

**HALODULE EMARGINATA NOV. SP.,  
A NEW SEA-GRASS FROM BRAZIL (POTAMOGETONACEAE)**

C. DEN HARTOG

Hardly anything is known about the occurrence of sea-grasses along the Atlantic coast of the South American continent. There are a few records from the coasts of Venezuela and Colombia and only two certain records outside the Caribbean area. The Hydrocharitacean *Halophila baillonis* Aschers. ex Dickie in Hook. f. (sub nomine *H. ascheronii* Ostenf.) has been collected once, in 1888, near Pernambuco, Brazil (Setchell, 1934). The other record concerns the leaf-blade of a still unidentified *Zostera* species, washed ashore near Montevideo, Uruguay, in 1934 (Setchell, 1935; den Hartog, 1970, p. 96).

Through the kind mediation of Mrs. F. M. Lindeman-Torgo, Utrecht, I received a sea-grass sample from South America. This appeared to consist of an undescribed species of *Halodule*. I am indebted to Dr. R. C. Bakhuizen van den Brink, Leyden, for rendering the diagnosis of this species into Latin.

***Halodule emarginata* den Hartog, nov. sp. — Fig. 1.**

Rhizoma repens, scaberulum, 1—1½ mm diam., radibus 1 vel 2 simplicibus, trunco brevi erecto ad nodos 1—4-folii fero. Radices usque ad 10 cm longi. Internodia 4—25 mm longa. Vagina 2—3 cm longa, magis persistens quam lamina, delapsis foliis cicatrices orbiculares relinquens; vaginae reliqua bases truncorum erectorum obtegentia; omnes cicatrices 1 vel 2 radices emittentes. Lamina 3—10 cm longa, 1¼—1½ mm lata, basi distincte, parte apicali paullum angustata. Costa apice dilatata. Mucro obtusus emarginatus, subspinulosus simulac dentibus lateralibus duobus munitus, dentibus interdum nullis. Cellulae tanniniferae sat sparse distributae in omnia folia. Flores atque fructus ignoti.

Rhizome creeping, rather coarse, 1—1½ mm thick, with 1 or 2 unbranched roots and a short erect stem bearing 1—4 leaves at each node. Roots up to 10 cm long. Internodes

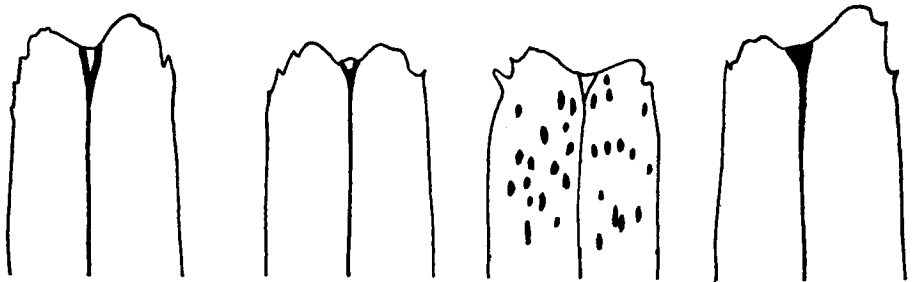


Fig. 1. Leaf-tips of *Halodule emarginata* den Hartog (São Paulo, 15-10-1969, Petersen, Type,  $\times 15$ ).

4—25 mm long. Leaf-sheath 2—3 cm long, persisting longer than the leaf-blade, when shed leaving a circular scar; remains of sheaths covering the bases of the erect stems; 1 or 2 roots developing from each leaf-scar. Leaf-blade 3—10 cm long and  $1\frac{1}{4}$ — $1\frac{1}{2}$  mm wide, narrowed at the base, and slightly narrowed towards the apex. Midrib widened at the apex. Leaf-tip obtuse, emarginate, slightly spinulose, and with 2 inconspicuous lateral teeth; lateral teeth sometimes absent. Tannin cells in leaves rather scattered. Flowers and fruits unknown.

*Distribution:* Brazil, São Paulo, Praia de Araça, I. de São Sebastião (23°23' S, 45°23' W), 15-10-1969, Dr. J. A. Petersen (Type, L).

*Notes:* The species is easily recognized from all other species by its distinctly emarginate leaf-tip; the faint development or absence of the lateral teeth is a feature that it has in common with *H. pinifolia* (Miki) den Hartog (den Hartog, 1964, p. 309).

One of the plants was infected with *Plasmodiophora diplantherae* (Ferdinandson & Winge, Ivim. Cook, a fungus which causes a strong swelling of the stem-internodes (den Hartog 1965).

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