

BULLIAS, NASSAS and MUD WHELKS/DOG WHELKS**List of species**

1. *Bullia tranquebarica* (Röding, 1798)
2. *Bullia vittata* (Linnaeus, 1767)
3. *Cyllene pulchella* Adams & Reeve, 1850
4. *Nassarius albescens* (Dunker, 1846)
5. *Nassarius castus* (Gould, 1850)
6. *Nassarius conoidalis* (Deshayes, 1833)
- 6a. *Nassarius foveolatus* (Dunker, 1847)
7. *Nassarius distortus* (A. Adams, 1852)
8. *Nassarius dorsatus* (Röding, 1798)
9. *Nassarius gaudiosus* (Hinds, 1844)
10. *Nassarius glans* (Linnaeus, 1758)
11. *Nassarius livescens* (Philippi, 1849)
12. *Nassarius nodiferus* (Powys, 1835)
13. *Nassarius pullus* (Linnaeus, 1758)
14. *Nassarius reeveanus* (Dunker, 1847)
15. *Nassarius stolatus* (Gmelin, 1791)
16. *Reticunassa neoproducta* (Kool & Dekker, 2007)
17. *Phos* cf. *senticosus* (Linnaeus, 1758)
18. *Phos textus* (Gmelin, 1791)

Other species reported from Sri Lanka

- Nassarius olivaceus* (Bruguière, 1789)
Alectrion suturalis (Lamarck) – unverified name
 - Kirtisinghe, 1978

NASSARIIDAE Iredale, 1916 (1835)

Bullinae, Cylleninae, Nassariinae and Photinae
 Bullias, Nassas and Mud Whelks/Dog Whelks

Shell ovately rounded, usually with a fairly high, conical spire and large body whorl anteriorly bordered by a strong spiral groove. Outer surface sculptured with axial ribs and spiral cords, sometimes smooth. No umbilicus. Aperture rather small and irregularly rounded, with a very short, recurved siphonal canal. Outer lip often somewhat thickened, smooth or denticulate inside, sometimes with a shallow groove or slot posteriorly. Inner lip smooth or weakly ridged but not folded, calloused and more or less expanded into a smooth shield. Operculum corneous, smaller than the aperture, with a subterminal nucleus and often serrate along margins.

Mostly common on intertidal and sublittoral, temperate to tropical, soft bottoms, in marine and brackish water environments. Mainly carrion-feeding, active animals. Can glide rapidly on sand or mud, with fleshy siphon expanded as they search for food, or quickly bury themselves in the substrate. Often living in colonies.

(Poutiers, 1998 – p. 576.)



