# **Rhipidosiphon** Montagne, 1842

BRYOPSIDALES, UDOTEACEAE

Thallus small, about 2.5 to 40 mm tall, consisting of a holdfast of fine rhizoids, monosiphonous uncorticated stipe to about 3 mm. long which may be calcified near its apex, and fan-shaped, unistratose (= a single layer), calcified terminal blade composed of dichotomously branched siphons. Siphons of blades do not anastomose, although their calcified sheaths may be fused, obliterating demarcations. The monosiphonous, partially calcified stipe distinguishes *Rhipidosiphon* from *Udotea*. Reproduction is by biflagellated zooids discharged terminally from uncalcified or lightly calcified, sometimes swollen zooidangia formed by extension of siphons of blade. In *R. javensis*, non-reproductive siphons are about 50-70 µm diameter.

- Guiry, M.D. & Guiry, G.M. 2021. AlgaeBase. World-wide electronic publication, National University of Ireland, Galway. http://www.algaebase.org; searched on 02 July 2021

**Species reported from Sri Lanka**

*Rhipidosiphon javensis* Montagne, 1842

- Silva et al, 1996
- Coppejans et al, 2009

**Description of species**

## ***Rhipidosiphon javensis*** Montagne, 1842

Synonym: *Udotea javensis* (Montagne) A. & E. Gepp, 1904

Type species of the genus Rhipidosiphon

**Morphology** Dark green, tiered, elongated fan-shaped fronds, the whole thallus 5 mm high. Other workers report 5-10 mm (Coppejans et al, 2009), 1.25 cm (Teo & Wee, 1983) or even up to 40 mm (Coppejans & Prud'homme van Reine, 1989).

**Anatomy** A small, delicate thallus consisting of dichotomously branching cylindrical threads 25-70 µm thick aggregated side-by-side with silt concretions into triangular fans (reported as lightly calcified). Branching at uneven levels. Basally attached by a single thread that branches repeatedly, determinate branches with rounded apices forming a curved upper border to the frond. Indeterminate branches grow to a higher level producing tiered fronds. The filaments widen upwards, widest just before the fork.

**Ecology** Collected from a subtidal reef habitat (1-2 m depth) in Colombo, Wellawatte. Would be easily missed on account of its small size, if not searched for amongst other green algae. On vertical rock face at a depth of 20 m (Coppejans et al, 2009). Other workers report this species from intertidal habitats too.

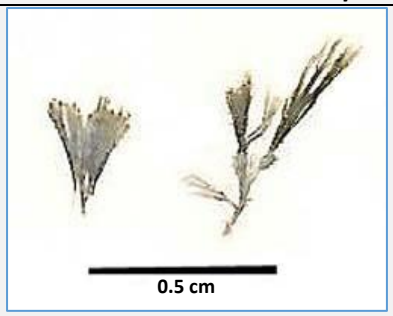
**Discussion** An inadvertent collection, found on the sand grains adherent to the rhizoids of a *Caulerpa*. Identified by reference to two papers - Coppejans et al, 1989 & 2001.

**Material examined** HMF 176, 26.12.1999, Wellawatte, Kinross first reef, 1.5-2 m, sand grains adherent to rhizoids of *C. racemosa*.

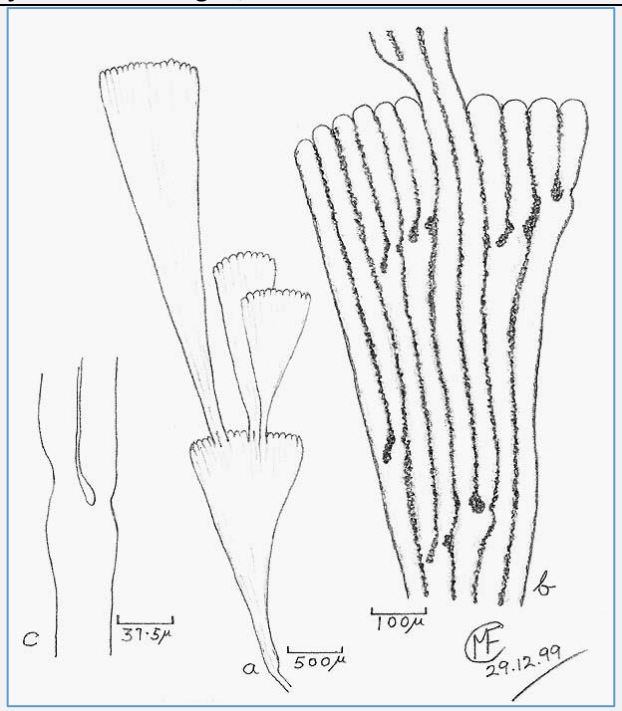
**References**

Coppejans & Prud'homme van Reine, 1989: 34, 119-142.
Coppejans et al, 2001.
Coppejans et al, 2009: 128, Fig. 102.
Lewmanomont & Ogawa, 1995: 59 (as *Udotea javensis*).
Teo & Wee, 1983: 54-56, Fig. 54.

