

**CAPÍTULO 13**  
**CHAPTER 13**

**LISTA DAS MACROALGAS MARINHAS**  
**(RHODOPHYTA, CHLOROPHYTA E PHAEOPHYCEAE)**

**LIST OF MARINE MACROALGAE**  
**(RHODOPHYTA, CHLOROPHYTA AND PHAEOPHYCEAE)**

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## Notas explicativas

A lista corrigida de espécies de macroalgas marinhas dos Açores tem por base as publicações existentes (ver Neto 1994 para aquelas anteriores a 1994). A presente lista está organizada nos seguintes grupos: Rhodophyta (algas vermelhas), Chlorophyta (algas verdes) e Phaeophyceae (algas castanhas), dentro de cada grupo os *taxa* estão organizados por ordem alfabética. O sistema de classificação adoptado foi o sugerido por Guiry & Guiry (2010) para as algas vermelhas e verdes e para as castanhas foi o sugerido por Reviere & Rousseau (1999), Draisma *et al.* (2001), Phillips *et al.* (2008) e Bittner *et al.* (2008). A flora marinha açoriana de macroalgas compreende 327 espécies, entre estas 214 são vermelhas, 51 são verdes e 62 são castanhas, distribuídas respectivamente por 18, 6 e 10 ordens, e 123, 24 e 41 géneros.

As sinonímias de uma espécie, incluindo nomes substituídos por taxonomistas, erros tipográficos, identificações erradas bem como as fases alternativas do ciclo de vida de espécies heteromórficas estão listadas no Índice e acopladas ao nome actualmente válido para a espécie ou subespécie. As espécies duvidosas foram removidas da lista principal e incluídas no Apêndice 1.

As espécies *Ahnfeltia plicata* (Hudson) E. M. Fries, *Amphiroa fragilissima* (Linnaeus) J. V. Lamouroux, *Dictyota ciliolata* Sonder ex Kützinger, *Haraldia lenormandii* (Derbès & Solier) Feldmann, *Hildenbrandia crouaniorum* J. Agardh, *Lithophyllum decussatum* (J. Ellis & Solander) Philippi, *Mesophyllum lichenoides* (J. Ellis) Marie Lemoine e *Phymatolithon tenuissimum* (Foslie) W. H. Adey não foram incluídas na presente lista porque nunca foram encontradas nas costas açorianas. Estas espécies foram referidas para os Açores por South & Tittley (1986), com base na área de distribuição geográfica e posteriormente incorporadas na flora açoriana por Neto (1994). As espécies endémicas dadas por Schmidt (1931) foram removidas uma vez que, após a sua descrição, nunca foram encontradas e constituem registos duvidosos. *Ascophyllum nodosum* (Linnaeus) Le Jolis e *Halimeda tuna* (J. Ellis & Solander) J. V. Lamouroux foram removidas da flora, pois só foram encontradas uma vez nas costas açorianas (Tittley *et al.* 2009) e não constituem populações vi-

## Explanatory notes

A corrected species list of marine macroalgae of the Azores is presented on previous publications (see Neto 1994 for those prior to 1994). The present list is organized among the following groups: Rhodophyta (reds), Chlorophyta (greens) and Phaeophyceae (browns). Inside each group the *taxa* are organized in alphabetical order. The adopted classification system was the one suggested by Guiry & Guiry (2010) for reds and greens and for browns the one suggested by Reviere & Rousseau (1999), Draisma *et al.* (2001), Phillips *et al.* (2008) and Bittner *et al.* (2008). The Azorean marine algal flora comprises 327 species, being 214 reds, 51 greens and 62 browns, distributed respectively among 18, 6 and 10 orders, and 123, 24 and 41 genera.

Synonyms include true synonyms, names resulting from misidentifications, typographical errors, and also the life history phases of heteromorphic species are listed in the index in association with the valid species or subspecies name. All species of doubtful identification were removed from the main list and are included in Appendix 1.

