**Anomalocardia squamosa** (Linnaeus, 1758)

**Frequent synonyms / misidentifications:** *Anomalodiscus squamosus* (Linnaeus, 1758) / None.

**FAO names:** En - Squamose Venus; Fr - Vénus écailleuse.

**Diagnostic characters:** Shell small, solid, inflated and strongly inequilateral in shape, subtrigonal in outline. Umbones thick and prominent, well anterior to midlength of valves, on top of the strongly sloping anterodorsal and posterodorsal margins. Anterior side of shell rounded, posterior side produced and tapering to posterior end. Posterodorsal margin slightly flexuous. **Lunule broad and rounded, well defined** by an incised peripheral groove, more shallowly sculptured than the main surface of shell. Posterodorsal slope depressed, set off by an obtuse ridge radiating from umbones to posterior end of shell and forming a shallow groove in front of it. Outer **sculpture of valves strong, of dense radial riblets and low concentric cords**, giving the surface a finely granulated and latticed aspect. **Sculpture of posterodorsal slope obsolete**, reduced to fine radial and concentric lines. **Hinge plate trigonal**, with 3 cardinal teeth at each valve, but without lateral teeth. **Pallial sinus small** and short, trigonal. **Internal margins crenulated.** Crenulations much smaller on dorsal margins, fading out at posterior end. **Colour:** outside of shell **dull yellowish white**, often flushed with slightly **darker** greyish to purplish brown on lunule and **escutcheon areas.** Interior whitish.

**Size:** Maximum shell length 4.5 cm, commonly to 3 cm.

**Habitat, biology, and fisheries:** In fine sandy to muddy bottoms, often near mangroves. Intertidal zone and shallow subtidal waters. Collected mainly for subsistence and sold in local Philippine markets.

**Distribution:** Indo-West Pacific, from the Persian Gulf and India to eastern Indonesia; north to Korea and Japan, and south to north Western Australia.
Circe scripta (Linnaeus, 1758)

Frequent synonyms / misidentifications: None / None.
FAO names: En - Script venus; Fr - Circé violette.

Diagnostic characters: Shell solid, very compressed laterally, trigonal-ovate in outline, about as long as high. Umbones small, submedian, flattened, on top of the strongly sloping anterodorsal and posterodorsal margins. Ventral half of shell rounded, often somewhat truncate at posterior margin. Lunule flattened, lanceolate, set off by a thin groove. Escutcheon narrow and elongate, poorly distinct. Outer sculpture mainly concentric, with numerous, low and rounded ridges, vanishing towards the umbones and crossed by diverging radial riblets on anterodorsal and posterodorsal areas. Ligament sunken in posterodorsal margin. Hinge plate rather high and short, with 3 cardinal teeth in each valve, and a well-developed anterior lateral tooth in left valve, fitting in a deep socket with beveled margins in right valve. Interior of shell smooth, with a low radial undulation running from umbonal area to posteroventral margin. Pallial sinus very shallow, reduced to a slight depression under the posterior adductor scar. Internal margins flattened, smooth and thin. Colour: outer coloration of shell very variable, whitish or pale grey to cream, with various patterns of darker markings which vary from being weak and interrupted, to broad and dense. Lunule and escutcheon often flecked with brown. Interior whitish with brown or purplish blotching.

Size: Maximum shell length 5 cm, commonly to 4 cm.

Habitat, biology, and fisheries: Shallow burrower of sandy bottoms. Intertidal and shallow sublittoral levels to a depth of about 20 m. Collected for food at subsistence level in the Philippines and sold in local markets.

Distribution: Widespread in the Indo-West Pacific, from East Africa, including Madagascar and the Red Sea, to Papua New Guinea; north to Japan and south to New South Wales and New Caledonia.
**Gafrarium dispar** (Holten, 1802)

**Frequent synonyms / misidentifications:** *Gafrarium dispar* (Chemnitz, 1795) (Invalid name) / *Gafrarium pectinatum* (Linnaeus, 1758).

