

MURDOCH UNIVERSITY
BIMB-4

A Collection of Marine Benthic Algae from the Montebello Islands, Western
Australia

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Running Head: Algae of the Montebello Islands

Key Index Words: Algae; Australia; Biogeography; Systematics, *montebello islands,*
macroalgae, benthos

ABSTRACT

??? species of marine algae are reported from the Montebello Islands, northwestern Western Australia. Included are ?? species of Rhodophyta, ?? species of Chlorophyta and ? species of Phaeophyta. This report is the first to record marine benthic algae from tropical Western Australia. ????? taxa are newly recorded for Western Australia, with five of those (*Dictyopteris hoytii*, *Corynomorpha prismatica*, *Balliella subcorticata*, *Gracilaria eucheumoides*, *Exophyllum wentii*, *Periphykon beckeri*) also being new records for Australia. The algal flora of the Montebello Islands includes many elements common to tropical areas worldwide.

INTRODUCTION

Studies of the benthic marine algae of temperate regions of Australia have documented a diverse flora that is currently in the process of being collated (Womersley 1984, 1987). By comparison, that of the continent's tropical shores remains poorly known. This is especially true of the marine flora of northern Western Australia. A recent compendium of records of marine algae from northern Australia (Lewis 1984, 1985, 1987) included some 800 species, of which only 9 were attributed to the Western Australian coast north of (and including) North-West Cape. More recently the brown alga *Stoechospermum marginatum* was recorded from North West Cape (Phillips *et al.* 1993), but there is clearly a need for much additional collecting and research before the marine flora can be regarded as even moderately known.

In 1992 I had the opportunity to visit and collect algae from the Montebello Islands, a group of over 100 islands which lie about 120 km west-north-west of Dampier (20° 30' S, 115° 30' E). The islands are generally flat limestone, with sizes ranging from about 1000 hectares (Hermite I.) to several small islets and rocks of less than 1 hectare. During this visit a number of algal species were collected, including several that represent new records for Australia. The results are presented herein.

MATERIALS AND METHODS

The majority of specimens were collected *in situ* using S.C.U.B.A. and preserved in a 5-10% solution of formaldehyde in sea-water. All specimens are housed in the herbarium of the School of Biological and Environmental Sciences, Murdoch University ('Murdoch'), with some duplicates distributed to MELU and MICH (Herbarium abbreviations follow Holmgren *et al.* ??).

TAXONOMIC ACCOUNT

DIVISION CHLOROPHYTA

Family Polyphysaceae

Genus: *Acetabularia* Lamouroux, 1812[#122]: 185.

Acetabularia calyculus Lamouroux in Quoy & Gaimard, 1824[#60]: 621, pl. 90, figs 6,7.

Reference: Womersley 1984[#73]: 295, figs 101B, 102B-D.

Type Locality: Shark Bay, Western Australia.

Distribution: Widely distributed in tropical and subtropical seas and extending into warm temperate regions.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Anadyomenaceae

Genus: *Anadyomene* Lamouroux, 1812: 187.

Anadyomene brownii (J.E. Gray) J. Agardh, 1887[#18]: 127*

Calomena brownii J. E. Gray, 1866[#123]: 46.

Reference: Sonder, 1871[#124]: 68-69, tab. VI, figs 1-4. (as *Anadyomene muelleri* Sonder).

Type Locality: Australia.

Distribution: Northern Australia, Indonesia, Solomon Islands, Philippines.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Boodleaceae

Genus: *Boodlea* Murray & De Toni, 1889[#52]: 243

Boodlea composita (Harvey) Brand, 1904[#125]: 187 *

Conferva composita Harvey, 1834[#126]: 157.

Reference: Jaasund, 1976[#44]: 11, fig. 23.

Type Locality: Mauritius.

Distribution: Tropical and subtropical Indo-Pacific

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Caulerpaceae

Genus: *Caulerpa* Lamouroux, 1809[#127]: 332.

Caulerpa cactoides (Turner) C. Agardh, 1822[#8]: 439.

Fucus cactoides Turner, 1811[#128]: 90, pl 171.

Reference: Womersley, 1984[#73]: 269, figs 91A, 92C.

Type Locality: Southern coast of Australia.

Distribution: From Dampier, Western Australia, to the Richmond River mouth, New South Wales.
Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Caulerpa cupressoides (Vahl) C. Agardh, 1817[#6]: XXIII.

Fucus cupressoides Vahl, 1802[#129]: 38.

Reference: Weber-van Bosse, 1898[#68]: 323, pls XXVII, XXVIII.

Type Locality: St. Croix, Virgin Is.

Distribution: Widely distributed in tropical seas.

Specimens: West of Hermite I., on sand at 1-6m depth (*J. M. Huisman*, 11.vii.1992; Murdoch).

N.W. shore of Hermite I., on sand at 1-2m depth (*J. M. Huisman*, 12.vii.1992; Murdoch).

Caulerpa fergusonii Murray, 1891[#130]: 212*

Reference: Svedelius, 1906[#131]: 140, fig. 51.

Type Locality: Sri Lanka.

Distribution: Indian Ocean.

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Remarks: The present specimens are slightly larger than those figured by other authors. As mentioned by Svedelius (1906), this species is doubtfully distinct from *C. cactoides*, differing only in the lack of annular constrictions at the base of the upright branches.

Caulerpa lentillifera J. Agardh, 1837[#132]: 173

Reference: Jaasund, 1976: 25, fig. 49.

Type Locality: Ethiopia

Distribution: Tropical Indo-Pacific.

Specimens: West of Hermite I., 1-6 m depth (*J. M. Huisman*, 11.vii.1992; Murdoch ??).

Caulerpa racemosa (Forsskål) J. Agardh, 1873[#133]: 35.

Fucus racemosus Forsskål, 1775[#134]: 191.

Reference: Coppejans, 1992[#135]: 401, figs 4C, D.

Type Locality: Suez, Egypt.

Distribution: Widely distributed in tropical seas.

Specimens: West of Bluebell I., (*J. M. Huisman*, 9.vii.1992; Murdoch).