***Rhipidosiphon javensis*** Montagne, 1842



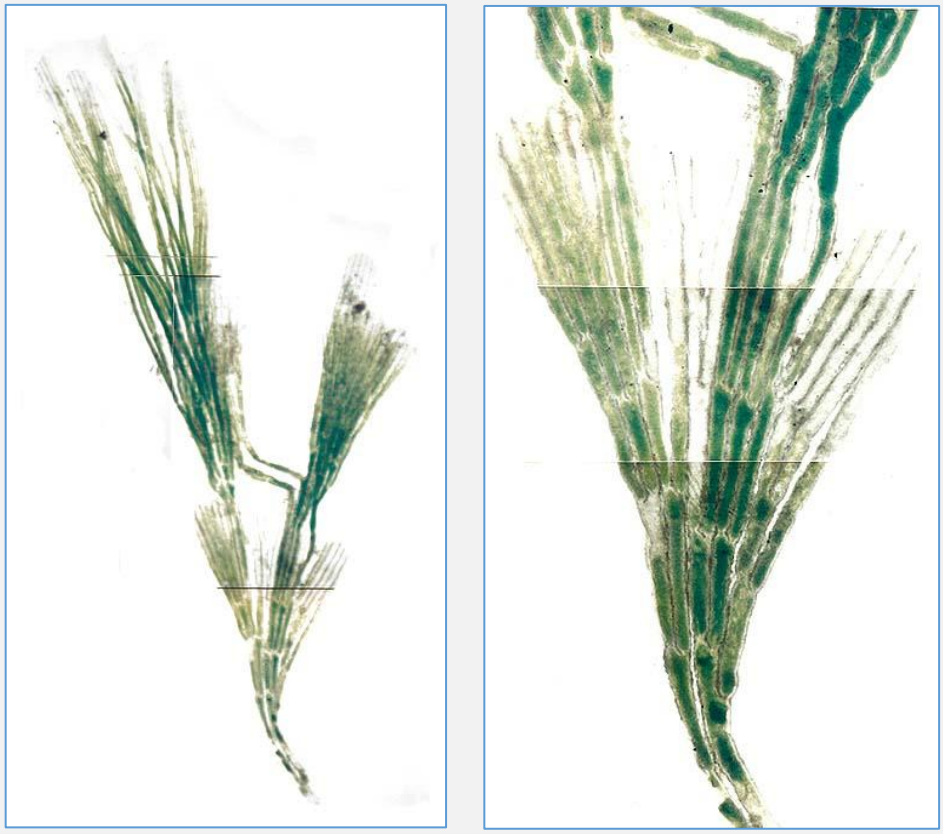

Herbarium image of HMF 176, 26.12.1999.




Drawing at right:
a) Habit, with a single basal thread, attachment missing. Note the tiered fronds.

b) Detail of dichotomously branching filaments compacted side-by-side, with rounded apices.

c) Detail of a single filament showing branching at unequal levels, widest just before the fork, constricted at the origin.



Montage of microscope images of HMF 176.

The filaments are held together lightly and tend to separate with handling.

The right-hand image is at a higher magnification.

**BIBLIOGRAPHY**


Coppejans, E. & Prud'homme van Reine, W.F., 1989. Seaweeds of the Snellius II Expedition - Chlorophyta: Caulerpales (Except *Caulerpa* and *Halimeda*). *Blumea* 34: 119-142.

Coppejans, E., Leliaert, F., Dargent, O. & De Clerck, O., 2001. Marine green algae (Chlorophyta) from the north coast of Papua New Guinea *Cryptogamie Algologie* **22**(4).

Coppejans, E., Leliaert, F., Dargent, O., Gunasekara, R. and De Clerck, O. 2009. *Sri Lankan Seaweeds, Methodologies and field guide to the dominant species*, ABC Taxa, Vol. 9, Belgian Development Corporation.

Lewmanomont, K. and Ogawa, H., 1995. *Common Seaweeds and Seagrasses of Thailand*. Faculty of Fisheries, Kasetsart University.

Teo Lee Wei and Wee Yeow Chin, 1983. *Seaweeds of Singapore*, 54-56, Fig. 54. Singapore University Press, National University of Singapore.


MF 7.7.2021.