



Anales del Jardín Botánico de Madrid

ISSN: 0211-1322

anales@ma-rjb.csic.es

Consejo Superior de Investigaciones

Científicas

España

Bárbara, Ignacio; Cremades, Javier; Calvo, Silvia; López-Rodríguez, M. Carmen; Dosil, Javier
Checklist of the benthic marine and brackish Galician algae (NW Spain)
Anales del Jardín Botánico de Madrid, vol. 62, núm. 1, 2005, pp. 69-100
Consejo Superior de Investigaciones Científicas
Madrid, España

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Checklist of the benthic marine and brackish Galician algae (NW Spain)

by

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Abstract

We present an annotated checklist of the benthic marine and brackish algae of the Galician coasts (Spain) based on literature records and new collections. This checklist includes 618 species: 118 Cyanophyta, 296 Rhodophyta, 127 Ochrophyta, and 77 Chlorophyta. The number of specific, infraspecific taxa, and stages is 643: 121 Cyanophyta, 309 Rhodophyta, 135 Ochrophyta, and 79 Chlorophyta. *Hyella caespitosa* var. *nitida*, *Calothrix fasciculata*, *Gracilariopsis longissima*, *Compsomena minutum*, and *Sphacelaria tribuloides* are new records for Galicia, and there are also some new provincial records. We state the presence of each species for Lugo (Lu), A Coruña (Co), and Pontevedra (Po) provinces. The number of species found in Galicia is high, since 85% of the species recorded for the warm-temperate NE Atlantic Ocean grow in Galicia. Biogeographical comments comparing the Galician data with the neighboring areas of Britain and Ireland, Basque coast, Portugal, southern Iberian Peninsula, Canary Islands and Atlantic coast of Morocco are given. Finally, we present lists of cold-temperate, warm-temperate, Lusitanic Province endemics, and alien species growing in Galicia.

Key words: biogeography, checklist, Galicia, Iberian Peninsula, seaweeds, Spain.

Introduction

Galicia is located in the northwest of the Iberian Peninsula. The coastline (1200 km) is very rough, and characterized by the existence of "ríaas". These are flooded valleys (Vidal Romaní, 1984) showing abrupt

Resumen

Se presenta una lista comentada de las especies de algas bentónicas marinas y salobres de la costa de Galicia (España) basada en citas bibliográficas y nuevos datos de los autores. La lista contiene 618 especies: 118 Cyanophyta, 296 Rhodophyta, 127 Ochrophyta y 77 Chlorophyta. El número de taxa específicos e infraespecíficos asciende a 643: 121 Cyanophyta, 309 Rhodophyta, 135 Ochrophyta y 79 Chlorophyta. *Hyella caespitosa* var. *nitida*, *Calothrix fasciculata*, *Gracilariopsis longissima*, *Compsomena minutum* y *Sphacelaria tribuloides* son nuevas citas para Galicia, y algunas nuevas citas provinciales. Para cada especie se especifica su presencia en las provincias de Lugo (Lu), A Coruña (Co) y Pontevedra (Po). El número de especies encontradas en Galicia es elevado, ya que se conocen el 85% de las especies de la región atlántico noreste templado-cálida. Se aportan comentarios biogeográficos comparados de Galicia y de las áreas vecinas: Gran Bretaña, Irlanda, costa Vasca, Portugal, sur de la Península Ibérica, Islas Canarias y costa atlántica de Marruecos. Se presentan listas de las especies templado-frías, templado-cálidas, endémicas de la provincia Lusitana y alóctonas que crecen en Galicia.

Palabras clave: algas marinas, biogeografía, catálogo, España, Galicia, Península Ibérica.

environmental differences between the external exposed areas and the internal, more sheltered areas. The number of marine environments on Galician coast varies from very exposed cliffs to semi-exposed and sheltered zones, beaches, marshes, etc. The temperature of the seawater ranges from 11°C in winter to

18°C in summer, but it can rise to 24°C in summer –in sheltered zones– and decreases to 10°C in winter, at 20 m depth. Biogeographically, the NW-Spain is included in the warm-temperate NE Atlantic subregion 1 (WNE₁, Hoek & Breeman, 1990) or Lusitanic Province (Hoek, 1975). In Galicia, water temperature, upwelling, surge of the sea and semidiurnal tides –up to 3.8 m in spring tides– are important factors that determine the development of the characteristic vegetation of fucoids, kelps and carragenophytes. On the other hand, fishing industry and aquaculture have great development in Galicia and favor the interchange of biological material from remote areas, which is responsible for a change on the original communities and the introduction of several alien species that are now locally abundant in some places.

Seaweeds of Galicia have been studied for more than 140 years. The first works were made by Quer (1762-1764), Alonso López (1820), Colmeiro (1851), Lange (1860), López Seoane (1866), Colmeiro (1867, 1889), Texidor (1869, 1871), Graells (1870), Amo y Mora (1870), Lázaro Ibiza (1889), Sauvageau (1896, 1897), Chalon (1904, 1905), Hamel (1928a,b), Miranda (1934, 1936, 1943a-c, 1944) and Bescansa Casares (1948). In the 50's and 60's Dizerbo (1956), Ardré (1957), Ardré & al. (1958), Seoane Camba (1957, 1958, 1960, 1965a,b), Fischer-Piette & Seoane Camba (1962, 1963), Donze (1968) and Seoane Camba & Campo Sancho (1968) increased the floristic knowledge, that was continued in the 70's and 80's by Adey & McKibbin (1970), Niell (1970a,b, 1976, 1977, 1978), Niell & al. (1980), Pérez-Cirera (1975a,b, 1976, 1980), Pérez-Cirera & Gallardo (1981), Pérez-Cirera & Maldonado (1982), Valenzuela & Pérez-Cirera (1982), Polo & al. (1982), Anadón & al. (1982), Gili & al. (1982), Gallardo & Pérez-Cirera (1982a,b, 1985), Gallardo & al. (1984) and Pérez-Cirera & Pacheco (1985).

During the last 16 years, many species have been added to the Galician seaweeds flora by Pérez-Cirera & al. (1989a-d, 1991a,b), Cremades & Bárbara (1990), Gallardo & Margalet (1992), Granja & al. (1992, 1993), Guillermes & Cremades (1993, 1997), Guillermes & al. (1994), Andrés Abad & al. (1995), Otero-Schmitt (1992), Otero-Schmitt & Pérez-Cirera (1996, 1998, 2002), López Rodríguez & Pérez-Cirera (1990, 1995, 1996), López Rodríguez & al. (1991, 1997, 1999, 2000, 2003), Veiga & al. (1997, 1998a,b), Bárbara & Cremades (1990, 1993, 1996, 2004), Cremades & al. (1992, 1997a,b), Guillermes Vázquez (1997), Dosil Mancilla (1997), Bárbara & al. (1992a,b, 1994, 1995, 1996, 2001, 2002, 2003a,b, 2004), Calvo & al. (1999), Calvo & Bárbara (2000a-c, 2002, 2003, 2004), López Varela (2000), López Varela & al. (2002), Valenzuela

Miranda (2001), Peña & Bárbara (2002, 2003a,b, 2004, 2005) and Díaz Tapia & Bárbara (2005a,b).

Despite this wealth of articles on Galician seaweeds, there is no a catalogue summarizing all this knowledge. The aim of this work is therefore to compile a checklist of the benthic marine and brackish algae of the Galician coast, in order to compare it with similar catalogues from Britain and Ireland (Hardy & Guiry, 2003), Basque coast (Gorostiaga & al., 2004), Portugal (Ardré, 1970, 1971, Cremades & al., 2002, Bárbara & al., 2003b, Araújo & al., 2003, 2005), Andalucía (Flores Moya & al., 1995a,b, Conde & al., 1996), Canary Islands (Haroun & al., 2002), Atlantic coast of Morocco (Benhissoune & al., 2001, 2002a,b, 2003) and Mediterranean coast of Spain (Ribera & al., 1992, Gallardo & al., 1993, Gómez Garreta & al., 2001). We hope this work take a step forward the floristic knowledge of the warm-temperate NE Atlantic region and it could be a started point for another studies in this area.

Material and Methods

This catalogue is mainly based on more than 16000 herbarium specimens kept in L, MA, MAF, SANT-Algae, and the personal herbaria of López Seoane, Miranda and Bescansa. It also benefits from an exhaustive literature search (190 articles), and information from our unpublished records. For Cyanophyta we follow Komárek & Anagnostidis's classification system (Komárek & Anagnostidis 1986, 1989, 1999; cf. also Anagnostidis & Komárek 1985, 1988, 1990), taking into account the opinion of Silva & al. (1996) regarding *Dermocarpa*, *Xenococcus*, *Spirocoleus* and several *Phormidium* species. Systematic arrangement of Rhodophyta, Ochrophyta and Chlorophyta follows Silva & al. (1996), Cavalier-Smith & Chao (1996), Rousset & Rousseau (1999), Rousseau & Rousset (1999), Rousseau & al. (2001), Friedl & O'Kelly (2002) and O'Kelly & al. (2004a,b). Orders, families, genera and species are alphabetically arranged.

Results and Discussion

Table 1 presents the checklist of Galician seaweeds in taxonomic order. It includes most synonyms used in literature concerning Galicia, especially if heterotypic. For each species we give infraspecific taxa and life history stage as well as its presence in Lugo (Lu), A Coruña (Co) and Pontevedra's (Po) provinces (north to south order). Only if the species is poorly known in Galicia, present in a unique province, or recently introduced in NW-Spain, the first or main references are provided. The checklist includes 618 species: 118 Cyanophyta, 296 Rhodophyta, 127 Ochrophyta, and

77 Chlorophyta. The number of specific, infraspecific taxa and stages is 643: 121 Cyanophyta, 309 Rhodophyta, 135 Ochrophyta, and 79 Chlorophyta. *Hyella caespitosa* var. *nitida*, *Calothrix fasciculata*, *Gracilariopsis longissima*, *Compsonea minutum*, and *Sphacelaria tribuloides* are new records for Galicia.

We have excluded 43 species from the Galician flora, and considered doubtful the presence of 56 further taxa. We have excluded old records like *Cystoclonium purpureum*, *Halopitys incurva*, *Membranoptera alata*, *Naccaria wiggii*, *Ptilota gunneri*, *Ecklonia muratii*, *Laminaria digitata*, or *Sargassum vulgare*, for which no herbarium vouchers or recent collections could be found. Erroneous recent records like *Brachytrichia quoyi*, *Gloetrichia pisum*, *Porphyrosiphon martensianus*, *Synechocystis salina*, *Xenococcus acervatus*, *Halymenia floresia*, *Heterosiphonia crispella* var. *laxa*, *Odonthalia dentata*, *Cystoseira compressa*, *C. spinosa* var. *compressa* were also excluded. Species whose presence in Galicia requires further study were included under a “Dubious records and taxa inquirenda” section.

Galicia has a high seaweeds diversity related to its coastline extension compared with nearby regions. The number of specific and infraspecific taxa is high as a consequence of the diversity of habitats. About 85% of the species recorded for the warm-temperate NE Atlantic subregion 1 (WNE1, Hoek & Breeman, 1990) are listed in the present catalogue. Feldmann’s (Rhodophyta/Pheophyta; Feldmann, 1937) and Cheney’s (Rhodophyta+Chlorophyta/Pheophyta; Cheney, 1977) ratios are indices showing the position of a flora in relation to cold and warm waters. The Galician seaweeds ratios are intermediate among the neighboring areas of Britain and Ireland, northern Portugal, southern Iberian Peninsula, and Canary Islands (Table 2). Galicia marks the southern limit of the typical fucoids and kelps vegetation, which are common on the North Atlantic European coasts. Big brown seaweeds like *Ascophyllum nodosum*, *Chorda filum*, *Desmarestia aculeata*, *Halidrys siliquosa*, *Himantalia elongata*, *Laminaria saccharina* and *Pelvetia canaliculata* have their meridional distribution limit in Galicia and northern Portugal. Some arctic-cold temperate amphioceanic and North Atlantic species included in Lüning (1990), like *Desmarestia aculeata*, *Laminaria saccharina*, *Ahnfeltia plicata*, *Palmaria palmata* and *Delesseria sanguinea* are abundant in Galicia. The number of northern cold-water species (76) is higher than for southern warm-temperate ones (28). The list of northern cold-water species (Appendix I) includes a high number of brown algae, mainly Fucales and Laminariales like *Ascophyllum nodosum*, *Chorda filum*, *Fucus serratus*, *Halidrys siliquosa*, *Hi-*

mantalia elongata, *Laminaria hyperborea*, *L. saccharina* and *Pelvetia canaliculata*, which are characteristic of rocky seabeds. Similarly to the abundance of these brown algae, a high number of exclusively epiphytic and/or parasitic northern cold-water species live over them, like *Elachista flaccida*, *E. scutulata*, *Herponema velutinum*, *Litosiphon laminariae*, *Pylaiella littoralis*, *Choreocolax polysiphoniae*, *Harveyella mirabilis*, *Polysiphonia lanosa*, “*Codiolum petrocelidis*” [stage] or *Halochlorococcum moorei*. Northern cold-water red algae like *Aglaothamnion sepositum*, *Ceramium shuttleworthianum*, *Chondrus crispus*, *Delesseria sanguinea*, *Dilsea carnosa*, *Dumontia contorta*, *Mastocarpus stellatus*, *Palmaria palmata*, *Plumaria plumosa* or *Rhodomela confervoides* are a significant component in intertidal and subtidal communities, whilst green algae like *Acrosiphonia arcta*, *Prasiola stipitata* or several *Vaucheria*—profuse in mudflat systems—are equally abundant in Galicia seashores.

On the other hand, meridional species—usually small and unnoticed rhodophycean algae—are abundant in sheltered places of the *rias*. Small red algae like *Ctenosiphonia hypnoides*, *Griffithsia schousboei*, *Leptosiphonia schousboei*, *Ophidocladus simpliciusculus*, *Polysiphonia scopulorum*, *Strebloladia collabens* and *Tiffaniella capitata* are especially abundant in sandy habitats of northwestern Iberian Peninsula. The Rhodophyta, with 24 taxa, constitutes the bulk of the southern warm-temperate element (Appendix II), mainly represented by Ceramiales like *Aphanocladia stichidiosa*, *Callithamniella tingitana*, *Ceramium callipterum*, *Ctenosiphonia hypnoides*, *Griffithsia opuntoides*, *G. schousboei*, *Leptosiphonia schousboei*, *Pleonosporium flexuosum*, *Polysiphonia scopulorum*, *P. polyspora*, *Spermothamnion repens* var. *flagelliferum*, *Strebloladia collabens* and *Tiffaniella capitata*. Contrary to cold-water brown algae, most of the red algae form small populations and often pass unnoticed.

In Galicia there is an excellent representation of Lusitanic Province endemic species (Appendix III), like *Bifurcaria bifurcata*, *Cystoseira baccata*, *Laminaria ochroleuca*, *Phyllariopsis brevipes* subsp. *pseudopurpurascens*, *P. purpurascens*, *Callithamnion tetricum*, *Laurencia pyramidalis*, *Osmundea osmunda* and *Pterosiphonia complanata*. There are also endemic species that are poorly represented in other Iberian Peninsula coasts, like *Ahnfeltiopsis pusilla*, *Apoglossocolax pusilla*, *Cordylecaladia erecta*, *Drachiella spectabilis*, *Erythroglussum lusitanicum*, *Gelidiella calcicola*, *Polyneura bonnemaisoni*, *Ptilothamnion sphaericum*, *Desmarestia dudrenayi* and *Ulva rigida* var. *fimbriata*.

Most of the alien species (Appendix IV), like *Asparagopsis armata*, “*Falkenbergia rufolanosa*” [stage],

Heterosiphonia japonica, *Neosiphonia harveyi*, *Colpomenia peregrina*, *Sargassum muticum* or *Codium fragile* subsp. *tomentosoides* are widely represented in Galicia. However, *Grateloupia luxurians* is only known from the Ría de Arousa, and *Grateloupia turuturu*, *Lomentaria bakodatensis* and *Undaria pinnatifida* lack in Lugo.

The knowledge of seaweeds is unequal for the three provinces included in this catalogue, with 554 species recorded for A Coruña, 546 for Pontevedra, but only 379 for Lugo. Another expression of this asymmetry

would be the number of species known in Galicia exclusively from one province; this number is much higher for A Coruña (64) and Pontevedra (71) than for Lugo (11). Such differences were already pointed out by Álvarez Cobelas & al. (1989), and although in the last fifteen years much has been published on Lugo seaweeds (López-Rodríguez & al., 1991; Gallardo & Margalet, 1992; Cremades & al., 1997a; Bárbara & al., 2002, 2003b), more research is still required to complete the catalogue.

Table 1. Catalogue of the benthic marine and brackish Galician algae and their distribution by provinces. (Lu) Lugo, (Co) A Coruña and (Po) Pontevedra.

CYANOPHYTA	HYDROCOCCACEAE
CHROOCOCCALES	Placoma Schousboe ex Bornet & Thuret
CHAMAESIPHONACEAE	<i>Placoma vesiculosum</i> Schousboe ex Bornet & Thuret (Co, Po)
Chamaecalyx Komárek & Anagnostidis	HYELLACEAE
<i>Chamaecalyx leibleinia</i> (Reinsch) Komárek & Anagnostidis (Lu, Co, Po)	Hyella Bornet & Flahault
CHROOCOCCACEAE	<i>Hyella balani</i> Lehmann (Co) ⁴
Chroococcus Nägeli	<i>Hyella caespitosa</i> Bornet & Flahault (Lu, Co, Po) ⁵
<i>Chroococcus minutus</i> (Kützing) Nägeli (Co) ¹	<i>Hyella endophytica</i> Börgesen (Co) ⁶
= <i>Gloeocapsa minuta</i> (Kützing) Hollerbach in Elenkin	Pleurocapsa Thuret in Hauck
<i>Chroococcus turgidus</i> (Kützing) Nägeli (Lu, Co, Po)	<i>Pleurocapsa crepidinum</i> F.S. Collins (Po) ⁷
= <i>Chroococcus dimidiatus</i> (Kützing) Nägeli	<i>Pleurocapsa fuliginosa</i> Hauck (Po) ²
= <i>Anacystis dimidiata</i> (Kützing) Drouet & Daily	<i>Pleurocapsa minuta</i> Geitler (Po) ²
Gloeocapsopsis Geitler ex Komárek	MERISMOPEDIAEAE
<i>Gloeocapsopsis crepidinum</i> (Thuret) Komárek (Co, Po)	Aphanocapsa Nägeli
= <i>Gloeocapsa crepidinum</i> (Thuret) Thuret in Bornet & Thuret, non Geitler	<i>Aphanocapsa conferta</i> (W. & G. S. West) Komárková-Legnerová & Cronberg (Co) ⁸
DERMOCARPELLACEAE	= <i>Aphanocapsa elachista</i> var. <i>conferta</i> W. & G. S. West
Cyanocystis Borzi	= <i>Microcystis pulverulea</i> f. <i>conferta</i> (W. & G. S. West) Elenkin
<i>Cyanocystis minima</i> (Geitler) Komárek & Anagnostidis (Po) ²	<i>Aphanocapsa litoralis</i> (Hansgirg) Komárek & Anagnostidis (Co, Po)
= <i>Dermocarpa minima</i> Geitler	= <i>Microcystis litoralis</i> (Hansgirg) Forti in De Toni
<i>Cyanocystis olivacea</i> (Reinsch) Komárek & Anagnostidis (Co, Po)	<i>Aphanocapsa marina</i> Hansgirg (Lu, Po)
<i>Cyanocystis violacea</i> (P. Crouan & H. Crouan) Komárek & Anagnostidis (Co, Po)	<i>Aphanocapsa raspaiellae</i> (Hauck) Frémy (Co, Po)
Dermocarpella Lemmermann	<i>Aphanocapsa reinboldii</i> (Richter) Komárek & Anagnostidis (Po) ⁹
<i>Dermocarpella prasina</i> (Reinsch) Komárek & Anagnostidis (Lu, Co, Po)	= <i>Microcystis reinboldii</i> (Richter) Forti
= <i>Dermocarpa prasina</i> (Reinsch) Bornet & Thuret	Gomphosphaeria Kützing
Stanieria Komárek & Anagnostidis	<i>Gomphosphaeria salina</i> Komárek & Hindák (Co) ¹⁰
<i>Stanieria sphaerica</i> (Setchell & N.L. Gardner) Anagnostidis & Pantazidou (Co) ³	Merismopedia Meyen
= <i>Dermocarpa sphaerica</i> Setchell & N.L. Gardner in Gardner	<i>Merismopedia elegans</i> A. Braun ex Kützing (Co) ⁸
<i>Stanieria sublitoralis</i> (Lindstedt) Anagnostidis & Pantazidou (Lu, Co, Po)	<i>Merismopedia mediterranea</i> Nägeli (Co) ⁸
ENTOPHYSALIDACEAE	= <i>Merismopedia glauca</i> f. <i>mediterranea</i> (Nägeli) F.S. Collins
Chlorogloea Wille	Microcrocis Richter
<i>Chlorogloea microcystoides</i> Geitler (Po) ²	<i>Microcrocis sabulicola</i> (Lagerheim) Geitler (Po) ²
Entophysalis Kützing	MICROCYSTACEAE
<i>Entophysalis conferta</i> (Kützing) Drouet & Daily (Co, Po)	Gloeocapsa Kützing
<i>Entophysalis deusta</i> (Meneghini) Drouet & Daily (Co, Po)	<i>Gloeocapsa granosa</i> (Berkeley) Kützing (Co) ¹
= <i>Gloeocapsa deusta</i> (Meneghini) Kützing	= <i>Gloeocapsa fenestralis</i> Kützing
	Microcystis Kützing ex Lemmermann
	<i>Microcystis aeruginosa</i> (Kützing) Kützing (Po) ²
	= <i>Clathrocystis aeruginosa</i> (Kützing) Henfrey
	= <i>Microcystis ochracea</i> (Brand) Forti
	= <i>Anacystis cyanea</i> (Kützing) Drouet & Daily

