

NOTES ON THE SEAWEEDS OF TRIPOLI, LIBYA.

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Abstract

Marine benthic algae collected from Tripoli and adjacent coastal areas containing 15 species of Chlorophyta, 15 of Phaeophyta and 17 of Rhodophyta are listed. It includes 7 new reports for Tripoli and 4 new records for the Libyan coast. A new combination, *Tenarea pustulata* has been suggested. Some ecological notes have also been given.

Introduction

Enrico Albertis, captain of the cutter “Violante”, was the first to collect some seaweeds near Tripoli in 1878, the specimens of which were described by Piccone (1879, 1884). Prof. R. Spigani in 1887 collected a few more marine algae from the coast of Tripoli and his collections were taxonomically evaluated by De Toni & Levi (1888). Muschler (1910) compiled a list of seaweeds from Tripoli and other areas of Tripolitania. During 1912 – 13 Profs. A. Trotter and C. F. Parona made collections of calcareous and other algae from Tripoli and neighbouring areas, which were described by Raineri (1920). With the available data of marine algae from Libya (Nizamuddin *et al.*, 1979), it would appear that these taxonomic studies can be described only as fragmentary and provide no ecological information.

Results and Discussion

During December 1977 and July 1978 the author participated with Prof. M. Nizamuddin in a few collection trips of Tripoli and the adjacent coastal areas. Following is a preliminary report of marine benthic algae collected. It embraces specimens from the intertidal rocks and drift material collected during the ebb tides:

I. Chlorophyta

1. Chlorophyceae

§ *Enteromorpha compressa* (L.) Grevil.

--§ *E. intestinalis* (L.) Grevil.

§ *Ulva fasciata* Delile

–\$ *U. lactuca* L.

2. Bryopsidophyceae

- + *Acetabularia mediterranea* Lamour.
- \$ *Anadyomene stellata* (Wulf.) C. Ag.
- Caulerpa prolifera* (Forssk.) Lamour.
- \$ *Chaetomorpha aerea* (Dillw.) Kütz.
- \$ *Cladophora hutchinsiae* (Dillw.) Kütz.
- *C. refracta* (Roth) Kütz.
- Codium bursa* (L.) C. Ag.
- C. tomentosum* Stackh.
- * *Dasycladus vermicularis* (Scop.) Krass.
- \$ *Halimeda tuna* (Ellis et Soland.) Lamour.
- * *Udotea petiolata* (Turra) Børg.

II. Phaeophyta

1. Phaeophyceae

- Cladostephus verticillatus* (Lightf.) van Reine
- Dictyopteris membranacea* (Stackh.) Batters
- \$ *Dictyota dichotoma* (Huds.) Lamour.
- * *Dilophus fascicola* (Roth) Howe
- * *Ectocarpus confervoides* (Roth) Kjellm.
- * *Halopteris scoparia* (L.) Sauvag.
- * *Padina pavonica* (L.) Thiv. ex Taylor
- + \$ *Sphacelaria furcigera* Kütz.

2. Laminariophyceae

- Asperococcus bullosus* Lamour.
- * \$ *Colpomenia sinuosa* (Mert. ex Roth) Derb. et Solier
- \$ *Petalonia fascia* (Müller) Kuntze.

3. Fucophyceae

- Cystoseria amentacea* (C. Ag.) Bory
- * *C. compressa* (Esper) Gerloff et Nizamuddin
- *C. ericamarina* (Gmel.) Naccari
- Sargassum hornschurchii* C. Ag.

III. Rhodophyta.

1. Bangiophyceae

§ *Bangia fuscopurpurea* (Dillw.) Lyngb.

* *Porphyra umbilicalis* (L.) J. Ag.

2. Florideophyceae

*§ *Acanthophora najadiformis* (Delile) Papenf.

— *Acrosorium uncinatum* (J. Ag.) Kylin

* *Asparagopsis taxiformis* (Delile) Trevis.

Callithamnion granulatum (Duch.) C. Ag.

Ceramium rubrum (Huds.) C. Ag.

— *Fosliella zonalis* (Crouan et Crouan) Feldm.

Gelidium crinale (Turn.) Lamour.

*§ *Gracilaria verrucosa* (Huds.) Papenf.

+ *Griffithsia barbata* (Smith) C. Ag.

§ *Hypnea musciformis* (Wulf.) Lamour.

§ *Laurencia obtusa* (Huds.) Lamour.

+ *Peyssonnelia coriacea* Feldm.

§ *Polysiphonia elongata* (Huds.) Spreng.

*§ *Scinaia forcillata* Bivone

*§ *Tenarea pustulata* (Lamour.) comb. nov.

Bas. : *Melobesia pustulata* Lamouroux (1816)

Syn.: *Dermatolithon pustulatum* (Lamour.) Foslie

The taxa marked with an asterisk (*) have previously been reported from Tripoli under a synonymous name. A negative sign (—) indicates that the species have not previously been recorded from Tripoli, while those algae with a positive sign (+) are new reports from the Libyan coast. *Tenarea pustulata* (Lamouroux) Shameel is the correct specific epithet for *Dermatolithon pustulatum*, previously recorded by Muschler (1910) from Tripoli. As *Dermatolithon* Foslie has been placed in synonymy with *Tenarea*, this new combination is being suggested.

It is interesting to note that the seaweed flora of Tripoli is strikingly similar to that of Karachi, since algae with a § sign have also been reported from Karachi, Pakistan. With the exception of *Peyssonnelia* all the above mentioned genera are found at Karachi coast. This close resemblance in seaweed flora may be due to similar ecological conditions, both from topographical as well as hydrographical point of view.

The marine algal flora of Tripoli does not differ considerably from other areas

of Mediterranean Sea (Boudouresque & Boudouresque, 1969; Güven & Ötzing, 1971; Boudouresque, 1974; Tsekos & Haritonidis, 1977). On exposed intertidal rocks and stones *Dictyopteris membranacea*, *Dictyota dichotoma*, *Halopteris scoparia*, *Padina pavonica* and *Ulva lactuca* appear at quite a high frequency. In shadowy places *Cystoseira amentacea*, *Halimeda tuna*, *Peyssonnelia coriacea* and *Udotea petiolata* occur in abundance. On quays and wharves there was a luxuriant growth of *Enteromorpha intestinalis*. In some places of infralittoral rocks *Cladophora hutchinsie* spread as a carpet. Less common species of the littoral zone were *Acetabularia mediterranea*, *Ceramium rubrum*, *Codium bursa*, *Ectocarpus confervoides* and *Laurencia obtusa*. Red algae usually dominate in the sublittoral zone, *Gelidium crinale*, *Hypnea musciformis* and *Tenarea pustulata* prevail with a high frequency. *Bangia fuscopurpurea* and *Griffithsia barbata* were found only as epiphytes.

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