Caulerpa racemosa (Forsskål) J. Agardh var. *lamourouxii* (Turner) Weber-van Bosse, 1898[#68]: 368*

Fucus lamourouxii Turner, 1816[1815-1819][#136]: 79, pl. 229.

Reference: Weber-van Bosse, 1898: 368, pl. 32, figs 1-7.

Type Locality: Red Sea.

Distribution: Widely distributed in tropical seas.

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Caulerpa racemosa (Forsskål) J. Agardh var. *laetivirens* (Montagne) Weber-van Bosse f. *cylindracea* (Sonder) Weber-van Bosse, 1898: 366, pl. 33, figs 17, 19, 20.

C. cylindracea Sonder, 1845[#64]: 50.

Reference: Womersley, 1984: 270, figs 91B, 92D.

Type Locality: Western Australia.

Distribution: Tropical Western Australia to King Georges Sound, Western Australia.

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Caulerpa racemosa (Forsskål) J. Agardh var. *occidentalis* (J. Agardh) Børgesen, 1907[#137]: 379.

Caulerpa chemnitzia (Esper) Lamouroux var. *occidentalis* J. Agardh, 1873[#133]: 37.

Reference: Taylor, 1960[#138]: 151-155, pl. 17, fig. 6; pl. 18, fig. 5.

Type Locality: Upper Gulf of Mexico to Recife, Brazil.

Distribution: Widely distributed in tropical seas.

Specimens: West of Hermite I., 1-6 m depth (*J. M. Huisman*, 11.vii.1992; Murdoch ??). N.W. shore of Hermite I. (*J. M. Huisman*, 12.vii.1992; Murdoch ??).

Caulerpa serrulata (Forsskål) J. Agardh, 1837[#132]: 174 *

Fucus serrulatus Forsskål, 1775: 189.

Reference: Taylor, 1960: 145-146, pl. 14, fig. 5.

Type Locality: Mokha, Yemen.

Distribution: Widely distributed in tropical seas.

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Caulerpa sertularioides (Gmelin) Howe, 1905[#139]: 576.

Fucus sertularioides Gmelin, 1768[#140]: 151

Reference: Taylor, 1960: 144-145, pl. 13, figs 1-7.

Type Locality: "in coralliis americanis"

Distribution: Widely distributed in tropical seas.

Specimens: N.W. shore of Hermite I., on sand at 1-2m depth (*J. M. Huisman*, 12.vii.1992; Murdoch ??).

Caulerpa taxifolia (Vahl) C. Agardh, 1817[#6]: XXII*

Fucus taxifolius Vahl, 1802[#129]: 36.

Reference: Taylor, 1960: 142, pl. 12, fig. 1.

Type Locality: St. Croix, Virgin Is.

Distribution: Widely distributed in tropical seas.

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Caulerpa verticillata J. Agardh, 1847[#141]: 6*

Reference: Taylor, 1960: 138-139, pl. 10, figs 1, 2.

Type Locality: Not specified.

Distribution: Widely distributed in tropical seas.

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Family Cladophoraceae

Genus: *Cladophoropsis* Børgesen, 1905[#142]: 288

Cladophoropsis sp. *

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Family Codiaceae

Genus: *Codium* Stackhouse, 1797[#143]: xvi, xxiv

Codium geppii *

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Codium sp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Dasycladaceae

Genus: *Bornetella* Munier-Chalmas, 1877[#51]: 816.

Bornetella oligospora Solms-Laubach, 1892[#144]: 87*

Reference: Berger & Kaever, 1992[#4]: 95, figs

Syntype Localities: Macassar, Celebes and Bari, Flores, Indonesia

Distribution: Tropical Indo-Pacific.

Specimens: N.W. shore of Hermite I., on rock at 2 m depth (*J. M. Huisman*, 12.vii.1992; Murdoch ??).

Genus: *Neomeris* Lamouroux, 1816[#47]: 241

Neomeris vanbosseae Howe, 1909[#145]: 80*

Reference: Berger & Kaever, 1992: 108.

Type Locality: Sikka, Flores, Indonesia.

Distribution: Tropical Indo-Pacific

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Siphonocladaceae

Genus: *Boergesenia* J. Feldmann, 1938

Boergesenia forbesii (Harvey) J. Feldmann, 1938[#146]: 1503*

Valonia forbesii Harvey, 1860[#147]: 333

Reference: Jaasund, 1976: 15, fig. 31.

Syntype Localities: Ryukyu-retto, Japan; Sri Lanka.

Distribution: Tropical Indo-Pacific

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Udoteaceae

Genus: *Halimeda* Lamouroux, 1812[#122]: 186

Halimeda cuneata Hering in Krauss, 1846[#148]: 214.

Reference: Womersley 1984: 244, figs 81C, 82E-G. Hillis-Colinvaux 1980[#41]: 124-126, figs 36, 61.

Type Locality: "Natalbai" (Durban), South Africa

Distribution: Indian Ocean; south-western Pacific Ocean.

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Halimeda macroloba Decaisne, 1841:118 *

Reference: Hillis-Colinvaux, 1980[#41]:

Type Locality: Red Sea

Distribution:

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Remarks: The present specimens are not entirely compatible with published accounts of *H. macroloba*. Segments in the Montebello Islands plants are

Halimeda velasquezii W.R. Taylor, 1962: 177 *

Reference: Hillis-Colinvaux, 1980: 117-118, fig. 32.

Type Locality: Santa Ana, Cagayan Province, Luzon I., Philippines

Distribution: Indo-Pacific.

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Halimeda spp.

Type Locality:

Genus: *Penicillus* Lamarck, 1813: 297

Penicillus nodulosus Blainville, 1834: 553.

Reference: Harvey, 1858: pl. 22 (as *Penicillus arbuscula*); Gepp & Gepp, 1911: 86-87, figs 172-175.

Type Locality: Shark Bay, Western Australia.

Distribution: Western Australia; 'Ile Toud', Pacific Ocean.

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Genus: *Udotea* Lamouroux, 1812: 186.

