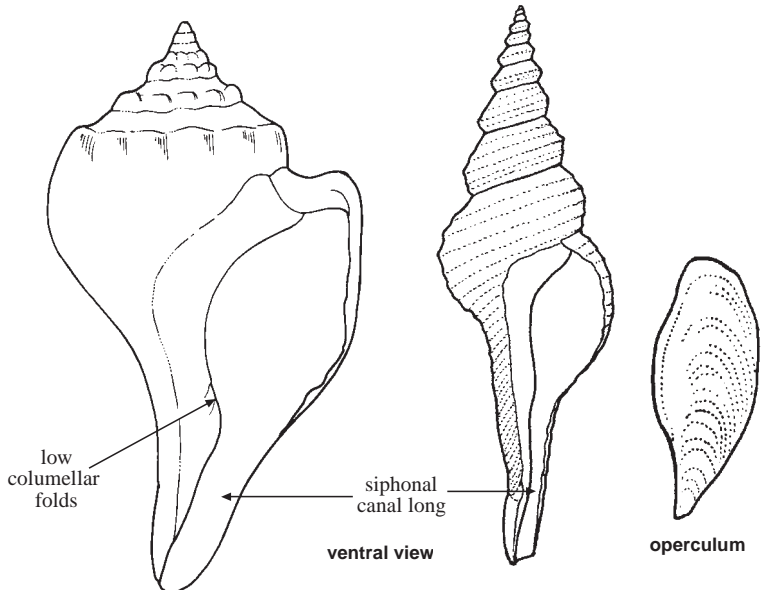


FASCIOLARIIDAE

Horse conchs, spindle shells

Diagnostic characters: **Shell** more or less elongate, **fusi-form**, with a generally elevated spire and a **well-developed**, sometimes very long, **siphonal canal**. Sculpture variable, often strong and nodular or composed of spiral threads and axial ribs. Periostracum very thin to thick and fibrous. Aperture long and ovate. Outer lip smooth or with numerous inner spiral lirae. **Columella often with a few low basal threads**. **Operculum** thick and **corneous**, ovate to claw-shaped, with a terminal nucleus. **Soft parts** of the animal **brilliant scarlet**. Head small and narrow, with short tentacles bearing eyes on their outer bases. Snout extensible, very long. Foot bluntly truncate anteriorly. Fleshy siphon well developed.



examples showing diversity of shape

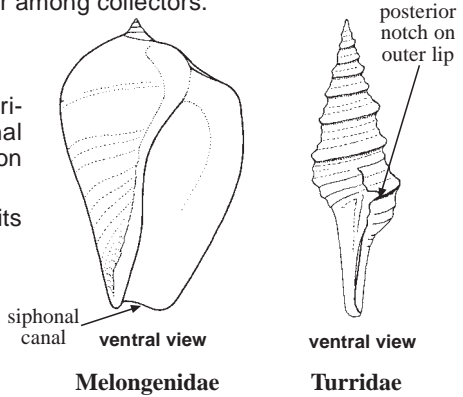
Habitat, biology, and fisheries:

Large members of the Fasciolaridae mainly occur on sublittoral bottoms of sand, mud or rubble, sometimes forming large populations. Active predators, feeding on tube worms, vermetid and other molluscs. Sexes separate, fertilization internal. Eggs produced in capsules typically anchored to the substrate by a thin stalk, and hatching often as crawling juveniles, but sometimes also as planktonic, free-swimming larvae. Shallow-water, rock-dwelling fasciolarids are collected at low tide by coastal people, while other species are sometimes trawled in large quantities on soft bottoms of the continental shelf. These represent a potential resource in some areas. Used as food and for the shell trade, their elegantly shaped shell being popular among collectors.

Similar families occurring in the area

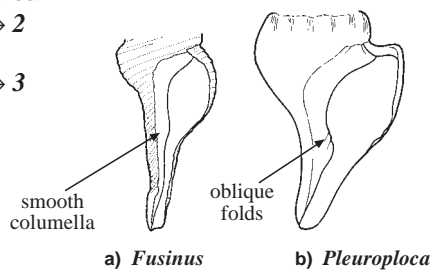
Melongenidae: sometimes convergent in shape with the Fasciolaridae, but usually distinguishable by the shorter and wider siphonal canal, the smooth inner lip and the absence of bright red coloration of the soft parts.

Turridae: outer lip of aperture with a notch-like sinus at or near its posterior end.



Key to species of interest to fisheries occurring in the area

- 1a. Columella without folds (Fig. 1a) → 2
- 1b. Columella with a few low oblique folds (Fig. 1b) → 3



a) *Fusinus* b) *Pleuroploca*

Fig. 1 ventral view of aperture

- 2a. Siphonal canal moderately long; shoulder nodules strong on body whorl; outer colour conspicuously blotched with brown throughout (Fig. 2) *Fusinus nicobaricus*
- 2b. Siphonal canal long; shoulder nodules low to obsolete on body whorl; brown patches, when present, mainly restricted to the interstices of nodules and tip of siphonal canal (Fig. 3) *Fusinus colus*
- 3a. Siphonal canal relatively short; shoulders rounded, not nodulose (Fig. 4) . . . *Latirolagena smaragdula*
- 3b. Siphonal canal relatively long; shoulders nodulose → 4

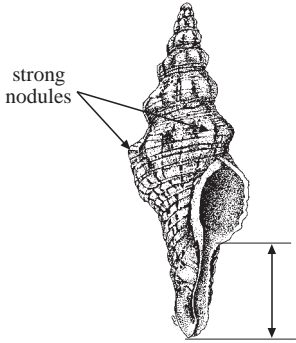


Fig. 2 *Fusinus nicobaricus*
(ventral view)

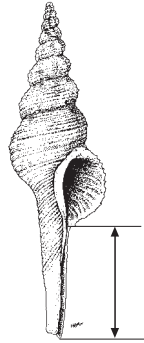


Fig. 3 *Fusinus colus*
(ventral view)

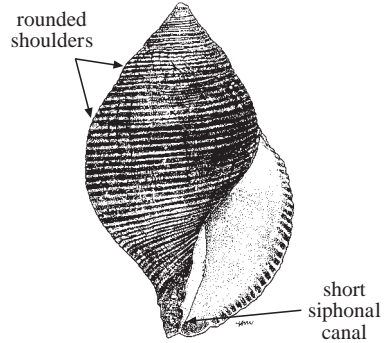


Fig. 4 *Latirolagena smaragdula*
(ventral view)