Table 1 (continuation)

SYNECHOCOCCACEAE	
Aphanothece Nägeli	
<i>Aphanothece stagnina</i> (Sprengel) A. Braun (Co, Po)	
Gloeothece Nägeli	
<i>Gloeothece palea</i> (Kützing) Rabenhorst (Co) ¹	
= <i>Gloeocapsa palea</i> Kützing	
XENOCOCCACEAE	
Myxosarcina Printz	
<i>Myxosarcina gloeocapsoides</i> (Setchell & N.L. Gardner) Komárek & Anagnostidis (Co) ³	
Xenococcus Thuret in Bornet & Thuret	
<i>Xenococcus cladophorae</i> (Tilden) Setchell & N.L. Gardner (Co) ³	
<i>Xenococcus gilkeyae</i> Setchell & N.L. Gardner (Lu, Co) ¹¹	
<i>Xenococcus pyriformis</i> Setchell & N.L. Gardner (Lu, Co, Po)	
<i>Xenococcus schousboei</i> Thuret (Po) ²	
Xenotholos Gold-Morgan, Montejano & Komárek	
<i>Xenotholos kernerii</i> (Hansgirg) Gold-Morgan, Montejano & Komárek (Po) ⁷	
OSCILLATORIALES	
HOMEOTRICHACEAE	
Heteroleibleinia (Geitler) Hoffmann	
<i>Heteroleibleina infixa</i> (Frémy) Anagnostidis & Komárek (Po) ²	
OSCILLATORIACEAE	
Blennothrix Kützing	
<i>Blennothrix lynbyacea</i> (Kützing) Anagnostidis & Komárek (Lu, Co, Po)	
= <i>Hydrocoleum lynbyaceum</i> Kützing	
= <i>Microcoleus lynbyaceus</i> (Kützing) P.L. Crouan & H.M. Crouan	
Hormoscilla Anagnostidis & Komárek	
<i>Hormoscilla spongelliae</i> (Schulze ex Gomont) Anagnostidis & Komárek (Co, Po) ¹²	
= <i>Oscillatoria spongelliae</i> Schulze	
= <i>Phormidium spongelliae</i> (Schulze) Gomont	
Hydrocoleum Kützing	
<i>Hydrocoleum glutinosum</i> (C. Agardh) Gomont (Co, Po)	
Lyngbya C. Agardh, nom. cons.	
<i>Lyngbya aestuarii</i> (Mertens) Liebmann (Co, Po)	
<i>Lyngbya confervoides</i> C. Agardh (Lu, Co, Po)	
<i>Lyngbya majuscula</i> (Dillwyn) Harvey (Lu, Co, Po)	
<i>Lyngbya meneghiniana</i> (Kützing) Falkenberg (Lu) ¹³	
<i>Lyngbya semiplena</i> (C. Agardh) J. Agardh (Lu, Co, Po)	
Oscillatoria Vaucher ex Gomont	
<i>Oscillatoria bonnemaisonii</i> (P. Crouan & H. Crouan) P. Crouan & H. Crouan (Lu, Co, Po) ¹⁴	
= <i>Oscillatoria intermedia</i> P. Crouan & H. Crouan ex Gomont	
= <i>Oscillatoria colubrina</i> Thuret in Le Jolis	
<i>Oscillatoria limosa</i> C. Agardh ex Gomont (Co, Po)	
<i>Oscillatoria margaritifera</i> (Kützing) Gomont (Co, Po)	
PHORMIDIACEAE	
Microcoleus Desmazières ex Gomont	
<i>Microcoleus acutirostris</i> Gomont (Lu, Co)	
<i>Microcoleus chthonoplastes</i> Thuret ex Gomont (Co, Po)	
<i>Microcoleus codii</i> Frémy (Co) ¹⁵	
<i>Microcoleus wuïtneri</i> Frémy (Co, Po) ¹⁶	
Phormidium Kützing ex Gomont	
<i>Phormidium aerugineo-caeruleum</i> (Gomont) Anagnostidis & Komárek (Co) ⁸	
<i>Phormidium autumnale</i> (C. Agardh) Gomont (Co, Po)	
<i>Phormidium breve</i> (Kützing ex Gomont) Anagnostidis & Komárek (Co, Po)	
= <i>Oscillatoria brevis</i> Kützing ex Gomont	
<i>Phormidium corallinae</i> (Gomont ex Gomont) Anagnostidis & Komárek (Lu, Co, Po)	
= <i>Oscillatoria corallinae</i> Gomont ex Gomont	
<i>Phormidium corium</i> (C. Agardh) Kützing (Lu, Co, Po)	
<i>Phormidium ectocarpi</i> Gomont (Po) ¹⁷	
<i>Phormidium laetevirens</i> (P. Crouan & H. Crouan ex Gomont) Anagnostidis & Komárek (Co, Po)	
<i>Phormidium limosum</i> (Dillwyn) P.C. Silva (Lu, Co, Po)	
= <i>Phormidium tenue</i> (C. Agardh ex Gomont) Anagnostidis & Komárek nom. illeg.	
<i>Phormidium nigro-viride</i> (Thornwaites ex Gomont) Anagnostidis & Komárek (Po) ¹⁸	
= <i>Oscillatoria nigroviridis</i> Thwaites ex Gomont	
<i>Phormidium papyraceum</i> (C. Agardh) Kützing (Co, Po)	
<i>Phormidium subfuscum</i> (Vaucher) Kützing (Co, Po)	
<i>Phormidium subsalsum</i> Gomont (Co) ¹⁹	
<i>Phormidium submembranaceum</i> (Ardissonne & Strafforello) Gomont (Po) ²⁰	
= <i>Oscillatoria submembranacea</i> Ardissonne & Strafforello	
<i>Phormidium subuliforme</i> (Thwaites ex Gomont) Anagnostidis & Komárek (Co) ¹³	
= <i>Oscillatoria subuliformis</i> Thwaites	
<i>Phormidium valderianum</i> (Delponte) Gomont (Co) ¹	
Porphyrosiphon Kützing ex Gomont	
<i>Porphyrosiphon luteus</i> (Gomont ex Gomont) Anagnostidis & Komárek (Co, Po)	
Sirocoleum Kützing ex Gomont	
<i>Sirocoleum kurzii</i> (Zeller) Gomont (Po) ²¹	
Spirulina Turpin <i>emend.</i> N.L. Gardner ex Gomont	
<i>Spirulina labyrinthiformis</i> (Meneghini) Gomont (Co) ¹	
<i>Spirulina major</i> Kützing ex Gomont (Co, Po)	
= <i>Spirulina oscillarioides</i> Kützing	
<i>Spirulina miniata</i> Hauck (Po) ²²	
<i>Spirulina subsalsa</i> Gomont (Co, Po)	
<i>Spirulina subtilissima</i> Kützing ex Gomont (Po) ²³	
<i>Spirulina tenerrima</i> Kützing (Co, Po)	
Symploca Kützing ex Gomont	
<i>Symploca atlantica</i> Gomont (Lu) ²⁴	
<i>Symploca funicularis</i> Setchell & N.L. Gardner (Co) ⁸	
<i>Symploca hydnoides</i> (Harvey) Kützing ex Gomont (Co, Po)	
SCHIZOTRICHACEAE	
Schizothrix Kützing ex Gomont	
<i>Schizothrix tenerrima</i> (Gomont) Drouet (Co, Po)	
PSEUDOANABAENACEAE	
Leibleinia (Gomont) Hoffmann	
<i>Leibleinia baculum</i> (Gomont) Hoffmann (Co) ²⁵	
<i>Leibleinia epiphytica</i> (Hieronymus) Anagnostidis & Komárek (Co, Po)	
Leptolyngbya Anagnostidis & Komárek	
<i>Leptolyngbya calothrichoides</i> (Gomont) Anagnostidis & Komárek (Po) ⁷	
<i>Leptolyngbya perelegans</i> (Lemmermann) Anagnostidis & Komárek (Co) ²⁶	
Pseudoanabaena Lauterborn	
<i>Pseudoanabaena catenata</i> Lauterborn (Co) ⁸	
Spirocoleus Möbius	
<i>Spirocoleus battersii</i> (Gomont) P.C. Silva (Lu, Co, Po)	

Table 1 (continuation)

<i>Spirocoleus fragilis</i> (Meneghini) P.C. Silva (Co, Po) = <i>Phormidium fragile</i> (Meneghini) Gomont = <i>Leptolyngbya fragilis</i> (Meneghini) Anagnostidis & Komárek	STIGONEMATALES
<i>Spirocoleus tenuis</i> (Meneghini) P.C. Silva (Co, Po) = <i>Phormidium tenue</i> (Meneghini) Gomont = <i>Leptolyngbya tenuis</i> (Meneghini) Anagnostidis & Komárek	MASTIGOCALACEAE
NOSTOCALES	Brachytrichia Zanardini ex Bornet & Flahault <i>Brachytrichia lloydii</i> (P. Crouan & H. Crouan) P.C. Silva (Co, Po) = <i>Brachytrichia balani</i> (C. Agardh) Bornet & Flahault, nom. illeg.
MICROCHAETACEAE	NOSTOCHOPSACEAE
Hassallia Berkeley ex Bornet & Flahault <i>Hassallia bouteillei</i> (Brébisson & Desmazières) Bornet & Flahault (Co) ¹ = <i>Tolypothrix bouteillei</i> (Brébisson & Desmazières) Lemmermann	Mastigocoleus Lagerheim ex Bornet & Flahault <i>Mastigocoleus testarum</i> Lagerheim ex Bornet & Flahault (Co, Po)
Microchaete Thuret ex Bornet & Flahault <i>Microchaete grisea</i> Thuret ex Bornet & Flahault (Lu) ¹³	RHODOPHYTA
Tolypothrix Kützing ex Bornet & Flahault <i>Tolypothrix tenuis</i> Kützing ex Bornet & Flahault (Lu, Co, Po)	BANGIOPHYCEAE
NOSTOCACEAE	PORPHYRIDIALES
Anabaina Bory de Saint-Vincent <i>Anabaina oscillarioides</i> Bory de Saint-Vincent ex Bornet & Flahault (Co) ⁸ <i>Anabaina torulosa</i> (Carmichael) Lagerheim ex Bornet & Flahault (Co, Po)	GONIOTRICHACEAE
Isactis Thuret ex Bornet & Flahault <i>Isactis plana</i> (Harvey in Hooker) Thuret (Lu, Co, Po)	Chroodactylon Hansgirg <i>Chroodactylon ornatum</i> (C. Agardh) Basson (Po) ³¹ = <i>Asterocytis ornata</i> (C. Agardh) G. Hamel = <i>Asterocytis ramosa</i> (Thawaites) Gobi ex F. Schmitz
Isocystis Borzi ex Bornet & Flahault <i>Isocystis lithophila</i> Ercegovic (Co, Po)	Colacodictyon J. Feldmann <i>Colacodictyon reticulatum</i> (Batters) J. Feldmann (Po) ³²
Nodularia Mertens ex Bornet & Flahault <i>Nodularia harveyana</i> (Thornwaites) Thuret (Co) ¹ <i>Nodularia spumigena</i> Bornet & Flahault (Co) ¹⁰	Stylonema Reinsch <i>Stylonema alsidii</i> (Zanardini) K.M. Drew (Lu, Co, Po) = <i>Goniotrichum alsidii</i> (Zanardini) M.A. Howe = <i>Goniotrichum elegans</i> (Chauvin) Zanardini <i>Stylonema cornu-cervi</i> Reinsch (Lu, Co, Po) = <i>Goniotrichum cornu-cervi</i> (Reinsch) Hauck
Nostoc Vaucher ex Bornet & Flahault <i>Nostoc commune</i> Vaucher ex Bornet & Flahault (Co) ¹ <i>Nostoc endophytum</i> Bornet & Flahault (Po) ² <i>Nostoc sphaericum</i> Vaucher ex Bornet & Flahault (Co) ¹	ERYTHROPELTIDALES
Trichormus (Ralfs ex Bornet & Flahault) Komárek & Anagnostidis <i>Trichormus variabilis</i> (Kützing) Komárek & Anagnostidis (Co, Po) ²⁷ = <i>Anabaina variabilis</i> Kützing	ERYTHROPELTIDACEAE
RIVULARIACEAE	Erythropeltis F. Schmitz <i>Erythropeltis discigera</i> (Berthold) F. Schmitz (Po) ²⁰
Calothrix C. Agardh ex Bornet & Flahault <i>Calothrix aeruginea</i> (Kützing) Thuret (Co, Po) ²⁸ <i>Calothrix confervicola</i> (Dillwyn) C. Agardh (Lu, Co, Po) ²⁹ <i>Calothrix crustacea</i> Thuret (Lu, Co, Po) <i>Calothrix fasciculata</i> C. Agardh (Co) ³⁰ <i>Calothrix parasitica</i> (Chauvin) Kützing (Lu, Co, Po) <i>Calothrix parietina</i> (Nägeli ex Kützing) Thuret (Lu, Co, Po) <i>Calothrix prolifera</i> Bornet & Flahault (Po) ² <i>Calothrix pulvinata</i> C. Agardh ex Bornet & Flahault (Lu, Co, Po) <i>Calothrix scopulorum</i> (F.F. Weber & Morh) C. Agardh (Lu, Co, Po)	Erythrotrichia J.E. Areschoug <i>Erythrotrichia bertholdii</i> Batters (Co, Po) ³³ = <i>Erythrotrichia ciliaris sensu</i> Berthold <i>Erythrotrichia carnea</i> (Dillwyn) J. Agardh (Lu, Co, Po) <i>Erythrotrichia investiens</i> (Zanardini) Bornet (Co) ³⁴ <i>Erythrotrichia welwitschii</i> (Ruprecht) Batters (Lu, Co, Po)
Rivularia C. Agardh <i>Rivularia atra</i> Roth ex Bornet & Flahault (Lu, Co, Po) <i>Rivularia bullata</i> (Poiret) Berkeley ex Bornet & Flahault (Lu, Co, Po) <i>Rivularia nitida</i> C. Agardh (Co, Po)	Porphyrostromium Trevisan <i>Porphyrostromium boryanum</i> (Montagne) P.C. Silva (Lu, Co, Po) = <i>Erythrotrichia boryana</i> (Montagne) Berthold <i>Porphyrostromium ciliare</i> (Carmichael) M.J. Wynne (Co, Po) ³⁵ = <i>Bangia ciliaris</i> Carmichael ex Harvey in Hooker = <i>Erythrotrichia ciliaris</i> (Carmichael ex Harvey in Hooker) Thuret in Le Jolis
	Sahlingia Kornmann <i>Sahlingia subintegra</i> (Rosenvinge) Kornmann (Co, Po) = <i>Erythrocladia subintegra</i> Rosenvinge = <i>Erythropeltis subintegra</i> (Rosenvinge) Kornmann & Sahling
	BANGIALES
	BANGIACEAE
	Bangia Lyngbye <i>Bangia atropurpurea</i> (Roth) C. Agardh (Lu, Co, Po) = <i>Bangia fuscopurpurea</i> (Dillwyn) Lyngbye
	Porphyra C. Agardh <i>Porphyra dioica</i> J. Brodie & L.M. Irvine (Co, Po) ²⁴ <i>Porphyra leucosticta</i> Thuret (Lu, Co, Po) <i>Porphyra linearis</i> Greville (Lu, Co, Po) <i>Porphyra purpurea</i> (Roth) C. Agardh (Lu, Co, Po) <i>Porphyra umbilicalis</i> (Linnaeus) Kützing (Lu, Co, Po)

Table 1 (continuation)

