The Marine Algae of Tunisia

ERNANI G. MEÑEZ
and
ARTHUR C. MATHIESON

SMITHSONIAN CONTRIBUTIONS TO THE MARINE SCIENCES • NUMBER 10

SERIES PUBLICATIONS OF THE SMITHSONIAN INSTITUTION

Emphasis upon publication as a means of "diffusing knowledge" was expressed by the first Secretary of the Smithsonian. In his formal plan for the Institution, Joseph Henry outlined a program that included the following statement: "It is proposed to publish a series of reports, giving an account of the new discoveries in science, and of the changes made from year to year in all branches of knowledge." This theme of basic research has been adhered to through the years by thousands of titles issued in series publications under the Smithsonian imprint, commencing with *Smithsonian Contributions to Knowledge* in 1848 and continuing with the following active series:

Smithsonian Contributions to Anthropology
Smithsonian Contributions to Astrophysics
Smithsonian Contributions to Botany
Smithsonian Contributions to the Earth Sciences
Smithsonian Contributions to the Marine Sciences
Smithsonian Contributions to Paleobiology
Smithsonian Contributions to Zoology
Smithsonian Studies in Air and Space
Smithsonian Studies in History and Technology

In these series, the Institution publishes small papers and full-scale monographs that report the research and collections of its various museums and bureaux or of professional colleagues in the world of science and scholarship. The publications are distributed by mailing lists to libraries, universities, and similar institutions throughout the world.

Papers or monographs submitted for series publication are received by the Smithsonian Institution Press, subject to its own review for format and style, only through departments of the various Smithsonian museums or bureaux, where the manuscripts are given substantive review. Press requirements for manuscript and art preparation are outlined on the inside back cover.

S. Dillon Ripley
Secretary
Smithsonian Institution

SMITHSONIAN CONTRIBUTIONS TO THE MARINE SCIENCES • NUMBER 10

The Marine Algae of Tunisia

Ernani G. Meñez
and Arthur C. Mathieson

SMITHSONIAN INSTITUTION PRESS
City of Washington
1981

ABSTRACT

Meñez, Ernani G., and Arthur C. Mathieson. The Marine Algae of Tunisia. *Smithsonian Contributions to the Marine Sciences*, number 10, 59 pages, 1 figure, 1981.—A taxonomic study of the marine flora of Tunisia, North Africa, was conducted during 1973–1975. A total of 169 species, 37 Chlorophyta, 36 Phaeophyta, 96 Rhodophyta, of benthic marine algae were collected from 29 sites along the Mediterranean coast of Tunisia. Of the 169 species, 57 taxa are newly reported for the country. Of these, 16 represent genera previously unreported.

OFFICIAL PUBLICATION DATE is handstamped in a limited number of initial copies and is recorded in the Institution's annual report, *Smithsonian Year*. SERIES COVER DESIGN: Seascape along the Atlantic coast of eastern North America.

Library of Congress Cataloging in Publication Data
Meñez, Ernani G. The marine algae of Tunisia.
(Smithsonian contributions to the marine sciences ; no. 10)
Bibliography: p.
1. Marine algae—Tunisia. I. Mathieson, Arthur C. II. Title. III. Series.
QK576.T8M46 589.3961'1 81-607084 AACR2

Contents

The Marine Algae of Tunisia

Ernani G. Meñez
and Arthur C. Mathieson

Introduction

The North African country of Tunisia lies on the southwestern shore of the Mediterranean between Algeria and Libya (Figure 1). The country's extensive coastline (approximately 1500 km) borders the eastern and western basins of the Mediterranean. Very few detailed floristic studies of the Tunisian marine flora have been conducted.

The first records of Tunisian marine algae (42 species) were published by Piccone (1884, 1879) from Galite and Cani Islands in northern Tunisia. Patouillard (1897) published a catalog of plants in which Sauvageau reported 6 species of seaweeds from the Gulf of Gabes in southeastern Tunisia. In the same year Debray (1897) reported 30 species from Tunisia. Peterson (1918) listed 19 species collected by Paulsen and Ostenfeld from Galite Island during the winter of 1908–1909 and summer of 1910 cruises of the *Thor*'s Danish oceanographic expeditions to the Mediterranean and adjacent seas. Schiffner (1926) published the first marine flora of Tunisia, listing 60 species of algae from Tunis, the capital of the country, and Sfax, a coastal city in the east. Hamel (1926, 1927, 1931a,b) listed 55 species of algae from Tunisia. Feldmann published two short papers (1931a, 1951) on Tunisian algae citing a few specimens from Gabes and Sousse. Subsequently Feldmann (1961) gave a comprehensive report of 90 species from Galite Island in northern Tunisia. Hamel and Lemoine (1953), in their publication of the Corallinaceae of France and North Africa, listed 15 species of coralline algae from Tunisia. Earlier Lemoine (1924) reported 3 species of calcareous algae from Tunisia during the Mediterranean cruise of the *Pourquois Pas?*. A list of 56 species of seaweeds from the Gulf of Tunis was published by Ben Alaya (1970). Other investigators, such as Fremy (1925), Pottier (1929), Huve (1962), Boudouresque (1967), Mazoyer (1937, 1938), Seurat (1929), Mollinier and Picard (1954), have also contributed to our knowledge of the benthic marine algae in Tunisia.

General collections of seaweeds were made at different times of the year at 29 sites throughout the Tunisian coast (Figure 1) between 1973–1975. Voucher specimens of all the species collected at each site were prepared. Whenever possible, 5 or more replicates of each species were made. Habitat descriptions of the 29 collecting sites (Figure 1) are summarized in "Collecting Locations on the Tunisian Coast." Overall, the sites represent exposed, semi-exposed, and sheltered locations, and the algae were either growing on rocks or sand-mud substrate or epiphytically on seagrasses or other algae. The specimens were collected principally by free diving to 3 m deep or dredging to a depth of 40 m.

A total of 169 taxa of seaweeds was collected

Ernani G. Meñez, Smithsonian Oceanographic Sorting Center, Smithsonian Institution, Washington, D.C. 20560. Arthur C. Mathieson, director, Jackson Estuarine Laboratory, University of New Hampshire, Durham, New Hamphshire 03824.

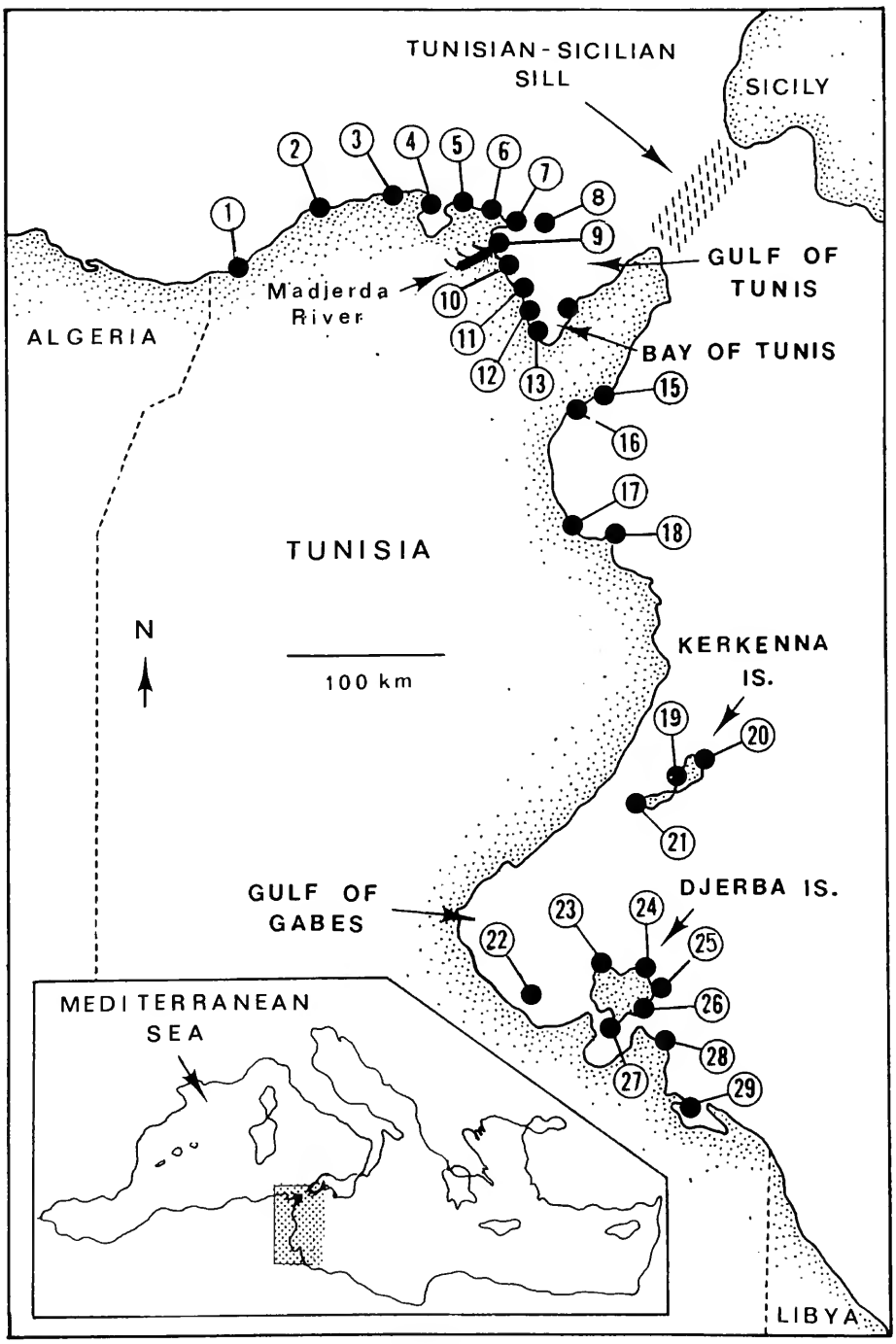

FIGURE 1.—General collecting sites throughout the Tunisian coast.

from the 29 sites in Tunisia, including 37 (22%) Chlorophyta, 36 (21%) Phaeophyta, and 96 (57%) Rhodophyta. Of the 169 species, 57 are newly reported from Tunisia, i.e., 14 Chlorophyta, 8 Phaeophyta and 35 Rhodophyta. Of these, 16 represent genera previously unreported. The genera are: *Spatoglossum*, *Punctaria*, *Blidingia*, *Derbesia*, *Pseudobryopsis*, *Scinaia*, *Myriogramme*, *Bonnemaisonia*, *Falkenbergia*, *Cryptonemia*, *Halarachnion*, *Hypoglossum*, *Rhodymenia*, *Pterosiphonia*, *Spyridia*, *Digenia*. The taxa new to Tunisia are designated with an asterisk (*) in the systematic section. Basionyms and synonyms are included in the list. References pertinent to Tunisian marine flora, general collection data, and the distribution of seaweed taxa in the Mediterranean, northeastern Atlantic, Red Sea, and Indian Ocean are included in the list. Collector is designated as EGM for E. G. Meñez. The numbers in italic cited after the collector correspond to collecting stations, followed by specimen numbers in roman. Specimens are being deposited in the U.S. National Herbarium, Smithsonian Institution (US), the Hogdon Herbarium (NHA) at the University of New Hampshire, and the Institut National Scientifique, Technical d'Océanographie et des Pêches (INSTOP) in Tunisia.

ACKNOWLEDGMENTS.—This study represents a portion of a dissertation submitted by E. Meñez to the University of New Hampshire in partial fulfillment of the requirements for the degree of doctor of philosophy. The financial support provided by the Smithsonian Foreign Currency Program for the research in Tunisia was greatly appreciated. We wish to thank Dr. S. Dillon Ripley, secretary of the Smithsonian Institution, for granting travel support from the Fluid Research Fund to enable E. G. Meñez to study specimens of Tunisian seaweeds deposited in the British Museum (Natural History), London, and in the Laboratoire de Cryptogamie, Muséum National d'Histoire Naturelle, Paris. We would like to acknowledge the assistance of Dr. Abderrazak Azouz, director, Institut National Scientifique, Technical d'Océanographie et des Pêches (Tunisia), for granting permission to collect and study seaweeds from Tunisia. For critical review and discussion of this paper, we are indebted to Dr. Linn Bogle and Dr. Garrett Crow, Department of Botany, University of New Hampshire; Dr. James Norris, National Museum of National History, Smithsonian Institution; and Dr. John West, Department of Botany, University of California, Berkeley. Dr. Paul Silva, University of California Herbarium, Berkeley, assisted with problems of literature citations, for which we are grateful. For their encouragement and continued support, the senior author wishes to thank Dr. Robert Higgins and Dr. Raymond Manning, Smithsonian Institution. Last, but not least, we would like to acknowledge the assistance of Ms. Hilconida Calumpong, Smithsonian fellow (Educational Outreach Program), in the final proofreading and typing of this paper.

Collecting Locations on the Tunisian Coast

The Tunisian coastline is approximately 1500 km long. The northern boundary (08°45′00″ N lat., 36°57′00″ E long.) is 5 km west of the city of Tabarka and the southern boundary (11°34′00″ N lat., 33°10′ 00″ E long.) is 6 km south of Lake El Bibane. A brief description of each collecting station (Figure 1) is given below.

Station 1, Tabarka: a sheltered rocky beach at the western edge of the port. The substrate consists of large subtidal rock outcrops. A rich algal flora is evident.

Station 2, Cap Serrat: a semi-exposed sandy beach 56 km west of Bizerte. A rocky promontory with large tidepools provides an excellent substrate for a well-developed flora. Heavy populations of *Posidonia* with numerous algal epiphytes.

Station 3, Bechateur: an isolated, semi-exposed rocky site with a sandy beach 3 km west of the town. Rocky outcrops and *Posidonia* beds abound with algae.

Station 4, Corniche, Bizerte: an exposed sandy beach located behind Hotel Corniche 4 km west of the town. Collection consisted of drift specimens of algae.

Station 5, Cap Zebib: an exposed sandy beach 12 km west of Bizerte. Vertical surfaces of rock benches, subtidal rock platforms, and sparse population of seagrass provide an excellent substrate for a rich algal flora.

Station 6, Raf Raf: an exposed sandy beach 15 km west of Cap Zebib. The substrate consists of a few, small rock outcrops and sand. Algae were sparse.

Station 7, Ras Sidi Ali El Mekki: an exposed sandy beach at the northwest end of Gulf of Tunis. Few, scattered rocks with poor algal cover.

Station 8, Ile Plane: an exposed offshore station 8 km west of Ras Sidi Ali El Mekki. The substrate consists of rocks mixed with sand and calcareous algae fragments. Algae were dredged from depths of 15–75 m.

Station 9, mouth of Madjerda: a semi-exposed site near a river outlet 8 km south of Ras Sidi Ali El Mekki. The substrate consists of muddy sand. Algae were dredged from depths of 15–57 m.

Station 10, Raouad: an exposed sandy beach 13 km south of Madjerda on the western side of the Gulf of Tunis. The substrate consists of sand with few, isolated rocks. Algae collection consisted of drift specimens.

Station 11, Gammarth: a semi-exposed sandy beach behind Abou Nawas Hotel 9 km south of Raouad. Rock outcrops and *Cymodocea* beds abound with well-developed marine flora.

Station 12, Corniche, La Marsa: a sheltered sandy beach 7 km north of Gammarth in the Bay of Tunis. A rocky promontory and extensive *Cymodocea* beds provide a good substrate for a rich algal flora.

Station 13, Sidi Bou Said: a sheltered marina enclosed by man-made rock piles 3 km south of Corniche, La Marsa. Sparse *Cymodocea* covered with algal epiphytes.

Station 14, Korbous: a semi-exposed rocky beach 6 km south of the town on the Cap Bon peninsula. Few algae were found on intertidal rocks and *Cymodocea*.

Station 15, Nabeul: an exposed rocky beach behind Hotel Pyramides on the Cap Bon peninsula. Intertidal rock platforms with few algae.

Station 16, Hammamet: a semi-exposed sandy beach behind an old fortification on the Cap Bon peninsula. Isolated boulders provide a good substrate for rich populations of *Codium* and *Porphyra*.

Station 17, Sousse: a semi-exposed sandy beach adjacent to the main boulevard. Massive rock piles 50 m offshore support a rich algal flora.

Station 18, Monastir: an exposed rocky beach 14 km southwest of Sousse. The substrate consists of sand and rocks. Vegetation is poor.

Station 19, Sidi Fredj, Kerkenna Island: a semi-exposed sandy-muddy beach on the western end of the island. Occasional rocks and *Cymodocea* beds provide substrate for the algae.

Station 20, El Attaya, Kerkenna Island: an exposed sandy-muddy beach on the southern end of the island. Intertidal rock platforms and *Cymodocea* beds abound with lush algal vegetation.

Station 21, Sidi Youssef, Kerkenna Island: a sheltered sandy-muddy beach adjacent to the ferry-landing. Sand, mud, and occasional rocks support a poor vegetation.

Station 22, Gulf of Gabes: an offshore station 72 km south of the city of Sfax. Algae were dredged from depths of 37–38 m.

Station 23, Bordj Djillidj, Djerba Island: an exposed sandy beach on the northwestern end of the island. Coarse sand supports few algae.

Station 24, Dar Djerba, Djerba Island: an exposed sandy beach behind Hotel Dar Djerba. Rock outcrops with poor cover of algae.

Station 25, Sakiet, Djerba Island: an exposed sandy beach 3 km south of Dar Djerba. Seagrass, rocks, and sand provide substrate for algae.

Station 26, El Kantara, Djerba Island: a sheltered sandy beach on the southern end of the island. Intertidal rock platforms and *Cymodocea* beds provide a good substrate for marine vegetation.

Station 27, Aghir, Djerba Island: a semi-exposed sandy beach 5 km north of El Kantara. *Cymodocea* with numerous algal epiphytes. Occasional rocks support sparse populations of larger algae.

Station 28, Zarzis: an exposed sandy beach adjacent to a small bridge 18 km south of El Kantara. The substrate consists of rocks and sand. Vegetation is poor.

Station 29, El Bibane: a sheltered salt-water lake 8 km north of the Libyan border. The substrate inside the lake consists of mud and sand, which support thick populations of *Cystoseira*, *Udotea*, and *Halimeda*. Subtidal rock platforms at the narrow opening into the lake with rich algal cover.

Key to the Marine Algae of Tunisia

1. Plants calcified 2
   Plants not calcified 13
2. A simple stalk bearing a disk at the apex .... ***Acetabularia acetabulum***
   Plants not a stalk bearing a disk at the apex 3
3. Plants flabellate ..... ***Udotea petiolata***
   Plants not flabellate 4
4. Plants erect 5
   Plants crustose 10

5. Plants stiff, with heavy calcification 6
   Plants soft and pliable, moderately calcified ..... ***Liagora***
   A. Plants irregularly branched, with many laterals ..... ***L. distenta***
      Plants dichotomously branched, without laterals ..... ***L. viscida***
6. Plants with simple stalk and terminal tufts of free filaments ..... ***Espera mediterranea***
   Plants not a simple stalk with terminal tufts of filaments 7
7. Holdfast fibrous ..... ***Halimeda tuna***
   Holdfast not fibrous 8
8. Plants with axial conceptacles 9
   Plants with apical conceptacles ..... ***Haliptilon squamatum***
   Plants with lateral conceptacles ..... ***Amphiroa***
   A. Upper segments compressed, cylindrical below, dichotomously branched, branches often recurved ..... ***A. beauvoisii***
      Segments terete, branches not recurved ..... ***A. rigida***
9. Branching dichotomous ..... ***Jania***
   A. Diameter of main segments more than 400 μ; plants more than 4 cm high ..... ***J. longifurca***
      Diameter of main segments less than 250 μ; plants up to 5 cm high ..... B
   B. Habit corymbose, segments 3–6 times as long as broad .. ***J. rubens***
      Habit divaricate, segments 2–3 times as long as broad ..... ***J. corniculata***
9. Branching pinnate ..... ***Corallina***
   A. Conceptacles without horns ..... ***C. officinalis***
      Conceptacles with horns ..... B
   B. Plants saxicolous; basal disk bears many large erect fronds; intergeniculum compressed ..... ***C. elongata***
      Plants epiphytic; basal disk bears single erect fronds; intergeniculum partly cylindrical ..... ***C. granifera***
10. Thallus heavily encrusted with lime; sporangia in conceptacles 11
    Thallus moderately encrusted with lime; sporangia scattered between erect filaments(paraphyses) ..... ***Peyssonnelia***
    A. Plants crustose, loosely attached, somewhat rigid and stony, deep red ..... ***P. rubra***
       Plants crustose, closely adhering to substrate, leathery, brownish to rust colored ..... ***P. squamaria***
11. Secondary pit connections present 12
    Secondary pit connections absent ..... ***Fosliella farinosa***
12. Plants epiphytic on other algae ..... ***Dermatolithon pustulatum***
    Plants saxicolous ..... ***Lithophyllum incrustans***
13. Plants filamentous 14
    Plants not filamentous 34
14. Filaments branched 15
    Filaments unbranched ..... ***Chaetomorpha aerea***

15. Filaments entirely uniseriate 16
    Filaments partly or entirely multiseriate 26
16. Filaments with reticulate, clathrate, or fragmented chloroplast; multinucleate 17
    Filaments without reticulate, clathrate, or fragmented chloroplast; uninucleate 18
17. Thallus free-floating; chloroplast clathrate or fragmented; filaments entangled ..... ***Cladophoropsis modonensis***
    Thallus attached; chloroplast reticulate; filaments free ... ***Cladophora***
    A. Plants a spongy mass of interwoven filaments ..... ***C. albida***
       Plants consisting of free filaments ..... B
    B. Rhizoids numerous, long, rising from basal filaments .. ***C. prolifera***
       Rhizoids few, short, arising from basal filaments C
    C. Filaments fine, soft, silky, and pale green ..... ***C. crystallina***
       Filaments coarse, not silky, dark green ..... D
    D. Plants forming tufted cushions, not more than 1 cm high ..... ***C. lutescens***
       Plants erect, more than 2 cm high ..... E
    E. Filaments near the base 150–200 μ in diameter, 6–10 times as long as broad ..... ***C. utriculosa***
       Filaments near the base less than 150 μ (rarely 200 μ) in diameter, 2–7 times as long as broad ..... F
    F. Branch system acropetally organized, falcate ..... ***C. dalmatica***
       Branch system not acropetally organized, straight ..... G
    G. Filaments 80–150 μ in diameter; branches opposite or in fours; cells 3–4 times as long as broad ..... ***C. rupestris***
       Filaments 120–200 μ in diameter; branching radial; cells 2–6 times as long as broad ..... ***C. ramosissima***
18. Filaments without involucral cells 19
    Filaments bearing involucral filaments ..... A
    A. Branching alternate or irregular, plants bushy . ***Anotrichium tenue***
       Branching dichotomous, plants tufted ..... ***Griffithsia***
    B. Tetrasporangia naked ..... ***G. flosculosa***
       Tetrasporangia covered ..... ***G. phyllamphora***
19. Plants free-floating, green ..... ***Derbesia lamourouxii***
    Plants attached, color various but not green 20
20. Filaments occasionally epiphytic, reproducing commonly by polyspores 21
    Filaments epiphytic, reproducing commonly by monospores ..... ***Acrochaetium***
    A. Base composed of creeping filaments ..... ***A. codiculum***
       Base composed of a disk ..... B
    B. Disk produces creeping filaments ..... ***A. virgatulum***
       Disk produces directly erect filaments ..... ***A. savianum***

21. Filaments with highly refractive lateral vesicular cells ..... ***Trailliella intricata***
    Filaments without refractive lateral vesicular cells 22
22. Filaments ecorticate 23
    Filaments corticated at the nodes or sometimes cortical cells covering entire uniseriate axis ..... ***Ceramium***
    A. Filaments beset with spines at the nodes ..... ***C. ciliatum***
       Filaments without spines ..... B
    B. Plants entirely corticated ..... ***C. rubrum***
       Plants corticated only at the nodes C
    C. Filaments setaceous at the base ..... ***C. diaphanum***
       Filaments not setaceous at the base ..... D
    D. Cortical cells distinctly dissimilar in size and shape; tetrasporangia covered by cortical cells ..... E
       Cortical cells similar in size and shape; tetrasporangia naked ..... ***C. tenuissimum***
    E. Cortical cells at the base of the node larger than cells above ..... ***C. tenerrimum***
       Cortical cells above the node larger than cells below ..... ***C. gracillimum***
23. Sporangia tetrapartite or tetrahedral 24
    Sporangia unilocular 25
24. Sporangia tetrapartite; cells uninucleate .... ***Antithamnion cruciatum***
    Sporangia tetrahedral; cells plurinucleate ..... ***Callithamnion***
    A. Tetrasporangia elliptical; ultimate branchlets pinnate or dichotomous ..... B
       Tetrasporangia oval; ultimate branchlets alternate ..... ***C. tetragonum***
    B. Tetrasporangia lateral on branches; branchlets pinnate ..... ***C. byssoides***
       Tetrasporangia axial on branches; branchlets dichotomous ..... ***C. granulatum***
25. Chromatophores numerous, discoid ..... ***Giffordia hincksiae***
    Chromatophores few, banded ..... ***Ectocarpus***
    A. Base of plants tighty entangled becoming free above; ultimate branchlets secund and ending in a hair; plurilocular gametangia ovate-acuminate ..... ***E. fasciculatus***
       Base of plants loosely entangled becoming free above; ultimate branchlets secund, few ending in a hair; plurilocular gametangia subulate-conical, sometimes apices ending in long multicellular hairs ..... ***E. siliculosus***
26. Filaments without propagula 27
    Filaments with stalked, bi- or triradiate propagula ..... ***Sphacelaria***
    A. Branching irregular; propagulum bi- or triradiate ..... B
       Branching pinnate; propagulum triradiate ..... ***S. cirrosa***

B. Propagulum triradiate ..... ***S. tribuloides***
Propagulum biradiate ..... ***S. furcigera***
27. Cells without pit connections 28
Cells with pit connections 30
28. Filaments uniseriate throughout 29
Filaments uniseriate below becoming multiseriate above ..... ***Bangia fuscopurpurea***
29. Filaments unbranched, with gelatinous sheaths .. ***Goniotrichum alsidii***
Filaments branched, without gelatinous sheaths .. ***Erythrotrichia carnea***
30. Filaments with 3 pericentral cells ..... ***Falkenbergia rufolanosa***
Filaments with 4 or more pericentral cells 31
31. Branches not formed in regular sequences 32
Determinate and indeterminate branches formed in regular sequences ..... ***Herposiphonia***
A. Pericentral cells less than 10; erect determinate branches less than 1 mm long ..... ***H. tenella*** f. ***secunda***
Pericentral cells more than 20; erect determinate branches more than 1 mm long ..... ***H. tenella***
32. Plants erect, sometimes with decumbent basal filaments; apices straight 33
Plants with creeping primary axes, lateral branches with recurved apex ..... ***Lophosiphonia***
A. Pericentral cells 4; rhizoids saccate ..... ***L. sacchoriza***
Pericentral cells more than 4; rhizoids not saccate ... ***L. subadunca***
33. Main axes polysiphonous; ultimate branches monosiphonous ..... ***Heterospihonia wurdemanni***
Filaments entirely polysiphonous ..... ***Polyspihonia***
A. Primary axes with 4 pericentral cells ..... B
Primary axes with 16–20 pericentral cells ..... ***P. opaca***
B. Filaments corticated C
Filaments uncorticated ..... D
C. Plants 10–15 cm high, branching alternate ..... ***P. violacea***
Plants more than 15 cm high, branching irregular ..... ***P. elongata***
D. Plants less than 3 cm high; branching irregular ..... ***P. macrocarpa***
Plants more than 10 cm high; branching pseudodichotomous ..... ***P. urceolata***
34. Plants not spongy or feltlike, without inflated utricles 35
Plants spongy or feltlike with a layer of inflated utricles ..... ***Codium***
A. Plants an unbranched spherical mass ..... ***C. bursa***
Plants erect, subdichotomously branched ..... ***C. decorticatum***
35. Plants subspherical and convoluted ..... ***Colpomenia sinuosa***
Plants not subspherical and convoluted 36
36. Thallus with inrolled margins ..... ***Padina pavonica***
Thallus without inrolled margins 37

37. Medulla traversed by a system of filaments (trabeculae) ..... ***Caulerpa prolifera***
    Medulla without trabeculae 38
38. Thallus not tufted, coarse and stiff, often more than 10 cm high, ramuli not basally constricted 39
    Thallus tufted, soft and flexuous, less than 10 cm high, with ramuli basally constricted and pinnately or multifariously arranged ..... ***Bryopsis***
    A. Ramuli multifarious ..... B
       Ramuli distichous, sometimes with only one row of ramuli C
    B. Main axes profusely branched ..... ***B. hypnoides***
       Main axes simple ..... ***B. muscosa***
    C. Diameter of ramuli less than 50 μ ..... ***B. balbisiana***
       Diameter of ramuli more than 50 μ ..... ***B. plumosa***
39. Plants bearing air-vesicles 40
    Plants without air-vesicles 41
40. Foliar structures spinelike; receptacles developed near tips of branches ..... ***Cystoseira***
    A. Single axis produced from a single basal disk ..... B
       Several axes produced from a single basal disk C
    B. Branches beset with long, slender, generally dichotomous ramuli; vesicles catenate ..... ***C. barbata***
       Branches beset with short, stubby, spiny, dichotomous ramuli; vesicles solitary ..... ***C. mediterranea***
    C. Axes and branches compressed, becoming terete distally; large fusiform vesicles conspicuously catenate at younger parts of the plant ..... ***C. compressa***
       Axes and branches terete; small round vesicles solitary or sometimes double and borne at bases of ramuli ..... D
    D. Ramuli short, not more than 3 mm long, crowded or thickly set radially on branches ..... E
       Ramuli long, slender, more than 3 mm long, branches and ramuli patent ..... F
    E. Ramuli short, torulose, with blunt tips ..... ***C. schiffneri***
       Ramuli slightly compressed, forked, with pointed tips involute, completely covering axes and branches, except short portion near the basal disk ..... ***C. sedoides***
    F. Ramuli compressed, irregular to opposite ..... ***C. myriophylloides***
       Ramuli terete, dichotomous to subdichotomous ..... G
    G. Basal disk producing two axes with many branches; ramuli dichotomous ..... ***C. sauvageauiana***
       Basal disk producing more than two axes; branches clothed with tiny spinelike projections at the lower end; branchlets arising from apex of each main branch ..... ***C. discors***
40. Foliar structures narrow or broad blades; receptacles axillary ..... ***Sargassum***