Udotea argentea Zanardini, 1858: 290.

Reference: Gepp & Gepp, 1911: 125-127, figs 15, 21, 22c-d, 25a, 57-62.

Type Locality: Suez, Egypt.

Distribution: Tropical Indo-Pacific.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Udotea flabellum (Ellis & Solander) Howe, 1904: 94*

Corallina flabellum Ellis & Solander, 1786: 124, pl. 24.

Reference: Littler & Littler, 1990: 226, fig. 12.

Type Locality: West Indies.

Distribution: Widespread in tropical regions.

Specimens: N. W. shore of Hermite I., in sand at 1-2m depth (*J. M. Huisman*, 12.vii.1992; Murdoch).

Udotea glaucescens Harvey ex J. Agardh, 1887: 70*

Reference: Gepp & Gepp, 1911: 113-114, figs 3, 5, 7, 8, 43.

Type Locality: Tonga.

Distribution: Tropical Indo-Pacific.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Order ULVALES

Family Ulvaceae

Genus: *Enteromorpha* Link, 1820: 5.

Enteromorpha paradoxa (Dillwyn) Kützing, 1845: 247; 1856, pl. 35, I.

Reference: Womersley, 1984: 154, figs 48B, 49C, D.

Type Locality: Bangor, Wales.

Distribution: Probably cosmopolitan, at least in temperate seas (Womersley, 1984)

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Enteromorpha flexuosa (Wulfen) J. Agardh, 1883[#150]: 126.

Ulva flexuosa Wulfen, 1803[#149]: 1

Reference: Womersley, 1984:

Type Locality: Trieste, Italy.

Distribution: Probably cosmopolitan.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Ulva* Linnaeus

Ulva sp.

Distribution:

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Order SIPHONOCLADALES

Family Valoniaceae

Genus: *Dictyosphaeria* Decaisne ex Endlicher, 1842a: 328??

Dictyosphaeria cavernosa (Forsskål) Børgesen, 1932:2.*

Ulva cavernosa Forsskål, 1775: 187.

Reference: Taylor, 1960: 116, pl. 7, fig. 5.

Syntype Localities: "Gomfodae" (Al-Qunfidha), Saudi Arabia; Mokha, Yemen.

Distribution: Widely distributed in tropical and subtropical seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Ventricaria* Olsen & J. West 1988: 104.

Ventricaria ventricosa (J. Agardh) Olsen & J. West, 1988: 104.

Valonia ventricosa J. Agardh, 1887: 96.

Reference: Olsen & West, 1988

Syntype Localities: St. Croix, Virgin Is; Guadeloupe.

Distribution: Widely distributed in tropical and subtropical seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

DIVISION PHAEOPHYTA

Order DICTYOTALES

Family Dictyotaceae

Genus: *Dictyopteris* Lamouroux, 1809a: 332.

Dictyopteris serrata / hoytii **

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Dictyopteris sp.

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Genus: *Dictyota* Lamouroux, 1809a: 331.

Dictyota ciliolata Kützing, 1859: 12, pl. 27, fig. 1.

Reference:

Type Locality: La Guaira, Venezuela

Distribution: Widely distributed in tropical and subtropical waters.

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Dictyota spp.

Genus: *Lobophora* J. Agardh, 1894a: 21.

Lobophora variegata (Lamouroux) Womersley, 1967: 221.

Dictyota variegata Lamouroux, 1809a: 40

References: Womersley, 1987: 255, figs 91F,G, 92A. Allender & Kraft, 1983: 81, figs 4G-H, 5A-B.

Type Locality: Antilles

Distribution: Tropical to warm temperate coasts in most seas.

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Genus: *Padina* Adanson, 1763: 13, 586.

Padina spp.

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Genus: *Spatoglossum* Kützing, 1843: 339.

Spatoglossum sp.

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Genus: *Styopodium* (Kützing) J. Agardh,

Styopodium sp.

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Order ECTOCARPALES

Family Ectocarpaceae

Genus: *Feldmannia* Hamel, 1939b: xi.

Feldmannia indica (Sonder) Womersley & Bailey, 1970: 288*

Ectocarpus indicus Sonder in Zollinger, 1854: 2, 3.

Reference: Clayton

Type Locality: Bima Bay, Sumbawa I., Indonesia.

Distribution:

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Order FUCALES

Family Cystoseiraceae

Genus: *Cystoseira* C. Agardh, 1820b: 50.

Cystoseira trinodis (Forsskål) C. Agardh, 1820: 67.

References: Womersley, 1987: 357, figs 128B, 131E,F. Papenfuss & Jensen, 1967: 17, figs 1, 2.

Type Locality: Red Sea.

Distribution: Northern Australia around to Victor Harbour, South Australia; Red Sea; Indian Ocean; Indonesia.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Family Sargassaceae

Genus: *Sargassum* C. Agardh, 1820: 1

Sargassum decurrens

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Sargassum spp.

Genus: *Turbinaria* Lamouroux,

Turbinaria

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Order SCYTOSIPHONALES

Family Scytosiphonaceae

Genus: *Colpomenia* (Endlicher) Derbès & Solier, 1851: 95.

Colpomenia sinuosa (Mertens ex Roth) Derbès & Solier in Castagne, 1851: 95.

Ulva sinuosa Mertens ex Roth, 1806: 327, pl. 12

References: Womersley, 1987: 297, figs 107A, 108E,F. Fuhrer *et al.*, 1981: 64, pl. 99.

Type Locality: Cádiz, Spain.

Distribution: Almost cosmopolitan.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Hydroclathrus* Bory, 1825a: 419.

Hydroclathrus clathratus (C. Agardh) Howe, 1920: 590.

Encoelium clathratum C. Agardh, 1822a: 412.

References: Womersley, 1987: 300, figs 109A, 110A,B. Fuhrer *et al.*, 1981: pl. 100.

Type Locality: Uncertain.

Distribution: Widely distributed in tropical to warm temperate seas.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Order SPHACELARIALES

Family Sphacelariaceae

Genus: *Sphacelaria* Lyngbye in Hornemann, 1818: pl. 1600.

