

Subfamily Ostreinae (Part 2)

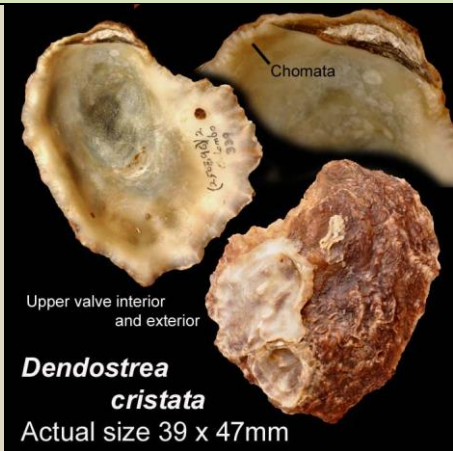
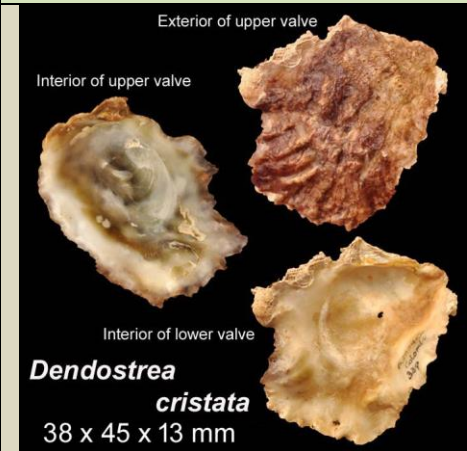
Dendostrea cristata (Born, 1778)
Dendostrea folium (Linnaeus, 1758)
Lopha cristagalli (Linnaeus, 1578)
Nanostrea fluctigera (Jousseaume in Lamy, 1925)

Part 2

Part 2 - Subfamily Ostreinae

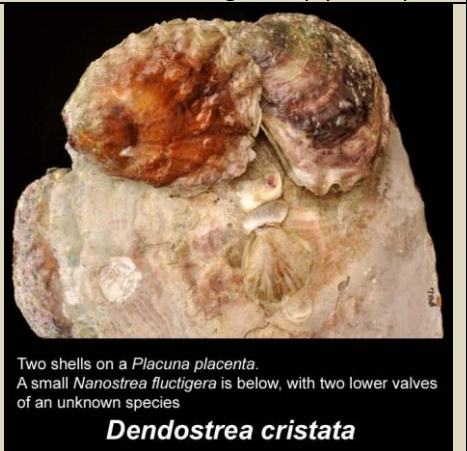
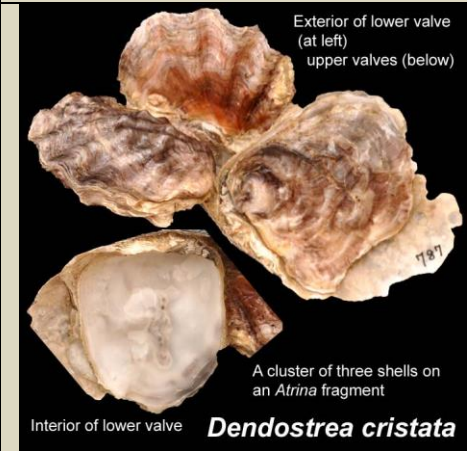
Medium-sized to small shells with markedly folded valves, or very flat. Chomata prominent. Attached on hard substrates by the lower valve, or on gorgonian sea-fans by clasping spines.

Dendostrea cristata



MF339: Colombo, no collection data, by diving.

No collection data. The exterior of the lower valve deeply furrowed and the unattached free margin deeply scalloped.


