

## SOME CAULERPAS FROM SRI LANKA

A collection of annotated photographs

from the Malik Fernando Collection and Herbarium

Species of *Caulerpa* reported from Sri Lanka. This list is from Silva, Basson & Moe with one addition (*C. filicoides*)  
The serial numbers identify each taxon in the key and the photographs that follow. The key was developed based on published descriptions and personal observations.

1. *Caulerpa cupressoides* (Vahl) C. Ag., 1817
2. *C. dichotoma* Svedelius, 1906. (Type locality: Weligama, SL)
3. *C. fergusonii* G. Murray, 1891. (Type locality: Sri Lanka)
4. *C. filicoides* Yamada, 1936. (Not listed by Silva, Basson & Moe)
5. *C. imbricata* G. Muray, 1887
6. *C. imbricata* G. Murray forma *minor* Svedelius, 1906a. (Syntype locality: Galle, SL)
7. *C. lentillifera* J. Ag., 1837
8. *C. lessonii* Bory de Saint-Vincent, 1828.
9. *C. lessonii* Bory de Saint-Vincent forma *tuticorinensis* Svedelius, 1906
10. *C. mexicana* Sonder ex Kützing, 1849
11. *C. nummularia* Harvey ex J. Ag., 1873.
12. *C. parvula* Svedelius, 1906a (Syntype locality: Beruwela, SL)
13. *C. peltata* Lamouroux, 1809
14. *C. peltata* Lam. var. *macrodisca* (Decaisne) W-v B, 1898
15. *C. plumulifera* Zanardini, 1878
16. *C. racemosa* (Forsskål) J. Agardh, 1873
17. *C. racemosa* (Forssk.) J. Ag [var. *racemosa*] forma *compressa* Weber-van Bosse, 1898
18. *C. racemosa* (Forssk.) J. Ag. var. *macrophysa* (Sonder ex Kützing) W. R. Taylor, 1928
19. *C. racemosa* (Forssk.) J. Ag var. *turbinata* (J. Ag.) Eubank, 1946
20. *C. scalpelliformis* (R. Brown ex Turner) C. Agardh, 1817
21. *C. scalpelliformis* (R. Br. ex Turn.) C. Ag. var. *denticulata* (Decaisne) W-v B, 1898
22. *C. scalpelliformis* (R. Br. ex Turn.) C. Ag. var. *intermedia* Weber-van Bosse, 1898
23. *C. sedoides* C. Agardh, 1817
24. *C. sedoides* forma *crassicaulis* (J. Ag.) Weber-van Bosse, 1898
25. *C. sedoides* forma *mixta* Svedelius, 1906 (type locality: Jaffna, SL)
26. *C. serrulata* (Forsskål) J. Agardh.
27. *C. serrulata* (Forsskål) J. Agardh. [var. *serrulata*] forma *lata* (W-v B) Tseng, 1936
28. *C. sertularioides* (S. Gmelin) Howe, 1905
29. *C. sertularioides* forma *brevipes* (J. Agardh) Svedelius, 1906
30. *C. sertularioides* forma *longiseta* (Bory de Saint-Vincent) Svedelius, 1906
31. *C. sertularioides* forma *umbellata* (Weber-van Bosse) Svedelius, 1906
32. *C. taxifolia* (Vahl) C. Agardh, 1817
33. *C. taxifolia* forma *asplenoides* (Greville) Weber-van Bosse, 1898
34. *C. taxifolia* forma *interrupta* Svedelius, 1906a
35. *C. taxifolia* forma *tristichophylla* Svedelius,
36. *C. verticillata* J. Agardh, 1847