Nassariidae; Bullinae



Bullia tranquebarica
Actual size 20 x 18.4 mm



Bullia vittata
Actual size 36 x 14.5 mm

Nassariidae; Cylleninae



Cyllene pulchella
Actual size 11.3 x 6.5 mm

Nassariidae; Nassariinae



Nassarius albescens
Actual size 15.6 x 9 mm



Nassarius castus
Actual size 17 x 9 mm



Nassarius castus
Actual size 21 x 12 mm



Nassarius conoidalis
Actual size 23 x 16 mm



Nassarius foveolatus
Actual size 18 x 9.6 mm



Nassarius distortus
Actual size 18 x 10 mm



Nassarius dorsatus
Actual size 33.5 x 18 mm



Nassarius gaudiosus
Actual size 22 x 12 mm



Nassarius glans
Actual size 21.1 x 12 mm



Nassarius livescens
Actual size 21.4 x 13 mm



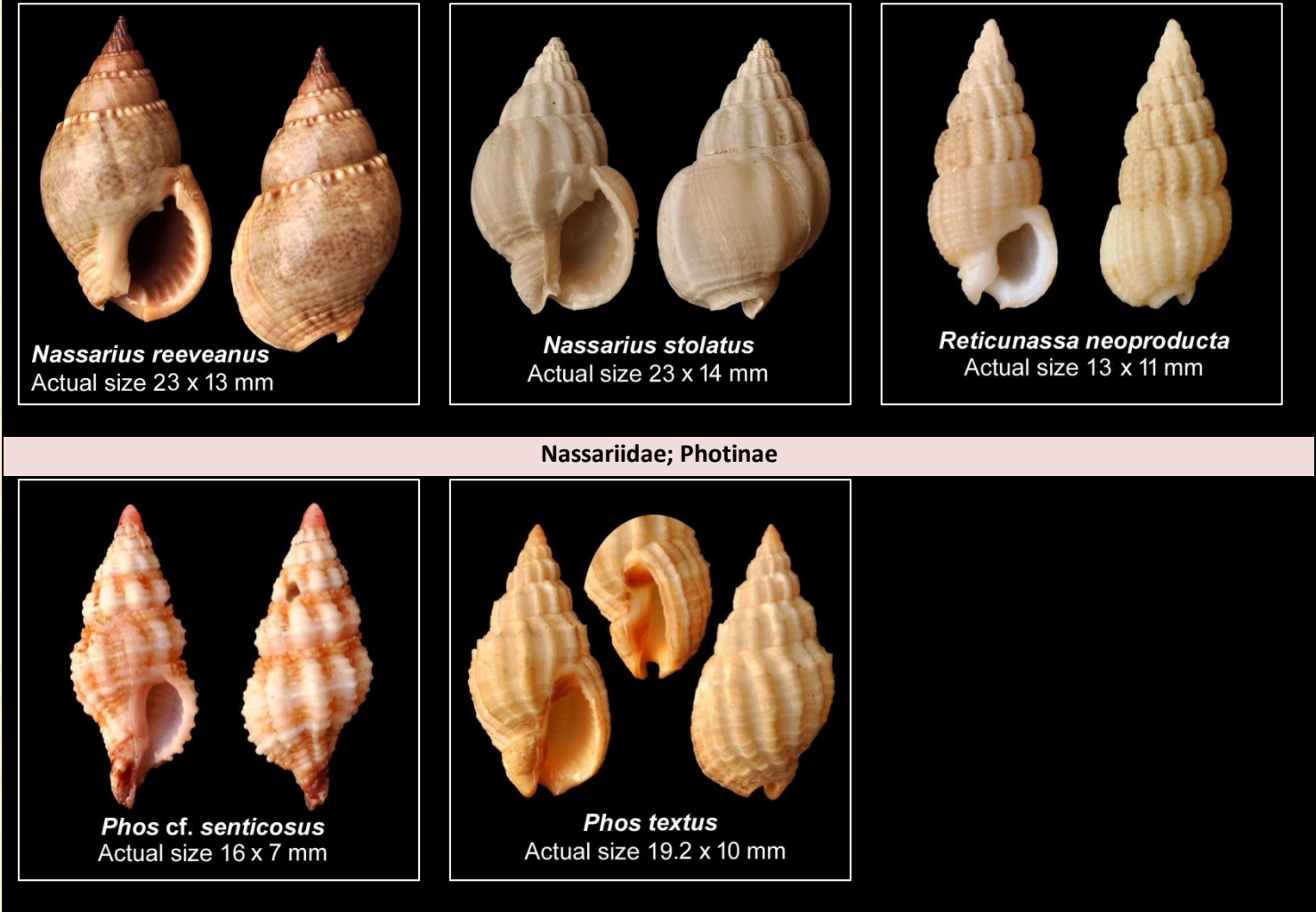
Nassarius nodiferus
Actual size 26.5 x 15 mm



Nassarius pullus
Actual size 18.55 x 12 mm



Nassarius pullus
Actual size 18.6 x 12 mm



1. *Bullia tranquebarica* (Röding, 1798) Lined bullia

[*Plotia tranquebarica* Röding, 1798; *Bullia bellangeri* (Kiener, 1834)]

Subfamily Bulliinae

Tall conical shells with pointed, suture constricted, whorls with rounded sides and slightly inflated body whorls. Sculpture consists of a single rounded subsutural cord with a series of shallow spiral incised lines, that are deeper on the anterior part of the body whorl where there are a series of spiral cords. Outer lip thin, edentulous, columella smooth. Anterior siphonal canal a wide notch, aperture bee-hive shaped. External colour pinkish with fine, darker axial streaks. Interior white (is probably an immature shell). Two juvenile shells are whitish with faint streaking. 20x18.4mm (ht x w).