A. Blades linear-lanceolate, 5–9 cm long; vesicles with alated stalks; receptacles up to 7 mm long ..... ***S. linifolium***
Blades lanceolate, 1–2 cm long; vesicles with simple stalks, receptacles 2–4 mm long ..... ***S. vulgare***

41. Thallus tubular, brown and constricted ..... ***Scytosiphon lomentaria***
Thallus, if tubular, not brown and constricted 42

42. Thallus not consisting of vacuolate cells 43
Thallus consisting of vacuolate cells ..... ***Valonia***
A. Cells crowded together in a mass; cells ovoid, obovate or clavate, more than 5 mm in diameter ..... ***V. macrophysa***
Cells loose, long and clavate, less than 5 mm in diameter ..... ***V. utricularis***

43. Thallus green and tubular 44
Thallus not green and tubular 45

44. Two or more thalli arising from a single discoid holdfast ..... ***Blidingia marginata***
Thallus arising singly from a discoid holdfast ..... ***Enteromorpha***
A. Plants tubular near the base, expanded distally, unbranched, margins of blades hollow ..... ***E. linza***
Plants entirely cylindrical or compressed or expanded distally, simple or branched, hollow throughout ..... B
B. Cells in longitudinal series or at least in ultimate divisions C
Cells not in longitudinal series ..... F
C. Plants repeatedly and profusely branched ..... D
Plants simple or with proliferations ..... E
D. Plants stiff, with short, spinelike branchlets ..... ***E. ramulosa***
Plants filiform, with elongate branchlets ..... ***E. clathrata***
E. Plants without proliferations ..... ***E. flexuosa***
Plants with proliferations ..... ***E. prolifera***
F. Plants unbranched, expanded distally, often contorted and open at the end ..... ***E. intestinalis***
Plants branched, expanded distally and compressed .. ***E. compressa***

45. Plants olive-brown to dark brown 46
Plants not brown 59

46. Thallus consisting of a small monostromatic disk of radiating filaments ..... ***Myrionema strangulans***
Thallus not a monostromatic disk 47

47. Thallus with a distinct midrib ..... ***Dictyopteris membranacea***
Thallus without a midrib 48

48. Entire plant a slippery dark brown crust ..... ***Ralfsia verrucosa***
Entire plant not a slippery dark brown crust 49

49. Blades subpalmately lobed with an irregularly dentate margin ..... ***Spatoglossum schroederi***
Blades not subpalmately lobed 50

50. Blades wedge shaped ..... ***Taonia atomaria***
    Blades not wedge shaped 51
51. Plants consisting of an entire lanceolate blade ..... ***Punctaria latifolia***
    Plants not a lanceolate blade 52
52. Plants prostrate or appressed to substrate by numerous rhizoids ..... ***Zanardinia prototypus***
    Plants erect 53
53. Thallus without distichous or multipinnate branching 54
    Thallus with distichous or multipinnate branching ..... ***Halopteris***
    A. Branching multipinnate; plants attached by a disk ..... ***H. filicina***
       Branching distichous; plants attached by rhizoidal filaments ..... ***H. scoparia***
54. Branchlets whorled; main axes covered by rhizoidal filaments ..... ***Cladostephus verticillatus***
    Branchlets not whorled; main axes not covered by rhizoidal filaments 55
55. Blades flabellate and incised ..... ***Zonaria tournefortii***
    Blades not flabellate and incised 56
56. Thallus strap shaped 57
    Thallus not strap shaped 58
57. Medulla consisting of a single layer of cells ..... ***Dictyota***
    A. Blades straight, more than 2 mm wide ..... ***D. dichotoma***
       Blades twisted, less than 2 mm wide ..... ***D. linearis***
    Medulla with at least two layers of cells ..... ***Dilophus***
    A. Blades spiralled ..... ***D. spiralis***
       Blades straight ..... ***D. fasciola***
58. Branchlets dichotomous; sporangia borne on straight, clavate paraphyses in spherical sori ..... ***Spermatochnus paradoxus***
    Branchlets subdichotomous; sporangia borne on incurved, clavate paraphyses in hemispherical sori ..... ***Stilophora rhizodes***
59. Plants green 60
    Plants not green 63
60. Entire plant club shaped ..... ***Dasycladus clavaeformis***
    Entire plant not club shaped 61
61. Thallus flabellate, formed by polychotomously branched cells ..... ***Anadyomene stellata***
    Thallus not flabellate 63
62. Thallus tufted, consisting of uniseriate rows of cells originating from creeping rhizomes ..... ***Pseudobryopsis myura***
    Thallus a membranous, expanded, distromatic blade ..... ***Ulva***
    A. Plants with simple, lanceolate blades ..... ***U. lactuca***
       Plants with broad lobed blades ..... ***U. rigida***
63. Blades ligulate or strap shaped 64
    Blades not ligulate or strap shaped 67
64. Blade surface proliferous ..... ***Halarachnion ligulatum***
    Blade surface not proliferous 65

65. Blades ligulate and twisted ..... ***Vidalia volubilis***
Blades ligulate to strap shaped and not twisted 66
66. Plants consisting of simple, strap-shaped blades with inrolled apices ..... ***Rytiphloea tinctoria***
Plants consisting of proliferous, ligulate to strap-shaped blades without inrolled apices ..... ***Rissoella verruculosa***
67. Entire plant one or two cells thick 68
Entire plant more than two cells thick 69
68. Thallus monostromatic ..... ***Porphyra leucosticta***
Thallus distromatic ..... ***Myriogramme distromatica***
69. Blades with a midrib ..... ***Hypoglossum woodwardii***
Blades without a midrib 70
70. Thallus without a stalk 71
Thallus consisting of a distinct stalk, with expanded, flat, proliferous blades above ..... ***Phyllophora***
A. Plants with long, terete stalk expanding into flabellate, forked branches above ..... ***P. nervosa***
Plants with a short, terete stalk and with strap-shaped, dichotomous segments above ..... ***P. pseudoceranoides***
71. Plants one cell thick, except in lower portions, occasionally branches with hooked apices ..... ***Acrosorium uncinatum***
Plants more than one cell thick, branches rarely with hooked apices ..72
72. Medulla with stellate cells 73
Medulla without stellate cells 74
73. Stellate cells numerous, large, with many refractive cells ..... ***Kallymenia microphylla***
Stellate cells few, small, with few refractive cells ..... ***Cryptonemia seminervis***
74. Thallus expanded into a semicircular blade, repeatdly cleft into dichotomous segments ..... ***Rhodymenia pseudopalmata***
Thallus not semicircular and not cleft into segments 75
75. Plants with central-filament structure; monosiphonous (uniseriate) or polysiphonous (with development of pericentral cells around central cell); naked or corticated; auxillary cells produced from supporting cells after fertilization 76
Plants without pericentral cells; not uniseriate; auxillary cells absent, or if present, they are formed before fertilization 85
76. Main axes covered with uniseriate, branched filaments; soft and delicate; older parts clothed by rhizoidal filaments ..... ***Dasya baillouviana***
Axes and branches with or without short, stiff, or spinelike branchlets; rigid and cartilaginous; rhizoidal filaments absent 77
77. Apical cells in sunken pits 78
Apical cells not in sunken pits 79
78. Pericentral cells distinctly arranged in section; tetrasporangia developed from pericentral cells and embedded below cortical area .. ***Chondria***

A. Ramuli attenuated at base and apex ..... ***C. tenuissima***
Ramuli clavate ..... B
B. Ramuli long, truncated at apex ..... ***C. coerulescens***
Ramuli short, rounded apex ..... ***C. dasyphylla***

78. Pericentral cells not distinct in section; tetrasporangia found outside of cortical area and not developed from pericentral cells .... ***Laurencia***
A. Thallus terete ..... B
Thallus compressed ..... ***L. pinnatifida***
B. Branching alternate ..... ***L. papillosa***
Branching opposite ..... ***L. obtusa***

79. Main axes corticated by downgrowth of filaments from nodal cells, pinnate-alternately branched ..... ***Wrangelia penicillata***
Main axes naked, if corticated, then not consisting of filaments; branching irregular 80

80. Branches pectinate or second, with two rows of subulate ramuli ..... ***Halopitys incurvus***
Branches not pectinate or secund and without rows of subulate ramuli 81

81. Spur branches present, bearing spinelike branchlets ..... ***Acanthophora najadiformis***
Spur branches absent 82

82. Plants corticated 83
Plants ecorticated ..... ***Alsidium corallinum***

83. Branching alternate or pinnate, terete or compressed 84
Branching dichotomous, terete ..... ***Digenia simplex***

84. Main axes with alternate branches producing short, slender, deciduous spinelike branchlets ..... ***Spyridia filamentosa***
Main axes producing pinnately arranged simple branchlets ..... ***Pterosiphonia***
A. Plants procumbent, less than 5 cm high, branchlets terete ..... ***P. pennata***
Plants erect, more than 5 cm high, compressed ..... ***P. complanata***

85. Typical auxillary cells absent 86
Typical auxillary cells present 90

86. Plants haplobiontic 87
Plants diplobiontic 89

87. Plants uniaxial 88
Plants multiaxial ..... ***Scinaia forcellata***

88. Plants bushy, in brushlike tufts, alternately branched ..... ***Asparagopsis armata***
Plants not bushy, with alternate, closely packed patent branchlets, and spinelike ramuli covering ..... ***Bonnemaisonia asparagoides***

89. Thallus compressed, rhizines present in the central medulla ..... ***Pterocladia capillacea***
Thallus terete or compressed, rhizines present in the subcortical region ..... ***Gelidium***

A. Plants with prostrate axes ..... ***G. pusillum***
Plants without prostrate axes ..... B
B. Plants erect, with broad flat axes and linear-lanceolate branches beset with bristle-like pinnae; branching distichous .. ***G. latifolium***
Plants erect, terete shortly above the base, becoming flat above, pinnules often pinnate-alternate, occasionally radial ..... ***G. pectinatum***

90. Auxillary cells formed by ordinary intercalary cells 91
Auxillary cells formed by daughter cells of the supporting cell 96
91. Branching pinnately-decompound with alternately secund branchlets ..... ***Plocamium cartilagineum***
Branching not pinnately-decompound and without alternate secund branchlets 92
92. Branches with spur branchlets, branch tips often hooked ..... ***Hypnea musciformis***
Branches without spur branchlets, branch tips straight 93
93. Thallus filiform, terete, irregularly branched; branches curved ..... ***Gigartina acicularis***
Thallus not filiform, terete or compressed, branches straight 94
94. Plants less than 5 cm high; branching dichotomous; branches slightly compressed ..... ***Gymnogongrus griffithsiae***
Plants more than 5 cm high; branching pinnate; branches terete or compressed 95
95. Branches fringed with numerous tiny proliferations which bear the cystocarps ..... ***Sphaerococcus coronopifolius***
Branches without proliferations, cystocarps sessile ..... ***Gracilaria***
A. Branches arcuate ..... ***G. arcuata***
Branches straight ..... B
B. Main axes compressed, repeatedly pinnately branched ..... ***G. cervicornis***
Main axes terete or slightly compressed, branching radial C
C. Thallus terete, with spinelike branchlets ..... ***G. armata***
Thallus slightly compressed, without spinelike branchlets ..... ***G. verrucosa***
96. Plants with stipitate pyriform vesicles ..... ***Chrysymenia ventricosa***
Plants without vesicles 97
97. Plants hollow, or with few medullary filaments 98
Plants entirely solid, or with solid axes below and hollow above 99
98. Plants entirely hollow ..... ***Champia parvula***
Plants solid at bases of branches ..... ***Lomentaria articulata***
99. Axes solid below and hollow above; irregularly branched ..... ***Gastroclonium clavatum***
Axes with few medullary filaments; branching verticillate ..... ***Chylocladia verticillata***

Division PHAEOPHYTA

Class PHAEOPHYCEAE

Order ECTOCARPALES

Family ECTOCARPACEAE

Ectocarpus fasciculatus Harvey

**Ectocarpus fasciculatus* Harvey, 1851, pl. 273.—Gayral, 1958: 122, 197, 199.—Seoane-Camba, 1965:69.—Ardre, 1970: 231.—Boudouresque and Perrett, 1977:96.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (France, Corsica).

SPECIMENS STUDIED.—EGM *12:* 298(US); 301 (NHA).

REMARKS.—Common; found in June and August epiphytic on various algae and *Cymodocea nodosa.*

Ectocarpus siliculosus (Dillwyn) Lyngbye

Conferva siliculosa Dillwyn, 1807:69.
Ectocarpus siliculosus (Dillwyn) Lyngbye, 1819:131.—Bornet, 1892:246.—Funk, 1927:239.—Feldmann, 1931b:209; 1937:265.—Hamel, 1931d:21.—Papenfuss, 1968:28.—Ardre, 1970:229.—Gerloff and Geissler, 1971:743.—Güven and Östig, 1971:122.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:212.

DISTRIBUTION.—Tunisia (Tabarka, La Marsa, Sousse); northeastern Atlantic (Portugal, Morocco); Mediterranean (Spain, France, Italy, Sicily, Greece, Turkey, Algeria); Red Sea.

SPECIMENS STUDIED.—EGM *1:* 296 (INSTOP), 302(US); *17:* 297(NHA).

REMARKS.—Common; found in January, February, April, May, and August epiphytic on various algae and *Cymodocea nodosa.*

**Giffordia hincksiae* (Harvey) Hamel

Ectocarpus hincksiae Harvey, 1841:40.—Bornet, 1892:246.
Giffordia hincksiae (Harvey) Hamel, 1939:xv.—Gayral, 1958: 200.—Seoane-Camba, 1965:70.—Ardre, 1970:238.

DISTRIBUTION.—Tunisia (Tabarka, Sousse); northeastern Atlantic (Portugal, Spain, Morocco).

SPECIMENS STUDIED.—EGM *1:* 308, 309; *17:* 306(US), 307(NHA), 310 (INSTOP).

REMARKS.—Common; found in April epiphytic on various algae and *Cymodocea nodosa.*

Family RALFSIACEAE

Ralfsia verrucosa (Areschoug) J. Agardh

Cruoria verrucosa Areschoug, 1843:264.
Ralfsia verrucosa (Areschoug) J. Agardh, 1848:62.—Piccone, 1884:117.—Bornet, 1892:241.—Boergesen, 1926:64.—Funk, 1927:344.—Feldmann, 1931b:210; 1961:505.—Riedl, 1963:47.—Seoane-Camba, 1965:70.—Papenfuss, 1968:30.—Ardre, 1970:247.—Gerloff and Geissler, 1971: 744.—Giaccone et al., 1973:110.—Furnari and Scammacca, 1973:7.—Boudouresque and Perret, 1977:100.

DISTRIBUTION.—Tunisia (Tabarka); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Corsica, Italy, Sicily, Adriatic Sea, Greece, Algeria); Red Sea.

SPECIMENS STUDIED.—EGM *1:* 492(NHA); *18:* 1976(US).

REMARKS.—Occasional; found in April growing as crust on rocks in the sublittoral zone.

Order SPHACELARIALES

Family SPHACELARIACEAE

Sphacelaria cirrosa (Roth) C. Agardh

Conferva cirrosa Roth, 1800:214.
Sphacelaria cirrosa (Roth) C. Agardh, 1824:164.—Piccone, 1879:24; 1884:116.—Bornet, 1892:240.—Boergesen, 1926: 74.—Schiffner, 1926:308.—Funk, 1927:354.—Feldmann, 1931b:214; 1937:268; 1961:505.—Navarro and Uriarte, 1945:218.—Dao, 1957:168.—Riedl, 1963:49.—Seoane-Camba, 1965:76.—Ardre, 1970:258.—Gerloff and Geissler, 1971:749.—Güven and Östig, 1971:124.—Harotinidis and Tsekos, 1975:212.—Boudouresque and Perret, 1977:104.

DISTRIBUTION.—Tunisia (Tabarka); northeast-

ern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria).

SPECIMENS STUDIED.—EGM *1:* 515(US), 1191 (NHA).

REMARKS.—Common; found in April epiphytic on *Cystoseira sedoides*.

**Sphacelaria furcigera* Kuetzing

Sphacelaria furcigera Kuetzing, 1855:27.—Boergesen, 1926: 72.—Papenfuss, 1968:31.—Boudouresque and Perret, 1977:105.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Canary Islands); Mediterranean (Corsica); Red Sea; Indian Ocean.

SPECIMEN STUDIED.—EGM *2:* 1184(US).

REMARKS.—Common; found in April epiphytic on *Cystoseira*.

**Sphacelaria tribuloides* Meneghini

Sphacelaria tribuloides Meneghini, 1840:[2].—Boergesen, 1926: 72.—Funk, 1927:353.—Hamel, 1939:xli.—Feldmann, 1937:268.—Navarro and Uriarte, 1945:217.—Aleem, 1951:251.—Papenfuss, 1968:31.—Lipkin and Safriel, 1971:7.—Gerloff and Geissler, 1971:749.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:213.—Boudouresque and Perret, 1977:106.

DISTRIBUTION.—Tunisia (Tabarka, Hammamet); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Israel, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 516–518(US); *16:* 519(NHA), 520(INSTOP).

REMARKS.—Occasional; found in April and September epiphytic on various algae.

Family STYPOCAULACEAE

Halopteris filicina (Grateloup) Kuetzing

Ceramium filicinum Grateloup, 1806:33.

Halopteris filicina (Grateloup) Kuetzing, 1843:292.—Bornet, 1892:239.—Petersen, 1918:8.—Funk, 1927:354.—Feldmann, 1931b:214; 1937:268; 1961:505.—Navarro and Uriarte, 1945:218.—Aleem, 1951:251.—Dao, 1957:169.—Riedl, 1963:49.—Edelstein, 1964:186.—Seoane-Camba, 1965:76.—Ardre, 1970:260.—Ben Alaya, 1970:209.—Furnari and Scammacca, 1970:219.—Gerloff and Geissler, 1971:749.—Güven and Östig, 1971:124.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:212.—Boudouresque and Perret, 1977:103.

DISTRIBUTION.—Tunisia (Ile Plane, mouth of Madjerda, Sidi Bou Said); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Egypt).

SPECIMENS STUDIED.—EGM *8:* 316, 325–330; *9:* 311–315, 317–320, 331; *13:* 321–322(US), 323(NHA), 324(INSTOP).

REMARKS.—Common; found in October and December on rocks. Dredged from 15 to 57 m.

Halopteris scoparia (Linnaeus) Sauvageau

Conferva scoparia Linnaeus, 1758:720.

Halopteris scoparia (Linnaeus) Sauvageau, 1907:506.—Petersen, 1918:8.—Boergesen, 1926:75.—Feldmann, 1931b: 214; 1937:268; 1961:505.—Hamel, 1938:263.—Nasr, 1940a:14.—Gayral, 1958:204.—Riedl, 1963:49.—Papenfuss, 1968:32.—Furnari and Scammacca, 1970:219.—Ardre, 1970:261.—Ben Alaya, 1970:209.—Gerloff and Geissler, 1971:749.—Güven and Östig, 1971:124.—Giaccone et al., 1973:112.—Harotinidis and Tsekos, 1975:212.

Stypocaulon scoparium Kuetzing, 1843:293.—Bornet, 1892: 238.—Funk, 1927: 355.—Navarro and Uriarte, 1945: 219.—Seoane-Camba, 1965:77.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Cap Zebib, Bechateur, Ras Sidi Ali El Mekki, Bizerte, La Marsa, Sidi Bou Said, Nabeul, Hammamet, Monastir, Sousse, Djerba Island, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria, Libya, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *1:* 336–338, 365; *2:* 339, 351, 353, 1172, 1260; *3:* 355, 375–386; *4:* 349, 350; *5:* 354, 1366, 1367; *7:* 366; *12:* 352, 356–358; *13:* 359–364; *15:* 369–374; *16:* 367, 368; *17:* 322; *18:* 340–348(US); *24:* 333–335(NHA); *29:* 387(INSTOP).

REMARKS.—Abundant; found from February

to July and in September and October on rocks in the sublittoral zone.

Family CLADOSTEPHACEAE

Cladostephus verticillatus (Lightfoot) Lyngbye

Conferva verticillata Lightfoot, 1777:984.
Cladostephus verticillatus (Lightfoot) Lyngbye, 1819:102.—Fremy, 1925:28.—Boergesen, 1926:75.—Funk, 1927:356.—Feldmann, 1931b:214; 1937:268; 1961:505.—Hamel, 1938:268.—Navarro and Uriarte, 1945:219.—Riedl, 1963:49.—Seoane-Camba, 1965:77.—Ardre, 1970:262.—Ben Alaya, 1970:209.—Furnari and Scammacca, 1970:218.—Gerloff and Geissler, 1971:750.—Güven and Östig, 1971:125.—Giaccone et al., 1973:112.—Harotinidis and Tsekos, 1975:211.
Cladostephus verticillatus J. Agardh, 1848:43.—Piccone, 1884:117.—Bornet, 1892:239.—DeToni, 1895:455.—Gayral, 1958:208.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Bechateur, Raf Raf, mouth of Madjerda, La Marsa, Sidi Bou Said, Hammamet, Nabeul, Monastir); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria, Libya).

SPECIMENS STUDIED.—EGM *2:* 1265, 1266; *3:* 13–21, 27, 30; *6:* 7, 24; *9:* 8–12, 26; *12:* 22; *13:* 5, 6, 23; *15:* 25, 29; *16:* 28; *18:* 1–4(US), 2029(NHA), 2031(INSTOP).

REMARKS.—Abundant; found in February, from April to July, and in September, October, and December.

Order CUTLERIALES

Family CUTLERIACEAE

Zanardinia prototypus Nardo

Zanardinia prototypus Nardo, 1841:189.—Feldmann, 1937:268.—Aleem, 1951:251.—Dao, 1957:169.—Edelstein, 1962:213; 1964:187.—Ardre, 1970:263.—Furnari and Scammacca, 1970:218.—Ben Alaya, 1970:209.—Gerloff and Geissler, 1971:748.—Güven and Östig, 1971:125.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:109.
Padina collaris Montagne, 1846:33.
Zanardinia collaris Crouan and Crouan, 1867:168.—Bornet, 1892:231.

DISTRIBUTION.—Tunisia (Ile Plane); northeastern Atlantic (Portugal, Morocco); Mediterranean (France, Corsica, Sicily, Greece, Turkey, Israel, Egypt).

SPECIMEN STUDIED.—EGM *8:* 545(US).

REMARKS.—Occasional; found in December on rocks. Dredged from 65 m.

Order DICTYOTALES

Family DICTYOTACEAE

Dictyopteris membranacea (Stackhouse) Batters

Fucus membranaceus Stackhouse, 1801, pl. 13.
Dictyopteris membranacea (Stackhouse) Batters, 1902:54.—Feldmann, 1937:268; 1961:505.—Hamel, 1938:341.—Nasr, 1940b:15.—Aleem, 1951:251.—Dao, 1957:169.—Edelstein, 1964:188.—Papenfuss, 1968:32.—Ardre, 1970:267.—Furnari and Scammacca, 1970:219.—Ben Alaya, 1970:208.—Gerloff and Geissler, 1971:750.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:212.—Boudouresque and Perret, 1977:110.
Dictyopteris polypodioides Lamouroux, 1809c:19.—Boergesen, 1926:95.—Feldmann, 1931b:217.—Navarro and Uriarte, 1945:225.—Riedl, 1963:51.—Seoane-Camba, 1965:84.—Güven and Östig, 1971:124.
Haliseris polypodioides C. Agardh, 1820:142.—Piccone, 1879:26; 1884:120.—Muschler, 1910:468.—Schiffner, 1926:306.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Raf Raf, Ras Sidi Ali El Mekki, La Marsa, Gammarth, Sidi Bou Said, Monastir, Djerba Island); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *1:* 182; *2:* 176, 177; *7:* 180; *11:* 193, 195–197; *12:* 181, 189–191, 194, 1609; *13:* 178, 179, 198, 199; *18:* 193–196, 192(US); *24:* 187(NHA), 188(INSTOP).

REMARKS.—Abundant; found throughout the year on rocks in the sublittoral zone.

Dictyota dichotoma (Hudson) Lamouroux

Ulva dichotoma Hudson, 1762:476.

Dictyota dichotoma (Hudson) Lamouroux, 1809a:331.—Muschler, 1910:301.—Fremy, 1925:28.—Boergesen, 1926: 84.—Funk, 1927:361.—Feldmann, 1931b:216; 1937:268; 1961:505.—Hamel, 1939:347.—Navarro and Uriarte, 1945:226.—Nasr and Aleem, 1949:270.—Dao, 1957: 169.—Gayral, 1958:218.—Riedl, 1963:51.—Edelstein, 1962:213; 1964:188.—Seoane-Camba, 1965:85.—Papenfuss, 1968:32.—Ardre, 1970:268.—Ben Alaya, 1970: 208.—Furnari and Scammacca, 1970:219.—Gerloff and Geissler, 1971:750.—Güven and Östig, 1971:124.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975: 211.—Boudouresque and Perret, 1977:111.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Gammarth, La Marsa, Sidi Bou Said, Nabeul, Monastir, Sousse, Djerba Island, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Turkey, Israel, Algeria, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *2:* 118, 119, 217–219, 1259, 1261, 1267; *3:* 273; *5:* 233, 234; *11:* 227; *12:* 228, 230, 232, 235–244; *13:* 229; *15:* 223–226, 231; *17:* 203, 204, 206, 216; *18:* 200–202, 207–214; *24:* 205, 274, 275; *29:* 215(US), 220(NHA), 221–222(INSTOP).

REMARKS.—Abundant; found throughout the year on rocks in the sublittoral zone.

Dictyota linearis (C. Agardh) Greville

Zonaria linearis C. Agardh, 1820:134.

Dictyota linearis (C. Agardh) Greville, 1830:xliii.—Piccone, 1879:25; 1884:118.—Muschler, 1910:301.—Petersen, 1918:8.—Boergesen, 1926:85.—Schiffner, 1926:306.—Funk, 1927:363.—Feldmann, 1931b:217; 1961:505.—Navarro and Uriarte, 1945:226.—Aleem, 1951:251.—Dao, 1957:169.—Edelstein, 1964:189.—Furnari and Scammacca, 1970:219.—Gerloff and Geissler, 1971:751.—Güven and Östig, 1971:124.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:212.—Boudouresque and Perret, 1977:113.

DISTRIBUTION.—Tunisia (Tabarka, Bechateur, Bizerte, Ras Sidi Ali El Mekki, Korbous, Hammamet, Monastir, Sousse, Kerkenna Island, Djerba Island); northeastern Atlantic (Morocco, Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Turkey, Israel, Algeria, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 249–251; *2:* 1191, 1192; *3:* 262, 269; *7:* 265; *14:* 263, 264, 266–268; *16:* 261; *18:* 253–259; *21:* 260, 270–272(US); *24:* 246–247(NHA), 248(INSTOP).

REMARKS.—Abundant; found from April to July and in September, October, and December on rocks or entangled amongst other algae in the sublittoral zone.

Dilophus fasciola (Roth) Howe

Fucus fasciola Roth, 1800:146.

Dictyota fasciola (Roth) Lamouroux, 1809d:14.—Muschler, 1910:301.—Güven and Östig, 1971:124.

Dilophus fasciola (Roth) Howe, 1914:72.—Boergesen, 1926: 82.—Funk, 1955:50.—Feldmann, 1931b:217; 1937:269; 1961:505.—Hamel, 1939:351.—Dao, 1957:139.—Gayral, 1958:224.—Seoane-Camba, 1965:85.—Papenfuss, 1968: 33.—Ardre, 1970:269.—Ben Alaya, 1970:210.—Gerloff and Geissler, 1971:751.—Lipkin and Safriel, 1971:9.—Giaccone et al., 1973, table III.—Boudouresque and Perret, 1977:114.

DISTRIBUTION.—Tunisia (Bechateur, Ras Sidi Ali El Mekki, Nabeul); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Italy, Sicily, Greece, Israel, Algeria, Libya); Red Sea.

SPECIMENS STUDIED.—EGM *3:* 278–280; *7:* 276, 277; *15:* 281(US); *25:* 292–293(NHA), 294–295(INSTOP).

REMARKS.—Occasional; found in June, July, September, and December on rocks in the sublittoral zone.

Dilophus spiralis (Montagne) Hamel

Dictyota spiralis Montagne, 1846:29.

Dilophus spiralis (Montagne) Hamel, 1939:352.—Ardre, 1970:269.—Gerloff and Geissler, 1971:752.—Lipkin and Safriel, 1979:9.—Harotinidis and Tsekos, 1975:212.

Dictyota ligulata Kuetzing, 1847:53.—Feldmann, 1931b:216.

Dilophus ligulatus Feldmann, 1937:269.—Nasr, 1940a:4.

DISTRIBUTION.—Tunisia (Bechateur, Raf Raf, Nabeul, Monastir, Djerba Island); northeastern Atlantic (Portugal); Mediterranean (Greece, Israel, Algeria, Egypt).

