

Nova Hedwigia

Beiheft 153

Michael J. Wynne

Checklist of benthic marine algae of the tropical and subtropical Western Atlantic: fifth revision



J. Cramer

in Borntraeger Science Publishers · Stuttgart · 2022

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Author's address:

Michael J. Wynne, The University of Michigan Herbarium, 3600 Varsity Drive, Ann Arbor, Michigan 48108-2287, USA

We appreciate suggestions and comments on this book to editors@borntraeger-cramer.de

ISBN 978-3-443-51079-4

ISBN ebook (epdf) 978-3-443-51080-0

ISSN 1438-9134 (Nova Hedwigia, Beiheft)

Information on this title: **www.borntraeger-cramer.com/9783443510794**

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Publisher: J. Cramer in der
Gebr. Borntraeger Verlagsbuchhandlung
Johannesstr. 3A
70176 Stuttgart, Germany
mail@borntraeger-cramer.de
www.borntraeger-cramer.de

♻️ Printed on permanent paper conforming to ISO 9706-1994
Printed in Germany by Esser printSolutions GmbH, Bretten

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Introduction

The goal of this series of checklists continues to be the cataloging and presentation of an updated compilation of the names of the species of benthic marine algae, or seaweeds, reported from the tropical and subtropical western Atlantic. Thus, it provides a catalogue of the currently accepted nomenclatural and taxonomic changes since the time of W.R. Taylor's (1960) *Marine algae of the eastern tropical and subtropical coasts of the Americas*, which covered the broad area of the western Atlantic Ocean, namely, from Cape Hatteras, North Carolina (USA) to southern Brazil. That original checklist (Wynne 1986) was followed by four revisions (Wynne 1998, 2005, 2011, 2017a) that were further attempts to compile updated catalogues of the benthic marine algae for the three assemblages of macroalgae, the brown algae (classes Pelagophyceae and Phaeophyceae of phylum Ochrophyta), red algae (classes Bangiophyceae, Florideophyceae, Compsopogonophyceae, Porphyridiophyceae, Rhodellophyceae, and Stylonematophyceae of the phylum Rhodophyta), and green algae (classes Chlorophyceae, Trebouxiophyceae, Ulvophyceae, Codiolophyceae, and Palmophyllophyceae of the phylum Chlorophyta), for the tropical and subtropical eastern coastline of the Americas, using Taylor's 1960 flora as a baseline. Table 1 represents a compilation of primarily recent literature according to coastal State (of the USA), country, or broader region. Table 2 provides a summary of the number of taxa (families, genera, species, and infraspecific rank) assigned to the orders of the three larger groupings of benthic macro-algae (Ochrophyta, Rhodophyta, and Chlorophyta) as well as listing the orders that are currently recognized. It will be seen that the present tally gives a total of 1,707 species of seaweeds listed for this domain of the tropical and subtropical western Atlantic, or 1,863 taxa, when the 156 infraspecific names are included into the overall count. This is an increase from the 1,472 species and total of 1,646 taxa listed in the previous checklist revision (Wynne 2017a). Additionally, there have been significant taxonomic changes at various taxonomic levels as advances have been made in large part from gene-sequence data. Some of these changes have necessitated altered realignments with respect to how these categories are interrelated.

The classification recognized in this fifth revision of the checklist mostly follows the treatment proposed by Ruggiero et al. (2015) and the recent treatment of brown algae proposed by Bringle et al. (2020). As in the previous treatment (Wynne 2017), the brown algae and two additional classes of Ochrophyta are maintained in the Kingdom Chromista, distinct from the red and green algae, which are recognized as two phyla placed in the Kingdom Plantae.

Molecular methods have been a major driving force for our gaining an improved understanding of certain genera. The combination of gene-sequence analyses and morphological-anatomical observations has led to the recognition of additional species in what had been thought to be a single or a few species in the past. One powerful example is *Lobophora*, which formerly had been regarded to be represented in the western Atlantic by the single species *L. variegata*, thought to be a taxon with a worldwide distribution. Only *L. variegata* was listed in the first, second, and third revisions (Wynne 1998, 2005, and 2011). In the fourth revision (Wynne 2017a) 5 species of *Lobophora* were recognized. In the present work, the number of species of *Lobophora* now recognized for this flora has climbed to 18, a remarkable increase.