The foot of this animal was not observed. The operculum is proportionately larger than those of *B. vittata*.

Galle Harbour, off Marine Drive, 5 m, burrowing in sand, by diving.

2. *Bullia vittata* (Linnaeus, 1767) Ribbon Bullia

[*Buccinum vittatum* Linnaeus, 1767; *Ancilla alba* Perry, 1811, *Terebra Buccinoidea* Blainville, 1824]

Subfamily Bulliinae

Tall conical shells with pointed spires, suture constricted, whorls with rounded sides and slightly inflated body whorls. Sculpture consists of two subsutural cords divided by axial grooves into a series of squarish nodules, the upper cord sometimes divided unequally into two by a shallow spiral groove, resulting in three rows of nodules. The remainder of the whorls smooth and shiny, faintly marked by shallow spiral incised lines, more obvious on the body whorl that is also marked by axial grooves over the lip. Outer lip thin, edentulous, columella smooth. Anterior siphonal canal a wide notch, aperture bee-hive shaped. External colour ivory, tinged with pink; interior tawny with lip edged with white in adult shells, wholly white in young shells. Operculum very small, yellowish, thin, transparent, elliptical, pale pinkish in colour.

The animals possess very large, discoid feet coloured white. They are carried up the beach by waves, extending the feet to dig into the sand rapidly as the waves recede (similar to *Latona* clams). 36 x 14.5 mm (ht x w)

Trincomalee, Nilaveli, intertidal, burrowing in sand, lower shore.

3. *Cyllene pulchella* Adams & Reeve, 1850 Glossy bullia

[*Cyllene glabrata* A. Adams, 1851, *Cyllene striata* A. Adams, 1851]

Subfamily Cylleninae

Stubby shell, short pointed spire, inflated body whorl, incised suture. Edge of lip thick, bevelled, few faint lirae within. Columella smooth, two anterior plications. Anal canal poorly developed. Parietal shield thin and poorly developed. Axial ribs crossed by spiral threads on spire, remaining as small shoulder nodules on the body whorl crossed by 3-4 granulated spiral threads. Six to seven incised spiral lines on anterior of body whorl, some growth striae on lip. Cream, honey-coloured network overall, few chestnut subsutural spots on body whorl and a large blotch on the dorsum. 11.3 x 6.5 mm (ht x w)

Galle Harbour, 'Pipe Wreck' site, 7 m, crab occupied, by diving.

4. *Nassarius albescens* (Dunker, 1846) Whitish Nassa

[*Buccinum albescens* Dunker, 1846; *Nassa (Niotha) albescens* (Dunker, 1846),
Nassa bicolor Hombron & Jacquinot, 1848, *Nassarius (Niotha) albescens* (Dunker, 1846)]

Subfamily Nassariinae

Shell small, with inflated body whorl and short pointed spire, suture constricted. Sides of whorls gently rounded. Aperture elliptical, outer lip thickened, bevelled, strongly lirate within. Inner lip reflected forming a small parietal shield, edge free anteriorly. Columella with a posterior tooth bordering the anal canal and a few obsolete plaits anteriorly. Sculpture of rounded oblique axial ribs with narrower interspaces crossed by spiral grooves. Uppermost groove deeper and wider cutting off a row of small rounded subsutural nodules. Shell white diffusely banded with chestnut, lips, columella, and interior white, the external colour showing through. Operculum thin, edge serrated. 15.6 x 9 mm (ht x w)

Galle Harbour, 'Pipe Wreck' site, 7 m, crab occupied, by diving; Trincomalee, Marble Bay, 1 m, sand bottom, live collected 1 p.m.