**FAO names:** En - Discrepant venus; Fr - Circé mouchetée.

![Exterior of left valve](image1)

![Interior of right valve](image2)

**Diagnostic characters:** Shell rather small, thick and solid, somewhat inflated, ovate-subquadrate in outline. Umbones low and rounded, anterior to midline of valves. Lunule lanceolate, flattened, with concentric growth lines and peripheral groove. Escutcheon smoothish, indistinct. Outer sculpture rather fine but well marked, with many small concentric ridges and slightly nodulous, diverging radial riblets rapidly weakening medially and anteriorly. **Main sculpture of median area** of valves of concentric ridges. **Hinge with** 3 cardinal teeth at each valve and well-developed anterior lateral teeth: 1 in left valve and 2 in right valve, separated by a deep socket. **Pallial sinus very shallow,** reduced to a faint undulation under the posterior adductor scar. Inner margins faintly crenulate. **Colour:** outside of shell cream to buff-coloured, with irregular reddish brown patches or lines, sometimes forming zigzag patterns. Interior whitish, sometimes with yellowish hue.

**Size:** Maximum shell length 3 cm, commonly to 2 cm.

**Habitat, biology, and fisheries:** In sandy to muddy bottoms. Common in mangrove areas. Intertidal and shallow sublittoral levels to a depth of 20 m. Collected for food and commonly marketed in the Philippines.

**Distribution:** Widespread in the Indo-West Pacific, from East Africa, including the Red Sea to eastern Polynesia; north to Japan and south to Queensland.
**Gafrarium divaricatum** (Gmelin, 1791)

**Frequent synonyms / misidentifications:** *Gafrarium divaricatum* (Chemnitz, 1782) (Invalid name) / *Gafrarium pectinatum* (Linnaeus, 1758).

**FAO names:** En - Forked venus; Fr - Circé divariquée.

**Diagnostic characters:** Shell rather thick and solid, moderately inflated, rounded-ovate in outline. Umbones very low and rounded, somewhat anterior to midline of valves. Lunule lanceolate, flattish, with concentric growth marks and fine peripheral groove. Escutcheon long and narrow, poorly distinct. Outer sculpture rather fine and low, with many small concentric ridges crossed by slightly diverging, weakly nodulous radial riblets weakening anteriorly and medially. **Main sculpture of median area** of valves of diverging radial riblets, that do not interrupt the concentric sculpturing. **Hinge with** 3 cardinal teeth at each valve and well-developed anterior lateral teeth: 1 in left valve and 2 in right valve, separated by a deep socket. **Pallial sinus very shallow**, reduced to a faint undulation under the posterior adductor scar. **Inner margins finely crenulate.** Colour: outside of shell cream to brown, often with various patterns of darker or lighter lines and patches. Interior whitish, sometimes tinged golden yellow and with brown blotching on hinge area.

**Size:** Maximum shell length 4.5 cm, commonly to 3.5 cm.

**Habitat, biology, and fisheries:** In clean or muddy sand, or in sandy gravel. Intertidal and sublittoral zones, to a depth of about 20 m. Artisanal exploitation in Thailand and the Philippines, where it appears commonly in local markets.

**Distribution:** Widespread in the Indo-West Pacific, from East and South Africa to the Philippines; north to Japan and south to Malaysia.
Gafrarium pectinatum (Linnaeus, 1758)

Frequent synonyms / misidentifications: Circe pectinata (Linnaeus, 1758) / None.

FAO names: En - Comb venus; Fr - Circé pectinée.

Diagnostic characters: Shell thick and solid, with a variable, relatively compressed, elongated shape, elliptical-ovate in outline. Umbones thick, low and rounded, decidedly anterior to midline of valves. Lunule lanceolate, often slightly depressed, set off from valve by an incised peripheral groove, only sculptured with concentric growth marks. Escutcheon a very long and narrow, depressed area along posterodorsal margin of both valves. Outer sculpture rather coarse, with strong, nodulous radial riblets, often dividing in 2 with growth and diverging obliquely towards anterior and posterior parts of valves. Radial ribs of posterior slope strongly diverging and somewhat recurved in dorsal direction, with moderately wide interstices. Anterior limit of posterior slope poorly distinct, marked by a series of radial riblets, often appearing and/or branching at various levels between umbonal region and posteroventral margin. Hinge plate strong, with 3 cardinal teeth at each valve and well-developed anterior lateral teeth: 1 in left valve, and 2 in right valve, separated by a deep socket. Pallial sinus very shallow, reduced to a faint undulation under the posterior adductor scar. Inner ventral margin crenulated. Colour: outer coloration of shell variable, off-white to buff-coloured and generally with fawn or brown blotches or spots throughout. Lunule frequently darker towards the umbones. Interior porcelaneous white, often with yellowish hue inside the pallial line, and with purple-brown blotching on lunular margin, posteroventral part of hinge and posterior margin of valves.