Many new genera occurring in the tropical and subtropical western Atlantic have been described in the past few years. This includes two new genera in the Pelagophyceae, namely, *Pelagospilus* and *Sargassococcus*. Two new genera of Scytosiphonaceae have been described, namely, *Planosiphon* (segregated from *Scytosiphon*) and *Pseudochnoospora* (segregated from *Chnoospora*). It is in the red algae that we have seen the greatest proliferation in the description of new genera. For example, the genera *Neoporphyra*, *Neopyropia*, and *Phycocalidia* have been added to the Bangiaceae. *Dawsoniolithon* is a new genus in the Porolithaceae, whereas *Crustaphytum*, *Roseolithon*, and *Tectolithon* have been newly added to the Hapalidiaceae. The recent description of *Rhodachlya westii* from Brazil added the third species to the genus, the other two species having been described from Madagascar (*R. madagascarensis*, which is the generitype) and *R. hawaiiiana*. Such an addition has also added the order Rhodachlyales (West et al. 2008) to this checklist. Similarly, the description of the new species *Madagascaria atlantica* has added *Madagascaria* to this checklist.

Additional newly described genera are *Austrokallymenia* and *Nothokallymenia*, both in the Kallymeniaceae, and *Eucheumatopsis* and *Tepoztequiella*, both in the Solieriaceae. The transfer of *Grateloupia gibbesii* to *Phyllymenia* means that the genus *Phyllymenia* is now included in this checklist. Evidence has been presented in the past few years to merge the segregate genera *Agarophyton* and *Crassiphycus* back into *Gracilaria*. Time will tell if such a taxonomic proposal becomes accepted. A similar taxonomic proposal concerns *Sargassum*. Recent ideas strongly suggest that the genetic differences among a large number of previously recognized species of *Sargassum* are not significant, although morphological differences are apparent. *Sargassum natans* (L.) Gaillon is the name with priority. The species *S. xochitlae*, was newly described from Mexico.

A major re-alignment of the red algal order Ceramiales was proposed by Díaz-Tapia et al. (2019). The family Delesseriaceae was more broadly circumscribed to include the families Dasyaceae and Sarcomeniaceae. But the family Delesseriaceae was proposed to be comprised of six subfamilies, which have been accepted in this revision. In the Delesseriaceae the genus *Calonitophyllum* has been included within *Radicilingua*, a genus now added to this flora, whereas *Phrix* has been reinstated as distinct from *Apoglossum*. *Kapraunia* has been newly added to the family Rhodomelaceae.

Five new genera have been delineated in the family Peyssonneliaceae: *Agissea*, *Brasilophycus*, *Incendia*, *Olokunia*, and *Rhodowynnea*. Three new species have been described in the genus *Hypnea*.

Relatively few changes have happened in the classification of the Chlorophyta. The genus *Johnson-sea-linkia*, formerly merged with *Rhipiliopsis*, has been reinstated. *Caulerpa wysorii* and *Halimeda jolyi* are recently described new species.

The “Geographic Table” in Table 1, which is a breakdown of regions covered by this checklist and publications from those regions, is very illuminating in that it clearly shows the heightened phycological activity in certain regions, especially noteworthy in Bermuda, Brazil, Cuba, Columbia, Venezuela, and Mexico. Users of this catalogue should also be aware of two extremely useful on-line data-banks, the “Index Nominum Algarum” (Silva 2022), which is a nomenclatural resource, and “AlgaeBase” (Guiry & Guiry 2022), which is a taxonomic resource. Both of these electronic resources are continuously being updated, and users are wise to have them bookmarked on one’s computer.

Format

Explanations of what literature sources are the bases for the various classifications being followed are given in the Notes for the particular taxonomic category. Once again, there have been major re-alignments of orders and classes because of the abundant new information being obtained from phylogenetic studies using gene-sequencing. The reasons for these changes are explained in the Notes accompanying these sections. As in the previous versions (Wynne 1986, 1998, 2005, 2011, 2017a), the genera are arranged alphabetically within their assigned family, and species likewise are listed alphabetically within their assigned genus. Names of taxa in brackets are treated as taxonomic synonyms or, when followed by “*sensu auct.*,” are being treated here as prior mis-identifications. On the whole, references that were included in the 1986, 1998, 2005, 2011 or 2017a checklists have not been repeated here, unless they are being specifically cited or are otherwise of relevance.

Table 1. Geographic table.

