

**CHECKLIST AND BIBLIOGRAPHY  
OF THE MARINE BENTHIC ALGAE  
FROM THE MARIANA ISLANDS  
(GUAM AND CNMI)**

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**UNIVERSITY OF GUAM MARINE LABORATORY**

**Technical Report No. 107**

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of the Marine Benthic Algae  
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(Guam and CNMI)**

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**Cover:** *Halimeda macroloba* Decaisne, Pago Bay, Guam,  
19 cm high including holdfast.

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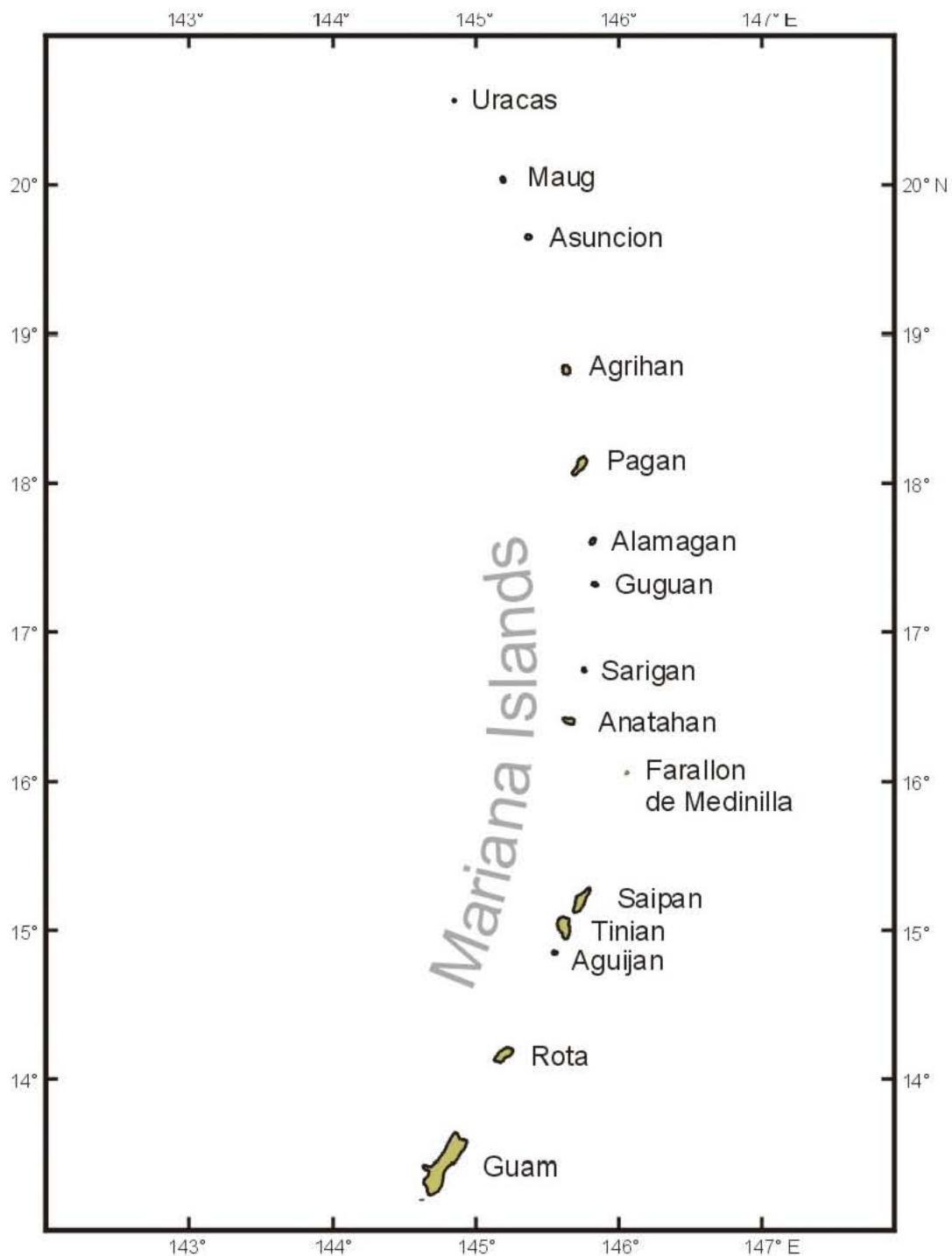
## INTRODUCTION

The checklist and bibliography of the marine benthic algae from the Mariana Islands (Figure 1), i.e., Territory of Guam and the Commonwealth of the Northern Mariana Islands, serve as an update of the Marianas algal bibliography (see Tsuda and Wray, 1977; Tsuda, 1981a) and an extension of the Guam algal checklist (Tsuda, 1981b; Lobban and Tsuda, 2003) to the entire island chain. Of the 148 references listed in the Literature Cited section, 107 of the citations are published papers. One unpublished M.S. thesis (Potter, 1986) discusses the ecomorphs of the brown alga *Dictyota bartayresiana*. The remaining 40 references are technical/environmental reports, i.e., grey literature, which mention or list marine benthic algae with no citation of voucher specimens. Three of the 40 reports represent algal checklist and bibliographies for other Micronesian islands (Tsuda, 2002a, 2002b, 2002c). The technical reports which were printed under the auspices of the University of Guam Marine Laboratory serve as the major sources of the species listings for the southern islands of Guam, Rota, Tinian and Saipan. A few species listed in the technical and environmental reports were based on specimens which had been curated and deposited in the University of Guam Algal Herbarium at the Marine Laboratory.

Of the 107 published papers, 36 papers (34%) are taxonomic or floristic papers on marine algae which cite voucher specimens. Another 32 papers (30%) target secondary metabolites, i.e., their chemistry and interaction with reef herbivores. The remaining 39 published papers (36%) provide information on seagrasses or on marine benthic algae relative to zonation, seasonality, succession, faunal association, food habits of herbivores, nutrient uptake and aquaculture.

Floristic studies on the marine benthic algae in the Mariana Islands were initiated by the Japanese (Okamura, 1904, 1916; Yamada, 1931, 1940, 1941; Tokida, 1939). Taxonomic or floristic studies on Marianas algae include those on *Laurencia* (Yamada, 1931), *Caulerpa* (Yamada, 1940; Taylor, 1977), *Halimeda* (Yamada, 1941; Moul, 1964), *Chlorodesmis* (Ducker, 1957), crustose corallines (Johnson, 1957, 1964; Gordon et al., 1976), *Turbinaria* (Taylor, 1964), *Herposiphonia* (Hollenberg, 1968), *Ulva* (Tsuda, 1982a), Guam Phaeophyta (Tsuda, 1972a), *Sargassum* (Tsuda, 1972b, 1988; Soe-Htun and Yoshida, 1986), *Rhipilia* (Gilbert, 1978), *Bostriechia* (Kumano, 1979), *Galaxaura* (Itono, 1980), *Chamaedoris* and *Rhodopeltis* (Itono and Tsuda, 1980a), *Titanophora* (Itono and Tsuda, 1980b), *Gracilaria* (Matlock and Romeo, 1982; Tsuda, 1985; Meneses and Abbott, 1987; Abbott et al., 1991), *Avrainvillea* (Olsen-Stojkovich, 1985), *Chondrophyllum* (Nam and Saito, 1991), *Dasyphila* (Kraft and Wilson, 1997) and *Dictyota* (Tsuda, 2004). Only two papers (Tsuda and Tobias, 1977a, 1977b) targeted the marine benthic algae from the islands north of Saipan.

The classification system basically follows Silva et al. (1996), and synonymies are according to Silva et al. (1987, 1996). Algal records are delineated with their respective islands which are listed in order of their location from south, i.e., Guam, to north, i.e., Uracas (Farallon de Pajaros). Families and genera are listed in alphabetical order for easy retrieval. References are cited in chronological order and published references which cite voucher specimens for a particular species are highlighted in boldface. The eight species described as new from the Mariana Islands are, likewise, designated in boldface.



**Figure 1. Map of the Mariana Islands.**

This report does not include the seagrasses; however, only three species of seagrasses, i.e., *Enhalus acoroides* (Linnaeus f.) Royle, *Halodule uninervis* (Forsskål) Ascherson and *Halophila minor* (Zollinger) den Hartog, are documented from the larger and southern Mariana Islands (Tsuda et al., 1977). No record of seagrass exists for those islands north of Saipan. Coles and Kuo (1995) mistakenly (Personal Communication between R.T. Tsuda and authors) reported *Halophila ovalis* (R. Brown) Hooker f. from Guam, and *Halophila ovalis* and *Halodule pinifolia* (Miki) den Hartog from Saipan.

I acknowledge Barry D. Smith, University of Guam Marine Laboratory, for providing me a copy of a map (original source not known) of the Mariana Islands. The report was printed with funds provided by the Marine Resources Pacific Consortium (MAREPAC).

## SPECIES AND REFERENCES

### **Division CYANOPHYTA (Blue-Green Algae/Cyanobacteria) Class Cyanophyceae**

#### **Order Chroococcales**

##### **Family Entophysalidaceae**

*Entophysalis conferta* (Kützing) Drouet & Daily. GUAM: Belk & Belk (1975), Jones et al. (1976), Lobban & Tsuda (2003).

*Entophysalis deusta* (Meneghini) Drouet & Daily. GUAM: Tsuda et al. (1972), Randall (1974), Tsuda (1981b, 1992), Lobban & Tsuda (2003). ROTA: Tsuda (1969).

##### **Family Microcystaceae**

*Gomphosphaeria aponina* Kützing. GUAM: Tsuda (1981b).

*Merismopedia thermalis* Kützing [= *Agmenellum thermale* (Kützing) Drouet & Daily]. GUAM: Tsuda (1981b) as *Agmenellum thermale*.

*Microcystis dimidiata* (Kützing) Silva [= *Anacystis dimidiata* (Kützing) Drouet & Daily]. GUAM: Jones et al. (1976), Tsuda (1981b, 1992), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). All, except Lobban & Tsuda (2003), as *Anacystis dimidiata*.

*Microcystis zanardinii* (Hauck) P. Silva [= *Anacystis aeruginosa* (Zanardini) Drouet & Daily]. GUAM: Tsuda (1981b) as *Anacystis aeruginosa*.

##### **Family Synechococcaceae**

*Johannesbaptistia pellucida* (Dickie) W.R. Taylor & Drouet. GUAM: **Lobban & Tsuda (2003)**.

## Order Oscillariales

### Family Oscillariaceae

*Blennothrix lyngbyacea* (Kützing) Anagnostidis & Komárek [= *Hydrocoleum lyngbyaceum* Kützing]. GUAM: Lassuy (1980) as *Hydrocoleum lyngbyaceum*, Lobban & Tsuda (2003).

*Lyngbya aestuarii* (Mertens) Liebman. GUAM: Lobban & Tsuda (2003).

*Lyngbya bouillonii* Hoffmann & Demoulin. GUAM: **Lobban & Tsuda (2003)**.

*Lyngbya confervoides* C. Agardh. GUAM: Lobban & Tsuda (2003).

*Lyngbya guaymensis* Drouet. GUAM: Lobban & Tsuda (2003).

*Lyngbya majuscula* (Dillwyn) Harvey. GUAM: Thacker et al. (1997, 2001), Nagle et al. (1998), Nagle & Paul (1999), Carlson & Hoff (2000), Lobban & Tsuda (2003).

*Lyngbya meneghiniana* (Kützing) Falkenberg. GUAM: Lobban & Tsuda (2003).

*Lyngbya penicilliformis* Silva [= *Phormidium penicillatum* Gomont]. GUAM: Lobban & Tsuda (2003).

*Lyngbya polychroa* (Meneghini) Rabenhorst [= *Lyngbya sordida* Gomont]. GUAM: Lobban & Tsuda (2003).

*Lyngbya semiplena* (C. Agardh) J. Agardh. GUAM: Lobban & Tsuda (2003).

*Microcoleus acutissimus* Gardner. GUAM: Lobban & Tsuda (2003).

*Microcoleus lyngbyaceus* (Kützing) P. Crouan & H. Crouan sensu Drouet (1968) [includes *Lyngbya majuscula* (Dillwyn) Harvey]. GUAM: Tsuda (1971, 1977b, 1981b, 1992, 1993), Tsuda et al. (1972), Tsuda & Kami (1973), Tsuda & Bryan (1973), Randall (1974), Randall et al. (1974, 1975), Bryan (1975), Belk & Belk (1975), Dickinson & Tsuda (1975), Tobias (1976), Jones et al. (1976), Marsh et al. (1977), Tsuda & Grosenbaugh (1977), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Neudecker (1977), Stojkovich (1977), Tsuda et al. (1978), Lassuy (1980, 1984), Davis (1982), Best (1982), Pennings & Paul (1992, 1993), Pennings et al. (2001), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie & Paul (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. ALAMAGAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. AGRIHAN: **Tsuda & Tobias (1977b)**. ASUNCION: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977). URACAS: **Tsuda & Tobias (1977b)**.

