

ANCILLAS, OLIVES and NUTMEG SHELLS

List of species

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8. *Oliva sericea* (Röding, 1798)
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11. *Oliva macleaya* Duclos, 1840
12. *Oliva ozodona* Duclos, 1835

Family: Cancellariidae **Nutmegs**

1. *Scalptia scalarina* (Lamarck, 1822)

Page reviewed by Pierre Recourt,
Research Associate (Olivioidea),
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in September 2020.
Nomenclature of some taxa corrected.
October 2020.

Other species of *Olividae* reported from Sri Lanka
by Kirtisinghe, 1978 are rejected based on the
opinion of Pierre Recourt -

Agaronia hiatula (Gmelin, 1791) (?) - a Western
African species

Agaronia steeriae (Reeve, 1850) - a rare Pacific
Ocean species

Oliva miniacea (Röding, 1798) - possible, but
probably *Oliva flammeacolor*

Oliva ornata Marrat, 1867 - a Western Australian
species.

Family Cancellariidae

Trigonostoma scalare (Gmelin, 1791)

- Kirtisinghe, 1978

ANCILLARIIDAE and OLIVIDAE

Ancillas and Olive shells

The superfamily Olivioidea has been revised in 2017 (Kantor et al, 2017) with the genera being re-assigned to different families. As a result, the Sri Lanka genera described here are distributed as follows:

Ancillariidae Swainson, 1840

Ancilla Lamarck, 1799

Amalda H. Adams & A. Adams, 1853

Olividae Latreille, 1825

Agaronia Gray, 1839

Oliva Bruguière, 1789

Following the publication of the article on the Internet in July 2020 nomenclatural corrections were made by Pierre Recourt (pers. comm.) in September and the names have been changed as suggested. The order of the images and the descriptive text have not been changed. The (incorrect) names used in the July version are noted in the text.

The following general description applies to all genera. *Ancilla* and *Amalda* are distinguished by distinctive tapering spires with rounded apices covered in callus and shorter apertures. They also possess an ancillid groove and an ancillid band. (See extract below.)

Shells thick and porcellaneous, elongate-ovate, with a short spire, a large body whorl, and usually deeply channelled sutures. Surface smooth, highly polished and vividly coloured. No periostracum. Aperture elongate, with a wide and short anterior siphonal canal and an indistinct posterior notch. Outer lip slightly thickened in the adult, smooth. Inner lip calloused, often with fine transverse lirae and with oblique columellar grooves anteriorly. Columellar callus usually bordered by a distinct, calloused spiral band - the fasciole. Operculum absent. Sand-dwelling, active animals, crawling on the surface or just below. Intertidal or shallow sub-littoral. Carnivorous, feeding on small invertebrates, or scavengers.

(Poutiers, 1998 p. 607)



The fasciole, or the fasciolar band, is a distinctive calloused area at the anterior end of olive shells. It is usually coloured in contrasting colours and seen on the apertural aspect as well as on the dorsal aspect.

Ancillids have other grooves and bands in addition.



Ancillariidae Swainson, 1840

“In ancillids the spire is covered with a glaze (also referred to as ‘callus’ if it is thick) applied after the creation of the normal spiral shell. There may be two layers of callus, applied at different times, over different parts of the shell. The callus on the spire may be smooth or spirally ribbed. The subsutural callus is a spiral band of callus below the suture. Below the centre of the body whorl there is a groove known as the ancillid groove, which may be weak or strong. Below the ancillid groove is the ancillid band, and below that the anterior fasciole, or fasciolar band. The fasciolar band usually has a ridge in the centre, which again may be weak or strong. The columellar pillar may be smooth or with plaits, varying in number and strength.” – extracted from <seashellsofns.org.au>