- 4a. Shell relatively small (up to 9 cm in length); body whorl with 2 spiral rows of nodules (Fig. 5) *Latirus polygonus*
- 4b. Shell relatively large (up to 15 cm in length, or more); body whorl with only 1 spiral row of nodules → 5
- 5a. Shell very large (up to 28 cm in length), broadly fusiform in shape; shoulder angulate, with prominent nodules (Fig. 6) *Pleuroploca trapezium*
- 5b. Shell large (up to 15 cm in length), narrowly fusiform in shape; shoulder rounded, with low nodules (Fig. 7) *Pleuroploca filamentosa*

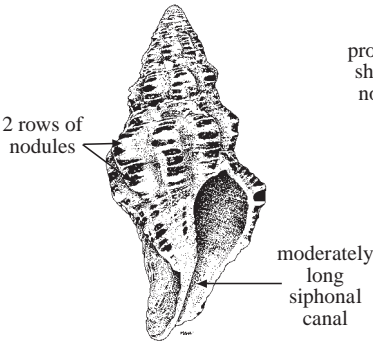


Fig. 5 *Latirus polygonus*
(ventral view)

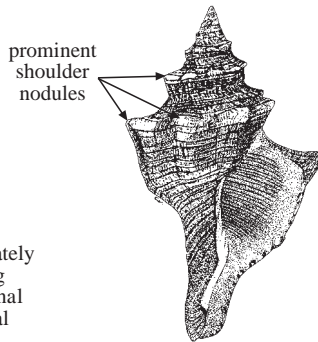


Fig. 6 *Pleuroploca trapezium*
(ventral view)

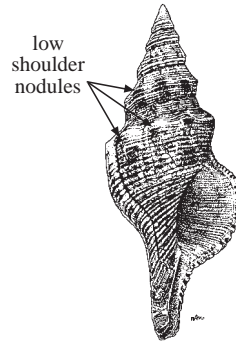


Fig. 7 *Pleuroploca filamentosa*
(ventral view)

List of species of interest to fisheries occurring in the area

The symbol is given when species accounts are included.

- Fusinus colus* (Linnaeus, 1758)
- Fusinus nicobaricus* (Röding, 1798)
- Latirolagena smaragdula* (Linnaeus, 1758)
- Latirus polygonus* (Gmelin, 1791)
- Pleuroploca filamentosa* (Röding, 1798)
- Pleuroploca trapezium* (Linnaeus, 1758)

***Pleuroploca filamentosa* (Röding, 1798)**

Frequent synonyms / misidentifications: *Fasciolaria filamentosa* (Röding, 1798) / None.

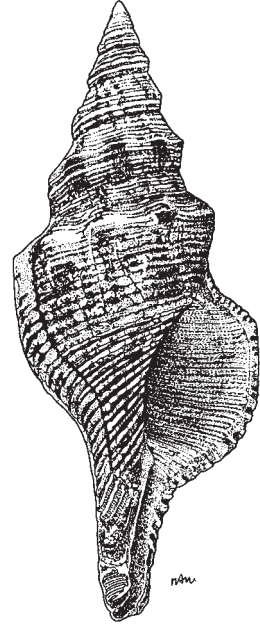
FAO names: En - Filamentous horse conch; Fr - Fasciolaire filamenteuse.

Diagnostic characters: Shell moderately strong, reaching a **large** size (up to 15 cm long), **narrowly fusiform in shape**, with a high, pointed spire and **moderately long siphonal canal**. **Whorls rounded** to moderately shouldered in profile, sometimes slightly concave under the suture. Sculpture of **numerous**, thin **spiral threads throughout** the entire surface and a row of **low** to obsolete **axial nodules at the shoulders**. Aperture ovate, with **many fine spiral threads inside the outer lip** which has a slightly serrate, sharp margin. **Columella with** a slight elbow at its basal end, bearing **3 oblique folds**. Anterior siphonal canal straight and broadly open. **Colour:** **outside of shell generally dark brown**, sometimes orange-brown, with **lighter brown spiral lines** and cream to nearly **white irregular patches**, mainly **between the shoulder nodules**. Interior of the **outer lip orange cream**, **inner lip orangish brown with pale columellar folds**.

Size: Maximum shell length 15 cm, commonly to 12 cm.

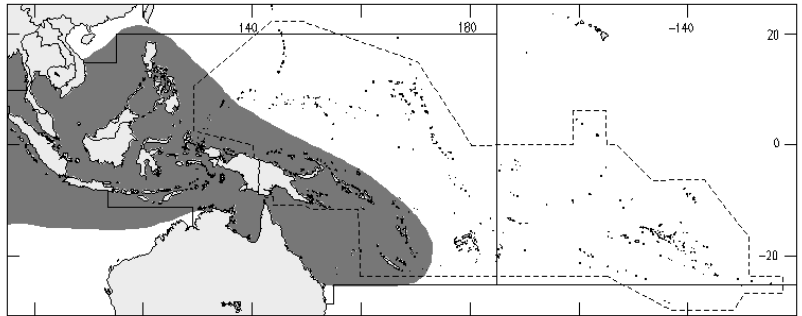
Habitat, biology, and fisheries: Common in coral reef areas and sandy bottoms. Sublittoral, mainly in shallow water. Sold in local markets of the northern Philippines.

Distribution: Widespread in the Indo-West Pacific, from East Africa, including the Red Sea, to Melanesia; north to the Philippines and south to Queensland and New Caledonia.



ventral view

(after Short and Potter, 1987)



Pleuroploca trapezium (Linnaeus, 1758)

Frequent synonyms / misidentifications: *Fasciolaria trapezium* (Linnaeus, 1758) / None.

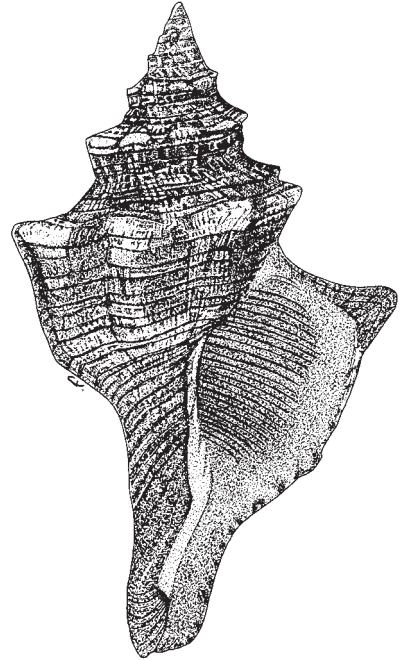
FAO names: En - Trapezium horse conch; Fr - Fasciolaire ferrugineuse.