*Microcoleus vaginatus* (Vaucher) Gomont. GUAM: Tsuda (1981b). ROTA: Tsuda (1969), **Lobban & Tsuda (2003)**

*Oscillatoria margaritifera* (Kützing) Gomont. GUAM: Thacker & Paul (2001).

### Family Phormidiaceae

*Phormidium breve* (Kützing) Anagnostidis & Komárek [= *Arthrospera brevis* (Kützing) Drouet]. GUAM: Lobban & Tsuda (2003).

*Porphyrosiphon luteus* (Gomont ex Gomont) Anagnostidis & Komàrek [= *Oscillatoria lutea* C. Agardh]. GUAM: Lobban & Tsuda (2003).

*Porphyrosiphon notarisii* (Meneghini) Kützing. GUAM: Lobban & Tsuda (2003).

*Porphyrosiphon versicolor* (Gomont) Anagnostidis & Komàrek. GUAM: Lobban & Tsuda (2003).

*Spirulina subsalsa* Oersted. GUAM: **Stone (1966)**, Tsuda et al. (1972), Belk & Belk (1975), Jones et al. (1976), Tsuda (1981b, 1992), Lobban & Tsuda (2003). PAGAN: **Tsuda & Tobias (1977b)**.

### Family Pseudanabaenaceae

*Leibleinia gracilis* Meneghini [= *Lyngbya gracilis* (Meneghini) Rabenhorst]. GUAM: Lobban & Tsuda (2003).

### Family Schizothrichaceae

*Schizothrix calcicola* (C. Agardh) Gomont [Includes *Spirocoleus crosbyanus* (Tilden) P. Silva]. GUAM: Tsuda (1971, 1977b, 1981b, 1992, 1993), Tsuda et al. (1972, 1978), Tsuda & Kami (1973), Tsuda & Bryan (1973), Randall (1974), Randall et al. (1974), Marsh & Gordon (1974), Belk & Belk (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Jones et al. (1976), Marsh et al. (1977), Tsuda & Grossenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Neudecker (1977), Stojkovich (1977), Davis (1982), Best (1982), Wylie & Paul (1988), Nagle & Paul (1999), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). GUGUAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. AGRIHAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977). URACAS: **Tsuda & Tobias (1977b)**.

*Schizothrix mexicana* Gomont [Includes *Symploca hydnoides* (Harvey) Kützing]. GUAM: Tsuda (1971, 1977b, 1981b, 1992, 1993), Tsuda et al. (1972, 1978), Tsuda & Kami (1973), Tsuda & Bryan (1973), Randall (1974), Belk & Belk (1975), Marsh & Doty (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Davis (1982), Best (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. ASUNCION: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**. URACAS: **Tsuda & Tobias (1977b)**.

*Schizothrix tenerrima* (Gomont) Drouet. GUAM: Tsuda (1992).

## Order Nostocales

### Family Nostocaceae

*Hormothamnium enteromorphoides* Grunow [= *Hormothamnion enteromorphoides* Grunow]. GUAM: Tsuda & Bryan (1973), Marsh & Gordon (1974), Bryan (1975), Randall et al. (1975), Marsh & Doty (1975), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Tsuda et al. (1978), Best (1982), Wylie & Paul (1988), Pennings & Paul (1992), Pennings et al. (1997), Nagle & Paul (1999), Thacker et al. (2001), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). SAIPAN: Tobias (1977), Wilkins (1987, 1988), Wilkins & Meyer (1991). PAGAN: **Tsuda & Tobias (1977b)**.

*Hormothamnium solutum* Bornet & Grunow [= *Hormothamnion solutum* Bornet & Grunow]. GUAM: Tsuda & Kami (1973), Belk & Belk (1975), Lobban & Tsuda (2003).

### Family Rivulariaceae

*Calothrix confervicola* (Dillwyn) C. Agardh. GUAM: Merten (1971), Belk & Belk (1975), Jones et al. (1976). ROTA: Tsuda (1969).

*Calothrix crustacea* Thuret. GUAM: Tsuda & Kami (1973), Tsuda & Bryan (1973), Randall (1974), Bryan (1975), Randall et al. (1975), Lassuy (1980, 1984), Tsuda (1981b, 1992), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994), Lobban & Tsuda (2003). ROTA: Wylie (1989). SAIPAN: Tobias (1977), Wilkins (1987). PAGAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977).

*Calothrix pilosa* Harvey. GUAM: Randall (1974), Bryan (1975), Belk & Belk (1975), Tobias (1976), Amesbury et al. (1977).

*Rivularia atra* Roth. GUAM: Randall et al. (1975).

*Rivularia polyotis* (J. Agardh) Hauck. GUAM: Marsh & Doty (1976), Marsh et al. (1977).

### Family Scytonemataceae

*Scytonema hofman-bangii* C. Agardh. SAIPAN: Wilkins & Meyer (1991).

## Division CHLOROPHYTA (Green Algae) Class Chlorophyceae

## Order Ulvales

### Family Ulvaceae

*Enteromorpha clathrata* (Roth) Greville. GUAM: Safford (1905), Prowazek (1913), Belk & Belk (1975), Dickinson & Tsuda (1975), Tobias (1976), Marsh et al. (1977),

Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1982b, 1992, 1993), FitzGerald (1978), Tsuda et al. (1978), Lassuy (1980, 1984), Wylie & Paul (1988), Meyer & Paul (1992), Pennings & Paul (1992, 1993), Pennings et al. (1993, 2001), Schupp & Paul (1994), Lumbang & Paul (1996), Thacker et al. (1997), Nagle et al. (1998), Nagle & Paul (1999), Lobban & Tsuda (2003). SAIPAN: PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Enteromorpha compressa* (Linnaeus) Nees. GUAM: Safford (1905), Randall et al. (1974, 1975), Bryan (1975).

*Enteromorpha flexuosa* (Wulfen) J. Agardh subsp. *flexuosa* [= *Enteromorpha tubulosa* (Kützing) Kützing]. GUAM: Randall (1974) and Tobias (1976) as *E. tubulosa*. SAIPAN: Tobias (1977) as *E. tubulosa*.

*Enteromorpha intestinalis* (Linnaeus) Nees. GUAM: Randall (1974), Jones et al. (1976). ANATAHAN: **Tsuda & Tobias (1977a)**.

*Enteromorpha lingulata* J. Agardh. GUAM: **Taylor (1966)**.

*Gayralia oxysperma* (Kützing) Vinogradova ex Scagel et al. [= *Monostroma oxysperma* (Kützing) Doty]. GUAM: Tsuda (1981b) as *Monostroma oxysperma*, **Lobban & Tsuda (2003)**.

*Ulva lactuca* Linnaeus. GUAM: Tsuda (1981b, **1982a**), Lobban & Tsuda (2003). SAIPAN: **Tsuda (1982a)**, Wilkins & Meyer (1991). FARALLON de MEDINILLA: **Tsuda (1982a)**. PAGAN: **Tsuda (1982a)**.

## Order Cladophorales

### Family Anadyomenaceae

*Anadyomene wrightii* Harvey ex Gray. GUAM: Tobias (1976), Tsuda (1981b), Lobban & Tsuda (2003). AGRIHAN: **Tsuda & Tobias (1977a)**.

*Microdictyon okamurae* Setchell. GUAM: Dickinson & Tsuda (1975), Stojkovich (1977), Tsuda (1981b), Davis (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Phyllocladion anastomosans* (Harvey) Kraft & Wynne [= *Struvea anastomosans* (Harvey) Piccone & Grunow ex Piccone and *S. delicatula* Kützing]. GUAM: Emery (1962) as *Struvea anastomosans*.

### Family Cladophoraceae

*Chaetomorpha antennina* (Bory) Kützing. GUAM: Tsuda (1981b), Wylie & Paul (1988), Lobban & Tsuda (2003).

*Chaetomorpha crassa* (C. Agardh) Kützing. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Chaetomorpha indica* (Kützing) Kützing. GUAM: Tsuda & Kami (1973), Randall (1974), Marsh & Doty (1975), Marsh et al. (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: Tobias (1977).

*Cladophora albida* (Nees) Kützing. GUAM: Tsuda (1992).

*Cladophora socialis* Kützing. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). PAGAN: **Tsuda & Tobias (1977a)**.

*Cladophora vagabunda* (Linnaeus) van den Hoek [= *Cladophora fascicularis* (Mertens ex C. Agardh) Kützing]. GUAM: Stojkovich (1977), Tsuda et al. (1978), Tsuda (1981b, 1993), Wylie & Paul (1988), **Lobban & Tsuda (2003)**. SAIPAN: Cloud (1959) possibly as *Cladophoropsis fascicularis*. All, except Lobban & Tsuda (2003), as *C. fascicularis*.

*Rhizoclonium africanum* (Kützing) Womersley & Bailey [= *Rhizoclonium samoense* Setchell]. GUAM: Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974a). SAIPAN: Tobias (1977).

*Rhizoclonium riparium* (Roth) Harvey [= *Rhizoclonium implexum* (Dillwyn) Kützing]. GUGUAN: **Tsuda & Tobias (1977a)**.

*Rhizoclonium tortuosum* (Dillwyn) Kützing. GUAM: Safford (1905).

## Family Siphonocladaceae

*Boergesenia forbesii* (Harvey) Feldmann. GUAM: Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Tsuda (1981b, 1992, 1993), Davis (1982), Best (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974a). SAIPAN: Amesbury et al. (1979), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**.

*Boodlea coacta* (Dickie) Murray & DeToni. SAIPAN: Tokida (1939).

*Boodlea composita* (Harvey) Brand [= *Boodlea siamensis* Reinbold and *Boodlea kaeneana* Brand]. GUAM: Emery (1962), Tsuda & Bryan (1973), Randall (1974), Randall et al. (1974, 1975), Bryan (1975), Jones et al. (1976), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1992, 1993), Tsuda et al. (1978), Davis (1982), Best (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tokida (1939) as *B. kaeneana*, Tobias (1977), PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Boodlea vanbosseae* Reinbold. GUAM: Tsuda (1992), Lobban & Tsuda (2003).

*Chamaedoris orientalis* Okamura & Higashi. GUAM: **Itono and Tsuda (1980)**, Tsuda (1981b), Lobban & Tsuda (2003).

*Cladophoropsis gracillima* Dawson. GUAM: Randall (1974), Tsuda (1981b), Lobban & Tsuda (2003). ROTA: Tsuda (1969). PAGAN: **Tsuda & Tobias (1977a)**.

*Cladophoropsis membranacea* (Hofman Bang ex C. Agardh) Børgesen. GUAM: **Taylor (1966)**, Tsuda & Bryan (1973), Randall (1974), Bryan (1975), Belk & Belk (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Stojkovich (1977), Tsuda et al. (1978), Tsuda (1981b, 1993), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins & Meyer (1991). MAUG: **Tsuda & Tobias (1977a)**.

*Cladophoropsis sundanensis* Reinbold. GUAM: Tsuda (1981b), Tsuda (1992, 1993), **Lobban & Tsuda (2003)**. ROTA: Tsuda (1969), **Lobban & Tsuda (2003)**. SAIPAN: PBEC (1984), **Lobban & Tsuda (2003)**.

*Dictyosphaeria cavernosa* (Forsskål) Børgesen [= *Dictyosphaeria favulosa* (C. Agardh) Decaisne ex Endlicher]. GUAM: Randall (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Tsuda (1977b, 1981b, 1993), Davis (1982), Best (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tokida (1939) as *D. favulosa*, Tobias (1977), Wilkins (1987, 1988). ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Dictyosphaeria versluysii* Weber-van Bosse [= *Dictyosphaeria setchellii* Børgesen and *Dictyosphaeria bokotensis* Yamada]. GUAM: Emery (1962), Tsuda (1971), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1992, 1993), Tsuda et al. (1978), Davis (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1916)**, Schmidt (1928), Tokida (1939), Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). AGRIHAN: **Tsuda & Tobias (1977a)**. URACAS: **Tsuda & Tobias (1977a)**.

*Siphonocladus tropicus* (P. Crouan & H. Crouan) J. Agardh [= *Siphonocladus rigidus* Howe]. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**.

*Spongocladia vaucheriaeformis* Areschoug [= *Cladophoropsis vaucheriaeformis* (Areschoug) Papenfuss]. SAIPAN: **Okamura (1916)**, Tokida (1939).

*Ventricaria ventricosa* (J. Agardh) Olsen & West [= *Valonia ventricosa* J. Agardh]. *Valonia ventricosa*. GUAM: Tsuda (1971, 1977b, 1981b, 1993), Randall et al. (1975), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Best (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), Wilkins (1987). GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**. URACAS: **Tsuda & Tobias (1977a)**. All, except Tsuda (1993) and Lobban & Tsuda (2003), as *Valonia ventricosa*.