Bermuda: Collins & Hervey 1917; Collins et al. 1916, 1917; Popolizio et al. 2022; Richards et al. 2018b; Schneider et al. 2003; Schneider & Flook 2017; Schneider et al. 2011, 2016, 2018a, 2018b, 2018c, 2019a, 2019b, 2019c, 2020a, 2020b, 2021a; Stefanoudis et al. 2019; Vieira et al. 2019; Wolsak et al. 2018

North Carolina: Camacho et al. 2019; Campbell et al. 2021; Hardesty & Freshwater 2018; Richards et al. 2018a; Schneider & Searles 1991; Taylor et al. 2017

South Carolina: Schneider & Searles 1991

Gulf of Mexico: Bombin et al. 2020; Camacho et al. 2018, 2019; Dreckmann et al. 2018; Earle 1969; Kravesky-Self et al. 2020; Littler & Littler 2000; Melton & Lopez-Bautista 2020; Melton et al. 2016; Núñez-Resendiz et al. 2017a; Ortegón-Aznar et al. 2009, 2015, 2020; Peterson et al. 2020; Richards & Fredericq 2018; Richards et al. 2019, 2020, 2022; Sauvage et al. 2021; Venera-Pontón et al. 2019; Vilchnis et al. 2018; West & Loiseaux-de Goër 2021

Florida: Collado Vides et al. 2018; Dawes & Mathison 2008; Freshwater et al. 2021; González-Nieto et al. 2020; Littler & Littler 2000; Melton & Lopez-Bautista 2020; Melton et al. 2016; Peterson et al. 2020; Schneider & Searles 1991; Schneider et al. 2019a; Vieira et al. 2020b; Woodworth et al. 2019

Louisiana: Camacho et al. 2019; Kravesky-Self et al. 2020; Richards et al. 2020

Texas: Richards et al. 2020

Caribbean: Hollister et al. 2021; Lagourque et al. 2018; Nauer et al. 2019a; Ortega et al. 2001; Robledo et al. 2020; Schell et al. 2015; Torres Conde et al. 2021; Vieira et al. 2020a, 2020b

Greater Antilles: Littler & Littler 2020; Vieira et al. 2020a, 2020b

Cuba: Alfonso et al. (2022); Alfonso Sánchez et al. 2017, 2020; Blanco Ojeda et al. 2016; Cabrera et al. 2019b, c, 2020; Cabrera Guerero & Jover Capote 2021; Cabrera Guerrero et al.

2018; Gómez-González & Martinas-Daranas 2016; Gómez-González et al. 2016; González-Sánchez et al. 2015, 2022; Guardia et al. 2018; Hernández-Fernández et al. 2013; Jover-Capote & Cabrera Guerrero 2020; Jover et al. 2020a, 2020b, 2020c; Martinas-Daranas et al. 2018, 2021; Moreira-González et al. 2017, 2018, 2021; Ramos Romero & Suárez Alfonso 2016; Ramos Romero et al. 2019; Reyes de Armas & Martinas Daranas 2015; Suárez et al. 2015; Torres-Conde & Martinas-Daranas 2019a, 2019b; Torres-Conde et al. 2019, 2021; Zuniga-Ríos 2016; Zuniga-Ríos et al. 2012

Dominican Republic: Vieira et al. 2020b

Jamaica: Vieira et al. 2020b

Puerto Rico: Ballantine & Wynne 1986; Ballantine et al. 2011, 2017, 2019a, 2021; Williams & García-Sais 2020

Lesser Antilles: Gavio 2021; Littler & Littler 2020; Pellizzari et al. 2020; Vieira et al. 2020a

Aruba: Gavio 2021

Bahamas: Ballantine et al. 2017; Howe 1920; Littler & Littler 2020; Vieira 2020b

Barbados: Vickers 1905

Bonaire: Ballantine et al. 2019b

Curaçao: Fricke et al. 2018; Hoek 1969; Viera et al. 2020a

Dutch Caribbean: Loos & Bennema 2016; Loos & Prudhomme van Reine 2016; Loes et al. 2017

