

Botanica Marina
Vol. XX, pp. 405–414, 1977

Marine Algae in Tanzania VI

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(Received November 2, 1976)

Abstract

This first part of an annotated list of marine algae in Tanzania deals with red algae of the orders Rhodymeniales and Ceramiales. The study is based on collections brought together by the author during a 4 years stay in Tanzania 1966–70.

The analysis has indicated a closer relationship between the algal vegetation in Tanzania and the eastern part of the Indian Ocean (the Malay Archipelago of Weber van Bosse, Japan and eastern Australia) than between the vegetation in Tanzania and South Africa.

This is the first part (of four) of an annotated list of marine algae in Tanzania. The account is based on collections made by the author from 1966 till 1970.

In the previous reports in this series some genera have been broken out and discussed separately: *Giffordia*, *Sphacelaria*, *Dictyota*, *Ceramium* and *Laurencia*.

Our knowledge of the algal vegetation of the East African shores has been fragmentary to say the least, based as it had to be on some incomplete reports from temporary visits to the area. The most comprehensive list as regards the red algae in Tanzania is that of Schmitz (1895) which included 82 species and varieties. The annotated lists of Hauck (1886–1889) had 117 entries from the Red Sea and adjacent part of the Indian Ocean. 37 species had been collected in Zanzibar-Mombasa-Comore Islands and 27 on Madagascar. Reinbold's list came in 1907. From Dar es Salaam 41 species have been recorded (the same number has been given for Seychelles). Schröder (1912) reported 82 species (blue-greens, greens, browns and reds) collected during his voyage from Mombasa to Dar es Salaam in 1910. Gerloff made a list of 50 species collected in Dar es Salaam in 1957. The present account includes 292 species, varieties and forms. Less than ten non-calcified species in the collections as well as the lithothamnia are still awaiting identification and will be included later. The corresponding numbers for Kenya is 260 (taken from the 3 lists that appeared 1967–71 from the hand of Isaac) and, in addition 13 lithothamnia. The figures are not direct comparable because of different view on species delimitations in some cases. Attention should also be paid to the lists from Mocambique (Isaac 1957–58).

To most species in this account reference is made to the figures and descriptions in a booklet: Intertidal Seaweeds in Tanzania that appeared in 1976.

Champia parvula (Ag.) Harvey

Harvey 1853 p. 76, Jaasund fig. 203.

A group of *Champia* plants collected in Tanzania has certain features in common: The thallus is more or less procumbent, the patent branches are irregularly set and the thallus wall is uni-layered. The diameter of the thallus may vary from 300–400 μ in some plants to 800–1000 in others and the length of the plants between 1–3 cm. They have been taken to represent *C. parvula*, though it must be said that this species seems to be variously understood by different contributors to the herbaria.

Champia somalensis Hauck

Hauck 1888 p. 88, Börgesen 1933 p. 119, Jaasund 1976 fig. 204.

A relatively large species, easily recognized because of the thick thallus wall with 3–5 layers of cells and usually greenish colour. Distributed in the Red Sea and adjacent waters of the Indian Ocean. Collected on Zanzibar in October.

Champia globulifera Börgesen

Börgesen 1937 p. 330, Jaasund 1976 fig. 205.

3–6 cm long plants with an outstanding, monopodial axis 2 mm in diameter, collected in Pangani Bay (near