L	0	+	0	0	Alan Kohn

OPISTHOBRANCHIA

CEPHALASPIDEA

<i>Hydatina amplustre</i> (L.)	0	+	0	0	Kathe R. Jensen
<i>Bulla</i> cf. <i>ampulla</i> (L.)	0	+	0	0	Kathe R. Jensen

NOTASPIDEA

<i>Pleurobranchus forskalii</i>	0	+	0	0	Kathe R. Jensen
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SACOGLOSSA

<i>Berthelinia</i> sp. (bivalved)	0	+	0	0	Kathe R. Jensen
<i>Costasiella</i> sp.	0	+	0	0	Kathe R. Jensen
<i>Dolabella auricularia</i>	0	0	0	+	Kathe R. Jensen
<i>Elysiella pusilla</i> Bergh, 1872	0	0	0	+	Kathe R. Jensen

BIVALVIA

CARDIIDAE

<i>Fulvia papyracea</i> (Bruguière, 1789)	0	+	+	+	Jacques Vidal
<i>Fragum unedo</i> (Linné, 1758)	+	+	+	+	J. Vidal, J. Hylleberg
<i>Fragum scruposum</i> (Deshayes, 1855)	0	+	0	0	Jacques Vidal
<i>Fragum fragum</i> (Linné, 1758)	0	+	0	0	J. Vidal, J. Hylleberg
<i>Laevicardium</i> cf. <i>biradiatum</i> (Bruguière)	+	0	0	0	Jorgen Hylleberg
<i>Maoricardium setosum</i> (Redfield, 1846)	+	+	+	+	J. Vidal, J. Hylleberg
<i>Nemocardium lyratum</i> (Sowerby, 1841)	+	0	+	+	Jacques Vidal
<i>Vasticardium angulatum</i> (Lamarck, 1819)	0	0	0	+	J. Vidal, J. Hylleberg
<i>Vasticardium orbita philippinense</i> (Hedley, 1899)	+	+	+	+	Jacques Vidal
<i>Vasticardium flavum subrugosum</i> (Sow., 1840)	0	+	+	+	Jacques Vidal
<i>Vasticardium pectiniforme</i> Born, 1780 = <i>rugosum</i> Lamarck, 1819	0	+	+	+	J. Vidal, J. Hylleberg

HEMIDONACIDAE

<i>Hemidonax donaciformis</i> (Schröter)	0	0	+	+	David Reid
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LUCINIDAE

<i>Anodontia philippiana</i> (Reeve, 1858)	0	+	0	0	David Reid
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MACTRIDAE

<i>Maetra maculata</i>	0	+	0	0	Jorgen Hylleberg
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MESODESMATIDAE

<i>Atactodea striata</i> (Gmelin, 1791)	0	0	0	+	David Reid
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PECTINIDAE

<i>Comptopallium radula</i> (L.)	0	0	0	+	David Reid
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PINNIDAE

<i>Pinna</i> cf. <i>bicolor</i> Gmelin, 1791	0	0	0	+	Kathe R. Jensen
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TRIDACNIDAE

<i>Tridacna maxima</i> (Röding 1798)	+	0	0	0	Jorgen Hylleberg
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VENERIDAE

<i>Anomalodiscus squamosus</i> (L.)	0	0	+	0	David Reid
<i>Antigona (Periglypta) lacerata</i> (Hanley, 1830)	0	0	0	+	Nguyen Chinh
<i>Circe scripta</i> (Linné, 1758)	0	+	0	0	D. Reid, J. Hylleberg
<i>Marcia hiantina</i> (Lamarck, 1818)	0	0	0	+	David Reid
<i>Pitar pellucidus</i> (Lamarck, 1818)	0	0	0	+	David Reid
<i>Tapes literatus</i> (Linné, 1758)	0	0	0	+	J. Hylleberg, D. Reid

CEPHALOPODA

NAUTILIDAE

<i>Nautilus pompilius</i> Linné, 1758	0	0	0	+	Jorgen Hylleberg
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SEPIIDAE

<i>Sepia pharaonis</i> Ehrenberg	0	0	0	+	Jaruwat Nabhitabhata
<i>Sepia latimanus</i> Quoy & Gaimard, 1832	0	0	0	+	A. Nateewathana