DRUPES and PURPURAS

List of species

Subfamily: Rapaninae Gray, 1853

1. *Drupa ricinus* Linnaeus, 1758
2. *Indothais lacera* (Born, 1778)
3. *Indothais sacellum* (Gmelin, 1791)
4. *Mancinella alouina* (Röding, 1798)
5. *Purpura bufo* Lamarck, 1822
6. *Purpura persica* (Linnaeus, 1758)
7. *Rapana rapiformis* (Born, 1778)
8. *Semiricinula tissoti* Petit de la Saussaye, 1852

Other species reported from Sri Lanka

Drupa morum Röding, 1798
Nassa francolina (Bruguière, 1789)
- Kirtisinghe, 1978
Semiricinula squamosa (Pease, 1868)
- de Silva, 2006
as *Drupella fusconigra* (Dunker, 1871)

MURICIDAE Rafinesque, 1815
Subfamily RAPANINAE Gray, 1853
Drupes and Purpuras

The family Muricidae is extremely large, and is treated in a number of subfamilies, these varying with the author. In this work the Sri Lanka species are described under the following subfamilies— Coralliophilinae, Muricinae, Rapaninae and Ergalataxinae. In Muricinae the opercula nucleus is subcentral to terminal (near or at the anterior end). Rapaninae possess opercula with lateral nuclei (at the right-hand side margin of the external surface).

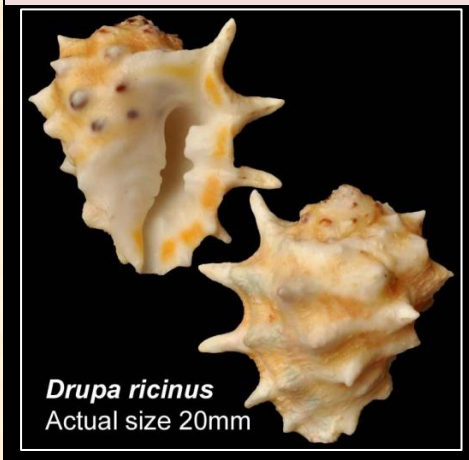
(Poutiers, 1998; de Bruyne, 2003)

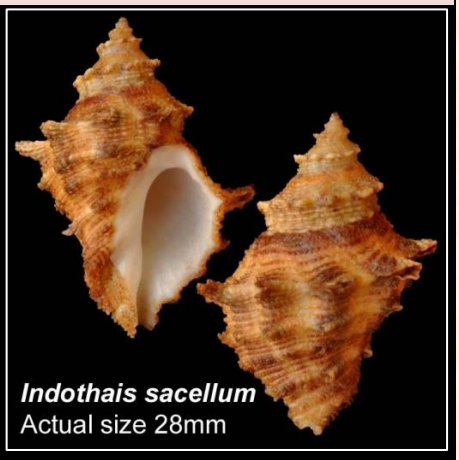
This section, titled Drupes and Purpuras, deals with the Subfamily Rapaninae. The other three subfamilies are treated in other sections: Babylons & coral shells (Coralliophilinae), Murex shells and Comb shells (Muricinae) and Drupellas& Rock shells (Ergalataxinae). For a fuller account of the family see the introduction to Muricinae.

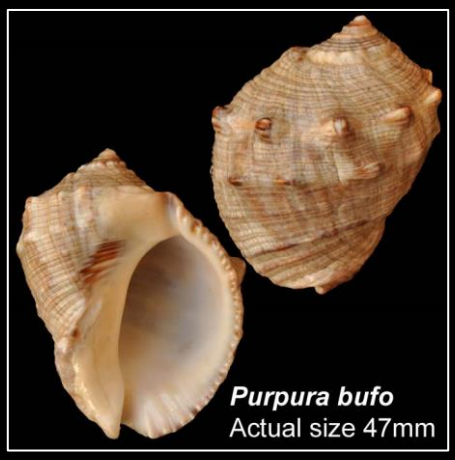
The Rapaninae are, by and large, small to medium small shells, bi-conical or with swollen body whorls and low spires. Ornamentation may be lacking or low, or better developed in others. *Indothais* Claremont, Vermeij, Williams & Reid, 2013 is a new genus following a reassignment of the Rapaninae genera based on molecular data.