# Identification of Sri Lanka Caulerpas

## A Provisional Tabular Key

Nature of erect axes (assimilators)		Branchlet character (ramuli)		Species
<b>Leaf-like</b> Erect axis flattened and leaf-like. 20 - 36 cm.		Small, spine-like, along edges of "leaf"		<b>scalpelliformis (20, 21, 22)</b>
<b>Whorled</b> Erect axes long or short, branches whorled or apparently whorled		Filiform, in dense whorls on longish fine axes		<b>verticillata (35)</b>
		Repeatedly branched, forming umbrella-like structures on short axes		<b>filicoides (4)</b>
<b>Pinnate</b>	1. Erect axes not jointed; round or flattened with usually two opposing rows of branchlets	Cylindrical	Apex tapering, base wide	<b>sertularioides (28, 29, 30, 31)</b>
		Flattened, sickle-shaped	Narrow and comparatively long, sides parallel, not overlapping, mucronate	<b>taxifolia (32, 33, 34, 35)</b>
			Wide and comparatively short, wider at the middle, overlapping, mucronate	<b>mexicana (10)</b>
		Flattened, not sickle-shaped	Very small, spine-like on flattened axis, branched or not	<b>lessonii (8, 9)</b>
			Forked tips	<b>dichotoma (2)</b>
	Vesicular	Short-stalked or not, pear-shaped, in two series	<b>sedoides (23, 24, 25)</b>	
	2. Erect axes jointed	Vesicular	Pear-shaped	<b>fergusonii (3)</b>

Continued next page: **Other forms of erect axes**

**Other forms of erect axes**

Nature of erect axes (assimilators)	Branchlet character (ramuli)		Species
<p><b>Other forms</b> Erect axes may appear to be absent, short or long. Branchlets often obscure the axis</p>	Ribbon-like	Spread horizontally. Twisted, curved, long, toothed on short erect axes	<b>serrulata (26, 27)</b>
	Peltate, or with "disciform flattened tops sharply defined from the stalk"	On long erect axes (1-10 cm), discs +/- 3 mm	<b>peltata (13)</b>
		On long erect axes, discs larger (?)	<b>peltata</b> var. <b>macrodisca (14)</b>
		Shortish erect axes forming mats, densely covered with flat-topped branchlets 3-4 mm dia.	<b>imbricata (5, 6)</b>
		Erect axes mostly procumbent, peltate discs spread in one layer, 1-2 mm dia.	<b>parvula (12)</b>
		Arising mainly from the creeping axis and spread in one layer, discs not > 5 mm	<b>nummularia (11)</b>


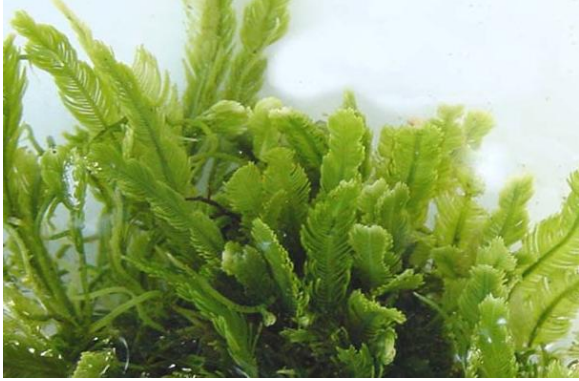

Continued next page: **Vesicular** branchlets

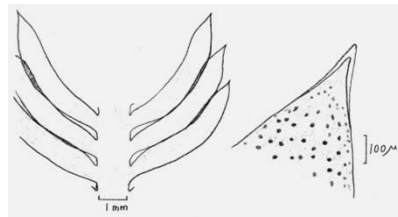
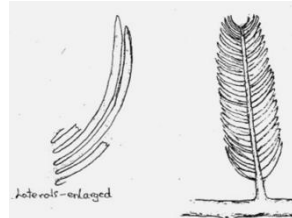
## Branchlets vesicular

Nature of erect axes (assimilators)	Branchlet character (ramuli)		Species
	Vesicular	Short, recumbent, forming a single layer	<b>racemosa</b> var. <b>macrophysa (18)</b>
		Long vertical erect axes with crowded, radially arranged, short stalked branchlets.	<b>racemosa (16, 17)</b>
		Long vertical erect axes, stalked branchlets in two opposing series	<b>racemosa</b>
		Long vertical erect axes, stalked branchlets <b>with constrictions</b> in two opposing series (or three)	<b>lentillifera (7)</b>
	Top &/or trumpet-shaped	Top-shaped below, trumpet-shaped with expanded discs above	referable to <b>imbricata?</b>
	Cylindrical &/or club-shaped	Axis round, branchlets club-shaped in two opposing series (?)	<b>racemosa</b> var. <b>corynephora</b>
		Axis flat, branchlets club-shaped in two opposing series (?)	<b>racemosa</b> var. <b>corynephora</b> forma <b>complanata</b>
	Mixed	Long erect axes; basal branchlets cylindrical, apical peltate, transitional trumpet-shapes in between	<b>racemosa</b> var. <b>turbinata (19)</b> ( <b>C. chemnitzia</b> of Svedelius)
		Spreading habit, short erect axes; basal branchlets simple + club-shaped, upper mixed trumpet & disciform 2.5-3 mm, occasionally 4 mm	<b>'Pigeon Islands-254'</b> (= v. <b>turbinata</b> )