Diagnostic characters: Shell thick and heavy, reaching a **very large** size (up to 28 cm long), **broadly fusiform in shape, with a high conical spire and stout, moderately long siphonal canal. Whorls angulate at the shoulders, with a row of thick and prominent axial nodules**, most pronounced on the last 2 whorls. Body whorl swollen, subangulate at the base. Spiral sculpture reduced, of fine paired grooves, most visible on last whorl and siphonal canal. **Aperture** roughly quadrate, **finely lirate inside** the outer lip which has sharp paired denticles at the margin. **Columella with about 3 weak oblique folds** anteriorly. Siphonal canal straightish, broadly open. **Colour: outside of shell off-white to light fawn, with paired, darker brown spiral lines, under a thin brown periostracum. Interior of aperture light purple with deep red denticles and lirae. Inner lip and columellar side of siphonal canal purplish brown.** Anterior end of siphonal canal often tinged dark greyish brown.

Size: Maximum shell length 28 cm, commonly to 20 cm.

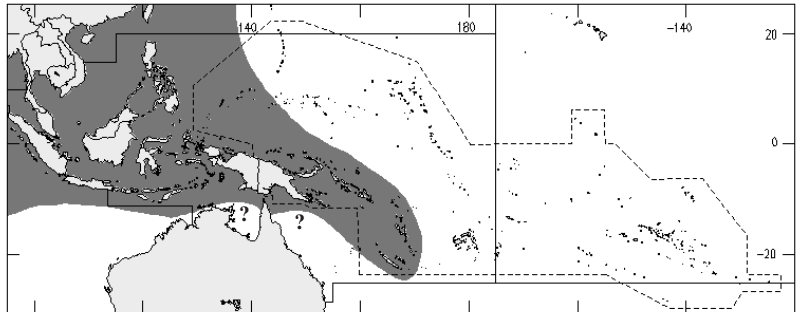
Habitat, biology, and fisheries: On sand and rubble bottoms. Common on inner reef flats and in shallow water near rocky areas, but frequent also offshore. Low tide levels to a depth of about 40 m. Collected for food and for the large, heavy shell in many areas. Mature shell is traditionally used as a trumpet when tip of the spire is cut off. Sold in local markets of the northern Philippines.

Distribution: Widespread in the Indo-West Pacific, from East Africa, including the Red Sea and the Persian Gulf, to Melanesia; north to Japan, and south to northern Queensland and New Caledonia. Apparently rare in Australia.



ventral view

(after Short and Potter, 1987)



***Fusinus colus* (Linnaeus, 1758)**

Frequent synonyms / misidentifications: *Fusus colus* (Linnaeus, 1758) / *Fusinus longicaudus* (Lamarck, 1822).

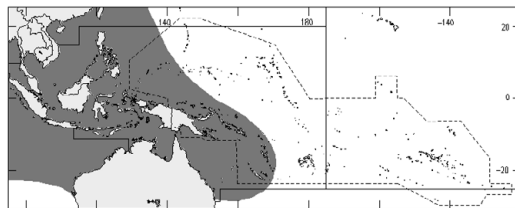
En - Distaff spindle; **Fr** - Fuseau quenouille.

Maximum shell length 20 cm, commonly to 15 cm. On sandy bottoms. Intertidal and sublittoral zones to a depth of about 40 m. Commonly collected in the area by shrimp trawlers, sometimes in large quantities. Widespread in the Indo-West Pacific, from East Africa to Melanesia; north to southern Japan, and south to southern Queensland.



ventral view

(after Short and Potter, 1987)

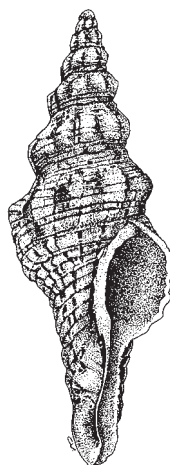


***Fusinus nicobaricus* (Röding, 1798)**

Frequent synonyms / misidentifications: *Fusus laticostatus* Deshayes, 1830 / None.

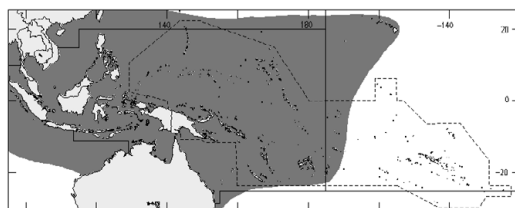
En - Nicobar spindle; **Fr** - Fuseau de Nicobar.

Maximum shell length 18 cm, commonly to 11 cm. On sandy bottoms. Sublittoral, from shallow subtidal water to a depth of about 40 m. Incidental catch of shrimp trawlers. Widespread in the Indo-West Pacific, from Sri Lanka to Polynesia; north to Japan and Hawaii, and south to northern New South Wales.



ventral view

(after Short and Potter, 1987)

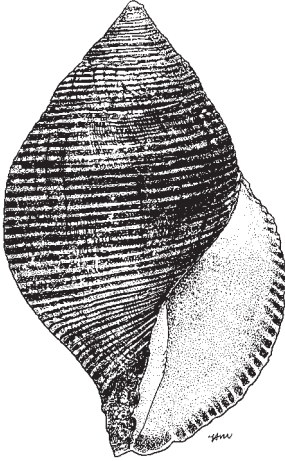


***Latirolagena smaragdula* (Linnaeus, 1758)**

Frequent synonyms / misidentifications: *Latirus crassus* (Schumacher, 1817); *L. rusticus* (Lamarck, 1822); *Lathyrus smaragdulus* (Linnaeus, 1758); *Paralagena smaragdula* (Linnaeus, 1758) / None.

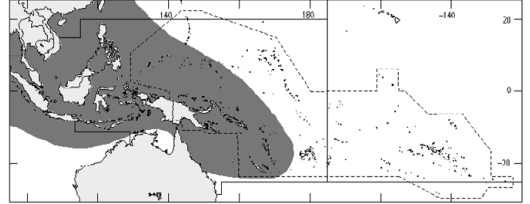
En - Precious stone shell; **Fr** - Fasciolaire rustique.

