

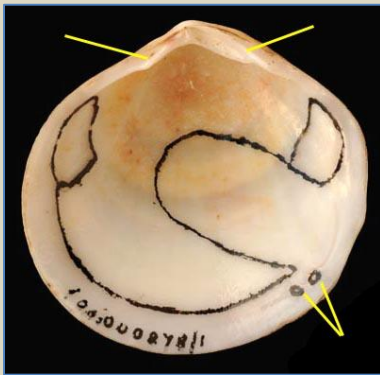
SEMELE CLAMS

Family: SEMELIDAE

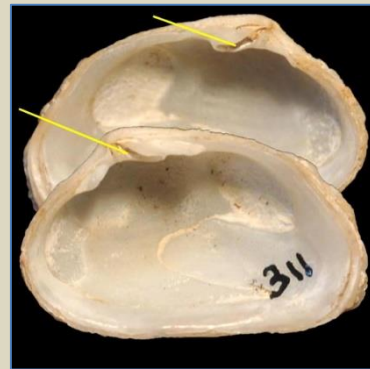
Semele cordiformis (Holten, 1802)
Semele lamellosa (Reeve, 1853)
Semele radiata (Say, 1826)
Semele sp.
Montrouzieria sp.

Shells range from very thin to thick, rounded, oval or egg-shaped. The valves may gape and in some species the posterior is bent to a side. Compressed or somewhat inflated. Sculpture is mainly concentric, low threads or erect frilled lamellae, which may be crossed by radial threads. The ligament is in two parts: a thin external part and an internal part in an oblique groove (chondrophore). Cardinal teeth and lateral teeth are present. Well-developed pallial sinus; cruciform muscle scars are present.

Shallow burrowers in sand and muddy-sand, mostly in shallow water, sometimes in deep water. They are filter feeders.










***Semele radiata*:** Circular shape. Lateral teeth in addition to two small cardinal teeth. Bag-shaped pallial sinus. Two cruciform muscle scars are marked. These can be difficult to visualize in members of those families where they are present.



***Montrouzieria*:** Oval shape. Lateral teeth in addition to two small cardinal teeth. The oblique chondrophore for the internal ligament is marked. Bag-shaped pallial sinus. Cruciform muscle scars present.



PLATE 12 - SEMELIDAE

 <p><i>Semele cordiformis</i> Actual size 24.85 x 23.77 x 13.14mm</p>	 <p><i>Semele cordiformis</i> Actual size 24 x 22.2mm</p>	<p><i>Semele cordiformis</i> Heart-shaped semele Shell inflated, equilateral. A single cardinal tooth in each valve, single anterior and posterior lateral tooth in each. Concentric sculpture of close-set, frilled lamellae 0.3 to 0.35 mm apart, with radial threads inbetween that correspond with the frills. White.</p> <p>MF106: Colombo, Palagala (reef), inshore, empty, 13 m, sand bottom. 16.83 x 15.5 x 7.23 mm.</p> <p>- Abbott & Dance, p. 350; Kira, 1962 p. 169 Pl. 50 #18; Kirtisinghe, 1978 p. 43 (image possible but description of another species); Siddique et al, p. 313. Femorale website image</p>
 <p><i>Semele lamellosa</i> Actual size 38.7 x 36.4mm</p>	 <p><i>Semele lamellosa</i></p>	<p><i>Semele lamellosa</i> Fringed Semele Shell compressed, equilateral. Only single left valves collected, both with anterior and posterior lateral teeth. Concentric sculpture of erect lamellae 1.6 mm apart at periphery, toothed on the lower (convex) side.</p> <p>- Abbott, 1994 p. 100; images in femorale.com. No image - MF098: Degal Meda (reef), 23 m, single valve, 18.6 x 16.2 mm, both by diving.</p>
<p>MF097: Wellawatte, Kinross, 7 m, single left valve.</p>		
 <p><i>Semele radiata</i> Actual size 26.7 x 23.5 x 11.2mm</p>	 <p><i>Semele radiata</i> Actual size 32.9 x 31.5mm</p>	
<p>MF099: Mount Lavinia, Bellangala inshore, sand bottom, empty, by diving. Shell with longer anterior.</p>	<p>MF100: Mount Lavinia, beached, single valve. Shell sub-circular. Also- MF101: Colombo, near Dehiwela Sewage Outfall, single valve; MF102: Kirinda, Amaduwa, beach, singles.</p>	

Semele radiata Radial Semele

Shell moderately inflated, umbo just posterior to the midline. Two small diverging cardinal teeth l/v, one in r/v, two lateral teeth in each valve. A large oblique chondrophore. Deep, bag-shaped pallial sinus, cruciform muscle scars present.

Shell white under a translucent greyish periostracum, the umbo pink-purple, purplish concentric bands (indistinct), pinkish rays radiating from umbo (more apparent on the inside). Sculpture of fine close-set radial grooves cross growth lines giving a cancellate sculpture.

- Kirtisinghe, 1978 p. 38



Semele obscura

Actual size
19.36 x 17.35 x 7.06mm

Semele sp.

Shell compressed, equilateral. Concentric sculpture of close-set, frilled lamellae 0.3 to 0.35 mm apart, with radial threads in-between that correspond with the frills. White.

Sculpture similar to *S. cordiformis* but shell longer for height and compressed.

Determination as *S. obscura* in 2016 was based on the publication 'Genres représentés à la Réunion'.

Neither name (*obscura*) nor synonym *S. borbonica* (Deshayes, 1863) listed in Worms (2016).

Name *obscura* replaced with *Semele australis* (GB Sowerby I, 1833) Synonyms: *Amphidesma obscura*, *Amphidesma borbonica* in 'Genres représentés à la Réunion' (2020). MolluscaBase listed. Images (of shells from Hawaii and la Réunion) show shells that are nearly circular.

MF107 remains undetermined.

MF107: No find data.



Montrouzieria elegans (?)

Actual size 16mm

Montrouzieria sp. Shell species undetermined.

MF311: December, 2006. Mount Lavinia, Bellangala rocky islet, inshore, 3 m, underside of *Favia* colony, by diving.

Shell trapezoidal-oval, beaks anterior, moderately inflated. Ligament internal in a chondrophore, a single cardinal tooth in each valve, strong laterals, anterior and posterior in each valve. Deep pallial sinus present, cruciform muscle scars present.

Sculpture consists of erect concentric lamellae with closely packed radial threads in the interspaces. Shell white, interior white.

The shell was determined as *Montrouzieria* cf. *elegans* (Sowerby, 1873), based on a French-language report of shells from La Réunion, Indian Ocean (vieocean.free.fr). It was not WoRMS verified in 2016; and has been removed from the paper following revision when reviewed in 2020. The generic name, however, is likely to be correct, with two species accepted in MolluscaBase (2020).

Montrouzieria Souverbie, 1863 is an Indo-Pacific genus (Souverbie & Montrouzier, 1863). MolluscaBase lists the two species: *clathrata* Souverbie, 1863 and *quadrata* F.-S. Xu & J.-L. Zhang, 2018. *M. clathrata* is described as "...sculpture of radiating and concentric striae, slightly nodulose at their intersections..." --- quite different from the index specimen. The general shape of the shell is also different from the Sri Lanka specimen. No description or image of *quadrata* has been seen for comparison with that species.

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Femorale website available at :- <http://www.femorale.com/shellphotos/>

Genres représentés à la Réunion available at :- <Http://vieocean.free.fr/mollusques/Semelidae.htm>.

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Xu Fengshan & Zhang Junlong

251 pages, 15 plates with colour photos; 8 b/w line drawings, 42 b/w distribution maps, Science Press.

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