Note: "White-cream; sometimes with one or two spiral bands; apical whorls and protoconch usually purple-brown; to approx. 20 mm." (Sally Kaicher cards). *N. albescens gemmuliferus* (A. Adams) now accepted as *N. gemmuliferus* is said, in the subsequent card, to differ "from the nominate species in having white to tan nuclear whorls, post-nuclear whorls with more riblets and a less expansive parietal shield..." The only shell showing colour seems to have a purplish protoconch and nuclear whorls, but a decidedly small parietal shield.

5. *Nassarius castus* (Gould, 1850)

[*Nassa casta* Gould, 1850 the original combination, and 19 synonyms incl. *Nassa maldivensis* E. A. Smith, 1903 and
Nassarius maldivensis (E. A. Smith, 1903)]

Subfamily Nassariinae

Shells ovate with tapering spires ending in a point. Suture constricted; sides of whorls slightly rounded. Aperture elliptical, anterior canal a wide notch, well-formed anal canal. Outer lip thin backed by a varix, edentulous, lirate within. Inner lip reflected, anterior end free, lirate. Columella arcuate with a tooth guarding the anal canal. Sculpture of strong, flexuous, narrowly rounded axial ribs, crossed by spiral grooves, the uppermost groove cutting off a row of subsutural nodules formed by the upper ends of the ribs. Shells faded and weathered. 21 x 12 mm (ht x w)

Discussion: This is not *N. livescens* as originally determined, but agree more with images of *N. castus*: shells slenderer and more elongated than 'livescens' as decided later (see no. 11). Spiral grooves shallow. Spire not stepped, no shoulder. However, rather confusingly, some images in the Hardy collection (gastropods.com) from various sources are shouldered and granulated between grooves. These are disregarded here and 'castus' is assigned to slender shells with no shoulders and shallow grooves.

Puttalam, Vanathavillu, Pubudugama Totupola, beached, Puttalam, Palavi Salterns, lagoon shore & ditches, beached; Kalpitiya, no find data, collected by A. C. M. Niyas. All collections faded and weathered.

6. *Nassarius conoidalis* (Deshayes, 1833) Cone-shaped nassa, Jewelled dog whelk

[*Buccinum conoidale* Deshayes, 1833 and along list of synonyms.]

Subfamily Nassariinae

Shell with inflated body whorl and short, stepped spire. Suture channelled; sides of whorls gently rounded. Aperture broadly elliptical, outer lip thin, crenulate, strongly lirate within. Inner lip reflected forming a parietal shield, edge free, the body whorl sculpture showing through. Columella arcuate, a tooth guarding the anal canal. Sculpture of slightly oblique axial ribs and spiral ridges, the crossing points raised into rounded granules separated by deep axial and spiral grooves. The subsutural row of granules are distinctly domed and prominent. Cream coloured, interior white. 23 x 16 mm (ht x w)

Off Colombo, Vatiya Parai (reef), 32 m, empty, litter carried by the sea urchin *Salmacis virgulatus*; Galle Harbour? empty, weathered.

Note: Colour cream, may be banded, to 30 mm (Sally Kaicher cards)

6a. *Nassarius foveolatus* (Dunker, 1847)

Pitted nassa

[*Buccinum foveolatum* Dunker, 1847 - original. *Nassa foveolata* (Dunker, 1847), *Nassarius (Zeuxis) foveolatus* (Dunker, 1847), *Nassarius (Zeuxis) semiplicatoides* A.-J. Zhang & Z.-J. You, 2007 - synonyms.]

Shell elongate-ovate with tapering pointed spire. Suture simple, sides of whorl gently rounded. Aperture elliptical, external lip thin backed by a varix, with spaced teeth, internal lip reflected, adherent to body whorl, margin free. Well-formed anal canal, anterior canal open. Columella with strong teeth. Sculpture cancellate - consisting of oblique axial ribs with strong spiral threads in the interspaces.