FLORIDOPHYCEAE	= <i>Rodymenia palmata</i> (Linnaeus) Greville
ACROCHAETIALES	RHODOTHAMNIELLACEAE
ACROCHAETIACEAE	Rhodophysema Batters
Acrochaetium Nägeli	<i>Rhodophysema elegans</i> (P. Crouan & H. Crouan ex J. Agardh) Dixon (Po) ²⁰
<i>Acrochaetium battersianum</i> G. Hamel (Po) ³⁶	= <i>Peyssonelia rupestris</i> P. Crouan & H. Crouan
= <i>Audouinella battersiana</i> (G. Hamel) Dixon	<i>Rhodophysema georgei</i> Batters (Po) ⁴¹
<i>Acrochaetium chylocladiae</i> (Batters) Batters (Po) ³⁶	= <i>Rhododermis georgii</i> (Batters) F.S. Collins
= <i>Audouinella chylocladiae</i> (Batters) P.S. Dixon	Rhodothamniella J. Feldmann emend. Bidoux & Magne
<i>Acrochaetium corymbiferum</i> (Thuret) Batters (Lu, Co) ³⁷	<i>Rhodothamniella floridula</i> (Dillwyn) J. Feldmann (Lu, Co, Po)
= <i>Audouinella corymbifera</i> (Thuret) P.S. Dixon	= <i>Audouinella floridula</i> (Dillwyn) Woelkerling
<i>Acrochaetium infestans</i> M.A. Howe & Hoyt (Co) ³⁸	= <i>Rhodochorton floridulum</i> (Dillwyn) Nägeli
= <i>Audouinella infestans</i> (M.A. Howe & Hoyt) P.S. Dixon	AHNFELTIALES
<i>Acrochaetium minimum</i> F.S. Collins (Po) ²⁰	AHNFELTIACEAE
= <i>Audouinella minima</i> (F.S. Collins) G.R. South	Ahnfeltia Fries
= <i>Acrochaetium mirabilis</i> (Shur) Nägeli	<i>Ahnfeltia plicata</i> (Hudson) Fries (Lu, Co, Po)
<i>Acrochaetium naumannii</i> (Askenasy) Börgesen (Lu, Co, Po)	= <i>Gymnogongrus plicatus</i> (Hudson) Kützing
= <i>Acrochaetium interpositum</i> (Heydrich) Börgesen	NEMALIALES
<i>Acrochaetium parvulum</i> (Kylin) Hoyt (Co) ²⁰	GALAXAURACEAE
<i>Acrochaetium savianum</i> (Meneghini) Nägeli (Po) ³⁶	Scinaia Bivona-Bernardi
= <i>Audouinella thuretii</i> (Bornet) Woelkerling	<i>Scinaia furcellata</i> (Turner) J. Agardh (Lu, Co, Po)
= <i>Audouinella saviana</i> (Meneghini) Woelkerling	= <i>Scinaia pseudocrispa</i> (Clemente) M.J. Wynne
<i>Acrochaetium secundatum</i> (Lyngbye) Nägeli (Co, Po) ³⁹	= <i>Scinaia forcellata</i> Bivona-Bernardi
= <i>Audouinella secundata</i> (Lyngbye) Woelkerling	<i>Scinaia interrupta</i> (A.P. De Candolle) M.J. Wynne (Lu, Co, Po)
<i>Acrochaetium sparsum</i> (Carmichael ex Harvey) Nägeli (Lu, Co, Po)	= <i>Scinaia turgida</i> Chemin
= <i>Audouinella sparsa</i> (Harvey) P.S. Dixon	= <i>Scinaia subcostata</i> (J. Agardh) Chemin & G. Hamel
<i>Acrochaetium virgatulum</i> (Harvey) Batters (Lu, Co, Po)	LIAGORACEAE
= <i>Acrochaetium rhipidandrum</i> (Rosenvinge) G. Hamel (Co, Po)	Helminthocladia J. Agardh
Rhodochorton Nägeli	<i>Helminthocladia calvadosii</i> (J.V. Lamouroux ex Duby) Setchell (Lu, Co, Po)
<i>Rhodochorton membranaceum</i> (Magnus) Hauck (Lu, Po) ⁴⁰	= <i>Helminthocladia purpurea</i> (Harvey) J. Agardh
= <i>Audouinella membranacea</i> (Magnus) Papenfuss	Helminthora J. Agardh
<i>Rhodochorton purpureum</i> (Lightfoot) Rosenvinge (Lu, Co, Po)	<i>Helminthora divaricata</i> (C. Agardh) J. Agardh (Co) ⁴³
= <i>Audouinella purpurea</i> (Lightfoot) Woelkerling	Liagora J.V. Lamouroux
= <i>Rhodochorton rothii</i> (Turton) Nägeli	<i>Liagora distenta</i> (G. Mertens ex Roth) J.V. Lamouroux (Lu) ⁴⁴
Schmitziella Bornet & Batters	<i>Liagora viscida</i> (Forsskål) C. Agardh (Lu, Co, Po)
<i>Schmitziella endophloea</i> Bornet & Batters (Co, Po)	Nemalion Duby
COLACONEMATALES	<i>Nemalion helminthoides</i> (Velley) Batters (Lu, Co, Po)
COLACONEMATACEAE	= <i>Nemalion multifidum</i> (F. Weber & D. Mohr) Endlicher
Colaconema Batters emend. J.T. Harper & G.W. Saunders	= <i>Nemalion lubricum</i> Duby
<i>Colaconema bonnemaisoniae</i> Batters (Po) ⁴¹	GELIDIALES
= <i>Acrochaetium bonnemaisoniae</i> (Batters) Feldmann & G. Feldmann	GELIDIACEAE
= <i>Audouinella bonnemaisoniae</i> (Batters) P.S. Dixon	Gelidiella Feldmann & G. Hamel
<i>Colaconema caespitosum</i> (J. Agardh) Jackelman, Stegenga & Bolton (Lu, Co, Po)	<i>Gelidiella calcicola</i> Maggs & Guiry (Po) ³²
= <i>Rhodothamniella caespitosa</i> (J. Agardh) J. Feldmann	Gelidium J.V. Lamouroux
= <i>Audouinella caespitosa</i> (J. Agardh) P.S. Dixon	<i>Gelidium corneum</i> (Hudson) J.V. Lamouroux, (Lu, Co, Po)
= <i>Audouinella botryocarpa</i> (Harvey) Woelkerling	= <i>Gelidium sesquipedale</i> (Clemente) Thuret
<i>Colaconema daviesii</i> (Dillwyn) Stegenga (Lu, Co, Po)	<i>Gelidium crinale</i> (Turner) Gaillon (Co, Po)
= <i>Acrochaetium daviesii</i> (Dillwyn) Nägeli	<i>Gelidium maggsiae</i> Rico & Guiry (Po) ²⁵
= <i>Audouinella daviesii</i> (Dillwyn) Woelkerling	<i>Gelidium pulchellum</i> (Turner) Kützing (Lu, Co, Po)
<i>Colaconema endophyticum</i> (Batters) J.T. Harper & G.W. Saunders (Co) ³⁸	<i>Gelidium pusillum</i> (Stackhouse) Le Jolis (Lu, Co, Po) ⁴⁵
= <i>Audouinella endophytica</i> (Batters) P.S. Dixon	<i>Gelidium spathulatum</i> (Kützing) Bornet (Lu, Co, Po)
<i>Colaconema nemalione</i> (De Notaris) H. Stegenga (Lu) ⁴²	<i>Gelidium spinosum</i> (S.G. Gmelin) P.C. Silva (Lu, Co, Po) ⁴⁶
= <i>Audouinella nemalionis</i> (De Notris ex L. Dufour) P.S. Dixon	= <i>Gelidium latifolium</i> (Greville) Bornet & Thuret
PALMARIALES	= <i>Gelidium attenuatum</i> (Turner) Thuret
PALMARIACEAE	Parviphycus Santelices
Palmaria Stackhouse	<i>Parviphycus tenuissimus</i> (Feldmann & G. Hamel) Santelices (Co, Po) ⁴⁷
<i>Palmaria palmata</i> (Linnaeus) Kuntze (Lu, Co, Po)	

Table 1 (continuation)

= <i>Gelidiella tenuissima</i> (Thuret) Feldmann & G. Hamel	
= <i>Gelidiella pannosa</i> (Feldmann) Feldmann & G. Hamel	
Pterocладиella Santelices & Hommersand	
<i>Pterocладиella capillacea</i> (S.G. Gmelin) Santelices & Hommersand (Lu, Co, Po)	
= <i>Pterocладиella capillacea</i> (S.G. Gmelin) Bornet	
= <i>Pterocладиella pinnata</i> (Hudson) Papenfuss	
<i>Pterocладиella melanoidea</i> (Schousboe ex Bornet) Santelices & Hommersand (Lu, Co, Po) ⁴⁸	
= <i>Gelidium melanoideum</i> Schousboe ex Bornet	
GRACILARIALES	
GRACILARIAEAE	
Gracilaria Greville	
<i>Gracilaria bursa-pastoris</i> (S.G. Gmelin) P.C. Silva (Lu, Co, Po) ⁴⁹	
= <i>Gracilaria compressa</i> (C. Agardh) Greville	
<i>Gracilaria gracilis</i> (Stackhouse) Steentoft, L.M. Irvine & Farnham (Lu, Co, Po)	
= <i>Gracilaria confervoides</i> Greville, <i>nom. illeg.</i>	
= <i>Gracilaria verrucosa</i> (Hudson) Papenfuss	
<i>Gracilaria multipartita</i> (Clemente) Harvey (Lu, Co, Po)	
= <i>Gracilaria foliifera</i> (Forsskål) Börgesen	
<i>Gracilaria vermiculophylla</i> (Ohmi) Papenfuss (Lu, Co) ⁵⁰	
Gracilariopsis E.Y. Dawson	
<i>Gracilariopsis longissima</i> (S.G. Gmelin) Steentoft, L.M. Irvine & Farnham (Co) ⁵¹	
PTEROCLADIOPHILACEAE	
Gelidiocolax N.L. Gardner	
<i>Gelidiocolax deformans</i> Seoane (Co, Po)	
<i>Gelidiocolax margaritoides</i> (Martin & Pocock) Fan & Papenfuss (Lu, Co, Po)	
Holmsella Struch	
<i>Holmsella pachyderma</i> (Reinsch) Sturch (Co, Po)	
BONNEMAISONIALES	
BONNEMAISONIAEAE	
Asparagopsis Montagne	
<i>Asparagopsis armata</i> Harvey (Lu, Co, Po)	
" <i>Falkenbergia rufolanosa</i> " (Harvey) F. Schmitz [stage] (Lu, Co, Po)	
Bonnemaisonia C. Agardh	
<i>Bonnemaisonia asparagoides</i> (Woodward) C. Agardh (Lu, Co, Po)	
" <i>Hymenoclonium serpens</i> " (P.L. Crouan & H.M. Crouan) Batters [stage] (Co, Po) ⁵²	
<i>Bonnemaisonia clavata</i> G. Hamel (Po) ⁵³	
" <i>Trailiella intricata</i> " Batters [stage] (Po) ⁵⁴	
CRYPTONEMIALES	
DUMONTIACEAE	
Dilsea Stackhouse	
<i>Dilsea carnosa</i> (Schmidel) Kuntze (Lu, Co, Po)	
= <i>Dilsea edulis</i> Stackhouse	
Dudresnaya P.L. Crouan & H.M. Crouan	
<i>Dudresnaya verticillata</i> (Withering) Le Jolis (Lu, Co, Po) ⁵⁵	
Dumontia J.V. Lamouroux	
<i>Dumontia contorta</i> (S.G. Gmelin) Ruprecht (Lu, Co, Po)	
= <i>Dumontia incrassata</i> (O.F. Müller) J.V. Lamouroux	
= <i>Dumontia filiformis</i> (Hornemann) Greville	
	GLOIOSIPHONIAEAE
	Gloiosiphonia Carmichael
	<i>Gloiosiphonia capillaris</i> (Hudson) Carmichael ex Berkeley (Lu, Co, Po)
	Schimmelmannia Schousboe ex Kützing
	<i>Schimmelmannia schousboei</i> (J. Agardh) J. Agardh (Co) ⁵⁶
	HALYMENIAEAE
	Cryptonemia J. Agardh
	<i>Cryptonemia lomation</i> (Bertoloni) J. Agardh (Lu, Co, Po) ⁵⁷
	= <i>Cryptonemia seminervis</i> (C. Agardh) J. Agardh
	= <i>Cryptonemia lactuca</i> (C. Agardh) J. Agardh
	Grateloupia C. Agardh
	<i>Grateloupia dichotoma</i> J. Agardh (Lu, Co, Po)
	<i>Grateloupia lanceola</i> (J. Agardh) J. Agardh emend. Ardré & Gayral (Co) ⁵⁸
	<i>Grateloupia luxurians</i> (A. Gepp & E.S. Gepp) De Clerk & Gavio (Co, Po) ⁵⁹
	= <i>Grateloupia filicina</i> var. <i>luxurians</i> A. Gepp & E.S. Gepp
	<i>Grateloupia minima</i> P.L. Crouan & H.M. Crouan (Lu, Co, Po) ⁶⁰
	<i>Grateloupia proteus</i> Kützing (Co) ⁶¹
	<i>Grateloupia turuturu</i> Yamada (Co, Po) ⁶²
	Halymenia C. Agardh
	<i>Halymenia latifolia</i> P.L. Crouan & H.M. Crouan ex Kützing (Co, Po)
	KALLYMENIAEAE
	Callocolax F. Schmitz ex Batters
	<i>Callocolax neglectus</i> F. Schmitz ex Batters (Lu, Co, Po)
	Callophyllis Kützing
	<i>Callophyllis laciniata</i> (Hudson) Kützing (Lu, Co, Po)
	= <i>Callophyllis flabellata</i> P.L. Crouan & H.M. Crouan
	Kallymenia J. Agardh
	<i>Kallymenia reniformis</i> (Turner) J. Agardh (Lu, Co, Po)
	<i>Kallymenia requienii</i> (J. Agardh) J. Agardh (Lu, Co, Po) ⁶³
	Meredithia J. Agardh
	<i>Meredithia microphylla</i> (J. Agardh) J. Agardh (Lu, Po) ⁶⁴
	= <i>Kallymenia microphylla</i> J. Agardh
	PEYSSONNELIAEAE
	Peyssonnelia Decaisne
	<i>Peyssonnelia atropurpurea</i> P.L. Crouan & H.M. Crouan (Lu, Co, Po)
	<i>Peyssonnelia coriacea</i> J. Feldmann (Lu, Co) ⁶⁵
	<i>Peyssonnelia dubyi</i> P.L. Crouan & H.M. Crouan (Lu, Co, Po)
	= <i>Cruoriella dubyi</i> (P.L. Crouan & H.M. Crouan) F. Schmitz
	<i>Peyssonnelia rubra</i> (Greville) J. Agardh (Co, Po) ⁶⁶
	HILDENBRANDIALES
	HILDENBRANDIAEAE
	Hildenbrandia Nardo
	<i>Hildenbrandia crouaniorum</i> J. Agardh (Lu, Co, Po)
	= <i>Hildenbrandia canariensis</i> Börgesen
	= <i>Hildenbrandia crouanii</i> J. Agardh
	<i>Hildenbrandia occidentalis</i> Setchell (Co, Po)
	= <i>Hildebrandia occidentalis</i> var. <i>lusitanica</i> Ardré
	<i>Hildenbrandia rubra</i> (Sommerfelt) Meneghini (Lu, Co, Po)
	= <i>Hildenbrandia prototypus</i> Nardo
	= <i>Hildenbrandia rosea</i> Kützing
	CORALLINALES
	CORALLINAEAE
	Amphiroa J.V. Lamouroux
	<i>Amphiroa van-bosseae</i> M. Lemoine (Lu, Co, Po) ⁶⁷
	= <i>Amphiroa subcilindrica</i> E.Y. Dawson

Table 1 (continuation)

Boreolithon A.S. Harvey & Woelkerling <i>Boreolithon van-heurckii</i> (Heydrich) A.S. Harvey & Woelkerling (Po) ³⁶ = <i>Melobesia van-heurckii</i> (Heydrich in Chalon) De Toni	Pneophyllum Kützing <i>Pneophyllum fragile</i> Kützing (Co, Po) = <i>Fosliella lejolisii</i> (Rosanoff) M.A. Howe = <i>Melobesia lejolisii</i> Rosanoff = <i>Pneophyllum lejolisii</i> (Rosanoff) Y.M. Chamberlain
Choreonema F. Schmitz <i>Choreonema thuretii</i> (Bornet) F. Schmitz (Lu, Co, Po) = <i>Melobesia thuretii</i> Bornet	Titanoderma Nägeli ⁷⁵ <i>Titanoderma corallinae</i> (P.L. Crouan & H.M. Crouan) Woelkerling, Y.M. Chamberlain & P.C. Silva (Lu, Co, Po) = <i>Dermatolithon corallinae</i> (P.L. Crouan & H.M. Crouan) Foslie = <i>Melobesia corallinae</i> P.L. Crouan & H.M. Crouan <i>Titanoderma laminariae</i> (P.L. Crouan & H.M. Crouan) Y.M. Chamberlain (Co) ⁷⁶ = <i>Melobesia laminariae</i> P.L. Crouan & H.M. Crouan = <i>Dermatolithon laminariae</i> (P.L. Crouan & H.M. Crouan) Foslie <i>Titanoderma pustulatum</i> (J.V. Lamouroux) Nägeli (Lu, Co, Po) = <i>Dermatolithon pustulatum</i> (J.V. Lamouroux) Foslie = <i>Dermatolithon litorale</i> (Suneson) G. Hamel & Lemoine
Corallina Linnaeus ⁶⁸ <i>Corallina elongata</i> J. Ellis & Solander (Lu, Co, Po) = <i>Corallina mediterranea</i> J.E. Areschoug <i>Corallina officinalis</i> Linnaeus (Lu, Co, Po)	GIGARTINALES ARESCHOUGIACEAE
Haliptilon (Decaisne) Lindley <i>Haliptilon squamatum</i> (Linnaeus) H.W. Johansen, L.M. Irvine & A. Webster (Lu, Co, Po) = <i>Corallina squamata</i> Linnaeus <i>Haliptilon virgatum</i> (Zanardini) Garbary & H.W. Johansen (Co, Po) ⁶⁹ = <i>Corallina granifera</i> J. Ellis & Solander	Solieria J. Agardh <i>Solieria chordalis</i> (C. Agardh) J. Agardh (Co) ¹⁹ = <i>Gigartina gaditana</i> Montagne CAULACANTHACEAE
Hydrolithon (Foslie) Foslie <i>Hydrolithon farinosum</i> (J.V. Lamouroux) D. Penrose & Y.M. Chamberlain (Lu, Co, Po) = <i>Fosliella farinosa</i> (J.V. Lamouroux) M.A. Howe = <i>Melobesia farinosa</i> J.V. Lamouroux	Catenella Greville <i>Catenella caespitosa</i> (Withering) L.M. Irvine (Lu, Co, Po) = <i>Catenella repens</i> (Lightfoot) Batters = <i>Catenella opuntia</i> (Goodenough & Woodward) Greville, nom. illeg.
Jania J.V. Lamouroux <i>Jania longifurca</i> Zanardini (Lu, Co, Po) <i>Jania rubens</i> (Linnaeus) J.V. Lamouroux (Lu, Co, Po) ⁷⁰ = <i>Jania corniculata</i> (Linnaeus) J.V. Lamouroux	Caulacanthus Kützing <i>Caulacanthus ustulatus</i> (Turner) Kützing (Lu, Co, Po) CHOREOCOLACACEAE
Leptophytum Adey <i>Leptophytum bisporum</i> (Foslie) Adey (Co, Po) ⁶⁹ = <i>Phymatolithon bisporum</i> (Foslie) Afonso-Carrillo	Choreocolax Reinsh <i>Choreocolax polysiphoniae</i> Reinsch (Lu, Co, Po) ⁷⁷
Lithophyllum Philippi <i>Lithophyllum byssoides</i> (Lamarck) Foslie (Lu, Co, Po) = <i>Lithophyllum lichenoides</i> Philippi, nom. illeg. = <i>Lithophyllum tortuosum</i> Foslie = <i>Tenarea tortuosa sensu auct. plur.</i> <i>Lithophyllum incrustans</i> Philippi (Lu, Co, Po) <i>Lithophyllum orbiculatum</i> (Foslie) Foslie (Po) ⁷¹	Harveyella F. Schmitz & Reinke <i>Harveyella mirabilis</i> (Reinsch) F. Schmitz & Reinke (Lu) ⁷⁸ CRUORACEAE
Lithothamnion Heydrich <i>Lithothamnion corallioides</i> (P.L. Crouan & H.M. Crouan) P.L. Crouan & H.M. Crouan (Co, Po) ⁷²	Cruoria Fries <i>Cruoria cruoriaeformis</i> (P.L. Crouan & H.M. Crouan) Denizot (Co, Po) <i>Cruoria pelltita</i> (Lyngbye) Fries (Lu, Co, Po) CYSTOCLONACEAE
Melobesia J.V. Lamouroux <i>Melobesia membranacea</i> (Esper) J.V. Lamouroux (Lu, Co, Po) = <i>Lithothamnion membranaceum</i> (Esper) Foslie	Calliblepharis Kützing <i>Calliblepharis ciliata</i> (Hudson) Kützing (Lu, Co, Po) <i>Calliblepharis jubata</i> (Goodenough & Woodward) Kützing (Lu, Co, Po) = <i>Calliblepharis lanceolata</i> Batters, p.p.
Mesophyllum M. Lemoine ⁷³ <i>Mesophyllum expansum</i> (Philippi) Cabioch & Mendoza (Co, Po) ⁷⁴ = <i>Lithophyllum expansum</i> Philippi = <i>Lithophyllum stictaeforme</i> (J.E. Areschoug) Hauck = <i>Lithophyllum frondosum</i> (L. Dufour) Furnari, Cormaci & Alongi = <i>Lithophyllum grandiusculum</i> (Montagne) Woelkerling, D. Penrose & Y.M. Chamberlain <i>Mesophyllum lichenoides</i> (J. Ellis) M. Lemoine (Lu, Co, Po)	Rhodophyllis Kützing <i>Rhodophyllis divaricata</i> (Stackhouse) Papenfuss (Lu, Co, Po) = <i>Rhodophyllis bifida</i> Kützing = <i>Rhodophyllis appendiculata</i> J. Agardh FURCELLARIACEAE
Phymatholithon Foslie <i>Phymatholithon calcareum</i> (Pallas) Adey & D.L. McKibbin (Co, Po) ⁷² = <i>Lithothamnion polymorphum</i> (Linnaeus) J.E. Areschoug <i>Phymatolithon lenormandii</i> (J.E. Areschoug) Adey (Co, Po) = <i>Lithothamnion lenormandii</i> (J.E. Areschoug) Foslie <i>Phymatolithon purpureum</i> (P.L. Crouan & H.M. Crouan) Woelkerling & L.M. Irvine (Lu, Po)	Furcellaria J.V. Lamouroux <i>Furcellaria lumbricalis</i> (Hudson) J.V. Lamouroux (Lu, Co) = <i>Furcellaria fastigiata</i> (Turner) J.V. Lamouroux
	Halarachnion Kützing <i>Halarachnion ligulatum</i> (Woodward) Kützing (Lu, Co, Po) "Cruoria rosea" (P.L. Crouan & H.M. Crouan) P.L. Crouan & H.M. Crouan [stage] (Po) ⁷⁹

Table 1 (continuation)

Neurocaulon Zanardini

Neurocaulon foliosum (Meneghini) Zanardini (Lu, Co) ⁸⁰
= *Neurocaulon grandifolium* Rodríguez

GIGARTINACEAE

Chondracanthus Kützing

Chondracanthus acicularis (Roth) Fredericq (Lu, Co, Po)
= *Gigartina acicularis* (Roth) J.V. Lamouroux
Chondracanthus teedei (Mertens ex Roth) Kützing (Lu, Co, Po) ⁸¹
= *Gigartina teedei* (Mertens ex Roth) J.V. Lamouroux

Chondrus Stackhouse

Chondrus crispus Stackhouse (Lu, Co, Po) ⁸²

Gigartina Stackhouse

Gigartina pistillata (S.G. Gmelin) Stackhouse (Lu, Co, Po)