Size: Maximum shell length 4.8 cm, commonly to 3.5 cm.

Habitat, biology, and fisheries: In sandy bottoms. Intertidal and shallow sublittoral waters to a depth of about 20 m. Artisanal exploitation in the Philippines, where it appears commonly in local markets.

Distribution: Widespread in the Indo-West Pacific, from East and South Africa, including Madagascar, the Red Sea and the Persian Gulf to eastern Polynesia; north to Japan and south to Queensland.
**Gafrarium tumidum** Röding, 1798

**Frequent synonyms / misidentifications:** *Circe gibbia* (Lamarck, 1818); *Gafrarium undulatum* Röding, 1798 / *Gafrarium pectinatum* (Linnaeus, 1758).

**FAO names:** En - Tumid venus; Fr - Circé gibbeuse.

**Diagnostic characters:** Shell thick and solid, with a very variable, relatively inflated, short and high shape, ovate-subquadrate to subtrigonal in outline. Posterior margin convex, high and truncate to somewhat obliquely expanded posteroventrally. **Umbones** thick, low and rounded, markedly anterior to midline of valves. Lunule ovate, moderately flattish or somewhat depressed, set off from valve by an incised peripheral groove and only sculptured with concentric growth marks. Escutcheon long and narrow, depressed, smoothish. **Outer sculpture rather coarse, with strong, nodulous radial riblets, diverging obliquely towards anterior and posterior parts of valves,** some dividing into 2 with growth. Ribs of posterior slope weaker, strongly oblique and somewhat recurved dorsalwards, with rather wide interstices. **Anterior limit of posterior slope distinct,** generally marked by a single, uninterrupted radial rib, running from the umbonal region to posteroventral margin. **Hinge plate strong,** with 3 cardinal teeth at each valve and well-developed anterior lateral teeth: 1 in left valve, and 2 in right valve, separated by a deep socket. **Pallial sinus very shallow,** reduced to a faint depression under posterior adductor scar. **Inner ventral margin crenulated. Colour:** outer coloration of shell variable, usually off-white to fawn and with indistinct dark brown blotches around umbonal area and posterodorsal margin, but sometimes extending throughout the shell surface. Lunule commonly tinged dark brown, at least towards the umbones. **Interior of shell porcelaneous white, with variable dark purplish brown blotches** on hinge area and posterior half of shell.

**Size:** Maximum shell length 4 cm, commonly to 3 cm.

**Habitat, biology, and fisheries:** In sandy bottoms. Intertidal and sublittoral, to a depth of about 30 m. This species is artisanally exploited and marketed in Indonesia, Fiji Islands, and the Philippines.

**Distribution:** Indo-West Pacific, from India, Sri Lanka, Mauritius and the Seychelles to Melanesia; north to southern Japan and south to Queensland and New Caledonia.
**Katelysia hiantina** (Lamarck, 1818)

**Frequent synonyms / misidentifications:** Marcia hiantina (Lamarck, 1818); *M. rimularis* (Lamarck, 1818); *Paphia hiantina* (Lamarck, 1818) / None.

