

SRI LANKA STARFISH

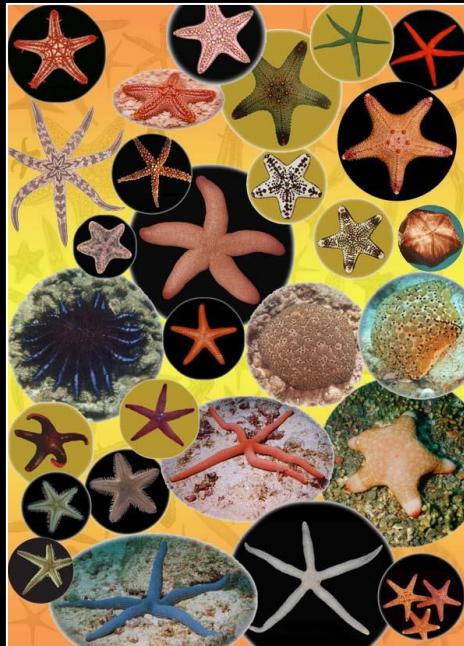
A GUIDE TO COMMON SPECIES

ILLUSTRATED WITH PHOTOGRAPHS, COLOURED DRAWINGS, AND
ANATOMICAL LINE DRAWINGS

BY

MALIK FERNANDO

AUGUST, 2020



Part 2

LIST OF SPECIES

PART 2

		Page
LUIDIIDAE	<i>Luidia maculata</i> Müller & Troschel, 1842	3
OPHIDIASTERIDAE	<i>Gomophia egyptiaca</i> Gray, 1840	4
	<i>Linckia guildingii</i> Gray, 1840	5
	<i>Linckia laevigata</i> (Linnaeus, 1758)	6
	<i>Linckia multifora</i> (Lamarck, 1816)	7
	<i>Nardoa galatheae</i> (Lütken, 1864) [= <i>N. lemonnieri</i>]	8



Exported ornamental
species

Luidia maculata Müller & Troschel, 1842

LUIDIIDAE



$R = 130 \text{ mm}$; $r = 20 \text{ mm}$; $br = 15 \text{ mm}$

8.9.1999:

Trincomalee, Clappenberg Bay, Ceylon Sea Anglers Club. Dead, fragmented animals found on sandy bottom. Part of a mass dying event of burrowing animals as many dead irregular sea urchins were also present.

Animals with 7 long, narrow arms with pointed ends, and orange coloured, tapering, blunt tube feet, i.e. not with adhesive discs,

characteristic of starfish that burrow in sand. Colour scheme of light and dark brown, all with a characteristic star-shape over the central disc. Fringing spines black.

Four species of *Luidia* are reported from the "Ceylon Area" in Clark & Rowe, 1971. *Luidia maculata* was reported as being abundant all-around Ceylon in Herdman & Herdman, 1904.



Gomophia egyptiaca Müller & Troschel, 1842

OPHIDIASTERIDAE

'Batik starfish'



Live animal photographed
in aquarium.



$R = 70 \text{ mm}$; $r = 9 \text{ mm}$; $br = 11 \text{ mm}$



11.12.99: From marine ornamental fish exporter's tanks.

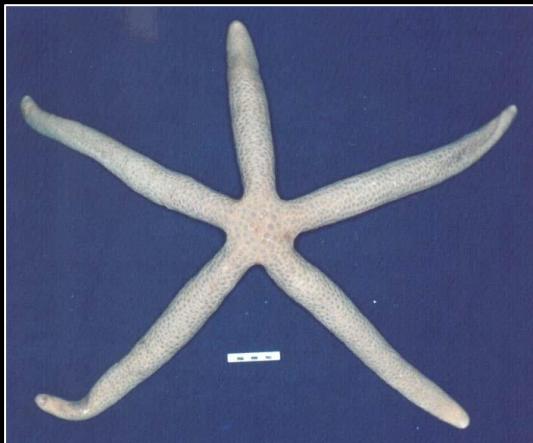
Location and habitat : No data

Left: Another animal photographed in air,
showing a different colour pattern and
some enlarged conical tubercles.

- *Gomophia egyptiaca* is described from the "Ceylon Area" in Clark & Rowe, 1971.

Linckia guildingi Gray, 1840

OREASTERIDAE



$R = 225$ mm; $r = 25$ mm; $br = 23-26$ mm

Pitagala, 22 m.

27. 2 2000

Photographed in air. The close-up at right (above) shows the circular pore areas that interrupt the mid-radial plates. In *L. laevigata* the mid-radial plates are un-interrupted. The image at right compares the two: *guildingi* above and *laevigata* below.

Linckia guildingi occurs sympatrically with *L. laevigata* in the same habitat, but is often seen on the top of rocks rather than on the sand. They can be told apart under water by the pore areas that are obvious on the dorsum as well as by a greenish hue, particularly of the underside.

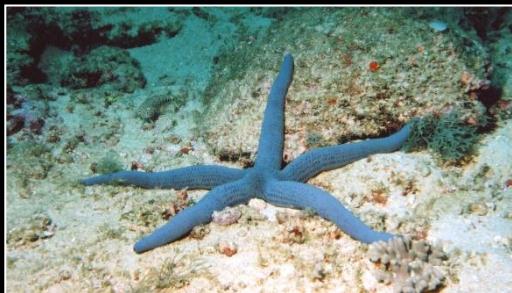
10.2.2001, Gigiripita, 22 m. $R = 240$; $r = 24$; $br = 22-26$.