Trinidad: Pellizzari et al. 2020; Sissini et al. 2018

U.S. Virgin Islands: Børgesen 1914, 1920

Mexico: Acosta-Calderón et al. 2018, 2019; Boo et al. 2018; Cruz-Francisco et al. 2020; Dreckmann et al. 2018; García-Ferrer et al. 2021; García-García et al. 2020, 2021; García-Lopez et al. 2017; Godínez-Ortega et al. 2019, 2021; González-Nieto et al. 2020; González-Solis & Torruco 2015; González-Solis et al. 2018; Hernández et al. 2020, 2021; Landa-Cansigno et al. 2019; Luna-Ortega & Cruz Francisco 2017; Mateo-Cid et al. 2018a, 2018b, 2020; Mendoza-Gonzalez et al. 2016, 2017; Nava-Olvera et al. 2017; Núñez-Resendiz et al. 2017b, 2017c, 2018b, 2019a, 2019b, 2019c; Ortega et al. 2001; Ortegon-Aznar et al. 2001, 2009, 2015, 2020; Pedroche & Senties 2020; Pérez-Jiménez et al. 2020; Pestana et al. 2020, 2021; Quiros-González et al. 2017, 2018, 2021; Rosado-Espinosa et al. 2020; Rosas Ortiz et al. 2019; Sauvage et al. 2021; Schnoller et al. 2016; Senties et al. 2016; Tufiño-Velázquez & Pedroche 2019; Valadez Cruz et al. 2014; Vazquez-Delfin et al. 2019; Vieira et al. 2020b; Vilchnis et al. 2018, 2019, 2022

Belize: González-Solis et al. 2018

Costa Rica: Cabrera et al. 2019a, 2019b, 2019d, 2020, 2021a, 2021b; Camacho et al. 2019; Vega-Álvarez et al. 2018

Panama: Camacho et al. 2019; Sellers et al. 2015

Colombia: Barrera et al. 2016; Diaz-Pullido & Díaz-Ruíz 2003; Gavio 2020; Gavio et al. 2013, 2020; Gómez-Cubillos et al. 2020; Reyes-Gómez & Gavio 2017; Reyes-Gómez et al. 2021; Rincón-Díaz & Gavio 2020; Rincón-Díaz & Ramos-Gallego 2010; Rincón-Díaz et al.

2018; Salazar-Forero et al. 2020; Schnetter 1976; Vega-Sequeda et al. 2015

Venezuela: Barrios 1999, 2021; Barrios & García 2021; Betancourt & Barrios Montilla 2021; Cassano et al. 2020; Diaz-Piferrer 1970; García 2006; Gómez et al. 2016; Gomez-Acevedo et al. 2016, 2018; Núñez-Resendiz et al. 2018a; Pereira et al. 2020; Rodríguez Reyes et al. 2018; Taylor 1976

Brazil: Alves et al. 2011; Amado-Filho et al. 2010, 2017, 2018; Amaral et al. 2017; Avanzo Neto & Fujii 2016; Azvedo 2016; Brunelli et al. 2018, 2019; Caires et al. 2020; Cavalcanti et al. 2022; Carneiro et al. 2019; Carvalho et al. 2013, 2020; Cassano et al. 2019, 2020, 2022; Chen et al. 2019; Chiaramonte et al. 2018; Costa et al. 2019; Coutinho et al. 2021; Creed et al. 2010; Crespo et al. 2014; De Barros-Barreto et al. 2013; Fernandes & Alves 2011; Fernandez et al. 2011; Figueiredo et al. 2008, 2017; Guimarães 2006; Guimarães et al. 2019; Holz et al. 2020; Iha et al. 2017, 2022; Jamas et al. 2017; Jesionek et al. 2020; Jesus et al. 2018, 2019a, 2019b; Joly 1957, 1965; Joly et al. 1967; Kano et al. 2017; Leão et al. 2020; Lyra et al. 2021a, 2021b; Machado et al. 2011; Nauer et al. 2018a, 2018b, 2019c, 2020, 2022; Oliveira et al. 2021; Oliveira Costa et al. 2014; Oliveira Filho 1977; Oliveira Filho & Coll 1975; Paula et al. 2020a, 2020b; Pedrini et al. 2017, 2021; Pestana et al. 2020, 2021; Richards et al. 2019; Rocha-Jorge et al. 2012, 2018; Santiañez 2021; Santos et al. 2020; Simioni et al. 2019; Soares & Fujii 2020; Soares et al. 2018, 2019a, 2019b, 2020, 2021; Steigleder et al. 2019; Szechy & Paula 2010; Tâmagá et al. 2021; Tavaras de Oliveira et al. 2021; Torrano-Silva et al. 2018; Vale et al. 2018; Ximenes et al. 2017, 2019; Yoneshigue 1985