HYPNEACEAE

Hypnea J.V. Lamouroux

Hypnea musciformis (Wulfen) J.V. Lamouroux (Lu, Co, Po)

NEMASTOMATAACEAE

Itonoa Masuda & Guiry

Itonoa marginifera (J. Agardh) Masuda & Guiry (Co, Po)
= *Platoma marginifera* (J. Agardh) Batters

PETROCELIDACEAE

Mastocarpus Kützing

Mastocarpus stellatus (Stackhouse) Guiry (Lu, Co, Po)
= *Gigartina stellata* (Stackhouse in Withering) Batters
= *Gigartina mamillata* (Goodenough & Woodward) J. Agardh
"Petrocelis cruenta" J. Agardh [stage] (Lu, Co, Po)

PHYLLOPHORACEAE

Ahnfeltiopsis P.C. Silva & DeCew

Ahnfeltiopsis devoniensis (Greville) P.C. Silva & DeCew (Lu, Co, Po)

= *Gymnogongrus devoniensis* (Greville) Schotter

Ahnfeltiopsis pusilla (Montagne) P.C. Silva & DeCew (Lu, Co) ²⁵

Gymnogongrus Martius

Gymnogongrus crenulatus (Turner) J. Agardh (Lu, Co, Po)
= *Gymnogongrus norvegicus* J. Agardh, p.p., non *Fucus norvegicus* Gunnerus

= *Actinococcus peltaeformis* F. Schmitz

Gymnogongrus griffithsiae (Turner) Martius (Lu, Co, Po)

= *Actinococcus aggregatus* F. Schmitz

Phyllophora Greville

Phyllophora crispa (Hudson) P.S. Dixon (Lu, Co, Po)
= *Phyllophora rubens* (Goodenough & Woodward) Greville
= *Phyllophora epiphylla* (O.F. Müller) Batters
Phyllophora sicula (Kützing) Guiry & L.M. Irvine (Co, Po) ⁸³
= *Phyllophora palmettoides* J. Agardh

Schottera Guiry & Hollenberg

Schottera nicaeensis (J.V. Lamouroux ex Duby) Guiry & Hollenberg (Lu, Co, Po)

= *Petroglossum nicaeense* (J.V. Lamouroux ex Duby) Schotter

Stenogramme Harvey

Stenogramme interrupta (C. Agardh) Montagne ex Harvey (Co, Po)

SPHAEROCOCCACEAE

Sphaerococcus Stackhouse

Sphaerococcus coronopifolius Stackhouse (Lu, Co, Po)
"Haematocelis fissurata" P.L. Crouan & H.M. Crouan [stage] (Lu, Po) ⁸⁴
= *Ethelia fissurata* (P.L. Crouan & H.M. Crouan) Denizot [stage]

SCHIZYMENIACEAE

Schizymenia J. Agardh

Schizymenia dubyi (Chauvin ex Duby) J. Agardh (Lu, Co, Po)
"Haematocelis rubens" J. Agardh [stage] (Lu, Co, Po)

PLOCAMIALES

PLOCAMIACEAE

Plocamium J.V. Lamouroux

Plocamium cartilagineum (Linnaeus) P.S. Dixon (Lu, Co, Po)
= *Plocamium coccineum* (Hudson) Lyngbye
= *Plocamium vulgare* J.V. Lamouroux
Plocamium raphelisianum P.J.L. Dangeard (Co, Po) ⁸⁵

RHODYMENIALES

CHAMPIACEAE

Champia Desvoux

Champia parvula (C. Agardh) Harvey (Lu, Co, Po)
= *Champia intricata* (Clemente) Cremades

Chylocladia Greville

Chylocladia verticillata (Lightfoot) Bliding (Lu, Co, Po)
= *Chylocladia kaliformis* (Goodenough & Woodward) Greville in W.J. Hooker
= *Chylocladia squarrosa* (Kützing) Le Jolis

Gastroclonium Kützing

Gastroclonium ovatum (Hudson) Papenfuss (Lu, Co, Po)
= *Chylocladia ovata* (Hudson) Batters
Gastroclonium reflexum (Chauvin) Kützing (Lu, Co, Po)
= *Chylocladia reflexa* (Chauvin) Zanardini

FAUCHEACEAE

Fauchea Montagne & Bory de Saint-Vincent

Fauchea repens (C. Agardh) Montagne & Bory de Saint-Vincent (Co) ⁸⁶

LOMENTARIACEAE

Lomentaria Lyngbye

Lomentaria articulata (Hudson) Lyngbye (Lu, Co, Po)
Lomentaria clavellosa (Turner) Gaillon (Lu, Co, Po)
= *Chylocladia clavellosa* (Turner) Areschoug
Lomentaria hakodatensis Yendo (Co, Po) ⁸³
Lomentaria orcadensis (Harvey) F.S. Collins ex W.R. Taylor (Co, Po) ⁸⁷
= *Lomentaria rosea* (Harvey) Thuret ex Farlow

RHODYMENIACEAE

Cordylecladia J. Agardh

Cordylecladia erecta (Greville) J. Agardh (Lu, Co, Po) ⁸⁸

Rhodymenia Greville

Rhodymenia holmesii Ardissonne (Lu, Co, Po)
Rhodymenia pseudopalmeta (J.V. Lamouroux) P.C. Silva (Lu, Co, Po)
= *Rhodymenia palmetta* (J.V. Lamouroux) Greville

CERAMIALES

CERAMIACEAE

Aglaothamnion Feldmann-Mazoyer

Aglaothamnion bipinnatum (P.L. Crouan & H.M. Crouan) J. Feldmann & Feldmann-Mazoyer (Co, Po)
Aglaothamnion diaphanum L'Hardy-Halos & Maggs (Co, Po) ⁸⁹
Aglaothamnion gallicum (Nägeli) L'Hardy-Halos ex Ardré (Lu, Co, Po)
= *Aglaothamnion brodiaei* auct.
= *Callithamnion brodiaei* auct.

Table 1 (continuation)

<i>Aglaothamnion hookeri</i> (Dillwyn) Maggs & Hommersand (Lu, Co, Po)	<i>Ceramium gaditanum</i> (Clemente) Cremades (Lu, Co, Po)
= <i>Callithamnion hookeri</i> (Dillwyn) S.F. Gray	= <i>Ceramium flabelligerum</i> J. Agardh
= <i>Callithamnion polyspermum</i> C. Agardh	<i>Ceramium pallidum</i> (Nägeli ex Kützing) Maggs & Hommersand (Lu, Co, Po)
= <i>Aglaothamnion scopulorum</i> C. Agardh	= <i>Ceramium fruticosum</i> (Kützing) J. Agardh
<i>Aglaothamnion pseudobyssoides</i> (P.L. Crouan & H.M. Crouan) L'Hardy-Halos (Lu, Co)	<i>Ceramium secundatum</i> Lyngbye (Lu, Co, Po)
<i>Aglaothamnion roseum</i> (Roth) Maggs & L'Hardy-Halos (Co, Po)	<i>Ceramium shuttleworthianum</i> (Kützing) Rabenhorst (Lu, Co, Po)
<i>Aglaothamnion sepositum</i> (Gunnerus) Maggs & Hommersand (Co, Po)	= <i>Ceramium acanthonothum</i> (Carmichael ex Harvey) J. Agardh
= <i>Callithamnion sepositum</i> (Gunnerus) P.S. Dixon & J.H. Price	<i>Ceramium tenuicorne</i> (Kützing) Waern (Lu, Co, Po)
= <i>Callithamnion arbuscula</i> (Dillwyn) Lyngbye	= <i>Ceramium strictum sensu</i> Harvey
<i>Aglaothamnion tenuissimum</i> (Bonnemaison) Feldmann-Mazoyer (Lu, Co, Po)	<i>Ceramium virgatum</i> Roth (Lu, Co, Po)
= <i>Aglaothamnion furcellariae</i> (J. Agardh) Feldmann-Mazoyer	= <i>Ceramium nodulosum</i> (Lightfoot) Ducluzeau
= <i>Callithamnion byssoides</i> Arnott ex Harvey	= <i>Ceramium rubrum</i> C. Agardh, auct.
= <i>Aglaothamnion byssoides</i> (Arnott ex Harvey) L'Hardy-Halos & Rueness	Compsothamnion (Nägeli) F. Schmitz
<i>Aglaothamnion tripinnatum</i> (C. Agardh) Feldmann-Mazoyer (Lu, Co, Po) ⁹⁰	<i>Compsothamnion gracillimum</i> De Toni (Po) ¹⁰⁰
Anotrichium Nägeli	<i>Compsothamnion thuyoides</i> (J.E. Smith) Nägeli (Lu, Co, Po)
<i>Anotrichium barbatum</i> (C. Agardh) Nägeli (Po) ⁹¹	Crouania J. Agardh
= <i>Griffithsia barbata</i> C. Agardh	<i>Crouania attenuata</i> (C. Agardh) J. Agardh (Lu, Co, Po)
<i>Anotrichium furcellatum</i> (J. Agardh) Baldock (Lu, Co, Po) ⁹²	Griffithsia C. Agardh
= <i>Neomonospora furcellata</i> (J. Agardh) Feldmann-Mazoyer & Meslin	<i>Griffithsia opuntioides</i> J. Agardh (Co) ⁴³
Antithamnion Nägeli	<i>Griffithsia schousboei</i> Montagne (Co, Po)
<i>Antithamnion cruciatum</i> (C. Agardh) Nägeli (Lu, Co, Po)	Gymnothamnion J. Agardh
<i>Antithamnion densum</i> (Suhr) M.A. Howe (Co, Po)	<i>Gymnothamnion elegans</i> (Schousboe ex C. Agardh) J. Agardh (Lu, Co, Po) ¹⁰¹
= <i>Antithamnion defectum</i> Kylin	= <i>Plumaria schousboei</i> (Bornet) F. Schmitz
<i>Antithamnion villosum</i> (Kützing) Athanasiadis (Lu, Po) ⁹³	Halurus Kützing
Antithamnionella Lyle	<i>Halurus equisetifolius</i> (Lightfoot) Kützing (Lu, Co, Po)
<i>Antithamnionella elegans</i> (Berthold) J.H. Price & D.M. John (Co) ⁹⁴	= <i>Griffithsia equisetifolia</i> C. Agardh
<i>Antithamnionella spirographidis</i> (Schiffner) E.M. Wollaston (Co, Po)	<i>Halurus flosculosus</i> (J. Ellis) Maggs & Hommersand (Lu, Co, Po)
<i>Antithamnionella ternifolia</i> (J.D. Hooker & Harvey) Lyle (Lu, Co, Po)	= <i>Griffithsia flosculosa</i> (J. Ellis) Batters
= <i>Antithamnionella sarniensis</i> Lyle	= <i>Griffithsia setacea</i> (Hudson) C. Agardh
Bornetia Thuret	Microcladia Greville
<i>Bornetia secundiflora</i> (J. Agardh) Thuret (Lu, Co, Po)	<i>Microcladia glandulosa</i> (Solander ex Turner) Greville (Lu, Co, Po)
Callithamniella Feldmann-Mazoyer	Monosporus Solier
<i>Callithamniella tingitana</i> (Schousboe ex Bornet) Feldmann-Mazoyer (Lu, Co) ⁹⁵	<i>Monosporus pedicellatus</i> (J.E. Smith) Solier (Lu, Co, Po)
Callithamnion Lyngbye	= <i>Corynospora pedicellata</i> (J.E. Smith) J. Agardh
<i>Callithamnion corymbosum</i> (J.E. Smith) Lyngbye (Co, Po)	= <i>Monospora pedicellata</i> (J.E. Smith) J. Agardh
<i>Callithamnion granulatum</i> (Ducluzeau) C. Agardh (Lu, Co, Po)	= <i>Neomonospora pedicellata</i> (J.E. Smith) Feldmann-Mazoyer & Meslin
= <i>Callithamnion spongiosum</i> Harvey	Pleonosporium Nägeli nom. cons.
<i>Callithamnion tetragonum</i> (Withering) S.F. Gray (Lu, Co, Po)	<i>Pleonosporium borrieri</i> (J.E. Smith) Nägeli (Lu, Co, Po)
<i>Callithamnion tetricum</i> (Dillwyn) S.F. Gray (Lu, Co, Po)	= <i>Callithamnion seminudum</i> C. Agardh
Ceramium Roth	= <i>Callithamnion borrieri</i> (J.E. Smith) C. Agardh
<i>Ceramium botryocarpum</i> A.W. Griffiths ex Harvey (Lu, Co, Po)	<i>Pleonosporium flexuosum</i> (C. Agardh) Bornet (Lu, Co, Po)
<i>Ceramium callipterum</i> Feldmann-Mazoyer (Co, Po) ⁹⁶	Plumaria F. Schmitz
<i>Ceramium ciliatum</i> (J. Ellis) Ducluzeau (Lu, Co, Po)	<i>Plumaria plumosa</i> (Hudson) O. Kuntze (Lu, Co, Po)
<i>Ceramium cimbricum</i> H.E. Petersen (Co) ⁹⁷	= <i>Plumaria elegans</i> (Bonnemaison) F. Schmitz
<i>Ceramium circinatum</i> (Kützing) J. Agardh (Po) ⁹⁸	Pterothamnion Nägeli
<i>Ceramium codii</i> (H. Richards) Feldmann-Mazoyer (Po) ⁶⁹	<i>Pterothamnion crispum</i> (Ducluzeau) Nägeli (Lu, Co, Po)
<i>Ceramium diaphanum</i> (Lightfoot) Roth (Lu, Co, Po)	= <i>Platythamnion crispum</i> (Ducluzeau) J. Feldmann
<i>Ceramium echionotum</i> J. Agardh (Lu, Co, Po) ⁹⁹	= <i>Antithamnion plumula</i> var. <i>crispum</i> (Ducluzeau) Hauck
<i>Ceramium flaccidum</i> (Harvey ex Kützing) Ardissonne (Lu, Co, Po)	<i>Pterothamnion plumula</i> (J. Ellis) Nägeli (Lu, Co, Po)
	Ptilothamnion Thuret
	<i>Ptilothamnion pluma</i> (Dillwyn) Thuret (Lu, Co, Po)
	= <i>Callithamnion pluma</i> (Dillwyn) C. Agardh
	<i>Ptilothamnion sphaericum</i> (P.L. Crouan & H.M. Crouan ex J. Agardh) Maggs & Hommersand (Lu, Co, Po) ¹⁰²
	Seirospora Harvey
	<i>Seirospora interrupta</i> (J.E. Smith) F. Schmitz (Co, Po) ¹⁰³

Table 1 (continuation)

- = *Seiropora hormocarpa* (Holmes) Batters
 = *Seiropora griffithsiana* Harvey
 = *Seiropora seirosperma* (Harvey) P.S. Dixon
- Spermothamnion** J.E. Areschoug
Spermothamnion repens (Dillwyn) Rosenvinge (Lu, Co, Po)¹⁰⁴
Spermothamnion strictum (C. Agardh) Ardissonne (Po)¹⁸
- Sphondylothamnion** Nägeli
Sphondylothamnion multifidum (Hudson) Nägeli (Lu, Co, Po)
 = *Wrangelia multifida* J. Agardh
- Spyridia** Harvey
Spyridia griffithsiana (J.E. Smith) Zuccarello, Prud'homme van Reine & Stegenga (Po)¹⁰⁵
- Tiffaniella** Doty & Meñez
Tiffaniella capitata (Schousboe ex Bornet) Doty & Meñez (Lu, Co, Po)¹⁰⁶
 = *Spermothamnion capitatum* Bornet ex Bornet
- DASYACEAE
- Dasya** C. Agardh
Dasya corymbifera J. Agardh (Co, Po)⁶⁹
Dasya hutchinsiae Harvey (Lu, Co, Po)
 = *Dasya arbuscula sensu* Harvey
Dasya ocellata (Grateloup) Harvey (Co, Po)
 = *Dasya simpliciuscula* C. Agardh
Dasya punicea (Zanardini) Meneghini ex Zanardini (Co, Po)¹⁰⁷
Dasya rigidula (Kützing) Ardissonne (Po)¹⁸
- Heterosiphonia** Montagne
Heterosiphonia japonica Yendo (Lu, Co, Po)¹⁰⁸
Heterosiphonia plumosa (J. Ellis) Batters (Lu, Co, Po)
 = *Heterosiphonia coccinea* (Hudson) Falkenberg
 = *Dasya coccinea* (Hudson) Areschoug
- DELESSERIACEAE
- Acrosorium** Zanardini ex Kützing
Acrosorium ciliolatum (Harvey) Kylin (Lu, Co, Po)
 = *Acrosorium venulosum* (Zanardini) Kylin
 = *Acrosorium uncinatum* (Turner) Kylin
 = *Nitophyllum uncinatum* J. Agardh
- Apoglossocolax** Maggs & Hommersand
Apoglossocolax pusilla Maggs & Hommersand (Po)¹⁰⁹
- Apoglossum** J. Agardh
Apoglossum ruscifolium (Turner) J. Agardh (Lu, Co, Po)
 = *Delesseria ruscifolia* (Turner) J.V. Lamouroux
- Cryptopleura** Kützing
Cryptopleura ramosa (Hudson) Kylin ex L. Newton (Lu, Co, Po)
 = *Cryptopleura lacerata* (S.G. Gmelin) Kützing
 = *Acrosorium reptans* (Crouan) Kylin
- Delesseria** J.V. Lamouroux
Delesseria sanguinea (Hudson) J.V. Lamouroux (Lu, Co, Po)
- Drachiella** J. Ernst & J. Feldmann
Drachiella minuta (Kylin) Maggs & Hommersand (Lu, Co, Po)
 = *Myriogramme minuta* Kylin
Drachiella spectabilis J. Ernst & J. Feldmann (Lu, Co, Po)
- ErythroGLOSSUM** J. Agardh
ErythroGLOSSUM laciniatum (Lightfoot) Maggs & Hommersand (Lu, Co, Po)
 = *Polyneura laciniata* (Lightfoot) P.S. Dixon
 = *Polyneura gmelinii* (J.V. Lamouroux) Kylin
 = *Nitophyllum gmelinii* Greville
ErythroGLOSSUM lusitanicum Ardré (Co, Po)¹¹⁰
- Gonimophyllum** Batters
Gonimophyllum buffhamii Batters (Co, Po)
- Haraldia** J. Feldmann
Haraldia lenormandii (Derbès & Solier) J. Feldmann (Lu, Co, Po)¹¹¹
- Haraldiophyllum** A.D. Zinova
Haraldiophyllum bonnemaisonii (Kylin) A.D. Zinova (Lu, Co, Po)
 = *Nitophyllum bonnemaisonii* (Kylin) Kylin
- Hypoglossum** Kützing
Hypoglossum hypoglossoides (Stackhouse) F.S. Collins & Hervey (Lu, Co, Po)
 = *Hypoglossum woodwardii* Kützing
 = *Delesseria hypoglossum* (Woodward) J.V. Lamouroux
- Nitophyllum** Greville
Nitophyllum punctatum (Stackhouse) Greville (Lu, Co, Po)
- Polyneura** Kylin
Polyneura bonnemaisonii (C. Agardh) Maggs & Hommersand (Lu, Co, Po)
 = *Polyneura hilliae* (Greville) Kylin
 = *Nitophyllum hilliae* (Greville) Greville
- Radicilingua** Papenfuss
Radicilingua thysanorhizans (Holmes) Papenfuss (Co, Po)¹¹²
 = *Rhizoglossum thysanorhizans* (Holmes) Kylin
- RHODOMELACEAE
- Aphanocladia** Falkenberg
Aphanocladia stichidiosa (Funk) Ardré (Lu, Co)¹¹³
- Boergesenella** Kylin
Boergesenella fruticulosa (Wulfen) Kylin (Lu, Co, Po)
 = *Pterosiphonia fruticulosa* (Wulfen) L. Batten
 = *Boergesenella martensiana* (Kützing) Ardré
Boergesenella thuyoides (Harvey) Kylin (Lu, Co, Po)
 = *Pterosiphonia thuyoides* (Harvey) F. Schmitz
- Bostrychia** Montagne
Bostrychia scorpioides (Hudson) Montagne (Lu, Co, Po)
- Brongniartella** Bory de Saint-Vincent
Brongniartella byssoides (Goodenough & Woodward) F. Schmitz (Lu, Co, Po)
- Chondria** C. Agardh
Chondria capillaris (Hudson) M.J. Wynne (Co, Po)
 = *Chondria tenuissima* (Withering) C. Agardh
Chondria coerulecens (J. Agardh) Falkenberg (Lu, Co, Po)
Chondria dasyphylla (Woodward) C. Agardh (Lu, Co, Po)
Chondria scintillans Feldmann-Mazoyer (Lu, Co, Po)
- Ctenosiphonia** Falkenberg
Ctenosiphonia hypnoides (Welwitsch ex J. Agardh) Falkenberg (Lu, Co, Po)
- Herposiphonia** Nägeli
Herposiphonia secunda (C. Agardh) Ambronn (Co)¹¹⁴
Herposiphonia tenella (C. Agardh) Ambronn (Lu, Co, Po)
 = *Herposiphonia secunda* f. *tenella* (C. Agardh) M.J. Wynne
- Laurencia** J.V. Lamouroux
Laurencia minuta Vandermeulen, Garbary & Guiry (Lu)¹¹⁵
Laurencia obtusa (Hudson) J.V. Lamouroux (Lu, Co, Po)
Laurencia pyramidalis Bory de Saint-Vincent ex Kützing (Lu, Co, Po)
 = *Laurencia obtusa* var. *pyramidata* Bory de Saint-Vincent ex J. Agardh
- Leptosiphonia** Kylin
Leptosiphonia schousboei (Thuret) Kylin (Lu, Co, Po)