Ancillariidae



Amalda tindalli
Actual size 17 x 7 mm



Amalda tindalli
Showing details of base



Ancilla cf. cinnamomea
Actual size 17.75 x 7.5 mm

Olividae



Agaronia gibbosa
Actual size 50 mm



Agaronia gibbosa
Actual size 55 mm



Agaronia junior
Actual size 42 mm



Agaronia junior
Actual sizes 32.5, 30 mm



Agaronia junior
Actual size 26 mm



Agaronia junior
Actual size 23 mm



Oliva mantichora
Actual size 29 mm



Oliva bulbosa
Actual size 48 mm



Oliva bulbosa
Actual size 38 mm



Oliva oliva
Actual size 23 mm



Oliva oliva
Actual size 29 mm



Oliva oliva
Colour variations
22 to 35 mm



Oliva flammeacolor
Actual size 79 mm



Oliva flammeacolor
Actual size 72 mm



Oliva flammeacolor
Actual size 58 mm



Oliva flammeacolor
Actual size 78 x 33 mm



Oliva sericea
Actual size 79 mm



Oliva sericea
Actual size 76 x 34 mm



Oliva kremerorum
Actual size 56.5 mm



Oliva kremerorum
Actual size 50.5 mm



Oliva kremerorum
Actual size 50 mm



Oliva kremerorum
Actual size 50 mm



Oliva todosina
Actual size 19.5 mm



Oliva macleaya
Actual size 47.5 mm



Oliva ozodona
Actual size 17.5 mm

Cancellariidae

1. *Amalda tindalli* (Melvill, 1898)

[*Amalda* sp. 1 'Kupatha' in the July 2020 version]

Shell resembles a *Bullia*. Shell fusiform, the widest part about the middle of the body whorl, with a tall tapering spire that is almost as long as the body whorl, ending in a rounded tip. Sides of spire smooth as the suture is filled in with callus that coats the entire spire. Aperture less than half length of shell. Columella deeply plicate anteriorly. The ancillid band thickly calloused. Fasciole present. Colour white, the body whorl overlaid with close-set, blurred, beige coloured axial scribbles between two white spiral bands with honey-coloured flames or squarish patches, one subsutural (the subsutural callus) and the other above the ancillid groove. Interior and columella white, callus translucent, tawny, the underlying pattern showing through.

17 x 7 mm (ht x w).

Tangalle, nr. Tangalle Rocks (Kupatha), 15 m on sand, by diving.

Note by Pierre Recourt: "Till recently only known from the holotype. About two years ago a population was discovered from Koothan Kuzhi, Tamil Nadu, India. About 15 dead collected specimens."

- det. Recourt, 2020 (pers. comm.); Eisenberg, 1989 p. 124: species of Ancillariidae.

2. *Ancilla* cf. *cinnamomea*

[*Ancilla ampla* (Gmelin, 1791) in the July 2020 version]

Shell sand worn and faded or stained. It is also immature judging by the thin edge of the outer lip. An ancillid groove and ancillid band are present. The spire is glazed, the apex rounded. The aperture is about three-fourths the shell length. The siphonal notch is broad. Pale cream with a darker spiral band on the spire.

17.75 x 7.5mm (ht x w).

Unawatuna, <1 m, in-shore rock fringe, on sand bottom, empty.

Kirtisinghe, 1978 lists two species of *Ancilla* – *ampla* and *cinnamomea* (as *Agaronia cinnamomea*). The latter being "cinnamon-brown" and the former "white except near brown spire." The index shell is immature, with a thin outer lip and smaller than Kirtisinghe's shell as well as weathered. It is referred to *Ancilla ampla*. (*A. ampla* is erroneously listed as *Angaria ampla* Gmelin in Kirtisinghe, 1978 p. 96. The description and image, however, are of an *Ancilla* and not of an *Angaria*.)

Note by Pierre Recourt: "This seems a worn subadult of *Ancilla cinnamomea*"

- det. Recourt, 2020 (pers. comm.)

3. *Agaronia gibbosa* (Born, 1778)

Inflated, gibbous, fat olive

[*Voluta gibbosa* Born, 1778; *Olivancillaria gibbosa* (Born, 1778); *Oliva nebulosa* Lamarck, 1822;

Agaronia nebulosa (Lamarck, 1822)]

Thick, heavy shell with swollen posterior, tapering to anterior. Prominent spire with sharp apex. Outer lip sharp, convex. Columella thickly callus, extending on to the spire whorls, lirate posteriorly, plicate anteriorly. Fasciole wide with prominent fasciolar ridge. Creamy-white clouded with a smudged blue-grey network. The fasciole creamy-yellow with brown axial marks divided into two by a cream-coloured fasciolar ridge. Other shells similar with different colour intensity. Colour and patterning variable as shown in Internet images (see idscaro.net images).

55 x 27, 50 x 24.5 mm (ht x w).

Beached at Kalpitiya, Mannar Island (Pesalai & Old Dutch Tower).

