

## MITRES and RIBBED MITERS

## List of species

Family: Mitridae Swainson, 1831

## Mitres

1. *Cancilla isabella* (Swainson, 1831)
2. *Domiporta circula* (Kiener, 1838)
3. *Mitra papalis* (Linnaeus, 1758)
4. *Nebularia pellisserpentis* (Reeve, 1844)
5. *Strigatella litterata* (Lamarck, 1811)

Family: Costellariidae MacDonald, 1860

## Ribbed Mitres

1. *Protoelongata corallina* (Reeve, 1845)
2. *Vexillum acuminatum* (Gmelin, 1791)
3. *Vexillum exasperatum* (Gmelin, 1791)
4. *Vexillum obtusispinosum* Sowerby, 1874

## Other species reported from Sri Lanka

*Calcimitra morchii* (A. Adams, 1855) as *Mitra*  
*Mitra mitra* (Linnaeus, 1758)  
*Nebularia eremitarum* (Röding, 1798) as *Mitra*  
*Nebularia ferruginea* (Lamarck, 1811) as *Mitra*  
*Pseudonebularia chrysalis* (Reeve, 1844) as *Mitra*  
*Quasimitra floccata* (Reeve, 1844) as *Mitra*  
*Strigatella ambigua* (Swainson, 1829) as *Mitra*  
*Vexillum curviliratum* (G. B. Sowerby II, 1874)  
 - Kirtisinghe, 1978

## MITRIDAE Swainson, 1829

## Mitres

Shells fusiform-ovate, with a high, tapering spire and a rather narrow aperture. Surface smooth or with a predominantly spiral sculpture. Periostracum thin or absent. Aperture elongate, anteriorly notched by a short siphonal canal. Outer lip smooth to crenulate on the margin, not lirate inside. Columella with a few strong spiral folds, the larger ones situated posteriorly. No operculum. Mostly inhabiting littoral and shallow waters of tropical and subtropical seas, but also deeper. Often burrowing in sand, sometime resting during the day in rock crevices or under stones. Carnivorous, or carrion feeders, mainly feeding on sipunculid worms and other gastropods which are swallowed whole or in chunks.

(Poutiers, 1998 – p. 613.)



## COSTELLARIIDAE MacDonald, 1860

## Ribbed mitres, Costate mitres

Shells fusiform-ovate, with a high, tapering spire and a rather narrow aperture. Surface with a predominantly axial sculpture. Periostracum thin or absent. Aperture elongate, anteriorly notched by a short siphonal canal. Outer lip generally smooth on the margin, finely lirate deep inside. Columella with a few strong spiral folds, the larger ones situated posteriorly. No operculum. Mostly living in littoral and shallow subtidal, tropical or subtropical habitats. Smaller species usually in rock crevices or hard coral areas, larger ones burrowing in sand. Active predators or scavengers, sucking up soft tissues and body fluids of their prey.

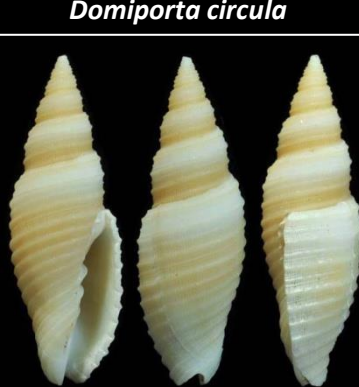
(Poutiers, 1998 – p. 616.)



Mitridae



***Cancilla isabella***  
Actual size 34.5mm



***Domiporta circula***

***Neocancilla circula***  
Actual size 35.7mm



***Mitra papalis***  
Actual size 82mm



***Mitra pellisserpentis***  
Actual size 18.2mm

***Nebularia pellisserpentis***



***Mitra litterata***  
Actual size 17mm

***Strigatella litterata***

1. *Cancilla isabella* (Swainson, 1831) Isabella mitre

[*Tiara Isabella* Swainson, 1831; *Mitra Isabella* (Swainson, 1831)]  
Subfamily Imbricariinae

Shell slender, fusiform, spire as long as body whorl. Incised spiral lines are overlaid by axial riblets on spire, these obsolete on body whorl. Suture adpressed. 4 columellar plaits, the most posterior thick, squared. Reddish-brown, a spiral yellow sub-sutural line and another at mid-body.

25 x 7.6 mm; 34.5 x 10 mm (ht x w).

Mount Lavinia, Hotel Bay, 5 m, empty; Beruwela, harbour dredge spoil; Kirinda, weathered, beached, purchased.

2. *Domiporta circula* (Kiener, 1838) Ringed mitre

[*Mitra circula* Kiener, 1838; *Neocancilla circula* (Kiener, 1838); *Subcancilla circula* (Kiener, 1838)]  
Subfamily Mitrinae

Shell fusiform, 7 whorls. Suture constricted, whorls stepped, sides convex sub-sutural, plane lower. Body whorl somewhat swollen, longer than spire. Spaced acute spirals with axial grooves in the wide interspaces. Interspaces also with spiral grooves giving a cancellate pattern. Outer lip thin, grooves inner edge corresponding to the external spirals. Three columellar folds. Bleached/faded: buff to peach shading to cream subsutural band.

35.66 x 12.56 mm. (NMR image: Chennai, Tamil Nadu, 35 mm, buff coloured.)

Kayankerni, Thennadi Bay, beached.