SPECIMENS STUDIED.—EGM *3:* 285–288; *6:* 289; *15:* 290; *18:* 282–283(US), 284(NHA); *25:* 291(INSTOP).

REMARKS.—Common; found from March to May and in July, September, October, and December on rocks in the sublittoral zone.

Padina pavonica (Linnaeus) Thivy

Fucus pavonicus Linnaeus, 1753:1162.

Padina pavonica (Linnaeus) Thivy in Taylor, 1960:234.—Papenfuss, 1968:34.

Padina pavonia (Linnaeus) Gaillon, 1828:371.—Piccone, 1879: 26; 1884:119.—Bornet, 1892:230.—Fremy, 1925:28.—Boergesen, 1926:86.—Schiffner, 1926:306.—Pottier, 1929: 322.—Feldmann, 1931b:217; 1937:268; 1961:505.—Hamel, 1939:341.—Nasr, 1940b:14.—Nasr and Aleem, 1949: 272.—Aleem, 1951:251.—Dao, 1957:169.—Gayral, 1958: 230.—Riedl, 1963:51.—Edelstein, 1964:188.—Seoane-Camba, 1965:82.—Ardre, 1970:267.—Furnari and Scammacca, 1970:219.—Gerloff and Geissler, 1971:752.—Güven and Östig, 1971:124.—Harotinidis and Tsekos, 1975: 212.

Padina pavonia (Linnaeus) Lamouroux, 1816:304.—Muschler, 1910:302.—Funk, 1927:365.—Navarro and Uriarte, 1945: 224.—Ben Alaya, 1970:208.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Bechateur, Tabarka, Raf Raf, Ras Sidi Ali El Mekki, La Marsa, Korbous, Nabeul, Hammamet, Gammarth, Monastir, Djerba Island, Kerkenna Island, Zarzis, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 462–464; *2:* 446, 461, 478; *3:* 417–421; *5:* 468; *6:* 392, 393; *7:* 391; *11:* 406–408, 465, 466; *12:* 467, 470, 471, 473–478; *13:* 388; *14:* 401–405; *15:* 395–400, 414–416; *16:* 394; *18:* 435, 436, 438, 448, 449, 453–457; *25:* 389, 390, 469; *26:* 429–431, 440–442, 447, 458, 459; *27:* 460; *28:* 427, 428, 437, 439(US); *29:* 450–452(NHA), 472(INSTOP).

REMARKS.—Abundant; found from February to October on rocks in the sublittoral zone.

**Spatoglossum schroederi* (C. Agardh) Kuetzing

Zonaria schroederi C. Agardh, 1824:265.

Spatoglossum schroederi (C. Agardh) Kuetzing, 1859:21.

DISTRIBUTION.—Tunisia (Djerba Island); Indian Ocean.

SPECIMENS STUDIED.—EGM *24:* 504(US), 505(NHA), 506(INSTOP).

REMARKS.—Rare; found in May on rocks in the sublittoral zone.

Taonia atomaria (Woodward) J. Agardh

Ulva atomaria Woodward, 1797:53.

Taonia atomaria (Woodward) J. Agardh, 1848:101.—Bornet, 1892:229.—Muschler, 1910:302.—Boergesen, 1926:89.—Funk, 1927:364.—Feldmann, 1931b:217; 1937:268; 1961: 505.—Hamel, 1939:337.—Aleem, 1951:251.—Gayral, 1958:232.—Riedl, 1963:51.—Seoane-Camba, 1965:82.—Ardre, 1970:266.—Gerloff and Geissler, 1971:753.—Harotinidis and Tsekos, 1975:213.—Boudouresque and Perret, 1977:118.

DISTRIBUTION.—Tunisia (Bechateur, Raf Raf, La Marsa, Gammarth); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Italy, Adriatic Sea, Greece, Algeria, Libya, Egypt).

SPECIMENS STUDIED.—EGM *3:* 536; *6:* 537, 538; *11:* 527, 529–532; *12:* 528, 539–544(US); *15:* 533–534(NHA), 535(INSTOP).

REMARKS.—Common; found from March to May and in July and September on rocks in the sublittoral zone.

Zonaria tournefortii (Lamouroux) Montagne

Fucus tournefortii Lamouroux, 1805:44.

Zonaria tournefortii (Lamouroux) Montagne, 1846:32.—Bornet, 1892:230.—Boergesen, 1926:92.—Feldmann, 1931b: 217; 1961:505.—Hamel, 1939:338.—Navarro and Uriarte, 1945:224.—Gayral, 1958:225.—Furnari and Scammacca, 1970:219.—Gerloff and Geissler, 1971:753.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:118.

Zonaria flava (Clemente) C. Agardh, 1820:140.—Piccone, 1879:26; 1884:119.—Muschler, 1910:302.—Funk, 1927: 366.

DISTRIBUTION.—Tunisia (Ile Plane, Mouth of Madjerda); northeastern Atlantic (Spain, Morocco, Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Algeria, Libya); Indian Ocean.

SPECIMENS STUDIED.—EGM *8:* 550; *9:* 551(US); *11:* 546-547(NHA), 548-549(INSTOP).

REMARKS.—Occasional; found in December. Dredged from 71 to 75 m.

Order CHORDARIALES

Family STILOPHORACEAE

Stilophora rhizodes (Turner) J. Agardh

Fucus rhizodes Turner, 1819:92.

Stilophora rhizodes (Turner) J. Agardh, 1841:6.—Piccone, 1879:25; 1884:118.—Papenfuss, 1968:38.—Gerloff and Geissler, 1971:746.

Stilophora rhizodes (Ehrenberg) J. Agardh, 1841:6.—Fremy, 1925:28.—Schiffner, 1926:310.—Feldmann, 1937:267; 1961:505.—Nasr, 1940b:10.—Navarro and Uriarte, 1945: 215.—Riedl, 1963:53.—Güven and Östig, 1971:125.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:120.

DISTRIBUTION.—Tunisia (Djerba Island); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Libya, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *24:* 521-524(US), 526(NHA); *29:* 525(INSTOP).

REMARKS.—Occasional; found in March epiphytic on other algae.

Family SPERMATOCHNACEAE

Spermatochnus paradoxus (Roth) Kuetzing

Conferva paradoxa Roth, 1800:172.

Spermatochnus paradoxus (Roth) Kuetzing, 1845:268.—Funk, 1955:37.—Feldmann, 1937:267; 1961:505.—Riedl, 1963: 53.—Edelstein, 1964:185.—Gerloff and Geissler, 1971: 746.—Güven and Östig, 1971:125.

DISTRIBUTION.—Tunisia (Kerkenna Island); Mediterranean (France, Italy, Adriatic Sea, Greece, Turkey, Israel, Algeria).

SPECIMENS STUDIED.—EGM *20:* 507-512(US), 513(NHA), 514(INSTOP).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Family CHORDARIACEAE

Myrionema strangulans Greville

Myrionema strangulans Greville, 1827, pl. 300.—Hamel, 1935: 88.—Navarro and Uriarte, 1945:213.—Feldmann, 1961: 504.—Ardre, 1970:249.—Gerloff and Geissler, 1971: 744.—Boudouresque and Perret, 1977:120.

DISTRIBUTION.—Tunisia (Bechateur); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Corsica, Algeria, Libya).

SPECIMENS STUDIED.—EGM *3:* 946-947(US), 948(NHA), 1295(INSTOP).

REMARKS.—Rare; found in May endophytic in *Enteromorpha compressa*.

Order SCYTOSIPHONALES

Family PUNCTARIACEAE

**Punctaria latifolia* Greville

Punctaria latifolia Greville, 1830:52.—Funk, 1927:348.—Feldmann, 1937:267.—Riedl, 1963:54.—Güven and Östig, 1971:124.—Harotinidis and Tsekos, 1975:212.—Boudouresque and Perret, 1977:100.

DISTRIBUTION.—Tunisia (La Marsa); Mediterranean (France, Corsica, Italy, Greece, Turkey).

SPECIMENS STUDIED.—EGM *12:* 480(US), 489(NHA), 491(INSTOP).

REMARKS.—Occasional; found from January to July epiphytic on *Cymodocea nodosa*.

Family SCYTOSIPHONACEAE

Colpomenia sinuosa (Mertens ex Roth) Derbes and Solier

Ulva sinuosa Mertens ex Roth, 1806:327.

Colpomenia sinuosa (Mertens ex Roth) Derbes and Solier, 1856:

11.—Bornet, 1892:249.—Boergesen, 1926:70.—Funk, 1927:352.—Feldmann, 1931b:213; 1937:267; 1961:505.—Nasr, 1940b:12.—Navarro and Uriarte, 1945:216.—Aleem, 1951:251.—Gayral, 1958:213.—Edelstein, 1964:186.—Seoane-Camba, 1965:74.—Papenfuss, 1968:38.—Ardre, 1970:273.—Furnari and Scammacca, 1970:219.—Gerloff and Geissler, 1971:747.—Güven and Östig, 1971:125.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:211.—Boudouresque and Perret, 1977:95.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Tabarka, Bizerte, La Marsa, Bechateur, Sidi Bou Said, Nabeul, Monastir); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 37, 1229; *2:* 33–36, 1264, 1290; *3:* 41–43, 45; *4:* 40; *5:* 47; *12:* 44, 46, 48; *15:* 49; *18:* 38–39(US), 2027(NHA), 2028(INSTOP).

REMARKS.—Common; found from February to May and in July on rocks and occasionally epiphytic on various algae.

Scytosiphon lomentaria (Lyngbye) Endlicher

Chorda lomentaria Lyngbye, 1819:74.

Scytosiphon lomentaria (Lyngbye) Endlicher, 1843:25.—Bornet, 1892:249.—DeToni and Forti, 1914:291.—Boergesen, 1926:67.—Feldmann, 1931b:213; 1937:267.—Hamel, 1937:194.—Nasr, 1940b:12.—Navarro and Uriarte, 1945:215.—Riedl, 1963:55.—Seoane-Camba, 1965:72.—Papenfuss, 1968:39.—Ardre, 1970:270.—Gerloff and Geissler, 1971:747.—Güven and Östig, 1971:125.—Lipkin and Safriel, 1971:8.—Harotinidis and Tsekos, 1975:212.—Boudouresque and Perret, 1977:101.

DISTRIBUTION.—Tunisia (Cap Serrat, Nabeul); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *2:* 495–498; *5:* 499, 500; *15:* 501(US), 502(NHA), 503(INSTOP).

REMARKS.—Occasional; found from February to April and in July on rocks in the sublittoral zone.

Order FUCALES

Family CYSTOSEIRACEAE

Cystoseira barbata (Goodenough and Woodward) J. Agardh

Fucus barbatus Goodenough and Woodward, 1797:128.

Cystoseira barbata (Goodenough and Woodward) J. Agardh, 1842:50.—Schiffner, 1926:304.—Funk, 1927:371.—Feldmann, 1937:269.—Hamel, 1939:392.—Navarro and Uriarte, 1945:228.—Riedl, 1963:55.—Ardre, 1970:317.—Ben Alaya, 1970:200.—Gerloff and Geissler, 1971:754.—Güven and Östig, 1971:124.—Harotinidis and Tsekos, 1975:211.

DISTRIBUTION.—Tunisia (Bechateur, Gammarth, Sidi Bou Said, Korbous); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Italy, Adriatic Sea, Greece, Turkey, Libya).

SPECIMENS STUDIED.—EGM *3:* 61; *11:* 63, 64; *13:* 52; *14:* 56–60; *24:* 2139–2141(US); *29:* 54(NHA), 55(INSTOP).

REMARKS.—Common; found in March, May, June, July, and October on rocks in the sublittoral zone.

Cystoseira compressa (Esper) Gerloff and Nizamuddin

Fucus compressus Esper, 1799:152.

Cystoseira compressa (Esper) Gerloff and Nizamuddin, 1975:342.

Cystoseira fimbriata (Desfontaines) Bory, 1832:318.—Hamel, 1939:418.—Dao, 1957:169.—Gayral, 1958:260.—Seoane-Camba, 1965:90.—Gerloff and Geissler, 1971:755.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:211.

Cystoseira abrotanifolia J. Agardh, 1842:52.—Piccone, 1879:27; 1884:122.—Bornet, 1892:257.—Muschler, 1910:300.—Boergesen, 1926:104.—Funk, 1927:369.—Feldmann, 1931b:221; 1937:269.—Navarro and Uriarte, 1945:230.—Riedl, 1963:57.—Güven and Östig, 1971:124.—Lipkin and Safriel, 1971:15.

DISTRIBUTION.—Tunisia (Cap Zebib, Tabarka, Bechateur, Bizerte, Gammarth, La Marsa, Na-

beul, Monastir, Kerkenna Island, Djerba Island); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily).

SPECIMENS STUDIED.—EGM *1:* 92; *3:* 102–104; *4:* 98; *5:* 93–94; *11:* 89, 91, 95, 105, 106; *12:* 96, 97; *13:* 77; *15:* 90; *20:* 2062, 2065(US), *24:* 99–100(NHA), 101(INSTOP).

REMARKS.—Common; found from February to May and in July and November on rocks in the sublittoral zone.

Cystoseira discors C. Agardh

Cystoseira discors C. Agardh, 1828:62.—Muschler, 1910: 300.—Boergesen, 1926:103.—Feldmann, 1931b:221; 1937:269; 1961:506.—Navarro and Uriarte, 1945:230.—Riedl, 1963:57.—Seoane-Camba, 1965:91.—Gerloff and Geissler, 1971:755.—Güven and Östig, 1971:124.—Harotinidis and Tsekos, 1975:211.

DISTRIBUTION.—Tunisia (Raf Raf, La Marsa, Sidi Bou Said, Kerkenna Island, Djerba Island); northeastern Atlantic (Spain, Canary Islands); Mediterranean (Spain, France, Italy, Adriatic Sea, Greece, Turkey, Libya).

SPECIMENS STUDIED.—EGM *6:* 71, 73–75; *12:* 72; *21:* 65, 68–69(US), 70(NHA); *24:* 76 (INSTOP).

REMARKS.—Occasional; found in March, July, September, and October on rocks in the sublittoral zone.

Cystoseira mediterranea Sauvageau

Cystoseira mediterranea Sauvageau, 1912:209.—Funk, 1927: 370.—Feldmann, 1937:269.—Navarro and Uriarte, 1945: 228.—Gayral, 1958:264.—Ben Alaya, 1970:208.—Gerloff and Geissler, 1971:756.—Furnari and Scammacca, 1973: 9.

DISTRIBUTION.—Tunisia (Cap Zebib, Bechateur, La Marsa); northeastern Atlantic (Morocco); Mediterranean (Spain, France, Italy, Greece, Sicily).

SPECIMENS STUDIED.—EGM *3:* 108; *5:* 107(US); *12:* 109(NHA), 100(INSTOP).

REMARKS.—Occasional; found in February, July, and August on rocks in the sublittoral zone.

**Cystoseira myriophylloides* Sauvageau

Cystoseira myriophylloides Sauvageau, 1912:323.—Gayral, 1958:258.—Seoane-Camba, 1965:91.—Giaccone et al., 1973:112.—Harotinidis and Tsekos, 1975:211.

DISTRIBUTION.—Tunisia (Raouad, La Marsa); northeastern Atlantic (Spain, Morocco); Mediterranean (Sicily, Greece).

SPECIMENS STUDIED.—EGM *10:* 111(US); *12:* 112(NHA), 1731(INSTOP).

REMARKS.—Occasional; found from February to March on rocks in the sublittoral zone.

**Cystoseira sauvageauiana* Hamel

Cystoseira sauvageauiana Hamel, 1939:399.
Cystoseira crinita (Desfontaines) Bory, 1832:320.—Gerloff and Geissler, 1971:757.—Giaccone et al., 1973:112.

DISTRIBUTION.—Tunisia (Bizerte, Raf Raf, Djerba Island); Mediterranean (Sicily, Greece).

SPECIMENS STUDIED.—EGM *4:* 119, 120; *6:* 121a–121b, 122, 123; *26:* 113–116(US), 117 (NHA), 118(INSTOP).

REMARKS.—Common; found in May, September, and October on rocks in the sublittoral zone.

Cystoseira schiffneri Hamel

Cystoseira schiffneri Hamel, 1939:421.—Feldmann, 1951:107.
Cystoseira acanthophora Schiffner, 1926:305.

DISTRIBUTION.—Tunisia (Kerkenna Island, Djerba Island, El Bibane).

SPECIMENS STUDIED.—EGM *19:* 124; *20:* 128–132; *21:* 153–156; *23:* 127, 135, 138, 144; 125, 137, 146–150; *26:* 141, 142, 151–152; *29:* 126, 133–134 (US), 143(NHA), 145(INSTOP).

REMARKS.—Abundant; found from March to July and in October on rocks in the sublittoral zone.

Cystoseira sedoides (Desfontaines) C. Agardh

Fucus sedoides Desfontaines, 1799:423.
Cystoseira sedoides (Desfontaines) C. Agardh, 1820:53.—Feldmann, 1931a:7; 1931b:219.—Hamel, 1939:394.—Giaccone et al., 1973:115.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Bechateur, Bizerte, Monastir); Mediterranean (Sicily, Algeria).

SPECIMENS STUDIED.—EGM *1:* 158; *2:* 165, 166, 168–170, 1257; *3:* 167, 171–175; *5:* 160–163(US); *18:* 157(NHA), 164(INSTOP).

REMARKS.—Common; found in February, April, May, and June on rocks in the sublittoral zone.

Family SARGASSACEAE

Sargassum linifolium (Turner) C. Agardh

Fucus linifolius Turner, 1811:84.
Sargassum linifolium (Turner) C. Agardh, 1820:18.—Bornet, 1892:258.—Fremy, 1925:28.—Funk, 1927:367.—Feldmann, 1931b:218; 1937:269.—Nasr, 1940b:15.—Navarro and Uriarte, 1945:232.—Aleem, 1951:251.—Riedl, 1963: 59.—Güven and Östig, 1971:124.

DISTRIBUTION.—Tunisia (Djerba Island); northeastern Atlantic (Morocco); Mediterranean (Spain, France, Italy, Adriatic Sea, Turkey, Algeria, Egypt); Red Sea.

SPECIMEN STUDIED.—EGM *24:* 493(US).

REMARKS.—Rare; found in May as drift material.

Sargassum vulgare C. Agardh

Sargassum vulgare C. Agardh, 1820:3.—Bornet, 1892:258.—Boergesen, 1926:106.—Feldmann, 1937:269; 1961:506.—Navarro and Uriarte, 1945:232.—Aleem, 1951:251.—Gayral, 1958:272.—Riedl, 1963:58.—Edelstein, 1964: 190.—Seoane-Camba, 1965:92.—Ben Alaya, 1970:209.—Gerloff and Geissler, 1971:758.—Güven and Östig, 1971: 124.—Giaccone et al., 1973:111.—Boudouresque and Perret, 1977:128.

DISTRIBUTION.—Tunisia (Djerba Island); northeastern Atlantic (Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Sicily, Adriatic Sea, Greece, Turkey, Israel, Egypt); Indian Ocean.

SPECIMEN STUDIED.—EGM *24:* 494(US).

REMARKS.—Rare; found in May as drift material.

Division CHLOROPHYTA

Class CHLOROPHYCEAE

Order ULVALES

Family MONOSTROMATACEAE

**Blidingia marginata* (J. Agardh) Dangeard

Enteromorpha marginata J. Agardh, 1842:16.
Blidingia marginata (J. Agardh) Dangeard, 1958:347.—Seoane-Camba, 1965:57.—Ardre, 1970:343.—Gerloff and Geissler, 1971:728.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Portugal, Spain); Mediterranean (Greece).

SPECIMENS STUDIED.—EGM *2:* 597–600(US), 601–602(NHA), 603(INSTOP).

REMARKS.—Rare; found in April on rocks in the high littoral zone.

Family ULVACEAE

**Enteromorpha clathrata* (Roth) Greville

Conferva clathrata Roth, 1806:175.
Enteromorpha clathrata (Roth) Greville, 1830:181.—Boergesen, 1925:10.—Ardre, 1970:345.—Gerloff and Geissler, 1971: 728.—Harotinidis and Tsekos, 1975:210.
Enteromorpha clathrata (Roth) J. Agardh, 1883:153.—Funk, 1927:312.—Hamel, 1931a:67.—Feldmann, 1937:263.—Aleem, 1951:251.—Rayss, 1955:10.—Seoane-Camba, 1965:54.—Güven and Östig, 1971:121.—Boudouresque and Perret, 1977:130.

DISTRIBUTION.—Tunisia (Tabarka, La Marsa, Sidi Bou Said, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Italy, Greece, Turkey, Israel, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *12:* 917; *13:* 931, 932; *15:* 916, 1905; *18:* 915, 930; *19:* 921–927; *24:* 928–929(US); *29:* 919(NHA), 2291(INSTOP).

REMARKS.—Common; found from February to May and in September and December on rocks and epiphytic on various algae and *Cymodocea nodosa.*

Enteromorpha compressa (Linnaeus) Greville

Ulva compressa Linnaeus, 1755:433.
Enteromorpha compressa (Linnaeus) Greville, 1830:180.—Bornet, 1892:199.—Patouillard, 1897:18.—Muschler, 1910: 295.—Boergesen, 1925:12.—Fremy, 1925:28.—Funk, 1927:312.—Feldmann, 1931b:202; 1937:263.—Nasr, 1940b:4.—Navarro and Uriarte, 1945:201.—Rayss, 1955: 8.—Gayral, 1958:154.—Seoane-Camba, 1965:54.—Ben Alaya, 1970:207.—Gerloff and Geissler, 1971:728.—Güven and Östig, 1971:121.—Harotinidis and Tsekos, 1975: 210.—Boudouresque and Perret, 1977:130.

DISTRIBUTION.—Tunisia (Raouad); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1225–1227; *2:* 1134; *10:* 933–935, 1515–1517, 1525; *12:* 1734, 1735, 1742, *15:* 938, 942, 1906; *16:* 1935, 1936; *17:* 1965–1967; *18:* 2013–2015, 2019–2021(US); *29:* 2289(NHA), 2290(INSTOP).

REMARKS.—Abundant; found in March, August, and September on rocks and epiphytic on various algae and *Cymodocea nodosa.*

Enteromorpha flexuosa (Roth) J. Agardh

Conferva flexuosa Roth, 1800:188.
Enteromorpha flexuosa (Roth) J. Agardh, 1883:126.—Bornet, 1892:197.—Feldmann, 1931b:202; 1937:263.—Rayss, 1955:9.—Ardre, 1970:345.—Gerloff and Geissler, 1971: 728.

DISTRIBUTION.—Tunisia (Raouad, Sidi Bou Said, Hammamet, Nabeul, Djerba Island); northeastern Atlantic (Morocco); Mediterranean (France, Greece, Israel, Algeria); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *13:* 943; *16:* 936, 937, 939, 944(US), 1942(NHA); *24:* 945(INSTOP).

REMARKS.—Common; found in March, July, and September epiphytic on various algae and *Cymodocea nodosa.*

Enteromorpha intestinalis (Linnaeus) Link

Ulva intestinalis Linnaeus, 1753:1163.
Enteromorpha intestinalis (Linnaeus) Link, 1820:5.—Bornet, 1892:198.—Patouillard, 1897:17.—Muschler, 1910:294.—Petersen, 1918:5.—Boergesen, 1925:13.—Fremy, 1925: 28.—Feldmann, 1937:263.—Navarro and Uriarte, 1945: 201.—Rayss, 1955:9.—Gayral, 1958:156.—Riedl, 1963: 38.—Seoane-Camba, 1965:56.—Ardre, 1970:347.—Ben Alaya, 1970:207.—Gerloff and Geissler, 1971:728.—Güven and Östig, 1971:121.—Furnari and Scammacca, 1973:6.—Harotinidis and Tsekos, 1975:210.—Boudouresque and Perret, 1977:131.

DISTRIBUTION.—Tunisia (Bechateur, Djerba Island); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Adriatic Sea, Greece, Turkey, Israel, Libya); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1222–1224; *2:* 1136; *3:* 1337–1339; *4:* 1351; *5:* 1335; *6:* 1382; *7:* 1389; *10:* 1523–1524; *12:* 1743; *13:* 1820; *16:* 1930–1933(US), 1934(NHA); *24:* 194(INSTOP).

REMARKS.—Abundant; found in March and May and from July to September on rocks and occasionally epiphytic on various algae and *Cymodocea nodosa.*

Enteromorpha linza (Linnaeus) J. Agardh

Ulva linza Linnaeus, 1753:1133.
Enteromorpha linza (Linnaeus) J. Agardh, 1883:134.—Muschler, 1910:294.—Schiffner, 1926:310.—Funk, 1927: 312.—Feldmann, 1937:263; 1961:504.—Nasr, 1940b:3.—Navarro and Uriarte, 1945:201.—Rayss, 1955:10.—Gayral, 1958:159.—Feldmann, 1931b:202; 1961:504.—Seoane-Camba, 1965:57.—Furnari and Scammacca, 1970:217.—Gerloff and Geissler, 1971:729.—Güven and Östig, 1971:121.—Harotinidis and Tsekos, 1975:210.—Boudouresque and Perret, 1977:131.

DISTRIBUTION.—Tunisia (Gammarth, La Marsa); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Spain, France, Corsica, Italy, Greece, Turkey, Israel, Algeria, Libya, Egypt).

SPECIMENS STUDIED.—EGM *1:* 1228; *2:* 1252–1254; *11:* 950–954; *12:* 1736–1741; *13:* 1818, 1819; *15:* 1897–1904; *18:* 2022–2024(US), 2025(NHA), 2026(INSTOP).

REMARKS.—Common; found in May, June, and September on rocks and occasionally epiphytic on various algae and *Cymodocea nodosa.*

***Enteromorpha prolifera (Mueller) J. Agardh**

Ulva prolifera Mueller, 1778, pl. 763.
Enteromorpha prolifera (Mueller) J. Agardh, 1883:129.—Schiffner, 1926:310.—Rayss, 1955:9.—Seoane-Camba, 1965: 58.—Ardre, 1970:344.—Gerloff and Geissler, 1971:729.—Güven and Östig, 1971:121.

DISTRIBUTION.—Tunisia (Tabarka); northeastern Atlantic (Portugal, Spain); Mediterranean (Greece, Turkey, Israel); Indian Ocean.

SPECIMEN STUDIED.—EGM *1:* 920(US).

REMARKS.—Rare; found in April on rocks.

***Enteromorpha ramulosa (J. E. Smith) Carmichael in Hooker**

Ulva ramulosa J. E. Smith, 1810, pl. 2137.
Enteromorpha ramulosa (J. E. Smith) Carmichael in Hooker, 1833:315.—Bornet, 1892:200.—Boergesen, 1925:11.—Feldmann, 1937:263.—Seoane-Camba, 1965:58.—Gerloff and Geissler, 1971:729.—Güven and Östig, 1971:121.—Boudouresque and Perret, 1977:131.

DISTRIBUTION.—Tunisia (Monastir); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Greece, Turkey); Indian Ocean.

SPECIMEN STUDIED.—EGM *18:* 955(US).

REMARKS.—Rare; found in April on rocks.

***Ulva lactuca* Linnaeus**

Ulva lactuca Linnaeus, 1753:1163.—Boergesen, 1925:14.—Fremy, 1925:28.—Funk, 1927:311.—Feldmann, 1937: 263; 1961:504.—Navarro and Uriarte, 1945:199.—Nasr and Aleem, 1949:276.—Aleem, 1951:251.—Rayss, 1955: 11.—Gayral, 1958:145.—Riedl, 1963:38.—Seoane-Camba, 1965:53.—Ardre, 1970:333.—Gerloff and Geissler, 1971:730.—Harotinidis and Tsekos, 1975:210.

DISTRIBUTION.—Tunisia (Cap Zebib, Tabarka, Bechateur, Raf Raf, Ras Sidi Ali El Mekki, La Marsa, Sidi Bou Said, Nabeul, Hammamet, Monastir, Sousse); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Adriatic Sea, Greece, Turkey, Israel, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1124, 1125; *3:* 1135; *6:* 1141; *7:* 1143; *12:* 1147; *13:* 1131; *15:* 1137; *16:* 1136; *17:* 1123(US), 1130(NHA); *18:* 1126(INSTOP).

REMARKS.—Abundant; found year round on rocks and epiphytic on *Cymodocea nodosa.*

***Ulva rigida C. Agardh**

Ulva rigida C. Agardh, 1822:410.—Bornet, 1892:193.—Feldmann, 1937:263.—Aleem, 1951:251.—Rayss, 1955:11.—Funk, 1955:9.—Gayral, 1958:148.—Ardre, 1970:335.—Furnari and Scammacca, 1970:217.—Gerloff and Geissler, 1971:730.—Giaccone et al., 1973:110.—Harotinidis and Tsekos, 1975:210.—Boudourseque and Perret, 1977:132.

DISTRIBUTION.—Tunisia (Gammarth, La Marsa, Hammamet); northeastern Atlantic (Portugal, Morocco); Mediterranean (France, Corsica, Italy, Sicily, Greece, Israel, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *5:* 1134; *11:* 1162–1166; *12:* 1145, 1158–1160; *16:* 1161(US), 1167(NHA), 1168(INSTOP).

REMARKS.—Common; found from March to May and in September epiphytic on *Cymodocea nodosa.*

Order CLADOPHORALES

Family CLADOPHORACEAE

***Chaetomorpha* aerea (Dillwyn) Kuetzing**

Conferva aerea Dillwyn, 1807:80.
Chaetomorpha aerea (Dillwyn) Kuetzing, 1849:379.—Boergesen, 1925:43.—Pottier, 1929:344.—Hamel, 1931c:28.—Feldmann, 1931b:203; 1937:264; 1961:504.—Navarro and Uriarte, 1945:206.—Nasr and Aleem, 1949:277.—Funk, 1955:9.—Rayss, 1955:15.—Riedl, 1963:39.—Seoane-Camba, 1965:59.—Ardre, 1970:206.—Ben Alaya, 1970:207.—Güven and Östig, 1971:122.—Boudouresque and Perret, 1977:135.