Western Atlantic/Caribbean: Camacho et al. 2019; Carvalho et al. 2020; Costa et al. 2016; Coutinho et al. 2021; Crespo et al. 2014; Desrochers et al. 2020; Garcia-Soto & Lopez-Bautista 2019a, 2019b; Gonzalez-Nieto et al. 2020; Guimarães & Amado-Filho 2009; Guimarães et al. 2019; Gurgel et al. 2020; Han et al. 2018; Hernández et al. 2017; Hernández-Kantun et al. 2016; Holloway-Adkins & Hanisak 2015; Littler & Littler 2020; Nauer et al. 2019b; Núñez-Resendiz et al. 2019c; Parr 1939; Sissini et al. 2017, 2021; Soares et al. 2021; Suárez & Martinas-Daranas 2020a, 2020b; Taylor 1960; Vieira et al. 2020a; Vilchnis et al. 2019; Wang et al. 2019

Table 2. Tally of numbers of taxa by taxonomic assignment

Classes and Orders	Family	Genus	Species	Intraspecific taxa
Pelagophyceae				
Pelagomonadales	1	1	1	
Sarcinochrysidales	2	7	8	
Phaeophyceae				
Discosporangiales	1	1	1	
Dictyotales	1	9	63	1
Onslowiales	1	2	3	
Sphacelariales	3	3	9	
Syringodermatales	1	1	2	
Ishigeales	1	1	1	
Asterocladales	1	1	2	
Desmarestiales	2	2	3	
Ectocarpales	4	44	82	5
Fucales	2	6	25	3
Laminariales	1	1	1	
Ralfsiales	3	2	2	
Scytothamnales	2	2	2	
Sporochnales	1	3	4	
Xanthophyceae				
Vaucheriales	1	1	21	
Sum Ochrophyta	28	87	230	9
Bangiophyceae				
Bangiiales	1	6	13	1
Florideophyceae				
Pihiellales	1	1	1	
Corallinales	4	16	106	5
Hapalidiales	2	9	41	1
Rhodogorgonales	1	2	2	
Sporolithales	1	1	18	
Hildenbrandiales	1	1	1	
Acrochaetiales	1	2	34	
Colaconematales	1	1	16	
Nemaliales	6	19	49	5
Palmariales	1	1	1	
Rhododachlyales	1	1	1	
Acrosymphytales	2	2	3	
Bonnemaisoniales	2	4	5	
Atractophorales	1	1	1	
Ceramiales	5	116	420	30

Gelidiales	3	6	37	5
incertae sedis (<i>Schmitzia</i>)	1	1	1	
Gigartinales	13	44	101	
Gracilariales	2	5	66	5
incertae sedis (<i>C. peasiae</i>)		1	1	
Halymeniales	2	11	54	
Nemastomatales	2	5	15	
Peyssonneliales	1	11	40	
Plocamiales	2	2	2	
Rhodymeniales	5	23	75	1
Sebdeniales	1	2	4	
Incertae sedis (<i>H. serpens</i>)		1	1	
Compsopogonophyceae				
Compsopogonales	1	1	2	
Erythropeltidales	1	6	10	
Rhodochaetales	1	1	1	
Porphyridiophyceae				
Porphyridiales	1	2	2	
Rhodellophyceae				
Dixoniales	1	1	1	
Stylonematophyceae				
Stylonematales	1	4	6	
Sum Rhodophyta	69	310	1,131	53
Chlorophyceae				
Chaetophorales	1	1	1	
Chlamydomonales	1	1	1	
Trebouxiophyceae				
Prasiolales	1	2	2	
Ulvoephyceae				
Bryopsidales	9	23	139	84
Cladophorales	6	22	115	3
Dasycladales	2	7	18	1
Oltmannsiellopsidales	1	1	2	
Ulotrichales	3	6	9	1
Ulvales	5	8	53	5
Palmophyllophyceae				
Palmophyllales	1	2	6	
Sum Chlorophyta	30	73	346	94
Totals:	127	470	1,707	156

Kingdom Chromista**Superphylum Heterokonta****Phylum Ochrophyta**

[Heterokontophyta]

Class Pelagophyceae**Order Pelagomonadales**

Family Pelagomonadaceae

Chrysophaeum I.F. Lewis & H.F. Bryan, 1941

taylorii I.F. Lewis & H.F. Bryan**Order Sarcinochrysidales**

Family Chrysocystaceae (1)

Chrysocystis Lobban, D. Honda & Chihara, 1995

fragilis Lobban, D. Honda & Chihara (2)

Sungminbooa H.S. Yoon & R.A. Andersen, 2018 (3)

caribensis H.S. Yoon & R.A. Andersen (4)

Family Sarcinochrysidaceae

Aureoscheda M.J. Wynne & R.A. Andersen in Wynne et al., 2014

bahamensis M.J. Wynne & R.A. Andersen in Wynne et al.