18 x 9.6 mm (ht x w)

Kalpitiya, no habitat details apart from comment "Mangrove", weathered, bleached. Collected by A. C. M. Niyas.

7. *Nassarius distortus* (A. Adams, 1852)

Necklace, Distorted nassa

Nassariinae

[*Nassa distorta* A. Adams, 1852; *Nassa (Alectrion) distorta* A. Adams, 1852, *Nassarius (Niotha) distortus* (A. Adams, 1852), *Nassa lachrymosa* Reeve, 1853]

Shell with tall spire, incised suture. Whorls axially ribbed: thick, rounded, complete in the upper whorls, fading below in the lower whorls. Upper ends crossed by a spiral groove forming a row of granules above and another row below. The obsolete axial ribs below with low granules barely distinguishable. The larger part of the body whorl smooth, a few incised lines at the anterior end. Lip thick, lirate within. Columella smooth, a posterior tooth beside the anal canal. Parietal shield small. Blue-grey, irregularly banded with paler shades, lip and columella white.

18x10 mm (ht x w)

No find data recorded.

Note: *N. distortus* is described with "ribs narrow, sinuous, separated from the subsutural nodes by a channel." The colour as "ivory and cream-tan with greenish brown band at periphery." *N. distortus f. lachrymosus* (Reeve) appears to have obsolete ribs on the body whorl with subsutural nodules and draws this comment: "This handsome, polished variety apparently occurs occasionally with typical *distortus* in the Philippines." (Sally Kaicher Cards) The colour is not described but appears to be a darker coloured shell in the black & white images. (*Nassa lachrymosa* Reeve, 1853 is a synonym of *N. distortus*.)

8. *Nassarius dorsatus* (Röding, 1798)

Channelled nassa, Unicolour dog whelk

Nassariinae

[*Buccinum dorsatum* Röding, 1798; *Nassa (Alectrion) pallidula* A. Adams, 1852, *Nassa (Zeuxis) pallidula* A. Adams, 1852, *Nassa dorsata* (Röding, 1798), *Zeuxis dorsatus* (Röding, 1798) and many more synonyms.]

Shell ovate with pointed, stepped spire. Suture channelled; sides of whorls gently rounded. Aperture elliptical, siphonal canal open, anal canal well-formed. Outer lip thin backed by a varix, a series of short spines anteriorly, lirate within. Inner lip reflected, margin free, lirate within. Columella smooth with a tooth bordering the anal canal. Exterior smooth, early spire whorls obliquely ribbed, the body whorl with a series of spiral grooves anteriorly and a few axial grooves near the varix. Colour grey tinged with purple and variable brown blotches. Interior violet. Lips white.

33.5 x 18.0 to 37.6 x 18.4 mm (ht x w)

Wellawatte, Kinross beach, fishing trash (bottom-set crab net); Beruwela, beach, fishing trash (prawn net).

9. *Nassarius gaudiosus* (Hinds, 1844)

Gaudy Nassa

Nassariinae

[*Nassa (Telasco) gaudiosa* Hinds, 1844; *Alectrion gaudiosus* (Hinds, 1844), *Nassa (Zeuxis) gaudiosa* Hinds, 1844, *Nassarius (Niotha) gaudiosus* (Hinds, 1844) and many other synonyms.]

Shell ovate with pointed spire and inflated body whorl. Suture constricted; sides of whorls rounded. Aperture elliptical, outer lip thin, edentulous, lirate within. Anterior canal open, a well-formed anal canal. Inner lip reflected, anterior margin free, lirate. Columella arcuate with a posterior tooth guarding the anal canal. Sculpture of oblique axial ribs on the earliest whorls and a series of axial grooves bordering the outer lip with a few shallow spiral grooves anteriorly, the rest of the shell smooth and glossy. Colour white overlaid with pinkish-tan streaks that coalesce over the dorsum of the body whorl, and a row of subsutural dark spots.