DISTRIBUTION.—Tunisia (Tabarka, La Marsa, El Bibane); northeastern Atlantic (Portugal,

Spain, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Adriatic Sea, Turkey, Israel, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 715; *4:* 714(US); *29:* 716(NHA), 2259(INSTOP).

REMARKS.—Occasional; found in April and May on rocks.

***Cladophora albida* (Hudson) Kuetzing**

Conferva albida Hudson, 1762:505.

Cladophora albida (Hudson) Kuetzing, 1843:267.—Feldmann, 1937:264.—Navarro and Uriarte, 1945:204.—Funk, 1955: 13.—Ardre, 1970:356.—Gerloff and Geissler, 1971:731.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977:137.

DISTRIBUTION.—Tunisia (Gammarth); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Corsica, Italy, Greece, Libya); Red Sea.

SPECIMENS STUDIED.—EGM *11:* 717–719(US), 720(NHA), 721(INSTOP).

REMARKS.—Rare; found in May epiphytic on *Cymodocea nodosa.*

***Cladophora crystallina* (Roth) Kuetzing**

Conferva crystallina Roth, 1797:196.

Cladophora crystallina (Roth) Kuetzing, 1843:213.—Boergesen, 1925:67.—Feldmann, 1937:264.—Navarro and Uriarte, 1945:204.—Rayss, 1955:19.—Güven and Östig, 1971: 121.—Boudouresque and Perret, 1977:137.

DISTRIBUTION.—Tunisia (Cap Serrat, Bechateur, La Marsa, Sidi Bou Said, Djerba Island, El Bibane); northeasern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Turkey, Israel); Red Sea.

SPECIMENS STUDIED.—EGM *3:* 725, 728, 729, 732–733; *12:* 723, 724, 727, 731, 735, 736; *24:* 730, 734, 739; *29:* 726(US), 737–738(NHA), 810(INSTOP).

REMARKS.—Abundant; found from March to June and in August and October entangled with other algae or epiphytic on *Cymodocea nodosa.*

***Cladophora dalmatica* Kuetzing**

Cladophora dalmatica Kuetzing, 1843:268.—Hamel, 1931c: 49.—Feldmann, 1937:264.—Gerloff and Geissler, 1971: 731.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977:138.

DISTRIBUTION.—Tunisia (Tabarka); Mediterranean (France, Corsica, Greece, Algeria); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 740(US), 741(NHA), 742(INSTOP).

REMARKS.—Rare; found in April epiphytic on various algae.

***Cladophora lutescens* Kuetzing**

Cladophora lutescens Kuetzing, 1854:21.—Bornet, 1892:208.

DISTRIBUTION.—Tunisia (Sidi Bou Said); Mediterranean (France).

SPECIMEN STUDIED.—EGM *13:* 743(US).

REMARKS.—Rare; found in June epiphytic on *Cymodocea nodosa.*

***Cladophora prolifera* (Roth) Kuetzing**

Conferva prolifera Roth, 1797:182.

Cladophora prolifera (Roth) Kuetzing, 1845:207.—Bornet, 1892:207.—Boergesen, 1925:61.—Fremy, 1925:28.—Funk, 1927:316.—Feldmann, 1931b:203; 1937:264; 1961: 504.—Navarro and Uriarte, 1945:202.—Rayss, 1955: 17.—Dao, 1957:166.—Gayral, 1958:168.—Riedl, 1963: 39.—Seoane-Camba, 1965:59.—Ardre, 1970:357.—Ben Alaya, 1970:206.—Gerloff and Geissler, 1971:733.—Güven and Östig, 1971:121.—Giaccone et al., 1973, table IV.—Furnari and Scammacca, 1973:6.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977:141.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Ras Sidi Ali El Mekki, Raouad, Gammarth, La Marsa, Nabeul, Hammamet, Monastir); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 745, 764; *2:* 744, 746, 747; *7:* 759; *10:* 762, 763; *11:* 772, 779, 780; *12:* 748–752, 757, 758, 765, 770, 771; *13:* 766–769, 773–778; *15:* 756(US), 761(NHA); *18:* 753(INSTOP).

REMARKS.—Abundant; found from March to

May, from July to October, and in December epiphytic on various algae and *Cymodocea nodosa.*

***Cladophora ramosissima (Draparnaud ex Kuetzing) Kuetzing**

Conferva ramosissima Draparnaud ex Kuetzing, 1845:209.
Cladophora ramosissima (Draparnaud ex Kuetzing) Kuetzing, 1849:396.—Feldmann, 1931b:203; 1937:264.—Nasr, 1940b:5.—Rayss, 1955:18.—Gayral, 1958:166.

DISTRIBUTION.—Tunisia (Raouad, Gammarth, Sidi Bou Said); northeastern Atlantic (Morocco); Mediterranean (France, Algeria, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *10:* 781; *11:* 783(US); *13:* 782(NHA), 784(INSTOP).

REMARKS.—Occasional; found in March, May, and October epiphytic on various algae.

Cladophora rupestris (Linnaeus) Kuetzing

Conferva rupestris Linnaeus, 1753:721.
Cladophora rupestris (Linnaeus) Kuetzing, 1843:270.—Ardre, 1970:355.—Ben Alaya, 1970:206.—Gerloff and Geissler, 1971:734.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977: 142.

DISTRIBUTION.—Tunisia (Ras Sidi Ali El Mekki, Gammarth, La Marsa); northeastern Atlantic (Portugal); Mediterranean (Corsica, Sicily, Greece, Algeria).

SPECIMENS STUDIED.—EGM *2:* 722, *11:* 787(US); *12:* 760(NHA), 785(INSTOP).

REMARKS.—Occasional; found in February, May, and September epiphytic on various algae.

Cladophora utriculosa Kuetzing

Cladophora utriculosa Kuetzing, 1843:269.—Bornet, 1892: 208.—Boergesen, 1925:65.—Schiffner, 1926:311.—Funk, 1927:316.—Feldmann, 1931b:204; 1937:264.—Nasr, 1940b:4.—Navarro and Uriarte, 1945:203.—Rayss, 1955: 18.—Seoane-Camba, 1965:60.—Ben Alaya, 1970:206.—Gerloff and Geissler, 1971:732.—Güven and Östig, 1971: 121.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Sidi Bou Said, Gammarth, La Marsa, Nabeul, Hammamet, Monastir, Sousse, Kerkenna Island, Djerba Island, El Bibane); northeastern Atlantic (Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Greece, Turkey, Israel, Algeria, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 793–795; *2:* 805; *11:* 823, 830–833; *12:* 807–809, 814–822, 839, 840; *13:* 826–829; *15:* 834–838; *16:* 811–813, 824, 825; *17:* 796; *18:* 797–799; *19:* 800, 801; *24:* 806(US); *29:* 802–803(NHA), 804(INSTOP).

REMARKS.—Abundant; found from January to August and from October to December epiphytic on various algae.

Family ANADYOMENACEAE

Anadyomene stellata (Wulfen) C. Agardh

Ulva stellata Wulfen in Jacquin, 1786:351.
Anadyomene stellata (Wulfen) C. Agardh, 1822:400.—Muschler, 1910:295.—DeToni and Forti, 1913:17; 1914:293.—Boergesen, 1925:25.—Funk, 1927:320.—Hamel, 1931c: 18—Nasr, 1940a:2.—Navarro and Uriarte, 1945:202.–Nasr and Aleem, 1949:256.—Rayss, 1955:13.—Dao, 1957: 167.—Edelstein, 1962:213; 1964:180.—Riedl, 1963:39.—Gerloff and Geissler, 1971:737.—Güven and Östig, 1971: 122.—Giaccone et al., 1973; table IV.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977:135.

DISTRIBUTION.—Tunisia (Korbous, Kerkenna Island, Djerba Island, Zarzis, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *14:* 587, 588; *19:* 568–574; *20:* 590–594; *21:* 581–584, 586; *24:* 589; *25:* 585, 595; *26:* 575; *28:* 596, *29:* 576–577(US), 578–579(NHA), 580(INSTOP).

REMARKS.—Common; found in March, April, July, and October on rocks.

Order SIPHONOCLADALES

Family VALONIACEAE

***Valonia macrophysa Kuetzing**

Valonia macrophysa Kuetzing, 1843:307.—Boergesen, 1925: 22.—Funk, 1927:320.—Feldmann, 1937:264.—Aleem,

1951:251.—Dao, 1957:166.—Furnari and Scammacca, 1970:217.—Gerloff and Geissler, 1971:738.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:210.—Boudouresque and Perret, 1977:144.

DISTRIBUTION.—Tunisia (Raouad, Korbous, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (France, Corsica, Italy, Sicily, Greece, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *10:* 1175, 1176; *14:* 1174; *29:* 1169–1171(US), 1172(NHA), 1173(INSTOP).

REMARKS.—Occasional; found in March, April, and October in rock crevices in the sublittoral zone.

Valonia utricularis C. Agardh

Valonia utricularis C. Agardh, 1822:431.—Piccone, 1884:112; 1879:22.—Boergesen, 1925:22.—Funk, 1927:321.—Feldmann, 1931b:203; 1937:264; 1961:504.—Hamel, 1931c: 14.-Nasr, 1940b:6.—Navarro and Uriarte, 1945:201.—Nasr and Aleem, 1949:278.—Rayss, 1955:12.—Dao, 1957: 167.—Gayral, 1958:170.—Riedl, 1963:39.—Edelstein, 1964:180.—Seoane-Camba, 1965:58.—Ardre, 1970: 349.—Gerloff and Geissler, 1971:738.—Güven and Östig, 1971:122.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:143.

DISTRIBUTION.—Tunisia (Ile Plane, La Marsa, Nabeul, Sidi Bou Said, Kerkenna Island, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *18:* 1186; *12:* 1183, 1185; *13:* 1187; *15:* 1184; *19:* 1181–1182(US); *20:* 1177–1178(NHA), 1179–1180(INSTOP).

REMARKS.—Common; found in April, July, September, and December on rocks.

Family SIPHONOCLADACEAE

Cladophoropsis modonensis (Kuetzing) Boergesen

Cladophora modonensis Kuetzing, 1849:486.
Cladophoropsis modonensis (Kuetzing) Boergesen, 1905:288.—Hamel, 1931c:15.—Rayss, 1955:14.—Dao, 1957:167.—Gerloff and Geissler, 1971:737.—Giaccone et al., 1973, table III.—Boudouresque and Perret, 1977:142.

DISTRIBUTION.—Tunisia (Kerkenna Island, Djerba Island, Zarzis, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (Corsica, Sicily, Greece, Israel).

SPECIMENS STUDIED.—EGM *20:* 841–843, 853, 854; *24:* 846, 849, 851; *28:* 844, 845; *29:* 847–848(US), 850(NHA), 852(INSTOP).

REMARKS.—Common; found from April to July and in October on rocks in the sublittoral zone.

Order BRYOPSIDALES

Family BRYOPSIDACEAE

**Derbesia lamourouxii* (J. Agardh) Solier

Bryopsis balbisiana var. *lamourouxii* J. Agardh, 1842:18.
Derbesia lamourouxii (J. Agardh) Solier, 1847:162.—Bornet, 1892:212.—Funk, 1927:333.—Feldmann, 1937:265.—Rayss, 1955:41.—Gayral, 1958:172.—Riedl, 1963:41.—Ardre, 1970:359.—Gerloff and Geissler, 1971:742.—Güven and Östig, 1971:122.—Giaccone et al., 1973, table IV.—Furnari and Scammacca, 1973:6.

DISTRIBUTION.—Tunisia (Gammarth); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (France, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel); Red Sea.

SPECIMEN STUDIED.—EGM *11:* 913(US).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Bryopsis balbisiana Lamouroux

Bryopsis balbisiana Lamouroux, 1813:66.—Piccone, 1879:22; 1884:112.—Bornet, 1892:213.—Boergesen, 1925:98.—Feldmann, 1937:265; 1961:504.—Rayss, 1955:26.—Gayral, 1958:177.—Riedl, 1963:41.—Seoane-Camba, 1965:62.—Güven and Östig, 1971:122.—Furnari and Scammacca, 1973:6.—Boudouresque and Perret, 1977: 146.

DISTRIBUTION.—Tunisia (La Marsa, Sidi Bou Said, Hammamet, Sousse); northeastern Atlantic

(Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Adriatic Sea, Turkey, Israel, Algeria, Sicily).

SPECIMENS STUDIED.—EGM *12:* 607, 608; *13:* 610; *16:* 604, 606(US); *17:* 605(NHA), 609 (INSTOP).

REMARKS.—Common; found in April, July, and September on rocks in the sublittoral zone.

***Bryopsis hypnoides Lamouroux**

Bryopsis hypnoides Lamouroux, 1809c:135.—Feldmann, 1937:265.—Ardre, 1970:363.—Gerloff and Geissler, 1971:740.—Güven and Östig, 1971:122.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:209.

DISTRIBUTION.—Tunisia (Kerkenna Island); northeastern Atlantic (Portugal, Morocco); Mediterranean (France, Sicily, Greece, Turkey); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *20:* 612(US), 2102(NHA).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Bryopsis muscosa Lamouroux

Bryopsis muscosa Lamouroux, 1809c:23.—Funk, 1927:328.—Feldmann, 1937:265.—Navarro and Uriarte, 1945:207.—Rayss, 1955:26.—Furnari and Scammacca, 1970:218.—Ben Alaya, 1970:206.—Gerloff and Geissler, 1971:740.—Giaccone et al., 1973, table III.—Harotinidis and Tsekos, 1975:209.

DISTRIBUTION.—Tunisia (Sousse); northeastern Atlantic (Morocco); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Israel).

SPECIMENS STUDIED.—EGM *17:* 613–614(US), 615(NHA), 616(INSTOP).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Bryopsis plumosa (Hudson) C. Agardh

Ulva plumosa Hudson, 1778:571.

Bryopsis plumosa (Hudson) C. Agardh, 1822:488.—Bornet, 1892:213.—Boergesen, 1925:97.—Hamel, 1931b:287.—Feldmann, 1937:265.—Navarro and Uriarte, 1945:207.—Aleem, 1951:251.—Rayss, 1955:26.—Gayral, 1958:180.—Riedl, 1963:41.—Ardre, 1970:362.—Ben Alaya, 1970:206.—Furnari and Scammacca, 1970:218.—Gerloff and Geissler, 1971:740.—Güven and Östig, 1971:122.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977:147.

DISTRIBUTION.—Tunisia (Sidi Bou Said); northeastern Atlantic (Portugal, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Adriatic Sea, Greece, Turkey, Israel, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *12:* 1608; *13:* 617–621(US); *28:* 2235(NHA), 2236(INSTOP).

REMARKS.—Occasional; found in February and September on rocks in the sublittoral zone.

***Pseudobryopsis myura (J. Agardh) Berthold in Oltmanns**

Bryopsis myura J. Agardh, 1842:20.

Pseudobryopsis myura (J. Agardh) Berthold in Oltmanns, 1904:303.—Boergesen, 1925:103.—Funk, 1927:332.—Hamel, 1931b:396.—Feldmann, 1937:265.—Rayss, 1955:27.

DISTRIBUTION.—Tunisia (Djerba Island, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (France, Italy, Israel).

SPECIMENS STUDIED.—EGM *24:* 1051,1052; *29:* 1053(US), 1054(NHA), 1055 (INSTOP).

REMARKS.—Occasional; found in April and May on rocks in the sublittoral zone.

Family CAULERPACEAE

Caulerpa prolifera (Forsskal) Lamouroux

Fucus prolifer Forsskal, 1775:193.

Caulerpa prolifera (Forsskal) Lamouroux, 1809b:142.—Muschler, 1910:296.—DeToni and Forti, 1913:18; 1914:293.—Boergesen, 1925:112.—Fremy, 1925:28.—Schiffner, 1926:311.—Funk, 1927:335.—Pottier, 1929:325.—Hamel, 1931b:420.—Nasr, 1940b:9.—Navarro and Uriarte, 1945:208.—Nasr and Aleem, 1949:271.—Aleem, 1951:251.—Feldmann, 1951:106.—Rayss, 1955:22.—Dao, 1957:168.—Edelstein, 1964:182.—Seoane-Camba, 1965:66.—Furnari and Scammacca, 1970:218.—Ardre, 1970:374.—Gerloff and Geissler, 1971:739.—Güven and Östig, 1971:122.—Harotinidis and Tsekos, 1975:209.—Boudouresque and Perret, 1977:150.

DISTRIBUTION.—Tunisia (Mouth of Madjerda,

Gammarth, La Marsa, Sidi Bou Said, Korbous, Nabeul, Hammamet, Gabes, Kerkenna Island, Zarzis, El Bibane); northeastern Atlantic (Portugal, Spain, Canary Islands); Mediterranean (Spain, Italy, France, Greece, Turkey, Israel, Libya, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *9:* 622, 651; *11:* 697–700, 713; *12:* 643–647, 712; *13:* 623, 642; *14:* 675–679; *15:* 657–659; *16:* 661, 662; *19:* 689; *20:* 663–667, 686–688, 693, 694, 696, 701; *21:* 652–656; *22:* 668–674; *23:* 706; *24:* 648–650, 680–684, 702, 703, 708–710; *25:* 660; *26:* 690–692, 704–705; *28:* 707, 711(US); *29:* 695(NHA), 696(INSTOP).

REMARKS.—Abundant; found from March to October on rocks, sometimes epiphytic on rhizomes of *Posidonia oceanica*.

Family CODIACEAE

Codium bursa (Linnaeus) C. Agardh

Alcyonium bursa Linnaeus, 1759:1295.
Codium bursa (Linnaeus) C. Agardh, 1822:457.—Piccone, 1879:23; 1884:114.—Bornet, 1892:215.—DeToni and Forti, 1913:19.—Petersen, 1918:6.—Fremy, 1925:18.—Funk, 1927:324.—Feldmann, 1931b:207; 1937:265.—Hamel, 1931b:413.—Navarro and Uriarte, 1945:210.—Aleem, 1951:251.—Riedl, 1963:43.—Seoane-Camba, 1965:64.—Furnari and Scammacca, 1970:218.—Ben Alaya, 1970:207.—Gerloff and Geissler, 1971:741.—Güven and Östig, 1971:122.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:148.

DISTRIBUTION.—Tunisia (Bizerte, Gabes); northeastern Atlantic (Morocco, Spain); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria, Libya, Egypt).

SPECIMENS STUDIED.—EGM *4:* 855–858(US), 859(NHA); *22:* 860(INSTOP).

REMARKS.—Occasional; found from May to June as drift material.

**Codium decorticatum* (Woodward) Howe

Ulva decorticata Woodward, 1797:55.
Codium decorticatum (Woodward) Howe, 1911:494.—Ardre, 1970:370.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (Hammamet, Sousse); northeastern Atlantic (Portugal); Mediterranean (Sicily).

SPECIMENS STUDIED.— EGM *16:* 967–971(US); *17:* 861–864(NHA), 965–966 (INSTOP).

REMARKS.—Occasional; found in March and April on rocks in the sublittoral zone.

Family UDOTEACEAE

Espera mediterranea Decaisne

Espera mediterranea Decaisne, 1842:99.—Gerloff and Geissler, 1971:739.
Penicillus mediterraneus (Decaisne) Thuret in Bornet, 1892: 217.—Hamel, 1931b:403.

DISTRIBUTION.—Tunisia (Korbous, El Bibane); Mediterranean (Greece).

SPECIMENS STUDIED.—EGM *14:* 1046–1050; *29* 1042–1043(US), 1044(NHA), 1045(INSTOP).

REMARKS.—Occasional; found in April and October on rocks in sandy bottom of the sublittoral zone.

Halimeda tuna (Ellis and Solander) Lamouroux

Corallina tuna Ellis and Solander, 1786:111.
Halimeda tuna (Ellis and Solander) Lamouroux, 1812:186.—Muschler, 1910:296.—DeToni and Forti, 1913:19; 1914: 293.—Funk, 1927:327.—Pottier, 1929:325.—Feldmann, 1937:265.—Nasr, 1940b:8.—Navarro and Uriarte, 1945: 209.—Nasr and Aleem, 1949:277.—Aleem, 1951:251.—Rayss, 1955:29.—Dao, 1957:168.—Edelstein, 1962:213; 1964:184.—Riedl, 1963:43.—Gerloff and Geissler, 1971: 741.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:210.—Boudouresque and Perret, 1977:150.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Tabarka, Ras Sidi Ali El Mekki, Raouad, Gammarth, La Marsa, Sidi Bou Said, Nabeul, Hammamet, Monastir, Gabes, Kerkenna Island, Djerba Island, El Bibane, Zarzis); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 983, 984, 1026; *2:* 956–960, 975, 985–988, 1263; *5:* 998; *7:* 1028; *10:* 1027; *11:* 1013–1016; *12:* 992–997, 1001; *13:* 1029–1032; *15:* 1007, 1024, 1025; *16:* 1006, 1023; *18:* 980–982; *20:* 1008–1012; *21:* 1033–1037; *22:* 1017–1022; *24:* 965–967, 972, 976–979; *25:* 999, 1038–1041; *26:* 971, 973; *27:* 970, 974; *28:* 964, 968, 969, 989, 1002–1005; *29:* 961–963(US), 990–991(NHA), 1000(INSTOP).

REMARKS.—Abundant; found in March and October on sandy substrate in the sublittoral zone.

Udotea petiolata (Turra) Boergesen

Ulva petiolata Turra, 1780:68.

Udotea petiolata (Turra) Boergesen, 1925:86.—DeToni and Forti, 1914:293.—Funk, 1955:25.—Hamel, 1931b:404.—Feldmann, 1937:265; 1961:504.—Nasr, 1940a:3.—Navarro and Uriarte, 1945:208.—Aleem, 1951:251.—Rayss, 1955:28.—Dao, 1957:168.—Edelstein, 1964:183.—Riedl, 1963:41.—Ben Alaya, 1970:207.—Furnari and Scammacca, 1970:217.—Gerloff and Geissler, 1971:739.—Güven and Östig, 1971:122.—Giaccone et al., 1973:110.—Harotinidis and Tsekos, 1975:210.—Boudouresque and Perret, 1977:153.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Tabarka, Bechateur, Raf Raf, Ras Sidi Ali El Mekki, Ile Plane, Mouth of Madjerda, Raouad, La Marsa, Sidi Bou Said, Korbous, Nabeul, Hammamet, Monastir, Gabes, Kerkenna Island, Djerba Island); northeastern Atlantic (Spain, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Libya, Egypt).

SPECIMENS STUDIED.—EGM *1:* 1063–1066, 1082; *2:* 1059, 1067–1074; *3:* 1088; *5:* 1076, 1078; *6:* 1079, 112; *7:* 1116; *8:* 1099–1107; *9:* 1108–1110; *10:* 1113–1115; *11:* 1091; *12:* 1075, 1077, 1080, 1081; *13:* 1083, 1084, 1120–1122; *14:* 1094–1098; *15:* 1089, 1111; *16:* 1092, 1093; *18:* 1056–1058; *21:* 1085–1087, 1123; *22:* 1090; *24:* 1060, 1061(US); *25:* 1117–1119(NHA); *27:* 1062(INSTOP).

REMARKS.—Abundant; found from February to May and in July, September, October, and December on rocks in the sublittoral zone.

Order DASYCLADALES

Family DASYCLADACEAE

Acetabularia acetabulum (Linnaeus) Silva

Madrepora acetabulum Linnaeus, 1758:793.

Acetabularia acetabulum (Linnaeus) Silva, 1952:255.—Gerloff and Geissler, 1971:742.—Boudouresque and Perret, 1977:133.

Acetabularia mediterranea Lamouroux, 1816:249.—Boergesen, 1925:77.—Fremy, 1925:28.—Schiffner, 1926:311.—Funk, 1927:322.—Feldmann, 1931b:205; 1937:264.—Hamel, 1931c:38.—Navarro and Uriarte, 1945:206.—Rayss, 1955:21.—Dao, 1957:168.—Riedl, 1963:41.—Furnari and Scammacca, 1970:218.—Ben Alaya, 1970:208.—Güven and Östig, 1971:122.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:209.

DISTRIBUTION.—Tunisia (Tabarka, Bechateur, Kerkenna Island, Djerba Island, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria); Red Sea.

SPECIMENS STUDIED.—EGM *3:* 563; *19:* 552–554, 557, 558; *20:* 555, 556, 559–560, 565; *21:* 564; *23:* 562; *24:* 566(US); *29:* 561(NHA), 567(INSTOP).

REMARKS.—Abundant; found in March, April, June, and July on rocks, occasionally epiphytic on various algae and *Cymodocea nodosa.*

Dasycladus clavaeformis (Roth) C. Agardh

Conferva clavaeformis Roth, 1806:315.

Dasycladus clavaeformis (Roth) C. Agardh, 1828:16.—DeToni, 1895:455.—Boergesen, 1925:75.—Schiffner, 1926:311.—Funk, 1927:322.—Hamel, 1931c:36.—Navarro and Uriarte, 1945:206.—Rayss, 1955:20.—Riedl, 1963:39.—Edelstein, 1964:181.—Ben Alaya, 1970:207.—Güven and Östig, 1971:122.

Dasycladus vermicularis (Scopoli) Krasser in Beck and Zahlbruckner, 1898:459.—Aleem, 1951:251.—Dao, 1957:168.—Gerloff and Geissler, 1971:741.—Giaccone et al., 1973:112.—Harotinidis and Tsekos, 1975:210.—Boudouresque and Perret, 1977:134.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Raf Raf, Ras Sidi Ali El Mekki, Gammarth, Sidi Bou Said, Nabeul, Kerkenna Island, Djerba Is-

land, Zarzis, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Libya, Egypt).

SPECIMENS STUDIED.—EGM *1:* 876, 878; *2:* 872–874, 880, 887, *6:* 906, 907; *7:* 908; *11:* 910, 911; *13:* 891, 912; *14:* 900–904; *15:* 905, 909; *18:* 879; *19:* 875; *23:* 889; *24:* 881, 886, 890; *25:* 895–899; *26:* 888; *28:* 885(US), 892–894(NHA); *29:* 882–884(INSTOP).

REMARKS.—Abundant; found from March to July and from September to October on rocks in the sublittoral zone.

Division RHODOPHYTA

Class RHODOPHYCEAE

Order BANGIALES

Family ERYTHROPELTIDACEAE

Erythrotrichia carnea (Dillwyn) J. Agardh

Conferva carnea Dillwyn, 1807, pl. 84.
Erythrotrichia carnea (Dillwyn) J. Agardh, 1883:15.—Boergesen, 1927:5.—Feldmann, 1937:269.—Nasr, 1940b:17.—Aleem, 1951:251.—Papenfuss, 1968:68.—Ardre, 1970: 46.—Gerloff and Geissler, 1971:759.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:12.

DISTRIBUTION.—Tunisia (Tabarka, La Marsa, Sousse); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (France, Sicily, Greece, Italy, Egypt, Corsica); Red Sea.

SPECIMENS STUDIED.—EGM *12:* 1628–1629 (US).

REMARKS.—Occasional; found in April epiphytic on *Cymodocea nodosa*.

Family BANGIACEAE

Bangia fuscopurpurea (Dillwyn) Lyngbye

Conferva fuscopurpurea Dillwyn, 1807:54.
Bangia fuscopurpurea (Dillwyn) Lyngbye, 1819:83.—Funk, 1927:373.—Feldmann, 1937:269.—Gayral, 1958:280.—Riedl, 1963:64.—Ardre, 1970:49.—Harotinidis and Tsekos, 1975:214.—Boudouresque and Perret, 1977:11.

DISTRIBUTION.—Tunisia (Bizerte, Raouad, Hammamet); northeastern Atlantic (Portugal); Mediterranean (France, Italy, Adriatic Sea, Greece, Algeria); Indian Ocean.

SPECIMENS STUDIED.—EGM *4:* 1349; *10:* 1518–1522, 1526(US); *16:* 1937–1939(NHA), 1940–1941(INSTOP).

REMARKS.—Common; found in March and May as tufted mats on rocks in the upper littoral zone.

Porphyra leucosticta Thuret in Le Jolis

Porphyra leucosticta Thuret in Le Jolis, 1863:100.—Bornet, 1892:262.—Boergesen, 1927:5.—Funk, 1927:374.—Feldmann, 1937:269.—Nasr, 1940a:5.—Navarro and Uriarte, 1945:232.—Riedl, 1963:64.—Ardre, 1970:53.—Gerloff and Geissler, 1971:760.—Güven and Östig, 1971:125.—Boudouresque and Perret, 1977:12.

DISTRIBUTION.—Tunisia (Hammamet); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (Spain, France, Corsica, Adriatic Sea, Turkey, Algeria, Egypt).

SPECIMENS STUDIED.—EGM *16:* 1915–1918 (US), 1919(NHA), 1920(INSTOP).

REMARKS.—Occasional; found from March to April on spray-covered rocks in the littoral fringe.

Order GONIOTRICHALES

Family GONIOTRICHACEAE

Goniotrichum alsidii (Zanardini) Howe

Bangia alsidii Zanardini, 1839:136.
Goniotrichum alsidii (Zanardini) Howe, 1914:75.—Feldmann, 1937:269; 1961:506.—Aleem, 1951:251.—Edelstein, 1964: 190.—Gerloff and Geissler, 1971:759.
Goniotrichum elegans (Chauvin) Le Jolis, 1863:103.—Boergesen, 1927:10.—Ardre, 1970:44.

DISTRIBUTION.—Tunisia (Sousse); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (France, Corsica, Italy, Greece, Israel, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMEN STUDIED.—EGM *17:* 1541a(US).