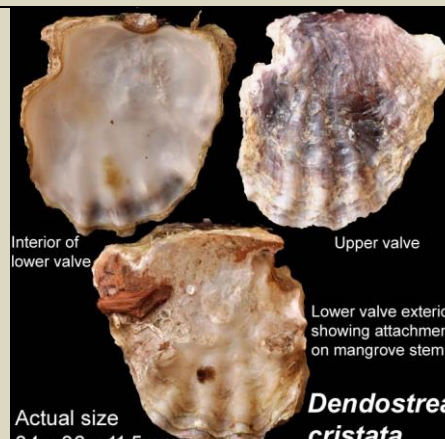
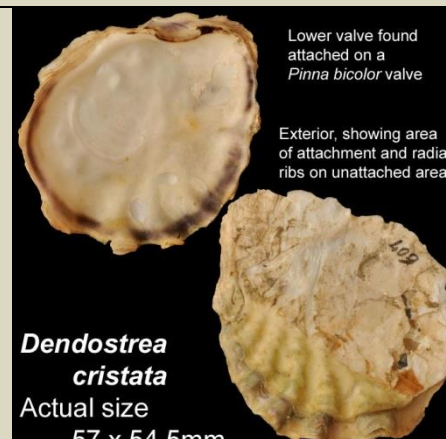





MF787: Jaffna, Mandaitivu, fishing trash. Clusters of *D. cristata* of varying shape:

Left - attached to shell of *Atrina*.

Centre - attached thick mangrove stem.

Right - attached *Placuna placenta*.

 <p>Interior of lower valve on <i>Atrina</i> fragment</p> <p>Exterior of upper valve</p> <p>Interior of upper valve</p> <p><i>Dendostrea cristata</i> Actual size 41 x 45 x 20 mm</p>	 <p>Interior of lower valve</p> <p>Upper valve</p> <p>Lower valve exterior showing attachment on mangrove stem</p> <p>Actual size 34 x 36 x 11.5mm</p> <p><i>Dendostrea cristata</i></p>	 <p>Lower valve found attached on a <i>Pinna bicolor</i> valve</p> <p>Exterior, showing area of attachment and radial ribs on unattached area</p> <p><i>Dendostrea cristata</i> Actual size 57 x 54.5mm</p>
MF787: Jaffna, Mandaitivu, details of a shell on an <i>Atrina</i> valve.	MF787: Jaffna, Mandaitivu, shell detached from a mangrove stem showing attaching area.	MF607: Jaffna, Mandaitivu, fishing trash, lower valve attached to <i>Pinna bicolor</i> valve. The crescentic muscle scar is seen.
 <p><i>Dendostrea cristata</i> Actual size 60 x 47mm</p>	 <p><i>Dendostrea cristata</i> Actual size 67mm</p>	 <p><i>Dendostrea cristata</i> Actual size 58mm</p>
MF736: Mannar Island, Pesalai anchorage, single upper valves, fishing trash.	MF737: Jaffna, Mandaitivu, fishing trash, weathered single valves.	
<p><i>Dendostrea cristata</i></p> <p>Checklist 2012 as <i>Ostrea</i> sp. 3</p> <p>Shape variable, obliquely ovate with narrow hinge margin to squarish with longer hinge margin, compressed. Attachment umbonal or by a larger area, attaching to other empty bivalves (<i>Atrina</i>, <i>Placuna</i>), or to each other incorporating barnacles, or to mangrove vegetation, clustered. Both valves plicate with rounded radial ridges the grooves as wide, crossed by concentric growth lines peripherally. Chomata absent. Interior white, muscle scar un-pigmented. Exterior purplish to reddish-brown.</p> <p>Positive identification was possible with the collection of many well-preserved specimens from J/Mandaitivu (21.9.17) that included un-eroded paired valves complete with the substrate. These matched images from conchology.be as well as WMSD. Distribution is not given in WoRMS but WMSD gives the distribution as Atlantic - off N & S America, Hawaii, Fiji and Italy (Sicily).</p> <p>WoRMS gives many synonyms: <i>Alectryonella radix</i> (G. B. Sowerby II, 1871), <i>Ostrea cristata</i> Born, 1778, <i>Ostrea elliptica</i> Lamarck, 1819, <i>Ostrea glaucina</i> Lamarck, 1819, <i>Ostrea parasita</i> Küster, 1868, <i>Ostrea radix</i> G. B. Sowerby II, 1871.</p>		