Maximum shell length 6 cm, commonly to 4 cm. Common on coral reefs and rocky shores. Intertidal and shallow subtidal waters, to a depth of about 10 m. Locally collected for food and for the shell. Widespread in the Indo-West Pacific, from East Africa, including the Red Sea, to Melanesia; north to southern Japan, and south to Queensland and New Caledonia.



ventral view

(after Short and Potter, 1987)

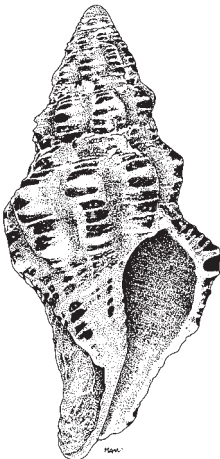


***Latirus polygonus* (Gmelin, 1791)**

Frequent synonyms / misidentifications: *Lathyrus angulatus* (Röding, 1798) / *Latirus belcheri* (Reeve, 1847).

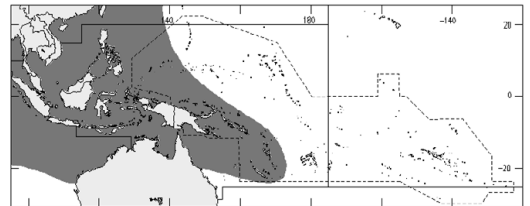
En - Many-angled spindle; **Fr** - Fasciolaire polygonale.

Maximum shell length 9 cm, commonly to 7 cm. Common on coral reefs and rocky shores. Intertidal and sublittoral zones, to a depth of about 40 m. Collected locally for food and shell trade. Widespread in the Indo-West Pacific, from East Africa, including the Red Sea, to Melanesia; north to Japan, and south to central Queensland and New Caledonia.



ventral view

(after Short and Potter, 1987)



COLUBRARIIDAE

Dwarf tritons

Diagnostic characters: Shell thick, elongate-fusiform in shape. Spire tall, with many convex whorls. Outer sculpture of **discontinuous axial varices**, and intersecting axial and spiral cords producing a **finely granulate or reticulated surface**. **Aperture** rather small, with a **short**, recurved, anterior **siphonal canal** and an indistinct posterior sinus. **Outer lip thickened**, toothed inside. **Inner lip** glazed and **calloused**, often somewhat flaring anteriorly. **Operculum corneous**, with an anterior nucleus. Head with a small mouth and vestigial or absent radula. Cephalic tentacles bearing eyes on swellings of their outer bases. Foot bluntly truncate anteriorly.

Habitat, biology, and fisheries: Found among rocks or corals, and often burying themselves in sand. Low intertidal to shelf zones, mainly in the tropics. Biology poorly known. Prey probably swallowed by suction. Sexes separate. Development likely with a planktonic larval stage. Locally collected for subsistence.

Similar families occurring in the area

Buccinidae: axial varices absent; aperture and body whorl relatively large.

Ranellidae (= Cymatiidae): siphonal canal well developed; periostracum often conspicuous and hairy.

References

Cernohorsky, W.O. 1967. The Bursidae, Cymatiidae and Colubrariidae of Fiji (Mollusca: Gastropoda). *Veliger*, 9(3):310-329.

Ponder, W.F. 1968. Anatomical notes on two species of the Colubrariidae (Mollusca Prosobranchia). *Trans. R. Soc. N. Z. (Zool.)*, 10(24):217-223.

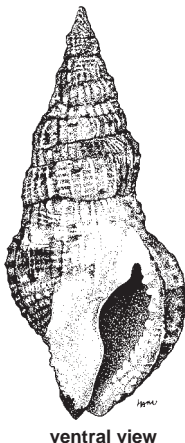
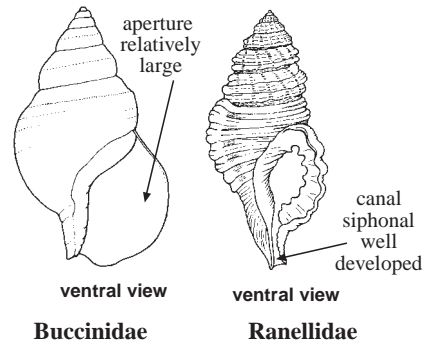
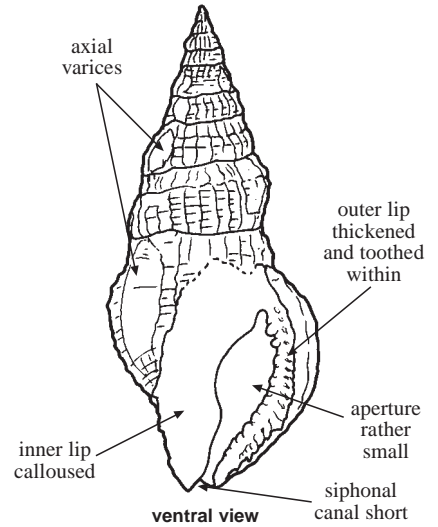
A single species of interest to fisheries occurring in the area

Colubraria muricata (Lightfoot, 1786)

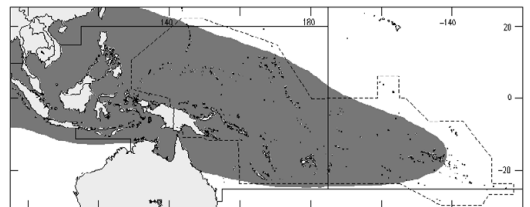
Frequent synonyms / misidentifications: *Colubraria maculosa* (Gmelin, 1791) / None.

En - Maculated dwarf triton; **Fr** - Couleuvreau tacheté.

Maximum shell length 10 cm, commonly to 8 cm. On sand and rock bottoms. In coral reef areas, often under coral boulders or in crevices. Low tide levels and shallow subtidal zone. Widespread in the Indo-West Pacific, from East Africa to eastern Polynesia; north to southern Japan and south to Queensland.



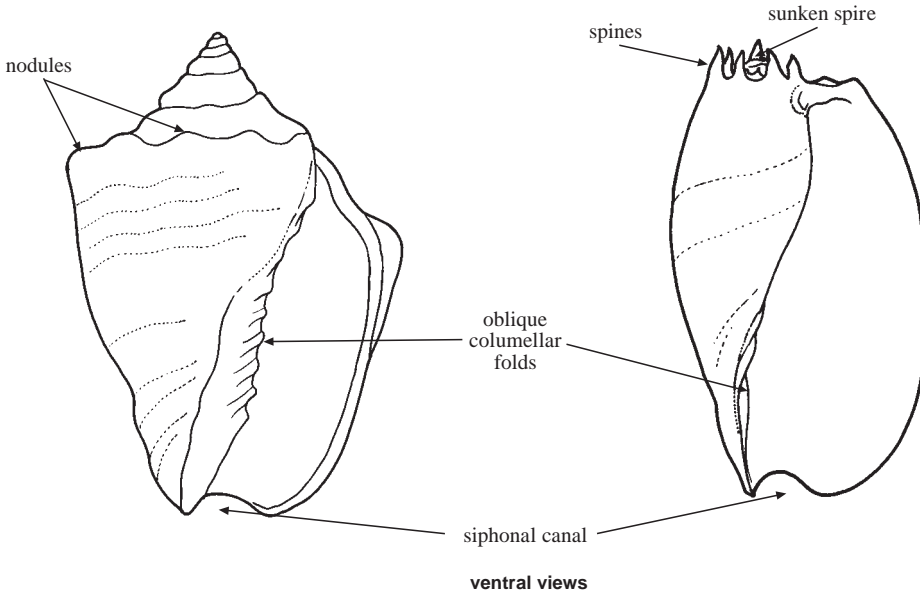
(after Kira, 1962)