## Family Valoniaceae

*Valonia aegagropila* C. Agardh. GUAM: Dickinson & Tsuda (1975), Amesbury et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Lobban & Tsuda (2003). SAIPAN: Wilkins & Meyer (1991). MAUG: **Tsuda & Tobias (1977a)**.

*Valonia fastigiata* Harvey ex J. Agardh. GUAM: Randall (1974), Randall et al. (1975), Jones et al. (1976), Chernin et al. (1977), Tsuda (1977b, 1981b), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: Wilkins (1987), Wilkins & Meyer (1991).

*Valonia utricularis* (Roth) C. Agardh. GUAM: Chernin et al. (1977), Tsuda et al. (1978), MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Valoniopsis pachynema* (G. Martens) Børgesen. GUAM: Dickinson & Tsuda (1975), Stojkovich (1977), Tsuda (1981b), Lobban & Tsuda (2003).

## Order Bryopsidales

## Family Bryopsidaceae

*Bryopsis hypnoides* Lamouroux. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: PBEC (1984).

*Bryopsis pennata* Lamouroux. GUAM: Tsuda & Bryan (1973), Tobias (1976), Jones et al. (1976), Chernin et al. (1977), Stojkovich (1977), Carlson & Hoff (1978), Tsuda et al. (1978), Lassuy (1980), Tsuda (1981b, 1992, 1993), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988). SAIPAN: PBEC (1984). MAUG: Eldredge et al. (1977).

*Bryopsis plumosa* (Hudson) C. Agardh. GUAM: Safford (1905). SAIPAN: Prowazek (1913).

*Derbesia attenuata* Dawson. GUAM: Tsuda (1981b). ALAMAGAN: **Tsuda & Tobias (1977a)**, Lobban & Tsuda (2003). PAGAN: **Tsuda & Tobias (1977a)**, Lobban & Tsuda (2003).

*Trichosolen* sp. GUAM: **Lobban & Tsuda (2003)**

## Family Caulerpaceae

*Caulerpa antoensis* Yamada. GUAM: Dickinson & Tsuda (1975), Stojkovich (1977), Tsuda (1981b, 1992), **Lobban & Tsuda (2003)**. SAIPAN: Wilkins (1987), **Lobban & Tsuda (2003)**.

*Caulerpa brachypus* Harvey. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Caulerpa cupressoides* (Vahl) C. Agardh. GUAM: Randall et al. (1975), Chernin et al. (1977), Stojkovich (1977), Carlson & Hoff (1978), Tsuda et al. (1978), Tsuda (1981b, 1993), Davis (1982), Meyer & Paul (1992), Pennings & Paul (1993), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). TINIAN: Jones et al.

(1974b). SAIPAN: Tokida (1939), **Taylor (1966)**, PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Caulerpa elongata* Weber-van Bosse. SAIPAN: Cloud (1959).

*Caulerpa filicoides* Yamada. GUAM: Tsuda (1971, 1981b), Randall et al. (1975), Stojkovich (1977), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984). GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Caulerpa lentillifera* J. Agardh. GUAM: Randall et al. (1975), Tsuda (1981b), Davis (1982), Lobban & Tsuda (2003). SAIPAN: Wilkins & Meyer (1991).

*Caulerpa peltata* Lamouroux [= *Caulerpa macrodiscus* Decaisne]. GUAM: Lobban & Tsuda (2003). ROTA: Tsuda (1969). SAIPAN: Wilkins & Meyer (1991).

*Caulerpa racemosa* (Forsskål) J. Agardh. GUAM: Safford (1905) as *Caulerpa clavifera uvifera*, Emery (1962), **Taylor (1966)**, Tsuda (1971, 1977b, 1981b, 1982b, 1992, 1993), **Peterson (1972)**, Tsuda & Bryan (1973), Randall (1974), Marsh & Doty (1975), Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Hohman & Tsuda (1976), Marsh et al. (1977), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Hedlund (1977), Chernin et al. (1977), Stojkovich (1977), Carlson & Hoff (1978), Tsuda et al. (1978), Davis (1982), Best (1982), Wylie & Paul (1988), Meyer & Paul (1992), Pennings & Paul (1992), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1904)**, Schmidt (1928), Tokida (1939), **Yamada (1940)**, Cloud (1959), **Taylor (1966)**, Tobias (1977), PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Caulerpa serrulata* (Forsskål) J. Agardh [= *Caulerpa boryana* J. Agardh and *Caulerpa freycinetii* C. Agardh]. GUAM: Randall et al. (1975), Dickinson & Tsuda (1975), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Tsuda (1981b, 1993), Davis (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), **Taylor (1977)**, PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). SARIGAN: **Tsuda & Tobias (1977a)**. GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Caulerpa sertularioides* (Gmelin) Howe [= *Caulerpa plumaris* (Forsskål) Weber-van Bosse]. GUAM: Safford (1905) as *C. plumaris*, **Taylor (1966)**, Merten (1971), Randall et al. (1975), Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b, 1992, 1993), Davis (1982), Best (1982), Wylie & Paul (1988), Meyer & Paul (1992), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1904, 1916)**, Prowazek (1916) and Schmidt (1928) as *C. plumaris*; Tokida (1939) as *C.*

*sertularioides* and *C. plumaris*, **Yamada (1940)**, PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). URACAS: **Tsuda & Tobias (1977a)**.

*Caulerpa taxifolia* (Vahl) C. Agardh. GUAM: Tsuda (1971, 1981b), Randall et al. (1975), Jones et al. (1976), Chernin et al. (1977), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Cloud (1959), Tobias (1977), Wilkins (1987), Wilkins & Meyer (1991). MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Caulerpa urvilleana* Montagne [= *Caulerpa urvilliana* Montagne]. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: Cloud (1959), PBEC (1987).

*Caulerpa verticillata* J. Agardh. GUAM: Tsuda (1971, 1981b), Randall et al. (1975), Amesbury et al. (1977), Chernin et al. (1977), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984).

*Caulerpa webbiana* Montagne [= *Caulerpa pickeringii* Harvey & Bailey]. GUAM: Tsuda (1981b), Best (1982), Lobban & Tsuda (2003). SAIPAN: Wilkins & Meyer (1991). GUGUAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**. URACAS: **Tsuda & Tobias (1977a)**.

*Caulerpella ambigua* (Okamura) Prud'homme van Reine & Lokhorst [= *Caulerpa ambigua* Okamura and *Caulerpa vickersiae* Børgesen]. GUAM: Tsuda (1981b) as *Caulerpa ambigua*, Lobban & Tsuda (2003). ROTA: Tsuda (1969) as *C. vickersiae*. SAIPAN: Wilkins (1987) as *C. ambigua*. GUGUAN: **Tsuda & Tobias (1977a)** as *C. vickersiae*. MAUG: **Tsuda & Tobias (1977a)** as *C. vickersiae*, Eldredge et al. (1977) as *C. ambigua*. URACAS: **Tsuda & Tobias (1977a)** as *C. ambigua*.

## Family Codiaceae

*Codium arabicum* Kützing GUAM: Tsuda (1981b), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974a).

*Codium edule* P. Silva. GUAM: Randall et al. (1975), Tobias (1976), Stojkovich (1977), Tsuda (1977b), Davis (1982). MAUG: Eldredge et al. (1977).

*Codium geppiorum* O. Schmidt [= *Codium geppii* O. Schmidt]. GUAM: Jones et al. (1976), Tsuda (1981b), Wylie & Paul (1988), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Wilkins (1987), Wilkins & Meyer (1991). All, except Lobban & Tsuda (2003), as *Codium geppii*.

## Family Halimedaceae

*Halimeda copiosa* Goreau & Graham [= *Halimeda hederacea* (Barton) Colinvaux]. GUAM: Randall et al. (1975), Dickinson & Tsuda (1975), Stojkovich (1977), Tsuda (1981b), Davis (1982), Lobban & Tsuda (2003).

*Halimeda cylindracea* Decaisne. GUAM: **Moul (1964)**.

*Halimeda discoidea* Decaisne. GUAM: Safford (1905), Emery (1962), Tsuda (1971, 1977b, 1981b), Randall (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda & Grosenbaugh (1977), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Goreau et al. (1972), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Halimeda fragilis* Taylor. SAIPAN: Goreau et al. (1972).

*Halimeda gigas* Taylor. GUAM: Randall et al. (1975), Chernin et al. (1977), Stojkovich (1977), Amesbury et al. (1977), Tsuda (1981b), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994), **Lobban & Tsuda (2003)**. SAIPAN: Tobias (1977).

*Halimeda goreauii* W.R. Taylor. SAIPAN: Goreau et al. (1972). Hillis-Colinvaux (1980) reports this species as an Atlantic species.

*Halimeda gracilis* Harvey ex J. Agardh. GUAM: **Johnson (1957)**, Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: Cloud (1959).

*Halimeda incrassata* (Ellis) Lamouroux [*Halimeda tridens* (Ellis & Solander) Lamouroux]. GUAM: Randall et al. (1975), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Schupp & Paul (1994), Meyer et al. (1994), Kerr & Paul (1995), Lobban & Tsuda (2003). SAIPAN: Tokida (1939), Goreau et al. (1972).

*Halimeda lacunalis* W.R. Taylor. GUAM: **Moul (1964)**. SAIPAN: Goreau et al. (1972).

*Halimeda macroloba* Decaisne. GUAM: **Moul (1964)**, **Taylor (1966)**, **Merten (1971)**, Randall et al. (1975), Marsh & Doty (1975, 1976), Marsh et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1993), Amesbury et al. (1977), Carlson & Hoff (1978), Tsuda et al. (1978), Tsuda (1981b, 1993), Best (1982), Davis (1982), Pennings & Paul (1992), Pennings et al. (1993), Meyer et al. (1994), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: **Yamada (1941)**, **Moul (1964)**, **Taylor (1966)**, Goreau et al. (1977), Tobias (1977), Wilkins (1987).

*Halimeda micronesica* Yamada. [*Halimeda orientalis* Gilbert]. GUAM: Tsuda (1977b, 1981b), **Lobban & Tsuda (2003)**.

*Halimeda opuntia* (Linnaeus) Lamouroux [= *Halimeda cordata* J. Agardh]. GUAM: **Johnson (1957)**, Emery (1962), **Moul (1964)**, **Taylor (1966)**, Merten (1971), Tsuda (1971, 1977b, 1981b, 1992, 1993), Randall (1974), Randall et al. (1975), Marsh & Doty (1975, 1976), Dickinson and Tsuda (1975), Jones et al. (1976), Tobias (1976), Marsh et al. (1977), Chernin et al. (1977), Stojkovich (1977), Amesbury et al. (1977), Tsuda et al. (1978), Lassuy (1980), Davis (1982), Best (1982), Wylie & Paul (1988), Pennings & Paul (1992), Meyer & Paul (1995), Kerr & Paul (1995), Pitlik & Paul (1997), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1916)**, **Yamada (1941)**, Cloud (1959), Goreau et al. (1972), Tobias (1977), PBEC (1984), Wilkins

(1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977). URACAS: **Tsuda & Tobias (1977a)**.

*Halimeda papyracea* Zanardini. GUAM: Safford (1905). Hillis-Colinvaux (1980) lists this species under the heading “Species of uncertain systematic position.”

*Halimeda simulans* Howe. ROTA: Tsuda (1969). SAIPAN: Wilkins (1987).

*Halimeda stuposa* W.R. Taylor. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**. ROTA: Randall & Smith (1988).

*Halimeda taenicola* W.R. Taylor. TINIAN: Jones et al. (1974b). SAIPAN: Goreau et al. (1972).

*Halimeda tuna* (Ellis & Solander) Lamouroux. SAIPAN: Cloud (1959).

*Halimeda velasquezii* Taylor. GUAM: Chernin et al. (1977), Stojkovich (1977), Tsuda (1981b), **Lobban & Tsuda (2003)**. SAIPAN: PBEC (1984), Wilkins & Meyer (1991).

## Family Ostreobiaceae

*Ostreobium quekettii* Bornet & Flahault [= *Ostreobium reineckii* Bornet]. GUAM: Belk & Belk (1975) and Tsuda (1992) as *O. reineckii*, Lobban & Tsuda (2003).

## Family Udoteaceae

*Avrainvillea lacerata* Harvey ex J. Agardh. GUAM: Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b, 1992), **Lobban & Tsuda (2003)**. SAIPAN: Tobias (1977). ANATAHAN: **Tsuda & Tobias (1977a)**, Olsen-Stojkovich (1985).

*Avrainvillea mazei* Murray & Boodle. GUAM: Tsuda (1981b) as *Avrainvillea longicaulis* (Kützing) G. Murray & Boodle, Olsen-Stojkovich (1985), Lobban & Tsuda (2003).

*Avrainvillea nigricans* Decaisne. GUAM: Tsuda (1981b), Olsen-Stojkovich (1985), Lobban & Tsuda (2003).