Slender shells with the same colouration previously assigned to *Agaronia nebulosa* (Lamarck, 1822) and subsequently synonymised with *A. gibbosa* (MolluscaBase accessed 3.5.2019) are now accepted as *Agaronia junior* and included as No. 3a. - Pierre Recourt, 2020 (pers. comm.)

- Eisenberg, 1989; Abbott, 1994; Abbott & Dance; Kirtisinghe, 1978.

3a. *Agaronia junior* (Duclos, 1840)

[*Oliva utriculus junior* Duclos, 1840 - original name]

Type locality in Sri Lanka (WoRMS distribution details)

Shell slender, torpedo-shaped with conical spire and pointed apex, tapering anteriorly with wide siphonal notch. Spire whorls callus, suture incised. Bluish-grey or reddish-brown, mottled, the fasciole with white or yellow and brown bands.

42 x 16.55, 30 x 11.5 mm and smaller.

Jaffna, Mandaitivu, fishing trash; Beruwela, beached; no data, purchased.

- Det. Recourt, 2020, personal communication.

4. *Oliva mantichora* Duclos, 1840

Ridged Olive

[*Oliva annulata* Gmelin, 1791 in the July 2020 version]

The smooth curve of the body whorl is interrupted a short distance below the suture by a rounded ridge, forming a shoulder, the widest part of the shell. The suture is deeply channelled, with a layer of callus above forming a ridge. The columella is lirate posteriorly, plicate anteriorly, the fasciole with a rounded ridge. The ground colour cream, clouded with brown blotches, more intense below the shoulder; dark flames edge the suture; dark crescents below the white fasciolar ridge.

29 x 13 mm.

No find data recorded.

- Det. Pierre Recourt, personal communication.

5. *Oliva bulbosa* (Röding, 1798)

Bulbous olive

[*Porphyria bulbosa* Röding, 1798]

Thick, inflated shells widest at mid-body, the outer lip thick, more or less straight, the body whorl profile convex. The apex almost buried, sunk within a raised rim of columellar callus that projects strongly above the level of the posterior end of the outer lip. The columella heavily calloused, plicate anteriorly with one strong ridge prominent. The fasciole hardly noticeable, the fasciolar ridge wide and low. Exterior colour cream with coloured dots and dashes haphazardly arranged – red-purple in one and blue-purple in the other of the two shells in the collection. Interior and columellar callus white.

48 x 27, 38 x 23 mm (ht x w).

No find data recorded. Probably east coast via Sr. Rita – fishing trash.

- Eisenberg, 1989 p. 122; Oliver, 1975 p. 206.

6. *Oliva oliva* (Linnaeus, 1758)

Common olive

[*Voluta oliva* Linnaeus, 1758] (*Oliva ispidula* Linn. in Kirtisinghe, 1978, an un-verified name.)

Shells widest at about mid-body tapering smoothly to anterior, and posteriorly to a pointed spire. Suture deeply channelled, the columellar callus extending above as a thin rim on the spire whorls. Low columellar plaits anteriorly, fasciole low, the fasciolar ridge weak, pigmented. Exterior colours range from white to cream to grey and golden-brown, spotted or maculated with darker colours of grey, brown, russet and blue tones. A few immaculate, some with a grey or brown spiral band on the shoulder. Interior brown, paler in the smallest shells, columellar callus white.

35 x 15 to 14.5 x 6 mm (ht x w)

Dehiwela, Auburnside beach, intertidal, burrowing in sand at strand line with receding waves, mostly small sizes, just one 31 mm; Colombo, Diyambin Gala, 13 m, on sand bottom, the largest found at 35 mm; Maggona, Thudawa Bay, 1 m, on sand bottom near shore, 30 mm.

It is noteworthy that only the very small shells were found riding the waves and burrowing into sand high up a beach. The largest shells were found by diving, on sublittoral sand. This suggests changing habits with maturity.

Note: Kirtisinghe, 1978 lists both *Oliva oliva* Linn. and *Oliva ispidula* Linn. The shell figured and described as *O. oliva* is a mis-identification of *O. vidua*. Those figured as *O. ispidula*, a name that is not listed in MolluscaBase (July, 2020) are *O. oliva*.

- Eisenberg, 1989 p. 123; Oliver, 1975 p. 210; Abbott, 1994 p.67; Kirtisinghe, 1978 p. 87 as *O. ispidula*.