VOLUTIDAE

Volutes

Diagnostic characters: Shell variable in shape, subcylindric or fusiform to swollen and globose with a sunken spire. Surface of shell often smooth, **glossy and brightly coloured**, sometimes nodulose to spinose on shoulder, or with axial ribs or cancellate sculpture. **Aperture long, with a short and wide siphonal canal** anteriorly. **Inner lip usually with strong, oblique folds**, the weaker ones situated posteriorly. **Operculum corneous, often absent**. Head small, with thin tentacles and sometimes eyes at their bases. Snout moderately short, covered by a hood. Foot broad and large, often colourfully patterned. Mantle well developed, with a long fleshy siphon anteriorly and partially enveloping the shell in life.

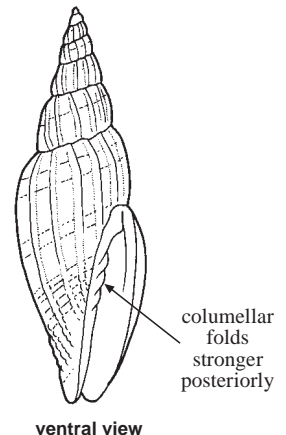


ventral views
examples showing diversity in shape

Habitat, biology, and fisheries: Active, living on sandy or muddy bottoms, from intertidal flats to deep waters of the continental shelf and slope. Can crawl very quickly over the substrate or bury themselves completely, except for the tip of the long fleshy siphon. Scavengers or carnivores, feeding on a variety of invertebrates, including other molluscs. Sexes separate, fertilization internal. Eggs laid in tough, horny capsules. Each capsule contains many eggs, but only 1 or a few develop, consuming the others for growth. Embryos generally hatching directly as crawling juveniles. As cones and cowries, volutes are popular with collectors, and their shells can attain high prices. As the planktonic larval stage is absent, there is a great variation in shell form and colour pattern among many species, hence the inflated values demanded for the rare or localized forms. Some of the larger and more common species are also valued for their edible flesh in the tropical Pacific. These are not frequently found in the markets, but fishermen retain all for food. Empty shells are traditionally used in local markets as scoops for sugar, salt, and, flour.

Similar families occurring in the area

Costellariidae and Mitridae: columellar folds stronger posteriorly.



ventral view
Costellariidae and Mitridae

Key to species of interest to fisheries occurring in the area

- 1a. Shell moderately large (up to 11.5 cm in length), elongate-ovate in shape; spire conical and prominent (Fig. 1) *Cymbiola vesperilio*
- 1b. Shell large to very large (exceeding 20 cm in length), globose-ovate in shape; spire low and more or less enveloped by body whorl → 2
- 2a. Spire completely enveloped by body whorl; shoulder smooth (Fig. 2). *Melo melo*
- 2b. Apex of the spire not enveloped by body whorl; shoulder with elevated, furrowed spines (Fig. 3) *Melo amphora*

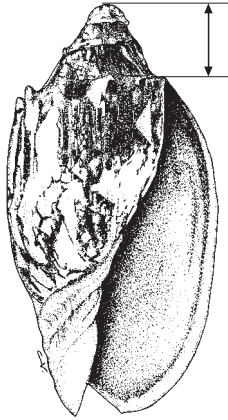


Fig. 1 *Cymbiola vesperilio*
(ventral view)

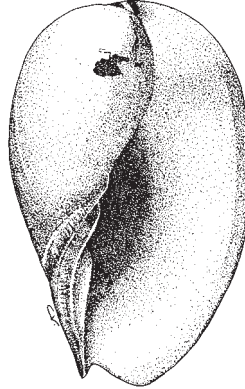


Fig. 2 *Melo melo*
(ventral view)

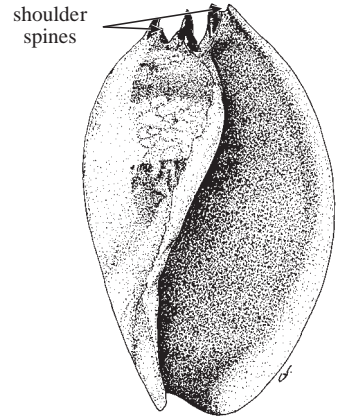






Fig. 3 *Melo amphora*
(ventral view)

List of species of interest to fisheries occurring in the area

The symbol  is given when species accounts are included.

-  *Cymbiola vesperilio* (Linnaeus, 1758)
-  *Melo amphora* (Lightfoot, 1786)
-  *Melo melo* (Lightfoot, 1786)

References

Poppe, G.T. and Y. Goto. 1992. *Volutes*. Ancona, L'Informatore Piceno, 348 p.
 Weaver, C.S. and J.E. Dupont. 1970. *Living volutes. A monograph of the recent Volutidae of the world*. Greenville, Museum of natural History, 375 p.

***Cymbiola vesperilio* (Linnaeus, 1758)**

Frequent synonyms / misidentifications: *Scapha vesperilio* (Linnaeus, 1758); *Vesperilio vesperilio* (Linnaeus, 1758) / None.

FAO names: En - Bat volute; Fr - Volute chauve-souris.