22 x 12 mm (ht x w)

Colombo, only find year recorded (1990), empty.

10. *Nassarius glans* (Linnaeus, 1758)

Glans nassa, Acorn dog whelk

Nassariinae

[*Buccinum glans* Linnaeus, 1758; *Nassa suturalis* Lamarck, 1822, *Nassarius (Alectrion) glans* (Linnaeus, 1758) and many other synonyms.]

Shell thin, ovate, with stepped spire. Five whorls with rounded apex consisting of larval whorl. Suture constricted with rounded sides. Outer lip thin, damaged, a juvenile shell. Rounded axial ribs crossed by incised spirals prominent on early whorls, becoming obsolescent on later whorls, the ribs persisting as rounded shoulder nodules on the body whorl. Cream, the incised spirals coloured cinnamon on the early whorls, persisting as spiral lines on later ones. A few patches of cinnamon on the body whorl, especially between the shoulder nodules.

21.1 x 12mm (ht x w)

Jaffna, Kachchativu (Island), beached empty shell. Collected by Devaka Weerakoon.

11. *Nassarius livescens* (Philippi, 1849)

No common name (Hardy - gastropods.com)

[*Buccinum livescens* Philippi, 1849; *Nassa (Niotha) livescens* (Philippi, 1849), *Niotha livescens* (Philippi, 1849) and many other synonyms]

Shells ovate, shouldered, with inflated body whorl and short, stepped spire. Suture constricted, subsutural portion of whorl forming a shelf with angled shoulder, straight below. Aperture elliptical, anterior canal a wide notch, anal canal absent. Outer lip thin, edentulous. Inner lip thin, adnate to body whorl. Columella smooth. (All four shells appear to be immature, hence absence of lip varix, anal canal and poorly developed inner lip.) Sculpture is of strong, broadly rounded axial ribs crossed by spiral grooves, the uppermost groove cutting off a row of strong rounded nodules formed by the upper ends of the axial ribs, at the edge of the shoulder. Shell grey in colour, lighter over the ribs and nodules, a faint mid-body white spiral line, best seen in the lilac coloured interior. 21.4 x 13 mm (ht x w)

Trincomalee, Marble Bay, 1-2 m, live collections on sand bottom during the day.

Note: (1) Misidentified as *Nassarius unicolor* and *pallidulus* – both names being synonyms of *N. dorsatus*. *N. pallidulus* was listed in the 2012 Gastropod Checklist (Fernando, 2012).

(2) The taxon *N. livescens* in gastropods.com site (Hardy) has a number of shells illustrated, of varying colour: from pale brown and greyish hues to darker brown, with blotches of darker colour and light bands. All show spiral grooves across axial ribs, the interspaces between grooves granular. The degree of shouldering is variable, none as pronounced as the Marble Bay shells.

12. *Nassarius nodiferus* (Powys, 1835)

Nodular nassa

Nassariinae

[*Nassa nodifera* Powys, 1835; *Nassa (Alectrion) nodifera* Powys, 1835, *Nassa (Telasco) stoliczkana* G. Nevill & H. Nevill, 1874, *Nassa stolidia* Adams, 1852, *Nassarius (Niotha) nodifer* (Powys, 1835) among other synonyms.]

Shells ovate with tapering, pointed spires as tall as the body whorl. Suture constricted; sides of whorls very slightly rounded. Aperture elliptical, anterior canal a wide notch, well-formed anal canal. Outer lip thin backed by a varix, edentulous, lirate within. Inner lip reflected, anterior end free, lirate. Columella arcuate with a tooth guarding the anal canal. Sculpture of strong, rounded, flexuous axial ribs with narrow interspaces, crossed by a spiral groove cutting off a row of rounded subsutural nodules and a series of spiral grooves anteriorly, otherwise the ribs smooth and glossy. Most shells faded and weathered, one greyish with a mid-body white spiral. Interior purple with a white spiral, outer lip and columella white. 26.5 x 15 mm (ht x w)

Jaffna, Kachchativu (Island), beached empty shells collected by Devaka Weerakoon; Mannar, abandoned fish pond, empty, faded, weathered; Kalpitiya, no find location, 6 nos. empty shells collected by A.C.M. Niyas; Puttalam, Karativu, Serakkuli, lagoon shore, beached, faded, eroded, damaged.