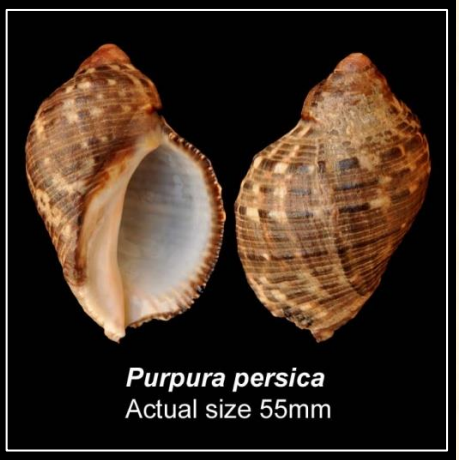


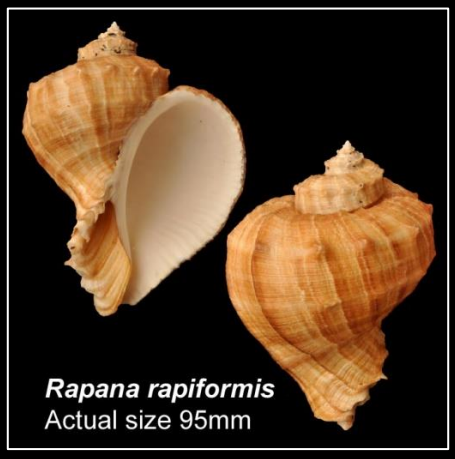

Muricidae; Rapanininae











1. *Drupa ricinus* Linnaeus, 1758 Spotted drupe; Spider-like castor bean

[*Murex ricinus* Linnaeus, 1758]

Shell thick, squat, ovate-triangular, with finger-like spines on the outer lip. Spire low, body whorl large and spiny, siphonal canal short and open. Aperture linear, narrowed by large projecting teeth on the outer lip: two blocks of fused teeth posteriorly and two teeth anterior. Columella with three folds anteriorly, the middle one double; inner lip spreading as a callus shield over the body whorl. Surface with five spiral rows of spines, more or less joined by low ridges, the longest at the shoulder, finger-like and bordering the lip, with rough cords in between. Dirty white, body spines black, lip spines white, aperture and interior white with a deep yellow line on the inner edge of the outer lip extending to the anterior end of the columella.

23 x 23 mm (ht x w including spines).

Kudawella Bay, 2-3 m, empty, amongst rocks, by diving.

Note: Much encrusted and eroded when collected. Cleaning left the dorsal spines sharp and white instead of blunt and black.

2. *Indothais lacera* (Born, 1778) Keeled or carinate rock shell

[*Murex lacerus* Born, 1778; *Cymia carinifera* (Lamarck, 1822); *Cymia lacera* (Born, 1778); *Thais carinifera* (Lamarck, 1822), *Thais lacera* (Born, 1778); *Thais mutabilis* in Kirtisinghe, 1978]

Strong-shelled, somewhat biconical, swollen body whorl, low, stepped spire with pointed apex. Simple suture, the peristome separated from the body whorl in mature shells. Sharply angled shoulder bearing triangular tubercles. Sculpture consists of crowded, irregular spiral cords crossed by growth lines and short axial ridges below shoulder tubercles. On the body whorl one spiral cord midway between the suture and the shoulder angulation progressively developed, becoming nodular such that in the apertural view the shoulder nodule is pushed down to about halfway down the outer lip, it being smaller than the one above. Outer lip crenulate, the columella smooth with a small parietal shield. Strong fasciole. Ground colour off-white, sparsely and irregularly mottled with quadrangular brown patches. Aperture and interior peach. Young shells are tinged with brown, the aperture and columella whitish callus, the parietal shield poorly developed; in juveniles (e.g. 33 mm) the interior striped with chocolate on a pink-orange background and devoid of callus and these colours showing through on the outside.