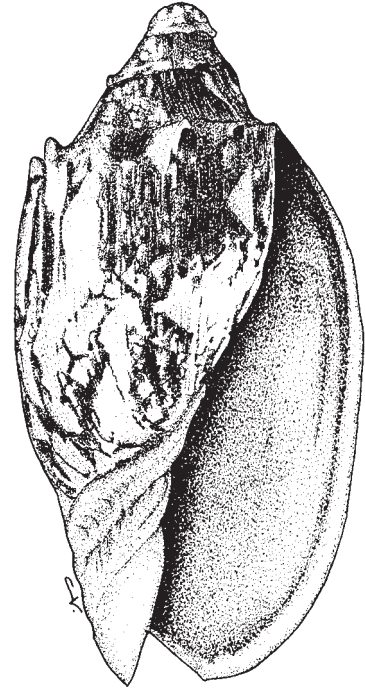
Diagnostic characters: Shell medium sized, heavy, with a variable, **elongate-ovate** shape. **Spire short and conical, markedly protruding** beyond posterior end of the large, inflated body whorl. Apex of spire blunt. **A spiral row of axially elongate, spiny tubercles on shoulder** of body whorl and just above sutures of spire whorls. Tubercles strong to obsolete, depending on the specimen. Outer surface of shell glossy, with fine axial growth lines. Aperture wide and long, about 80% the total length of shell, or more. Outer lip widely convex, obtusely angled on the shoulder. **Columella with 4 oblique folds.** Anterior siphonal canal a wide and rather deep notch. No operculum. **Colour: outer coloration highly variable, mostly pale cream to olive brown, with darker overlays of zigzag lines, blotches or streaks,** occasionally plain white or black. **Interior generally greyish cream,** often tinged light orange on columella and outer lip margin.

Size: Maximum shell length 11.5 cm, commonly to 8 cm.

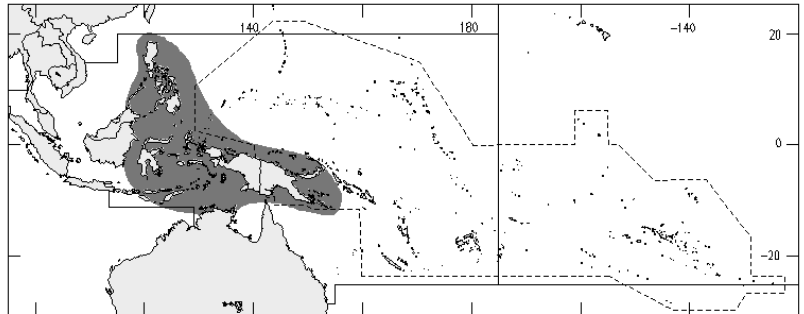
Habitat, biology, and fisheries: On muddy sand or mud bottoms. Littoral and sublittoral zones, to a depth of about 20 m. Appears in local markets of the northern and central Philippines.

Distribution: Restricted to the tropical West Pacific, from the Philippines to eastern Indonesia, Papua New Guinea and Northern Territory.

Remark: Many names have been attributed to the varietal forms of this polymorphic species.



ventral view
(after Lindner, 1976)



Melo amphora (Lightfoot, 1786)

Frequent synonyms / misidentifications: *Voluta diadema* Lamarck, 1816 / *Melo miltonis* (Griffith and Pidgeon, 1834).

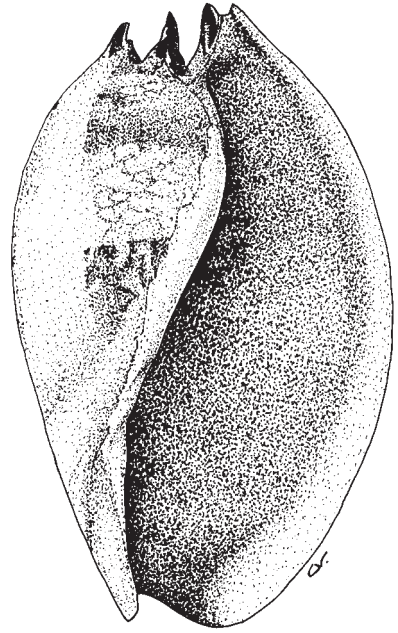
FAO names: En - Diadem volute; Fr - Volute diadème.

Diagnostic characters: Shell large to very large, **globose-ovate** in shape. **Spire short and blunt, hardly protruding beyond** the very large, inflated and posteriorly expanded **body whorl**. Apex smooth, large and dome-shaped. Outer surface of shell with axial growth lines, **shoulder with elevated, furrowed spines** tending to be straight or curved outwards and **becoming obsolete in later stages of growth** of the adult specimens. Aperture wide, nearly as long as the shell. Outer lip rather thin and regularly arched, sometimes slightly flared at posterior end. **Columella with 3 strong oblique folds**. Anterior siphonal canal a wide and shallow notch. No operculum. **Colour: outer coloration highly variable**, most commonly **white or creamy orange, with zigzag axial lines of orange to chocolate brown** enclosing pale triangular patches, **and often with 2 broad spiral bands of darker brown blotches**. Axial lines crowded, widely spaced or almost lacking. Spiral brown bands sometimes continuous. **Interior glossy, creamy to pinky orange**, sometimes lighter coloured on the outer lip margin.

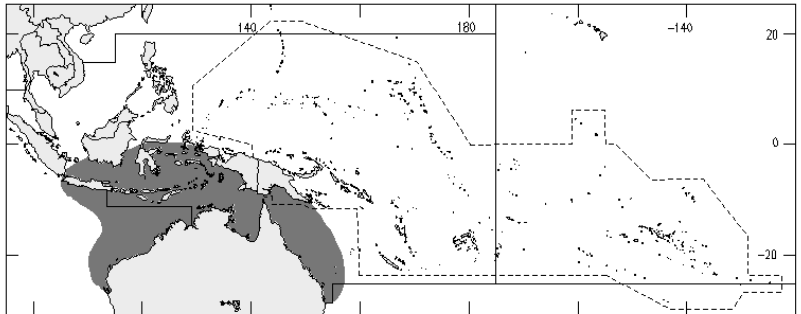
Size: Maximum shell length 50 cm, commonly to 30 cm.

Habitat, biology, and fisheries: On sand or sand and mud bottoms. Littoral and shallow sublittoral zones, to a depth of about 10 m. Used as food by native fishermen. Shell traditionally utilized as water carrier or for bailing canoes; also used as a decorative item.

Distribution: Restricted to the tropical Southwest Pacific, from southern Indonesia and Papua New Guinea to the northern half of Australia.



ventral view
(after Lindner, 1976)



Melo melo (Lightfoot, 1786)

Frequent synonyms / misidentifications: *Cymbium melo* (Lightfoot, 1786); *Melo indica* (Gmelin, 1791); *Yetus indicus* (Gmelin, 1791) / None.

