

## Chlorodesmis Harvey & Bailey, 1841

### BRYOPSIDALES, UDOTACEAE

Type locality Colombo, Sri Lanka. The identity of the original collector is unknown to the compiler. It was not collected subsequently till 2002 and has not been seen in the same locality since.

One, possibly two species, in Sri Lanka. S. Balasubramaniam lists *C. hildebrandtii* with a query from Jaffna. Only the absence of cellular crystal inclusions in this species differentiates it from *C. caespitosa*, the two species being otherwise macroscopically similar (Eric Coppejans, pers. comm.).

Not listed by Durairatnam in his 1961 checklist.

Four species of *Chlorodesmis* in the Indian Ocean, two in India. Distributed worldwide.  
(Balasubramaniam, 1979; Silva *et al.*, 1996; AlgaeBase, 2021)

### Description of species

#### ***Chlorodesmis caespitosa* J. Agardh, 1887**

**Morphology** Dark green, flat-topped cushions consisting of close-packed erect filaments showing repeated dichotomous branching. Filaments 20 mm high. On hard substrates, rhizoids ramifying within a layer of fine sand that buries the lower parts of the filaments.

**Anatomy** Unseptate filaments 100-150-190 µm wide, symmetrical constrictions at dichotomies, internodes wider above than below, needle-shaped crystal inclusions (Coppejans *et al.*, 2001).

**Ecology** Epilithic, sublittoral. Recent collection was from an exposed location on a rocky reef subject to surge. The 15 cm diameter cushion was present at one spot only, never seen previously and not seen the following seasons. Collected only once in 2002 at Colombo: Wellawatte, Kinross first reef. Low intertidal wave-washed, sand covered rocks, at Sallimundal, east coast, 2012 (Mallikarachchi, 2013). Horizontal, sand covered rocks just above low water mark, continuously wave-swept (Coppejans *et al.*, 2009).

**Discussion** The presence of needle-shaped, crystal inclusions in the filament identifies this collection as *Chlorodesmis caespitosa*. (Eric Coppejans, pers. comm.)

**Material examined** HMF342, 10.3.2002, Wellawatte, Kinross first reef.

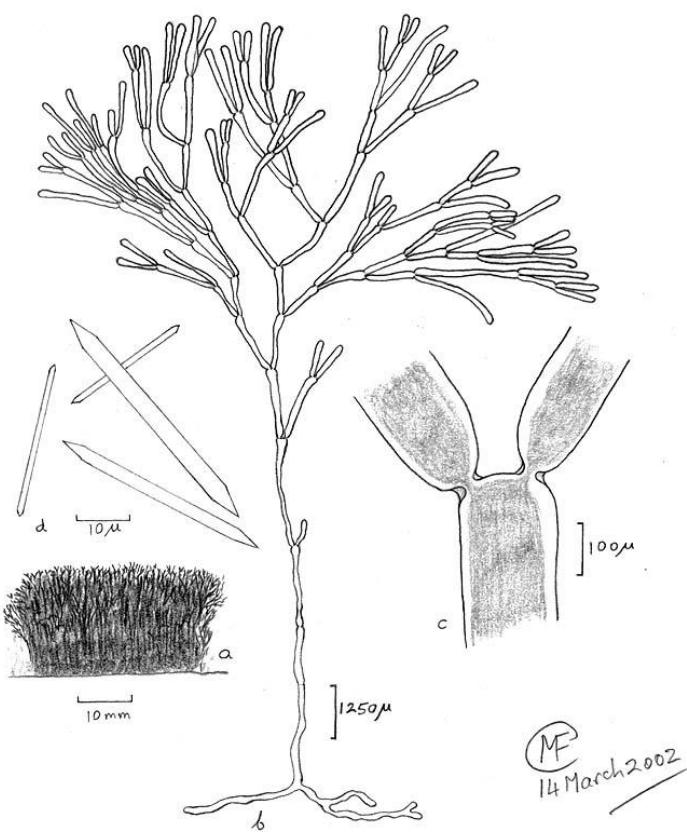
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*Chlorodesmis caespitosa* J. Agardh, 1887



*Chlorodesmis caespitosa*. A portion of a cushion freshly collected photographed ex-situ.



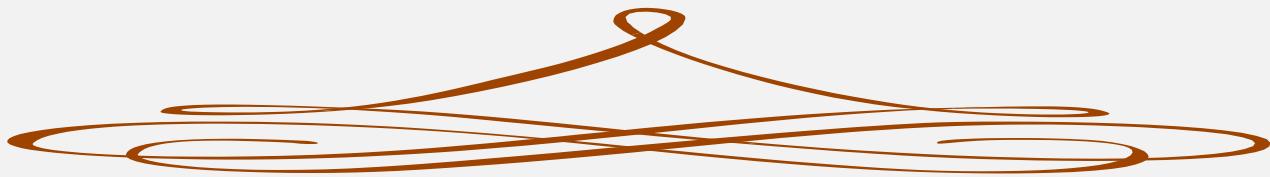
Left, Drawing, from fresh material.

- (a) Side view of a cushion on its substrate.
- (b) A single filament showing branching habit and rhizoids, the internodes wider above than below.
- (c) Highly magnified view of a dichotomy, showing symmetrical branching with basal constrictions.
- (d) Intra-cellular crystal inclusions.



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