Notes: "greyish, pale spiral bands" (Sally Kaicher cards); Hardy (gastropods.com) lists '*nodiferus*' as a synonym of '*castus*'.

13. *Nassarius pullus* (Linnaeus, 1758)

Black nassa; Olive dog whelk; Ribbed dog whelk

Nassariinae

[*Buccinum pullus* Linnaeus, 1758 orig. *Arcularia (Plicarcularia) thersites* (Bruguière, 1789), *Nassarius (Plicarcularia) pullus* (Linnaeus, 1758), *Arcularia thersites* (Bruguière, 1789), *Nassarius thersites* (Bruguière, 1789) and many other synonyms.]

Shell squat and bulbous with a prominent dorsal hump and a thick parietal shield. Spire low, pointed. Suture simple. Aperture elliptical, outer lip thickened, with a row of small teeth. Anterior canal open, anal canal narrow. Inner lip thick and callus forming a large oval parietal shield that extends on to the body whorl as high as the last two spire whorls and includes the outer lip. Columella arcuate with a posterior tooth guarding the anal canal. Sculpture of oblique axial ribs, with wide interspaces containing axial threads on the body whorl, the spire interspaces crossed by spiral threads. The sculpture obliterated in the midline by a dorsal swelling of the body whorl and replaced by axial threads on the side of the outer lip. A few spiral grooves anteriorly on the body whorl. All collections faded and weathered.

Mannar, abandoned CFC fish pond; Kalpitiya, no location, collected by A.C.M. Niyas; Puttalam, Karativu, Serakkuli, lagoon shore. All collections beached, faded and weathered.

14. *Nassarius reeveanus* (Dunker, 1847)

No common name (Hardy, gastropods.com)

Nassariinae

[*Buccinum reeveanum* Dunker, 1847; *Nassarius (Telasco) reeveanus* (Dunker, 1847), *Nassarius (Zeuxis) lentiginosus* (A. Adams, 1852), *Nassarius (Zeuxis) zonalis* Kira, 1954 and many other synonyms]

Shell ovate, inflated body whorl, pointed spire, suture incised. Outer lip thin, backed by a varix, lirate within. Inner lip reflexed; anterior portion free. Columella smooth, a posterior tooth beside the well-developed anal canal, a few anterior folds. Apical whorls obliquely ribbed crossed by spiral threads. Lower whorls smooth, a row of rounded subsutural granules, anterior end with incised spiral lines. Ground colour grey, finely peppered with purplish dots to varying degrees, the granules whitish. Lip and columella light grey, darker within. 23 x 13 mm (ht x w)

Dehiwela, no find data, a juvenile shell; Mount Lavinia, Bellangala rocky islet, 5 m, crab occupied; Mount Lavinia, reef south of Bellangala, 5 m, crab occupied; Mount Lavinia, Hotel Bay, 3 m, under rock, live collection. All by diving.

15. *Nassarius stolatus* (Gmelin, 1791)

No common name (Hardy, gastropods.com)

Nassariinae

[*Buccinum stolatum* Gmelin, 1791; *Nassa stolata* (Gmelin, 1791), *Nassarius (Niotha) stolatus* (Gmelin, 1791)]

Shell ovate, body whorl inflated, the tapering spire shorter, pointed. Suture constricted; sides of whorl rounded. Aperture broadly elliptical, outer lip thin, backed by a varix, lirate within. Inner lip reflexed, lirate, free anteriorly. Columella with a posterior tooth guarding the well-formed anal canal. Sculpture of strong axial ribs with wide interspaces, becoming obsolete on the body whorl from about the mid-line to the lip, those on the apical whorls crossed by spiral threads, a few spiral grooves cross the anterior. All collections are weathered and faded.