Table 1 (continuation)**Lophosiphonia** Falkenberg*Lophosiphonia obscura* (C. Agardh) Falkenberg (Lu, Co, Po)*Lophosiphonia reptabunda* (Suhr) Kylin (Lu, Co, Po)**Neosiphonia** M.S. Kim & I.K. Lee*Neosiphonia harveyi* (J. Bailey) M.S. Kim, H.G. Choi, Guiry & G.W. Saunders (Lu, Co, Po)= *Polysiphonia harveyi* J. Bailey= *Polysiphonia insidiosa* (J. Agardh) P.L. Crouan & H.M. Crouan, nom. illeg.**Ophidocladus** Falkenberg*Ophidocladus simpliciusculus* (P.L. Crouan & H.M. Crouan) Falkenberg (Lu, Co, Po)**Osmundea** Stackhouse*Osmundea hybrida* (A.P. De Candolle) K.W. Nam (Lu, Co, Po)= *Laurencia hybrida* (A.P. De Candolle) T. Lestiboudois= *Laurencia caespitosa* J.V. Lamouroux*Osmundea osmunda* (S.G. Gmelin) K.W. Nam & Maggs (Lu, Co, Po)= *Laurencia osmunda* (S.G. Gmelin) Maggs & Hommersand= *Laurencia pinnatifida* var. *osmunda* (Turner) Kützing*Osmundea pinnatifida* (Hudson) Stackhouse (Lu, Co, Po)= *Laurencia pinnatifida* (Hudson) J.V. Lamouroux*Osmundea truncata* (Kützing) K.W. Nam & Maggs (Co) ¹¹⁶**Polysiphonia** Greville*Polysiphonia atlantica* Kapraun & J.N. Norris (Lu, Co, Po)= *Polysiphonia macrocarpa* Harvey*Polysiphonia brodiei* (Dillwyn) Sprengel (Lu, Co, Po)*Polysiphonia denudata* (Dillwyn) Greville ex Harvey (Lu, Co, Po)*Polysiphonia elongata* (Hudson) Sprengel (Lu, Co, Po)*Polysiphonia ferulacea* Suhr ex J. Agardh (Lu, Co, Po)*Polysiphonia fibrillosa* (Dillwyn) Sprengel (Lu, Co, Po)*Polysiphonia fucoides* (Hudson) Greville (Lu, Co, Po)= *Polysiphonia nigrescens* (Hudson) Greville ex Harvey*Polysiphonia furcellata* (C. Agardh) Harvey (Po) ²⁰*Polysiphonia lanosa* (Linnaeus) Tandy (Lu, Co, Po)= *Polysiphonia fastigiata* (Roth-) Greville= *Vertebrata lanosa* (Linnaeus) Gayral*Polysiphonia nigra* (Hudson) Batters (Lu, Co, Po)= *Polysiphonia atrorubescens* (Dillwyn) Greville*Polysiphonia opaca* (C. Agardh) Moris & De Notaris (Lu, Co, Po)*Polysiphonia polyspora* (C. Agardh) Montagne (Lu, Co, Po)*Polysiphonia scopulorum* Harvey (Lu, Co, Po) ¹¹⁷= *Polysiphonia caespitosa* (Pocock) Hollenberg= *Falkenbergiella caespitosa* Pocock*Polysiphonia stricta* (Dillwyn) Greville (Lu, Co, Po)= *Polysiphonia urceolata* (Lightfoot ex Dillwyn) Greville*Polysiphonia subulata* (Ducluzeau) P.L. Crouan & H.M. Crouan (Co) ³⁸**Pterosiphonia** Falkenberg*Pterosiphonia ardreana* Maggs & Hommersand (Lu, Co, Po)= *Pterosiphonia spinifera* var. *robusta* Ardré*Pterosiphonia complanata* (Clemente) Falkenberg (Lu, Co, Po)*Pterosiphonia parasitica* (Hudson) Falkenberg (Lu, Co, Po)*Pterosiphonia pennata* (C. Agardh) Sauvageau (Lu, Co, Po) ¹¹⁸**Rhodomela** C. Agardh*Rhodomela confervoides* (Hudson) P.C. Silva (Lu, Co) ¹⁶⁸= *Rhodomela subfusca* (Woodward) C. Agardh**Streblocladia** F. Schmitz*Streblocladia collabens* (C. Agardh) Falkenberg (Lu, Co, Po)= *Polysiphonia collabens* (C. Agardh) Kützing= *Polysiphonia platyspira* Kützing

INCERTAE SEDIS

Aiolocolax Pocock*Aiolocolax pulchellus* Pocock (Lu, Co, Po) ¹²⁰

OCHROPHYTA

XANTHOPHYCEAE

VAUCHERIALES

VAUCHERIAEAE

Vaucheria A.P. De Candolle*Vaucheria arcassonensis* P.J.L. Dangeard (Co) ¹*Vaucheria coronata* Nordstedt (Lu, Co, Po) ¹²¹*Vaucheria dichotoma* (Linnaeus) Martius (Co) ¹= *Vaucheria pyrifera* Kützing*Vaucheria erythrospora* T.A. Christensen (Lu, Co) ¹²²*Vaucheria intermedia* Nordstedt (Lu, Co) ¹²³*Vaucheria subsimplex* P.L. Crouan & H.M. Crouan (Co) ⁸= *Vaucheria sphaerospora* Nordstedt*Vaucheria synandra* Woronin (Lu, Co) ¹²⁴*Vaucheria velutina* C. Agardh (Lu, Co) ¹²⁵= *Vaucheria thuretii* Woronin

PHAEOPHYCEAE

SPHACELARIALES

CLADOSTEPHACEAE

Cladostephus C. Agardh*Cladostephus spongiosum* (Hudson) C. Agardh (Lu, Co, Po)= *Cladostephus spongiosus* f. *verticillatus* Prud'homme van Reine= *Cladostephus verticillatus* (Lightfoot) Lyngbye, nom. illeg.

SPHACELARIAEAE

Sphacelaria Lyngbye*Sphacelaria cirrosa* (Roth) C. Agardh (Lu, Co, Po)= *Sphacelaria bipinnata* (Kützing) Sauvageau= *Sphacelaria hystrix* Suhr ex Reinke*Sphacelaria fusca* (Hudson) S.F. Gray (Co, Po) ¹²⁶*Sphacelaria nana* Nägeli ex Kützing (Co, Po) ⁶⁶= *Sphacelaria britannica* Sauvageau= *Sphacelaria olivacea* Pringsheim*Sphacelaria plumula* Zanardini (Lu, Co, Po)*Sphacelaria radicans* (Dillwyn) C. Agardh (Co, Po) ¹⁸*Sphacelaria rigidula* Kützing (Lu, Co, Po)= *Sphacelaria furcigera* Kützing*Sphacelaria tribuloides* Meneghini (Lu) ¹²⁷

STYPOCAULACEAE

Halopteris Kützing*Halopteris filicina* (Grateloup) Kützing (Lu, Co, Po)**Stypocaulon** Kützing*Stypocaulon scoparium* (Linnaeus) Kützing (Lu, Co, Po)= *Halopteris scoparia* (Linnaeus) Sauvageau

DICTYOTALES

DICTYOTACEAE

Dictyopteris J.V. Lamouroux*Dictyopteris ambigua* (Clemente) Cremades (Co, Po)= *Dictyopteris polypodioides* sensu J.V. Lamouroux*Dictyopteris lucida* Ribera Siguán & al. (Co) ¹²⁸*Dictyopteris polypodioides* (A.P. De Candolle) J.V. Lamouroux (Lu, Co, Po)= *Dictyopteris membranacea* (Stackhouse) Batters

Table 1 (continuation)

- Dictyota** J.V. Lamouroux
Dictyota dichotoma (Hudson) J.V. Lamouroux (Lu, Co, Po) ¹²⁹
Dictyota fasciola (Roth) J.V. Lamouroux (Lu) ¹³⁰
= *Dilophus fasciola* (Roth) M.A. Howe
Dictyota spiralis Montagne (Lu, Co) ¹³¹
= *Dilophus spiralis* (Montagne) G. Hamel
= *Dictyota ligulata* Kützing
- Padina** Adanson
Padina pavonia (Linnaeus) Thivy (Lu, Co, Po)
= *Padina mediterranea* Bory de Saint-Vincent
= *Zonaria pavonia* C. Agardh
- Taonia** J. Agardh
Taonia atomaria (Woodward) J. Agardh (Lu, Co, Po)
- ECTOCARPALES
ACINETOSPORACEAE
- Acinetospora** Bornet
Acinetospora crinita (Carmichael) Sauvageau (Co, Po)
= *Acinetospora pusilla* (A.W. Griffiths ex Harvey) De Toni
- Feldmannia** G. Hamel
Feldmannia irregularis (Kützing) G. Hamel (Co, Po)
Feldmannia lebelii (J.E. Areschoug ex P.L. Crouan & H.M. Crouan) G. Hamel (Co, Po)
= *Feldmannia caespitosa* var. *lebelii* (J. Areschoug ex P.L. Crouan & H.M. Crouan) Knoepffler
Feldmannia paradoxa (Montagne) G. Hamel (Lu, Co, Po)
= *Feldmannia globifera* (Kützing) G. Hamel
Feldmannia simplex (P.L. Crouan & H.M. Crouan) G. Hamel (Lu, Co, Po)
= *Ectocarpus simplex* P.L. Crouan & H.M. Crouan
- Hincksia** E. Gray
Hincksia granulosa (J.E. Smith) P.C. Silva (Lu, Co, Po)
= *Giffordia granulosa* (J.E. Smith) G. Hamel
Hincksia hincksiae (Harvey) P.C. Silva (Lu, Co, Po)
= *Giffordia hincksiae* (Harvey) G. Hamel
Hincksia mitchelliae (Harvey) P.C. Silva (Lu, Co, Po)
= *Giffordia mitchelliae* (Harvey) G. Hamel
Hincksia sandriana (Zanardini) P.C. Silva (Co, Po)
= *Giffordia sandriana* (Zanardini) G. Hamel
= *Ectocarpus elegans* Thuret
Hincksia secunda (Kützing) P.C. Silva (Lu, Co, Po)
= *Giffordia secunda* (Kützing) Batters
- Pylaiella** Bory de Saint-Vincent
Pylaiella littoralis (Linnaeus) Kjellman (Lu, Co, Po)
= *Ectocarpus littoralis* Lyngbye
- CHORDARIACEAE
- Asperococcus** J.V. Lamouroux
Asperococcus bullosus J.V. Lamouroux (Co, Po)
= *Asperococcus turneri* (Dillwyn ex J.E. Smith) W.J. Hooker
Asperococcus ensiformis (Delle Chiaje) M.J. Wynne (Lu, Co, Po)
= *Asperococcus compressus* A.W. Griffiths ex W.J. Hooker
Asperococcus fistulosus (Hudson) W.J. Hooker (Co, Po)
= *Ectocarpus repens* Reinke
- Cladosiphon** Kützing
Cladosiphon zosteræ (J. Agardh) Kylin (Co, Po) ¹³²
= *Castagnea zosteræ* (J. Agardh) Thuret
- Elachista** Duby
Elachista flaccida (Dillwyn) Fries (Lu, Co, Po)
Elachista fucicola (Vellay) J.E. Areschoug (Lu, Co, Po)
- Elachista intermedia* P.L. Crouan & H.M. Crouan (Co) ¹³³
Elachista scutulata (J.E. Smith) Duby (Lu, Co, Po)
- Eudesme** J. Agardh
Eudesme virescens (Carmichael ex Berkeley) J. Agardh (Lu, Co, Po)
= *Castagnea virescens* (Carmichael ex Berkeley) Thuret
- Hecatonema** J. Agardh
Hecatonema terminale (Kützing) Kylin (Co) ¹³⁴
= *Hecatonema maculans* F.S. Collins Sauvageau
- Herponema** J. Agardh
Herponema valiantei (Bornet ex Sauvageau) G. Hamel (Co) ¹³⁵
= *Ectocarpus valiantei* Bornet ex Sauvageau
Herponema velutinum (Greville) J. Agardh (Lu, Co, Po)
= *Ectocarpus velutinus* (Greville) Kützing
- Isthmoplea** Kjellman
Isthmoplea sphaerophora (Carmichael ex Harvey) Gobi (Po) ¹³⁶
- Kuckuckia** Kormann
Kuckuckia spinosa (Kützing) Kornmann (Po) ²⁰
= *Kuckuckia kylinii* Cardinal
- Kuetzingiella** Kormann
Kuetzingiella holmesii (Batters) Russell (Po) ²⁰
= *Ectocarpus holmesii* Batters
- Laminariocolax** Kylin
Laminariocolax aecidioides (Rosenvinge) Peters in Burkhard & Peters (Co, Po) ¹³⁷
= *Gononema aecidioides* (Rosenvinge) P.M. Pedersen
Laminariocolax tomentosoides (Farlow) Kylin (Po) ²⁰
- Leathesia** S.F. Gray
Leathesia difformis (Linnaeus) J.E. Areschoug (Lu, Co, Po)
- Leblondiella** G. Hamel
Leblondiella densa (Batters) G. Hamel (Po) ⁶⁹
- Leptonematella** P.C. Silva
Leptonematella fasciculata (Reinke) P.C. Silva (Po) ¹³⁸
- Liebmannia** J. Agardh
Liebmannia leveillei J. Agardh (Co, Po)
= *Mesogloia leveillei* (J. Agardh) Meneghini
- Litosiphon** Harvey
Litosiphon laminariae (Lyngbye) Harvey (Lu, Co, Po)
= *Litosiphon hibernicus* (T. Johnson) Batters
= *Litosiphon pusillus* (Carmichael ex W.J. Hooker) Harvey
- Mesogloia** C. Agardh
Mesogloia vermiculata (J.E. Smith) S.F. Gray (Lu, Po) ¹³⁹
- Mikrosyphar** Kuckuck
Mikrosyphar polysiphoniae Kuckuck (Co) ¹³⁵
- Myriactula** Kuntze
Myriactula areschougii (P.L. Crouan & H.M. Crouan) G. Hamel (Lu) ⁴¹
Myriactula rivulariae (Suhr) Feldmann (Lu, Co, Po)
= *Myriactula pulvinata* (Kützing) Kuntze
= *Elachista pulvinata* (Kützing) Harvey
- Myrionema** Greville
Myrionema corunnae Sauvageau (Co, Po) ¹⁴⁰
Myrionema magnusii (Sauvageau) Loiseaux (Co, Po) ¹⁴¹
= *Ascocyclus magnusii* Sauvageau
Myrionema strangulans Carmichael ex Greville (Lu, Co, Po)
= *Myrionema vulgare* Thuret
- Myriotrichia** Harvey
Myriotrichia clavaeformis Harvey (Lu, Co, Po)
= *Myriotrichia filiformis* Harvey
= *Myriotrichia repens* Hauck

Table 1 (continuation)

Petrospongium Nägeli ex Kützing <i>Petrospongium berkeleyi</i> (Greville) Nägeli ex Kützing (Co, Po) ¹⁴² = <i>Cylindrocarpus berkeleyi</i> (Greville) P.L. Crouan & H.M. Crouan	= <i>Scytosiphon simplicissimus</i> var. <i>complanatus</i> (Rosenvinge) Cremades <i>Scytosiphon dotyi</i> M.J. Wynne (Lu, Co, Po) ¹⁵¹ <i>Scytosiphon lomentaria</i> (Lyngnbye) Link (Lu, Co, Po) = <i>Scytosiphon simplicissimus</i> (Clemente) Cremades
Phaeostroma Kuckuck <i>Phaeostroma pustulosum</i> Kuckuck (Po) ⁹⁸ = <i>Streblonema aequale</i> Oltmanns	Stragularia Strömfelt <i>Stragularia clavata</i> (Harvey) G. Hamel (Co, Po) ¹⁸ = <i>Ralfsia clavata</i> (Harvey) P.L. Crouan & H.M. Crouan = <i>Ralfsia disciformis</i> P.L. Crouan & H.M. Crouan
Pilocladus Kuckuck ex Kornmann <i>Pilocladus codicola</i> (Stechell & N.L. Gardner) Ardré (Lu, Co) ¹⁴³ = <i>Streblonema codicola</i> Stechell & N.L. Gardner	Symphycarpus Rosenvinge <i>Symphycarpus strangulans</i> Rosenvinge (Po) ¹⁵²
Protectocarpus Kuckuck ex Kornmann <i>Protectocarpus speciosus</i> (Börgeesen) Kornmann (Po) ¹⁴⁴ = <i>Hecatonema speciosum</i> (Börgeesen) A.D. Cotton	RALFSIACEAE
Punctaria Greville <i>Punctaria latifolia</i> Greville (Lu, Co, Po) <i>Punctaria plantaginea</i> (Roth) Greville (Po) ⁶⁹ <i>Punctaria tenuissima</i> (C. Agardh) Greville (Po) ¹⁴⁵ = <i>Desmotrichum undulatum</i> (J. Agardh) Reinke = <i>Punctaria undulata</i> J. Agardh = <i>Punctaria baltica</i> (Kützing) Batters	Pseudolithoderma Svedelius ex Kjelman & Svedelius <i>Pseudolithoderma extensum</i> (P.L. Crouan & H.M. Crouan) S. Lund (Po) ¹⁸ = <i>Lithoderma extensum</i> (P.L. Crouan & H.M. Crouan) G. Hamel
Sauvageaugloia G. Hamel ex Kylin <i>Sauvageaugloia divaricata</i> (Clemente) Cremades (Co) ¹⁴⁶ <i>Sauvageaugloia griffithsiana</i> (Greville ex W.J. Hook) G. Hamel ex Kylin (Lu, Po) ¹⁴⁷ = <i>Mesogloia griffithsiana</i> A.W. Griffiths ex Harvey = <i>Sauvageaugloia chodariaeformis</i> (P.L. Crouan & H.M. Crouan) Kylin = <i>Castagnea chordariaeformis</i> Sauvageau	Ralfsia Berkeley <i>Ralfsia verrucosa</i> (J.E. Areschoug) J.E. Areschoug (Lu, Co, Po)
Spongonema Kützing <i>Spongonema tomentosum</i> (Hudson) Kützing (Lu, Co, Po) = <i>Ectocarpus tomentosus</i> (Hudson) Lyngbye	CUTLERIALES CUTLERIACEAE
Stictyosiphon Kützing <i>Stictyosiphon soriferus</i> (Reinke) Rosenvinge (Po) ¹⁸	Cutleria Greville <i>Cutleria adpersa</i> (Mertens ex Roth) De Notaris (Lu, Co, Po) <i>Cutleria multifida</i> (Turner) Greville (Lu, Co, Po) ¹⁵³ "Aglaozonia parvula" (Greville) Zanardini [stage] (Lu, Co, Po) = <i>Aglaozonia reptans</i> (P.L. Crouan & H.M. Crouan) Kützing
Stilophora J. Agardh <i>Stilophora tenella</i> (Esper) P.C. Silva (Po) ⁷⁴ = <i>Stilophora rhizodes</i> (C. Agardh) J. Agardh	Zanardinia Zanardini <i>Zanardinia typus</i> (Nardo) P.C. Silva (Co, Po) ¹⁵⁴ = <i>Zanardinia prototypus</i> (Nardo) Nardo, <i>nom. illeg.</i> = <i>Zanardinia collaris</i> (Montagne) P.L. Crouan & H.M. Crouan
Striaria Greville <i>Striaria attenuata</i> (Greville) Greville (Co, Po)	SPOROCHNALES SPOROCHNACEAE
ECTOCARPACEAE	Carpomitra Kützing <i>Carpomitra costata</i> (Stackhouse) Batters (Lu, Co, Po)
Ectocarpus Lyngbye <i>Ectocarpus fasciculatus</i> Harvey (Lu, Co, Po) <i>Ectocarpus siliculosus</i> (Dillwyn) Lyngbye (Lu, Co, Po) = <i>Ectocarpus siliculosus</i> var. <i>confervoides</i> (Roth) Kjellman	Sporochnus C. Agardh <i>Sporochnus pedunculatus</i> (Hudson) C. Agardh (Lu, Co) ¹⁵⁵
SCYTOSIPHONACEAE	DESMARESTIALES DESMARESTIACEAE
Colpomenia (Endlicher) Derbès & Solier <i>Colpomenia peregrina</i> Sauvageau (Lu, Co, Po)	Desmarestia J.V. Lamouroux <i>Desmarestia aculeata</i> (Linnaeus) J.V. Lamouroux (Lu, Co, Po) <i>Desmarestia dudresnayi</i> J.V. Lamouroux ex Léman (Lu, Co, Po) ¹⁵⁶ <i>Desmarestia ligulata</i> (Lightfoot) J.V. Lamouroux (Lu, Co, Po)
Componema Kuckuck <i>Componema minutum</i> (C. Agardh) Kornmann (Co) ¹⁴⁸	LAMINARIALES ALARIACEAE
Petalonia Derbès & Solier <i>Petalonia fascia</i> (O.F. Müller) Kuntze (Lu, Co, Po) = <i>Phyllitis fascia</i> (O.F. Müller) Kützing = <i>Phyllitis debilis</i> (C. Agardh) Kützing = <i>Phyllitis caespitosa</i> Le Jolis = <i>Laminaria fascia</i> Kützing <i>Petalonia zosterifolia</i> (Reinke) Kuntze (Co) ¹⁴⁹ = <i>Phyllitis zosterifolia</i> Reinke	Undaria Suringar <i>Undaria pinnatifida</i> (Harvey) Suringar (Co, Po) ¹⁵⁷
Scytosiphon C. Agardh <i>Scytosiphon complanatus</i> (Rosenvinge) Doty (Lu, Co) ¹⁵⁰	CHORDACEAE Chorda Stackhouse <i>Chorda filum</i> (Linnaeus) Stackhouse (Lu, Co, Po)
	LAMINARIACEAE
	Laminaria J.V. Lamouroux <i>Laminaria hyperborea</i> (Gunnerus) Foslie (Lu, Co, Po) = <i>Laminaria cloustoni</i> Edmonston <i>Laminaria ochroleuca</i> Bachelot de la Pylaie (Lu, Co, Po) = <i>Laminaria iberica</i> (G. Hamel) Lami = <i>Laminaria pallida</i> var. <i>iberica</i> G. Hamel <i>Laminaria saccharina</i> (Linnaeus) J.V. Lamouroux (Lu, Co, Po)