REMARKS.—Occasional; found in April epiphytic on various algae.

Order ACROCHAETIALES

Family ACROCHAETIACEAE

Acrochaetium virgatulum (Harvey in Hooker) J. Agardh

Callithamnion virgatulum Harvey in Hooker, 1833:349.
Acrochaetium virgatulum (Harvey in Hooker) J. Agardh, 1892: 48.—Hamel, 1927:45.—Feldmann, 1937:270.—Aleem, 1951:251.—Ardre, 1970:56.—Gerloff and Geissler, 1971: 760.—Boudouresque and Perrett, 1977:15.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (Corsica, France, Greece, Egypt).

SPECIMEN STUDIED.—EGM *12:* 1752(US).

REMARKS.—Rare; found in April epiphytic on *Cymodocea nodosa.*

**Acrochaetium codiculum* Boergesen

Acrochaetium codiculum Boergesen, 1927:33.

DISTRIBUTION.—Tunisia (Sousse); northeastern Atlantic (Canary Islands).

SPECIMEN STUDIED.—EGM *17:* 1541b(US).

REMARKS.—Occasional; found in April epiphytic on *Cymodocea nodosa.*

Acrochaetium savianum (Meneghini) Naegeli

Callithamnion savianum Meneghini, 1840:[3].
Acrochaetium savianum (Meneghini) Naegeli, 1861:171.—Feldmann, 1937:270.—Ardre, 1970:55.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal); Mediterranean (France, Libya).

SPECIMEN STUDIED.—EGM *12:* 2133(US).

REMARKS.—Occasional; found April epiphytic on *Cymodocea nodosa.*

Order NEMALIALES

Family HELMINTHOCLADIACEAE

Liagora distenta (Mertens in Roth) C. Agardh

Fucus distentus Mertens in Roth, 1806:103.
Liagora distenta (Mertens in Roth) C. Agardh, 1822:394.—Fremy, 1925:28.—Boergesen, 1927:62.—Feldmann, 1931b:227; 1937:270.—Navarro and Uriarte, 1945:234.—Seoane-Camba, 1965:94.—Gerloff and Geissler, 1971: 761.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:16.

DISTRIBUTION.—Tunisia (Bechateur); northeastern Atlantic (Spain, Canary Islands); Mediterranean (Spain, France, Corsica, Sicily, Greece, Algeria).

SPECIMENS STUDIED.—EGM *3:* 1316–1321; *18:* 1971(US), 1972(NHA), 2012(INSTOP).

REMARKS.—Occasional; found in April, June, and July on rocks in the sublittoral zone.

Liagora viscida (Forsskal) C. Agardh

Fucus viscidus Forsskal, 1775:193.
Liagora viscida (Forsskal) C. Agardh, 1822:395.—Muschler, 1910:303.—Funk, 1927:378.—Feldmann, 1931b:226; 1937:270; 1961:506.—Navarro and Uriarte, 1945:233.—Riedl, 1963:65.—Ardre, 1970:62.—Ben Alaya, 1970: 212.—Gerloff and Geissler, 1971:761.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:16.

DISTRIBUTION.—Tunisia (Tabarka, Bechateur); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria, Libya).

SPECIMENS STUDIED.—EGM *1:* 1211; *3:* 1310–1313(US), 1314(NHA), 1315(INSTOP).

REMARKS.—Occasional; found in June and July on rocks in the sublitoral zone.

Order CHAETANGIALES

Family CHAETANGIACEAE

**Scinaia forcellata* (Turner) Bivona

Ulva forcellata Turner, 1801:300.
Scinaia forcellata (Turner) Bivona, 1822:[3].—Bornet, 1892:

265.—Boergesen, 1927:63.—Funk, 1927:378.—Feldmann, 1937:270.—Navarro and Uriarte, 1945:234.—Aleem, 1951:251.—Gayral, 1958:296.—Seoane-Camba, 1965: 94.—Ardre, 1970:63.—Furnari and Scammacca, 1970: 220.—Güven and Östig, 1971:128.—Harotinidis and Tsekos, 1975:219.—Boudouresque and Perret, 1977:17.

DISTRIBUTION.—Tunisia (Sousse); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, Sicily, France, Corsica, Italy, Greece, Turkey, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *17:* 1943–1946 (US), 1947(NHA), 1948(INSTOP).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Order BONNEMAISONIALES

Family BONNEMAISONIACEAE

Asparagopsis armata Harvey

Asparagopsis armata Harvey, 1855:544.—Hamel, 1926:420.—Feldmann, 1931b:227; 1937:270.—Funk, 1955:68.—Gayral, 1958:284.—Seoane-Camba, 1965:96.—Papenfuss, 1968:73.—Ardre, 1970:142.—Güven and Östig, 1971: 127.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (France, Italy, Sicily, Turkey, Algeria); Red Sea; Indian Ocean.

SPECIMEN STUDIED.—EGM *2:* 1545(US).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

**Bonnemaisonia asparagoides* (Woodward) C. Agardh

Fucus asparagoides Woodward, 1794:239.
Bonnemaisonia asparagoides (Woodward) C. Agardh, 1822: 197.—Funk, 1927:411.—Feldmann, 1931b:227; 1937: 270.—Navarro and Uriarte, 1945:234—Seoane-Camba, 1965:96.—Ardre, 1970:142.

DISTRIBUTION.—Tunisia (Tabarka, Monastir); northeastern Atlantic (Portugal, Spain); Mediterranean (Spain, France, Italy).

SPECIMENS STUDIED.—EGM *18:* 2016(US), 2017(NHA), 2018(INSTOP).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

**"Falkenbergia rufolanosa"* (Harvey) Schmitz in Engler and Prantl

(tetrasporophyte stage of *Asparagopsis armata*)

Polysiphonia rufolanosa Harvey, 1855:540.
Falkenbergia rufolanosa (Harvey) Schmitz in Engler and Prantl, 1897:479.—Gayral, 1958:288.—Seoane-Camba, 1965: 97.—Ardre, 1970:142.—Furnari and Scammacca, 1970: 224.—Güven and Östig, 1971:127.—Boudouresque and Perret, 1977:94.

DISTRIBUTION.—Tunisia (Sidi Bou Said); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Corsica, Turkey, Sicily).

SPECIMEN STUDIED.—EGM *13:* 1757(US).

REMARKS.—Rare; found in October on rocks in the sublittoral zone.

"Trailliella intricata" Batters

(tetrasporophyte stage of *Bonnemaisonia hamifera*)

Trailliella intricata Batters, 1896:10.—Petersen, 1918:13.—Boergesen, 1930:9.—Feldmann, 1931a:17.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Canary Islands).

SPECIMEN STUDIED.—EGM *2:* 1546(US).

REMARKS.—Rare; found in April epiphytic on *Cystoseira*.

Order GELIDIALES

Family GELIDIACEAE

**Gelidium latifolium* (Greville) Bornet and Thuret

Gelidium corneum var. *latifolium* Greville, 1830:143.
Gelidium latifolium (Greville) Bornet and Thuret, 1876:58.—Bornet, 1892:270.—Funk, 1927:70.—Feldmann, 1931b: 228; 1937:270.—Navarro and Uriarte, 1945:236.—Aleem, 1951:251.—Gayral, 1958:306.—Edelstein, 1964:191.—Seoane-Camba, 1965:98.—Ardre, 1970:65.—Gerloff and

Geissler, 1971:762.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:19.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Portugal Spain, Morocco); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Turkey, Israel, Algeria); Red Sea.

SPECIMENS STUDIED.—EGM *2:* 1197–1198(US), 1199(NHA), 1200(INSTOP).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

***Gelidium pectinatum* Montagne**

Gelidium pectinatum Montagne, 1846:108.—Bornet, 1892: 271.—Boergesen, 1927:89.—Funk, 1927:381.—Navarro and Uriarte, 1945:236.—Edelstein, 1962:213; 1964:191.—Ardre, 1970:66.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Bechateur, La Marsa); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (Sicily, Spain, Italy).

SPECIMENS STUDIED.—EGM *2:* 1194, 1195; *3:* 1297; *5:* 1357(US); *12:* 1615(NHA), 1616(INSTOP).

REMARKS.—Common; found in February, April, July, and August on rocks in the sublittoral zone.

***Gelidium pusillum* (Stackhouse) Le Jolis**

Fucus pusillus Stackhouse, 1801:17.

Gelidium pusillum (Stackhouse) Le Jolis, 1863:139.—Bornet, 1892:268.—Boergesen, 1927:83.—Feldmann, 1931b:228; 1937:270.—Navarro and Uriarte, 1945:235.—Nasr and Aleem, 1949:278.—Gayral, 1958:308.—Seoane-Camba, 1965:100.—Ardre, 1970:72.—Gerloff and Geissler, 1971: 762.—Boudouresque and Perret, 1977:19.

DISTRIBUTION.—Tunisia (Gammarth, Hammamet); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Adriatic Sea, Greece, Sicily, Turkey, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *7:* 1384: *11:* 1528–1530, 1536; *12:* 1623–1627; *13:* 1756; *14:* 1826–1830; *15:* 1869; 1870; *16:* 1908–1914(US); *17:* 1949–1950(NHA), 2298(INSTOP).

REMARKS.—Common; found from March to May and in September, October, and December on rocks in the sublittoral zone.

***Pterocladia capillacea* (Gmelin) Bornet and Thuret**

Fucus capillaceus Gmelin, 1768:146.

Pterocladia capillacea (Gmelin) Bornet and Thuret, 1876:57.—Bornet, 1892:272.—Boergesen, 1927:93.—Funk, 1955: 71.—Feldmann, 1931b:229; 1937:271; 1961:506.—Nasr, 1940b:20.—Navarro and Uriarte, 1945:236.—Aleem, 1951:251.—Gayral, 1958:312.—Riedl, 1963:65.—Ardre, 1970:73.—Furnari and Scammacca, 1970:221.—Gerloff and Geissler, 1971:762.—Güven and Östig, 1971:127.—Lipkin and Safriel, 1971:10.

DISTRIBUTION.—Tunisia (Cap Zebib, Bechateur, La Marsa, Sousse); northeastern Atlantic (Portugal, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Adriatic Sea, Greece, Sicily, Turkey, Israel, Algeria, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *3:* 2299; *5:* 1360: *12:* 1649–1651(US); *17:* 1953–1955(NHA), 1956–1957(INSTOP).

REMARKS.—Common; found in February and April and from June to September on rocks in the sublittoral zone.

Order CRYPTONEMIALES

Family PEYSSONNELIACEAE

***Peyssonnelia rubra* (Greville) J. Agardh**

Zonaria rubra Greville, 1826:340.

Peyssonnelia rubra (Greville) J. Agardh, 1851:502.—Piccone, 1879:29; 1884:129.—Bornet, 1892:347.—Muschler, 1910: 311.—Petersen, 1918:12.—Boergesen, 1929:13.—Feldmann, 1931b:240; 1937:271; 1961:506.—Navarro and Uriarte, 1945:241.—Aleem, 1951:251.—Edelstein, 1962: 213; 1964:193.—Gerloff and Geissler, 1971:763.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:56.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Ze-

bib, Ile Plane, Korbous, Djerba Island); northeastern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Sicily, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *1:* 1204; *2:* 1226–1234, 1248, 1249, 1268, 1269; *5:* 1368; *8:* 1390, 1391, 1397–1401(US); *14:* 1849–1850(NHA), 1851(INSTOP).

REMARKS.—Abundant; found in January, February, April, May, July, August, October, and December growing as a fleshy crust on rocks.

Peyssonnelia squamaria (Gmelin) Decaisne

Fucus squamarius Gmelin, 1768:171.

Peyssonnelia squamaria (Gmelin) Decaisne, 1839:168.—Bornet, 1892:347.—Muschler, 1910:311.—DeToni and Forti, 1913:6; 1914:290.—Feldmann, 1931b:240; 1937:271.—Navarro and Uriarte, 1945:241.—Aleem, 1951:251.—Dao, 1957:170.—Edelstein, 1962:213; 1964:193.—Riedl, 1963:67.—Ardre, 1970:76.—Ben Alaya, 1970:210.—Gerloff and Geissler, 1971:763.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:57.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Tabarka, Bechateur, Raouad, mouth of Madjerda, Gammarth, La Marsa, Sidi Bou Said, Korbous, Nabeul, Monastir, Gabes); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *1:* 1205; *2:* 1222, 1223; *3:* 1307; *5:* 1365; *9:* 1468–1476; *10:* 1493–1495; *11:* 1553, 1567–1570; *12:* 1682–1684, 1686–1688; *13:* 1785–1788; *14:* 1847, 1848; *15:* 1886, 1887; *18:* 1978(US), 1996(NHA); *22:* 2131(INSTOP).

REMARKS.—Abundant; found from February to December usually on rocks but sometimes epiphytic on some algae; some specimens dredged from 4 to 45 m.

Family CORALLINACEAE

**Amphiroa beauvoisii* Lamouroux

Amphiroa beauvoisii Lamouroux, 1816:299.—Nasr, 1940b:21.—Navarro and Uriarte, 1945:249.—Aleem, 1951:251.

DISTRIBUTION.—Tunisia (La Marsa); Mediterranean (Egypt).

SPECIMEN STUDIED.—EGM *12:* 1173(US).

REMARKS.—Rare; found in October on rocks in the sublittoral zone.

Amphiroa rigida Lamouroux

Amphiroa rigida Lamouroux, 1816:297.—Muschler, 1910:312.—DeToni and Forti, 1914:290.—Funk, 1927:436.—Feldmann, 1931b:242; 1937:272; 1961:507.—Navarro and Uriarte, 1945;249.—Aleem, 1951:251.—Hamel and Lemoine, 1953:40.—Edelstein, 1962:213; 1964:195.—Riedl, 1963:70.—Seoane-Camba, 1965:118.—Ardre, 1970:92.—Gerloff and Geissler, 1971:764.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:36.

DISTRIBUTION.—Tunisia (Cap Serrat, Bechateur); northeastern Atlantic (Portugal, Spain); Mediterranean (Spain, Corsica, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *2:* 1255, 1262(US); *3:* 1340(NHA), 1341(INSTOP).

REMARKS.—Occasional; found from April to June on rocks in the sublittoral zone.

Corallina elongata Ellis and Solander

Corallina elongata Ellis and Solander, 1786:121.—Boudouresque and Perret, 1977:37.

Corallina mediterranea Areschoug in J. Agardh, 1852:568.—Bornet, 1892:350.—Funk, 1927:438.—Boergesen, 1929:68.—Feldmann, 1931b:242; 1937:272, 1961:507.—Nasr, 1940b:22.—Navarro and Uriarte, 1945:247.—Nasr and Aleem, 1949:278.—Aleem, 1951:251.—Gayral, 1958:320.—Riedl, 1963:70.—Seoane-Camba, 1965:110.—Ardre, 1970:94.—Furnari and Scammacca, 1970:221.—Gerloff and Geissler, 1971:764.—Güven and Östig, 1971:127.—Lipkin and Safriel, 1971:10.

DISTRIBUTION.—Tunisia (Tabarka, Gammarth, Hammamet, Sousse), northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Adriatic Sea, Greece, Turkey, Israel, Algeria, Egypt, Sicily).

SPECIMENS STUDIED.—EGM *1:* 1197; *13:* 1754;

16: 1907, 1921–1923(US), 1924(NHA); *17:* 1963(INSTOP).

REMARKS.—Common; found in January, March, April, June, July, and October on rocks in the sublittoral zone.

Corallina granifera Ellis and Solander

Corallina granifera Ellis and Solander, 1786:120.—Funk, 1927: 438.—Boergesen, 1929:69.—Feldmann, 1931b:242; 1937: 272.—Navarro and Uriarte, 1945:248.—Seoane-Camba, 1965:110.—Ardre, 1970:96.—Gerloff and Geissler, 1971: 764.—Güven and Östig, 1971:127.—Lipkin and Safriel, 1971:9.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:39.

DISTRIBUTION.—Tunisia (Tabarka, Bechateur, Bizerte, Raouad, Gammarth, La Marsa, Sidi Bou Said, Nabeul, Aghir, El Bibane); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Turkey, Israel, Algeria, Libya).

SPECIMENS STUDIED.—EGM *1:* 1194–1196; *3:* 1300–1304; *4:* 1343; *10:* 1479–1481, 1489; *11:* 1552, 1554; *12;* 1652; *13:* 1753, 1771, 1772; *15:* 1877–1880; *24:* 2175(US), 2176–2177(NHA); *29:* 2261(INSTOP).

REMARKS.—Abundant; found from March to July and in September, October, and December on rocks and epiphytic on various algae in the sublittoral zone.

Corallina officinalis Linnaeus

Corallina officinalis Linnaeus, 1758:805.—Bornet, 1892:350.—Muschler, 1910:312.—Feldmann, 1931b:242; 1937:272.—Navarro and Uriarte, 1945:247.—Aleem, 1951:251.—Gayral, 1958:317.—Seoane-Camba, 1965:110.—Ardre, 1970:92.—Ben Alaya, 1970:211.—Gerloff and Geissler, 1971:764.—Güven and Östig, 1971:127.—Lipkin and Safriel, 1971:10.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:39.

DISTRIBUTION.—Tunisia (Bizerte, La Marsa); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Spain, France, Corsica, Sicily, Greece, Turkey, Israel, Algeria, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *4:* 342; *5:* 1355 (US), 1356(NHA); *12:* 1607(INSTOP).

REMARKS.—Occasional; found in May and June and from August to September on rocks in the sublittoral zone.

Dermatolithon pustulatum (Lamouroux) Foslie

Melobesia pustulata Lamouroux, 1816:315.

Dermatolithon pustulatum (Lamouroux) Foslie, 1899:11.—Muschler, 1910:312.—Feldmann, 1937:272.—Navarro and Uriarte, 1945:245.—Funk, 1955:98.—Gayral, 1958: 340.—Seoane-Camba, 1965:114.—Ardre, 1970:89.—Gerloff and Geissler, 1971:765.—Boudouresque and Perret, 1977:41.

DISTRIBUTION.—Tunisia (Zarzis, La Marsa); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Spain, France, Corsica, Italy, Greece, Libya); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *12:* 1176–1177 (US).

REMARKS.—Common; found in October as a crust on rocks and *Cymodocea nodosa.*

Fosliella farinosa (Lamouroux) Howe

Melobesia farinosa Lamouroux, 1816:315.—DeToni and Forti, 1913:6; 1914:290.—Schiffner, 1926:304.—Funk, 1955: 97.—Boergesen, 1929:65—Feldmann, 1931b:242; 1937: 272; 1961:507.—Nasr, 1940b:22.—Navarro and Uriarte, 1945:246.—Nasr and Aleem, 1949:277.—Edelstein, 1962: 214; 1964:195.—Seoane-Camba, 1965:116.—Ardre, 1970: 90.—Gerloff and Geissler, 1971:767.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.

Fosliella farinosa (Lamouroux) Howe, 1920:587.—Aleem, 1951:251.—Hamel and Lemoine, 1953:102.—Riedl, 1963: 69.—Boudouresque and Perret, 1977:41.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, La Marsa, Kerkenna Island, Djerba Island, El Bibane); northeastern Atlantic (Portugal, Spain, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria, Libya); Red Sea; Indian Ocean.

SPECIMEN STUDIED.—EGM *2:* 1190(US).

REMARKS.—Occasional; found from April to July and in September as a crust on *Cymodocea nodosa.*

Haliptilon squamatum (Linnaeus) Johansen, Irvine, and Webster

Corallina squamata Linnaeus, 1767:540.
Haliptilon squamatum (Linnaeus) Johansen et al., 1973:212.—Boudouresque and Perret, 1977:44.
Corallina squamata Ellis and Solander, 1786:117.—Bornet, 1892:351.—Gayral, 1958:320.—Ardre, 1970:96.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Portugal, Morocco); Mediterranean (Corsica, Libya, Greece).

SPECIMENS STUDIED.—EGM *2:* 1139(US), 1178(NHA), 1220(INSTOP).

REMARKS.—Occasional; found in April on rocks in the sublittoral zone.

Jania corniculata (Linnaeus) Lamouroux

Corallina corniculata Linnaeus, 1758:806.
Jania corniculata (Linnaeus) Lamouroux, 1812:186.—Bornet, 1892:351.—Feldman, 1937:272.—Navarro and Uriarte, 1945:248.—Seoane-Camba, 1965:112.—Ardre, 1970:98.—Ben Alaya, 1970:211.—Boudouresque and Perret, 1977:44.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Spain, France, Corsica).

SPECIMENS STUDIED.—EGM *2:* 1225; *3:* 1291, 1293(US), 1294(NHA); *5:* 1354(INSTOP).

REMARKS.—Common; found in February and April on rocks.

**Jania longifurca* Zanardini

Jania longifurca Zanardini, 1843:43.—Bornet, 1892:351.—Feldmann, 1931b:242; 1937:272.—Gayral, 1958:330.—Seoane-Camba, 1965:112.—Ardre, 1970:98.—Furnari and Scammacca, 1973:13.—Gerloff and Geissler, 1971:766.

DISTRIBUTION.—Tunisia (Cap Zebib, Bechateur, La Marsa); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (France, Algeria, Sicily).

SPECIMENS STUDIED.—EGM *3:* 1305, 1306; *5:* 1353, 1364; *12:* 1606, 1671-1680(US), 1681 (NHA), 1685(INSTOP).

REMARKS.—Common; found from January to December on rocks in the sublittoral zone.

Jania rubens (Linnaeus) Lamouroux

Corallina rubens Linnaeus, 1767:1305.—DeToni and Forti, 1914:290.
Jania rubens (Linnaeus) Lamouroux, 1812:186.—Piccone, 1879:30; 1884:130.—Bornet, 1892:351.—Muschler, 1910:313.—Boergesen, 1929:70.—Feldmann, 1931b:242; 1937:272; 1961:507.—Navarro and Uriarte, 1945:248.—Nasr and Aleem, 1949:278.—Aleem, 1951:251.—Funk, 1955:102.—Dao, 1957:171.—Gayral, 1958:327.—Riedl, 1963:70.—Edelstein, 1964:195.—Seoane-Camba, 1965:113.—Ardre, 1970:97.—Ben Alaya, 1970:211.—Gerloff and Geissler, 1971:766.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:45.

DISTRIBUTION.—Tunisia (Tabarka, Gammarth, La Marsa, Sidi Bou Said, Nabeul, Aghir, Zarzis); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1198-1203; *3:* 1292; *11:* 1565, 1566; *12:* 1668-1670; *13:* 1782; *15:* 1868, 1885; *28:* 2234(US), 2250-2251(NHA), 2253 (INSTOP).

REMARKS.—Common; found in January and from March to December on rocks, epiphytic on various algae and *Cymodocea nodosa.*

Lithophyllum incrustans Philippi

Lithophyllum incrustans Philippi, 1837:387.—DeToni and Forti, 1914:290.—Funk, 1927:434.—Feldmann, 1931b:240; 1937:271.—Hamel and Lemoine, 1953:48.—Gayral, 1958:335.—Riedl, 1963:69.—Seoane-Camba, 1965:113.—Ardre, 1970:85.—Gerloff and Geissler, 1971:766.—Furnari and Scammacca, 1973:13.—Boudouresque and Perret, 1977:47.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Algeria, Libya); Red Sea.

SPECIMEN STUDIED.—EGM *12:* 1175(US).

REMARKS.—Occasional; found in January, March, April, October, and November as crust on rocks in the sublittoral zone.

Family CRYPTONEMIACEAE

*Cryptonemia seminervis (C. Agardh) J. Agardh

Sphaerococcus seminervis C. Agardh, 1822:232.
Cryptonemia seminervis (C. Agardh) J. Agardh, 1851:226.—Bornet, 1892:341.—Gayral, 1958:353.—Seoane-Camba, 1965:117.—Ardre, 1970:101.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Spain, Morocco).

SPECIMENS STUDIED.—EGM *12:* 1637-1638 (US).

REMARKS.—Occasional; found in September on rocks in the sublittoral zone.

Family KALLYMENIACEAE

Kallymenia microphylla J. Agardh

Kallymenia microphylla J. Agardh, 1848:288.—Bornet, 1892:278.—Funk, 1927:389.—Boergesen, 1929:75.—Feldmann, 1961:507.—Navarro and Uriarte, 1945:249.—Edelstein, 1962:215; 1964:196.—Ardre, 1970:103.—Gerloff and Geissler, 1971:769.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:46.

DISTRIBUTION.—Tunisia (El Attaya, Kerkenna Island); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Turkey, Israel, Algeria).

SPECIMEN STUDIED.—EGM *20:* 2100(US).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Order GIGARTINALES

Family HYPNEACEAE

Hypnea musciformis (Wulfen in Jacquin) Lamouroux

Fucus musciformis Wulfen in Jacquin, 1786:154.
Hypnea musciformis (Wulfen in Jacquin) Lamouroux, 1813:43.—Piccone, 1879:29; 1884:127.—Bornet, 1892:284.—Muschler, 1910:305.—DeToni and Forti, 1913:11.—Funk, 1955:77.—Boergesen, 1929:84.—Feldmann, 1931b:237; 1937:274; 1961:507.—Navarro and Uriarte, 1945:254.—Nasr and Aleem, 1949:278.—Gayral, 1958:385.—Riedl, 1963:73.—Seoane-Camba, 1965:124.—Ardre, 1970:111.—Ben Alaya, 1970:210.—Gerloff and Geissler, 1971:772.—Güven and Östig, 1971:125.—Lipkin and Safriel, 1971:9.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:23.

DISTRIBUTION.—Tunisia (Cap Zebib, Tabarka, Raf Raf, Raouad, Gammarth, Sidi Bou Said, La Marsa, Nabeul, Hammamet, Monastir, Djerba Island, El Bibane, Bechateur, Ras Sidi Ali El Mekki); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1207-1210; *3:* 1308, 1309; *5:* 1369; *6:* 1377; *7:* 1385; *10:* 1496; *11:* 1535, 1571, 1574, 1575; *12:* 1689-1706; *13:* 1790, 1796; *15:* 1888-1890; *16:* 1925; *18:* 1997, 1998; *20:* 2067, 2068; *24:* 2171-2173(US); *29:* 2262(NHA), 2263(INSTOP).

REMARKS.—Abundant; found year round on rocks and epiphytic on *Cymodocea nodosa.*

Family PLOCAMIACEAE

Plocamium cartilagineum (Linnaeus) Dixon

Fucus cartilagineus Linnaeus, 1753:1161.
Plocamium cartilagineum (Linnaeus) Dixon, 1967:58.—Gerloff and Geissler, 1971:771.—Boudouresque and Perret, 1977:25.
Plocamium coccineum (Hudson) Lyngbye, 1819:39.—Bornet, 1892:291.—DeToni, 1895:453.—Petersen, 1918:19.—Funk, 1955:77.—Boergesen, 1929:94.—Feldmann, 1931b:238; 1937:273.—Navarro and Uriarte, 1945:254.—Gayral, 1958:385.—Riedl, 1963:71.—Seoane-Camba, 1965:120.—Ardre, 1970:112.—Ben Alaya, 1970:211.—Furnari and Scammacca, 1970:222.—Güven and Östig, 1971:128.

DISTRIBUTION.—Tunisia (Tabarka, Cap Zebib, mouth of Madjerda, Gammarth, Sidi Bou Said, La Marsa, Monastir, Sousse); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Turkey, Algeria, Libya); Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1192, 1193; *5:* 1358; *9:* 1423–1431; *11:* 1531–1533; *12:* 1653–1667; *13:* 1768–1770(US); *17:* 1958–1962(NHA); *18:* 1977(INSTOP).

REMARKS.—Abundant; found from January to July and from September to December on rocks as well as epiphytic on various algae; some specimens dredged from 15 to 57 m.

Family SPHAEROCOCCACEAE

Sphaerococcus coronopifolius (Goodenough and Woodward) Stackhouse

Fucus coronopifolius Goodenough and Woodward, 1797:185.
Sphaerococcus coronopifolius (Goodenough and Woodward) Stackhouse, 1809:57.—Muschler, 1910:304.—DeToni and Forti, 1913:12.—Petersen, 1918:18.—Ardre, 1970:115.—Gerloff and Geissler, 1971:771.
Sphaerococcus coronopifolius (Goodenough and Woodward) C. Agardh, 1817:29.—Bornet, 1892:282.—Funk, 1955:77.—Boergesen, 1929:80.—Feldmann, 1931b:236; 1937:273.—Navarro and Uriarte, 1945:255.—Gayral, 1958:374.—Riedl, 1963:72.—Seoane-Camba, 1965:122.—Güven and Östig, 1971:125.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:29.

DISTRIBUTION.—Tunisia (Cap Serrat, Cap Zebib, Bizerte, Ile Plane, Raf Raf, mouth of Madjerda, Raouad, Gammarth, Sidi Bou Said, Korbous); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey).

SPECIMENS STUDIED.—EGM *2:* 1130, 1276–1280, 1282–1289; *5:* 1362; *6:* 1375; *8:* 1416; *9:* 1450; *10:* 1492; *11:* 1555–1564(US); *13:* 1780–1781(INSTOP); *14:* 1837–1841(NHA).

REMARKS.—Abundant; found from February to May and in July, September, October, and December on rocks; some specimens dredged from 40 to 65 m.

Family FURCELLARIACEAE

**Halarachnion ligulatum* (Woodward) Kuetzing

Ulva ligulata Woodward, 1797:54.
Halarachnion ligulatum (Woodward) Kuetzing, 1843:394.—Bornet, 1892:345.—Funk, 1927:423.—Boergesen, 1929:9.—Navarro and Uriarte, 1945:251.—Gerloff and Geissler, 1971:771.

DISTRIBUTION.—Tunisia (Sidi Bou Said); northeastern Atlantic (Morocco, Canary Islands); Mediterranean (Spain, Italy, Greece).