**FAO names:** En - Hiant venus; Fr - Vénus sillonnée.

**Diagnostic characters:** Shell solid, with a variable, moderately inflated, inequilateral shape, roughly rounded-ovate in outline. Umbones markedly anterior to midline, anterior side of shell rounded. Posterodorsal margin widely arched and gently sloping, meeting the convex posterior margin at an obtuse, poorly marked angle, giving a slightly truncate shape to posterior end of shell. Lunule lanceolate, not depressed, covered with concentric growth marks, bordered by a fine line. Escutcheon rather distinct, forming on both valves a narrow, smoothish band, somewhat depressed anteriorly. **Outer surface** of valves covered with numerous, somewhat irregular concentric grooves and cords, the latter sometimes flatter and less apparent, but always present, near posterior half of ventral margin. **Hinge** with 3 diverging cardinal teeth at each valve, but without lateral teeth. **Pallial sinus** moderately deep and broad, rounded anteriorly. **Internal margins smooth. Colour:** outside of shell variable in colour and pattern, whitish to grey, fawn-coloured or brown, frequently with various patterns of white, fawn or purplish radial bands, zigzags or trigonal spots or irregular blotches. **Interior dirty white,** often dark coloured on hinge area.

**Size:** Maximum shell length 6 cm, commonly to 5 cm.

**Habitat, biology, and fisheries:** In various sandy to muddy bottoms, especially in sheltered areas. Intertidal and sublittoral, to a depth of about 20 m. This species has relatively long siphons for the genus, and can therefore burrow to a depth of approximately 8 cm. Artisanal exploitation in Thailand and in the Philippines where it is commonly sold in local markets.

**Distribution:** Indo-West Pacific, from the Gulf of Aden to Papua New Guinea; north to southern Japan and south to Queensland.
**Lioconcha castrensis** (Linnaeus, 1758)

**Frequent synonyms / misidentifications:** *Cytherea ornata* Lamarck, 1818 / None.

**FAO names:** En - Camp pitar venus; Fr - Pitar aide-de-camp.

**Diagnostic characters:** Shell heavy and solid, inflated, subequilateral in shape, only a little longer than high and rounded-ovate in outline. Umbones inflated and rounded, slightly anterior to midline of valves. Posterodorsal margin rounded and steeply curving into the moderately high, faintly truncate posterior margin. Lunule broad, somewhat elevated above shell surface and well demarcated, with a deeply incised peripheral groove. Escutcheon indistinct. **Outer surface of shell smooth and shining,** only sculptured with fine concentric growth lines. External ligament deeply sunken into posterodorsal margin. **Hinge** plate strong, with 3 cardinal teeth in each valve and well-developed anterior lateral teeth: 1 in left valve, and 2 in right valve, separated by a deep socket. **Anterior and median cardinal teeth not radiating,** more or less vertical in direction. **Pallial sinus very shallow,** reduced to a faint undulation, **not extending forwards beyond the posterior adductor scar.** Internal margins smooth. **Colour:** outside of shell creamy white, with some large, dark chestnut brown to almost black, V-shaped markings or zigzag lines. Interior porcelaneous white.

**Size:** Maximum shell length 5 cm, commonly to 4 cm.

**Habitat, biology, and fisheries:** Shallow burrower of sandy bottoms, common in coral reef areas. Intertidal and sublittoral to a depth of 25 m. Artisanal exploitation in the Philippines; commonly sold for food in the markets of the central Philippines; the shell is used in local shellcraft.

**Distribution:** Widespread in the Indo-West Pacific, from northwestern Indian Ocean, including the Red Sea, to Polynesia; north to Japan and south to Queensland.
**Meretrix lyrata** (Sowerby, 1851)

**Frequent synonyms / misidentifications:** None / None.

**FAO names:** En - Lyrate hard clam; Fr - Cythère lyre.

**Diagnostic characters:** Shell thick, moderately inflated with a variable, inequilateral shape, subtrigonal in outline. **Umbones** anterior, poorly inflated, pointing on top of dorsal margin which is strongly sloping on both sides and longest posteriorly. Anterior and ventral margins rounded, posterior end of shell bluntly angled. **Lunule and escutcheon areas** smoothish and poorly distinct. Posterodorsal slope shallowly convex, bordered by a low fold radiating toward posteroventral end of valves. **Outer surface of shell with incised concentric grooves** fading out toward anterodorsal and posterodorsal margins, and sometimes also at ventral margin of larger specimens. **Periostracum** fine and glossy. **Hinge plate** strong, with an undulating, mostly concave ventral outline, bearing in each valve 3 diverging cardinal teeth and well-developed anterior lateral teeth: 1 in left valve, roughly parallel to dorsal margin, and 2 in right valve, with a deep median socket. Ligamental nymphs finely striate. **Pallial sinus broadly open, rather shallow.** Internal margins smooth. **Colour:** outside of shell light fawn to brown under the translucent, glossy, yellowish periostracum. Interior porcelaneous white.