50 x 37 mm (ht x w).

Puttalam lagoon, at Kalpitiya, Anawasala (western shore), Vanathavillu, Pubudugama Totupola and Karativu, Serakkuli (eastern shore), fishing trash, abundant.

3. *Indothais sacellum* (Gmelin, 1791) Rough drupe

[*Murex sacellum* Gmelin, 1791; *Drupa muricina* Röding, 1798; *Murex rugosa* Born, 1780 (non Born, 1778)]

Shell bi-conical, spire tall and pointed, body whorl tapering, widest at the shoulder that is somewhat carinate and spiny. Siphonal canal short, straight, open. Aperture half-moon shaped, outer lip thin, crenulate, lirate within. Columella straightish, smooth; inner lip adherent to body whorl. Surface encircled by scaly cords and four spiral rows of low ridges bearing spines where they are crossed by about nine low axial ribs. The uppermost row at the shoulder bears the strongest spines, their bases expanded spirally and the tips open, the lower rows with weak spines. Colouring variable, usually chestnut, the spines and axial ribs russet to chocolate brown to varying degrees. Aperture and interior white. Operculum thin and horny, the nucleus lateral on the right-hand side edge.

32.4 x 21 mm (ht x w).

Mount Lavinia, Bellangala environs and other sites off Colombo, 6 to 8 m, on rocks, live collected, empty and crab occupied, also as fishing trash, empty.

4. *Mancinella alouina* (Röding, 1798) Pimpled purple, mancinella or orange rock shell

[*Volema alouina* Röding, 1798; *Drupella mancinella* (Linnaeus, 1758;
Purpura mancinella (Linnaeus, 1758); *Thais (Mancinella) alouina* (Röding, 1798);
Thais (Mancinella) mancinella (Linnaeus, 1758)]

Shell medium sized, thick, oval, spiny. Spire low, pointed, body whorl large, swollen. Aperture half-moon shaped, outer lip thick, sharp-edged, crenulate, columella smooth, inner lip callus and fused with body whorl; siphonal canal short, curved, recurved. Interior lirate. Exterior encircled by thick and thin rough spiral cords crossed by growth lines and five spiral rows of tubercles arranged in seven oblique axial rows. The uppermost row of tubercles subsutural, low and rounded; the lower four rows strong, conical and pointed, especially the second and third rows. Pinkish brown with cream spiral streaks running between spines. Outer and inner lips cream, columella and interior yellowish pink, the lirae red-orange. Operculum horny, triangular, with lateral nucleus on the right- hand edge.

45 x 36 mm (ht x w including spines).

Off Colombo: Wellawatte, Mount Lavinia reef and Bellangala environs, on reef plateau, 5 m and on emergent boulder (Putugala) in heavy surge, 1.5 m, live collections by diving.

5. *Purpura bufo* Lamarck, 1822 Toad Purple

[*Mancinella bufo* (Lamarck, 1822); *Purpura bufonides* Valenciennes, 1846; *Thais bufo* (Lamarck, 1822)]

Shell oval and thick with low spire and large inflated body whorl, the aperture wide. Flat spiral cords of varying widths crossed by growth lines encircle the surface interrupted by four low spiral ridges with low tubercles; the uppermost row of tubercles at the shoulder stronger than those of the next, the lower two ridges sometimes reduced or absent. Aperture oval, wide, the siphonal canal short and wide, the anal canal deep and wide. The strong, flaring outer lip not thickened, crenulate and finely toothed on the inside; columella smooth, the inner lip adherent to the body whorl. Pinkish-brown in colour, the tubercles darker, the columella light apricot. Interior cream, the outside colour showing through. Operculum horny, triangulo-ovate, nucleus lateral on the right side.

47 x 37 mm (ht x w).

Mount Lavinia rocky shore, intertidal, exposed at low tide in crevices and depressions, live collections and beached. Common.