Dendostrea folium

 <p>Commissural view Upper valve Upper and lower valve interiors Lower valve</p> <p><i>Dendostrea folium</i> Actual size 38 x 35 mm</p>	 <p><i>Dendostrea folium</i> Actual size 34 x 44 x 18 mm</p>	 <p><i>Dendostrea folium</i> Actual size 26 x 53.5 mm</p>
<p>MF334: Colombo, Degal Meda (reef), 24 m, attached sea whip, by diving.</p>	<p>MF457: Shape varies from elliptical to ovate to sub-circular. Interior of upper valve margin with numerous golden pustules (see interior of MF334).</p>	
 <p><i>Dendostrea folium</i> Actual size 23.5 x 40 x 15 mm</p>	 <p><i>Dendostrea folium</i> Actual size 22 x 34 mm</p>	 <p><i>Dendostrea folium</i> Actual size 26.5 x 41.25 x 21 mm</p>
<p>MF451: Maggona, Thudawa bay, SBFH, fishing trash, with barnacles.</p>	<p>MF335: Colombo, Palagala (reef), 14 m, attached sea fan, by diving.</p>	<p>MF559: Maggona, Thudawa bay, SBFH, fishing trash.</p>
 <p><i>Dendostrea folium</i> Actual size 43.2 x 63.84 x 26.4 mm</p>	 <p><i>Dendostrea folium</i> Actual size 47.7 x 51.7 x 26.62 mm</p>	 <p>Lateral view showing clasping structures Upper valve <i>Dendostrea folium</i> and <i>Pteria sterna</i> on a branching gorgonian stem View showing undulating margin <i>Dendostrea folium</i> Actual size 25 x 26 x 14mm</p>
<p>MF562: Maggona, Thudawa bay, SBFH, fishing trash. Large shells clustered on gorgonian fan.</p>	<p>MF744: Maggona, Thudawa bay, SBFH, fishing trash. Shares host with <i>Pteria sterna</i>.</p>	

***Dendostrea folium* Leaf oyster**

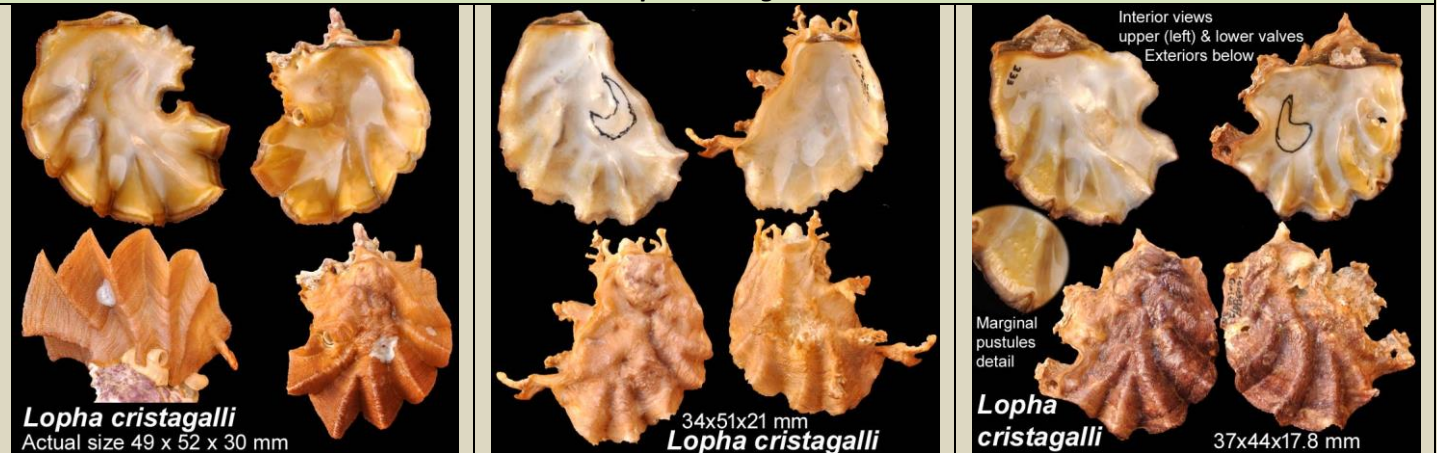
Shell small, elliptical to ovate to sub-circular, cupped l/v, flattish u/v, margin deeply folded corresponding to numerous strong radial folds on both valves. Differs from *Lopha cristagalli*, that it resembles, by the valve surfaces consisting of imbricating growth laminae without rounded surface projections arranged in radial rows. Attached (to sea whips and sea fans) by projecting clasping structures in the midline of the l/v; a groove in the midline between the processes with a corresponding ridge on the u/v. Hinge short, umbonal cavity shallow. Adductor muscle scar posterior, nearer hinge than ventral margin. Chomata present either