**Size:** Maximum shell length 6 cm, commonly to 5 cm.

**Habitat, biology, and fisheries:** In sand and mud bottoms. Intertidal and shallow sublittoral waters to a depth of about 20 m. Locally collected for food in Viet Nam and the Gulf of Thailand. Commercially fished in the Malacca Strait area (Indonesia) and appearing in local markets of the southern Philippines.

**Distribution:** Tropical West Pacific, from western Indonesia to the Philippines; north to the East China Sea and Taiwan Province of China, and south to southern Indonesia.
**Meretrix meretrix** (Linnaeus, 1758)

**Frequent synonyms / misidentifications:** Due to a pending taxonomic revision, *Meretrix meretrix* is considered here in a wide sense. However, some of its numerous varieties may represent distinct species, namely: *M. lamarckii* Deshayes, 1853; *M. lusoria* (Röding, 1798); *M. petechialis* (Lamarck, 1818).

**FAO names:** En - Asiatic hard clam; Fr - Cythérée commune.

**Diagnostic characters:** Shell thick, moderately inflated with a variable, nearly equilateral to rather strongly inequilateral shape, *trigonal-ovate* in outline. Umbones anterior, poorly inflated, pointing on top of dorsal margin which is strongly sloping on both sides and longest posteriorly. Anterior and ventral margins broadly rounded, posterior end of shell bluntly angled. Lunule smooth and poorly defined, escutcheon indistinct. Posterodorsal slope shallowly convex, bordered by a faint radial fold that disappears toward posteroventral end of valves. Outer surface of shell smooth, except from low concentric growth marks. Periostracum smooth and glossy, closely applied to shell. Hinge plate thick, with an irregularly shaped, concave ventral outline, bearing in each valve 3 cardinal teeth and well developed anterior lateral teeth: a strong one in left valve, nearly parallel to dorsal margin, and 2 smaller ones in right valve, with a deep median socket. Ligamental nymphs with fine transverse grooves. Pallial sinus broad and rather shallow, rounded anteriorly. Internal margins smooth. **Colour:** outside of shell very variable in colour and pattern, under the transparent and glossy, pale straw-coloured periostracum; basically white and often flushed with deep purple brown on posterodorsal slope, or fawn to chestnut brown, plain or variously spotted, blotched or streaked with darker grey or brown. Interior porcelaneous white, sometimes stained with dark brown along posterodorsal margin.

**Size:** Maximum shell length 7 cm, commonly to 6 cm.

**Habitat, biology, and fisheries:** In sand and muddy-sand bottoms. Intertidal and sublittoral waters to a depth of about 20 m. An economically important species outside the area (India, Korea, China, Taiwan Province of China, and Japan). Artisanal exploitation in Thailand, the Philippines, and Indonesia, with a potential interest for export.

**Distribution:** Widespread in the Indo-West Pacific, from East Africa to the Philippines; north to Japan and south to Indonesia.
**Paphia textile** (Gmelin, 1791)

**Frequent synonyms / misidentifications:** *Tapes txtrix* (Chemnitz, 1784) (Invalid name) / *Paphia undulata* (Born, 1778).

**FAO names:** En - Textile venus; Fr - Palourde textile.

**Diagnostic characters:** Shell moderately inflated, strongly *elongate* transversely, *elliptical-ovate* in outline. Umbones markedly anterior, approximately situated at the anterior 1/3 of shell length. Anterodorsal and posterodorsal margins straightish and *gently sloping*. Ventral margin broadly rounded. Lunule lanceolate, delicately outlined by a finely impressed line. Outer surface smooth and glossy, only with shallow concentric growth marks, but *devoid of undulating oblique grooves* on medial part of the shell. Hinge narrow, *concentrated* under the umbo of each valve, with 3 radiating cardinal teeth but without lateral teeth. Pallial sinus deep, markedly ascending, rounded in front and approximately extending over the posterior 2/5 of shell length. Internal margins smooth. **Colour:** outside of shell highly glossy, cream to pinkish brown, with a *netted pattern of darker* tan to greyish brown zigzag lines. Dorsal margins with distant, dark purplish brown, short and transverse lines anterior and posterior to the umbones. Interior whitish.