Sphacelaria rigidula Kützing, 1843b: 292

Reference: References: Womersley, 1987: 166, figs 51D, 54A-G. Prud'homme van Reine, 1982: 203, figs 508-554.

Type Locality: Red Sea.

Distribution: Cosmopolitan.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

DIVISION RHODOPHYTA

ORDER ACROCHAETIALES

Family Acrochaetiaceae

Genus: *Audouinella* Bory de Saint-Vincent, 1823: 340.

Audouinella daviesii (Dillwyn) Woelkerling, 1971: 28, figs 7, 22.

Conferva daviesii Dillwyn, 1809: 73, suppl. pl. F.

Reference: Woelkerling, 1971: 28, figs 7, 22.

Type Locality: Bantry Bay, Ireland.

Distribution: Cosmopolitan

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Audouinella thuretii (Bornet) Woelkerling, 1971: 36.

Chantransia thuretii Bornet. Collins, 1900: 49 (nom. nud.)

Reference: Woelkerling, 1971: 36.

Type Locality: Cherbourg, France.

Distribution: Nearly cosmopolitan (Woelkerling, 1971)

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Order BONNEMAISONIALES

Family Bonnemaisioniaceae

Genus: *Asparagopsis* Montagne, 1840: XV.

Asparagopsis taxiformis (Delile) Trevisan, 1845: 45.

Fucus taxiformis Delile, 1813: 151, 295, pl. 57, fig. 2.

Reference: Cribb, 1983: 28, pl. 4, figs 1-2.

Type Locality: Alexandria, Egypt.

Distribution: Cosmopolitan in warmer seas.

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Order CERAMIALES

Family Ceramiaceae

Genus: *Anotrichium* Nägeli, 1862: 397.

Anotrichium tenue (C. Agardh) Nägeli, 1862: 399.

Griffithsia tenuis C. Agardh, 1828: 131.

Reference: Baldock, 1976: 556, figs 59-64, 90.

Type Locality: Venezia, Italy.

Distribution: Widely distributed in all tropical and subtropical oceans except for the eastern Atlantic (Price & Scott, 1992).

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Genus: *Antithamnion* Nägeli, 1847: 202.

Antithamnion antillanum Børgesen, 1917: 226, figs 213-216

Reference: Price & Scott, 1992: 69-72, fig. 20A-C.

Type Locality: In the Harbour near Charlotte Amalia, St. Thomas, Virgin Is.

Distribution: Widespread in tropical seas

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Genus: *Antithamnionella* Lyle, 1922: 348.

Antithamnionella breviramosa. (Dawson) Wollaston ex Womersley & Bailey 1970: 322

Reference: Millar 1990: 388, figs 40A-D.

Type Locality: Santa Catalina Island, California.

Distribution: Widespread in warmer waters.

Specimens: (J. M. Huisman, ?.vii.1992; Murdoch).

Genus: *Balliella* Itono & Tanaka, 1973: 249

Balliella subcorticata (Itono) Itono & Tanaka, 1973: 250.

Antithamnion subcorticatum Itono, 1969: 40, fig. 7

Reference: Itono & Tanaka, 1973

Type Locality: Yoronjima, Okinawa-gunto, Ruykyu-retto, Japan

Distribution: Australia - Montebello Is.; World - Philippines, Japan

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Genus: *Centroceras* Kützing, 1841: 731.

Centroceras clavulatum (C. Agardh) Montagne, 1846b: 140

Ceramium clavulatum C. Agardh, 1822b: 2

Reference: Price & Scott, 1992: 81-82, fig 25A-E.

Type Locality: Callao, Peru.

Distribution: Australia - widespread; World - widespread in warmer waters.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Genus: *Ceramium* Roth, 1797: 146

Ceramium codii (Richard) G. Mazoyer, 1938: 324.

Ceramothamnion codii Richards, 1901: 264.

Reference: Price & Scott, 1992: 86-88, fig 26A-D.

Type Locality: Epiphytic on *Codium*, Bermuda.

Distribution: Australia (Queensland, Western Australia); Central and Western tropical Pacific Ocean; southern Japan; Mauritius; Tanzania; Mediterranean; tropical Atlantic Ocean; southern England; Baltic Sea (Price & Scott, 1992)

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Ceramium flaccidum (Harvey ex Kützing) Ardissonne, 1871: 40.

Hormoceras flaccidum Harvey ex Kützing, 1862: 21.

Reference: Womersley, 1978: 234, figs 4A-D, 14E-H.

Type Locality: Kilkee, County Clare, Eire.

Distribution: Widely distributed in cool-temperate to tropical oceans (Price & Scott 1992).

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Ceramium isogonum Harvey, 1855: 557

Reference: Womersley, 1978: 227, figs 3A, 12; Price & Scott, 1992: 95-97, fig. 29A-C.

Type Locality: Garden I., Western Australia.

Distribution: Australia - wide.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Ceramium sympodiale Dawson, 1957a: 121, fig. 27c-d.

Reference: Price & Scott, 1992: 109-110, fig. 35A-E.

Type Locality: Rigili I., Eniwetak Atoll, Marshall Islands.

Distribution: Northern Australia; Solomon Is., Eniwetak Atoll; Hateruma I. (Ryukyu Archipelago)
(Price & Scott, 1992)

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Ceramium spp.

Genus: *Crouania* J. Agardh, 1842: 83.

Crouania attenuata (C. Agardh) J. Agardh, 1842: 83.

Mesogloia attenuata C. Agardh, 1824: 51

Reference: Price & Scott, 1992: 117-120, fig. 38A-D, 39A-B.

Type Locality: "In mari Atlantico"

Distribution: Widespread in temperate and tropical seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Griffithsia* C. Agardh, 1817: XXVIII.

Griffithsia heteromorpha Kützing, 1863: 2, pl. 3, figs a, b.

Reference: Price & Scott, 1992: 121-123, fig. 40A-B.

Type Locality: New Caledonia.