side of hinge. The interior margin of the u/v profusely covered with golden pustular swellings. Exterior purplish brown, interior white with iridescent golden periphery, the margin dark similar to the exterior.

- Poutiers, 1998 pp. 224, 230.

Dendostrea frons (Linnaeus, 1758) looks identical (accepted by WoRMS) but is distributed in the Atlantic, Red Sea, W. Pacific and Philippines.

Lopha cristagalli



MF332: Trincomalee, harbour, attached oyster valve, live collection, by diving.

MF333: Galle, shipwreck "Rangoon", 30 m, attached clump of corals & shells, by diving. One empty, the other alive. Both attached by short attaching spines.

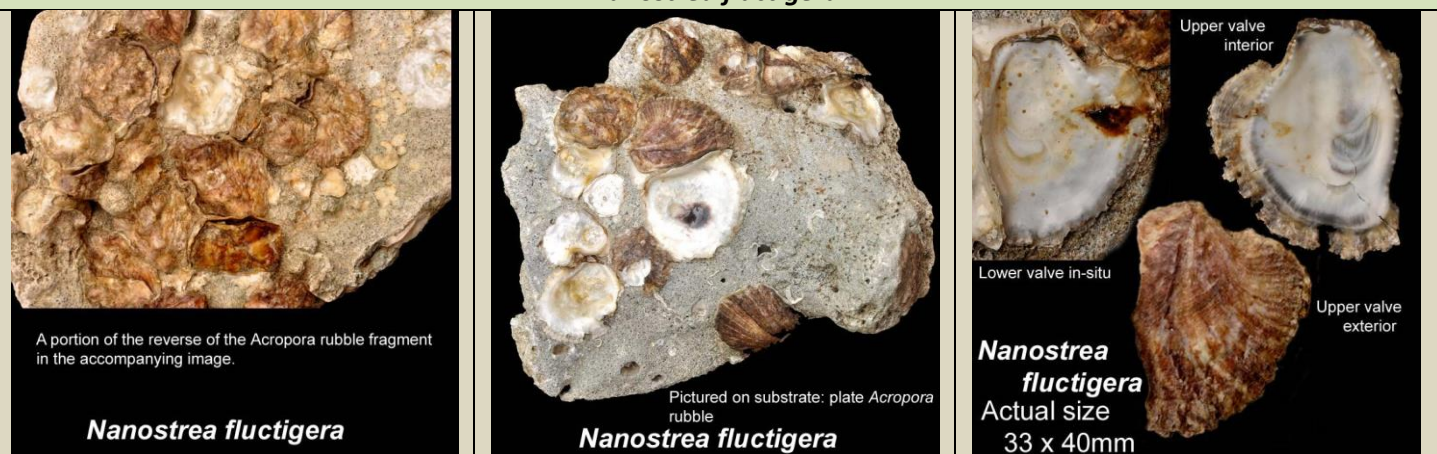
Lopha cristagalli Cock's comb oyster

Shell small to medium, thin valved, elongate oval or subcircular, l/v cupped, u/v flattish, the valve margins deeply folded corresponding to the radial ridges of both valves. Surfaces covered by small rounded swellings arranged in radial rows (distinguishes from *Dendostrea* where these are absent). Growth lines present. Lower valve with projecting clasping structures from the umbonal region and posterior side up to the ventral margin by which the shell attaches to the substrate.