**Size:** Maximum shell length 8 cm, commonly to 6 cm.

**Habitat, biology, and fisheries:** In fine sand and mud bottoms. Intertidal and sublittoral to a depth of about 20 m. Commonly collected for food with other *Tapes* and *Paphia* species.

**Distribution:** Imperfectly known, because of frequent confusion with *Paphia undulata* (Born, 1778), Indo-West Pacific, from eastern Africa to Papua New Guinea; north to the South China Sea and south to Indonesia.
Paphia undulata (Born, 1778)

Frequent synonyms / misidentifications: Paratapes scordalus Iredale, 1936 / Paphia textile (Gmelin, 1791).

FAO names: En - Undulate venus; Fr - Palourde ondulée.

Diagnostic characters: Shell moderately inflated, transversely elongate, elliptical-ovate in outline. Umbones anterior to midline of shell. Anterodorsal and posterodorsal margins straightish and gently sloping. Ventral margin broadly rounded. Lunule lanceolate, delicately outlined by a finely impressed line. Outer surface smooth and glossy, with fine, slightly oblique, undulating grooves crossing the shallow concentric growth marks and disappearing towards anterior and posterior ends of shell. Hinge narrow, with 3 cardinal teeth concentrated under the umbo of each valve, but without lateral teeth. Pallial sinus deep, markedly ascending, rounded in front. Internal margins smooth. Colour: outside of shell cream to light mauve, with a net-like pattern of tan zigzag lines. Umbones often more or less tinged light purple. Lunule and escutcheon whitish, with transverse streaks of purplish brown. Interior white, generally with a mauve hue in the umbonal cavity.

Size: Maximum shell length 6.5 cm, commonly to 5 cm.

Habitat, biology, and fisheries: In fine sand and mud bottoms. Intertidal and sublittoral to a depth of about 30 m. Heavily exploited in Thailand, for both domestic demand and export (916 t of canned meat exported to Italy in 1987).

Distribution: Indo-West Pacific, from the north-western Indian Ocean, including the Red Sea, to Papua New Guinea; north to Japan and south to New South Wales.
**Periglypta puerpera** (Linnaeus, 1771)

**Frequent synonyms / misidentifications:** *Antigona puerpera* (Linnaeus, 1771); *Venus aegrota* Reeve, 1863; *V. lacera* Hanley, 1844; *V. puerpera* Linnaeus, 1771; *V. reticulata* Born, 1780 (not of Linnaeus, 1758) / None.

**FAO names:** En - Youthful venus; Fr - Praire chagrinée.

**Diagnostic characters:** Shell thick and strongly inflated, nearly as high as long, rounded-quadrat in outline, reaching a very large size. Umbones in the anterior 1/4. Lunule and escutcheon well marked, the latter smoothish, medially grooved in left valve and posteriorly overlain by the right valve margin. Outer sculpture both concentric and radial, relatively fine, with many lamellous concentric ridges, radially undulated or crenulated by numerous low, rounded riblets. Ligament deeply inset, partly overlapped by the edge of the escutcheon in right valve. Hinge plate strong, excavated at ventral margin, with 3 strong cardinal teeth in each valve and with a small, tubercle-shaped anterior lateral tooth in left valve. Pallial sinus well developed, extending on about 2/5 of the shell length. Internal margins finely crenulated.

**Colour:** outside of shell whitish to light fawn, largely tinged with dark brown posteriorly, and with 3 or 4 interrupted radial bands of brown (reduced to small blotches towards the umbones). Interior whitish, often flushed pale yellow to orange and dark purple posteriorly.

**Size:** Maximum shell length 12.5 cm, commonly to 9 cm.

**Habitat, biology, and fisheries:** In sand and mud bottoms. Intertidal and sublittoral to a depth of about 20 m. Collected for food in Southeast Asia and Fiji Islands. Common in the markets of the central Philippines. Shell used in local shellcraft.