6. *Purpura persica* (Linnaeus, 1758) Princely purple, Persian Purpura

[*Buccinum persicum* Linnaeus, 1758; *Purpura rudolphi* Lamarck, 1822; *Thais rudolphi* Lamarck;
Thais persica (Linnaeus, 1758)]

Shell elongated oval with low spire, large body whorl, rounded shoulder and large aperture. Encircled by flat spiral cords crossed by growth lines, some wider and elevated: one at the shoulder and others below. Aperture oval with wide anal canal, the siphonal canal a wide notch; outer lip flaring, strong but not thickened, edge crenulate, finely toothed and lirate inside, the columella smooth, the inner lip callus and adherent to the body whorl. General colour grey-brown, the heavier cords blackish with interrupted cream dashes. Outer lip with a dark margin, the inner lip whitish, columella light apricot, interior blue-white. Operculum horny, triangulo-ovate, the nucleus lateral on the right side.

55 x 36 mm (ht x w).

Mount Lavinia, Hotel Bay, near low tide level, rocky shore; Mount Lavinia, Bellangala, summit rock pool; Maggona, Thudawa Bay, intertidal rocky shore, on wet rocks and in fissures; Kaluamodera, intertidal rock pool.

7. *Rapana rapiformis* (Born, 1778) Turnip shell

[*Murex rapiformis* Born, 1778; *Murex rapa* Gmelin, 1791; *Rapa bulbosa* (Dillwyn, 1817);
Rapa volema Röding, 1798; *Rapana bulbosa* (Dillwyn, 1817)]

Shell thin but strong, turnip-shaped. Spire low, body whorl greatly expanded, wide aperture, suture channelled. Siphonal canal moderately long, open, recurved. Wide, deep umbilicus bordered by a strong, imbricately scaled fasciole. Aperture narrowly ovate, outer lip thin but strong, edge crenulate, lirate within; columella smooth, inner lip adherent to the body whorl, notched posteriorly. Encircled by nodulose, thick and thin spiral threads and three or four low spiral ridges crossed by growth lines. The shoulder ridge and the one below with low tubercles; those on the shoulder stronger and developed into open spines. The shoulder on the spire whorls carinated and angular, on the body whorl rounded. Creamy-white to brown, the outer lip darker and imparting an axially striped pattern of light and dark bands corresponding to growth stages. Aperture white to pink, interior white.

90 x 73 mm (ht x w).

Jaffna, Mandaitivu, fishing trash; Chilaw, Udappuwa, fishing trash.

8. *Semiricinula tissoti* Petit de la Saussaye, 1852 Tissot's Rock Shell

[*Purpura tissoti* Petit de la Saussaye, 1852; *Thais tissoti* (Petit de la Saussaye, 1852);
Thaisella tissoti (Petit de la Saussaye, 1852)]

Shell with moderate pointed spire, body whorl inflated. Shoulder somewhat rounded. Surface encircled by more or less equal sized scaly spiral threads (the scales mostly weathered) of which four rows are distinctly enlarged: at the shoulder and three equally spaced below. These are crossed by axial ribs raised into nodules where they cross the enlarged spiral threads: the heaviest are at the shoulder and the row below, equal in size, the next two much smaller. Aperture large, ovate with short open, recurved, siphonal canal and shallow anal canal. The outer lip somewhat flaring, thin-edged, crenulate and bevelled, with three pairs of long, recessed teeth. The teeth are well developed only in the largest mature specimen, in the smaller, immature, ones they are more like lirae. The columella is smooth with a swelling at the posterior end that borders the anal canal. The immature shells (19 mm and below) are reddish brown with yellow spots between the nodules; the larger shells are flesh coloured, darker on the nodules. The interior is greyish in the small shells, flesh coloured in the others. Operculum ovate, horny, the nucleus lateral on the right side.

12 - 17 mm high (immature), 27.65 x 18.4 mm ht x w (mature).

Uswetikeiyawa, intertidal rock pool, a juvenile and four mature shells; Mount Lavinia, no find data, juveniles.

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