Distribution: Tropical Indo-West Pacific and tropical western Atlantic Ocean (Price & Scott, 1992)

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Griffithsia sp.

Genus: *Monosporus* Solier in Castagne, 1845: 242.

Monosporus indicus Børgesen 1931a: 12, fig. 8.

Reference: Huisman & Kraft, 1982: 189, fig. 38

Type Locality: Bombay, India.

Distribution: Indo-Pacific, in warmer waters.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Pleonosporium* (Nägeli) Nägeli ex Hauck,

Pleonosporium caribaeum (Børgesen) R. E. Norris, 1985: 61.

Mesothamnion caribaeum Børgesen, 1917: 208.

Reference: Norris, 1985

Type Locality: St. John, off Annaberg, Danish West Indies.

Distribution: Widely distributed in tropical and subtropical seas

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Seirospora* Harvey, 1846: 1.

Seirospora orientalis Kraft, 1988: 2

Reference: Kraft, 1988: 1-11, figs 2-25.

Type Locality: One Tree island, Capricorn Group, Great Barrier Reef, Queensland, Australia.

Distribution: Known from the Capricorn Group, Queensland, and the Houtman Abrolhos and Monte Bello Islands, Western Australia.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Spyridia* Harvey, 1833: 336.

Spyridia filamentosa (Wulfen) Harvey, 1833: 337.

Fucus filamentosus Wulfen, 1803: 64.

Reference: Womersley & Cartledge, 1975: 222, figs 1, 3A,B.

Type Locality: Adriatic Sea.

Distribution: Widely distributed in tropical and warm temperate oceans (Price & Scott 1992).

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Tiffaniella* Doty & Menez, 1960: 135.

Tiffaniella cymodoceae (Børgesen) Gordon, 1972: 121, figs 39D-F, 40A-E.

Spermothamnion cymodoceae Børgesen, 1952: 54, figs 27, 28.

Reference: Gordon, 1972: 121, figs 39D-F, 40A-E.

Type Locality: Mauritius, epiphytic on *Cymodocea*

Distribution: Southern and western Australia; Mauritius.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Wrangelia* C. Agardh, 1828: 136.

Wrangelia argus (Montagne) Montagne, 1856: 444.

Griffithsia argus Montagne, 1841 (1839-1842): 176, pl. 8, fig. 4 j-l, n-o.

Reference: Price & Scott, 1992: 134-136, fig. 46A-E.

Type Locality: Roque del Gando, Islas Canarias.

Distribution: Widely distributed in tropical seas.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Family Dasyaceae

Genus: *Heterosiphonia* Montagne, 1842b: 4.

Heterosiphonia crassipes (Harvey) Falkenberg, 1901: 655.

Type Locality: Jetty Reef, Rottnest I., Western Australia.

Distribution: Indian Ocean; Coffs Harbour, Lord Howe I., New South Wales.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Family Delesseriaceae

Genus: *Hypoglossum* Kützing, 1843: 444.

Hypoglossum caloglossoides Wynne & Kraft, 1985: 15.

Reference: Wynne & Kraft, 1985: 9-19, figs 1-19.

Type Locality: South Passage, Lord Howe Island, New South Wales

Distribution: Northern Australia, Samoa, Marshall Islands.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Hypoglossum heterocystideum (J. Agardh) J. Agardh, 1898: 187.

Reference: Womersley & Shepley, 1982: 326, figs 1B,C, 4 (as *Hypoglossum hypoglossoides*).

Type Locality: Port Phillip Bay, Victoria.

Distribution: Montebello Islands, Western Australia, around southern Australia and Tasmania to New South Wales (including Lord Howe Island).

Remarks: The present specimens have more rounded apices than is generally described in the literature (e.g. Millar, 1990), but Womersley & Shepley (1982) suggest that this is a variable feature.

Genus: *Martensia* Hering, 1841: 92.

Martensia fragilis Harvey, 1854: 145.

Reference: Millar, 1990: 418-420, figs 53C-E.

Type Locality: Belligam Bay, Ceylon.

Distribution: Probably pan-tropical (Millar, 1990)

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Remarks: The Montebello Islands specimen conforms to the description of *M. pavonia* (J. Agardh) J. Agardh as described by Price & Scott (1992). This species was included in the synonymy of *M. fragilis* by Millar (1990).

Genus: *Platysiphonia* Børgesen, 1931b: 28.

Platysiphonia delicatula (Clemente) Cremades in Cremades & Perez-Cirera, 1990: 492.

Reference: Børgesen, 1931: 21-29, figs 1-5; Ballantine & Wynne, 1985: 461-463, figs 7, 8 (as *Platysiphonia miniata* (C. Agardh) Børgesen).

Type Locality: Sanlúcar de Barrameda, Cadiz, Spain

Distribution: Widely distributed.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Remarks: This species is more widely known as *Platysiphonia miniata* (C. Agardh) Børgesen.

Family Rhodomelaceae

Genus: *Acanthophora* Lamouroux, 1813: 132.

Acanthophora spicifera (Vahl) Børgesen, 1910[#115]: 201.

Fucus spiciferus Vahl, 1802[#129]: 44.

Reference: Cribb, 1983: 105-106, pl. 32, fig. 2.

Type Locality: St. Croix, Virgin Islands.

Distribution: Widely distributed in tropical waters.

Specimens: North-East tip of Bluebell I., Montebello Is. (*J. M. Huisman*, 12.vii.1992; Murdoch JH 238).

Genus: *Amansia* Lamouroux, 1809: 332.

Amansia glomerata C. Agardh, 1822a: 194.

Reference: Cribb, 1983: 106, pl. 31, fig. 1.

Syntype Localities: Hawaiian Is.; "Ravak" (Lawak), Waigeo I., Moluccas, Indonesia.

Distribution: Widely distributed in tropical seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Amansia sp nov.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Chondria* C. Agardh, 1817:xviii

Chondria sp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Cliftonaea* Harvey 1863: pl. 279.

Cliftonaea pectinata (Harvey) Harvey, 1863: pl. 279.