*Avrainvillea obscura* (C. Agardh) J. Agardh (1887), Type from Guam. GUAM: Merten (1971), Randall et al. (1974), Marsh & Doty (1975), Randall et al. (1975), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Tsuda et al. (1978), Davis (1982), Olsen-Stojkovich (1985), Wylie & Paul (1988), Meyer et al. (1994), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Schmidt (1928), Cloud (1959), Taylor (1966), Tobias (1977), Olsen-Stojkovich (1985).

*Chlorodesmis caespitosa* J. Agardh. GUAM: Jones et al. (1976), Tsuda (1981b), **Lobban & Tsuda (2003)**. ROTA: Tsuda (1969), **Lobban & Tsuda (2003)**.

*Chlorodesmis fastigiata* (C. Agardh) Ducker [= *C. comosa* Harvey & Bailey]. GUAM: **Ducker (1967)**, Tsuda & Bryan (1973), Randall (1974), Jones et al. (1974a, 1976), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1992), Carlson & Hoff (1978), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Meyer et al. (1994), Lobban & Tsuda (2003). ROTA: Randall & Smith (1988). TINIAN: Jones et al. (1974b). SAIPAN: Tokida (1939) as *C. comosa*, PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Chlorodesmis hildebrandtii* A. Gepp & E. Gepp. GUAM: Tsuda (1981b). SAIPAN: **Taylor (1966)**.

*Pseudochlorodesmis furcellata* (Zanardini) Børgesen. GUAM: Belk & Belk (1975), Tsuda (1981b). GUGUAN: **Tsuda & Tobias (1977a)**, **Lobban & Tsuda (2003)**. MAUG: Eldredge et al. (1977), **Lobban & Tsuda (2003)**.

*Rhipidosiphon javensis* Montagne [= *Udotea javensis* (Montagne) A. Gepp & E. Gepp]. MAUG: Eldredge et al. (1977) as *Udotea javensis*. URACAS: **Tsuda & Tobias (1977a)** as *U. javensis*.

*Rhipilia orientalis* A. Gepp & E. Gepp. GUAM: Randall et al. (1975), Chernin et al. (1977), Stojkovich (1977), Davis (1982). SAIPAN: PBEC (1984).

*Rhipilia sinuosa* Gilbert (1978), Type from Guam. GUAM: **Gilbert (1978)**, Tsuda (1981b), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b) as *Rhipilia orientalis*, **Gilbert (1978)**. SAIPAN: Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)** as *R. orientalis* A. Gepp & E. Gepp, **Gilbert (1978)**. GUGUAN: **Tsuda & Tobias 1977a** as *R. orientalis*, **Gilbert (1978)**.

*Tydemania expeditionis* Weber-van Bosse. GUAM: Randall et al. (1975), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1981b), Davis (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Wylie (1989). SAIPAN: Goreau et al. (1972), PBEC (1984), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. GUGUAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**. URACAS: **Tsuda & Tobias (1977a)**.

*Udotea argentea* Zanardini. GUAM: Randall et al. (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Tokida (1939), Goreau et al. (1972), PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Udotea geppii* Yamada (1930). GUAM: Stojkovich (1977), Tsuda (1977b, 1981b), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Goreau et al. (1972), Tobias (1977), PBEC (1984), Wilkins & Meyer (1991).

*Udotea palmetta* Decaisne. GUAM: Chernin et al. (1977).

## Order Dasycladales

### Family Dasycladaceae

*Bornetella nitida* Munier-Chalmas ex Sonder. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Bornetella oligospora* Solms-Laubach. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977).

*Bornetella sphaerica* (Zanardini) Solms-Laubach. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). ANATAHAN: **Tsuda & Tobias (1977a)**.

*Neomeris annulata* Dickie. GUAM: Tsuda (1971, 1977b, 1981b, 1993), Randall et al. (1974, 1975), Bryan (1975), Dickinson & Tsuda (1975), Tobias (1976), Tsuda & Grossenbaugh (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Meyer & Paul (1995), Lumbang & Paul (1996), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins & Meyer (1991). GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**. URACAS: **Tsuda & Tobias (1977a)**.

*Neomeris van-bosseae* Howe. GUAM: Tsuda (1971, 1977b, 1981b), Randall et al. (1975), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984). GUGUAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**.

### Family Polyphysaceae

*Acetabularia exigua* Solms-Laubach. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). MAUG: **Tsuda & Tobias (1977a)**.

*Acetabularia parvula* Solms-Laubach [= *Acetabularia moebii* Solms-Laubach]. GUAM: Randall et al. (1975), Chernin et al. (1977), Tsuda et al. (1978), Lassuy (1980), Tsuda (1981b, 1992, 1993), Davis (1982), Lobban & Tsuda (2003). SAIPAN: Tobias (1977), PBEC (1984). PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977). All, except Tsuda (1993) and Lobban & Tsuda (2003), as *A. moebii*.

**Division PHAEOPHYTA (Brown Algae)**  
**Class Phaeophyceae**

**Order Ectocarpales**

**Family Ectocarpaceae**

*Asteronema breviarticulatum* (J. Agardh) Ouriques & Bouzon [= *Hincksia breviarticulata* (J. Agardh) P. Silva and *Ectocarpus breviarticulatus* J. Agardh]. GUAM: Tsuda (1972a, 1974, 1977a, 1981b), Randall (1974), Randall et al. (1975), Neudecker (1977), Stojkovich (1977), Lassuy (1980, 1984), Davis (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977). All, except Lobban & Tsuda (2003), as *Ectocarpus breviarticulatus*.

*Feldmannia irregularis* (Kützing) Hamel. GUAM: **Tsuda (1972a)**, Tsuda (1981b), Lobban & Tsuda (2003).

*Hincksia indica* (Sonder) J. Tanaka [= *Ectocarpus indicus* Sonder, *Giffordia indica* (Sonder) Papenfuss & Chihara and *Feldmannia indica* (Sonder) Womersley & Bailey]. GUAM: Tsuda (1971, 1972a, 1974, 1977a, 1981b, 1992, 1993), Tsuda et al. (1972, 1978), Tsuda & Kami (1973), Tsuda & Bryan (1973), Randall (1974), Randall et al. (1974, 1975), Bryan (1975), Dickinson & Tsuda (1975), Belk (1975), Tobias (1976), Jones et al. (1976), Marsh & Doty (1976), Marsh et al. (1977), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Neudecker (1977), Stojkovich (1977), Lassuy (1980), Davis (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), Wilkins (1987). ANATAHAN: **Tsuda & Tobias (1977a)**. MAUG: Eldredge et al. (1977). All, except Lobban & Tsuda (2003), as *Ectocarpus indicus*, *Giffordia indica* or *Feldmannia indica*.

**Family Ralfsiaceae**

*Hapalospongion pangoense* (Setchell) P. Silva [= *Ralfsia pangoensis* Setchell]. GUAM: Tsuda (1972a, 1977a, 1977b, 1981b, 1992, 1993), Randall (1974), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Lobban & Tsuda (2003). ROTA: Tsuda (1969). SAIPAN: Tobias (1977), Wilkins (1987, 1988). All, except Lobban & Tsuda (2003), as *Ralfsia pangoensis*.

## Order Sphacelariales

### Family Sphaceliaceae

*Sphacelaria novae-hollandiae* Sonder. GUAM: Emery (1962), Tsuda (**1972a**, 1977a, 1981b), Lobban & Tsuda (2003). SAIPAN: Tobias (1977), Wilkins & Meyer (1991). *Sphacelaria rigidula* Kützing [= *Sphacelaria furcigera* Kützing]. GUAM: **Tsuda (1972a, 1981b)**, Belk & Belk (1975), Tobias (1976), Lobban & Tsuda (2003). SAIPAN: Wilkins (1987, 1988). PAGAN: **Tsuda & Tobias (1977a)**. All, except Lobban & Tsuda (2003), as *S. furcigera*.

*Sphacelaria tribuloides* Meneghini. GUAM: Tsuda et al. (1972, 1978), Tsuda (**1972a**, 1974, 1977a, 1977b, 1981b), Tsuda & Kami (1973), Randall (1974), Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Marsh et al. (1977), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Davis (1982), Tsuda (1993), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), Wilkins (1987, 1988), Wilkins & Meyer (1991). PAGAN: **Tsuda & Tobias (1977a)**.

## Order Dictyotales

### Family Dictyotaceae

*Dictyopteris repens* (Okamura) Børgesen [*Neurocarpus repens* Okamura]. GUAM: Tsuda (1971, **1972a**, 1977a, 1981b), **Lobban & Tsuda (2003)**. ROTA: Tsuda (1969). SAIPAN: Wilkins & Meyer (1991). GUGUAN: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**. URACAS: **Tsuda & Tobias (1977a)**.

*Dictyota bartayresiana* Lamouroux [= *Dictyota bartayresii* Lamouroux]. Includes misapplied *Dictyota cervicornis* Kützing. GUAM: Merten (1971), Tsuda (**1972a**, 1974, 1977a, 1977b, 1981b, 1992, 1993), Tsuda & Kami (1973), Marsh & Gordon (1974), Marsh & Doty (1975), Bryan (1975), Dickinson & Tsuda (1975), Randall et al. (1975), Tobias (1976), Jones et al. (1976), Marsh et al. (1977), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Lassuy (1980), Davis (1982), Potter (1986), Wylie & Paul (1988), Van Alstyne & Paul (1990) as *D. bartayresii* and *D. cervicornis*, Pennings et Paul (1992) as *D. cervicornis*, Pennings et al. (1993, 1999) as *D. bartayresii* and *D. cervicornis*, Meyer et al. (1994), Kerr & Paul (1995), Ginsburg & Paul (2001) as *D. cervicornis*, Thacker et al. (2001), Lobban & Tsuda (2003) as *D. bartayresiana* and *D. cervicornis*. ROTA: Tsuda (1969, **2004**). TINIAN: Jones et al. (1974b), **Tsuda (2004)**. SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991), **Tsuda (2004)**. ANATAHAN: **Tsuda & Tobias (1977a)**. GUGUAN: **Tsuda & Tobias (1977a)**. ALAMAGAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**.

(1977a). ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977). URACAS: **Tsuda & Tobias (1977a)**. Many references include *D. cervicornis* as separate species.

*Dictyota ceylanica* Kützing [*Dictyota dichotoma* (Hudson) Lamouroux = *Dictyota divaricata* Lamouroux]. GUAM: Tsuda (1972a, 1977b, 1981b, 2004), Randall et al. (1975), Jones et al. (1976), Stojkovich (1977), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b), **Tsuda (2004)**. SAIPAN: **Tsuda (2004)**. All as *D. divaricata*.

*Dictyota friabilis* Setchell. GUAM: Tsuda (1972a, 1981b, 1993), Randall et al. (1975), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969, 2004). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991), **Tsuda (2004)**.

*Dictyota grossedentata* De Clerck & Coppejans [*Dictyota bartayresiana* Lamouroux = *Dictyota patens* J. Agardh]. GUAM: Tsuda (1971, 1972a, 1977a, 1981b), Randall et al. (1975), Davis (1982), Lobban & Tsuda (2003). All as *D. patens* J. Agardh.

*Dictyota hamifera* Setchell. ASUNCION: **Tsuda & Tobias (1977a)**.

*Lobophora variegata* (Lamouroux) Womersley ex Oliveira [= *Gymnosorus variegatus* (Lamouroux) J. Agardh and *Pocockiella variegata* (Lamouroux) Papenfuss]. GUAM: Tsuda (1971, 1972a, 1974, 1977a, 1977b, 1981b, 1992, 1993), Tsuda & Kami (1973), Randall (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Neudecker (1977), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Best (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969) as *P. variegata*. TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a)**. GUGUAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**. AGRIHAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**, Eldredge et al. (1977). URACAS: **Tsuda & Tobias (1977a)**.

*Padina boryana* Thivy in Taylor [= *P. tenuis* (C. Agardh) Bory and *P. commersonii* Bory de Saint-Vincent]. GUAM: Safford (1905) as *P. commersonii* and *P. pavonia* Linnaeus, Emery (1962) as *P. commersonii*, Tsuda (1972a, 1974, 1977a, 1977b, 1981b, 1993), Randall (1974), Marsh & Gordon (1974), Randall et al. (1974, 1975), Bryan (1975), Marsh & Doty (1975, 1976), Jones et al. (1976), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Lassuy (1980), Davis (1982), Best (1982), Wylie & Paul (1988), Van Alstyne & Paul (1990), Pennings & Paul (1992), Pennings et al. (1993, 1999), Schupp & Paul (1994), Meyer et al. (1994), Pitlik & Paul (1997), Thacker et al. (2001), Lobban & Tsuda (2003). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1904)**, Prowazek (1913) and Tokida (1939) as *P. pavonia*; Cloud (1959) as *P. commersonii*; Tobias (1977), PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). PAGAN:

**Tsuda & Tobias (1977a).** All, except Lobban & Tsuda (2003), as *P. tenuis*, unless otherwise designated.

***Padina jonesii* Tsuda (1972a),** Type from Guam. GUAM: Tsuda (1972a, 1974, 1977a, 1977b, 1981b), Tsuda & Kami (1973), Randall et al. (1975), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Wilkins & Meyer (1991). AGRIHAN: **Tsuda & Tobias (1977a).** MAUG: **Tsuda & Tobias (1977a).**

***Padina minor* Yamada.** GUAM: Merten (1971), Tsuda (1972a, 1974, 1977a, 1981b), Randall (1974), Dickinson & Tsuda (1975), Stojkovich (1977), Best (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988). SAIPAN: PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977a).** PAGAN: **Tsuda & Tobias (1977a).**

***Padina sanctaecrucis* Børgesen [= *Padina japonica* Yamada].** GUAM: **Lobban & Tsuda (2003).**

***Stylopodium hawaiiensis* (Doty & Newhouse) Abbott** [= *Zonaria hawaiiensis* Doty & Newhouse]. GUAM: Tsuda (1977b) as *Z. hawaiiensis*. MAUG: Eldredge et al. (1977).

