NEURYMENIA FRAXINIFOLIA (MERT.) J. AG. - A NEW RECORD OF A MARINE RED ALGA FOR BANGLADESH

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Abstract

Neurymenia fraxinifolia (Mert.) J. Ag. a marine red alga has been described and illustrated for the first time from St. Martin's Island, Bangladesh.

The algal sample was collected during low tide attached to inside black rocky hole in the northern side of 'Boroshiler Bandh' area of west coast of St. Martin's Island, Bangladesh on 14 February, 2006. The alga has been identified as *Neurymenia fraxinifolia* (Mert.) J. Ag. (Srinivasan 1969). The samples of *N. fraxinifolia* were preserved in 5% formalin in the sea water and kept in Environmental Science Discipline, Khulna University, Khulna-9208, Bangladesh.

Islam (1976) described 49 taxa of marine red algae under 35 genera from Bangladesh. Later on more marine red algae from this island were reported (Aziz (1997, Aziz *et al.* (2002a, 2002b, Islam and Aziz 1982, 1987, Islam *et al.* 2002). *N. fraxinifolia* (Mert.) J. Ag. is being reported here for the first time from Bangladesh.

Detailed description and illustrations are given on the basis of fresh and preserved materials.

Class: Rhodophyceae, Order: Ceramiales, Family: Rhodomelaceae

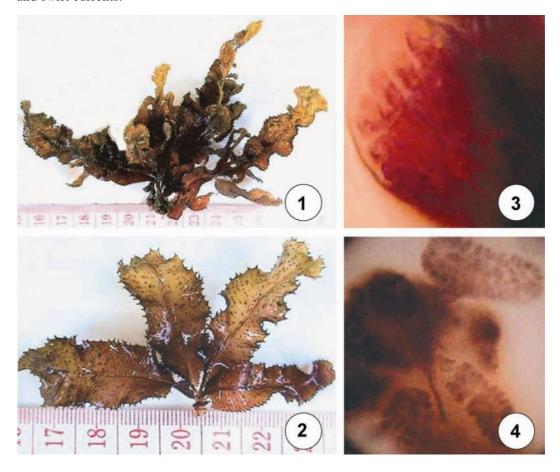
Neurymenia fraxinifolia (Mert.) J. Ag. (Figs. 1-4) (Srinivasan 1969).

Colour of the thallus deep-red to purplish, becomes reddish-brown on drying. Fronds simple linear oblong, membranous, lamina in older plants decayed and the midrib serves as a stipe. Fronds, 8-15 cm or more long, obtuse at base, rounded at apices, undulated and serrated throughout. Adventitious branches develop from the midrib of older lamina. Veins with short proliferations arising from both surfaces of lamina. Frond margins spinose with subulate and recurved ramuli; similar processes arising from veins and midrib also. Stem cylindrical, simple or branched thickened and denuded. Fructifications in secondary adventitious branchlets. Stichidia elongated, ovate or oblong, apex rounded, shortly stipitate, containing double rows of tetrasporangia. Tetrasporangia 80 - 100 µm long, 60 - 70 µm broad. Spermatangia cylindrical, 100 - 130 µm in diameter. Carposporophyte obovate, urn-shaped, 50 - 65 µm broad, 55 - 75 µm long and solitary.

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The alga is an inhabitant of deep water (ca. 8-10 m) and well protected by rocks at St. Martin's Island. It grows forming an interesting community on the vertical faces or inwardly scooped out portions of black rocks, which are only strongly agitated by the swell and swift currents.



Figs. 1-4: *Neurymenia fraxinifolia* (Mert.) J.Ag. 1-2. Whole plants. 3. A carposporophyte enlarged. 4. Spermatangial seri.

Distribution: Kenya, Madagascar, Mauritius, Mozambique, South Africa, Indonesia and Sri Lanka (Silva *et al.*1996); Réunion, Tanzania (Oliveira *et al.* 2005); Philippines (Kraft *et al.* 1999); India (Sahoo *et al.* 2001); Japan (Yoshida 1998); Taiwan (Huang 2000); Australia and New Zealand: Papua New Guinea (Huisman 2000, Littler and Littler 2003); Fiji (South and Skelton 2003).

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