Table 1 (continuation)

PHYLLARIACEAE	CHLOROPHYTA
Phyllariopsis E.C. Henry & South	ULVOPHYCEAE
<i>Phyllariopsis brevipes</i> (C. Agardh) E.C. Henry & South subsp.	ULVALES
<i>pseudopurpurascens</i> Pérez-Cirera & al. (Lu, Co, Po) ¹⁵⁸	CAPSOSIPHONACEAE
= <i>Phyllaria reniformis</i> (J.V. Lamouroux) Rostafinsky, p.p.	Capsosiphon Gobi
<i>Phyllariopsis purpurascens</i> (C. Agardh) E.C. Henry & South (Lu, Co, Po)	<i>Capsosiphon fulvescens</i> (C. Agardh) Setchell & N.L. Gardner (Co, Po) ¹⁶²
= <i>Phyllaria purpurascens</i> (C. Agardh) Rostafinsky	= <i>Capsosiphon aureolus</i> (Kützling) Gobi
Saccorhiza Bachelot de la Pylaie	CHAETOPHORACEAE
<i>Saccorhiza polyschides</i> (Lightfoot) Batters (Lu, Co, Po)	Bolbocoleon Pringsheim ¹⁶³
= <i>Saccorhiza bulbosa</i> Pylaie	<i>Bolbocoleon piliferum</i> Pringsheim (Po) ⁴¹
FUCALES	Pringsheimiella von Höhnel
CYTOSEIRACEAE	<i>Pringsheimiella scutata</i> (Reinke) Höhnel ex Marchewianka (Co, Po)
Bifurcaria Stackhouse	Tellamia Batters
<i>Bifurcaria bifurcata</i> R. Ross (Lu, Co, Po)	<i>Tellamia contorta</i> Batters (Lu, Po) ¹⁶⁴
= <i>Bifurcaria rotundata</i> Papenfuss	= <i>Tellamia intricata</i> Batters
= <i>Bifurcaria tuberculata</i> (Hudson) Stackhouse	ENDOSPHAERACEAE
Cystoseira C. Agardh	Chlorochytrium Cohn
<i>Cystoseira baccata</i> (S.G. Gmelin) P.C. Silva (Lu, Co, Po)	<i>Chlorochytrium cohnii</i> E.P. Wright (Co, Po) ⁵⁶
= <i>Cystoseira fibrosa</i> (Hudson) C. Agardh	GOMONTIACEAE
<i>Cystoseira foeniculacea</i> (Linnaeus) Greville (Lu, Co, Po)	Gomontia Bornet & Flahault
<i>Cystoseira humilis</i> Kützling var. <i>myriophylloides</i> (Sauvageau) J.H. Price & D.M. John (Lu, Co, Po)	<i>Gomontia polyrhiza</i> (Lagerheim) Bornet & Flahault (Lu, Co, Po)
<i>Cystoseira nodicaulis</i> (Withering) M. Roberts (Lu, Co, Po)	KORNMANNIACEAE
= <i>Cystoseira granulata</i> C. Agardh	Pseudendoclonium Wille
<i>Cystoseira tamariscifolia</i> (Hudson) Papenfuss (Lu, Co, Po)	<i>Pseudendoclonium submarinum</i> Wille (Co, Po) ¹⁶⁵
= <i>Cystoseira ericoides</i> (Linnaeus) C. Agardh	= <i>Protoderma marina</i> Reinke
<i>Cystoseira usneoides</i> (Linnaeus) M. Roberts (Lu, Co, Po)	= <i>Pseudodendoclonium marinum</i> (Reinke) Allem & E. Schulz
= <i>Cystoseira concatenata</i> C. Agardh, p.p.	MONOSTROMATACEAE
Halidrys Lyngbye	Monostroma Thuret
<i>Halidrys siliquosa</i> (Linnaeus) Lyngbye (Lu, Co, Po)	<i>Monostroma obscurum</i> (Kützling) J. Agardh (Lu, Co, Po)
FUCACEAE	= <i>Ulvaria obscura</i> (Kützling) Gayral
Ascophyllum Stackhouse	<i>Monostroma oxyspermum</i> (Kützling) Doty (Lu, Co, Po)
<i>Ascophyllum nodosum</i> (Linnaeus) Le Jolis (Lu, Co, Po)	= <i>Gayralia oxysperma</i> (Kützling) K.L. Vinogradova ex Scagel & al.
Fucus Linnaeus	= <i>Ulvaria oxysperma</i> (Kützling) Bliding
<i>Fucus ceranoides</i> Linnaeus (Lu, Co, Po)	= <i>Monostroma orbiculatum</i> Thuret
<i>Fucus serratus</i> Linnaeus (Lu, Co, Po)	ULVACEAE
<i>Fucus spiralis</i> Linnaeus (Lu, Co, Po) ¹⁵⁹	Blidingia Kylin
<i>Fucus vesiculosus</i> Linnaeus (Lu, Co, Po) ¹⁶⁰	<i>Blidingia chadefaudii</i> (Feldmann) Bliding (Co) ¹⁶⁶
Pelvetia Decaisne & Thuret	<i>Blidingia marginata</i> (J. Agardh) P.J.L. Dangeard ex Bliding (Lu, Co, Po)
<i>Pelvetia canaliculata</i> (Linnaeus) Decaisne & Thuret (Lu, Co, Po)	<i>Blidingia minima</i> (Nägeli ex Kützling) Kylin (Lu, Co, Po)
HIMANTHALIACEAE	= <i>Enteromorpha micrococca</i> Kützling
Himantalia Lyngbye	<i>Blidingia ramifera</i> (Bliding) Garbary & Barkhouse (Lu, Co, Po)
<i>Himantalia elongata</i> (Linnaeus) S.F. Gray (Lu, Co, Po)	= <i>Blidingia minima</i> var. <i>ramifera</i> Bliding
= <i>Himantalia lorea</i> (Linnaeus) Lyngbye	Percursaria Bory
SARGASSACEAE	<i>Percursaria percursa</i> (C. Agardh) Rosenvinge (Co, Po)
Sargassum C. Agardh	Ulva Linnaeus ¹⁶⁷
<i>Sargassum muticum</i> (Yendo) Fensholt (Lu, Co, Po)	<i>Ulva bifrons</i> Ardré (Co) ¹¹⁶
= <i>Sargassum kjellmanianum</i> Yendo f. <i>muticum</i> Yendo	<i>Ulva clathrata</i> (Roth) C. Agardh (Lu, Co, Po) ¹⁶⁸
INCERTAE SEDIS	= <i>Enteromorpha clathrata</i> (Roth) Greville
Bachelotia (Bornet) Kuckuck ex G. Hamel	= <i>Enteromorpha muscoides</i> (Clemente) Cremades
<i>Bachelotia antillarum</i> (Grunov) Gerloff (Lu, Co, Po)	= <i>Enteromorpha ramulosa</i> (Smith) Carmichael in Hooker
= <i>Pilayella fulvescens</i> Bornet	= <i>Enteromorpha crinita</i> (Roth) J. Agardh
Pilinia Kützling	<i>Ulva compressa</i> Linnaeus (Lu, Co, Po)
<i>Pilinia rimosa</i> Kützling (Po) ¹⁶¹	<i>Ulva curvata</i> (Kützling) de Toni (Lu, Co, Po)
= <i>Waerniella lucifuga</i> (Kuckuck) Kylin	<i>Ulva flexuosa</i> Wulfen (Lu, Co, Po)
= <i>Leptonema lucifuga</i> Kuckuck	

Table 1 (continuation)

= <i>Enteromorpha flexuosa</i> (Wulfen) J. Agardh	= <i>Cladophora hamosa</i> (Kützting) Kützting
<i>Ulva intestinalis</i> Linnaeus (Lu, Co, Po)	= <i>Cladophora neesiorum</i> (C. Agardh) Kützting
= <i>Enteromorpha intestinalis</i> (Linnaeus) Nees	= <i>Cladophora refracta</i> Kützting
<i>Ulva linza</i> Linnaeus (Co, Po)	<i>Cladophora coelothrix</i> Kützting (Lu, Co, Po)
= <i>Enteromorpha linza</i> (Linnaeus) J. Agardh	= <i>Cladophora repens</i> Harvey
<i>Ulva prolifera</i> O.F. Müller (Lu, Co, Po) ¹⁶⁹	<i>Cladophora dalmatica</i> Kützting (Po) ¹⁸
= <i>Enteromorpha prolifera</i> (O.F. Müller) J. Agardh	<i>Cladophora globulina</i> (Kützting) Kützting (Co, Po) ¹⁸
= <i>Enteromorpha torta</i> (Mertens) Reinbold	<i>Cladophora hutchinsiae</i> (Dillwyn) Kützting (Lu, Co, Po)
<i>Ulva pseudocurvata</i> Koeman & Hoek (Co, Po)	= <i>Cladophora rectangularis</i> (A.W. Griffiths ex Harvey) Harvey
<i>Ulva pseudolinza</i> (Koeman & Hoek) H.S. Hayden & al. (Lu, Co, Po)	<i>Cladophora laetevirens</i> (Dillwyn) Kützting (Lu, Co, Po)
= <i>Enteromorpha pseudolinza</i> Koeman & Hoek	<i>Cladophora lehmanniana</i> (Lindenberg) Kützting (Co, Po)
<i>Ulva ralfsii</i> (Harvey) Le Jolis (Po) ²⁰	= <i>Cladophora utriculosa</i> Kützting
= <i>Enteromorpha ralfsii</i> Harvey	= <i>Cladophora macallana</i> Harvey
<i>Ulva rhacodes</i> (Holmes) Papenfuss (Po) ¹⁸	<i>Cladophora liniformis</i> Kützting (Po) ¹⁸
<i>Ulva rigida</i> C. Agardh (Lu, Co, Po) ¹⁷⁰	<i>Cladophora pellucida</i> (Hudson) Kützting (Lu, Co, Po)
<i>Ulva rotundata</i> Bliding (Co, Po)	= <i>Cladophora pseudopellucida</i> Hoek
<i>Ulva scandinavica</i> Bliding (Co) ²⁰	= <i>Cladophora trichotoma</i> (C. Agardh) Kützting
<i>Ulva simplex</i> (K.L. Vinogradova) H.S. Hayden & al. (Co, Po)	<i>Cladophora prolifera</i> (Roth) Kützting (Lu, Co, Po) ¹⁷⁴
= <i>Enteromorpha simplex</i> (K.L. Vinogradova) Koeman & Hoek	<i>Cladophora ruchingeri</i> (C. Agardh) Kützting (Co, Po)
= <i>Enteromorpha prolifera</i> f. <i>simplex</i> Vinogradova, 1974	<i>Cladophora rupestris</i> (Linnaeus) Kützting (Lu, Co, Po)
Umbraulva E.H. Bae & I.K. Lee	<i>Cladophora sericea</i> (Hudson) Kützting (Co, Po)
<i>Umbraulva olivascens</i> (P.J.L. Dangeard) E.H. Bae & I.K. Lee (Lu, Co, Po)	= <i>Cladophora glaucescens</i> A.W. Griffiths ex Harvey
= <i>Ulva olivascens</i> P.J.L. Dangeard	= <i>Cladophora balliana</i> Harvey
Ruthnielsenia C.J. O'Kelly, B. Wynsor & W.K. Bellows	Rhizoclonium Kützting
<i>Ruthnielsenia tenuis</i> (Kyllin) C.J. O'Kelly, B. Wynsor & W.K. Bellows (Co) ²⁰	<i>Rhizoclonium riparium</i> (Roth) Harvey (Lu, Co, Po)
= <i>Phaeophyla tenuis</i> R. Nielsen	= <i>Rhizoclonium implexum</i> (Dillwyn) Kützting
= <i>Entocladia tenuis</i> Kyllin	= <i>Rhizoclonium kernerii</i> Stockmayer
ULVELLACEAE	= <i>Rhizoclonium kochianum</i> Kützting
Acrochaete Pringsheim	<i>Rhizoclonium tortuosum</i> (Dillwyn) Kützting (Co, Po)
<i>Acrochaete repens</i> Pringsheim (Po) ⁴¹	= <i>Lola tortuosa</i> (Dillwyn) Chapman
= <i>Acrochaete parasitica</i> Oltmanns	= <i>Chaetomorpha ligustica</i> (Kützting) Kützting
Entocladia Reinke	WITROCKIELLACEAE
<i>Entocladia viridis</i> Reinke (Co, Po)	Witrockiella Wille
= <i>Phaeophyla viridis</i> (Reinke) Burrow	<i>Witrockiella paradoxa</i> Wille (Co) ¹
<i>Entocladia wittrockii</i> Wille (Po) ²⁰	BRYOPSIDOPHYCEAE
= <i>Phaeophyla wittrockii</i> (Wille) R. Nielsen	ACROSIPHONIALES
Epicladia Reinke	ACROSIPHONIACEAE
<i>Epicladia flustrae</i> Reinke (Co, Po)	Acrosiphonia J. Agardh
Ulvella P.L. Crouan & H.M. Crouan	<i>Acrosiphonia arcta</i> (Dillwyn) Gain (Lu, Co, Po)
<i>Ulvella lens</i> P.L. Crouan & H.M. Crouan (Lu, Po)	= <i>Spongomorpha arcta</i> (Dillwyn) Kützting
= <i>Pseudulvella applanata</i> Setchell & N.L. Gardner	= <i>Acrosiphonia spinescens</i> (Kützting) Kjellman
<i>Ulvella setchellii</i> P.J.L. Dangeard (Lu, Co, Po) ¹⁷¹	" <i>Codiolum petrocelidis</i> " Kuckuck [stage] (Co, Po) ¹⁷⁵
CLADOPHOROPHYCEAE	Urospora J.E. Areschoug
CLADOPHORALES	<i>Urospora penicilliformis</i> (Roth) J.E. Areschoug (Co, Po)
CLADOPHORACEAE	= <i>Urospora mirabilis</i> J.E. Areschoug
Chaetomorpha Kützting	= <i>Urospora bangjooides</i> (Harvey) Holmes & Batters
<i>Chaetomorpha aerea</i> (Dillwyn) Kützting (Lu, Co, Po)	= <i>Urospora isogama</i> (J.E. Smith) Batters
<i>Chaetomorpha linum</i> (O.F. Müller) Kützting (Co, Po)	BRYOPSIDALES
<i>Chaetomorpha mediterranea</i> (Kützting) Kützting (Lu, Co, Po)	BRYOPSIDACEAE
= <i>Chaetomorpha capillaris</i> (Kützting) Börgesen	Bryopsis J.V. Lamouroux
<i>Chaetomorpha melagonium</i> (F. Weber & D. Morh.) Kützting (Po) ²⁰	<i>Bryopsis hypnoides</i> J.V. Lamouroux (Co, Po)
Cladophora Kützting ¹⁷²	<i>Bryopsis plumosa</i> (Hudson) C. Agardh (Lu, Co, Po)
<i>Cladophora aegagropila</i> (Linnaeus) Trevisan (Co, Po) ¹⁷³	= <i>Bryopsis arbuscula</i> J.V. Lamouroux
<i>Cladophora albida</i> (Nees) Kützting (Lu, Co, Po)	= <i>Bryopsis rosae</i> J. Agardh
	CODIACEAE
	Codium Stackhouse
	<i>Codium adhaerens</i> C. Agardh (Lu, Co, Po)
	<i>Codium decorticatum</i> (Woodward) M.A. Howe (Lu, Co, Po)

Table 1 (continuation)

= <i>Codium elongatum</i> (Turner) C. Agardh	CHLOROCYSTIDACEAE
<i>Codium fragile</i> (Suringar) Hariot subsp. <i>tomentosoides</i> (Goor) P.C. Silva (Lu, Co, Po)	Halochlorococcum P.J.L. Dangeard
= <i>Codium mucronatum</i> var. <i>tomentosoides</i> Van Goor	<i>Halochlorococcum moorei</i> (N.L. Gardner) Kornmann & Sahling (Co, Po) ¹⁷⁹
<i>Codium tomentosum</i> Stackhouse (Lu, Co, Po) ¹⁷⁶	= <i>Chlorochytrium willei</i> Printz
= <i>Codium dichotomum</i> (Hudson) Setchell	ULOTRICHIALES
<i>Codium vermilara</i> (Olivi) Delle Chiaje (Lu, Co, Po)	ULOTRICHACEAE
DERBESIAEAE	Ulothrix Kützing
Derbesia Solier	<i>Ulothrix flacca</i> (Dillwyn) Thuret (Co, Po)
<i>Derbesia marina</i> (Lyngbye) Solier (Lu, Co) ⁴⁷	= <i>Ulothrix pseudoflacca</i> Wille
= <i>Vaucheria marina</i> Lyngbye	= <i>Ulothrix consociata</i> Wille
<i>Derbesia tenuissima</i> (Moris & De Notaris) P.L. Crouan & H.M. Crouan (Co, Po) ¹⁷⁷	<i>Ulothrix implexa</i> (Kützing) Kützing (Co, Po)
Pedobesia McRaid & Womersley	<i>Ulothrix subflaccida</i> Wille (Co, Po)
<i>Pedobesia solieri</i> Feldman ex Abélard & Knoepffler (Co, Po) ¹⁷⁸	TREBOUXIOPHYCEAE
OSTREOBIACEAE	PRASIOLALES
Ostreobium Bornet & Flahault	PRASIOLACEAE
<i>Ostreobium quekettii</i> Bornet & Flahault (Po) ¹⁰⁰	Prasiola (C. Agardh) Meneghini ¹⁸⁰
CHLOROCYSTIDALES	<i>Prasiola stipitata</i> Suhr ex Jessen (Co, Po)

Table 2. Number of species from Britain and Ireland (Hardy & Guiry 2003), Galicia (this article), Basque coast (Gorostiaga & al., 2004), N Portugal (Ardre, 1970; Cremades & al., 2002; Bárbara & al., 2003b; Araújo & al., 2003, 2005), S Portugal (Ardre 1970), Andalucía (Flores Moya & al., 1995a,b; Conde & al., 1996), Canary Islands (Haroun & al., 2002), and Atlantic coast of Morocco (Benhissoune & al., 2001, 2002a,b, 2003), as well as comparative Feldmann's (Rhodophyta/Pheophyta, Feldmann, 1937) and Cheney's (Rhodophyta+Chlorophyta/Pheophyta, Cheney, 1977) ratios.