***Zonaria flabellata* (Okamura) Papenfuss** [= *Homeostrichus flabellatus* Okamura]. GUAM: **Tsuda (1972a)** as *Zonaria stipitata* Tanaka & K. Nozawa, Tsuda (1981b) as *Homeostrichus flabellatus*, Lobban & Tsuda (2003). MAUG: Eldredge et al. (1977).

## Order Scytoniphonales

### Family Chnoosporaceae

***Chnoospora implexa* J. Agardh.** GUAM: Tsuda (1972a, 1981b), Randall et al. (1975), Davis (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969).

***Chnoospora minima* (Hering) Papenfuss.** GUAM: Tsuda (1972a, 1974, 1977a, 1981b), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). ANATAHAN: **Tsuda & Tobias (1977a).** PAGAN: **Tsuda & Tobias (1977a).**

### Family Scytoniphonaceae

***Colpomenia sinuosa* (Mertens ex Roth) Derbès & Solier.** GUAM: Tsuda (1972a, 1974, 1981b), Davis (1982), Lobban & Tsuda (2003). SAIPAN: Wilkins & Meyer (1991).

***Hydroclathrus clathratus* (C. Agardh) Howe** [= *Hydroclathrus cancellatus* Bory de Saint-Vincent]. GUAM: **Taylor (1966)**, Tsuda (1972a, 1974, 1977a, 1981b), Marsh & Gordon (1974), Randall et al. (1975), Jones et al. (1976), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Best (1982), Van Alstyne & Paul (1990), Pennings & Paul (1992), Meyer et al. (1994), Thacker et al. (2001), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1904)** and Tokida (1939) as *H. cancellatus*, Cloud (1959), Wilkins & Meyer (1991).

*Rosenvingea intricata* (J. Agardh) Børgesen [= *Asperococcus intricatus* J. Agardh]. GUAM: Tsuda (**1972a**, 1981b), Tsuda & Kami (1973), Jones et al. (1976), Thacker et al. (2001), Lobban & Tsuda (2003). ROTA: Tsuda (1969).

## Order Fucales

### Family Cystoseiraceae

*Hormophysa cuneiformis* (Gmelin) Silva [= *Hormophysa triquetra* (C. Agardh) Kützing]. PAGAN: **Tsuda & Tobias (1977a)** as *H. triquetra*.

### Family Sargassaceae

*Sargassum crassifolium* J. Agardh. GUAM: **Taylor (1966)**.

*Sargassum cristaefolium* C. Agardh. GUAM: **Taylor (1966)** as *S. duplicatum* J. Agardh, Tsuda (**1972a, 1972b** as *S. duplicatum*, 1974, 1977a, 1981b, 1982b, **1988**, 1992, 1993), Randall (1974), Marsh & Gordon (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Best (1982), **Soe-Htun & Yoshida (1986)**, Wylie & Paul (1988), Van Alstyne & Paul (1990), Pennings & Paul (1992), Pennings et al. (1993), Meyer et al. (1994), Lobban & Tsuda (2003). ROTA: Tsuda (1969, **1988**), Wylie (1989). SAIPAN: **Okamura (1916)**, Tokida (1939), PBEC (1984), **Tsuda (1988)**. ANATAHAN: **Tsuda & Tobias (1977a)**. PAGAN: **Tsuda & Tobias (1977a)**, **Tsuda (1988)**. MAUG: **Tsuda & Tobias (1977a)**, **Tsuda (1988)**. URACAS: **Tsuda & Tobias (1977a)**, **Tsuda (1988)**.

*Sargassum obtusifolium* J. Agardh. GUAM: Tsuda (**1972a**, 1981b) as *Sargassum tenerimum* J. Agardh, **Tsuda (1988)**, Lobban & Tsuda (2003). ROTA: Randall & Smith (1988) as *S. tenerimum*. AGUIJAN: **Tsuda (1988)**. TINIAN: Jones et al. (1974b) as *S. tenerimum*, **Tsuda (1988)**.

*Sargassum polycystum* C. Agardh. GUAM: **Taylor (1966)**, Tsuda (**1972a, 1972b**, 1974, 1977a, 1977b, 1981b, **1988**, 1993), Randall (1974), Bryan (1975), Marsh & Doty (1975, 1976), Randall et al. (1975), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Van Alstyne & Paul (1990), Pennings & Paul (1992), Lobban & Tsuda (2003). ROTA: Tsuda (1969) as *Sargassum myriocystum* J. Agardh, **1988**. SAIPAN: Cloud (1959) as *S. microphyllum* C. Agardh, Amesbury et al. (1979), PBEC (1984), Wilkins (1987), **Tsuda (1988)**, Wilkins & Meyer (1991). PAGAN: **Tsuda & Tobias (1977a)**.

*Turbinaria condensata* Sonder in Kützing. GUAM: **Taylor (1964)**.

*Turbinaria ornata* (Turner) J. Agardh. GUAM: Emery (1962) probably as *Turbinaria trialata* (J. Agardh) Kützing, **Taylor (1964)**, Tsuda (**1972a**, 1974, 1977a, 1977b, 1981b, 1993), Randall (1974), Jones et al. (1974a, 1976), Randall et al. (1975), Dickinson & Tsuda (1975), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich

(1977), Tsuda et al. (1978), Davis (1982), Best (1982), Wylie & Paul (1988), Van Alstyne & Paul (1990), Pennings & Paul (1992), Meyer et al. (1994), Thacker et al. (2001), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Cloud (1959), **Taylor (1964)**, Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). PAGAN: **Tsuda & Tobias (1977a)**. ASUNCION: **Tsuda & Tobias (1977a)**. MAUG: **Tsuda & Tobias (1977a)**.

**Division RHODOPHYTA (Red Algae)  
Class Rhodophyceae**

**Subclass Bangiophycidae**

**Order Porphyridiales**

**Family Porphyridiaceae**

*Chroodactylon ornatum* (C. Agardh) Basson [= *Asterocytis ornata* (C. Agardh) G. Hamel].  
GUAM: Tobias (1976) as *Asterocytis ornata*.

**Order Erythropeltidales**

**Family Erythrotrichiaceae**

*Erythrotrichia carnea* (Dillwyn) J. Agardh. GUAM: **Lobban & Tsuda (2003)**.

**Subclass Florideophycidae**

**Order Nemaliales**

**Family Galaxauraceae**

*Actinotrichia fragilis* (Forsskål) Børgesen [= *Actinotrichia rigida* (Lamouroux) Decaisne].  
GUAM: Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Tsuda & Grosenbaugh (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1993), Tsuda et al. (1978), Davis (1982), Best (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins & Meyer (1991). MAUG: **Tsuda & Tobias (1977b)**.

*Galaxaura fasciculata* Kjellman. GUAM: Randall et al. (1975), Tsuda & Grosenbaugh (1977), Chernin et al. (1977), Tsuda (1977b, 1981b, 1993), Tsuda et al. (1978), **Itono (1980)**, Lassuy (1980) as *G. fascicularis*, Davis (1982), Wylie & Paul (1988). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: **Itono (1980)**, Wilkins (1987).

*Galaxaura filamentosa* Chou. GUAM: Tsuda & Kami (1973), Dickinson & Tsuda (1975), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b), Lobban & Tsuda (2003). SAIPAN: Tobias (1977), PBEC (1984), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**, **Itono (1980)**. GUGUAN: **Tsuda & Tobias (1977b)**, **Itono (1980)**. AGRIHAN: **Tsuda & Tobias (1977b)**, **Itono (1980)**. MAUG: **Tsuda & Tobias (1977b)**, **Itono (1980)**.

*Galaxaura hystrix* Kjellman. GUGUAN: **Tsuda & Tobias (1977b)** as *G. veprecula* Kjellman, **Itono (1980)**.

*Galaxaura marginata* (Ellis & Solander) Lamouroux [*Galaxaura clavigera* Kjellman]. GUAM: Tsuda (1971, 1977b, 1981b, 1992), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Tsuda & Grosenbaugh (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978) as *G. clavigera*; **Itono (1980)**, Davis (1982), Wylie & Paul (1988), Pennings & Paul (1992), Meyer et al. (1994), Ginsburg & Paul (2001), Lobban & Tsuda (2003). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b), **Itono (1980)**. SAIPAN: Goreau et al. (1972), Tobias (1977), **Itono (1980)**, PBEC (1984), Wilkins & Meyer (1991).

*Galaxaura rugosa* (Ellis & Solander) Lamouroux [= *G. elongata* J. Agardh, *G. glabriuscula* Kjellman, *G. lapidescens* (Ellis & Solander) Lamouroux, *G. pacifica* Tanaka, *G. squalida* Kjellman, *G. subfruticulosa* Chou and *G. subverticillata* Kjellman]. GUAM: Emery (1962) as *G. glabriuscula*, **Itono (1980)** as *G. rugosa* and *G. pacifica*, Tsuda (1981b) as *G. pacifica* and *G. rugosa*, Lobban & Tsuda (2003). AGUIJAN: **Itono (1980)** as *G. elongata*. TINIAN: **Itono (1980)** as *G. subverticillata* and *G. glabriuscula*. SAIPAN: Cloud (1959) as *G. elongata*, Goreau et al. (1972) as *G. lapidescens* and *G. squalida*, **Itono (1980)** as *G. glabriuscula*.

*Galaxaura subfruticulosa* Chou in Taylor. TINIAN: **Itono (1980)**. SAIPAN: **Itono (1980)**.

*Galaxaura ventricosa* Kjellman. GUAM: **Itono (1980)**, Tsuda (1981b). TINIAN: **Itono (1980)**. SAIPAN: **Itono (1980)**.

*Tricleocarpa cylindrica* (Ellis & Solander) Huisman & Borowitzka (= *Galaxaura cylindrica* and *G. fastigiata* Decaisne]. GUAM: Tsuda et al. (1978) as *G. fastigiata*. SAIPAN: Goreau et al. (1972) as *G. cylindrica* and *G. fastigiata*.

*Tricleocarpa fragilis* (Linnaeus) Huisman & Townsend [= *Galaxaura oblongata* (Ellis & Solander) Lamouroux]. GUAM: Tsuda (1971, 1977b, 1981b), Randall et al. (1975), Dickinson & Tsuda (1975), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), **Itono (1980)**, Davis (1982), Wylie & Paul (1988), Pennings & Paul (1992), Pennings et al. (1993), Lobban & Tsuda (2003). AGUIJAN: **Itono (1980)**. TINIAN: Jones et al. (1974b), **Itono (1980)**. SAIPAN: Cloud (1959), **Itono (1980)**, PBEC (1984), Wilkins & Meyer (1991). All, except Lobban & Tsuda (2003), as *G. oblongata*.

## Family Liagoraceae

*Dermonema virens* (J. Agardh) Pedroche & Ávila Ortíz [= *Dermonema frappieri* (Montagne & Millardet) Børgesen]. ANATAHAN: **Tsuda & Tobias (1977b)** as *D. frappieri*. *Ganonema farinosum* (Lamouroux) Fan & Wang [= *Liagora farinosa* Lamouroux]. GUAM: Wylie & Paul (1988). SAIPAN: Tobias (1977), Wilkins & Meyer (1991). All as *Liagora farinosa*.

*Liagora ceranoides* Lamouroux. GUAM: Lobban & Tsuda (2003).

*Liagora dendroidea* (P. Crouan & H. Crouan) Abbott [= *Liagora mucosa* M. Howe]. SAIPAN: Wilkins & Meyer (1991) as *Liagora mucosa*.

*Trichogloea requienii* (Montagne) Kützing. GUAM: Tsuda (1981b).

*Yamadaella caenomyce* (Decaisne) Abbott. GUAM: **Lobban & Tsuda (2003)**. ROTA: **Lobban & Tsuda (2003)**.