Aureoumbra D. Stockwell, H. De Yoe, P.E. Hargraves & P.W. Johnson in De Yoe, 1997

lagunensis D. Stockwell, H. De Yoe, P.E. Hargraves & P.W. Johnson in De Yoe et al.

Chrysonephos W.R. Taylor, 1952

lewisii (W.R. Taylor) W.R. Taylor (5)

[Chrysophaeum lewisii]

Pelagospilus R.A. Andersen & L. Graf, 2018 (6)

aureus R.A. Andersen & L. Graf (7)

Sargassococcus R.A. Andersen & K.Y. Han, 2018 (8)

epiphyticus R.A. Andersen & M. Melkonian (9)*simulans* R.A. Andersen & M. Melkonian (10)

Class Phaeophyceae (11)**Subclass Discosporangiophycidae****Order Discosporangiales (11)**

Family Discosporangiaceae

Discosporangium Falkenb., 1878

mesarthrocarpum (Menegh.) Hauck**Subclass Dictyophycidae****Order Dictyotales (11)**

Family Dictyotaceae

Canistrocarpus De Paula & De Clerck in De Clerck et al., 2006

cervicornis (Kütz.) De Paula & De Clerck (12, 13, 14, 15)

[Dictyota cervicornis]

f. *cervicornis*

[indica; indica f. torta ?; pardalis]

f. *pseudohamatus* (Cribb) M.J. Wynne (15)

[Dictyota cervicornis f. pseudohamata; f. curvula]

crispatus (J.V. Lamour.) De Paula & De Clerck (15)[Dictyota bartayresiana *sensu* Vickers, 1908; D. crispata; D. cuspidata]Dictyopteris J.V. Lamour., 1809, *nom. cons.**delicatula* J.V. Lamour. (2, 16, 17)

[Polyzonia ? divaricata]

hoytii W.R. Taylor (18)[serrata *sensu* Hoyt 1920]*jamaicensis* W.R. Taylor (2, 17)*jolyana* E.C. Oliveira & R.P. Furtado (2, 17)*justii* J.V. Lamour. (2, 17, 19)*plagiogramma* (Mont.) Möbius (2, 17, 20)*polypodioides* (DC. in Lam. & DC.) J.V. Lamour. (534)

[ambigua; membranacea]

Dictyota J.V. Lamour., 1809, *nom. cons.* (560)

[Dichophyllum, Dilophus]

adhaerens Noda (140)*bartayresiana* J.V. Lamour. (156, 516, 561)

[bartayresii; neglecta; patens; Dilophus alternans f. acutissimus]

canaliculata De Clerck & Coppejans*canariensis* (Grunow in Piccone) Tronholm in Tronholm et al. (17)*caribaea* Hörnig & Schnetter (2, 17, 21)