SPECIMEN STUDIED.—EGM *13:* 1809(US).

REMARKS.—Rare; found in October on rocks in the sublittoral zone.

Family GRACILARIACEAE

Gracilaria armata (C. Agardh) J. Agardh

Sphaerococcus armatus C. Agardh, 1827:645.
Gracilaria armata (C. Agardh) J. Agardh, 1847:15.—Bornet, 1892:283.—DeToni, 1895:453.—Schiffner, 1926:302.—Funk, 1955:79.—Boergesen, 1929:82.—Feldmann, 1931b:237; 1937:273.—Nasr and Aleem, 1949:276.—Gerloff and Geissler, 1971:770.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Canary Islands); Mediterranean (France, Italy, Algeria, Greece, Libya, Egypt).

SPECIMENS STUDIED.—EGM *12:* 1610–1613 (US), 1614(NHA), 1622(INSTOP).

REMARKS.—Occasional; found in April, May, and September on rocks in the sublittoral zone.

Gracilaria arcuata Zanardini

Gracilaria arcuata Zanardini, 1858:265.—Feldmann, 1931a:14; 1951:107.

DISTRIBUTION.—Tunisia (La Marsa); Mediterranean (Egypt); Red Sea; Indian Ocean.

SPECIMEN STUDIED.—EGM *12:* 1611(US).

REMARKS.—Rare; found in May growing on rocks in the sublittoral zone.

**Gracilaria cervicornis* (Turner) J. Agardh

Fucus cervicornis Turner, 1809:131.
Gracilaria cervicornis (Turner) J. Agardh, 1852:504.—Gayral, 1958:364.

DISTRIBUTION.—Tunisia (Raf Raf, Ras Sidi Ali El Mekki, La Marsa); northeastern Atlantic (Morocco); Indian Ocean.

SPECIMENS STUDIED.—EGM *6:* 1378, 1379; *7:* 1388; *12:* 1715(US), 1716(NHA), 1717(INSTOP).

REMARKS.—Occasional; found from September to December on rocks in the sublittoral zone.

Gracilaria verrucosa (Hudson) Papenfuss

Fucus verrucosus Hudson, 1762:470.

Gracilaria verrucosa (Hudson) Papenfuss, 1950:195.—Ardre, 1970:115.—Gerloff and Geissler, 1971:771.—Güven and Östig, 1971:127.—Furnari and Scammacca, 1973:10.

Gracilaria confervoides (Linnaeus) Greville, 1830:liv.—Bornet, 1892:282.—Schiffner, 1926:302.—Funk, 1955:79.—Boergesen, 1929:81.—Feldmann, 1931b:237; 1937:273.—Nasr, 1940b:23.—Navarro and Uriarte, 1945:255.—Nasr and Aleem, 1949:276.—Gayral, 1958:358.—Edelstein, 1962:213; 1964:197.—Riedl, 1963:71.—Güven and Östig, 1971:127.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Morocco, Canary Islands); Mediterranean (Spain, France, Italy, Adriatic Sea, Greece, Turkey, Israel, Algeria, Sicily, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *12:* 1713(US), 1714(NHA).

REMARKS.—Occasional; found in January, April, May, and July on rocks in the sublittoral zone.

Family PHYLLOPHORACEAE

**Gymnogongrus griffithsiae* (Turner) Martius

Fucus griffithsiae Turner, 1808:80.

Gymnogongrus griffithsiae (Turner) Martius, 1833:27.—Bornet, 1892:276.—DeToni and Forti, 1913:12.—Boergesen, 1929:74.—Feldmann, 1931b:235; 1937:274.—Nasr and Aleem, 1949:278.—Funk, 1955:78.—Gayral, 1958:398.—Seoane-Camba, 1965:125.—Gerloff and Geissler, 1971:772.—Boudouresque and Perret, 1977:22.

DISTRIBUTION.—Tunisia (La Marsa, Hammamet); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Italy, Greece, Algeria, Libya, Egypt).

SPECIMENS STUDIED.—EGM *12:* 1718–1720 (US), 1721(NHA); *16:* 1927(INSTOP).

REMARKS.—Common; found in February, March, June, July, November, and December epiphytic on various algae.

Phyllophora nervosa (de Candolle) Greville in J. Agardh

Fucus nervosus de Candolle, 1805:29.

Phyllophora nervosa (de Candolle) Greville in J. Agardh, 1842:94.—Bornet, 1892:274.—Muschler, 1910:304.—Funk, 1927:386.—Feldmann, 1931b:231; 1937:274.—Navarro and Uriarte, 1945:256.—Nasr and Aleem, 1949:273.—Dao, 1957:171.—Riedl, 1963:72.—Ben Alaya, 1970:211.—Furnari and Scammacca, 1970:222.—Gerloff and Geissler, 1971:773.—Güven and Östig, 1971:125.—Boudouresque and Perret, 1977:24.

DISTRIBUTION.—Tunisia (Cap Serrat, Ile Plane, mouth of Madjerda, Korbous); Mediterranean (Spain, France, Corsica, Adriatic Sea, Greece, Turkey, Algeria, Libya, Sicily, Egypt).

SPECIMENS STUDIED.—EGM *2:* 1149–1156, 1183; *8:* 1395, 1396, 1402–1405, 1420; *9:* 1454–1467(US); *14:* 1843–1844(NHA), 1845–1846 (INSTOP).

REMARKS.—Common; found in April, October, and December on rocks; some specimens dredged from 65 m.

**Phyllophora pseudoceranoides* (Gmelin) Newroth and A.R.A. Taylor

Fucus pseudoceranoides Gmelin, 1768:119.

Phyllophora pseudoceranoides (Gmelin) Newroth and A.R.A. Taylor, 1971:95.

Phyllophora membranifolia (Goodenough and Woodward) J. Agardh, 1842:93.—Ardre, 1970:118.—Gerloff and Geissler, 1971:773.

DISTRIBUTION.—Tunisia (Ile Plane, mouth of Madjerda, Korbous); northeastern Atlantic (Portugal); Mediterranean (Greece).

SPECIMENS STUDIED.—EGM *9:* 1452–1453(US); *14:* 1451(NHA), 1842(INSTOP).

REMARKS.—Common; found from January to

July and from October to December on rocks in the sublittoral zone.

Family GIGARTINACEAE

Gigartina acicularis (Wulfen) Lamouroux

Fucus acicularis Wulfen, 1803:63.
Gigartina acicularis (Wulfen) Lamouroux, 1813:49.—Bornet, 1892:273.—Funk, 1927:385.—Boergesen, 1929:73.—Feldmann, 1931b:231; 1937:274.—Nasr, 1940b:25.—Navarro and Uriarte, 1945:257.—Aleem, 1951:251.—Gayral, 1958: 408.—Riedl, 1963:73.—Seoane-Camba, 1965:117.—Ardre, 1970:126.—Ben Alaya, 1970:211.—Gerloff and Geissler, 1971:773.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:21.

DISTRIBUTION.—Tunisia (Cap Serrat, La Marsa, Sidi Bou Said); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *12:* 1617(US), 1621(NHA); *13:* 1755(INSTOP).

REMARKS.—Common; found from January to July and from October to December on rocks in the sublittoral zone.

Family RISSOELLACEAE

Rissoella verruculosa (Bertoloni) J. Agardh

Fucus verruculosus Bertoloni, 1819:291.
Rissoella verruculosa (Bertoloni) J. Agardh, 1848:241.—Piccone, 1879:28; 1884:125.—DeToni, 1895:452.—Funk, 1927:390.—Feldmann, 1931b:235; 1937:90; 1961:507—Navarro and Uriarte, 1945:253.—Furnari and Scammacca, 1970:222.—Boudouresque and Perret, 1977:27.

DISTRIBUTION.—Tunisia (Cap Serrat, Bechateur); Mediterranean (Spain, France, Corsica, Italy, Algeria, Sicily, Libya).

SPECIMENS STUDIED.—EGM *2:* 1208–1215(US), 1256(NHA); *3:* 1298 (INSTOP).

REMARKS.—Common; found in April and July on rocks in the sublittoral zone.

Order RHODYMENIALES

Family RHODYMENIACEAE

**Chrysymenia ventricosa* (Lamouroux) J. Agardh

Dumontia ventricosa Lamouroux, 1813:45.
Chrysymenia ventricosa (Lamouroux) J. Agardh, 1876:322.—Bornet, 1892:288.—Funk, 1927:399.—Feldmann, 1937: 274.—Navarro and Uriarte, 1945:258.—Edelstein, 1964: 198.—Papenfuss, 1968:91.—Gerloff and Geissler, 1971: 774.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:31.

DISTRIBUTION.—Tunisia (Djerba Island) Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Israel, Egypt).

SPECIMENS STUDIED.—EGM *24:* 2174(US), 2148(NHA).

REMARKS.—Rare; found in May on rocks in the sublittoral zone.

**Rhodymenia pseudopalmata* (Lamouroux) Silva

Fucus pseudopalmatus Lamouroux, 1805:29.
Rhodymenia pseudopalmata (Lamouroux) Silva, 1952:265.—Ardre, 1970:132.—Gerloff and Geissler, 1971:774.
Rhodymenia palmetta (Esper) Greville, 1830:xlviii.—Piccone, 1879:28; 1884:126.—Funk, 1927:397.—Feldmann, 1931b: 237.—Gayral, 1958:410—Güven and Östig, 1971:126.

DISTRIBUTION.—Tunisia (Cap Zebib, Ile Plane, mouth of Madjerda, La Marsa, Sidi Bou Said); northeastern Atlantic (Portugal, Morocco); Mediterranean (Italy, Greece, Turkey, Algeria).

SPECIMENS STUDIED.—EGM *12:* 1632(US), 1636(NHA), 1761(INSTOP).

REMARKS.—Occasional; found from January to December on rocks in the sublittoral zone.

Family CHAMPIACEAE

Champia parvula (C. Agardh) Harvey

Chondria parvula C. Agardh, 1824:207.
Champia parvula (C. Agardh) Harvey, 1953:76.—Bornet, 1892:290.—Funk, 1927:405.—Boergesen, 1929:92.—

Feldmann, 1931b:238; 1937:274; 1961:507.—Navarro and Uriarte, 1945:262.—Aleem, 1951:251.—Gayral, 1958: 420.—Seoane-Camba, 1965:128.—Ardre, 1970:137.—Gerloff and Geissler, 1971:774.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:31.

DISTRIBUTION.—Tunisia (Cap Serrat, Djerba Island, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Algeria, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *2:* 1235(US); *29:* 2265(NHA), 2268(INSTOP).

REMARKS.—Common; found from April to May epiphytic on various algae.

Chylocladia verticillata (Lightfoot) Bliding

Fucus verticillatus Lightfoot, 1777:962.

Chylocladia verticillata (Lightfoot) Bliding, 1928:69.—Seoane-Camba, 1965:128.—Ardre, 1970:138.—Gerloff and Geissler, 1971:775.—Boudouresque and Perret, 1977:31.

Chylocladia kaliformis (Goodenough and Woodward) Hooker, 1833:397.—Bornet, 1892:291.—Petersen, 1918:19.—Funk, 1955:87.—Boergesen, 1929:93.—Feldmann, 1931b: 238; 1937:275.—Edelstein, 1962:213; 1964:199.—Giaccone et al., 1973, table IV.

Gastroclonium kaliforme (Goodenough and Woodward) Ardissone, 1883:322.—Navarro and Uriarte, 1945:261.

DISTRIBUTION.—Tunisia (Kerkenna Island, Djerba Island, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Israel, Algeria).

SPECIMENS STUDIED.—EGM *19:* 2034–2046; *20:* 2095–2099, 2101; *24:* 2154-2158(US); *29:* 2255(NHA), 2256(INSTOP).

REMARKS.—Common; found from March to April on rocks and epiphytic on various algae.

Gastroclonium clavatum (Roth) Ardissone

Conferva clavata Roth, 1797:160.

Gastroclonium clavatum (Roth) Ardissone, 1883:322.—DeToni and Forti, 1913:11.—Feldman, 1937:275; 1961:507.—Navarro and Uriarte, 1945:261.—Funk, 1955:88.—Seoane-Camba, 1965:130.—Gerloff and Geissler, 1971:775.—Boudouresque and Perret, 1977:32.

Chylocladia mediterranea J. Agardh, 1842:112.

Lomentaria mediterranea Endlicher, 1843:43.

DISTRIBUTION.—Tunisia (Nabeul, Monastir); northeastern Atlantic (Spain); Mediterranean (Spain, France, Corisca, Greece, Libya).

SPECIMENS STUDIED.—EGM *15:* 1871–1874 (US), 1875(NHA), 1970(INSTOP).

REMARKS.—Occasional; found from April to March on rocks in the sublittoral zone.

Family LOMENTARIACEAE

Lomentaria articulata (Hudson) Lyngbye

Ulva articulata Hudson, 1778:569.

Lomentaria articulata (Hudson) Lyngbye, 1819:101.—Bornet, 1892:289.—Boergesen, 1929:90.—Feldmann, 1937:274.—Navarro and Uriarte, 1945:260.—Gayral, 1958:418.—Ben Alaya, 1970:211.—Furnari and Scammacca, 1970:223.—Gerloff and Geissler, 1971:775.—Boudouresque and Perret, 1977:33.

DISTRIBUTION.—Tunisia (Hammamet); northeastern Atlantic (Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Sicily, Corsica, Italy, Greece).

SPECIMEN STUDIED.—EGM *16:* 1926(US).

REMARKS.—Rare; found in March on rocks in the sublittoral zone.

Order CERAMIALES

Family CERAMIACEAE

**Antithamnion cruciatum* (C. Agardh) Naegeli

Callithamnion cruciatum C. Agardh, 1824:160.

Antithamnion cruciatum (C. Agardh) Naegeli, 1847:200.—Funk, 1955:110.—Feldmann, 1931b:247.—Riedl, 1963:75.—Ardre, 1970:145.—Gerloff and Geissler, 1971:776.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:33.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria).

SPECIMENS STUDIED.—EGM *2:* 1144–1145(US), 1146(NHA), 1147(INSTOP).

REMARKS.—Occasional; found in April epiphytic on various algae.

*Callithamnion byssoides Arnott in Hooker

Callithamnion byssoides Arnott in Hooker, 1833:342.—Boergesen, 1930:42.—Feldmann, 1937:275.—Papenfuss, 1968: 92.

DISTRIBUTION.—Tunisia (Monastir); northeastern Atlantic (Canary Islands); Mediterranean (France); Red Sea.

SPECIMEN STUDIED.—EGM *18:* 2011(US).

REMARKS.—Rare; found in April on rocks in the sublittoral zone.

Callithamnion granulatum (Ducluzeau) C. Agardh

Ceramium granulatum Ducluzeau, 1805:72.

Callithamnion granulatum (Ducluzeau) C. Agardh, 1828:177.—DeToni, 1895:454.—Funk, 1955:134.—Feldmann, 1931b: 247.—Navarro and Uriarte, 1945:265.—Gayral, 1958: 438.—Ardre, 1970:176.—Gerloff and Geissler, 1971: 776.—Güven and Östig, 1971:126.—Boudouresque and Perret, 1977:64.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Bechateur); northeastern Atlantic (Portugal, Morocco); Mediterranean (Spain, Corsica, Italy, Greece, Turkey, Algeria, Libya).

SPECIMENS STUDIED.—EGM *1:* 2220; *2:* 1132, 1133, 1244–1246(US), 1247(NHA); *3:* 1336(INSTOP).

REMARKS.—Common; found in April and July epiphytic on various algae.

Callithamnion tetragonum (Withering) C. Agardh

Conferva tetragona Withering, 1796:405.

Callithamnion tetragonum (Withering) C. Agardh, 1828:176.—Boergesen, 1930:46.—Feldmann, 1931b:247; 1937:275; 1961:507.—Funk, 1955:133.—Seoane-Camba, 1965:140. —Ardre, 1970:177.

DISTRIBUTION.—Tunisia (Gammarth); northeastern Atlantic (Portugal, Spain, Canary Islands); Mediterranean (France, Italy, Algeria).

SPECIMEN STUDIED.—EGM *11:* 1605(US).

REMARKS.—Rare; found in May on rocks.

Ceramium ciliatum (Ellis) Ducluzeau

Conferva ciliata Ellis, 1768:425.

Ceramium ciliatum (Ellis) Ducluzeau, 1805:64.—DeToni and Forti, 1913:7; 1914:290.—Schiffner, 1926:301.—Funk, 1955:118.—Boergesen, 1930:65.—Nasr, 1940b:26.—Navarro and Uriarte, 1945:268.—Nasr and Aleem, 1949: 276.—Gayral, 1958:430.—Seoane-Camba, 1965:132.—Furnari and Scammacca, 1970:223.—Gerloff and Geissler, 1971:76.—Güven and Östig, 1971:126.—Boudouresque and Perret, 1977:65.

DISTRIBUTION.—Tunisia (Cap Serrat, Raouad, Gammarth, Monastir); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, Corsica, Italy, Greece, Sicily, Turkey, Libya, Egypt).

SPECIMENS STUDIED.—EGM *2:* 1240–1243; *10:* 1511–1514; *11:* 1598–1604(US); *15:* 1896(INSTOP); *18:* 2008–2010(NHA).

REMARKS.—Common; found from March to May epiphytic on various algae and *Cymodocea nodosa.*

Ceramium diaphanum (Lightfoot) Roth

Conferva diaphana Lightfoot, 1777:996.

Ceramium diaphanum (Lightfoot) Roth, 1806:154.—Piccone, 1879:28; 1884:123.—Petersen, 1918:14.—Schiffner, 1926: 301.—Boergesen, 1930:63.—Feldmann, 1931b:248; 1937: 276.—Mazoyer, 1938:325.—Nasr, 1940b:27.—Gayral, 1958:433.—Seoane-Camba, 1965:135.—Papenfuss, 1968: 92.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:66.

Ceramium diaphanum (Roth) Harvey, 1849: pl. 193.—Funk, 1955:119.—Ardre, 1970:155.—Gerloff and Geissler, 1971: 777.

DISTRIBUTION.—Tunisia (Tabarka, Gammarth, La Marsa, Sidi Bou Said, Hammamet, Sousse, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Italy, Greece, Turkey, Algeria, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1211; *11:* 1593–1597; *13:* 1815–1817(US); *29:* 2287(NHA), 2288(INSTOP).

REMARKS.—Common; found from January to May and in September and November epiphytic on various algae and *Cymodocea nodosa.*

Ceramium gracillimum Griffiths and Harvey in Harvey

Ceramium gracillimum Griffiths and Harvey in Harvey, 1849, pl. 206.—Funk, 1955:117.—Nasr and Aleem, 1949:276.—Edelstein, 1964:202.—Seoane-Camba, 1965:133.—Papenfuss, 1968:93.—Andre, 1970:153.—Gerloff and Geissler, 1971:777.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Spain); Mediterranean (Italy, Sicily, Greece, Israel, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *16:* 1928(US), 1929(NHA).

REMARKS.—Occasional; found in September epiphytic on *Cymodocea nodosa.*

Ceramium rubrum (Hudson) C. Agardh

Conferva rubra Hudson, 1762:486.

Ceramium rubrum (Hudson) C. Agardh, 1817:60.—Boergesen, 1930:63.—Feldmann, 1931b:248.—Mazoyer, 1938:320.—Nasr, 1940b:27.—Navarro and Uriarte, 1945:268.—Nasr and Aleem, 1949:276.—Aleem, 1951:251.—Funk, 1955:119.—Gayral, 1958:428.—Riedl, 1963:75.—Seoane-Camba, 1965:133.—Ardre, 1970:157.—Furnari and Scammacca, 1970:223.—Gerloff and Geissler, 1971:778.—Güven and Östig, 1971:126.—Boudouresque and Perret, 1977:67.

DISTRIBUTION.—Tunisia (Bechateur, Gammarth, La Marsa, Monastir); northeastern Atlantic (Portugal, Spain, Corsica, Italy, Sicily, Turkey, Adriatic Sea, Greece, Algeria, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *3:* 1333–1335: *11:* 1590–1592; *12:* 1729, 1730, 1732(US), 1733 (NHA); *18:* 2007(INSTOP).

REMARKS.—Abundant; found from January to August and from October to December on rocks, epiphytic on various algae and *Cymodocea nodosa.*

Ceramium tenerrimum (Martens) Okamura

Hormoceras tenerrimum Martens, 1866:146.

Ceramium tenerrimum (Martens) Okamura, 1933:112.—Funk, 1955:117.—Mazoyer, 1937:540; 1938:321.—Seoane-Camba, 1965:135.—Gerloff and Geissler, 1971:778.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (Djerba Island); northeastern Atlantic (Spain, Morocco); Mediterranean (Italy, Sicily, Greece, Algeria).

SPECIMENS STUDIED.—EGM: *24:* 2142–2144(US), 2145(NHA), 2146(INSTOP).

REMARKS.—Rare; found in March epiphytic on *Cymodocea nodosa.*

Ceramium tenuissimum (Lyngbye) J. Agardh

Ceramium diaphanum var. *tenuissimum* Lyngbye, 1819:120.

Ceramium tenuissimum (Lyngbye) J. Agardh, 1851:120.—Feldmann, 1931b:248; 1937:276.—Mazoyer, 1938:325.—Navarro and Uriarte, 1945:268.—Nasr and Aleem, 1949:270.—Funk, 1955:117.—Gerloff and Geissler, 1971:778.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:68.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Turkey, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMEN STUDIED.—EGM *12:* 1539(US).

REMARKS.—Occasional; found in May and August on *Cymodocea nodosa.*

**Griffithsia flosculosa* (Ellis) Batters in Newton

Conferva flosculosa Ellis, 1768:425.

Griffithsia flosculosa (Ellis) Batters in Newton, 1931:368.—Funk, 1955:129.—Feldmann, 1961:507.—Seoane-Camba, 1965:138.—Ardre, 1970:167.—Gerloff and Geissler, 1971:779.—Furnari and Scammacca, 1973:14.—Boudouresque and Perret, 1977:69.

Griffithsia setacea C. Agardh, 1817:xxviii.—Bornet, 1892:324.

DISTRIBUTION.—Tunisia (Cap Serrat); northeastern Atlantic (Portugal, Spain); Mediterranean (Corsica, Italy, Greece, Sicily).

SPECIMEN STUDIED.—EGM *2:* 1171(US).

REMARKS.—Rare; found in April epiphytic on *Cymodocea nodosa.*

**Griffithsia phyllamphora* J. Agardh

Griffithsia phyllamphora J. Agardh, 1842:77.—Bornet, 1892:324.—Boergesen, 1930:38.—Navarro and Uriarte, 1945:

263.—Funk, 1955:127.—Dao, 1957:172.—Riedl, 1963: 75.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:69.

DISTRIBUTION.—Tunisia (Sidi Bou Said); northeastern Atlantic (Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Adriatic Sea).

SPECIMEN STUDIED.—EGM *13:* 1808(US).

REMARKS.—Rare; found in July epiphytic on various algae.

*Anotrichium tenue (C. Agardh) Naegeli

Griffithsia tenuis C. Agardh, 1828:131.—Boergesen, 1930: 31.—Edelstein, 1964:199.—Gerloff and Geissler, 1971: 779.

Anotrichium tenue (C. Agardh) Naegeli, 1861:399.

DISTRIBUTION.—Tunisia (Kerkenna Island); northeastern Atlantic (Canary Islands); Mediterranean (Greece, Israel, Algeria); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *20:* 2093(US), 2094(NHA).

REMARKS.—Occasional; found in April on rocks in the sublittoral zone.

Spyridia filamentosa (Wulfen) Harvey

Fucus filamentosus Wulfen, 1803:64.

Spyridia filamentosa (Wulfen) Harvey, 1833:336.—Bornet, 1892:333.—DeToni and Forti, 1913:7.—Petersen, 1918: 15.—Schiffner, 1926:302.—Pottier, 1929:337.—Boergesen, 1930:61.—Feldmann, 1931b:247; 1937:276.—Nasr, 1940b:30.—Navarro and Uriarte, 1945:267.—Funk, 1955: 120.—Dao, 1957:172.—Edelstein, 1964:202.—Seoane-Camba, 1965:136.—Ben Alaya, 1970:211.—Gerloff and Geissler, 1971:780.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975: 219.—Boudouresque and Perret, 1977:72.

DISTRIBUTION.—Tunisia (Sidi Bou Said, Korbous, Monastir, Djerba Island, Kerkenna Island, Zarzis); northeastern Atlantic (Spain, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Turkey, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *4:* 1344–1348; *13:* 1773–1779; *14:* 1832–1836; *18:* 1994, 1995; *21:* 2107–2111; *24:* 2194; *26:* 2208–2214(US); *28:* 2246–2247 (NHA), 2248–2249(INSTOP).

REMARKS.—Abundant; found in April, May, July, and October epiphytic on various algae.

Wrangelia penicillata C. Agardh

Wrangelia penicillata C. Agardh, 1828:138.—Bornet, 1892: 265.—DeToni, 1895:452.—DeToni and Forti, 1913:12.—Schiffner, 1926:300.—Boergesen, 1927:94.—Feldmann, 1937:276.—Navarro and Uriarte, 1945:269.—Funk, 1955: 129.—Dao, 1957:172.—Riedl, 1963:75.—Edelstein, 1964: 200.—Gerloff and Geissler, 1971:780.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:220.—Boudouresque and Perret, 1977: 73.

DISTRIBUTION.—Tunisia (Monastir, Djerba Island, Zarzis); northeastern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Libya); Indian Ocean.

SPECIMENS STUDIED.—EGM *18:* 1991–1993; *24:* 2183, 2186–2193, 2197–2201(US); *28:* 2239–2243(NHA), 2244–2245(INSTOP).

REMARKS.—Common; found in April, May, and October epiphytic on various algae.

Family DELESSERIACEAE

*Acrosorium uncinatum (Turner) Kylin

Fucus laceratus var. *uncinatus* Turner, 1808:153.

Acrosorium uncinatum (Turner) Kylin, 1924:78.—Boergesen, 1930:154.—Feldmann, 1931b:238; 1937:278.—Navarro and Uriarte, 1945:272.—Funk, 1955:103.—Gayral, 1958: 461.—Seoane-Camba, 1965:142.—Ardre, 1970:188.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:90.

DISTRIBUTION.—Tunisia (Sidi Bou Said, Korbous, Sousse); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Algeria, Libya); Indian Ocean.

SPECIMENS STUDIED.—EGM *2:* 1186; *13:* 1821–1825; *14:* 1861–1863(US), 1864(NHA), 1865(INSTOP).

REMARKS.—Common; found in April and October epiphytic on various algae.

*Hypoglossum woodwardii Kuetzing

Hypoglossum woodwardii Kuetzing, 1843:444.—Boergesen, 1930:153.—Feldmann, 1931b:238; 1937:278.—Navarro and Uriarte, 1945:269.—Funk, 1955:106.—Gayral, 1958: 456.—Edelstein, 1964:207.—Seoane-Camba, 1965:141.—Ardre, 1970:179.—Gerloff and Geissler, 1971:781.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:91.

DISTRIBUTION.—Tunisia (Tabarka); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Algeria, Libya).

SPECIMEN STUDIED.—EGM *1:* 1540(US).

REMARKS.—Rare; found in April epiphytic on various algae.

*Myriogramme distromatica Rodriquez ex Boudouresque

Myriogramme distromatica Rodriguez ex Boudouresque, 1971: 76.—Boudouresque and Perret, 1977:92.

DISTRIBUTION.—Tunisia (Sidi Bou Said); Mediterranean (Corsica).

SPECIMEN STUDIED.—EGM *13:* 1789(US).

REMARKS.—Rare; found in October epiphytic on *Cymodocea nodosa*.

Family DASYACEAE

*Dasya baillouviana (Gmelin) Montagne

Fucus baillouviana Gmelin, 1768:165.
Dasya baillouviana (Gmelin) Montagne, 1841:164.
Dasya elegans (Martens) C. Agardh, 1828:117.—Edelstein, 1964:205.—Güven and Östig, 1971:127.
Dasya pedicellata C. Agardh, 1824:211.—Boergesen, 1930: 136.—Gerloff and Geissler, 1971:782.—Güven and Östig, 1971:127.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (Kerkenna Island, Djerba Island); northeastern Atlantic (Canary Islands); Mediterranean (Sicily, Greece, Turkey, Israel); Indian Ocean.

SPECIMENS STUDIED.—EGM *20:* 2057–2059, 2061; *24:* 2178–2179(US), 2180–2181(NHA), 2182(INSTOP).

REMARKS.—Common; found in March and April on rocks in the sublittoral zone.

Heterosiphonia wurdemanni (Bailey in Harvey) Falkenberg

Dasya wurdemanni Bailey in Harvey, 1853:64.
Heterosiphonia wurdemanni (Bailey in Harvey) Falkenberg, 1901:638.—Schiffner, 1926:303.—Boergesen, 1930:137.—Feldmann, 1937:277.—Nasr, 1940a:7.—Nasr and Aleem, 1949:270.—Aleem, 1951:252.—Funk, 1955:147.—Dao, 1957:173.—Edelstein, 1964:206.—Gerloff and Geissler, 1971:782.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:89.

DISTRIBUTION.—Tunisia (Djerba Island, El Bibane); northeastern Atlantic (Canary Islands); Mediterranean (France, Corsica, Italy, Sicily, Greece, Israel, Egypt).

SPECIMENS STUDIED.—EGM *26:* 2222(US), 2223(NHA).

REMARKS.—Occasional; found in April and October on rocks in the sublittoral zone.

Family RHODOMELACEAE

Acanthophora najadiformis (Delile) Papenfuss

Fucus najadiformis Delile, 1813:80.
Acanthophora najadiformis (Delile) Papenfuss, 1968:96.
Acanthophora delile Lamouroux, 1813:132.—Muschler, 1910: 307.—Funk, 1927:446.—Nasr and Aleem, 1949:277.—Feldmann, 1951:107.—Furnari and Scammacca, 1970: 225.—Gerloff and Geissler, 1971:783.—Boudouresque and Perret, 1977:73.