## Order Gelidiales

## Family Gelidiaceae

*Gelidium crinale* (Turner) Gaillon. GUAM: Stojkovich (1977), Tsuda (1981b). ROTA: Tsuda (1969). SAIPAN: PBEC (1984), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**.

*Gelidium divaricatum* G. Martens. GUAM: Randall et al. (1975), Stojkovich (1977), Tsuda (1977b, 1981b, 1993), Davis (1982). ROTA: Tsuda (1969), **Lobban & Tsuda (2003)**. SAIPAN: Wilkins (1987).

*Gelidium pusillum* (Stackhouse) Le Jolis. GUAM: Randall (1974), Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Tsuda & Grosenbaugh (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1992, 1993), Tsuda et al. (1978), Lassuy (1980), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**.

*Pterocladia caloglossoides* (Howe) Dawson [= *Pterocladia parva* Dawson]. GUAM: Belk (1975), Belk & Belk (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: PBEC (1984), Wilkins (1987). All, except Lobban & Tsuda (2003), as *Pterocladia parva*.

*Wurdemannia miniata* (Sprengel) Feldmann & Hamel. GUAM: Amesbury et al. (1977), Tsuda (1981b, 1993), **Lobban & Tsuda (2003)**. ANATAHAN: **Tsuda & Tobias (1977b)**, **Lobban & Tsuda (2003)**. MAUG: **Tsuda & Tobias (1977b)**, **Lobban & Tsuda (2003)**.

## Family Gelidiellaceae

*Gelidiella acerosa* (Forsskål) Feldmann & Hamel. GUAM: Emery (1962), Randall (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1982b, 1992, 1993), Tsuda et al. (1978), Davis (1982), Best (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Gelidiella myrioclada* (Børgesen) J. Feldmann & G. Hamel. GUAM: Amesbury et al. (1977), Marsh et al. (1977), Wylie & Paul (1988).

*Gelidiella pannosa* (J. Feldmann) J. Feldmann & G. Hamel [= *Gelidiella tenuissima* J. Feldmann & G. Hamel]. GUAM: Tsuda (1992) as *G. tenuissima*.

## Order Gracilariales

## Family Graciliariaceae

*Gracilaria hauckii* P. Silva [= *G. radicans* Hauck]. GUAM: Lobban & Tsuda (2003). SAIPAN: **Okamura (1916)**, Schmidt (1928) and Tokida (1939) as *G. radicans*.

*Gracilaria salicornia* (C. Agardh) Dawson [= *Corallopsis salicornia* (C. Agardh) Greville, *Corallopsis cacalia* J. Agardh and *Corallopsis minor* (Sonder) J. Agardh]. GUAM: Safford (1905) as *C. salicornia*, Randall (1974), Marsh & Doty (1975, 1976), Jones et al. (1976), Marsh et al. (1977), Chernin et al. (1977) and Stojkovich (1977) as *Gracilaria arcuata* Zanardini, Amesbury et al. (1977) and Tsuda et al. (1978) as *G. salicornia* and *G. arcuata*, Nelson et al. (1980a, 1980b) as *G. arcuata*, Tsuda (1981b) as *G. salicornia* and *G. arcuata*, 1982b as *G. arcuata*, 1992, 1993), Matlock & Romeo (1982) as *G. salicornia* and *G. arcuata*, Nelson et al. (1983) as *G. arcuata*, Marsh et al. (1985) as *G. arcuata*, **Meneses & Abbott (1987)**, Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: **Meneses & Abbott (1987)**. SAIPAN: **Okamura (1904)** and Tokida (1939) as *Corallopsis cacalia*, Tobias (1977), Nelson et al. (1983), **Meneses & Abbott (1987)**, Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**, **Meneses & Abbott (1987)**.

*Gracilaria tsudae* (Abbott & Meneses) Abbott in Abbott et al. (1991), Type from Saipan [= *Polycavernosa tsudae* Abbott & Meneses]. GUAM: Randall (1974) as *Gracilaria lichenoides* Greville; Randall et al. (1975) as *Gracilaria crassa* Harvey [synonym of *Gracilaria canaliculata* Sonder]; Tsuda (1977b as *G. lichenoides*, 1981b as *G. edulis* and *Gracilaria coronopifolia* J. Agardh, 1982b and 1985 as *G. edulis*); Hedlund (1977), Chernin et al. (1977) and Nelson et al. (1980a, 1980b) as *Gracilaria edulis* (Gmelin) P. Silva [= *Gracilaria lichenoides* Greville]; Davis (1982) as *G. edulis* and *G. crassa*; Matlock & Romeo (1982), Nelson & Tsutsui (1982) and Nelson et al. (1983) as *G. edulis*; **Meneses & Abbott (1987)** as *Polycavernosa tsudae*; Ginsburg & Paul (2001); Lobban & Tsuda (2003) as *G. tsudae* and *G. edulis*. ROTA: Tsuda (1969) as *G. crassa* Harvey. SAIPAN: Tobias (1977) as *G. lichenoides*, Amesbury

et al. (1979), Nelson et al. (1983) as *G. lichenoides*, **Meneses & Abbott (1987)** as *P. tsudae*.

### Order Bonnemaisoniales

#### Family Bonnemaisonaceae

*Asparagopsis taxiformis* (Delile) Trevisan. GUAM: Tsuda & Bryan (1973), Randall et al. (1975), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1981b, 1982b), Davis (1982), Best (1982), Wylie & Paul (1988), Pennings & Paul (1992), Meyer et al. (1994), Ginsburg & Paul (2001), Lobban & Tsuda (2003). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Wilkins & Meyer (1991). MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977).

### Order Cryptonemiales

#### Family Acrosympytaceae

*Acrosympyton* sp. GUAM: **Lobban & Tsuda (2003)**.

#### Family Dumontiaceae

*Gibsmithia hawaiiensis* Doty. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**. TINIAN: Jones et al. (1974b), **Lobban & Tsuda (2003)**. SAIPAN: **Lobban & Tsuda (2003)**.

#### Family Halymeniaceae

*Grateloupia filicina* (Wulfen) C. Agardh. GUAM: Tsuda (1981b).

*Halymenia dilatata* Zanardini. GUAM: **Lobban & Tsuda (2003)**.

*Halymenia durvillei* Bory. GUAM: Emery (1962), Randall et al. (1975), Dickinson & Tsuda (1975), Tsuda & Grosenbaugh (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Davis (1982), Wylie & Paul (1988), Pennings & Paul (1992), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b).

*Halymenia floresia* (Clemente y Rubio) C. Agardh. GUAM: Tsuda (1981b). TINIAN: Jones et al. (1974b).

*Halymenia lacerata* Sonder. GUAM: Lobban & Tsuda (2003).

*Polyopes clarionensis*. GUAM: Randall (1974).

## Family Peyssonneliaceae

*Peyssonnelia corallis* (C. Agardh) Kylin. GUAM: Lobban & Tsuda (2003).

*Peyssonnelia rubra* (Greville) J. Agardh. GUAM: Stojkovich (1977), Tsuda (1981b), Tsuda (1992, 1993), Lobban & Tsuda (2003). ROTA: Randall & Smith (1988). SAIPAN: Tobias (1977), Wilkins & Meyer (1991).

## Family Rhizophyllidaceae

*Portieria hornemannii* (Lyngbye) P. Silva [= *Desmia hornemannii* Lyngbye]. GUAM: Randall (1974), Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Davis (1982), Wylie & Paul (1988), Puglisi & Paul (1997), Matlock et al. (1999), Ginsburg & Paul (2001), Lobban & Tsuda (2003). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. AGRIHAN: **Tsuda & Tobias (1977b)**. Publications prior to 1997 cited as *Desmia hornemannii*.

## Order Corallinales

### Family Corallinaceae

*Amphiroa foliacea* Lamouroux. GUAM: Randall et al. (1975), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b), Tsuda et al. (1978), Davis (1982). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1988), Wilkins & Meyer (1991).

*Amphiroa fragilissima* (Linnaeus) Lamouroux. GUAM: Randall (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Jones et al. (1976), Tsuda & Grosenbaugh (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1992, 1993), Tsuda et al. (1978), Davis (1982), Lobban & Tsuda (2003). ROTA: Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977).

*Amphiroa tribulus* (Ellis & Solander) Lamouroux. SAIPAN: Goreau et al. (1972).

*Cheilosporum culturatum* (Harvey) Areschoug [= *Cheilosporum multifidum* (Kützing) Yendo]. GUAM: Randall (1974), Jones et al. (1976), Tsuda (1981b, 1992), **Lobban & Tsuda (2003)**. SAIPAN: Wilkins & Meyer (1991), **Lobban & Tsuda (2003)**. ANATAHAN: Lobban & Tsuda (2003). All, except Lobban & Tsuda (2003), as *C. multifidum*.

*Hydrolithon craspedium* (Foslie) Silva [= *Porolithon craspedium* (Foslie) Foslie]. GUAM: **Johnson (1964)** as *Porolithon craspedium*, Lobban & Tsuda (2003). SAIPAN: **Johnson (1957)** and Cloud (1959) as *P. craspedium*.

*Hydrolithon farinosum* (Lamouroux) Penrose & Y.M. Chamberlain [= *Fosliella farinosa* (Lamouroux) Howe]. GUAM: **Gordon et al. (1976)** and Tsuda (1981b) as *Fosliella farinosa*, Lobban & Tsuda (2003).

*Hydrolithon gardineri* (Foslie) Verheij & Prud'homme van Reine [= *Porolithon gardineri* (Foslie) Foslie and *Porolithon marshallense* Taylor]. GUAM: Randall (1974) and Jones et al. (1974b) as *Porolithon gardineri*, Lobban & Tsuda (2003). TINIAN: Jones et al. (1974a) as *P. gardineri*.

*Hydrolithon onkodes* (Heydrich) Penrose & Woelkerling [= *Porolithon onkodes* Foslie]. GUAM: Randall (1974), Jones et al. (1974a), Randall et al. (1975), Dickinson & Tsuda (1975), **Gordon et al. (1976)**, Gordon (1976), Tobias (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1993), Davis (1982), Best (1982), Lobban & Tsuda (2003). ROTA: Randall & Smith (1988). TINIAN: Jones et al. (1974b). SAIPAN: **Johnson (1957)**, Cloud (1959), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). All, except Lobban & Tsuda (2003), as *Porolithon onkodes*.

*Hydrolithon reinboldii* (Weber-van Bosse & Foslie) Foslie [= *Goniolithon reinboldii* (Weber-van Bosse & Foslie) Weber-van Bosse & Foslie in Foslie]. GUAM: **Johnson (1964)** as *Goniolithon reinboldii*, **Gordon et al. (1976)**, Gordon (1976), Chernin et al. (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: **Johnson (1957)** and Cloud (1959) as *G. reinboldii*, Wilkins (1987, 1988).

*Jania capillacea* Harvey. GUAM: Randall (1974), Bryan (1975), Belk (1975), Randall et al. (1975), Jones et al. (1976), Tsuda & Grosenbaugh (1977), Amesbury et al. (1977), Chernin et al. (1977), Marsh et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1992, 1993), Tsuda et al. (1978), Lassuy (1980), Davis (1982), Lobban & Tsuda (2003). ROTA: Randall & Smith (1988), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. ALAMAGAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. AGRIHAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977).

*Jania decussatodichotoma* (Yendo) Yendo. GUAM: Randall (1974), Tsuda (1981b). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins & Meyer (1991). AGRIHAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**.

*Jania radiata* (Yendo) Yendo. GUAM: Emery (1962).

*Jania tenella* (Kützing) Grunow. GUAM: Stojkovich (1977), Tsuda (1977b, 1981b), Lobban & Tsuda (2003). SAIPAN: Schmidt (1928), Tokida (1939), Wilkins (1987). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. ASUNCION: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**.

*Lithophyllum insipidum* Townsend, Adey & Boykins. GUAM: **Lobban & Tsuda (2003)**.

*Lithophyllum kotschyuanum* Unger. GUAM: **Johnson (1964)**, **Gordon et al. (1976)**, Tobias (1976), Chernin et al. (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: **Johnson (1957)**, Cloud (1959).

*Lithophyllum moluccense* Foslie. GUAM: **Johnson (1964), Gordon et al. (1976)**, Chernin et al. (1977), Tsuda (1981b), Pitlik & Paul (1997), Lobban & Tsuda (2003). SAIPAN: **Johnson (1957)**, Cloud (1959), Wilkins (1987), Wilkins & Meyer (1991).

*Lithoporella melobesioides* (Foslie) Foslie. GUAM: **Gordon et al. (1976)**, Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: **Johnson (1957)**.

*Mastophora pacifica* (Heydrich) Foslie [= *Lithoporella pacifica* (Heydrich) Foslie]. GUAM: **Gordon et al. (1976)**, Chernin et al. (1977) and Tsuda (1981b) as *L. pacifica*, Lobban & Tsuda (2003). SAIPAN: Wilkins (1987) as *L. pacifica*.