- *Linckia guildingi* is reported from the "Ceylon Area" in Clark & Rowe, 1971

Linckia laevigata (Linnaeus, 1758)

OREASTERIDAE



Strobe illuminated under water photographs by Saman Liyanage at Palagala, 22 m.



Two colour forms occur together on rock-strewn coarse sand with scattered rubble fragments. Abundant at Kalpitiya, Bar Reef, 10-11 m on 1.3.1991. Wellawatte, Pitagala, 22 m, 28. 3. 1999 & 27.2.2000. Gigiripita, 22-23 m, 10.2.2001. Negombo, Suda, 18 m, 8.2.1999.

R =190 mm; r = 20 mm; br = 27 mm

Under water colour: blue or greyish. Surface colour: purple to black upper surface, mauve under surface or pink-orange respectively.



Under water photographs in available light at Pitagala, 5.4.2003. The left-hand image shows a blue colour form and the right-hand image the pink form as they appear to a diver.

- *Linckia laevigata* is reported from the "Ceylon Area" in Clark & Rowe, 1971



Linckia multifora (Lamarck, 1816)

OREASTERIDAE

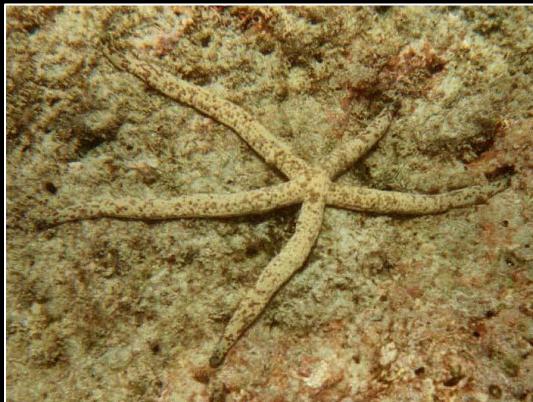


R = 75 mm; r = 8 mm; br = 7.5 mm

Nilaweli, Pigeon Islands;
Trincomalee, Clappenburg Bay;
Hikkaduwa, Yakamuththa gala.
Common on the shallow Colombo reefs.

Shallow coral/rocky reefs, on sunny silt covered rocks. Occasionally on sand (Kalpitiya Bar Reef), gregarious. Variable colours, the commonest being khaki with chocolate brown blotches; also, creamy-brown with orange blotches, some being more reddish, others with bluish tints. Uniform colour in any one locality.

Specimens with regenerating arms quite common.



Left: Erakkandy, 24.9.2003

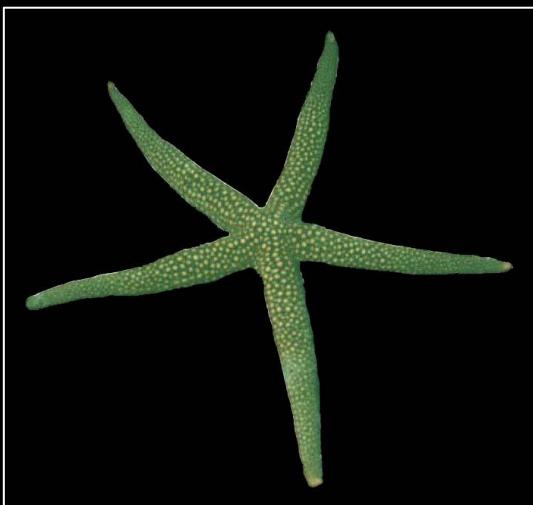
- *Linckia laevigata* is reported from the "Ceylon Area" in Clark & Rowe, 1971



Nardoa galathea (Lütken, 1864)

[= *N. lemonnieri*]

OPHIDIASTERIDAE



Shallow to moderately deep (3 – 10 m) rocky reefs, on sunny rocks. The colour variable. Most commonly dark green with cream details, sometimes bright green, brown or purplish with cream.

Widely distributed, solitary. 220 mm diameter.



Under water photograph by Saman Liyanage. Habaraduwa, Godagala. 1999

Left: Close-up image of a brown coloured form from Colombo showing the cream-coloured plates against the dark background colour. Clearly identifiable under water.

- *Nardoa galathea* is reported (as *N. lemonnieri*) from the “Ceylon Area” in Clark & Rowe, 1971.

BIBLIOGRAPHY

Clark, A.M. and Rowe, F.W.E., 1971. Monograph of shallow-water indo-west Pacific Echinoderms. *Trustees of the British Museum (Natural History)*. London. x + 238 p. + 30 pls.
Available online at <http://www.abctaxa.be/downloads/additional-information-volume-1/works-famous-holothuroid-workers/fwe-rowe/MonographIndoWestPacific.pdf>

George, J. D. & George, J. J. 1979. Marine Life, An Illustrated Encyclopedia of Invertebrates in the Sea. Lionel Leventhal, London.

Herdman, W. A. & Herdman, J. B. 1904. Report to the Government of Ceylon on the pearl Oyster Fisheries of the Gulf of Manaar. *London (Royal Society). Suppl. Rep.* **10**: 137-147, 1 fig. [With notes and additions by F. J. Bell]

MF: 2.10.2020