	Britain and Ireland	Galicia (NW Spain)	Basque coast	N Portugal	S Portugal	Andalucía (S Spain)	Canary Islands	Atlantic coast of Morocco
Rhodophyta	341	296	215	205	215	348	385	314
Ochrophyta	182	127	65	67	75	108	125	107
Chlorophyta	120	77	51	46	46	86	117	83
R/P ratio	1,87	2,33	3,31	3,06	2,87	3,22	3,08	2,93
R+C/P ratio	2,53	2,94	4,09	3,75	3,48	4,02	4,02	3,71

Notes

1. Calvo & al. (1999).
2. López Rodríguez & Pérez-Cirera (1996).
3. Peña & Bárbara (2003a).
4. Peña & Bárbara (2002).
5. Includes *Hyella caespitosa* var. *nitida* Batters (Po), a new record for Galicia, collected in the Ría de Arousa, 1995.
6. Calvo & Bárbara (2003) as *Hyella* sp.
7. Guillelmes Vázquez (1997).
8. Calvo & Bárbara (2000b).
9. Miranda (1936).
10. Calvo & Bárbara (2003).
11. Calvo & Bárbara (2000c) and Bárbara & al. (2003a).
12. Andrés Abad & al. (1995) and Veiga & al. (1998b).
13. Sauvageau (1897) and Miranda (1943a).
14. Includes *Oscillatoria bonnemaisonii* var. *intermedia* (Crouan) Ardre (Po) reported by Guillelmes & Cremades (1993).
15. Andrés Abad & al. (1995) and Bárbara & Cremades (1996).
16. Bárbara & Cremades (1996). New record for Pontevedra, collected in the Ría de Pontevedra, 1997.
17. López Rodríguez & al. (2000).
18. Donze (1968).
19. Bárbara & Cremades (1996).
20. Niell (1978).
21. Niell (1978) and Bárbara & al. (2003a).
22. Valenzuela & Pérez Cirera (1982) and Guillelmes & al. (1994).
23. Donze (1968) and López Rodríguez & Pérez-Cirera (1996).
24. Bárbara & al. (2003a).
25. Bárbara & al. (2002).
26. Calvo & al. (1999) as *Phormidium amphibium* (C. Agardh ex Gomont) Anagnostidis & Komárek (see Calvo & Bárbara, 2003).
27. Niell (1978) and Calvo & Bárbara (2000b).
28. Niell (1978) and Calvo & al. (1999).
29. Includes *Calothrix confervicola* var. *purpurea* Bornet & Flahault (Lu, Co)
30. New record for Galicia, collected in the Ría de Ferrol, 1990.

31. Miranda (1934), Seoane Camba (1957), Niell (1970a) and Valenzuela & Pérez-Cirera (1982).
32. Bárbara & al. (2004).
33. Pérez-Cirera (1975a) and Valenzuela & Pérez-Cirera (1982).
34. Otero-Schmitt (1992) and Otero-Schmitt & Pérez-Cirera (2002).
35. Bescansa (1948), Pérez-Cirera (1975b) and Niell (1978).
36. Valenzuela & Pérez-Cirera (1982).
37. Cremades & Bárbara (1990) and Bárbara & al. (2003a).
38. Otero-Schmitt & Pérez-Cirera (1996).
39. Donze (1968), Pérez-Cirera (1975a) and Valenzuela Miranda (2001).
40. Miranda (1934) and Polo & al. (1982).
41. Miranda (1934).
42. Gallardo & Margalet (1992).
43. Pérez-Cirera & al. (1989b).
44. Granja & al. (1993).
45. Includes *Gelidium pusillum* var. *pulvinatum* (C. Agardh) J. Feldmann (Lu, Co, Po).
46. Includes *Gelidium attenuatum* (Lu, Co, Po).
47. Donze (1968) and Bárbara & al. (2002).
48. Niell (1978) and Díaz Tapia & Bárbara (2005a,b).
49. Some material of *Gracilaria* sp. and *G. bursa-pastoris* from Galicia corresponds to *G. vermiculophylla* (see Rueness 2005).
50. Rueness (2005). New record for Lugo, collected as *Gracilaria bursa-pastoris* in the Ría de Foz, 2004. DNA sequences of this collection were identical to *G. vermiculophylla* (Rueness, per. com.).
51. New record for Galicia, collected in the Ría de Ortigueira, 1997.
52. "*Hymenoclonium serpens*" [stage] was reported by Veiga & al. (1998a) and Bárbara & al. (2004).
53. Miranda (1934), Niell (1978) and Valenzuela & Pérez-Cirera (1982).
54. It has only it has been reported "*Trailiella intricata*" Batters [stage] (Bárbara & al., 2004) of the species *Bonnemaisonia hamifera* Hariot.
55. Miranda (1936), Otero-Schmitt & Pérez-Cirera (1996) and Bárbara & al. (2003a).
56. Granja & al. (1992) and Bárbara & al. (2002).
57. In our opinion, *Cryptonemia seminervis* corresponds to young individuals of *C. lomation* (see Cremades, 1990).
58. Pérez-Cirera & al. (1989a), Bárbara & Cremades (1996) and Bárbara & Cremades (2004).
59. *Grateloupia filicina* var. *luxurians* A. Gepp & E.S. Gepp was raised to species rank by De Clerck & al. (2005). It was reported from Galicia by López Rodríguez & al. (1991) and Bárbara & al. (2002).
60. Includes the reports of *Grateloupia filicina* (J.V. Lamouroux) C. Agardh since De Clerck & al. (2005) reinstated *G. minima* as a separate species from the northeastern Atlantic Ocean.
61. Granja & al. (1992) and Bárbara & Cremades (1996).
62. ICES (1992), Cremades (1995) and Bárbara & al. (2002) as *Grateloupia doryphora* (Montagne) M.A. Howe and by Bárbara & Cremades (2004) as *G. turuturu*.
63. Rodríguez-Prieto & Vergés (2001).
64. New record for Lugo, collected in As Salseiras, 1994.
65. Granja & al. (1993) and Bárbara & Cremades (1996).
66. Donze (1968) and Niell (1978).
67. Cremades & al. (1997b).
68. See Beltrán & Bárbara (2003) for a comparative study between the two Galician *Corallina* species.
69. Miranda (1934), Bescansa Casares (1948) and Seoane Camba (1957).
70. Includes *Jania rubens* var. *corniculata* (Linnaeus) Yendo (Lu, Co, Po).
71. Veiga & al. (1998b).
72. For a comparative study between *Lithothamnion corallioides* and *Phymatolithon calcareum* in Galicia, see Adey & McKibbin (1970) and Peña & Bárbara (2004).
73. Cabioch & Mendoza (2003) reported five *Mesophyllum* species from Europe.
74. Donze (1968), Veiga & al. (1998a) and Bárbara & al. (2002).
75. According to Chamberlain (1991), *Titanoderma* is considered distinct from *Lithophyllum*.
76. Sauvageau (1897) and Miranda (1943c).
77. See López Rodríguez & al. (2002) for the complete distribution in the Iberian Peninsula.
78. López Rodríguez & al. (2002).
79. "*Cruoria rosea*" [stage] was reported by Bárbara & al. (2004).
80. Bescansa Casares (1948), Pérez-Cirera & al. (1989c), Bárbara & Cremades (1996) and Bárbara & al. (2003a).
81. Includes *Chondracanthus teedei* var. *lusitanicus* (Mesquita Rodrigues) Bárbara & Cremades (Lu, Co, Po). This variety is a new record for Lugo, collected in Peinzás, 2004.
82. Includes *Chondrus crispus* f. *filiformis* (Hudson) Thomas (Lu, Co), *C. crispus* var. *incurvatus* Lyngbye (Co), and *C. crispus* var. *planus* (Turner) Batters (Co).
83. Bárbara & Cremades (1996) and Veiga & al. (1998b).
84. "*Haematocelis fissurata*" [stage] was reported by Bárbara & al. (2002).
85. Donze (1968) and Pérez-Cirera (1975a,b).
86. Colmeiro (1867) and López Varela & al. (2002).
87. Bárbara & al. (1996) described the cystocarps of *Lomentaria orcadensis*.
88. New record for Lugo, collected in San Ciprián, 2005.
89. Veiga & al. (1998a,b).
90. New record for Lugo, collected in San Ciprián, 2005.
91. Miranda (1934) and Seoane-Camba (1957).
92. New record for Lugo, collected in Morás, 2004.
93. Bárbara & al. (2003a). New record for Lugo, collected in Morás, 2004.
94. Pérez-Cirera (1975a) and Otero-Schmitt (1992).
95. Veiga & al. (1998a) and Bárbara & al. (2003a).
96. Donze (1968) and Bárbara & al. (2003a).
97. Peña & Bárbara (2003b).
98. Seoane-Camba (1957) and Niell (1978).
99. Includes *Ceramium ecbionotum* var. *mediterraneum* Feldmann-Mazoyer (Lu, Co, Po).
100. Miranda (1934) and Niell (1978).
101. New record for Lugo, collected in Morás, 2004.
102. Bárbara & al. (2001), Peña & Bárbara (2005) and Díaz Tapia & Bárbara (2005a).
103. Niell (1978) and Peña & Bárbara (2003b).
104. Includes *Spermothamnion repens* f. *turneri* (Mertens ex Roth) Rosenvinge (Co, Po) and *S. repens* var. *flagelliferum* (De Notaris) Feldmann-Mazoyer (Lu, Co).
105. *Spyridia filamentosa* was reported from Galicia by Donze (1968), Niell (1970a) and Veiga & al. (1998b), but records of *S. filamentosa* (Wulfen) Harvey from Europe correspond to *S. griffithsiana* (see Zuccarello & al., 2004).
106. Bárbara & al. (1992b) and Bárbara & al. (2002).
107. Reported by Veiga & al. (1998b), Peña & Bárbara (2002) and Bárbara & al. (2004), it could be the alien species *Dasya ses-*

- silis* Yamada, reported as new from Europe by Verlaque (2002). A revision of *Dasya* from Galicia is needed.
108. Bárbara & al. (2003b) as *Dasysiphonia* sp. European material of this species is conspecific with *Heterosiphonia japonica* (see Bjaerke & Rueness, 2005).
 109. Guillermes & Cremades (1997) and Bárbara & al. (2002).
 110. Bárbara & al. (2002). New record for Pontevedra, collected in Islas Cíes, 2003.
 111. Donze (1968) and Veiga & al. (1998b). New record for Lugo, collected in San Ciprián, 2005.
 112. Donze (1968), Pérez-Cirera (1975b) and Niell (1978).
 113. Cremades & Bárbara (1990). New record for Lugo, collected in San Ciprián, 2005.
 114. Otero Schmitt (1992).
 115. Cremades & al. (1997a).
 116. Veiga & al. (1998a).
 117. Reported by Pérez-Cirera & al. (1989d) and Granja & al. (1993) as *Falkenbergiella caespitosa* Pocock. However Stegenga & al. (1997) treated *F. caespitosa* as a synonym of *Poly-siphonia scopulorum*.
 118. Díaz Tapia & Bárbara (2004).
 119. Granja & al. (1993) and Bárbara & al. (2002).
 120. Pérez Cirera & al. (1989d) and Granja & al. (1993). New record for A Coruña, collected in Seaia, 2002.
 121. New record for Lugo, collected in the Ría de Foz, 2003.
 122. Bárbara & Cremades (1996) and Bárbara & al. (2003a).
 123. Calvo & Bárbara (2000b) and Bárbara & al. (2003a).
 124. Calvo & Bárbara (2000a) and Bárbara & al. (2003a).
 125. Calvo & al. (1999) and Bárbara & al. (2003a).
 126. Pérez-Cirera (1975a), Niell (1978) and Valenzuela & Pérez-Cirera (1982).
 127. New record for Galicia, collected in Lugo, San Ciprián, 2004.
 128. Ribera Siguan & al. (2005).
 129. Includes *Dictyota dichotoma* var. *intricata* (C. Agardh) Greville (Lu, Co, Po).
 130. Polo & al. (1982).
 131. Pérez Cirera (1977a) and Cremades & al. (1997a).
 132. Miranda (1934) and Bárbara & al. (2003a).
 133. Bárbara & Cremades (1993).
 134. Pérez-Cirera (1975a).
 135. Sauvageau (1897).
 136. Niell & al. (1980).
 137. Veiga & al. (1997) and Bárbara & al. (2002).
 138. Donze (1968), Niell (1978) and Guillermes & al. (1994).
 139. Seoane Camba (1957) and Bárbara & al. (2002).
 140. Miranda (1943b), Donze (1968) and Niell (1978).
 141. According to Fletcher (1987), *Myrionema magnusii* could be a stage of another species.
 142. Niell (1978) and Veiga & al. (1998a). New record for Lugo, collected in Punta Riomar, 1993.
 143. Reported as new record for Galicia by Bárbara & al. (2003a). New record for A Coruña, collected in Cabo Corrubedo, 1999.
 144. Niell (1978) and Guillermes Vázquez (1997).
 145. Donze (1968), Niell (1978) and Valenzuela & Pérez-Cirera (1982).
 146. López Rodríguez & al. (1991).
 147. Sauvageau (1897) and Donze (1968).
 148. New record for Galicia, collected in Ferrol, Santa Comba, 2004.
 149. Bárbara & Cremades (1990) and Bárbara & al. (2002).
 150. Pérez-Cirera & al. (1991a) and Cremades & al. (1997a).
 151. Pérez-Cirera & al. (1991a), Guillermes Vázquez (1997) and Bárbara & al. (2002).
 152. Donze (1968) and Bárbara & al. (2004).
 153. See Wynne (2003) for the correct name of *Cutleria multifida*. New record for Lugo, collected in the Ría de Vivero, 1996. *Aglaozonia parvula* [stage] is new record for Lugo, collected in the Ría de Vivero, 1999.
 154. Niell (1976) and Granja & al. (1992).
 155. Colmeiro (1889) and Miranda (1944). This species was reported as new for Lugo in 1996 (Ría de Vivero), but the herbarium voucher is lost.
 156. Bárbara & Cremades (1996) and Bárbara & al. (2002, 2004).
 157. Santiago Caamaño & al. (1990), Bárbara & al. (2002) and Pérez-Ruzafa & al. (2002).
 158. Pérez-Cirera & al. (1991b) and Granja & al. (1993).
 159. Includes *Fucus spiralis* var. *platycarpus* Batters (Lu, Co, Po) and *F. spiralis* var. *limitaneus* (Montagne) I.M. Pérez-Ruzafa (Lu, Co, Po).
 160. Includes *Fucus vesiculosus* var. *compressus* Kjellman (Lu, Co, Po), *F. vesiculosus* var. *linearis* (Hudson) Kützing (Lu, Co, Po), *F. vesiculosus* var. *vadorum* J.E. Areschoug (Lu, Co, Po) and *F. vesiculosus* var. *volubilis* Goodenough & Woodward (Lu).
 161. Seoane (1957), Niell (1978) and Valenzuela & Pérez-Cirera (1982).
 162. Gallardo García (1984) and López Rodríguez & Pérez Cirera (1990).
 163. O'Kelly & al. (2004a) placed *Bolbocoleum piliferum* within the Ulvophyceae on the basis of a clade containing representatives of the families Ulvaceae, Ulvellaceae and Kornmanniaceae.
 164. Sauvageau (1897) and Niell (1978).
 165. Valenzuela & Miranda (1982) and Calvo & al. (1999).
 166. Granja & al. (1992).
 167. Following Hayden & al. (2003), *Enteromorpha* is included in *Ulva*.
 168. Following Blomster & al. (1999), *Enteromorpha muscooides* (Lu, Co, Po) is included in *Ulva clathrata*.
 169. Following Burrows (1991), *Enteromorpha torta* (Lu, Co, Po) is included in *Ulva prolifera*.
 170. Includes *Ulva rigida* var. *fimbriata* (Welwitsch) J. Agardh (Lu, Co, Po).
 171. New record for Pontevedra, collected in the Ría de Arousa, 1999.
 172. The genus *Cladophora* requires a revision in Galicia.
 173. Donze (1968), Niell (1978) and Calvo & Bárbara (2002).
 174. Miranda (1943b), Niell (1978) and Gallardo & Margalet (1992).
 175. Bárbara & Cremades (1996) and Veiga & al. (1998b).
 176. Includes *C. tomentosum* var. *mucronatum* (G. Hamel) Ardré (Lu, Co, Po).
 177. Donze (1968) and Peña & Bárbara (2002).
 178. Granja & al. (1992) and Guillermes & Cremades (1993).
 179. Cremades & al. (1992) and Guillermes Vázquez (1997).
 180. Following Friedl & O'Kelly (2002), *Prasiola* is included in Trebouxiophyceae.

Taxa excludenda

Cyanophyta

- Aphanocapsa pulchra* (Kützing) Rabenhorst (Co) is *Aphanocapsa conferta* (Calvo & Bárbara, 2003).
Brachytrichia quoyi (C. Agardh) Bornet & Flahault (Co, Po) reported by Niell (1978), López Ro-

- dríguez & al. (1991), Granja & al. (1992), Bárbara & Cremades (1996) and Donze (1998) corresponds to *Brachytrichia lloydii*.
- Geitlerinema amphibium* (C. Agardh) Anagnostidis (Co) reported by Calvo & al. (1999) as *Phormidium amphibium* (C. Agardh ex Gomont) Anagnostidis & Komárek is *Leptolyngbya perelegans* (Calvo & Bárbara, 2003).
- Gloeotrichia pisum* (C. Agardh) Thuret (Co) reported by Calvo & al. (1999) is *Rivularia nitida* (Calvo & Bárbara, 2003).
- Gomphosphaeria aponina* auct. (Co) is *Gomphosphaeria salina* (Calvo & Bárbara, 2003).
- Heteroleibleinia kuetzingii* (Schmidle) Compère (Po) reported as *Lynngbya kuetzingii* Schmidle by Niell (1970a) is not included in Niell (1978).
- Nostoc minutum* Desmazières ex Bornet & Flahault (Co) reported by Calvo & al. (1999) corresponds to *Nostoc sphaericum*.
- Oscillatoria curviceps* C. Agardh (Co) reported by Calvo & al. (1999) is *Oscillatoria limosa* (Calvo & Bárbara, 2003).
- Porphyrosiphon martensianus* (Meneghini) Anagnostidis & Komárek (Co, Po) reported by Calvo & al. (1996) and López-Rodríguez & Pérez-Cirera (1996) as *Lynngbya martensiana* is *Lynngbya aestuarii*.
- Synechocystis salina* Wislouch (Po) reported by López-Rodríguez & Pérez-Cirera (1996) corresponds to *Aphanocapsa litoralis*.
- Xenococcus acervatus* Setchell & N.L. Gardner (Po) reported by Guillerme (1997) corresponds to *X. schousboei* after the herbarium revision.
- Rhodophyta**
- Asidium helminthochorton* (Schwendimann) Kützing reported by Colmeiro (1867) should be excluded from the Galician seaweeds flora (see Miranda, 1944).
- Amphiroa rigida* J.V. Lamouroux (Co, Po) reported by Bescansa (1948), Donze (1968), Pérez-Cirera (1975a) and Niell (1978) corresponds to *Amphiroa van-bosseae* (Cremades & al., 1997b).
- Amphiroa verruculosa* Kützing (Co) reported by Sauvageau (1989) corresponds to *Amphiroa van-bosseae* (Cremades & al., 1997b).
- Ceramium deslongchampsii* Chauvin ex Dubyi (Co) reported by Bescansa (1948) is *C. diaphanum* (Bárbara & al., 1994). *Ceramium deslongchampsii* (Lu, Po) reported by Niell (1978) and Polo & al. (1982) requires confirmation since no herbarium vouchers from Galicia have been found.
- Chondracanthus elegans* (Greville) Guiry (Po) reported by Donze (1968) as *Gigartina elegans*, was excluded from the Galician seaweeds flora by Niell (1978). Donze (1968) report could be a misidentification for *Chondracanthus teedei* var. *lusitanicus*.
- Cystoclonium purpureum* (Hudson) Batters (Co) reported by Lázaro e Ibiza (1889) could be *Rhodomela subfusca* (Miranda, 1936).
- Gelidium fasciculatum* G. Hamel (Po) described by Hamel (1928a) and reported by Seoane Camba (1957) was excluded by Niell (1978).
- Griffithsia corallinoides* (Linnaeus) Trevisan (Po) reported by Colmeiro (1867) could be a confusion with *Griffithsia schousboei* (see Miranda, 1944). Reports by Seoane-Camba (1957) and Niell (1978) correspond to *G. schousboei* (Pérez-Cirera & al., 1989d).
- Halopitys incurva* (Hudson) Batters (Co) reported by Lázaro e Ibiza (1889) as *Rytiphlaea pinastroides* Ag. was not found in Lázaro original herbarium.
- Halymenia floresia* (Clemente) C. Agardh (Lu) reported by Polo & al. (1982) is a meridional species and no herbarium vouchers from Galicia have been found. Likely this report corresponds to *Halarachnion ligulatum*.
- Heterosiphonia crispella* (C. Agardh) M.J. Wynne var. *laxa* (Börgeesen) M.J. Wynne (Co) reported by Bárbara & Cremades (1996) is the alien species *H. japonica*, reported by Bárbara & al. (2003a) as *Dasysiphonia* sp.
- Laurencia paniculata* Kützing (Po) reported by Bescansa (1948) could not be found in his herbarium (Bárbara & al., 1994). According to Boisset & al. (2000), *L. paniculata* could be conspecific with *Osmundea truncata* (Kützing) Nam & Maggs.
- Membranoptera alata* (Hudson) Stackhouse (Co) reported by Colmeiro (1867) as *Hypoglossum alatum* Kützing (leg. López Seoane), was not collected in Galicia (Dosil Mancilla, 1997). According to Miranda (1944), this species should be excluded from the Spanish seaweeds flora since it is a cold-water species. Reports by Fischer-Piette & Seoane-Camba (1962), Ardré (1957) and Donze (1968) could correspond to *Apoglossum ruscifolium*, since Maggs & Hommersand (1993) stated that, occasionally, *M. alata* is misidentified as *A. ruscifolium*.
- Naccaria wiggii* (Turner) Endlicher (Co) reported by Bescansa (1948) is *Lomentaria clavellosa* (Bárbara & al., 1994).
- Odonthalia dentata* (Linnaeus) Lyngbye (Lu) reported by Polo & al. (1982) could be a *Plocamium*, since the former is a cold-water species for which no herbarium vouchers have been found.
- Phycodryis rubens* (Linnaeus) Batters (Co, Po) reported by López Seoane (1866), Colmeiro (1889),