*Mastophora rosea* (C. Agardh) Setchell [= *Mastophora macrocarpa* Montagne]. GUAM: Emery (1962), Stojkovich (1977), Tsuda (1981b, 1992), Best (1982), Wylie & Paul (1988), Pitlik & Paul (1997), Lobban & Tsuda (2003). SAIPAN: PBEC (1984), Wilkins & Meyer (1991).

*Mesophyllum erubescens* (Foslie) Lemoine. GUAM: **Gordon et al. (1976)**, Tsuda (1981b), Lobban & Tsuda (2003).

*Mesophyllum funafutense* (Heydrich) Foslie. GUAM: Lobban & Tsuda (2003).

*Mesophyllum mesomorphum* (Foslie) Adey. GUAM: **Gordon et al. (1976)**, Stojkovich (1977), Tsuda (1981b), Pitlik & Paul (1997), Lobban & Tsuda (2003). SAIPAN: Wilkins & Meyer (1991).

*Mesophyllum philippii* (Foslie) Adey. GUAM: Lobban & Tsuda (2003).

*Mesophyllum simulans* (Foslie) Lemoine [= *Lithothamnion simulans* (Foslie) Foslie]. GUAM: Emery (1962) as *L. simulans*.

*Metagoniolithon charoides* (Lamouroux) Weber-van Bosse. GUAM: Tsuda (1981b).

*Metagoniolithon graniferum* (Harvey) Weber-van Bosse. GUAM: Chernin et al. (1977), Tsuda (1981b).

*Metamastophora flabellata* (Sonder) Setchell [= *Mastophora lamourouxii* (Decaisne) Harvey and *Mastophora plana* (Sonder) Harvey]. GUAM: Safford (1905) and Jones et al. (1976) as *Mastophora lamourouxii*, Lobban & Tsuda (2003).

*Neogoniolithon brassica-florida* (Harvey) Setchell & Mason [= *Goniolithon fosliei* (Heydrich) Foslie, *Goniolithon frutescens* Foslie, *Neogoniolithon fosliei* (Heydrich) Setchell & Mason and *Neogoniolithon frutescens* (Foslie) Setchell & Mason]. GUAM: **Johnson (1964), Gordon et al. (1976)**, Chernin et al. (1977), Tsuda (1981b, 1993), Pitlik & Paul (1997), Lobban & Tsuda (2003). SAIPAN: **Johnson (1957)**, Cloud (1959), Wilkins (1987, 1988). All, except Lobban & Tsuda (2003), as *Goniolithon fosliei*, *Goniolithon frutescens*, *Neogoniolithon fosliei* or *Neogoniolithon frutescens*.

***Neogoniolithon medioramus* (Johnson) Setchell & Mason (1943)** [= *Goniolithon medioramus* Johnson], Type from Guam. GUAM: **Johnson (1964)** as *Goniolithon medioramus*, Lobban & Tsuda (2003).

*Neogoniolithon megalocystum* (Foslie) Setchell & Mason. GUAM: Lobban & Tsuda (2003).

*Neogoniolithon pacificum* (Foslie) Setchell & Mason. GUAM: **Gordon et al. (1976)**, Tsuda (1981b).

*Paragoniolithon conicum* (Dawson) Townsend, Adey & Boykins [= *Neogoniolithon conicum* (Dawson) Gordon, Masaki & Akioka]. GUAM: **Gordon et al. (1976)** and Tsuda (1981b) as *N. conicum*, Lobban & Tsuda (2003).

*Phymatolithon repandum* (Foslie) Wilks & Woelkerling [= *Lithothamnion asperulum* (Foslie) Foslie]. GUAM: **Gordon et al. (1976)** and Tsuda (1981b) as *L. asperulum*, Lobban & Tsuda (2003).

*Pneophyllum* sp. [= *Heteroderma subtilissima* (Foslie) Foslie]. SAIPAN: Tobias (1977) as *H. subtilissima*.

*Serraticardia maxima* (Yendo) Silva [= *Cheilosporum maximum* Yendo]. GUAM: Tsuda (1981b) as *C. maximum*, **Lobban & Tsuda (2003)**. TINIAN: Jones et al. (1974a) as *C. maximum*. ALAMAGAN: **Lobban & Tsuda (2003)**. PAGAN: **Lobban & Tsuda (2003)**.

### Family Sporolithaceae

*Sporolithon schmidtii* (Foslie) Gordon, Masaki & Akioka. GUAM: **Gordon et al. (1976)**, Chernin et al. (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: Wilkins (1987).

### Order Gigartinales

#### Family Furcellariaceae

*Halarachnion calcareum* Okamura. GUAM: Lobban & Tsuda (2003).

#### Family Hypnaceae

*Hypnea musciformis* (Wulfen) Lamouroux. GUAM: Merten (1971), Randall (1974), Marsh & Doty (1975, 1976), Amesbury et al. (1977), Marsh et al. (1977), Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b, 1993). ROTA: Tsuda (1969). SAIPAN: Tobias (1977), Wilkins (1987), Wylie & Paul (1988), Wilkins & Meyer (1991). MAUG: Eldredge et al. (1977). All, except Tsuda (1993), as *Hypnea esperi auctorum*.

*Hypnea nidulans* Setchell. GUAM: Randall (1974). SAIPAN: Tobias (1977).

*Hypnea pannosa* J. Agardh. GUAM: Tsuda & Bryan (1973), Randall (1974), Bryan (1975), Belk & Belk (1975), Randall et al. (1975), Jones et al. (1976), Chernin et al. (1977), Stojkovich (1977), Tsuda (1977b, 1981b, 1982b, 1992), Tsuda et al. (1978), Davis (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969). SAIPAN: **Okamura (1904)**, Tokida (1939), Wilkins (1987, 1988). GUGUAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**.

*Hypnea spinella* (C. Agardh) Kützing. GUAM: Randall (1974), Randall et al. (1975), Dickinson & Tsuda (1975), Stojkovich (1977), Tsuda (1981b), Davis (1982),

**Lobban & Tsuda (2003).** TINIAN: Jones et al. (1974b). SAIPAN: Wilkins & Meyer (1991). All, except Lobban & Tsuda (2003), as *H. cervicornis* J. Agardh.  
*Hypnea valentiae* (Turner) Montagne. GUAM: Randall et al. (1975), Tsuda (1981b), Davis (1982).

### Family Nemastomataceae

*Predaea weldii* Kraft & Abbott. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**.

### Family Polyidaceae

*Stenopeltis gracilis* (Yamada & Tanaka) Itono & Yoshizaki [= *Rhodopeltis gracilis* Yamada & Tanaka]. GUAM: **Itono and Tsuda (1980)**, Tsuda (1981b), Lobban & Tsuda (2003). All as *Rhodopeltis gracilis*.

### Family Schizymeniaceae

*Titanophora marianensis* Itono & Tsuda (1980b), Type from Guam. GUAM: **Itono & Tsuda (1980b)**, Tsuda (1981b), Lobban & Tsuda (2003).

### Family Solieriaceae

*Kappaphycus cottonii* (Weber-van Bosse) Doty ex Silva. GUAM: Tsuda (1981b, 1982b) as *Eucheuma cottonii* Weber-van Bosse, **Lobban & Tsuda (2003)**.

## Order Rhodymeniales

### Family Champiaceae

*Champia compressa* Harvey. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).  
*Champia parvula* (C. Agardh) Harvey. GUAM: Randall (1974), Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Stojkovich (1977), Tsuda (1981b, 1992), Davis (1982), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984). PAGAN: **Tsuda & Tobias (1977b)**.

### Family Rhodymeniaceae

*Asteromenia peltata* (Taylor) Huisman & Millar [= *Fauchea peltata* W.R. Taylor]. GUAM: **Lobban & Tsuda (2003)**.

*Botryocladia skottsbergii* (Børgesen) Levring. GUAM: Randall et al. (1975), Tsuda (1977b, 1981b), Davis (1982), **Lobban & Tsuda (2003)**. TINIAN: Jones et al. (1974b). PAGAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**.

*Ceratodictyon spongiosum* Zanardini. GUAM: Lobban & Tsuda (2003).

*Gelidiopsis intricata* (C. Agardh) Vickers. GUAM: Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Amesbury et al. (1977), Marsh et al. (1977), Chernin et al. (1977), Neudecker (1977), Tsuda (1977b, 1981b, 1993), Tsuda et al. (1978), Lassuy (1980), Davis (1982), Lassuy (1984), Wylie & Paul (1988), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Wilkins (1987, 1988), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. GUGUAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977).

*Gelidiopsis pannosa* (Grunow) Schmitz. GUAM: Lobban & Tsuda (2003).

*Gelidiopsis repens* (Kützing) Weber-van Bosse. GUAM: Lobban & Tsuda (2003).

*Rhodymenia divaricata* Dawson. GUAM: Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b, 1992, 1993), **Lobban & Tsuda (2003)**.

## Order Ceramiales

### Family Ceramiaceae

*Anotrichium tenue* (C. Agardh) Nägeli [= *Griffithsia tenuis* C. Agardh]. GUAM: Belk & Belk (1975), Lassuy (1980) and Tsuda (1981b) as *G. tenuis*, Lobban & Tsuda (2003). SAIPAN: Wilkins (1987) as *G. tenuis*.

*Antithamnion lherminieri* (P. Crouan & H. Crouan) Bornet ex Nasr [= *Antithamnion antillanum* Børgesen]. GUAM: Tsuda (1981b) as *A. antillanum*.

*Antithamnionella elegans* (Berthold) J. Price & D. John [= *Antithamnionella breviramosum* Dawson]. GUAM: Tsuda (1981b) as *A. breviramosum*.

*Antithamnionella graeffei* (Grunow) Athanasiadis. GUAM: **Lobban & Tsuda (2003)**.

*Balliella* cf. *subcorticata* (Itono) Itono & Tanaka. GUAM: **Lobban & Tsuda (2003)**.

*Callithamnion marshallense* Dawson. GUAM: Stojkovich (1977). SAIPAN: Tobias (1977).

*Centroceras clavulatum* (C. Agardh) Montagne [= *Ceramium clavulatum* C. Agardh]. GUAM: Randall (1974), Randall et al. (1974, 1975), Bryan (1975), Belk & Belk (1975), Amesbury et al. (1977), Chernin et al. (1977), Lassuy (1980), Tsuda (1981b, 1992), Davis (1982), Wylie & Paul (1988), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins & Meyer (1991). PAGAN: **Tsuda & Tobias (1977b)**.

*Centroceras minutum* Yamada. GUAM: Belk & Belk (1975), Stojkovich (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: Wilkins (1987, 1988).

*Ceramium clarionensis* Setchell & Gardner [= *Ceramium marshallense* Dawson]. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Ceramium fimbriatum* Setchell & Gardner. GUAM: Chernin et al. (1977).

*Ceramium flaccidum* (Harvey ex Kützing) Ardisone [= *Ceramium byssoides* Harvey, *Ceramium gracillimum* (Kützing) Zanardini and *Ceramium transversale* Collins & Hervey]. GUAM: Lassuy (1980) and Tsuda (1981b, 1993) as *C. gracillimum*. **Lobban & Tsuda (2003)**. SAIPAN: PBEC (1984), Wilkins (1987, 1988) and Wilkins & Meyer (1991) as *C. gracillimum*.

*Ceramium macilentum* J. Agardh [= *Ceramium mazatlanense* Dawson]. GUAM: Chernin et al. (1977), Stojkovich (1977), Lassuy (1980), Tsuda (1981b, 1992), Lobban & Tsuda (2003). ROTA: Tsuda (1969). SAIPAN: Wilkins (1987, 1988), Wilkins & Meyer (1991). MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977). All, except Lobban & Tsuda (2003), as *C. mazatlanense*.

*Ceramium maryae* Weber-van Bosse. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**.

*Ceramium subdichotomum* Weber-van Bosse [= *Ceramium sympodiale* Dawson]. GUAM: Tsuda (1981b).

*Ceramium vagans* P. Silva [= *Ceramium vagabundum* Dawson]. GUAM: Belk & Belk (1975) as *C. vagabunda*. SAIPAN: Tobias (1977) as *C. vagabunda*.

*Corallophila apiculata* (Yamada) R. Norris [= *Centroceras apiculatum* Yamada]. GUAM: Tsuda (1992) as *Centroceras apiculatum*. PAGAN: **Tsuda & Tobias (1977b)** as *Centroceras apiculatum*, **Lobban & Tsuda (2003)**.

*Corallophila huysmansii* (Weber-van Bosse) R. Norris [= *Ceramium huysmansii* Weber-van Bosse]. GUAM: Belk & Belk (1975), Chernin et al. (1977), Lassuy (1980) and Tsuda (1981b) as *Ceramium huysmansii*; Lobban & Tsuda (2003).

