

Bivalve Family Identifier

SHAPES IN DETAIL

Distinctly circular, no protruding umbo



Placunidae:
 Circular, compressed, no protruding umbo.

Circular with protruding umbo



Left
Glycymerididae: Umbo central, isodont hinge, inflated.



Right
Veneridae, Circe: Umbo nearly central, heterodont hinge, indented sinus, compressed.



Veneridae, Venus toreuma: Strong umbo pointing forwards, heterodont hinge, small pallial sinus, much inflated.



Veneridae, Dosinia: Umbo hooked forward, heterodont hinge, large V-shaped pallial sinus, compressed.



Semelidae, Semele: Umbo central pointing up, heterodont hinge, large pallial sinus with rounded apex, concentric sculpture.

Irregularly circular, short straight hinge, attached by flat lower valve, cupped upper valve



Ostreidae, *Dendostrea cristata*: small, thin-valved, laminar structure (not spongy).



Ostreidae, *Crassostrea bilineata*: single muscle scar pigmented or not.



Ostreidae, *Saccostrea echinata*: chomata granular or non-branching.



Gryphaeidae, *Hyotissa hyotis*: large, heavy shells deeply folded into ribs with spines for attachment.



Gryphaeidae, *Hyotissa numisma*: small to medium shells, no folding, characteristic structure as in next image.



Gryphaeidae characterised by branching chomata and alveolar (spongy) structure.



Spondylidae, *Spondylus lingua-felis*: characteristic hinge, long fine spines, thick & short.



Spondylidae, *Spondylus gloriosus*: circular, longer hinge than previous, short spines.



Spondylidae, *Spondylus anacanthus*: unusual shape, very long ligament area lower valve.

Rounded to somewhat triangular, prominent umbones, inflated, brackish water



Cyrenidae, *Geloina coaxans*:
heavy, inflated, rough blackish
periostracum.



Cyrenidae, *Geloina coaxans*:
denuded shell milky white, no
pallial sinus.



Cyrenidae, *Corbicula solida*:
resembles *Meretrix casta*, but
lighter shell, pale, brackish, mud

Irregularly circular, long straight hinge, weak/absent teeth, byssally attached rocks



Pteriidae

Left

***Pinctada imbricata radiata*:**
squarish outline, not longer than
hinge length.



Right

***Pinctada margaritifera*:** rounded
outline, longer than hinge length.

Horizontally elongated ovals



Mytilidae, *Perna perna*:
attached wave lashed intertidal
rocks, edible.



Mytilidae, *Modiolus auriculatus*: swollen anterior,
attached rocky crevices, sub-
tidal.



Mytilidae, *Acuatula capensis*:
fragile, devoid of marginal
crenulations, brackish water
lagoons and waterways.

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Mytilidae, *Brachidontes variabilis*: marginal crenulations behind ligament, intertidal, marine.



Mytilidae, *Septifer bilocularis*: anterior partition, sub-tidal in rocky crevices.



Mytilidae, *Leisolenus obesus*: boring into dead coral, calcareous encrustations, extra-periosteal encrustations.



Pinnidae, *Pinna*: median ridge externally, nacreous area in two lobes (2 spp.)

Pinnidae grow to over 300mm in length with strong shells. Byssally attached to buried rocks by the pointed anterior, only a portion showing above the sand.



Pinnidae, *Atrina*: no median ridge, nacreous area undivided (2 spp.)



Gastrochaenidae, *Gastrochaena cuneiformis*: fragile shells, 8-11 mm long, widely gaping ventrally, boring into coral, living in bottle-shaped burrows.

Trigonal with angular dorsal profile



Donacidae, *Donax deltoides*: fine, low sculpture, margin smooth.



Donacidae, *Donax scortum*: beaked posterior, margin smooth, concentric sculpture.



Donacidae, *Donax semisulcatus*: margin crenulate, ribbed & cancellate sculpture.

Vertically elongated gaping ovals with short edentulous hinge, internal ligament



Limidae, *Ctenoides annulatus*: thick shell, fine spinous ribs.



Limidae, *Lima vulgaris*: thick, strongly ribbed, strong scales.



Limidae, *Limaria fragilis*: thin shell, fine spinous ribs.

Obliquely oval, long straight hinge, edentulous, winged



Pteriidae, *Pteria heteroptera*: byssally attached on sea fans.

Strap-shaped or T-shaped, compressed; or inflated, sub-cylindrical



Malleidae, *Malleus malleus*: other spp. white, or mottled with one short wing or no wings.



Pharidae, *Siliqua radiata*: translucent, fragile, usually found empty.



Pharidae, *Ensiculus cultellus*: lateral and dorsal views, rare.

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Pharidae:
anterior extremity and dentition consisting of two teeth in the left valve and one in the right.

Solenidae: umbones at the anterior extremity and dentition consisting of single cardinal teeth in both valves.

Solenidae, *Solen roseomaculatus*: common, empty, Colombo, Negombo, 13-15m.

Solenidae, *Solen vagina*: common, empty, west, east, north.

Vertically elongated, irregular shapes, long straight hinge, multivincular hinge (ligament in multiple vertical pits)



Pteriidae
Left
***Isognomon isognomum*:** compressed, byssally attached on mangrove roots.
Right
***Isognomon perna*:** subtidal reefs, byssally attached on rocks.

Long isodont hinge, boat-shaped with overhanging umbones; or rounded/oval/somewhat triangular with overhanging umbones and strongly ribbed; or oval with low umbones



Arcidae, *Arca navicularis*: byssally attached on rocks, usually in crevices.

Arcidae, *Tegillarca rhombea*: free living on soft substrates.

Arcidae, *Barbatia amygdalumtostum*: byssally attached in rock crevices.

Nearly circular or elongate oval, weak hinge, heterodont, external ligament, large pallial sinus



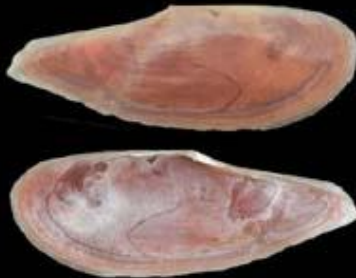
Tellinidae, *Cyclotellina remies*:
Large (70mm), shell strong,
strong concentric sculpture,
characteristic pallial sinus.



Tellinidae, *Macalia bruguieri*:
medium sized (35mm),
compressed, fine cancellate
sculpture.



Tellinidae, *Tellinides timorensis*:
compressed, closely
spaced concentric striae, glossy.



Tellinidae, *Dallitellina rostrata*:
shell thin, translucent, weak
teeth, glossy.