Malik Fernando, 10<sup>th</sup> May, 2002

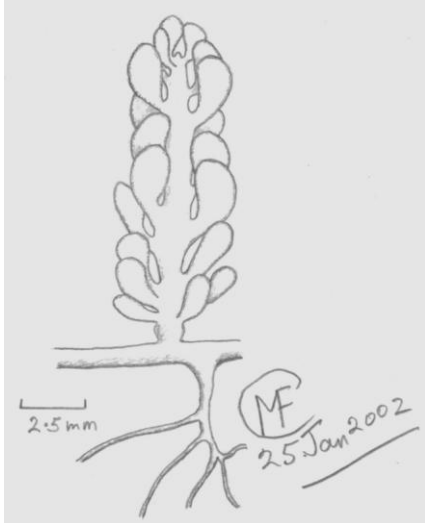
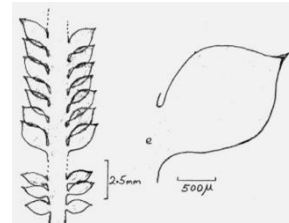
Photographs and /or drawings of the *Caulerpa* species in the collection.

	<p><i>Caulerpa filicoides</i> (4) Erect axes short, branchlets whorled, repeatedly branched forming umbrella-like structures.</p>
	<p><i>Caulerpa sertularioides</i> (28) Erect axes long or short, not jointed, branchlets usually in two opposing rows, cylindrical, apex tapering, base wide.</p>
	<p><i>Caulerpa taxifolia</i> (32) Similar to above, branchlets flattened, sickle-shaped, sides parallel, not overlapping, bases narrow, mucronate.</p>





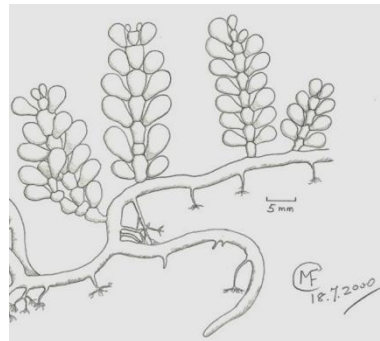
*Caulerpa mexicana* (10)  
*C. taxifolia* ecad *mexicana* of Coppejans.  
Similar to above, branchlets wide and comparatively short, wider at the middle, overlapping, mucronate (arrowed); mixed with typical branchlets.



*Caulerpa sedoides* (23)  
Vesicular branchlets in two series, short stalks or not, pear-shaped.



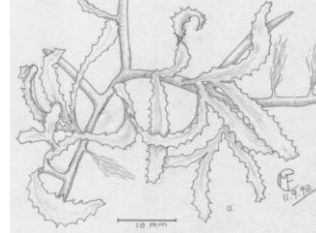
*Caulerpa fergusonii* (3)  
Erect axes jointed, pear-shaped vesicular branchlets in two series.



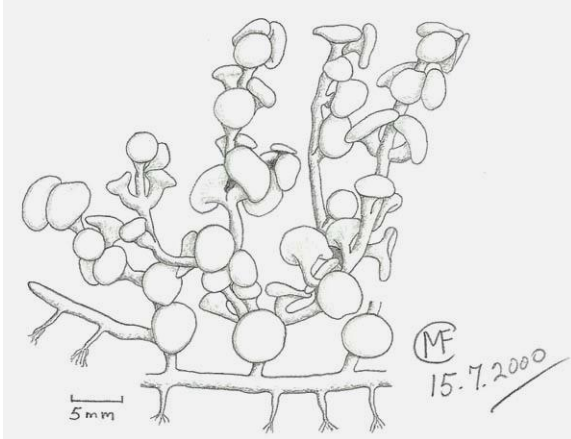




*Caulerpa serrulata f. lata* (27)  
Erect axes very short, branchlets ribbon-like spreading horizontally. The form commonly found.