*Dasyphila plumariooides* Yendo. GUAM: Dickinson & Tsuda (1975), Chernin et al. (1977), Stojkovich (1977), Tsuda et al. (1978), Tsuda (1981b), **Kraft & Wilson (1997)**, Lobban & Tsuda (2003). PAGAN: **Tsuda & Tobias (1977b)**.

*Griffithsia metcalfii* Tseng. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Griffithsia ovalis* Harvey. GUAM: Tsuda (1981b).

*Spyridia filamentosa* (Wulfen) Harvey. GUAM: Tsuda & Kami (1973), Randall (1974), Randall et al. (1975), Marsh et al. (1977), Amesbury et al. (1977), Tsuda et al. (1978), Tsuda (1981b, 1993), Davis (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Tobias (1977), PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Tiffaniella saccorrhiza* (Setchell & Gardner) Doty & Meñez [= *Spermothamnion saccorrhiza* (Setchell & Gardner) Feldmann-Mazoyer]. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**.

*Wrangelia anastomosans* Yamada. MAUG: **Tsuda & Tobias (1977b)**.

*Wrangelia argus* (Montagne) Montagne. GUAM: Chernin et al. (1977). TINIAN: Jones et al. (1974b).

*Wrangelia penicillata* (C. Agardh) C. Agardh. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**. GUGUAN: **Tsuda & Tobias (1977b)**.

## Family Dasyaceae

*Dasya pilosa* (Weber-van Bosse) Millar [= *Dasyopsis pilosa* Weber-van Bosse]. GUAM: Chernin et al. (1977).

*Dictyurus purpurascens* Bory. GUAM: **Lobban & Tsuda (2003)**.

*Heterosiphonia crispella* (C. Agardh) Wynne [= *Heterosiphonia wurdemannii* (Bailey) Falkenberg]. GUAM: **Lobban & Tsuda (2003)**.

## Family Delesseriaceae

*Caloglossa leprieurii* (Montagne) G. Martens. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**.

*Hypoglossum attenuatum* Gardner. GUAM: Tsuda (1981b), **Lobban & Tsuda (2003)**. ROTA: Tsuda (1969), **Lobban & Tsuda (2003)**. MAUG: **Tsuda & Tobias (1977b)**, **Lobban & Tsuda (2003)**.

*Hypoglossum simulans* Wynne, Price & Ballantine. GUAM: Lobban & Tsuda (2003).

*Martensia fragilis* Harvey [= *Hemitrema fragilis* ]. GUAM: Tsuda (1981b), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b) as *Hemitrema fragilis*.

## Family Rhodomelaceae

*Acanthophora spicifera* (Vahl) Børgesen [= *Acanthophora orientalis* J. Agardh]. GUAM: Safford (1905) as *A. orientalis*, Randall (1974), Jones et al. (1974a), Bryan (1975), Randall et al. (1975), Amesbury et al. (1977), Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b, 1993), Davis (1982), Wylie & Paul (1988), Pennings & Paul (1992), Pennings et al. (1993), Kerr & Paul (1995), Ginsburg & Paul (2001), Lobban & Tsuda (2003). ROTA: Tsuda (1969), Wylie (1989). SAIPAN: **Okamura (1904, 1916)** and Tokida (1939) as *A. orientalis*, Cloud (1959), Tobias (1977), PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991).

*Bostrychia tenella* (Lamouroux) J. Agardh [= *Bostrychia binderi* Harvey]. GUAM: **Kumano (1979)** as *B. tenella* and *B. binderi*, Tsuda (1981b) as *B. tenella* and *B. binderi*, Lobban & Tsuda (2003).

*Chondria polyrhiza* Collins & Hervey. GUAM: Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b), Lobban & Tsuda (2003). ANATAHAN: **Tsuda & Tobias (1977b)**.

*Chondria repens* Børgesen. GUAM: Bryan (1975), Tobias (1976), Tsuda (1977b).

*Chondrophyllum papillosum* (C. Agardh) Garbary & Harper [= *Laurencia papillosum* (C. Agardh) Greville]. GUAM: Tsuda (1981b), **Nam & Saito (1991)**, Pennings & Paul (1992), Ginsburg & Paul (2001), Lobban & Tsuda (2003). SAIPAN: **Okamura (1916)**, Schmidt (1928), Tokida (1939), Tobias (1977), Wilkins & Meyer (1991). All, except Lobban & Tsuda (1977), as *L. papillosum*.

*Herposiphonia delicatula* Hollenberg. GUAM: **Hollenberg (1968)**.

*Herposiphonia pacifica* Hollenberg. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Herposiphonia parca* Setchell. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Herposiphonia secunda* (C. Agardh) Ambronn [= *Herposiphonia tenella* (C. Agardh) Nägeli]. GUAM: Emery (1962), Tsuda (1981b) as *H. secunda* and *H. tenella*, Lobban & Tsuda (2003). SAIPAN: Wilkins (1987, 1988) as *H. tenella*.

*Herposiphonia trichia* Hollenberg. GUAM: Tsuda (1981b), Lobban & Tsuda (2003).

*Herposiphonia wurdemannii* Børgesen. GUAM: Tsuda (1981b).

*Laurencia cartilaginea* Yamada. GUAM: Tsuda et al. (1978).

*Laurencia ceylanica* J. Agardh. SAIPAN: **Okamura (1904)**, Schmidt (1928), Tokida (1939).

- Laurencia glandulifera* (Kützing) Kützing [= *Laurencia paniculata* (C. Agardh) J. Agardh]. SAIPAN: Wilkins & Meyer (1991) as *L. paniculata*.
- Laurencia majuscula* (Harvey) Lucas. GUAM: Belk & Belk (1975).
- Laurencia mariannensis Yamada (1931)***, Type from Saipan. SAIPAN: **Yamada (1931)**, Tokida (1939), Wilkins & Meyer (1991).
- Laurencia obtusa* (Hudson) Lamouroux. GUAM: Randall (1974), Jones et al. (1976), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: **Okamura (1904)**, Tokida (1939).
- Laurencia perforata* (Bory de Saint-Vincent) Montagen. SAIPAN: Cloud (1959).
- Laurencia rigida* J. Agardh. SAIPAN: **Okamura (1904)**, Schmidt (1928), Tokida (1939).
- Laurencia succisa* Cribb. MAUG: **Tsuda & Tobias (1977b)**.
- Lauencia surculigera* Tseng. PAGAN: **Tsuda & Tobias (1977b)**.
- Laurencia tropica Yamada (1931)***, Type from Saipan. GUAM: Randall (1974), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: **Yamada (1931)**, Tokida (1939), Wilkins & Meyer (1991). ANATAHAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. AGRIHAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias (1977b)**, Eldredge et al. (1977).
- Leveillea jungermannioides* (Hering & Martens) Harvey. GUAM: Dickinson & Tsuda (1975), Tobias (1976), Marsh et al. (1977), Amesbury et al. (1977), Chernin et al. (1977), Stojkovich (1977), Tsuda (1981b), Davis (1982), Best (1982), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). PAGAN: **Tsuda & Tobias (1977b)**.
- Melanamansia glomerata* (C. Agardh) R.E. Norris [= *Amansia glomerata* C. Agardh]. GUAM: Emery (1962), Randall (1974), Chernin et al. (1977), Tsuda et al. (1978), Tsuda (1981b), Lobban & Tsuda (2003). TINIAN: Jones et al. (1974b). SAIPAN: Wilkins & Meyer (1991). All, except Lobban & Tsuda (2003), as *Amansia glomerata*.
- Murrayella periclados* (C. Agardh) Schmitz. GUAM: Bryan (1975), Tsuda (1981b), Lobban & Tsuda (2003).
- Neosiphonia savatieri* (Hariot) M.S. Kim & I.K. Lee [= *Polysiphonia savatieri* Hariot]. GUAM: Tsuda (1971) as *Polysiphonia savatieri*.
- Polysiphonia saccorrhiza* (Collins & Hervey) Hollenberg. ASUNCION: **Tsuda & Tobias (1977b)**.
- Polysiphonia scopulorum* Harvey [= *Lophosiphonia villum* (J. Agardh) Setchell & Gardner]. GUAM: Tsuda et al. (1972), Tsuda & Kami (1973), Belk & Belk (1975), Jones et al. (1976), Chernin et al. (1977), Lassuy (1980), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: Tobias (1977), Wilkins (1987, 1988).
- Polysiphonia sphaerocarpa* Borgesen. SAIPAN: Tobias (1977). PAGAN: **Tsuda & Tobias (1977b)**.
- Polysiphonia tepida* Hollenberg. GUAM: Marsh & Doty (1976), Marsh et al. (1977).
- Polysiphonia triton* P.C. Silva [= *Polysiphonia tenuis* Hollenberg]. GUAM: Tsuda (1992).
- Polysiphonia upolensis* Grunow. GUAM: Amesbury et al. (1977), Tsuda (1981b), Lobban & Tsuda (2003). SAIPAN: Tobias (1977).

*Stictosiphonia kelanensis* (Grunow ex Post) King & Puttock [= *Bostrychia kelanensis* Grunow]. GUAM: **Kumano (1979)** as *B. kelanensis*, Tsuda (1981b) as *B. kelanensis*, Lobban & Tsuda (2003).

*Tolyptiocladia glomerulata* (C. Agardh) Schmitz [= *Roschera glomerulata* (C. Agardh) Weber-van Bosse]. GUAM: Tsuda (1971, 1981b, 1992), Tsuda et al. (1972, 1978), Randall (1974), Bryan (1975), Randall et al. (1975), Dickinson & Tsuda (1975), Tobias (1976), Chernin et al. (1977), Stojkovich (1977), Davis (1982), Thacker et al. (2001), Lobban & Tsuda (2003). ROTA: Tsuda (1969). TINIAN: Jones et al. (1974b). SAIPAN: **Okamura (1904)**, Tokida (1939) as *R. glomerulata*, PBEC (1984), Wilkins (1987), Wilkins & Meyer (1991). ALAMAGAN: **Tsuda & Tobias (1977b)**. PAGAN: **Tsuda & Tobias (1977b)**. AGRIHAN: **Tsuda & Tobias (1977b)**. MAUG: **Tsuda & Tobias**, Eldredge et al. (1977).

## DISCUSSION

The 332 species of marine benthic algae (155 genera) reported from the Mariana Islands consist of 38 species (18 genera) of Cyanophyta, 100 species (37 genera) of Chlorophyta, 32 species (17 genera) of Phaeophyta and 162 species (83 genera) of Rhodophyta. The number of marine benthic algae in the Mariana Islands is similar in number to the 361 species reported from the Marshall Islands (Tsuda, 2002c), and surpasses the 258 species of marine benthic algae, thus far, reported from the Palau Archipelago (Tsuda, 2002a), or the 224 species reported from Yap State (Tsuda, 2002b) within the Federated States of Micronesia.

Eight species, i.e., two species of Chlorophyta, one species of Phaeophyta and five species of Rhodophyta, were described as new species based on the type specimens from Guam, i.e., *Avrainvillea obscura* (C. Agardh) J. Agardh, *Rhipilia sinuosa* Gilbert, *Padina jonesii* Tsuda and *Titanophora marianensis* Itono & Tsuda, and Saipan, i.e., *Gracilaria tsudae* (Abbott & Meneses) Abbott, *Neogoniolithon medioramus* (Johnson) Setchell & Mason, *Laurencia mariannensis* Yamada and *Laurencia tropica* Yamada.

As seen in Table 1, the majority of the marine benthic algae, i.e., 270 of 332 species or 81%, was reported from the largest, most populated island of Guam. The compiler of this listing feels confident that most, if not all, of the floristic and taxonomic publications on the marine benthic algae reported from the Mariana Islands are included in this report. There are, however, publications applicable to algal chemistry and physiology which were most likely missed. If one was to rely solely on the published floristic and taxonomic literature which cite voucher specimens, only 188 species (57%) of marine benthic algae would be documented from the Mariana Islands. The north-south orientation of the volcanic Mariana Islands provides an interesting setting in terms of the distribution of algae along a slight temperature gradient.

**Table 1. Number of species reported from each island (north to south) within the Mariana Islands.**

Islands	Number of Algal Species				Total
	Cyanophyta	Chlorophyta	Phaeophyta	Rhodophyta	
Uracas (Farallon de Pajaros)	3	9	4	0	16
Maug	4	22	10	16	52
Asuncion	2	6	4	2	14
Agrihan	2	9	3	6	20
Pagan	6	15	12	17	50
Alamagan	1	10	1	3	15
Guguan	3	14	3	8	28
Sarigan	0	1	0	0	1
Anatahan	2	9	7	14	32
Farallon de Medinilla	0	1	0	0	1
Saipan	5	62	17	69	153
Tinian	4	30	12	30	76
Aguijan	0	0	1	1	2
Rota	8	23	17	22	70
Guam	7	88	30	145	270
<b>Mariana Islands</b>	<b>38</b>	<b>100</b>	<b>32</b>	<b>162</b>	<b>332</b>

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