Hinge short, chomata to either side small, easily overlooked, a row of prominent pustular swellings around the edge of the u/v interior. Adductor muscle scar posterior, about midway between hinge and ventral margin. Exterior colour purplish or hazel, interior white with golden tints around the periphery, margin dark or not.



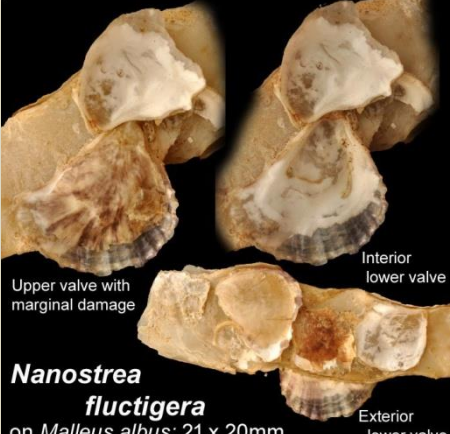
- Kirtisinghe, 1978 p. 26; Oliver, 1975 p. 304; Sabelli, 1979 #318, Poutiers, 1998 pp. 224, 230.

Nanostrea fluctigera



MF792: Trincomalee, Erakkandy, beached plate *Acropora* rubble with *N. fluctigera* on both sides. Shows crowded growth with irregular shell shape, exteriors not eroded. The lower valve in right hand image with pigmented muscle scar is an unknown species.

Detail of a shell showing low ribs on upper valve, chomata either side of ligament and concave upper border of muscle scar.

 <p>Upper valve interior</p> <p>Lower valve in-situ</p> <p>Upper valve exterior</p> <p><i>Nanostrea fluctigera</i> Actual size 33 x 36.4mm</p>	 <p>On <i>Placuna placenta</i> valve</p> <p>Interior views of lower and upper valves. Marginal chomata prominent in the upper valve</p> <p><i>Nanostrea fluctigera</i> Actual size 21 x 20 mm</p> <p>Eroded upper valve characteristically coloured</p>	 <p>Upper valve with marginal damage</p> <p>Interior lower valve</p> <p><i>Nanostrea fluctigera</i> on <i>Malleus albus</i>: 21 x 20mm</p> <p>Exterior lower valve</p>
<p>MF792: Trincomalee, Erakkandy. Symmetrical growth when not crowded, delicate sculpture of radial ribs upper valve. Chomata prominent.</p>	<p>Jaffna, Mandaitivu, fishing trash. A small shell with the superficial layers eroded, characteristically white with lavender radial stripes. (Detail of MF787 <i>Placuna</i> shell with <i>D. cristata</i>)</p>	<p>MF793 : Maggona, Thudawa, fishing trash. Small shells on <i>Malleus albus</i>. Upper valve exterior smooth, plicate exterior of unattached portion lower valve.</p>
<p><i>Nanostrea fluctigera</i></p> <p>Small, compressed, thin-valved shells common on large oysters, smaller bivalves and rubble. Fan-shaped to sub-circular or irregular shapes when crowded. Gregarious, forming a single layer. Lower valve flat, conforming to shape of substrate, u/v somewhat convex. Muscle scar central. Shells very compressed, attached by the whole of the left (lower) valve, upturned free margin if present plicate, prominent chomata that may extend all around the shell. Right valve exterior smooth in early parts, appressed lamellae over later parts that are thin and fragile. Radial grooves from umbones to margin defining low, rounded ribs with irregular shallow concentric grooves. Weathered shells characteristically white with lavender radial stripes.</p> <p>- ID established based on description of <i>N. exigua</i> in Harry, 1985.</p> <p><i>Ostrea fluctiger</i> Jousseaume in Lamy, 1925 is the original name, <i>Nanostrea exigua</i> Harry, 1985 is a synonym, with a number of other synonyms listed in WoRMS.</p>		

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