7. *Oliva flammeacolor* (Petuch & Sargent, 1986)

[*Oliva tremulina flammeacolor* Petuch & Sargent, 1986 - synonym]

[*Oliva reticulata* (Röding, 1798) in the July 2020 version]

Shells large and heavy with a small, pointed spire. Suture deeply channelled, a rim of callus above coating the spire whorls. Columella largely smooth except at the anterior end where it is strongly plicate. Fasciole with a rounded fasciolar ridge. Shells flesh-coloured, suffused with orange, brightest at the columella and lip edge, interior paler; grey-brown reticulations or crowded axial rows of zigzags, three interrupted oblique spiral bands—below suture and mid-body distinct, anterior indistinct, being partially obscured by the fasciole that has a flesh-coloured margin and the ridge barred in a dark colour.

79 x 35, 78 x 33, 74.5 x 31 mm (ht x w).

Beruwela, taken on baited fishhook from 35 m depth; Kirinda, purchased, intense colour, ground and interior orange; Batticaloa, Kalkudah, fishing trash, various sizes. Largest 79 mm, no find data,

- Det. Pierre Recourt as *Oliva flammeacolor*, personal communication. Accepted in WoRMS as *Miniaceoliva*.

8. *Oliva sericea* (Röding, 1798)

Orange-mouth olive

[*Oliva textilina* Lamarck, 1811]

Shells large and heavy with small, pointed spires, widest above mid-body. Suture deeply channelled, a rim of callus above coating the spire whorls, a beaked projection beyond the lip margin. Columella plicate throughout its length, strongly plicate at the anterior. Fasciole flat. Ground colour cream, heavily spotted and marked with axial zigzag lines in chocolate brown condensing to form three spiral bands, the anterior-most indistinct being obscured by the fasciole. Apertures light apricot, the columella in the ground colour.

79 x 35 – 47 mm.

Hikkaduwa, crab occupied, by diving; Tangalle and Kirinda purchased from vendors, the largest 79 mm.

Light orange coloured mouth is said to be characteristic, but shells with white apertures are also illustrated. The present collections all have light apricot apertures—fading in old collections.

- Eisenberg, 1989 p.124; Oliver, 1975 p. 212; Abbott p. 67; Kirtisinghe, 1978 pp. 86-87 (as *textilina* & *sericea*); Abbott & Dance, 1982 pp. 190-191.

9. *Oliva todosina* Duclos, 1840

[*Oliva sidelia* Duclos, 1835 in the July 2020 version]

Small stubby shells with low pointed spires, tapering to anterior but more or less cylindrical below spire. Suture deeply channelled, a rim of callus above the last whorl spreading over the spire. Columella is plicate throughout. Fasciole low, hardly discernible. Shells cream with a variable network of brown, condensing to form two spiral brown bands at the posterior and the mid-body; the suture edge marked by a row of brown flames on a marginal band of ground colour.

19.6 x 9.2; 19 x 8.8; 16 x 7 mm (ht x w).

Colombo, off Wellawatte, 13 m and Ratmalana, 20 m, empty on the reef and alive on sand, by diving.

- Det. Pierre Recourt, personal communication.

10. *Oliva kremerorum* Petuch & Sargent, 1986

[*Oliva tremulina* Lamarck, 1811 in the July 2020 version]

Shells medium large, widest at about mid-body, tapering more to the anterior end than towards the spire. Distinct pointed spire, the sides concave in the banded forms, but convex in the chocolate and golden forms. Suture deeply channelled, the upper whorls glazed with callus. The columellar callus extends above the suture but is not prolonged upwards. The chocolate and golden forms have a thicker layer of callus on the penultimate whorl, giving the convex spire profile. The columella is plicate throughout. The fasciole is smooth. Ground colour flesh-pink overlaid with grey-brown axial zigzag lines, leaving an unmarked subsutural band with a few spots on the edge of the suture. There are three variable broad oblique spiral bands, the same colour as the zigzag markings or a rich chocolate, below the suture, at mid-body and at the anterior end mostly obscured by the fasciole. Interior and columella white.

56.35 x 24.3, 50 x 20.4, 41 x 16 mm (ht x w).

Wellawatte, Kinross, empty on sand bottom; Kirinda, purchased at shell market, chocolate-brown & golden; Batticaloa, Kalkudah, fishing trash.