DISTRIBUTION.—Tunisia (Djerba Island); Mediterranean (Sicily, Corsica, Italy, Greece, Israel, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *23:* 2134(US), 2137(NHA).

REMARKS.—Occasional; found in June on rocks in the sublittoral zone.

Alsidium corallinum C. Agardh

Alsidium corallinum C. Agardh, 1827:639.—Schiffner, 1926: 303.—Boergesen, 1930:108.—Feldmann, 1937:277.—Navarro and Uriarte, 1945:276.—Aleem, 1951:252.—Funk, 1955:139.—Edelstein, 1964:203.—Gerloff and Geissler, 1971:783.—Boudouresque and Perret, 1977:74.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Greece, Israel, Egypt).

SPECIMENS STUDIED.—EGM *12:* 1744–1749 (US), 1750(NHA), 1751(INSTOP).

REMARKS.—Occasional; found in February, June, September, and November on rocks in the sublittoral zone.

**Chondria coerulescens* (Crouan and Crouan) Falkenberg

Laurencia coerulescens Crouan and Crouan, 1867:154.
Chondria coerulescens (Crouan and Crouan) Falkenberg, 1901: 205.—Funk, 1927:444.—Gayral, 1958:476.—Seoane-Camba, 1965:153.—Ardre, 1970:223.

DISTRIBUTION.—Tunisia (Raouad, La Marsa, Sidi Bou Said); northeastern Atlantic (Portugal, Spain, Morocco); Mediterranean (Italy).

SPECIMENS STUDIED.—EGM *10:* 1509–1510 (US); *12:* 1727–1728(NHA); *13:* 1814(INSTOP).

REMARKS.—Common; found in March, June, October, and December on rocks in the sublittoral zone.

Chondria dasyphylla (Woodward) C. Agardh

Fucus dasyphyllus Woodward, 1794:239.
Chondria dasyphylla (Woodward) C. Agardh, 1817:xviii.—Bornet, 1892:304.—Muschler, 1910:307.—Fremy, 1925:28.—Schiffner, 1926:303.—Funk, 1927:444.—Boergesen, 1930: 81.—Feldmann, 1931b:242.—Gayral, 1958:474.—Gerloff and Geissler, 1971:783.—Furnari and Scammacca, 1973: 16.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Gammarth, La Marsa, El Bibane); northeastern Atlantic (Portugal, Morocco, Canary Islands); Mediterranean (Greece, Algeria, Libya, Sicily, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1219; *2:* 1218, 1221, 1224; *11:* 1585–1589; *12:* 1724–1726; *20:* 2047–2056; *29:* 2269–2271(US), 2272(NHA), 2273(INSTOP).

REMARKS.—Common; found from January to May and in November and December on rocks in the sublittoral zone.

Chondria tenuissima (Goodenough and Woodward) C. Agardh

Fucus tenuissimus Goodenough and Woodward, 1797:215.
Chondria tenuissima (Goodenough and Woodward) C. Agardh, 1822:352.—Bornet, 1892:303.—Schiffner, 1926:303.—Boergesen 1930:80.—Feldmann, 1931b:243; 1937:276.—Navarro and Uriarte, 1945:276.—Aleem, 1951:252.—Funk, 1955:139.—Seoane-Camba, 1965:154.—Ardre, 1970:221.—Gerloff and Geissler, 1971:783.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:76.

DISTRIBUTION.—Tunisia (Bechateur, Raouad, Gammarth, Kerkenna Island, Djerba Island); northeastern Atlantic (Portugal, Spain, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Turkey, Algeria, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *3:* 1332; *10:* 1506–1508; *11:* 1583(US); *24:* 2149–2159(NHA), 2152–2153(INSTOP).

REMARKS.—Common; found from March to May and in July and August on rocks in the sublittoral zone.

**Digenia simplex* (Wulfen) C. Agardh

Conferva simplex Wulfen, 1803:17.
Digenia simplex (Wulfen) C. Agardh, 1822:388.—Muschler, 1910:308.—Funk, 1927:442.—Navarro and Uriarte, 1945: 280.—Nasr and Aleem, 1949:256.—Aleem, 1951:252.—Dao, 1957:172.—Gerloff and Geissler, 1971:783.—Güven and Östig, 1971:126.—Lipkin and Safriel, 1971:11.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:76.

DISTRIBUTION.—Tunisia (Cap Serrat, Nabeul, Djerba Island); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Turkey, Israel, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *2:* 1270–1275, 1281(US); *15:* 1876(INSTOP); *27:* 2231–2233 (NHA).

REMARKS.—Common; found in April, July, and October on rocks in the sublittoral zone.

Halopitys incurvus (Hudson) Batters

Fucus incurvus Hudson, 1762:470.

Halopitys incurvus (Hudson) Batters, 1902:78.—Aleem, 1951: 252.—Gayral, 1958:496.—Seoane-Camba, 1965:152.—Ardre, 1970:220.—Gerloff and Geissler, 1971:784.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:77.

Halopitys pinastroides (Gmelin) Kuetzing, 1843:433.—Bornet, 1892:303.—Muschler, 1910:309.—DeToni and Forti, 1914:298.—Schiffner, 1926:304.—Boergesen, 1930:117.—Feldmann, 1931b:245.—Navarro and Uriarte, 1945: 281.—Funk, 1955:145.

DISTRIBUTION.—Tunisia (Cap Serrat, Tabarka, Bechateur, Ile Plane, Ras Sidi Ali El Mekki, mouth of Madjerda, Raouad, Sidi Bou Said, La Marsa, Korbous, Nabeul, Gammarth, Monastir, Djerba Island); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Algeria, Libya, Egypt).

SPECIMENS STUDIED.—EGM *2:* 1148, 1157–1163, 1250–1251; *3:* 1323; *8:* 1393, 1394; *9:* 1477, 1478; *10:* 1500–1504; *11:* 1578–1580; *12:* 1709–1712; *13:* 1802–1806 *14:* 1852–1855; *15:* 1893–1894(US); *18:* 2005–2006(NHA); *23:* 2135–2136(INSTOP).

REMARKS.—Abundant; found from March to May and from July to December on rocks; some specimens dredged from 15 to 23 m.

Herposiphonia tenella (C. Agardh) Schmitz

Hutchinsia tenella C. Agardh, 1828:105.

Herposiphonia tenella (C. Agardh) Schmitz, 1889:449.

Herposiphonia tenella (C. Agardh) Ambronn, 1880:198.—DeToni and Forti, 1913:9.—Boergesen, 1930:110.—Funk, 1955:142.—Gerloff and Geissler, 1971:784.—Boudouresque and Perret, 1977:79.

Herposiphonia tenella (C. Agardh) Naegeli, 1846:238.—Feldmann, 1931b:245; 1961:508.—Navarro and Uriarte, 1945: 280.—Seoane-Camba, 1965:147.—Ardre, 1970:213.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.

DISTRIBUTION.—Tunisia (Monastir); northeastern Atlantic (Portugal, Spain, Canary Islands); Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Turkey, Algeria, Libya); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *18:* 1999(US), 2000(NHA), 2001(INSTOP).

REMARKS.—Rare; found in April epiphytic on various algae.

Herposiphonia tenella forma *secunda* (C. Agardh) Hollenberg

Herposiphonia secunda (C. Agardh) Falkenberg, 1901:307.

Hutchinsia secunda C. Agardh, 1824:149.

Herposiphonia tenella forma *secunda* (C. Agardh) Hollenberg, 1968:556.

Herposiphonia secunda (C. Agardh) Ambronn, 1880:197.—Nasr and Aleem, 1949:277.—Aleem, 1951:252.—Dao, 1957:172.—Gerloff and Geissler, 1971:784.

Herposiphonia secunda (C. Agardh) Naegeli, 1846:238.—Muschler, 1910:308.—Schiffner, 1926:303.—Boergesen, 1930: 111.—Feldmann, 1931b:245.—Navarro and Uriarte, 1945:281.—Funk, 1955:142.—Seoane-Camba, 1965: 147.—Ardre, 1970:214.—Furnari and Scammacca, 1970: 161.

DISTRIBUTION.—Tunisia (Sidi Bou Said, Djerba Island); northeastern Atlantic (Portugal, Spain, Canary Islands), Mediterranean (Spain, Corsica, Italy, Sicily, Greece, Algeria, Libya, Egypt); Indian Ocean.

SPECIMENS STUDIED.—EGM *24:* 2292(US); *25:* 2204(NHA), 2205(INSTOP).

REMARKS.—Occasional; found in February, March, and May epiphytic on various algae.

Laurencia obtusa (Hudson) Lamouroux

Fucus obtusus Hudson, 1778:586.

Laurencia obtusa (Hudson) Lamouroux, 1813:42.—Piccone, 1879:31; 1884:133.—Bornet, 1892:300.—Patouillard, 1897:19.—Muschler, 1910:306.—DeToni and Forti, 1913: 10.—Schiffner, 1926:302.—Funk, 1927:447.—Pottier, 1929:343.—Boergesen, 1930:67.—Feldmann, 1931b:243, 1937:276.—Navarro and Uriarte, 1945:273.—Nasr and Aleem, 1949:278.—Aleem, 1951:251.—Dao, 1957:172.—Gayral, 1958:482.—Riedl, 1963:77.—Seoane-Camba, 1965:155.—Ardre, 1970:224.—Gerloff and Geissler, 1971:

784.—Güven and Östig, 1971:126.—Boudouresque and Perret, 1977:79.

DISTRIBUTION.—Tunisia (Bechateur, Bizerte, Raf Raf, Raouad, Gammarth, La Marsa, Sidi Bou Said, Korbous, Monastir, Gabes, Kerkenna Island, Djerba Island, El Bibane); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Sicily, Italy, Adriatic Sea, Greece, Israel, Algeria, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *1:* 1212–1217; *2:* 1140–1143, 1164–1167, 1179–1182, 1187–1216, 1219; *3:* 1324–1331; *4:* 1350; *5:* 1371, 1372; *6:* 1380–1381; *10;* 1505; *11:* 1581, 1582; *12:* 1708; *13:* 1810; *14:* 1856–1860; *15:* 1895; *18:* 2002–2004; *19:* 2040–2042; *20:* 2078–2092; *21:* 2113–2117; *22:* 2132; *23:* 2293–2296; *24:* 2159–2170; *25:* 2202–2203(US); *26:* 2224–2230(NHA); *29:* 2274–2286(INSTOP).

REMARKS.—Abundant; found from February to July and in September and October on rocks and epiphytic on various algae; some specimens dredged from 31 m.

***Laurencia papillosa (Forsskal) Greville**

Fucus papillosus Forsskal, 1775:190.

Laurencia papillosa (Forsskal) Greville, 1830:52.—Muschler, 1910:306.—Feldmann, 1937:276.—Nasr and Aleem, 1949:276.—Aleem, 1951:251.—Funk, 1955:141.—Gerloff and Geissler, 1971:785.—Güven and Östig, 1971:126.—Lipkin and Safriel, 1971:8.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:81.

Laurencia papillosa (C. Agardh) Greville, 1830:lii.—DeToni and Forti, 1913:11.

DISTRIBUTION.—Tunisia (Ras Sidi Ali El Mekki, Raouad, Gammarth, La Marsa, Sidi Bou Said, Nabeul, Zarzis); Mediterranean (France, Corsica, Italy, Sicily, Greece, Turkey, Israel, Libya, Egypt); Red Sea; Indian Ocean.

SPECIMENS STUDIED.—EGM *7:* 1386; *10:* 1497–1499; *11:* 1572, 1573, 1576, 1577; *12:* 1707; 13: 1807; *15:* 1891–1892(US); *28:* 2254(INSTOP); *29:* 2265–2266(NHA).

REMARKS.—Abundant; found in March, May, September, and October on rocks and epiphytic on various algae.

***Laurencia pinnatifida (Gmelin) Lamouroux**

Fucus pinnatifidus Gmelin, 1792:1385.

Laurencia pinnatifida (Gmelin) Lamouroux, 1813:42.—Bornet, 1892:301.—Funk, 1927:449.—Boergesen, 1930:69.—Feldmann, 1931b:243; 1937:276.—Navarro and Uriarte, 1945: 275.—Aleem, 1951:251.—Gayral, 1958:478.—Seoane-Camba, 1965:154.—Ardre, 1970:225.—Gerloff and Geissler, 1971:785.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:81.

DISTRIBUTION.—Tunisia (Cap Serrat, Bechateur, Cap Zebib); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Greece, Turkey, Algeria, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *2:* 1370(US); *8:* 1392(NHA).

REMARKS.—Common; found in February, April, and July in the sublittoral zone.

***Lophosiphonia subadunca (Kuetzing) Falkenberg**

Polysiphonia subadunca Kuetzing, 1843:418.

Lophosiphonia subadunca (Kuetzing) Falkenberg, 1901:496.—Navarro and Uriarte, 1945:281.—Funk, 1955:142.—Gerloff and Geissler, 1971:786.

DISTRIBUTION.—Tunisia (Raf Raf); Mediterranean (Spain, Greece).

SPECIMEN STUDIED.—EGM *6:* 1376(US).

REMARKS.—Rare; found in September epiphytic on various algae.

***Lophosiphonia sacchoriza Collins and Hervey**

Lophosiphonia sacchoriza Collins and Hervey, 1917:127.

DISTRIBUTION.—Tunisia (Kerkenna Island).

SPECIMEN STUDIED.—EGM *20:* 2077(US).

REMARKS.—Rare; found in April epiphytic on various algae.

Polysiphonia elongata (Hudson) Harvey in Hooker

Conferva elongata Hudson, 1778:599.

Polysiphonia elongata (Hudson) Harvey in Hooker, 1833:333.—Bornet, 1892:308.—Muschler, 1910:307.—Boergesen,

1930:93.—Feldmann, 1937:277.—Navarro and Uriarte, 1945:278.—Aleem, 1951:252.—Funk, 1955:136.—Edelstein, 1964:204.—Ardre, 1970:206.—Ben Alaya, 1970: 212.—Gerloff and Geissler, 1971:786.—Furnari and Scammacca, 1973:16.—Boudouresque and Perret, 1977: 83.

DISTRIBUTION.—Tunisia (Gammarth); northeastern Atlantic (Portugal, Canary Islands); Mediterranean (Spain, France, Corsica, Greece, Turkey, Israel, Libya, Egypt).

SPECIMENS STUDIED.—EGM *11:* 1537–1538 (US).

REMARKS.—Occasional; found in May epiphytic on various algae.

***Polysiphonia macrocarpa* Harvey in Mackay**

Polysiphonia macrocarpa Harvey in Mackay, 1836:206.—Bornet, 1892:306.—Boergesen, 1930:82.—Gayral, 1958: 465.—Ardre, 1970:202.

DISTRIBUTION.—Tunisia (Raouad, Djerba Island); northeastern Atlantic (Morocco, Canary Islands).

SPECIMENS STUDIED.—EGM *10:* 1487, 1488; *20:* 2064(US), 2069(NHA), 2007 (INSTOP).

REMARKS.—Common; found in January, March, and August epiphytic on various algae and *Cymodocea nodosa.*

***Polysiphonia opaca* (C. Agardh) Zanardini**

Hutchinsia opaca C. Agardh, 1824:148.
Polysiphonia opaca (C. Agardh) Zanardini, 1842:63.—Schiffner, 1926:303.—Boergesen, 1930:104.—Feldmann, 1937: 277.—Navarro and Uriarte, 1945:379.—Nasr and Aleem, 1949:277.—Aleem, 1951:252.—Funk, 1955:136.—Gerloff and Geissler, 1971:787.—Güven and Östig, 1971:126.—Lipkin and Safriel, 1971:8.—Gaiccone et al., 1973, table IV.—Boudouresque and Perret, 1977:84.

DISTRIBUTION.—Tunisia (Tabarka, Monastir, Djerba Island); northeastern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Sicily, Greece, Turkey, Israel, Egypt).

SPECIMENS STUDIED.—EGM *1:* 1188–1190; *18:* 1985–1990(US); *24:* 2138 (INSTOP), 2184–2185(NHA).

REMARKS.—Common; found from April to May epiphytic on various algae.

***Polysiphonia urceolata* (Lightfoot in Dillwyn) Greville**

Conferva urceolata Lightfoot in Dillwyn, 1807:82.
Polysiphonia urceolata (Lightfoot in Dillwyn) Greville, 1824: 309.—Gerloff and Geissler, 1971:788.—Güven and Östig, 1971:126.

DISTRIBUTION.—Tunisia (Kerkenna Island); Mediterranean (Greece, Turkey).

SPECIMENS STUDIED.—EGM *20:* 2063, 2071–2073(US), 2074(NHA), 2075(INSTOP).

REMARKS.—Occasional; found in April on rocks.

***Polysiphonia violacea* (Roth) Greville in Harvey**

Ceramium violaceum Roth, 1797:150.
Polysiphonia violacea (Roth) Greville in Harvey, 1849:209.—Funk, 1927:135.—Boergesen, 1930:87.—Furnari and Scammacca, 1970:225.

DISTRIBUTION.—Tunisia (Kerkenna Island); northeastern Atlantic (Canary Islands); Mediterranean (Italy, Sicily).

SPECIMENS STUDIED.—EGM *19:* 2032(US), 2033(NHA), 2034(INSTOP).

REMARKS.—Occasional; found in April epiphytic on various algae.

***Pterosiphonia complanata* (Clemente) Falkenberg**

Fucus complanatus Clemente, 1807:316.
Pterosiphonia complanata (Clemente) Falkenberg, 1901:271.—Gayral, 1958:484.—Seoane-Camba, 1965:150.—Ardre, 1970:192.—Harotinidis and Tsekos, 1975:219.
Polysiphonia complanata J. Agardh, 1863:933.—Bornet, 1892: 317.

DISTRIBUTION.—Tunisia (Monastir, Kerkenna Island, El Bibane); northeastern Atlantic (Portugal, Spain); Mediterranean (Greece).

SPECIMENS STUDIED.—EGM *18:* 1979–1981; *19:*

2035–2037(US); *29:* 2257(NHA), 2258(INSTOP).

REMARKS.—Common; found in January, April, June, and August epiphytic on various algae.

**Pterosiphonia pennata* (C. Agardh) Falkenberg

Hutchinsia pennata C. Agardh, 1824:146.

Pterosiphonia pennata (C. Agardh) Falkenberg, 1901:263.—Funk, 1955:143.—Ardre, 1970:194.—Harotinidis and Tsekos, 1975:219.

Pterosiphonia pennata (Roth) Falkenberg, 1901:263.—Boergesen, 1930:108.—Feldmann, 1931b:244; 1937:277.—Nasr and Aleem, 1949:277.—Aleem, 1951:252.—Gayral, 1958: 488.—Seoane-Camba, 1965:150.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:85.

DISTRIBUTION.—Tunisia (La Marsa); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (France, Corsica, Italy, Sicily, Greece, Algeria, Egypt).

SPECIMENS STUDIED.—EGM *12:* 1639–1646 (US), 1647(NHA), 1648(INSTOP).

REMARKS.—Common; found year round on sandy substrate.

Rytiphloea tinctoria (Clemente) C. Agardh

Fucus tinctorius Clemente, 1807:316.

Rytiphloea tinctoria (Clemente) C. Agardh, 1824:160.—Bornet, 1892:302.—Muschler, 1910:308.—DeToni and Forti, 1913:8; 1914:290.—Funk, 1927:454.—Boergesen, 1930: 116.—Feldmann, 1931b:245; 137:277.—Navarro and Uriarte, 1945:281.—Aleem, 1951:252.—Dao, 1957:173.—Gayral, 1958:498.—Edelstein, 1962:213; 1964:205.—Riedl, 1963:77.—Seoane-Camba, 1965:152.—Ardre, 1970:220.—Ben Alaya, 1970:211.—Gerloff and Geissler, 1971:788.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Harotinidis and Tsekos, 1975:219.—Boudouresque and Perret, 1977:86.

DISTRIBUTION.—Tunisia (Bechateur, Raf Raf, Ile Plane, Gammarth, La Marsa, Sidi Bou Said, Korbous, Kerkenna Island, Gabes, Djerba Island, Zarzis); northeastern Atlantic (Portugal, Spain, Morocco, Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Israel, Algeria, Libya, Egypt); Red Sea.

SPECIMENS STUDIED.—EGM *3:* 1299; *6:* 1373, 1374; *8:* 1406; *11:* 1549–1551; *12:* 1630, 1631; *13:* 1758–1760; *14:* 1831; *21:* 2104–2106; *22:* 2118–2123, *25:* 2206(US); *28:* 2237(NHA); *29:* 2260 (INSTOP).

REMARKS.—Abundant; found from February to July and from September to December on vertical surfaces of rocks; some specimens dredged from 15 to 23 m.

Vidalia volubilis (Linnaeus) J. Agardh

Fucus volubilis Linnaeus, 1759:1344.

Vidalia volubilis (Linnaeus) J. Agardh, 1863:1121.—Piccone, 1879:33; 1884:137.—Bornet, 1892:301.—Muschler, 1910: 309.—DeToni and Forti, 1914:298.—Boergesen, 1930: 116.—Feldmann, 1931b:245; 1937:277; 1961:508.—Navarro and Uriarte, 1945:282.—Funk, 1955:144.—Riedl, 1963:77.—Ben Alaya, 1970:211.—Gerloff and Geissler, 1971:788.—Güven and Östig, 1971:126.—Giaccone et al., 1973, table IV.—Boudouresque and Perret, 1977:86.

DISTRIBUTION.—Tunisia (Gabes); northeastern Atlantic (Canary Islands); Mediterranean (Spain, France, Corsica, Italy, Sicily, Adriatic Sea, Greece, Turkey, Algeria, Libya).

SPECIMENS STUDIED.—EGM *22:* 2124–2128 (US), 2129(NHA), 2130(INSTOP).

REMARKS.—Occasional; found in July; dredged from 37 to 47 m.

Literature Cited

Agardh, C. A.

1817. *Synopsis algarum Scandinaviae, adjecta dispositione universali algarum.* 135 pages. Lund.

1820. *Species algarum rite cognitae.* Volume 1, part 1, 168 pages. Lund.

1822. *Species algarum rite cognitae.* Volume 1, part 2, pages 169–521. Lund.

1824. *Systema algarum.* 312 pages. Lund.

1827. Aufzählung einiger in den oesterreichischen Länden gefunden gattunge und arten von algen. *Flora*, 10:73, 625–646.

1828. *Species algarum rite cognitae.* Volume 2, 189 pages. Greifswald.

Agardh, J. G.

1841. In historiam algarum symbolae. *Linnaea*, 15:1–50, 443–457.

1842. *Algae maris Mediterranei et Adriatici, observationis in diagnosin specierum et dispositionem generum.* 164 pages. Paris.

1847. Nya alger från Mexico. *Öfversigt af Kongliga Vetenskaps Akademiens Förhandlingar*, 4:5–17.

1848. *Species, genera et ordines algarum, seu descriptiones succintae specierum, generum et ordinum, quibus algarum regnum constituitur.* Volume 1, 363 pages. Lund.

1851. *Species, genera et ordines algarum, seu descriptiones succintae specierum, generum et ordinum, quibus algarum regnum constituitur.* Volume 2, part 2, pages 1–336. Lund.

1852. *Species, genera et ordines algarum, seu descriptiones succintae specierum, generum et ordinum, quibus algarum regnum constituitur.* Volume 2, part 2, pages 337–700 + (addenda) 701–720. Lund.

1863. *Species, genera et ordines algarum, seu descriptiones succintae specierum, generum et ordinum, quibus algarum regnum constituitur.* Volume 2, pages 787–1291. Lund.

1876. *Species, genera et ordines algarum, seu descriptiones succintae specierum, generum et ordinum, quibus algarum regnum constituitur.* Volume 3, part 1, vii + 676 pages + (addenda) 677–724. Lund.

1883. Till algernes systematik. *Lunds Universitets Arsskrift*, new series, 19(2): 182 pages.

1892. Analecta algologica. *Lunds Universitets Arrskrift*, 28(6): 182 pages, 3 plates.

Aleem, A.

1951. Algues marines de profondeur des environs d'Alexandrie (Egypt). *Bulletin de la Societe Botanique de France*, 98(7–9):249–252.

Ambronn, H.

1880. Ueber einige Falle von Bilateralitat bei den Florideen. *Botanische Zeitschrift*, 38:193–200.

Ardissone, F.

1883. Phycologia Mediterranea, I: Floridee. *Memoire de Societa Crittomologica Italiana* (Varese), 1: 516 pages.

Ardré, F.

1970. *Contribution a l'étude des algues marines du Portugal, 1: La Flore.* Volume 10, 423 pages, 56 plates. Portugal: Coimbra Editora, Limitada.

Areschoug, J.

1843. Algarum minus rite cognitarum pugillus secundus. *Linnaea*, 17 (3):235–264.

Batters, E.A.L.

1896. Some New British Marine Algae. *Journal of Botany*, 34:6–11.

1902. A Catalogue of the British Marine Algae, Being a List of All the Species of Seaweeds Known To Occur on the Shores of the British Islands, with the Localities Where They Are Found. *Journal of Botany*, 40(supplement): 107 pages.

Beck, G., and A. Zahlbruckner

1898. Schedae ad "Kryptogamas exsiccatas" editae a Museo Palatino Vindobonensi, Centuria IV. *Naturhistorisches Museum Annalem*, 13:443–472.

Ben Alaya, H.

1970. Flore marine de Tunisie, I: Liste preliminaire des algues du Golfo de Tunis. *Bulletin de l'Institut National Scientifique et Technique d'Océanographie et de Pêche*, 1(4):205–212.

Bertoloni, A.

1819. *Amoenitas Italicae (con sei tavole delle quali tre relative alghe).* 472 pages, 6 plates. Bologna.

Bivona, B. A.

1822. *Scinaia,* algarum marinum novum genus. *l'Iride*, [3] pages, 1 plate.

Bliding, C.

1928. Studien ueber die florideenordnung Rhodymeniales. *Lunds Universitets Arsskrift*, 24(3): 74 pages.

Boergesen, F.

1905. Contribution a la connu du genre *Siphonocladus* Schmitz. *Danske Videnskabernes Selskab, Copenhagen Skrifter-Naturvid og Mathevid*, 1905:259–291.

1925. Marine Algae from the Canary Islands, Especially

from Teneriffe and Gran Canaria, I: Chlorophyceae. *Biologiske Meddelelser*, 5(3): 123 pages.

1926. Marine Algae from the Canary Islands, Especially from Teneriffe and Gran Canaria, II: Phaeophyceae. *Biologiske Meddelelser*, 6(2): 112 pages.

1927. Marine Algae from the Canary Islands, Especially from Teneriffe and Gran Canaria, III: Rhodophyceae, part 1: Bangiales and Nemalionales. *Biologiske Meddelelser*, 6(6): 97 pages.

1929. Marine Algae from the Canary Islands, Especially from Teneriffe and Gran Canaria, III: Rhodophyceae, part 2: Cryptonemiales, Gigartinales, and Rhodymeniales. *Biologiske Meddelelser*, 8(1): 97 pages.

1930. Marine Algae from the Canary Islands, Especially from Teneriffe and Gran Canaria, III: Rhodophyceae, part 3: Ceramiales. *Biologiske Meddelelser*, 9(1): 159 pages.

Bornet, E.

1892. Les algues de P.K.A. Schousboe. *Memoires de la Societe Nationale des Sciences Naturelles de Cherbourg*, 28:165–376.

Bornet, E., and G. Thuret

1876. *Notes algologiques: Recueil d'observations sur les algues.* Fascicle 1, 70 pages. Paris.

Bory de Saint Vincent, J. B.

1832. *Expedition Scientifique de Moree.* 367 pages, 38 plates. Paris.

Boudouresque, Ch. F.

1967. *Gelidiella ramellosa* (Kuetzing) Feldmann et Hamel et *Antithamnion heterocladum* Funk, Rhodophycées rares ou nouvelles pour la flore francaise. *Extrait des Annales de la Societe Scientifique Naturelles, Artes la Vulgarization*, 1967:153–161.

1971. Sur le *Nitophyllum distromaticum* Rodriguez manuscript (*Myriogramme distromatica* (Rodriguez) comb. nov.). *Societe Phycologique de France*, bulletin, 16:76–81.

Boudouresque. Ch. F., and N. Perret

1977. Inventaire de la flore marine de Corse (Méditerranée): Rhodophyceae, Phaeophyceae, Chlorophyceae et Bryopsidophyceae. *Bibliotheca Phycologia*, 25: 170 pages.pCandolle, A. P. de

1805. *Flore francaise, ou descriptions succintes de toutes les plantes qui croissent naturellement en France.* Edition 3, volume 2, 600 pages. Paris.

Clemente, S.

1807. *Ensajo sobre las variedades de la vid común que vegetan en Andalucía, con un indice etimológio y tres listas de plantas en que se caracterizan varias especies nuevas.* 324 pages. Madrid.

Collins, F. S., and A. B. Hervey

1917. The Algae of Bermuda: Contributions of the Bermuda Biological Station for Research, number 68. *Proceedings of the American Academy of Arts and Sciences*, 53: 195 pages.

Crouan, P. L., and H. M. Crouan

1867. *Florule du Finistere.* 262 pages, 31 + supplementary plates. Paris: Klincksieck.

Dangeard, P.

1958. Le reproduction et le developpement de l'*Enteromorpha marginata* J. Agardh et le reattachment de cette espece au genre *Blidingia. Comptes Rendus Academie des Sciences*, 246:347–351.

Dao, S.

1957. Contribution a l'étude de la flore marines de Baleares. *Vie et Milieu*, 6:165–176.

Debray, F.