**Distribution:** Widespread in the Indo-West Pacific, from East Africa, including Madagascar and the Red Sea, to Polynesia; north to Japan and south to Queensland and South Australia.
**Ruditapes philippinarum** (Adams and Reeve, 1850)

**Frequent synonyms / misidentifications:** *Tapes bifurcata* Quayle, 1938; *T. japonica* Deshayes, 1853; *T. philippinarum* (Adams and Reeve, 1850); *T. semidecussatus* Reeve, 1864; *Venerus japonica* (Deshayes, 1853); *V. philippinarum* (Adams and Reeve, 1850); *V. semidecussatus* (Reeve, 1864) / None.

**FAO names:** En - Japanese carpet shell; Fr - Palourde japonaise.

**Diagnostic characters:** Shell moderately strong and inflated, with a variable shape, generally relatively short for its height, elongate-subquadrate in outline. Umbones low, markedly anterior to midline of shell. Posterodorsal margin feebly arched and gently sloping, meeting the rounded and high posterior margin at an obtuse angle. Anterodorsal margin shorter, straightish to slightly concave, slanting obliquely towards the acutely rounded anterior margin. Ventral margin regularly and broadly rounded. Lunule smoothish, about twice as long as wide, with fine peripheral groove. Escutcheon asymmetrical, more distinct in left valve. Outer sculpture both concentric and radial, more pronounced anteriorly and posteriorly, giving a distinctly latticed and granulated characteristic pattern. Hinge with 3 cardinal teeth at each valve, but without lateral teeth. Pallial sinus deep and rounded, longer than high, nearly attaining midlength of valves. Internal margins smooth. Colour: outside variable, cream to light buff or fawn, uniform or variegated with various patterns of deeper brown. Interior whitish, often more or less stained with purple or brown, mainly posteriorly.

**Size:** Maximum shell length 8 cm, commonly to 5 cm.

**Habitat, biology, and fisheries:** In sandy and muddy bottoms. Common in protected marine areas; also in coastal lagoons. A major commercial species in the northern, subtropical western Pacific; intensively cultivated in Japan, Korea, and China. Introduced incidentally with Japanese oysters (*Crassostrea gigas*), or for aquaculture trials, in many areas.

**Distribution:** Indo-West Pacific, from India and Sri Lanka to Micronesia; north to Sakhaline, the Japan Sea and Hawaii (introduced), and south to Indonesia.
**Ruditapes variegatus** (Sowerby, 1852)

**Frequent synonyms / misidentifications:** *Tapes cinerea* Deshayes, 1853; *T. punicea* Deshayes, 1853; *T. variegata* Sowerby, 1852; *Venerupis variegata* (Sowerby, 1852) / *Tapes bruguieri* (Hanley, 1845); *T. japonica* Deshayes, 1853.

**FAO names:** En - Variegated carpet shell; Fr - Palourde bigarrée.

**Diagnostic characters:** Shell rather strong, with a variable, moderately inflated shape, generally relatively long for its height, elongate-ovate to subquadrate in outline. Umbones low, markedly anterior to midline of shell. Posterodorsal margin moderately long, becoming more strongly sloping towards the rounded posterior end of shell. Anterior and ventral margins rounded, the latter more broadly so. Lunule smoothish, long and narrow (about 3 to 4 times longer than wide), with fine peripheral groove. Escutcheon narrow and often moderately deep, well marked on both valves. Outer sculpture both concentric and radial, more pronounced anteriorly and posteriorly, giving a finely latticed and granulated characteristic pattern. Hinge with 3 cardinal teeth at each valve, but without lateral teeth. Pallial sinus well developed and rounded, about as high as long, but far from attaining midlength of valves. Internal margins smooth. Colour: outside variable, cream to fawn, brown or grey, uniform or variegated with various patterns of lighter or darker colours. Umbones frequently hued in pink, yellow, orange, or deep purplish blue. Interior often brightly tinged in yellow, pink, orange, purple, or light bluish grey, paler towards the margins and with deep purple blotches on hinge area.

