

21. *LENSIA GNANAMUTHUI*,<sup>1</sup> A NEW SIPHONOPHORE  
FROM THE MADRAS PLANKTON

(With a text-figure)

*Material*

2 anterior nectophores from an open haul from 0 to 25 metres off the Madras coast on 26.9.1952.

4 anterior nectophores from surface plankton off the Madras coast on 4.12.1952.

2 anterior nectophores from surface plankton off Madras coast on 8.1.1960.

*Diagnosis*

Anterior nectophore small, 3.8 mm. in length and 1.8 mm. in breadth; 5 distinct non-crested complete ridges; somatocyst placed near the mouth of the nectosac, characteristically minute with a stalk and a minute globular tip. Hydroecium in level with the velum.

*Size*

Anterior nectophore: length 3.8 mm., breadth 1.8 mm.

Somatocyst: length 0.32 mm.

*Description*

Anterior nectophore very small, pyramidal in shape with five complete non-crested longitudinal ridges extending from apex to base; ventrobasal margin or corner slightly rounded. Hydroecium shallow, level with mouth of nectosac. Mouth plates large and divided. Somatocyst characteristically very small and situated on the summit of the hydroecium very near base of nectosac; with thread-like, minute, curved stalk (0.2 mm. in length) and a globular tip (0.1 mm. in diameter).

Stem and posterior nectophore not collected.

*Type Material*

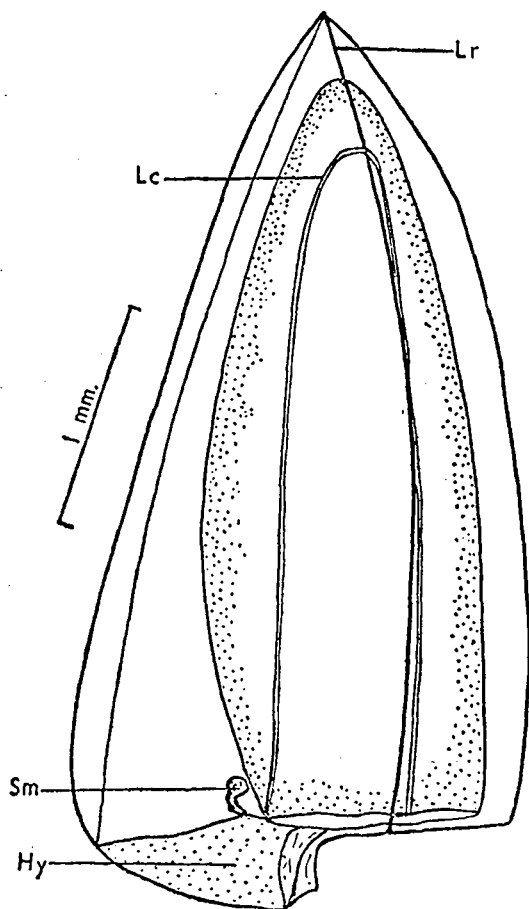
The holotype and paratypes will be deposited in the collections of the Zoological Survey of India, Calcutta. An anterior nectophore collected on 26.9.1952 from 0 to 25 metres off the Madras coast has been designated as the holotype. 2 anterior nectophores from surface plankton of the Madras coast collected on 8 January 1960 have been designated as paratypes.

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<sup>1</sup> Named after Prof. C. P. Gnanamuthu, Director, Zoological Research Laboratory, Madras.

### Comparison

The genus *Lensia*<sup>1</sup> includes the following twenty-two valid species: *grimaldii*<sup>2</sup>, *exeter*<sup>3</sup>, *ajax*, *hostile*, *lelouvetau*, *meteor*<sup>4</sup>, *reticulata*<sup>5</sup>,



*Lensia gnanamuthui* sp. nov.

Lc—Lateral canal; Lr—Lateral ridge; Sm—Somatocyst; Hy—Hydroecium

*subtilis*<sup>6</sup>, *cossack*, *multicristata*<sup>7</sup>, *hunter*, *havock*, *subtiloides*<sup>8</sup>, *conoidea*, *fowleri*<sup>9</sup>, *campanella*, *achilles*, *hardy*, *hotspur*, *challengeri*, *leloupi*, and *tottoni*<sup>10</sup>. The present species differs from all the other species hitherto described in the minute size of the somatocyst, its position near the mouth of the nectosac, and its shape, and in the rounded margin of the ventral corner of the nectophore.

*Notes on Siphonophores:* The Siphonophora includes 150 valid species of which 80 are known to occur in the Indian Ocean. We

have recorded 29 species in the limited area of the Madras coast (Daniel & Daniel, 1963b).

The Siphonophores are wholly holoplanktonic agreeing well in their distribution with the holoplanktonic surface medusae. A great majority are epiplanktonic. During our studies on the Siphonophore fauna of the Madras coast during 1952-54 and 1956-60, 23 species were taken from surface plankton hauls. As typical examples of epiplanktonic forms *Diphyes truncata*, *D. monoica*, and *D. dispar* may be mentioned. Among Physophorae, *Agalma okeni* and *Anthophysa* are surface forms. *Velella*, *Porpita*, and *Physalia* in the adult stage are known from the surface only, though the larvae are sometimes seen in the lower regions also. No Siphonophore has adopted the ocean floor as its usual habitat and none are parasitic.

Although Siphonophores are known to occur in a wide range of temperature, they are absent (or at least uncommon) in regions of low salinity. None has penetrated into brackish or fresh water, and they are uncommon in Ocean regions of low salinity. In the Madras coast where the salinity varied from 30‰ to 35‰ during our studies the Siphonophores were found in abundance in the plankton hauls throughout the year, whereas in the adjoining brackish waters at the mouths of the rivers Adyar and Cooum they were not collected.

Siphonophores are very delicate animals and usually during collection and transferring, the different parts of the colony become detached. In the case of Diphyids the anterior and posterior nectophores are easily detached and as such, in the genus *Lensia* except for a few forms the posterior nectophores have not yet been matched or described.

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