23x14 mm (ht x w)

Puttalam, Vanathavillu, Pubudugama Totupola; Puttalam, Palavi Salterns, lagoon shore & ditches. Beached, empty, faded and weathered shells.

Note: Internet images show creamy-white shells with brown banding.

16. *Reticunassa neoproducta* (Kool & Dekker, 2007)

Nassariinae

Shell slender, tall tapering spire, body whorl not swollen. 8 whorls. Apex rounded. Spire straight-sided, sutures constricted, whorls convex. Aperture broadly oval, short wide siphonal canal. Outer lip thickened, bevelled, three low teeth and a nodule bordering the siphonal canal. Inner lip reflected on to body whorl, columella concave, smooth apart from a nodule bordering the anal canal. Sculpture consists of thick axial ribs, 15 on body whorl, interspaces as wide, crossed by spaced, evenly distributed spiral threads. Dirty white in colour.

13 x 11mm (ht x w)

Mount Lavinia, Bellangala, 4m, under a small rock, by diving.

Notes: 1) Hardy (gastropods.com) images show unicolor tan, greyish-brown, grey/russet spiral bands. Wide distribution includes Indo-Pacific.

2) This shell, collected in 1980, was mis-identified as *Nassarius pauper* (Gould, 1850), a synonym being *Reticunassa dermestina* (Gould, 1860), and inadvertently omitted from the 2012 checklist.

17. *Phos cf. senticosus* (Linnaeus, 1758)

Common Pacific/Thorny phos

Photinae

[*Murex senticosus* Linnaeus, 1758; *Cancellaria senticososa* (Linnaeus, 1758)]

Description is of a weathered, damaged shell that was crab occupied, referred to '*senticosus*'.

Shell slender, fusiform, protoconch present, with damaged outer lip including anterior-most extremity. Suture constricted, channelled. Aperture elliptical, outer lip damaged, lirate within, anterior siphonal canal straight, damaged. Columella smooth. Anal canal a small notch. Sculpture of axial ribs with narrow interspaces crossed by finely granular spirals. Ground colour white crossed by bands of pink, interior white.

16 x 7 mm (ht x w)

Maggon, Thudawa Bay, shallows, 1m, crab occupied, by wading.

Note: *Phos senticosus* (Linnaeus, 1758) is listed in Kirtisinghe, 1978. The shell described is 40 mm high, is said to have "...numerous spiral striae bearing small spines..." The colour is given as "Greyish, with darker spiral band on about middle of body whorl." The coloured image in Oliver, 1975/1989 Sixth impression is of a similar coloured shell. The index shell is possibly '*senticosus*' but looks slenderer. *Phos roseatus* was considered in view of the colouration, but that species has narrow axial ribs with wide interspaces. Confer '*senticosus*'.

18. *Phos textus* (Gmelin, 1791)

Woven Pacific/Blue-mouth phos

Photinae

[*Buccinum textum* Gmelin, 1791; *Buccinum cancellatum* Quoy & Gaimard, 1833, *Phos varians* Sowerby, 1866]

Ovate shells with pointed spires. Suture constricted, shouldered whorls. Aperture elliptical, outer lip thin, lirate within. Inner lip adnate to body whorl, columella smooth. Anterior canal open, anal canal wide. Sculpture is of oblique, rounded axial ribs, the interspaces as wide crossed by spiral threads, every fifth or sixth being stronger. At the shoulder the strong threads are drawn out into small spines. Off white to light grey. Inside of lip salmon pink (seen on the only mature shell); the anterior end of the columella and the anal canal dark pink. Operculum thin, translucent, yellowish with entire margin.

19.2 x 10 mm (ht x w)

Trincomalee, Kinniya, 1 m, sand bottom, live collection by diving.

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