- [*cervicornis* f. *pseudobartayresii*; *indica sensu* Vickers; *indica* f. *torta?*; *volubilis sensu* Vickers]
- chalchicueyecanensis* J. Lozano-Orozco & Sentías (17)
- ciliolata* Sond. ex Kütz. (2, 12, 17, 22)
- [*ciliata*; *dichotoma sensu auct.*, non (Huds.) J.V. Lamour.; *dichotoma* var. *menstrualis*; *menstrualis*]
- dolabellana* De Paula, Yoneshigue-Valentin & Teixeira
- friabilis* Setch. (2, 17)
- [*pfaffii*; *adnata sensu auct.*, non Zanardini]
- guajirae* Hörnig, Schnetter & J.M. Over (17)
- guineënsis* (Kütz.) P. Crouan & H. Crouan (2, 17)
- [*Dilophus guineensis*]
- hamifera* Setch. (2, 17)
- humifusa* Hörnig, Schnetter & Coppejans (2, 17, 23, 24)
- implexa* (Desfont.) J.V. Lamour. (2, 17)
- jamaicensis* W.R. Taylor (2, 17, 25)
- [*ciliolata* var. *bermudensis*; *crenulata sensu auct.*; *Dilophus crenulatus sensu auct.*] (16)
- mayae* J. Lozano-Orozco & Sentías (17)
- mertensii* (Mart.) Kütz. (2, 17)
- [*brongniartii*; *dentata*]
- pedrochei* J. Lozano-Orozco & Sentías (17)
- pinnatifida* Kütz. (2, 17)
- [*alternans*; *Dilophus alternans*]
- pulchella* Hörnig & Schnetter (2, 26)
- [*divaricata sensu auct.*, non J.V. Lamour.; *linearis sensu auct.*, non (C. Agardh) Grev.]
- stolonifera* E.Y. Dawson (2, 27)
- Lobophora** J. Agardh, 1894 (560)
- [*Pocockiella*]
- agardhii* Payri & C.W. Vieira (28)
- brooksii* D.L. Ballant. & J.N. Norris (29)
- caboverdeana* C.W. Vieira & C.H. Almada (30, 31)
- canariensis* (Sauvageau) C.W. Vieira, De Clerck & Payri in Vieira et al. (2, 31, 32, 33)
- [*payriae*]
- colombiana* O. Camacho & Fredericq (21, 34)
- crispata* O. Camacho & Fredericq (35)
- declerckii* N.E. Schultz, C.W. Schneid & L. Le Gall (17, 32, 53)
- delicata* O. Camacho & Fredericq (31, 36)
- dickiei* Payri & C.W. Vieira (37)
- dispersa* O. Camacho, Freshwater & Fredericq (31, 38)
- gadeloupensis* N.E. Schultz, F. Rousseau & L. Le Gall (2, 32)
- lamourouxii* Payri & C.W. Vieira (39)
- littlerorum* C.W. Schneid., N.E. Schultz & L. Le Gall (2, 31, 32, 40)
- richardii* Payri & C.W. Vieira (41)
- schneideri* C.W. Vieira (2, 31, 42, 43)
- setchellii* Payri & C.W. Vieira (44)
- tortugensis* O. Camacho & Fredericq (45)

- variegata* (J.V. Lamour.) Womersley ex E.C. Oliveira (2, 12, 17, 32, 46, 47, 53)
 [Dictyota variegata; Pocockiella variegata]
- Padina** Adans., 1763, *nom. cons.*
 [Dictyerpa]
- antillarum* (Kütz.) Picc. (17, 48, 49)
 [Zonaria antillarum]
- boergesenii* Allender & Kraft (5, 17, 50, 517)
 [australis *sensu auct.*; gymnospora *sensu* W.R. Taylor, 1960; non Zonaria gymnospora Kütz.]
- glabra* Gaillard
- gymnospora* (Kütz.) Sond. (2, 17, 51, 52)
 [howeana; variegata *sensu* Børgesen (1914); vickersiae]
- haitiensis* Thivy in W.R. Taylor (17)
- pavonica* (L.) Thivy in W.R. Taylor (17)
- perindusiata* Thivy in W.R. Taylor (17)
- profunda* S.A. Earle (17)
- sanctae-crucis* Børgesen (2, 12, 17)
 [jamaicensis?; Dictyerpa jamaicensis?]
- Spatoglossum** Kütz., 1843
- asperum* J. Agardh
- schroederi* (C. Agardh) Kütz. (2, 17)
 [areschougii]
- Styopodium** Kütz., 1843
- zonale* (J.V. Lamour.) Papenf. (2, 12, 17, 53)
 [Spatoglossum versicolor; Zonaria fuliginosa; Z. lobata]
- Taonia** J. Agardh, 1848
- abbottiana* D.S. Littler & Littler (2, 19, 54)
- pseudociliata* (J.V. Lamour.) Nizamuddin & Godeh
- Zonaria** C. Agardh, 1817, *nom. cons.*
tournefortii (J.V. Lamour.) Mont. (2, 17, 50)

Order Onslowiales (11)

Family Onslowiaceae

- Onslowia** Searles in Searles & Leister, 1980
- bahamensis* E.C. Henry (17)
- endophytica* Searles in Searles & Leister (17)
- Verosphacela** E.C. Henry
- ebrachia* E.C. Henry (17)