### 3. *Mitra papalis* (Linnaeus, 1758)

Papal mitre

[*Voluta papalis* Linnaeus, 1758]  
Subfamily Mitrinae

Shell fusiform, thick and heavy. Spire and body whorl subequal. Suture adpressed, the thinned-out upper border of the whorls pleated into a number of folds projecting over the whorl above as blunt spines. Outer lip margin thin, crenulate; the columella with 4 plaits. Exterior smooth. Ground colour white almost covered with spiral rows of rectangular or oval maroon macules, often aligned in axial columns.

82 x 28 mm (ht x w).

Off Kirinda, fishing trash. Collected by Ananda Perera.

### 4. *Nebularia pellisserpentis* (Reeve, 1844)

Snake-head mitre

[*Mitra pellisserpentis* Reeve, 1844; *Strigatella pellisserpentis* (Reeve, 1844)]  
Subfamily Cylindromitrinae

Shell fusiform, body whorl swollen, spire low, about half body whorl length; suture channelled. Spiral threads throughout, few low (obsolete) axial ridges. Inside of outer lip smooth, 4 columellar plaits. Pink-brown, with darker brownish subsutural band marked by whitish axial marks. A thin brown periostracum present.

18.2 x 8 mm (ht x w).

Mount Lavinia, Bellangala rocky islet, 5 m, under rock.

### 5. *Strigatella litterata* (Lamarck, 1811)

Lettered mitre

[*Mitra litterata* Lamarck, 1811; *Mitra maculosa* Reeve, 1844]  
Subfamily Strigatellinae

Shell small, fusiform, inflated with very short spire. Suture simple. Outer lip thin, with an axial, rounded swelling in the interior. Columella with 4 plaits. Exterior smooth. Ground colour white overlaid with brown subsutural axial streaks and 3 spiral rows of irregular macules below the mid-body.

17 x 9.5 mm.

Mount Lavinia, Bellangala rocky islet, 4-5 m, on surrounding sand, by diving.



## Costellariidae



***Vexillum coralinum***  
Actual size 21.55mm



***Vexillum acuminatum***  
Actual size 24.5mm



***Vexillum exasperatum***  
Actual size 25mm

***Protoelongata corallina***





1. *Protoelongata corallina* (Reeve, 1845) Coralline mitre

[*Mitra corallina* Reeve, 1845; *Vexillum corallinum* (Reeve, 1845)]

Shell stubby, strong, spire about half total height. Suture incised, whorls straight-sided. Aperture lirate, the columella with 4 plaits. Encircled by close-spaced, narrow axial ribs, the intervening spaces with spiral grooves. Brownish-red, a narrow yellow spiral line at mid-body.

21.55 x 9 mm.

Kirinda, purchased, weathered, beached shells.

2. *Vexillum acuminatum* (Gmelin, 1791) Pointed mitre

[*Voluta acuminata* Gmelin, 1791; *Vexillum crebriliratum* (Reeve, 1844); *Mitra crebrilirata* Reeve, 1844]

Listed in Kirtisinghe, 1978 as *Mitropifex crebillirata*

Shell slender, fusiform, with tall tapering spire, apex pointed. Ten whorls. Suture slightly constricted, sides of whorls convex. Aperture narrow, elongated. Outer lip thin, interior lirate. Columella with four folds. Exterior covered with numerous fine axial ribs the interspaces crossed by punctate grooves.

24.48 x 7.16 mm.

Paiyagala, P/North railway station beach, beached, weathered, bleached.

3. *Vexillum exasperatum* (Gmelin, 1791) Roughened mitre

[*Mitra exasperata* (Gmelin, 1791); *Turricula exasperata* (Gmelin, 1791)]

Shell fusiform with stepped spire taller than body whorl. Suture constricted. Aperture lirate, the lirae consisting of rows of pin-points. The columella with 4 plaits. Encircled by strong, widely spaced axial ribs crossed by spirals, with nodules at the crossings. Ground colour white with a tracery of fine axial reddish-brown scribbles condensing to form a row of spots at mid-body level.

20 x 8 mm.

Wellawatte, Kinross lagoon, 2 m, empty on sand, by diving.

4. *Vexillum obtusispinosum* (Sowerby, 1874) Spiny mitre

Shell fusiform with tall stepped spire. Aperture narrow, elongated, outer lip thin, lirate inside. Columella with five folds. Narrow axial ribs drawn out as pointed tubercles at the shoulders with a second row lower down (quite worn in these specimens) visible on spire whorls. Encircled overall by perforated spiral grooves.

31.42 x 11.35 mm.

Paiyagala, P/railway station beach, weathered, bleached, beached.

---

#### **BIBLIOGRAPHY**

Abbott, R. Tucker (1994) *Seashells of Southeast Asia*, Graham Brash, Singapore.de Bruyne, 2003.

Eisenberg, Jerome M. (1989) *A collector's guide to seashells of the world*, Crescent Books, New York.

Kirtisinghe, Parakrama (1978) *Sea shells of Sri Lanka*, Tuttle, Tokyo.

Poutiers, J. M. (1998) *Gastropods* In: Carpenter, K. E. and Niem, V. H. (eds.), In: *FAO Species Identification Guide for Fishery Purposes, The Living Marine Resources of the Western Central Pacific*. Vol. 1. pp. 364-686, FAO, Rome.

31.5.2019; 23.6.2020 - reviewed and names updated.