**Size:** Maximum shell length 6 cm, commonly to 4.5 cm.

**Habitat, biology, and fisheries:** In sandy bottoms, often with pebble. Intertidal and sublittoral to a depth of about 20 m. Locally collected for food with other venerid species. Intensive exploitation in Korea, aquaculture in China.

**Distribution:** Indo-West Pacific, from Pakistan and India to eastern Polynesia; north to Korea and Japan; and south to Queensland.
**Tapes dorsatus** (Lamarck, 1818)

**Frequent synonyms / misidentifications:** Paphia turgida (Lamarck, 1818); Tapes ovulacea (Lamarck, 1818); *T. turgida* (Lamarck, 1818); *T. watlingi* Iredale, 1958 / None.

**FAO names:** En - Turgid venus; Fr - Palourde enflée.

**Diagnostic characters:** Shell elongate, slightly inflated, squarey oval in outline, with a narrowly rounded anterior margin and a wide, roughly truncate posterior margin. Umbones moderately low, markedly anterior to midline of shell. Posterodorsal margin moderately long, obtusely angulated posteriorly. Lunule lanceolate, bordered by a fine groove. Escutcheon well marked, long and narrow, depressed. Posterodorsal area sloping, set off by an obscure, broad angulation radiating from umbones to posteroventral end of shell. Outer surface ornamented with numerous, small and raised concentric ridges, separated by narrow grooves, becoming slightly lamellate posteriorly. Hinge narrow, with 3 cardinal teeth in each valve, but without lateral teeth. Median cardinal tooth of left valve strongest and widely bifid, appearing like 2 teeth. Posterior cardinal tooth of right valve separated by a gap from median cardinal tooth. Pallial sinus well developed, widely open behind. Dorsal side of pallial line bordered by a row of small scars. Internal margins smooth. **Colour:** outside variable, cream to light buff, with various pattern of brown lines and blotches, often forming a few radial rays. Lunule usually tinged with purple. Interior white, with an orange hue in the umbonal area.

**Size:** Maximum shell length 9 cm, commonly to 7.5 cm.

**Habitat, biology, and fisheries:** In sandy bottoms. Intertidal and shallow sublittoral waters to a depth of 30 m. Local exploitation in the Philippines.

**Distribution:** Indo-West Pacific, from India to the Philippines; north to South China Sea and south to New South Wales.
**Tapes literatus** (Linnaeus, 1758)

**Frequent synonyms / misidentifications:** *Paphia guttulata* Röding, 1798; *P. literata* (Linnaeus, 1758); *Tapes laterata* Iredale, 1958; *Venus nocturna, punctata, radiata* (all of Chemnitz, 1784) (Invalid names) / None.

**FAO names:** En - Lettered venus; Fr - Palourde écriture.

**Diagnostic characters:** Shell elongate, laterally compressed, ovate-subtrapezoidal in outline, with a narrowly rounded anterior margin and a wide, obliquely truncate posterior margin. Umbones low, markedly anterior to midline of shell. Posterodorsal margin long and feebly convex, somewhat angulated posteriorly. Lunule lanceolate, bordered by a fine groove. Escutcheon well marked, long and narrow, depressed. Posterodorsal area sloping and flattish, set off by an obtuse angulation radiating from the umbones to posterioventral end of shell. Outer surface ornamented with numerous, small and low concentric ridges, separated by narrow grooves, not becoming lamellate posteriorly. Hinge narrow, with 3 cardinal teeth in each valve, but without lateral teeth. Median cardinal tooth of left valve strongest and widely bifid, appearing like 2 teeth. Posterior cardinal tooth of right valve separated by a gap from median cardinal tooth. Pallial sinus well developed, widely open behind. Dorsal side of pallial line bordered by a row of small scars. Internal margins smooth. Colour: outside variable, cream to light buff, more or less variegated with brown patterns of angular lines, dots or blotches. Interior white, often with yellow or light orange in the umbonal area.

**Size:** Maximum shell length 10.8 cm, commonly to 8.5 cm.

**Habitat, biology, and fisheries:** In sandy bottoms. Most common in fine sand and muddy sand near mangroves on tidal and shallow subtidal flats. Littoral and sublittoral to a depth of 20 m. Exploited in the Philippines and Fiji Islands.

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