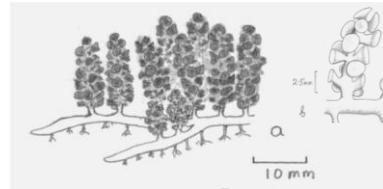
*Caulerpa serrulata f. typica* (26)  
Erect axes very short, branchlets ribbon-like, erect. An uncommon form found only once.



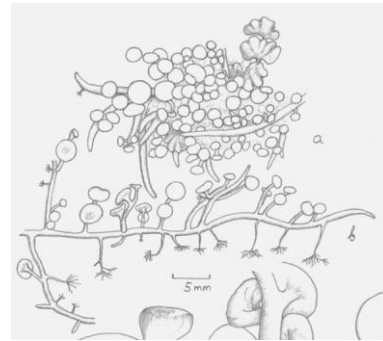
*Caulerpa peltata* (13)  
Erect axes long, branchlets peltate, or with "disciform flattened tops sharply defined from the stalk"



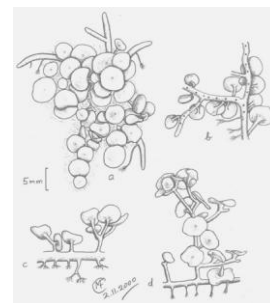
*Caulerpa imbricata* (5)  
Shortish erect axes, densely covered all round with flat-topped branchlets 3-4mm dia.



*Caulerpa parvula* (12)  
Erect axes mostly procumbent, peltate discs 1-2mm dia. spread in one layer.



*Caulerpa nummularia* (11)  
Main axis creeping, branchlets arising mainly from it and spread in one layer, discs not greater than 5mm.





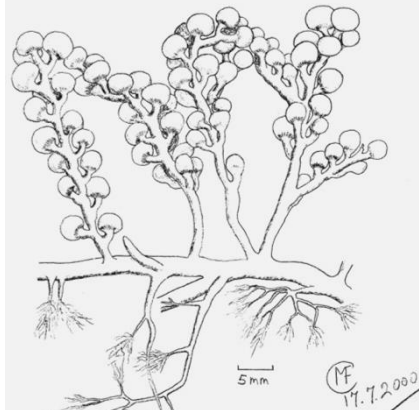
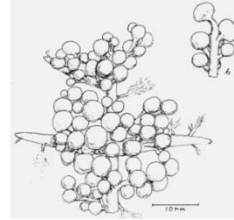


Top view at left, side view below. Drawing (b) shows a recumbent erect axis from below.



*Caulerpa racemosa* var. *macrophysa* (18)

Short recumbent erect axes from a creeping axis bearing stalked vesicular branchlets forming a single layer.



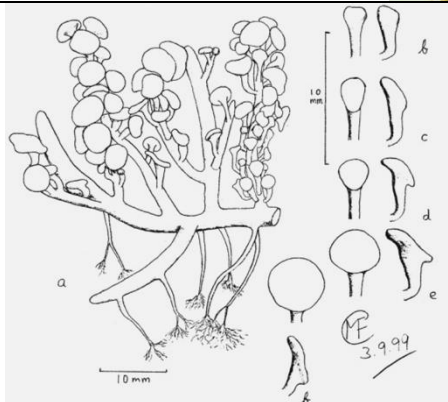
*Caulerpa racemosa* (16)

Erect axes long, vertical, simple or branched. Stalked vesicular branchlets usually in two imbricate series (alternate on opposing sides).



*Caulerpa lentillifera* (7)

Erect axes long, vertical with constricted stalked branchlets in two (or three) opposing series.



*Caulerpa racemosa* var. *turbinata* (19)

Erect axes long, basal branchlets cylindrical, apical peltate, transitional trumpet-shapes in between. Drawing shows individual branchlets from the front and the side at right.