Cliftonia pectinata Harvey, 1859a: pl. 100.

Reference: Lucas & Perrin, 1947: 289, fig. 135.

Type Locality: Garden I., Western Australia.

Distribution: Western Australia.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Endosiphonia* Zanardini, 1878: 35.

Endosiphonia spinuligera Zanardini, 1878[#222]: 35.

Reference: Falkenberg, 1901[#82]: 571-573, pl. 13, fig. 12; Dawson, 1956[#224]: 58, fig. 61.

Type Locality: Wokam I., Aru Is., Indonesia.

Distribution: Indonesia; Philippines; Marshall Is.; Northern Australia; Lord Howe I.

Specimens: North-East tip of Bluebell I. (*J. M. Huisman*, 12.vii.1992; Murdoch JH 212, 239).

West of Hermite I. (*J. M. Huisman*, 12.vii.1992; Murdoch JH 237).

Genus: *Exophyllum* Weber-van Bosse, 1911: 29.

Exophyllum wentii Weber-van Bosse, 1911: 29.

References: Weber-van Bosse, 1928: ; Tanaka, 1950: 176-179, figs 2, 3, pl. II.

Syntype Localities: Savu I. and Borneo Bank, Indonesia; North Ibian I., Sulu Prov., Sulu Archipelago, Philippines.

Distribution: Indonesia; Philippines; Hawaii; Japan; Montebello Islands, Western Australia.

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Remarks: This species is newly recorded for Australia.

Genus: *Herposiphonia* Nägeli, 1846: 238

Herposiphonia secunda (C. Agardh) Ambrohn, 1880: 197.

Hutchinsia secunda C. Agardh, 1824: 149

Reference: Millar, 1990: 451-452, figs 68A-C.

Type Locality: Sicily, Mediterranean

Distribution: Widespread in warmer waters

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Genus: *Kuetzingia*

Kuetzingia sp. nov.

Genus: *Laurencia* Lamouroux, 1813: 42

Laurencia brongniartii J. Agardh, 1841: 20

Reference: Saito & Womersley, 1974: 839, figs 4C,D 20,21.

Type Locality: Martinique, West Indies.

Distribution: Point Peron, Western Australia, around northern Australia to Mossy Point and Lord Howe I., New South Wales, isolated records in South Australia. West Indies; Indonesia; Japan; New Caledonia; South Africa.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Laurencia spp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Genus: *Leveillea* Decaisne, 1839: 375

Leveillea jungermannioides (Hering & Martens) Harvey, 1855: 539.

Amansia jungermannioides Hering & Martens in Martens & Hering, 1836: 485

Reference: Price & Scott, 1992: 196-198, fig 71A, B.

Type Locality: Tor, Sinai Peninsula, Egypt.

Distribution: Widely distributed in tropical and subtropical Indo-west Pacific.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Genus: *Melanamansia* R. E. Norris, 1988: 217.

Melanamansia pinnatifida (Harvey) R. E. Norris, 1988: 222.

Amansia pinnatifida Harvey, 1862: pl. CCXXII.

Reference: Harvey, 1862: pl. CCXXII.

Type Locality: King Georges Sound, Western Australia.

Distribution: Southern and western Australia.

Specimen: West (*J. M. Huisman*, ?vii.1992; Murdoch).

Genus: *Neurymenia* J. Agardh,

Neurymenia fraxinifolia (Mertens ex Turner) J. Agardh, 1863: 1135.

Fucus fraxinifolius Mertens ex Turner, 1811: 140.

References: Trono, 1972: 139, fig. 20; Jaasund, 1976: 133, fig. 271; Falkenberg, 1901: 444, t. 7, figs 20-29.

Type Locality: "East Indies"

Distribution: Tropical and subtropical Indo-pacific.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Periphykon* Weber-Van Bosse, 1929[#227]: 255.

Periphykon beckeri Weber-van Bosse, 1929:

Reference: Weber-van Bosse, 1929: 255-261

Type Locality: Southern Java.

Distribution: Southern Java; Montebello Is.

Specimens: Epiphytic on *Halimeda macroloba* (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Polysiphonia* Greville, 1823: pl. 90.

Polysiphonia ferulacea Suhr ex J. Agardh, 1863: 980.

Reference: Price & Scott, 1992: 202-204, fig. 73A-E.

Type Locality: Several localities listed; lectotype needs selecting (Price & Scott, 1992).

Distribution: Widely distributed, mostly in tropical seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Pterosiphonia* Falkenberg, 1897: 443.

Pterosiphonia pennata (Roth) Falkenberg, 1901: 263, t. 2, figs 1-2.

Ceramium pennatum Roth, 1800: 111.

Reference: Millar, 1990: 455-456, figs 69C, D.

Type Locality: Mediterranean.

Distribution: Widely distributed.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch)

Genus: *Spirocladia* Børgesen, 1933[#223]: 14.

Spirocladia barodensis Børgesen, 1933: 1-15, figs 1-10.

Reference: Millar, 1990: 453-455.

Type Locality: Baroda, India.

Distribution: Australia - Probably from the Houtman Abrolhos, Western Australia, around northern Australia to Coffs Harbour, New South Wales. World - India.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Tolypocladia* Schmitz in Schmitz & Hauptfleisch, 1897: 441.

Tolypocladia glomerulata (C. Agardh) Schmitz in Schmitz & Hauptfleisch, 1897: 442.

Hutchinsia glomerulata C. Agardh, 1824: 158.

Reference: Price & Scott, 1992: 219-221, fig. 81A-D.

Type Locality: Shark Bay, Western Australia.

Distribution: Widely distributed in tropical Indo-west Pacific (Price & Scott 1992).

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

ORDER GRACILARIALES

Family Gracilariaceae

Genus: *Gracilaria* Greville, 1830: 121

Gracilaria euchenmoides Harvey, 1860a: 331

Reference: Trono & Ganzon-Fortes, 1988[#221]: 168, figs 119A, B.

Syntype Localities: various, all in Ryukyu-retto, Japan.

Distribution: Tropical Indo-Pacific.