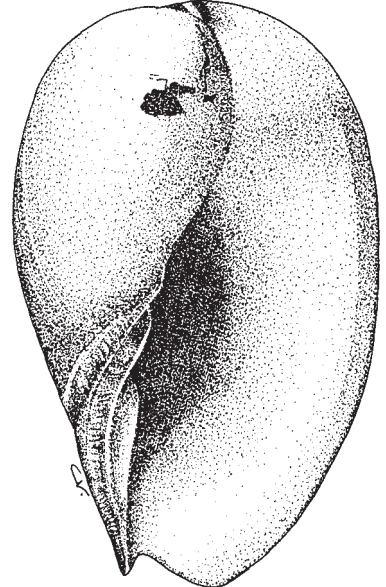
FAO names: En - Indian volute; Fr - Volute melon.

Diagnostic characters: Shell large to very large, **globose-ovate** in shape. **Spire completely enveloped by** posterior end of the very large, inflated **body whorl**. Apex smooth. Outer surface of shell smooth, only with axial lines of growth. Shoulder of body whorl rounded, **devoid of spines**. Aperture wide, as long as the shell, with a thin, regularly arched outer lip. **Columella with 3 or 4 long and prominent oblique folds**. Anterior siphonal canal a wide and shallow notch. No operculum. **Colour:** outside of shell **pale orange**, sometimes with irregular spiral banding of brown spots. **Interior glossy cream** with a light yellowish margin.

Size: Maximum shell length 27.5 cm, commonly to 17.5 cm.

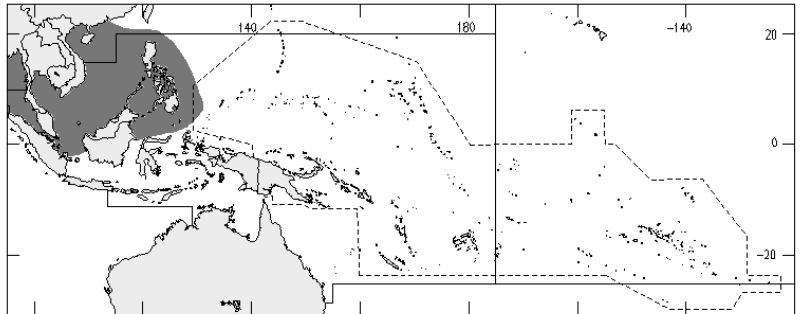
Habitat, biology, and fisheries: On muddy bottoms. Littoral and shallow sublittoral zones, to a depth of about 20 m. Collected for food by fishermen. Shells used as decorative items, or as scoops for salt, sugar and flour in the local markets. Also traditionally utilized by the native fishermen to bail out their boats.

Distribution: Restricted to the Southeast Asian region, from Burma, Thailand, and Malaysia to the South China Sea and the Philippines.



ventral view

(after Lindner, 1986)



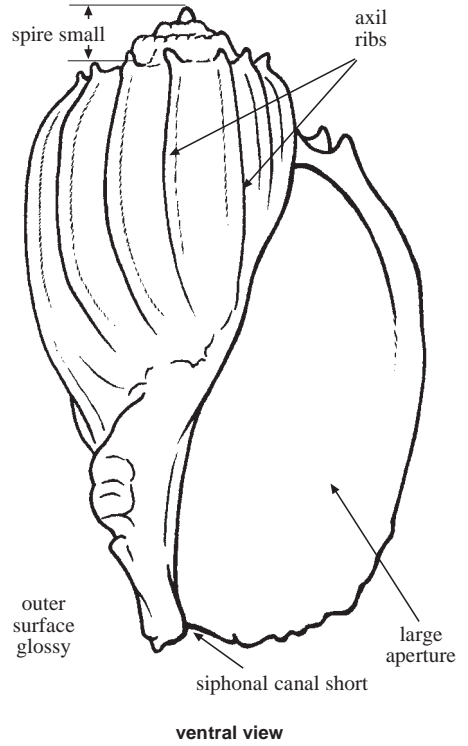
HARPIDAE

Harp shells

Diagnostic characters: Shell globular-ovate to potbel-
 lied in shape, with an inflated body whorl and small
 conical spire. Surface glossy, with usually vivid colour
 patterns, and with strong axial ribs ending in sharp points
 on the shoulder. Spiral sculpture mostly lacking. Perios-
 tracum absent. Aperture large, elongate-ovate, inner lip
 covered by a generally smooth, glossy callus. Columella
 without folds. Anterior siphonal canal a well marked, short
 and wide notch. Operculum absent or vestigial. Head small,
 with a long siphon between 2 slender tentacles that bear
 conspicuous eyes on their external lateral base. Foot very
 large and fleshy, divided into 2 parts: anterior part greatly
 expanded laterally, posterior part elongate and pointed be-
 hind.

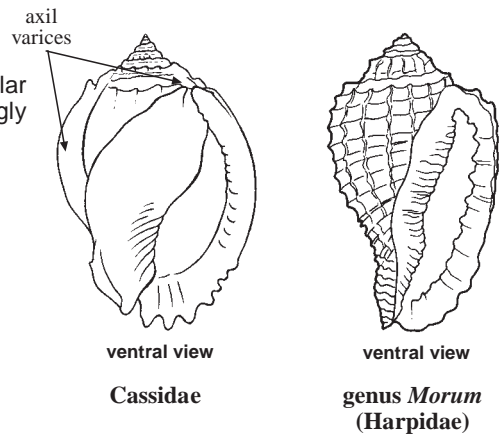
Habitat, biology, and fisheries: Active, burrowing animals,
 living in sandy bottoms in depths ranging from low tide levels
 to the deep shelf zone. Harps can glide rapidly over the
 substrate by means of the huge, leaf-shaped foot, or can use
 the anterior part of the foot to burrow, forming a low mound
 from which the siphon protrudes. Carnivores or occasionally
 scavengers, preying on small crabs and shrimps, which are
 trapped by the foot, then coated with mucus and adhering
 sand grains, and probably killed and partially digested by
 salivary secretions. When disturbed or attacked, the animal
 can cast off the hind part of the foot, which continues wrig-
 gling to distract the predator. Sexes separate. Eggs laid in
 capsules connected in a row on a hard substrate, hatching
 as free swimming planktonic larvae (genus *Harpa*) or as
 crawling juveniles (genus *Morum*). Although still locally
 eaten, harps are nowadays mainly collected for their beauti-
 ful, highly prized shells.

Remarks: Until recently, species of the genus *Morum* Röding, 1798 (which have the typical internal
 anatomy of the Harpidae) have been erroneously placed in the family Cassidae, exclusively on the basis
 of their unusual shell features: Shell elongate-ovate in shape, ornamented with axial and spiral ribs that
 form sharp, upturned points at intersections. Outer lip thickened and dentate inside, inner lip callus
 shield-like and pustulose. Anterior siphonal canal narrow, moderately produced. Operculum vestigial. No
 representatives of this genus are included here because they are not of interest to fisheries.