- Det. Pierre Recourt, personal communication.

Note: *Oliva miniacea* (Röding) is listed in Kirtisinghe, 1978 (p. 86) with an illustration and description of a shell that fits this collection. Recourt, pers. comm., is of the opinion that this is probably *O. flammeacolor*. *Miniaceoliva miniacea* (Röding, 1798) is accepted in MolluscaBase (as *Oliva miniacea*).

MolluscaBase/WoRMS lists *O. kremerorum* as a subspecies of *O. irisans*, with a number of colour forms (including concolor chocolate-brown and gold) as varieties of *irisans*. All shells in the writer's collection have white interiors, including chocolate-brown and gold concolor forms. The views of Recourt are followed here, all the banded and concolor forms being grouped under *O. kremerorum*.

11. *Oliva macleaya* Duclos, 1840[*Oliva vidua* (Röding, 1798) in the July 2020 version]

Shells medium sized, tapering more towards the anterior than the posterior, widest posterior to the mid-body. Small pointed spire that is partially sunken below the later whorls. Suture deeply channelled, a rim of callus above the last whorl spreading over the spire. Columella plicate throughout, the fasciole low, coloured as the rest of the shell. Exterior light grey-brown heavily maculated with chocolate-brown spots and axial zigzags. Two faint spiral bands discernible on the apertural aspect, one below the suture and the other at mid-body, represented by a few dark spots or a break in the pattern. Interior and columella white.

47.5 x 23.3, 32.7 x 15.2, 21.7 x 10.4 mm (ht x w).

Colombo, Mount Lavinia Hotel Bay, 5 m, by diving; Batticaloa, fishing trash.

- Det. Pierre Recourt, personal communication.

12. *Oliva ozodona* Duclos, 1835[*Oliva nitidula* Duclos, 1835, *Olivella paxillus* Reeve, 1850 - synonyms][*Omogymna paxillus* (Reeve, 1850) in the July 2020 version]

Shells small, shouldered. The body whorl widest at shoulder, tapering anteriorly, spire tall and tapering with rounded tip. Suture channelled; the upper whorls glazed with callus. The columella plicate throughout. Fasciole wide, flat, the fasciolar ridge small. Cream, covered by a faint brown network. Purple-brown patches form a broken sub-sutural band. Columella and aperture of the same colour, callus white. Two purple spiral bands on the inside of the outer lip.

18.6 x 7, 17.6 x 7.4 mm (ht x w).

Beruwela shoal, 26 m, empty; Mount Lavinia, Palagala (reef), 13 m, empty on sand. Both by diving.

- Det. Pierre Recourt, personal communication.

**CANCELLARIIDAE Forbes & Hanley, 1815****Nutmeg shells**

Shells small, thick, ovate or globose with large body whorls; the whorls loosely wound in some (*Trigonostoma*). Surface ornament mostly strongly cancellate, with spiral and axial ribs; some with sharply angled shoulders. Large, somewhat triangular aperture, lirate inside. Columella strongly plicate, with light parietal callus. Some with small siphonal notch, many umbilicate. No operculum. Usually shades of brown. Herbivorous, intertidal, shallow to relatively deep waters.

(Eisenberg, 1981 - 1989 edition p. 192)

1. *Scalptia scalarina* (Lamarck, 1822)[*Cancellaria scalarina* Lamarck, 1822]

A single beached shell is in the collection—weathered, damaged and bleached. The plate shows a shell in the ACM Niyas collection.

Shell globose with a turreted spire. Strongly shouldered, suture constricted. Aperture triangular, outer lip lirate, inner lip reflected on to the body whorl, umbilicus present. Columella with three strong plications. Sculpture of keeled, oblique axial ribs projecting above the shoulder in saw-tooth points, crossed by spiral striae.

17.62 x 11.8 mm (ht x w) - Enoke Corea collector; 30 x 25 mm - ACM Niyas collection.

Kalpitiya, no find data for the other shell.

Kirtisinghe, 1978 lists *Cancellaria scalarina* (= *Scalptia scalarina*) and *Trigonostoma trigonostoma* (Deshayes), a name not listed in MolluscaBase. *Trigonostoma trigonostoma* Lamarck, 1822 is a synonymised name (in Hardy's Internet Guide) for *Trigonostoma scalare* (Gmelin, 1791). Similar to *S. scalarina* but with the whorls partially unwound.

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