- Donze (1968), Pérez-Cirera (1975a,b) and Niell (1978) corresponds to drift and spoil material of *Delesseria sanguinea*.
- Phyllophora pseudoceranooides* (S.G. Gmelin) Newroth & A.R.A. Taylor (Co, Po) reported by Donze (1968) and Pérez-Cirera (1975b, as *Phyllophora membranifolia* (Goodenough & Woodward) J. Agardh) requires confirmation because confusion with sturdy specimens of *Gymnogongrus crenulatus* is common. According to Miranda (1994) it should be excluded from the Galician seaweeds flora.
- Ptilota gunneri* P.C. Silva, Maggs & L.M. Irvine reported by Colmeiro (1867, 1889) as *Ptilota plumosa* (Linnaeus) C. Agardh is the only record of this septentrional species, easy to confuse with *Plumaria plumosa* (see Miranda, 1944). Moreover, no herbarium vouchers from Galicia were found.
- Polysiphonia foetidissima* Cocks ex Bornet (Co) reported by Bescansa (1948) is the only record from Galicia, but we could not find material in Bescansa original herbarium (Bárbara & al., 1994).
- Porphyrostomium ciliare* (Carmichael) M.J. Wynne (Co) reported by Bescansa (1948) as *Bangia ciliaris* Carmichael is *Erythrotrichia carnea* (Bárbara & al., 1994).

Ochrophyta

- Cystoseira compressa* (Esper) Gerloff & Nizamuddin (Lu) reported by Gallardo & Margalet (1992) is excluded because its main range covers the southern Iberian Peninsula, Africa, Caribbean and Mediterranean coasts (Gómez Garreta & al., 2000). This report could belong to *C. foeniculacea*.
- Cystoseira spinosa* Sauvageau var. *compressa* (Ercegovic) Cormaci & al. (Po) reported by Niell (1978) as *Cystoseira platyramosa* is excluded because its range covers the Mediterranean and Adriatic Sea (Gómez Garreta & al., 2000). The record from Lugo could belong to *C. foeniculacea* or *C. myriophylloides*.
- Ecklonia muratii* Feldmann (Co) reported by Bory in Sauvageau (1897) is *Calliphephyris ciliata* (Miranda, 1944).
- Laminaria digitata* (Linnaeus) J.V. Lamouroux (Co) reported by Lázaro e Ibiza (1889) is not present in Spanish coasts (see Seoane Camba, 1965a).
- Pseudolithoderma extensum* (P.L. Crouan & H.M. Crouan) S. Lund (Co) reported by Bescansa (1948) as *Lithoderma fatiscens* Areschoug is the only record from Galicia, but we could not find herbarium vouchers (Bárbara & al., 1994).
- Sargassum vulgare* C. Agardh (Co) reported by Lázaro e Ibiza (1889) is the only record from Galicia of this meridional species.

Chlorophyta

- Cladophora flexuosa* (O.F. Müller) Kützing (Co) reported by Bescansa (1948) as *Cladophora gracilis* Kützing is the only record from Galicia, and herbarium vouchers were not found (Bárbara & al., 1994).
- Cladophora fracta* (O.F. Müller ex Vahl) Kützing (Co, Po) reported by Bescansa (1948) is a freshwater algae that we could not find in Bescansa original herbarium (Bárbara & al., 1994).
- Cladophora vagabunda* (Linnaeus) Hoek (Co, Po) reported by Donze (1968) is excluded because no material could be found in the Nationaal Herbarium Nederland (Prud'homme van Reine, pers. com.), where vouchers should be deposited.
- Monostroma grevillei* (Thuret) Wittrock (Po) reported by Donze (1968) corresponds to *Ulva* spp. (Gallardo García 1984).
- Ulva lactuca* Linnaeus (Co, Po) was excluded by Niell (1978).
- Ulva procera* (K. Ahlner) H.S. Hayden & al. (Co), reported by Otero Schmitt (1992) as *Enteromorpha ahlneri* Bliding is the only record from Galicia and no herbarium voucher could be found.

Dubious records and taxa inquirenda

Cyanophyta

- Aphanocapsa elachista* W. West & G.S. West (Co) reported by Veiga & al. (1998) is considered a planktonic species from eutrophic waters, and marine records should belong to other species. The Galician record could be *A. conferta*.
- Dermocarpa orbicularis* Miranda (Po) described by Miranda (1936) requires taxonomic re-investigation.
- Hydrococcus marinus* Grunow (Co) reported by López-Rodríguez (1994) could be a *Radaisia* species.
- Hydrococcus rivularis* Kützing (Co) reported by López-Rodríguez (1994) could be a *Radaisia* species.
- Leptolyngbya golenkiniana* (Gomont) Anagnostidis & Komárek (Co, Po) reported by Granja & al. (1992), Guillermes & Cremades (1993) and Guillermes & al. (1994) requires taxonomic re-investigation.
- Merismopedia glauca* (Ehrenberg) Kützing (Po) reported by López-Rodríguez & Pérez-Cirera (1996) is considered a freshwater species by several authors. The Galician record requires confirmation, as it could be *M. mediterranea*.
- Merismopedia thermalis* Kützing (Po) reported by Miranda (1934) as *Agmenellum thermale* is a ther-

- mophilic species (Komárek & Anagnostidis 1999); the Galician record from marine habitats would require confirmation.
- Palmogloea protuberans* (J.E. Smith & Sowerby) Kützling (Po) reported by Niell (1978) requires confirmation, as its distribution covers Pacific Islands, Australia and New Zealand (Guiry & Dhonncha, 2005).
- Phormidium favosum* (Bory) Gomont (Co) reported by Calvo & al. (1999) requires confirmation due to confusion between *P. favosum* and *P. autumnale*.
- Pleurocapsa gallaecica?* Miranda (Po) reported by Valenzuela & Pérez-Cirera (1982) and Valenzuela Miranda (2001) requires taxonomic re-investigation.
- Porphyrosiphon notarisii* (Meneghii) Kützling (Po) reported by Niell (1978) requires confirmation as it is a species from clearly non-marine habitats.
- Schizothrix arenaria* (Berkeley) Gomont (Po) reported by Niell (1978) requires confirmation.
- Schizothrix calcicola* (C. Agardh) Gomont (C, Po) reported by Donze (1968) and Niell (1978) requires confirmation as it is a species from clearly non-marine habitats.
- Schizothrix mexicana* Gomont (Po) reported by Niell (1978) requires confirmation.
- Spirulina versicolor* Cohn ex Gomont (Co) reported by Bescansa (1948) requires confirmation; it was collected in an aquarium filled with seawater previously sterilized.
- Xenococcus laminariae* Feldmann (Co) reported by López Varela (2000) requires confirmation.
- Rhodophyta
- Acrochaetium codii* (P.L. Crouan & H.M. Crouan) Bornet (Po) reported by Miranda (1934) requires confirmation.
- Acrochaetium pectinatum* (Kylin) G. Hamel (Po) reported by Miranda (1934) requires confirmation.
- Asparagopsis taxiformis* (Delile) Trevisan de Saint-Léon reported by Miranda (1934) as "*Falkenbergia hillebrandii*" (Bornet) Falkenberg [stage] requires confirmation.
- Callithamnion cryptopterum* Kützling (Po) reported by Valenzuela & Pérez-Cirera (1982) as *C. micropterum* Kützling requires confirmation.
- Ceramium tenue* J. Agardh (Po) reported by Valenzuela & Pérez-Cirera (1982) requires confirmation because several species have been recorded under this name (see Maggs & Hommersand, 1993).
- Ceramium tenuissimum* (Lyngbye) J. Agardh (Co, Po) reported by Donze (1968), Pérez-Cirera (1975) and Niell (1978) requires confirmation, as it could be *C. diaphanum*.
- Coccotylus truncatus* (Pallas) M.J. Wynne & J.N. Heine (Lu) reporter by Polo & al. (1982) as *Phyllophora brodiaei* (Turner) J. Agardh requires confirmation.
- Compsopogon coeruleus* (Balbis ex C. Agardh) Montagne (Co, Po) reported by Donze (1968) requires confirmation.
- Drachiella heterocarpa* (Chauvin ex Duby) Maggs & Hommersand (Co, Po) reported by Colmeiro (1867), Seoane Camba (1957) and Donze (1968) as *Nitophyllum versicolor* Harvey requires confirmation. Miranda (1944) stated that its presence is unlikely in northwestern Spain.
- Erythrotrichia reflexa* (P.L. Crouan & H.M. Crouan) Thuret ex De Toni (Co) reported by Pérez-Cirera (1975a) could be *E. carnea*.
- Gelidiocolax christiana* J. & G. Feldmann (Co, Po) reported by Donze (1968) requires re-investigation due to confusion with *G. margaritoides*.
- Gigartina falcata* J. Agardh (Lu, Po) reported by Niell (1970a), Polo & al. (1982) and Valenzuela & Pérez-Cirera (1982) requires confirmation due to resemblance with *Chondracanthus acicularis*.
- Gracilaria cervicornis* (Turner) J. Agardh (Po) reported by Donze (1968) requires confirmation.
- Gracilaria dura* (C. Agardh) J. Agardh (Po) reported by Niell (1978) requires confirmation.
- Gymnogongrus patens* (Goodenough & Woodward) J. Agardh (Co, Po) reported by Donze (1968) and Pérez-Cirera (1975a,b, 1976) requires confirmation.
- Gymnothamnion pteroton* (Schousboe ex Bornet) Athanasiadis (Po) reported by Miranda (1934) as *Antithamnion pteroton* Schousboe ex Bornet requires confirmation.
- Halymenia bermudensis* F.S. Collins & M.A. Howe (Po) reported by Donze (1968) requires confirmation.
- Peyssonelia polymorpha* (Zanardini) F. Schmitz (Lu) reported by Polo & al. (1982) requires confirmation.
- Peyssonelia squamaria* (S.G. Gmelin) Decaisne (Co) reported by Bescansa (1948) is *P. coriacea* (Bárbara & al., 1994). Records from Lugo and A Coruña (Polo & al., 1982, Donze, 1968) require further confirmation.
- Polyides rotundus* (Hudson) Greville strongly resembles *Furcellaria lumbricalis*. Reports of *P. rotundus* and *F. lumbricalis* from A Coruña and Pontevedra by Donze (1968), Pérez-Cirera (1975b) and Niell (1978) should therefore be re-examined.

Polysiphonia funebris De Notaris ex J. Agardh (Po) reported by Niell (1978) requires confirmation.
Rhodochorton atlanticum Miranda (Po) described by Miranda (1936) requires taxonomic re-investigation.
Rhodochorton velutinum (Hauck) G. Hamel (Po) reported by Miranda (1934) requires investigation.
Spermothamnion flabellatum Bornet (Co, Po) reported by Donze (1968) requires confirmation.

Ochrophyta

Chilionema hispanicum (Sauvageau) R.L. Fletcher (Lu) reported by Miranda (1944) as *Ascocyclus hispanicus* Sauvageau requires confirmation.
Colpomenia sinuosa (Mertens ex Roth) Derbès & Solier (Co, Po) reported by Bescansa (1948) is *C. peregrina* (Bárbara & al., 1994). Other records from Pontevedra (Hamel, 1928b; Miranda, 1943b; Seoane Camba, 1957; Valenzuela & Pérez-Cirera, 1982) require revision since *C. sinuosa* is a meridional species.
Desmarestia viridis (O.F. Müller) J.V. Lamoux (Co) reported by Colmeiro (1867) is unlikely in Galicia (see Miranda, 1944).
Giffordia recurvata (Kuckuck ex Kormann) Cardinal, nom. inval. (Co, Po) reported by Donze (1968) could be *Hinksia granulosa*. *Ectocarpus recurvatus* Kuckuck is a nomen nudum, and Cardinal did not provide a latin description and holotype. *Hinksia recurvata* (Cardinal) Athanasiadis, based on Cardinal's invalid name, is therefore illegitimate.
Kylinia sp. (Co, Po) reported by Donze (1968) requires investigation.
Zonaria tournefortii (J.V. Lamourux) Montagne (Co) reported by Colmeiro (1867) as *Stypopodium flavum* Kützing is unlikely in Galicia (see Miranda, 1944).

Chlorophyta

Bryopsis feldmannii Gallardo & G. Furnari (Po) reported by Niell (1978) as *B. cupressoides* Kützing requires confirmation.
Chaetomorpha auricoma (Suhr) Kjellmann (Co) reported by Donze (1968) requires taxonomic investigation.
Chaetomorpha gracilis Kützing (Co) reported by Bescansa (1948) requires confirmation.
Cladophora glomerata (Linnaeus) Kützing (Co, Po) reported by Donze (1968) and Niell (1978) requires confirmation.
Cladophora parriaudii Hoek (Po) reported by Donze (1968) requires confirmation.
Codium difforme Kützing (Lu) and *C. effusum* (Rafinesque)

Delle Chiaje (Lu) reported by Sauvageau (1897) require confirmation because they are often confused with *C. adhaerens*.

Enteromorpha pilifera Kützing (Co) reported by Peña Freire (2003) requires confirmation.
Enteromorpha stipitata P.J.L. Dangeard, nom. inval. (Po) reported by Donze (1968) requires re-study.
Ulva gigantea (Kützing) Bliding (Po) reported by Niell (1978) requires confirmation.
Ulvaria fusca Ruprecht reported by Niell (1978) requires confirmation.

Acknowledgements

We thank three anonymous referees and Tomás Gallardo (Universidad Complutense, Madrid) for their very valuable suggestions and corrections to the original manuscript.

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Appendix I. Northern cold-temperate species

Rhodophyta

Aglaothamnion pseudobyssoides
Aglaothamnion roseum
Aglaothamnion sepositum
Bostrychia scorpioides
Brongniartella byssoides
Callocolax neglectus
Ceramium shuttleworthianum
Chondrus crispus
Choreocolax polysiphoniae
Cruoria pellita
Delesseria sanguinea
Dilsea carnosa
Dumontia contorta
Gloiosiphonia capillarlis
Halarachnion ligulatum
Halurus flosculosus
Harveyella mirabilis
Heterosiphonia plumosa
Lomentaria orcadensis
Mastocarpus stellatus
Palmaria palmata
Plumaria plumosa
Polysiphonia fucoides
Polysiphonia lanosa
Polysiphonia nigra
Polysiphonia stricta
Porphyra linearis
Porphyra purpurea

Rhodochorton purpureum
Rhodomela confervoides
Rhodothamniella floridula

Ochrophyta

Ascophyllum nodosum
Chorda filum
Desmarestia aculeata
Desmarestia ligulata
Ectocarpus fasciculatus
Elachista flaccida
Elachista fucicola
Elachista scutulata
Eudesme virescens
Fucus ceranoides
Fucus serratus
Fucus spiralis
Fucus vesiculosus
Haliidrys siliquosa
Himantalia elongata
Laminaria hyperborea
Laminaria saccharina
Laminariocolax aecidioides
Litosiphon laminariae
Pelvetia canaliculata
Petalonia zosterifolia
Pylaiella littoralis
Protectocarpus speciosus
Saccorbiza polyschides
Scytosiphon dotyi
Sphacelaria plumula
Spongonema tomentosum
Striaria attenuata
Vaucheria arcassonensis
Vaucheria coronata
Vaucheria dichotoma
Vaucheria erythrospora
Vaucheria intermedia
Vaucheria subsimplex
Vaucheria velutina

Chlorophyta

Acrosiphonia arcta
 “*Codiolum petrocelidii*” [stage]
Blidingia chadefaudii
Blidingia ramifera
Capsosiphon fulvescens
Halochlorococcum moorei
Prasiola stipitata
Pseudendoclonium submarinum
Ulvella setchellii
Urospora penicilliformis

Appendix II. Southern warm-temperate species

Rhodophyta

Amphiroa van-bossea
Antithamnion densum
Aphanocladia stichidiosa
Callithamniella tingitana

Ceramium callipterum
Ceramium ecbionotum
Ctenosiphonia hypnoides
Gigartina pistillata
Griffithsia opuntioidea
Griffithsia schousboei
Gymnogongrus crenulatus
Haraldia lenormandii
Laurencia minuta
Leptosiphonia schousboei
Liagora distenta
Litobophyllum stictaeforme
Peyssonnelia coriacea
Pleonosporium flexuosum
Plocamium raphelisiaenum
Polysiphonia polyspora
Polysiphonia scopulorum
Spermothamnion repens var. *flagelliferum*
Streblodadia collabens
Tiffaniella capitata

Ochrophyta

Cutleria adpersa
Halopteris filicina
Padina pavonica

Chlorophyta

Codium decorticatum

Appendix III. Endemic species of Lusitanic province

Rhodophyta

Ahnfeltiopsis pusilla
Apoglossocolax pusilla
Callithamnion tetricum
Chondracanthus teedei var. *lusitanicus*
Cordylecladia erecta
Drachiella spectabilis
Erythrogllossum lusitanicum
Gelidiella calcicola
Gelidiocolax deformans
Gelidium maggsiae
Gonimophyllum buffhamii
Haraldiophyllum bonnemaisonii
Itonoa marginifera
Laurencia pyramidalis
Osmundea osmunda
Polyneura bonnemaisonii
Pterosiphonia complanata
Ptilothamnion sphaericum
Rhodymenia holmesii

Ochrophyta

Bifurcaria bifurcata
Cystoseira baccata
Cystoseira foeniculacea
Cystoseira nodicaulis
Desmarestia dudresnayi

Laminaria ochroleuca
Petrospongium berkeleyi
Phyllariopsis brevipes subsp. *pseudopurpurascens*
Phyllariopsis purpurascens

Chlorophyta

Codium tomentosum var. *mucronatum*
Ulva rigida var. *fimbriata*

Appendix IV. Alien species

Rhodophyta

Antithamnionella ternifolia
Asparagopsis armata and “*Falkenbergia rufolanosa*” [stage]
Gracilaria vermiculophylla
Grateloupia luxurians
Grateloupia turuturu
Heterosiphonia japonica
Lomentaria bakodattensis
Neosiphonia harveyi

Ochrophyta

Colpomenia peregrina
Sargassum muticum
Undaria pinnatifida

Chlorophyta

Codium fragile subsp. *tomentosoides*

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