Specimens: West of Hermite I., epilithic at 3-4 m depth. (J. M. Huisman, 11.vii.1992; Murdoch).

ORDER NEMALIALES

Family Galaxauraceae

Genus: *Actinotrichia* Decaisne, 1842: 118.

Actinotrichia fragilis (Forsskål) Børgesen, 1932: 6.

Fucus fragilis Forsskål, 1775[#134]: 6.

Reference: Cribb, 1983[#91]: 25, pl. 8, fig. 1; Jaasund, 1976: 65, fig. 131

Type Locality: Mokha, Yemen.

Distribution: Widely distributed in tropical waters.

Specimens: (J. M. Huisman, ? .vii.1992; Murdoch).

Genus: *Galaxaura* Lamouroux, 1812: 185; 1816: 259

Galaxaura marginata (Ellis & Solander) Lamouroux, 1816: 264.

Corallinamarginata Ellis & Solander, 1786: 115, pl. 22, fig. 6.

Reference: Huisman & Borowitzka, 1990: 157-161, figs 14-27.

Type Locality: Bahama Islands, West Indies

Distribution: Australia - throughout, although less common in colder waters. World - widely distributed in warmer seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Galaxaura obtusata (Ellis & Solander) Lamouroux, 1816: 262

Corallinaobtusata Ellis & Solander, 1786: 113, pl. 22, fig. 2.

Reference: Huisman & Borowitzka, 1990: 161-163, figs 28-38.

Type Locality: Bahama Islands, West Indies.

Distribution: Widely distributed in warmer seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Galaxaura rugosa (Ellis & Solander) Lamouroux, 1816: 263.

Corallinarugosa Ellis & Solander, 1786: 115, pl. 22, fig. 3.

Reference: Huisman & Borowitzka, 1990: 153-157, figs 1-13.

Type Locality: Jamaica.

Distribution: Widely distributed in warmer seas.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Genus: *Scinaia* Bivona-Bernardi, 1822: 232.

Scinaia tsinglanensis Tseng, 1941: 106.

Reference: Huisman, 1986: 282-284, figs 36-47.

Type Locality: Tsinglan-Kang, Wenchang, Hainan, China

Distribution: Australia - widely distributed throughout Australia. World - Hainan, China (Tseng, 1941).

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Liagoraceae

Liagora spp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Order RHODYMENIALES

Family Champiaceae

Genus: *Champia* Desvaux, 1808: 245

Champia spp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Family Lomentariaceae

Genus: *Lomentaria* Lyngbye, 1819: 101

Lomentaria corallicola Børgesen, 1939: 113.

Reference: Price & Scott, 1992:

Type Locality: Kharg Is., Gulf of Iran.

Distribution: Northern Australia, Iran, Natal.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Family Rhodymeniaceae

Genus: *Botryocladia* Kylin, 1931: 17.

Botryocladia leptopoda (J. Agardh) Kylin, 1931: 17, pl. 6, fig. 14.

Reference: Jaasund, 1976: 103, fig. 209.

Type Locality: Moreton Bay, Queensland.

Distribution: Northern and western Australia; Red Sea; Indian Ocean; Indonesia; Japan.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Botryocladia skottsbergii (Børgesen) Levring, 1941: 645, footnote.

Chrysiomenia skottsbergii Børgesen, 1924: 307, figs. 49, 50.

Reference: Jaasund, 1976: 103, fig. 210

Type Locality: Easter Island.

Distribution: Probably widely distributed in warmer waters.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Coelarthrum* Børgesen, 1910[#115]: 192.

Coelarthrum cliftonii (Harvey) Kylin, 1931: 15.

Chylocladia cliftonii Harvey, 1855: 22.

References: Norris, 1986: 537, figs 6-8. Harvey, 1858: pl. 57 (as *Chylocladia cliftoni*).

Type Locality: Fremantle, Western Australia.

Distribution: The Montebello Is. to Fremantle, Western Australia; South Africa.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Coelarthrum opuntia (J. Agardh) Børgesen, 1937[#94]: 333.

Chondria opuntia J. Agardh, 1841:21.

Reference: Lucas & Perrin, 1947: 208, fig. 73 (as *Erythrocolon muelleri* (Sonder) De Toni);

Børgesen, 1937: 333-335, figs 9, 10.

Type Locality: 'ex libra orientali' .

Distribution: Australia - Western and southern Australia, including Tasmania; India; Pakistan; Indonesia; Japan.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Remarks: Australian specimens of this species have previously been referred to the synonymous *C. muelleri* (Sonder) Børgesen.

Genus: *Gloiocladia* J. Agardh, 1842: 87.

Gloiocladia rubrispora (Searles) Norris 1991: 592.

Gloioderma rubrisporum Searles 1984: 217, figs 1-5.

Reference:

Type Locality: Onslow Bay, North Carolina, U.S.A.

Distribution: North Carolina, Southern Florida, U.S.A.; Coffs Harbour, New South Wales; Montebello Is., Western Australia.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Halichrysis* (J. Agardh) Schoesboe ex Schmitz, 1889: 444 (nom. nud.), Schmitz & Hauptfleisch, 1897: 401.

Halichrysis sp. nov.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Genus: *Rhodymenia* Greville, 1830: xiviii

Rhodymenia sp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Order CORALLINALES

Family Corallinaceae

Genus: *Amphiroa* Lamouroux, 1812: 185.

Amphiroa anceps (Lamarck) Decaisne, 1842: 125.

Corallina anceps Lamarck, 1815: 238.

Reference: Millar, 1990: 315-317, figs 9A-H.

Type Locality: "les mers Australes ou de la Nouv. Holl."

Distribution: Indo-West Pacific Ocean.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Amphiroa ephedraea (Lamarck) Decaisne, 1842: 124.

Corallina ephedraea Lamarck, 1815: 238.

Reference:

Type Locality: "les mers Australes ou de la Nouv. Holl."

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Amphiroa foliacea Lamouroux in Quoy & Gaimard, 1824: 628, pl. 93: figs 2, 3.