1897. *Catalogue des algues du Maroc, d'Algerie et de Tunisie.* 78 pages. Algeria.

Decaisne, J.

1839. Plantes de l'Arabie heureuse. *Museum d'Histoire Naturelle de Paris*, 1:143–214.

1842. Essai sur une classification des algues et des polypiers calciferes: Memoire sur les corallines. *Annales des Sciences Naturelles*, second series, 17: 380 pages.

Delile, A. R.

1813. Flore Aegyptiacae illustratio. *In* France (Commission d'Egypte), Description de l'Egypte ou recueil des observations et des recherches qui ont été faites en Egypte pendant l'expédition de l'armée Francaise (1798–1801). *Histoire Naturelle de Paris*, 2:49–82.

Derbes, A., and A. Solier

1856. Memoire sur quelques points de la physiologie des algues. *Extrait du Supplement aux Comptes Rendus Seances de l'Academie des Sciences*, 1: 120 pages.

Desfontaines, R.

1799. *Flora Atlantica.* Volumes 1, 2, 261 tables, Paris.

DeToni, G.

1895. Terzo pugillo di alghe Tripolitaine. *Rendiconti della Reale Accademia dei Lincei*, series 5, 5:451–457.

DeToni, G., and A. Forti

1913. Contribution á la flore algologique de la Tripolitaine et de la Cyranaique. *Annales de l'Institut Océanographique*, 5(7): 56 pages.

1914. Plantae cellulari: Alghe. *In* Pampanini, editor, *Plantae Tripolitanae*, pages 289–304. Florence.

Dillwyn, L. W.

1807. *British Confervae.* 87 pages, 115 plates. London.

Dixon, P. S.

1967. The Typification of *Fucus cartilagineus* L. and *F. corneus* Huds. *Blumea*, 15:55–62.

Ducluzeau, J. A.

1805. *Essai sur l'histoire naturelle des conferves de environs de Montpellier.* 164 pages. Montpellier.

Edelstein, T.
1962. On the Algal Associations and the Ecology of the Benthonic Flora of the Haifa Bay. *Recueil Travaux de la Station Marine d'Endoume bulletin*, 27(42):209–219.
1964. On the Sublittoral Algae of the Haifa Bay Area. *Vie et Milieu*, 15(1):177–212.

Ellis, J.
1768. The Natural History of Corallines. *Philosophical Transactions*, 57:425.

Ellis, J., and D. Solander
1786. *The Natural History of Many Curious and Uncommon Zoophytes Collected from Various Parts of the Globe.* 208 pages. London: Benjamin White and Son.

Endlicher, S. L.
1843. *Mantissa botanica altera: Sistens generum plantarum supplementum tertium.* 111 pages. Vienna.

Engler, A., and K. Prantl
1897. *Die naturalichen pflanzenfamilien.* Volume 2, 580 pages. Leipzig.

Esper, E. J.
1799. *Icones fucorum.* Fascicle 3, pages 129–166, 117 plates. Nuremberg.

Falkenberg, P.
1901. Die Rhodomelaceen des Golfes von Neapel und der angrezenden Meeresabschnittes. *Fauna und Flora des Golfes von Neapel*, 26: 754 pages, 10 figures, 24 plates. [Berlin: Verlag von R. Friedlander and Son.]

Feldmann, J.
1931a. Notes sur quelques algues marines de Tunisie. *Notes de Station Océanographique de Salammbô*, 24:3–17.
1931b. Contribution à la flore algologique marine de l'Algerie. *Bulletin de la Societe d'Histoire Naturelle de l'Afrique du Nord*, 22(7):179–254.
1937. Recherches sur la vegetation marine de la Méditerranée: La côte Alberes. *Revue Algologique,* 10: 339 pages.
1951. La flore marine de l'Afrique du Nord. *Societe de Biogeographie, Paris, Compte Rendu*, 243:106–108.
1961. Note sur les algues marines de la Galite (Tunisie). *Rapport et Procès Verbaux Commission Internationale Pour l'Exploration Scientifique de la Mer Méditerranée*, 16:503–508.

Forsskal, P.
1775. *Flora Aegyptiaco-Arabica.* 219 pages. Copenhagen.

Foslie, M.
1899. List of Species. *Konglia norske videnskabernes Selskab Skrifter, 1898*, 3: 11 pages.

Fremy, P.
1925. Quelques algues des environs de Sousse. *Bulletin de la Societe Lenneene de Normandie*, 8:28–32.

Funk, G.
1927. Die algen vegetation des Golfes von Neapel. *Pubblicazioni delle Stazioni Zoologica di Napoli*, 7: 507 pages.
1955. Beiträge zür kenntnis des meeresalgen von Neapel. *Pubblicazioni delle Stazioni Zoologica di Napoli*, 25: 178 pages.

Furnari, G., and B. Scammacca
1970. Richerche floristiche sulle alghe marine della Sicilia Orientale. *Bolletino delle Sedute dell'Accademia Gioenia di Scienze Naturali in Catania*, series 4, 10: 215–230.
1973. Richerche floristiche sulle alghe marine della Sicilia Orientale, nuovo contributo. *Bolletino delle Sedute dell'Accademia Gioenia di Scienze Naturali in Catania*, series 4, 11: 21 pages.

Gaillon, B.
1828. Thallasiophytes. In *Dictionaire de Sciences Naturelle*, 53:350–406.

Gayral, P.
1958. *Algues de la côte Atlantique Marocaine.* 523 pages. Rabat.

Gerloff, J., and U. Geissler
1971. Eine revidierte liste der meeresalgen Griechenlands. *Nova Hedwigia*, 12(3–4):721–793.

Gerloff, J., and M. Nizamuddin
1975. Bermerkungen zür nomenklatur einiger arten der gattung *Cystoseira* C. Ag. *Nova Hedwigia*, 26:341–348.

Giaccone, G., M. Sortino, A. Solazzi, and C. Tolomio
1973. Tipologia e distribuzione estiva della vegetazione sommersa dell'Isola di Pantelleria. *Lavori dell'Istituto Giardino Coloniale di Palermo*, 25:103–109.

Gmelin, S.
1768. *Historia Focorum.* 239 pages, 33 plates. St. Petersburg.
1792. *Caroli a Linne: Systema Naturae.* Volume 2(2), pages 885–1661. Leipzig.

Goodenough, S., and T. Woodward
1797. Observations on the British Fuci, with Particular Descriptions of Each Species. *Transactions of the Linnean Society*, 3:84–235.

Grateloup, J. P.
1806. *Observations sur la constitution de 1805 avec un appendix sur les Conferves.* Pages 33–35. Montpellier.

Greville, R. K.
1824. *Flora Edinensis.* 478 pages. Edinburgh: W. Blackwood.
1826. Some Account of a Collection of Plants from the Ionian Sea. *Transactions of the Linnean Society*, 15: 335–348.
1827. *Scottish Cryptogamic Flora.* Fascicle 60, volume 5, plates 296–300. Edinburgh: MacLachlan and Stewart.

1830. *Algae Britannicae.* 218 pages, 19 plates. London.

Güven, K., and F. Östig
1971. Ueber die marinen algen an den küsten der Turkei. *Botanica Marina*, 14:121–128.

Hamel, G.
1926. Quelques algues rares ou nouvelles pour la flore Méditerranéene. *Bulletin du Museum National d'Histoire Naturelle*, 32:420.
1927. *Recherches sur les genres Acrochaetium Naeg. et Rhodochorton Naeg.* 117 pages. Saint Lo: Imprimier R. Jacqueline.
1931a. Chlorophycées des côtes francaises: Des Ulvales. *Revue Algologique*, 5:146–176.
1931b. Chlorophycées des côtes francaises: Des Siphonales. *Revue Algologique*, 5:381–430.
1931c. Chlorophycées des côtes francaises: Des Siphonocladales. *Revue Algologique*, 6:9–73.
1931d. *Phéophycées de France.* Fascicle I, pages 1–80, Paris.
1935. *Phéophycées de France.* Fascicle II, pages 81–176. Paris.
1937. *Phéophycées de France.* Fascicle III, pages 177–239, Paris.
1938. *Phéophycées de France.* Fascicle IV, pages 240–335. Paris.
1939. *Phéophycées de France.* Fascicle V, pages 337–432, Paris.

Hamel, G., and M. Lemoine
1953. Corallinacées de France d'Afrique du Nord. *Archiv Museum d'Histoire Naturelle*, 1: 136 pages.

Harotinidis, S., and I. Tsekos
1975. Marine Algae of Northern Greece. *Botanica Marina*, 18:203–221.

Harvey, W. H.
1833. Algae. *In* W. J. Hooker, editor, *The British Flora*, volume 2(1), 401 pages. London.
1841. *A Manual of the British Marine Algae.* 229 pages. London.
1849. *Phycologia Britannica.* Volume 2, pages i–iv, plates 121–240. London.
1851. *Phycologia Britannica.* Volume 3, pages i–xiv, plates 241–360. London.
1853. *Nereis Boreali-Americana, II: Rhodospermae.* 258 pages. Washington, D.C.: Smithsonian Institution.
1855. Some Account of the Marine Botany of the Colony Western Australia. *Transactions of the Irish Academy*, 22:525–566.

Hollenberg, G.
1968. An Account of the Species of the Red Alga *Herposiphonia* Occurring in the Central and Western Tropical Pacific Ocean. *Pacific Science*, 22:536–559.

Hooker, W. J.
1833. *The English Flora of Sir James Edward Smith, Class XXIV, Cryptogamia.* 432 pages. London: Longman, Ress, Orme, Brown, Green, and Longman.

Howe, M. A.
1911. Phycological Studies, VI: Some Marine Algae of Lower California, Mexico. *Bulletin of the Torrey Botanical Club*, 38:489–514.
1914. The Marine Algae of Peru. *Torrey Botanical Club Memoires*, 15: 185 pages.
1920. Class 2, Algae. *In* N. L. Britton and C. F. Millspaugh, editors, *The Bahama Flora*, pages 553–625. New York. [Published by the authors.]

Hudson, W.
1762. *Flora Anglica.* First edition, 506 pages. London.
1778. *Flora Anglica.* Second edition, 680 pages. London.

Huve, H.
1962. Taxonomie, écologie et distribution d'une Mélobésiée, Méditerranéene: *Lithophyllum papillosum* (Zanardini) comb. nov., non *Lithophyllum* (*Dermatolithon*) *papillosum* (Zanardini) Foslie. *Botanica Marina*, 4(3–4):219–240.

Jacquin, N. J.
1786. *Collectanea ad Botanicam, Chemiam et Historiam Naturalem Spectantia.* Volume 1, 386 pages. Vienna.

Johansen, H. W., L. M. Irvine, and A. Webster
1973. *Haliptilon squamatum* (L.) comb. nov., a Poorly Known British Coralline Alga. *British Phycological Journal*, 8(2):212.

Kuetzing, F. T.
1843. *Phycologia generalis oder anatomie, physiologie und systemkunde der Tange.* 458 pages, 80 plates. Leipzig.
1845. *Phycologia Germanica: Deutschlands algen.* 340 pages. Nordhausen.
1847. Diagnosen und Bemerkungen zu neuen oder Kritischen Algen. *Botanische Zeitung*, 5:52, 53.
1849. *Species algarum.* 922 pages. Leipzig.
1854. *Tabulae phycologicae.* Volume 4, 23 pages, 100 plates. Nordhausen.
1855. *Tabulae phycologicae.* Volume 5, 30 pages, 100 plates. Nordhausen.
1859. *Tabulae phycologicae.* Volume 9, 42 pages, 100 plates. Nordhausen.

Kylin, H.
1924. Studien ueber die Delesseriaceen. *Lunds Universitets Arsskrift*, 20(6): 111 pages.

Lamouroux, J. V.
1805. *Dissertations sur plusieurs especes de Fucus.* 83 pages, 36 plates. Agen.
1809a. Observations sur la physiologie des algues marines, et description de cincq nouveau genres de cette famille. *Nouveau Bullentin des Sciences de la Societe Philomatique de Paris*, 1:330–333.
1809b. Memoire sur les Caulerpes, nuovo genre de la famille des algues marines. *Journal de Botanique*, 2: 129–146.

1809c. Memoire sur trois nouveaux genres de la famille des algues marines: *Dictyopteris*, *Amansia*, *Bryopsis*. *Journal de Botanique*, 2: 135 pages.

1809d. Exposition des caracteres du genre *Dictyota* et tableau des especes qu'il renferme. *Journal de Botanique*, 2:14.

1812. Classification des polypiers corraligenes. *Nouveau Bulletin des Sciences de la Societe Philomatique de Paris*, 3:185, 186.

1813. Essai sur les genres della famille des Thalassiophytes non articules. *Annales du Museum d'Histoire Naturelle de Paris*, 20:21–293.

1816. *Histoire des polypiers coralligenes flexibles, vulgairement nomnes zoophytes.* 560 pages, 1 table, 19 plates. Caen.

Le Jolis, A.

1863. Listes des algues marines de Cherbourg. *Memoires de la Societe Imperiales des Sciences Naturelles de Cherbourg*, 10(1): 168 pages.

Lemoine, M.

1924. Corallinacées recueilles par drageges en Méditerranée (Croissiere du "Pourquois Pas?" en 1923). *Bulletin du Museum d'Histoire Naturelle de Paris*, 1924: 402–405.

Lightfoot, J.

1777. *Flora Scotica.* Volumes 1, 2, 1149 pages. London.

Link, H. F.

1820. Epistola de algis aquaticis in genera disposendis. *In* Nees, editor, *Horae Physicae berolinenses*, 8 pages. Bonn.

Linnaeus, C.

1753. *Species Plantarum.* First edition, volume 2, pages 561–1200. Stockholm.

1755. *Flora Suecica, exhibens plantas per regnum Suecica crescentes.* Edition 2, 464 pages. Stockholm.

1758. *Systema naturae per regna tria naturae, secundum, classes, ordines, genera, species, cum characteribus differentis, synonymis locis: Regnum Vegetabile.* Pages 1–824. Stockholm.

1759. *Systema naturae per regna tria naturae, secundum, classes, ordines, genera, species, cum characteribus differentis, synonymis locis: Regnum Vegetabile.* Pages 825–1384. Stockholm.

1767. *Systema naturae per regna tria naturae, secundum, classes, ordines, genera, species, cum characteribus differentis, synonymis locis: Regnum Vegetabile.* Twelfth edition, volume 2, pages 304–1306. Stockholm.

Lipkin, Y., and U. Safriel

1971. Intertidal Zonation on Rocky Shores at Mikhmoret (Mediterranean, Israel). *Journal of Ecology*, 59(1): 30 pages.

Lyngbye, H. C.

1819. *Tentamen hydrophytologiae Danicae.* 248 pages, 70 plates. Copenhagen.

MacKay, J. F.

1836. *Flora Hibernica.* 279 pages. Dublin: Wm. Curry and Jun Company.

Martens, G. von

1866. *Preussische Expedition nach Ost-Asien.* 152 pages, 8 plates. Berlin: Verlag der Koeniglichen Geheimen Ober-Hofbuchdruckerei.

Martius, C. Ph.

1833. *Flora Brasilliensis.* Volume 1, 390 pages. Stuttgart and Tübingen.

Mazoyer, G.

1937. Sur la presence de *Ceramium tenerrimum* (Martens) Okamura sur la côtes nord-africaine. *Bulletin de la Societe d'Histoire Naturelle de l'Afrique du Nord*, 28(9): 510–512.

1938. Les Céramiées de l'Afrique du Nord. *Bulletin de la Societe d'Histoire Naturelle de l'Afrique du Nord*, 29(4): 317–331.

Meneghini, G.

1840. *Lettera del Professor Giuseppe Meneghini al Dottora Corinaldi a Pisa.* [4] pages. Pisa: Tipografia Prosperi.

Mollinier, R., and J. Picard

1954. Eléments de bionomie marine sur les côtes Tunisie. *Station Océanographique de Salammbô*, bulletin, 48: 47 pages.

Montagne, J. F.

1841. Plantes Cellulaires. *In* P. Barker-Webb and S. Berthelot, editors, *Histoire Naturelle des Iles Canaries*, 3(2)(4): 208 pages. Paris.

1846. Phyceae. *In* M. C. Durieu de Maisonneuve, editor, *Exploration de l'Algerie, Flore d'Algerie, Botanique I: Cryptogamie*, 197 pages. Paris.

Mueller, O. F.

1778. *Flora Danica: Icones Plantarum.* Fascicle 13, volume 5, plates 721–780. Copenhagen.

Muschler, R.

1910. Algae. *In* E. Durant and G. Barrate, editors, *Catalogue Raisonné des Plantes de Tripolitaine: Florae Libyae Prodromus*, pages 293–313. Geneva.

Naegeli, C.

1846. Ueber die *Polysiphonia* und *Herposiphonia*. *Zeitschrift für Wissenschaftliche Botanik*, 4:206–256.

1847. Die neueren algensysteme und versuch zur begrundung eines eigenen systems der algen und florideen. *Neue Denkschriften der Allgemeinen Schweizerischen Gesselschaft für die Naturwissenschaft*, 9: 275 pages.

1861. Beiträge zür morphologie und systematik der Ceramiaceae. *Sitzungsberichte Koeniglich Beyerische, Akademie Wissenschaften*, 2: 415 pages.

Nardo, G. D.

1841. Nuove osservazioni sulla struttura, abitudine e valori dei generi *Stifftia*, *Hildenbrandtia* ad *Agar-*

dhina, noche sullo svillupo e sul modo di propagazione della *Conferva catenata*. *Atti della Seconda Reunione Scienziati Italiani* (Torino), 1840:184–186.

Nasr, A. H.
1940a. The Marine Algae of Alexandria, II: A Study of the Occurrence of Some Marine Algae on the Egyptian Mediterranean Coast. *Fouad Institute of Hydrobiology and Fisheries*, 37: 9 pages.
1940b. The Marine Algae of Alexandria, I: A Report on Some Marine Algae Collected from the Vicinity of Alexandria. *Fouad Institute of Hydrobiology and Fisheries*, 36: 33 pages.

Nasr, A., and A. Aleem
1949. Ecological Studies of Some Marine Algae from Alexandria. *Hydrobiology*, 1(3):251–281.

Navarro, F., and L. Uriarte
1945. Catalogo de la flora del Mar de Baleares. *Anales del Jardin Botanico de Madrid*, 5: 156 pages. [Instituto Español de Oceanografia, Notas y Resumenes, series II, number 24.]

Newroth, P., and A.R.A. Taylor
1971. The Nomenclature of the North Atlantic Species of *Phyllophora* Greville. *Phycologia*, 10:93–97.

Newton, L.
1931. *A Handbook of the British Seaweeds*. 478 pages, 270 figures. London: A. Wheaton and Company Limited.

Okamura, K.
1933. *Icones of Japanese Algae*. Volume 4, 205 pages. Tokyo: Kazamashobo, Japan.

Oltmanns, F.
1904. *Morphologie und Biologie der Algen*. Volume 1, 733 pages. Jena: Verlag von Gustav Fischer.

Papenfuss, G. F.
1950. Review of the Genera of Algae Described by Stackhouse. *Hydrobiologia*, 2:181–208.
1968. A History, Catalogue, and Bibliography of Red Sea Benthic Algae: Contributions to Knowledge of the Red Sea, 42. *Israel Journal of Botany*, 17(1–2): 118 pages.

Patouillard, N.
1897. Catalogue raisonné des plantes cellulaires de la Tunisie. *Exploration Scientifique de la Tunisie, publiée sous les auspices du Ministere del'Instruction Publique*, 1897: 157 pages.

Petersen, H.
1918. Algae (Excluding Calcareous Algae): Report of the Danish Oceanographic Expedition of 1908–1910 to the Mediterranean and Adjacent Seas. *Biology*, 2: 19 pages.

Philippi, R. A.
1837. Beweiss, dass di Nulliporen planzen sind. *Archiv für Naturgeschichte*, 1:387–393.

Piccone, A.
1879. Catalogo delle alghe raccolte durante la crociere de cutter *Violante* en 1879. *Rendiconti della Reale Accademia dei Lincei*, 4:19–35.
1884. Risultati algologici della crociere del *Violante* commandata dal capitano-amatore Enrico D'Albertis. *Anali Museo Civico di Storia Naturale*, 20:106–142.

Pottier, J.
1929. Étude sur les possibilités d'utilisation des plantes marines Tunisiennes pour la nourriture du bétail. *Annales l'Institut Océanographique*, 6:321–362.

Rayss, T.
1955. Les algues marines des côtes Palestiniennes, I: Chlorophyceae. *State of Israel, Ministry of Agriculture, Division of Fisheries*, bulletin, 9: 36 pages.

Riedl, R.
1963. *Fauna und Flora der Adria*. 640 pages, 221 plates. Hamburg and Berlin: Verlag von Parey.

Roth, A. G.
1797. *Catalecta botanica quibus plantae novae et minus cognitae discribuntur atque illustantur*. Volume 1, 244 pages. Leipzig.
1800. *Catalecta botanica quibus plantae novae et minus cognitae discribuntur atque illustantur*. Volume 2, 258 pages. Leipzig.
1806. *Catalecta botanica quibus plantae novae et minus cognitae discribuntur atque illustantur*. Volume 3, 350 pages. Leipzig.

Sauvageau, C.
1907. *Remarques sur les Sphacelariales*. 634 pages, 128 figures. Bordeaux.
1912. A propos des *Cystoseira* de Banyuls et de Guethary. *Bulletin de la Station Biologie de Arachon*, 14:133–556.

Schiffner, V.
1926. Beiträge zür kenntnis der Meeresalgen, II: Ein beiträge zür algen-flora von Tunisien. *Hedwigia*, 66:300–311.

Schmitz, F.
1889. Systematische uebersicht der bischer bekannten Gattungen der Florideen. *Flora*, 72:435–456.

Seoane-Camba, J.
1965. Estudios sobre las algas bentonicas en la costa sur de la peninsula Iberica (litoral de Cadiz). *Investigacion Pesquera*, 29: 216 pages.

Seurat, L. G.
1929. Observation sur les limites, les facies et les associations animales de l'etage intertidal de la petite syrte (Golfe de Gabes). *Station Océanographique de Salammbô*, bulletin, 3: 72 pages.

Silva, P. C.
1952. A Review of Nomenclatural Conservation in the Algae from the Point of View of the Type Method. *The University of California Publications in Botany*, 25: 241–323.

Smith, J. E.
1810. *English Botany.* Volume 30, plates 1-2905. London.

Solier, A.
1847. Memoire sur deux algues zoosporées devant former un genre distinct, le genre *Derbesia. Annales des Sciences Naturelles*, third series, 7:157–166.

Stackhouse, J.
1801. *Nereis Britanica, continens species omnes Fucorum in Insulis Britannicis crescentium.* xl + 112 + [7] pages 17 + A-G plates. Bath.
1809. Tentamen marino-cryptogamicum, ordinem novum, in genera et species distributum, in Classe XXIVta Linnaei sistens. *Memoires de la Societe Imperiale des Naturalistes de Moscou*, 2:50–97.

Taylor, W. R.
1960. *Marine Algae of the Eastern Tropical and Subtropical Coasts of the Americas.* 870 pages, 80 plates. Ann Arbor, Michigan: University of Michigan Press.

Turner, D.
1801. *Ulva furcellata* et *multifida. Journal für Botanik* (Schrader), 1:300–302.
1808. *Fuci sive plantarum fucorum generi a botanicis ascriptarum icones, descriptiones et historia.* Volume 1, 165 pages, plates 1–71. London.
1809. *Fuci sive plantarum fucorum generi a botanicis ascriptarum icones, descriptiones et historia.* Volume 2, 162 pages, plates 72–134. London.
1811. *Fuci sive plantarum fucorum generi a botanicis ascriptarum icones, descriptiones et historia.* Volume 3, 148 pages, plates 135–196. London.
1819. *Fuci sive plantarum fucorum generi a botanicis ascriptarum icones, descriptiones et historia.* Volume 4, 153 pages, plates 197–258, index 1–7. London.

Turra, A.
1780. *Flora Italicae Prodromus.* 68 pages. Vicenza: Officina Turraeana.

Withering, G.
1796. *An Arrangement of British Plants.* Third edition, volume 4, 418 pages. Birmingham. [Printed for the author.]

Woodward, T. J.
1794. Description of *Fucus dasyphyllus. Transactions of the Linnean Society*, 2:239.
1797. Observations upon the Generic Character of *Ulva* with the Descriptions of Some New Species. *Transactions of the Linnean Society*, 3:46–58.

Wulfen, F. X.
1803. Cryptogama aquatica. *Arkiv für Botanik*, 3: 64 pages.

Zanardini, G.
1839. Sulle alghe. *Lettera alla direzione della bibliotheca Italiana*, 96:131–137.
1842. Synopsis algarum in Mari Adriatico hucusque collectarum cui accedunt monographia siphonearum nec non generales de algarum vita structura disquisitiones. *Memorie della Realle Accademia Scienze di Torino*, 2:63.
1843. *Saggio di classificazione naturale delle ficee.* 64 pages, 1 plate, 2 folding charts. Venice.
1858. Plantarium in Mari Rubro hucusque collectarum enumeratio. *Memorie della Realle Istituto Veneto di Scienze*, 7:209–309.

REQUIREMENTS FOR SMITHSONIAN SERIES PUBLICATION

Manuscripts intended for series publication receive substantive review within their originating Smithsonian museums or offices and are submitted to the Smithsonian Institution Press with approval of the appropriate museum authority on Form SI–36. Requests for special treatment—use of color, foldouts, casebound covers, etc.—require, on the same form, the added approval of designated committees or museum directors.

Review of manuscripts and art by the Press for requirements of series format and style, completeness and clarity of copy, and arrangement of all material, as outlined below, will govern, within the judgment of the Press, acceptance or rejection of the manuscripts and art.

Copy must be typewritten, double-spaced, on one side of standard white bond paper, with 1¼" margins, submitted as ribbon copy (not carbon or xerox), in loose sheets (not stapled or bound), and accompanied by original art. Minimum acceptable length is 30 pages.

Front matter (preceding the text) should include: **title page** with only title and author and no other information, **abstract page** with author/title/series/etc., following the established format, **table of contents** with indents reflecting the heads and structure of the paper.

First page of text should carry the title and author at the top of the page and an unnumbered footnote at the bottom consisting of author's name and professional mailing address.

Center heads of whatever level should be typed with initial caps of major words, with extra space above and below the head, but with no other preparation (such as all caps or underline). Run-in paragraph heads should use period/dashes or colons as necessary.

Tabulations within text (lists of data, often in parallel columns) can be typed on the text page where they occur, but they should not contain rules or formal, numbered table heads.

Formal tables (numbered, with table heads, boxheads, stubs, rules) should be submitted as camera copy, but the author must contact the series section of the Press for editorial attention and preparation assistance before final typing of this matter.

Taxonomic keys in natural history papers should use the alined-couplet form in the zoology and paleobiology series and the multi-level indent form in the botany series. If cross-referencing is required between key and text, do not include page references within the key, but number the keyed-out taxa with their corresponding heads in the text.

Synonymy in the zoology and paleobiology series must use the short form (taxon, author, year:page), with a full reference at the end of the paper under "Literature Cited." For the botany series, the long form (taxon, author, abbreviated journal or book title, volume, page, year, with no reference in the "Literature Cited") is optional.

Footnotes, when few in number, whether annotative or bibliographic, should be typed at the bottom of the text page on which the reference occurs. Extensive notes must appear at the end of the text in a notes section. If bibliographic footnotes are required, use the short form (author/brief title/page) with the full reference in the bibliography.

Text-reference system (author/year/page within the text, with the full reference in a "Literature Cited" at the end of the text) must be used in place of bibliographic footnotes in all scientific series and is strongly recommended in the history and technology series: "(Jones, 1910:122)" or ". . . Jones (1910:122)."

Bibliography, depending upon use, is termed "References," "Selected References," or "Literature Cited." Spell out book, journal, and article titles, using initial caps in all major words. For capitalization of titles in foreign languages, follow the national practice of each language. Underline (for italics) book and journal titles. Use the colon-parentheses system for volume/number/page citations: "10(2):5–9." For alinement and arrangement of elements, follow the format of the series for which the manuscript is intended.

Legends for illustrations must not be attached to the art nor included within the text but must be submitted at the end of the manuscript—with as many legends typed, double-spaced, to a page as convenient.

Illustrations must not be included within the manuscript but must be submitted separately as original art (not copies). All illustrations (photographs, line drawings, maps, etc.) can be intermixed throughout the printed text. They should be termed **Figures** and should be numbered consecutively. If several "figures" are treated as components of a single larger figure, they should be designated by lowercase italic letters (underlined in copy) on the illustration, in the legend, and in text references: "Figure 9b." If illustrations are intended to be printed separately on coated stock following the text, they should be termed **Plates** and any components should be lettered as in figures: "Plate 9b." Keys to any symbols within an illustration should appear on the art and not in the legend.

A few points of style: (1) Do not use periods after such abbreviations as "mm, ft, yds, USNM, NNE, AM, BC." (2) Use hyphens in spelled-out fractions: "two-thirds." (3) Spell out numbers "one" through "nine" in expository text, but use numerals in all other cases if possible. (4) Use the metric system of measurement, where possible, instead of the English system. (5) Use the decimal system, where possible, in place of fractions. (6) Use day/month/year sequence for dates: "9 April 1976." (7) For months in tabular listings or data sections, use three-letter abbreviations with no periods: "Jan, Mar, Jun," etc.

Arrange and paginate sequentially EVERY sheet of manuscript—including ALL front matter and ALL legends, etc., at the back of the text—in the following order: (1) title page, (2) abstract, (3) table of contents, (4) foreword and/or preface, (5) text, (6) appendixes, (7) notes, (8) glossary, (9) bibliography, (10) index, (11) legends.