Similar families occurring in the area

Cassidae: shell of *Morum* species (Harpidae) very similar
 to the Cassidae, but the latter generally possess a strongly
 upturned siphonal canal, and often axial varices.



Key to species of interest to fisheries occurring in the area

- 1a. An undivided, dark brown blotch nearly covering the ventral side of body whorl (Fig. 1) *Harpa articularis*
- 1b. Dark brown ventral blotch of body whorl divided into 2 or 3 parts. → 2
- 2a. Shell relatively large (up to 11 cm in length); ventral side of body whorl with a brown blotch more or less deeply divided in the middle into 2 parts (Fig. 2) *Harpa major*
- 2b. Shell relatively small (up to 7.5 cm in length); ventral side of body whorl with 3 separate brown blotches (Fig. 3) *Harpa harpa*

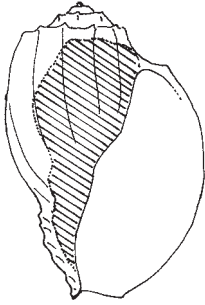


Fig. 1 *Harpa articularis*
(ventral view)

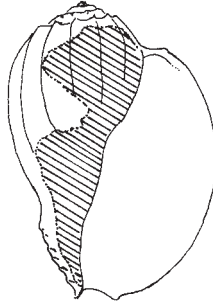


Fig. 2 *Harpa major*
(ventral view)

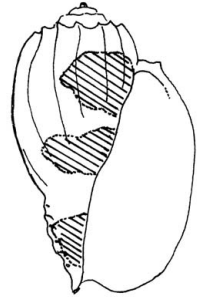





Fig. 3 *Harpa harpa*
(ventral view)

List of species of interest to fisheries occurring in the area

The symbol  is given when species accounts are included.

-  *Harpa articularis* Lamarck, 1822
-  *Harpa harpa* (Linnaeus, 1758)
-  *Harpa major* Röding, 1798

References

Hughes, R.N. and W.K. Emerson. 1987. Anatomical and taxonomic characteristics of *Harpa* and *Morum* (Neogastropoda: Harpidae). *Veliger*, 29(4):349-358.

Rehder, H.A. 1973. The family Harpidae of the world. *Indo-Pac. Moll.*, 3(16):207-274.

Walls, J.G. 1977. Another viewpoint on the living harps. *The Pariah*, 4:1-4.

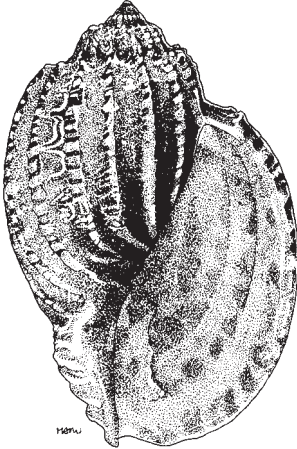
Walls, J.G. 1980. *Conchs, tibias, and harps*. T.F.H., Reigate, 191 p.

***Harpa articularis* Lamarck, 1822**

Frequent synonyms / misidentifications: *Harpa nobilis* Lamarck, 1816 (not of Röding, 1798) / *Harpa davidis* Röding, 1798.

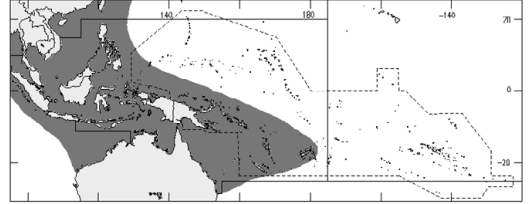
En - Articulate harp; **Fr** - Harpe articulée.

Maximum shell length 11 cm, commonly to 8.5 cm. Common on sublittoral and offshore sandy bottoms to depths of about 250 m. Collected by shrimp trawlers, mainly for shell trade. Eastern Indian Ocean and the tropical West Pacific, from Burma and eastern Indonesia to Fiji Islands; north to southern Japan and south to southern Queensland and New Caledonia.



ventral view

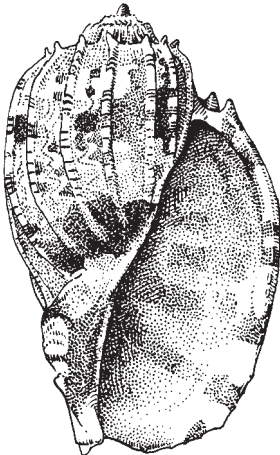
(after Short and Potter, 1987)

***Harpa harpa* (Linnaeus, 1758)**

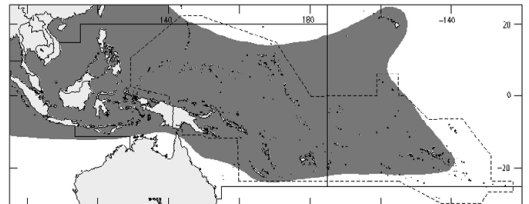
Frequent synonyms / misidentifications: *Harpa nobilis* Röding, 1798 / None.

En - True harp; **Fr** - Harpe noble.

Maximum shell length 7.5 cm, commonly to 6 cm. Common on sandy bottoms. Lower intertidal fringe and sublittoral to shelf zones. Collected mainly for shell trade in trawls. Widespread in the Indo-West Pacific, from East and South Africa, including Madagascar and the Red Sea, to eastern Polynesia; north to Japan and Hawaii, and south to New Caledonia.



ventral view



***Harpa major* Röding, 1798)**

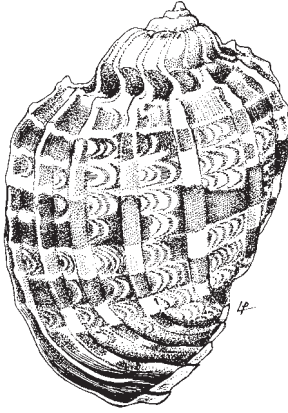
Frequent synonyms / misidentifications: *Harpa conoidalis* Lamarck, 1822 / *Harpa davidis* Röding, 1798; *H. ventricosa* Lamarck, 1816.

En - Major harp; **Fr** - Harpe majeure.

Maximum shell length 10 cm, commonly to 8.5 cm. Common on sandy bottoms. Lower intertidal fringe and sublittoral to shelf zones. Mainly collected for shell trade by shrimp trawlers. Widespread in the Indo-West Pacific, from East and South Africa, including Madagascar and the Red Sea, to eastern Polynesia; north to Japan and Hawaii, and south to Queensland and New Caledonia.



ventral view



dorsal view