Reference:

Type Locality: Mariana Is.

Distribution:

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Amphiroa fragilissima (Linnaeus) Lamouroux, 1816: 298.

Corallina fragilissima Linnaeus, 1758: 806.

Reference:

Type Locality: Jamaica

Distribution:

Specimens: (*J. M. Huisman*, ? .vii.1992; Murdoch).

Genus: *Jania* Lamouroux, 1812: 186

Jania rubens (Linnaeus) Lamouroux, 1816: 272, pl. IX, fig. 6, 7.

Corallinarubens Linnaeus, 1758: 806.

Reference:

Type Locality: Europe.

Distribution:

Specimens: (*J. M. Huisman*, 9.vii.1992; Murdoch).

Order GELIDIALES

Family Gelidiaceae

Gelidium/Pterocladia sp.

Family Gelidiellaceae

Genus: *Gelidiella* Feldmann & Hamel, 1934[#226]: 529.

Gelidiella acerosa (Forsskål) Feldmann & Hamel, 1934: 533.

Fucus acerosus Forsskål 1775[#134]: 190.

Reference: Price & Scott, 1992[#225]: 25-27, fig. 4.

Type Locality: Mokha, Yemen.

Distribution: Widely distributed in tropical seas.

Specimen: West of Hermite I., from 1-6 m depth. (*J. M. Huisman*; 11.vii.1992; Murdoch JH 235).

Order GIGARTINALES

Family Corynomorphaceae

Genus: *Corynomorpha* J. Agardh, 1872: 3.

Corynomorpha prismatica (J. Agardh) J. Agardh, 1872: 4.

Dumontia prismatica J. Agardh, 1841: 19.

Reference: Børgesen, 1937: 323-324, figs 1, 2.

Type Locality: India.

Distribution: Indian Ocean.

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Dumontiaceae

Genus: *Gibsmithia* Doty, 1963: 458.

Gibsmithia hawaiiensis Doty, 1963: 458.

Reference: Kraft, 1986: 425-433, figs. 2-22.

Type Locality: Waikiki, Oahu, Hawaii.

Distribution: Hawaiian Islands; southern Japan; southern Luzon (Philippines); Papua New Guinea; New Caledonia; Great Barrier Reef & Montebello Islands, Australia (Kraft 1986 & this record).

Specimens: (*J. M. Huisman*, ?.vii.1992; Murdoch).

Family Halymeniaceae

Genus: *Epiphloea* J. Agardh, 1890: 18, 1894: 48.

Epiphloea bullosa (Harvey) Schmitz, 1894: 27.

Schizymenia ? bullosa Harvey, 1863: pl. 277.

Reference: Harvey, 1863: pl. 277 (as *Schizymenia ? bullosa*).

Type Locality: Fremantle, Western Australia.

Distribution: Western and southern Australia, Lord Howe I.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Family Hypneaceae

Genus: *Hypnea* Lamouroux, 1813: 131

Hypnea sp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Family Kallymeniaceae

Genus: *Kallymenia* J. Agardh,

Kallymenia cribrosa Harvey, 1855: 555.

Reference:

Type Locality: Fremantle, Western Australia

Distribution: Western and southern Australia.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Kallymenia sp.

Reference:

Type Locality:

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Family Peyssonneliaceae

Genus: *Peyssonnelia* Decaisne, 1841: 168.

Peyssonnelia sp.

Reference:

Type Locality:

Distribution:

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Family Rhizophyllidaceae

Genus: *Portieria* Zanardini, 1851: 33.

Portieria hornemannii (Lyngbye) P.C. Silva in Silva *et al.*, 1987: 129.

Desmia hornemannii Lyngbye, 1819: 35, pl. 7c.

Reference: Cribb, 1983: 35-36, pl. 8, fig. 2 (as *Chondrococcus hornemannii* (Lyngbye) Schmitz).

Type Locality: Probably Red Sea.

Distribution: Tropical Indo-Pacific.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Family Sebdeniaceae

Genus: *Sebdenia* (J. Agardh) Berthold,

Sebdenia flabellata (J. Agardh) Parkinson, 1980: 12.

Isymenia flabellata J. Agardh 1899: 62, 66.

Reference: Schneider & Wynne, 1991: 471-474, fig. 1.

Lectotype Locality: Guadeloupe.

Distribution: Widely distributed in tropical and warmer seas.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Family Solieriaceae

Genus: *Sarconema* Zanardini, 1858: 256.

Sarconema filiforme (Sonder) Kylin, 1932: 22

Reference: Papenfuss & Edelstein, 1974:

Type Locality: Western Australia.

Distribution: Indo-Pacific.

Specimens: (J. M. Huisman, ?vii.1992; Murdoch).

Genus: *Solieria* J. Agardh, 1842: 156.

Solieria robusta (Greville) Kylin, 1932: 18.

Reference: Min-Thein & Womersley, 1976; Gabrielson & Kraft, 1984: 219-222, figs 1A, B; 2A, B.

Type Locality: "Nov. Holl" [probably near Fremantle, Western Australia (Min-Thein & Womersley, 1976)].

Distribution: Indo-Pacific.

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Order GONIOTRICHALES

Family Goniotrichaceae

Genus: *Stylonema* Reinsch, 1875

Stylonema alsidii (Zanardini) Drew 1956: 72

Reference:

Type Locality: Trieste, Italy.

Distribution:

Specimens: (*J. M. Huisman*, ?vii.1992; Murdoch).

Remarks: Wynne (1985) discusses the reasons for the use of *Stylonema* over the more well known *Goniotrichum*.

Acknowledgements

Sincere thanks to the organisers of the expedition, Ian McKernan and Scott Bird, who also acted as my 'buddies' on the majority of dives. Several people have examined specimens and either identified them or assisted in the process - many thanks to Dr Gerry Kraft of the University of Melbourne (*Gracilaria eucheumoides*), Professor Michael Wynne of Michigan University (*Exophyllum wentii*) and Roberta Townsend of Murdoch University (Corallines, *Gloiocladia tyoensis*).

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