The species *Ahnfeltia plicata* (Hudson) E.M. Fries, *Amphiroa fragilissima* (Linnaeus) J.V. Lamouroux, *Dictyota ciliolata* Sonder ex Kützinger, *Haraldia lenormandii* (Derbès & Solier) Feldmann, *Hildenbrandia crouaniorum* J. Agardh, *Lithophyllum decussatum* (J. Ellis & Solander) Philippi, *Mesophyllum lichenoides* (J. Ellis) Marie Lemoine and *Phymatolithon tenuissimum* (Foslie) W.H. Adey were not included in the present list, because they never found on Azorean coasts. These species were reported to be present in the Azores by South & Tittley (1986), based only on the geographic distributional range and were then incorporated by Neto (1994) in the Azorean algal flora. The endemic species given by Schmidt (1931) were removed because they have not been found subsequently, being considered doubtful records. *Ascophyllum nodosum* (Linnaeus) Le Jolis and *Halimeda tuna* (J. Ellis & Solander) J.V. Lamouroux were removed from the flora, since they were only found once (Tittley *et al.* 2009) and do not represent extant populations being for this reason considered pseudopopulations. The presence of *Petalonia fascia*

(O.F. Müller) Kuntze in the archipelago persist doubtful and for this reason this species was also removed.

The first column (D) gives the colonization status of each species as follows:

**END – Azorean endemic species**, *i.e.* species (or subspecies) occurring only in the Azores, as a result of either speciation events (neo-endemics) or extinction of the mainland populations (palaeo-endemics);

**MAC – Macaronesian endemic species**, *i.e.* species only known from Macaronesia (the Azores, Madeira, the Canaries, the Cape Verde Islands).

**PN – probably a native species**, *i.e.* species which arrived by long-distance dispersal in the Azores and which also occur in other archipelagos and/or on continents. Most of the species classified as MAC are also native;

**i – introduced species**, *i.e.* species believed to occur in the archipelago as a result of human activities; some of these species have a worldwide distribution.

**INV – invasive species**, *i.e.* exotic species that adversely affect the habitats they invade economically and ecologically.

áveis sendo por isso consideradas pseudo populações. A presença ou não de *Petalonia fascia* (O.F. Müller) Kuntze no arquipélago permanece duvidosa e por esse motivo foi igualmente removida.

A primeira coluna (D) refere-se ao estatuto de colonização de cada espécie:

**END – espécies endémicas dos Açores**, *i.e.* espécies (ou subespécies) que ocorrem apenas nos Açores em resultado de fenómenos evolutivos de especiação local (neoendemismos) ou extinção das populações continentais (paleoendemismos).

**MAC – espécies endémicas da Macaronésia**, *i.e.* espécies apenas conhecidas da Macaronésia (Açores, Madeira, Canárias, Cabo Verde).

**PN – espécies provavelmente nativas**, *i.e.* espécies que chegaram aos Açores pelos seus próprios meios, usando mecanismos de dispersão a longa distância, e que são conhecidas de outros arquipélagos ou zonas continentais. A maior parte dos endemismos macaronésicos também são espécies nativas;

**i – espécies introduzidas**, *i.e.* aquelas que chegaram aos Açores em resultado das actividades humanas, muitas delas de larga distribuição mundial;

**INV – espécies invasoras**, *i.e.* espécies exóticas que afectam os *habitats* de forma negativa em termos ecológicos e económicos.

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Reino **Plantae**  
Subreino **Biliphyta**  
Filo **Rhodophyta**  
Subfilo **Eurhodophytina**  
Classe **Bangiophyceae**  
Subclasse **Bangiophycidae**

Ordem **Bangiales**

**Bangiaceae**

PN *Bangiadulcis atropurpurea* (Roth) W.A. Nelson

PN *Porphyra leucosticta* Thuret

PN *Porphyra umbilicalis* Kützting

Classe **Florideophyceae**  
Subclasse **Corallinophycidae**

Ordem **Corallinales**

**Corallinaceae**

PN *Amphiroa beauvoisii* J.V. Lamouroux

PN *Amphiroa cryptarthrodia* Zanardini

PN *Amphiroa rigida* J.V. Lamouroux

PN *Corallina elongata* J. Ellis & Soland

PN *Corallina officinalis* Linnaeus

PN *Haliptilon virgatum* (Zanardini) Garbary & H.W. Johansen

PN *Hydrolithon onkodes* (Heydrich) D. Penrose & Woelkerling

PN *Jania adhaerens* J.V. Lamouroux

PN *Jania crassa* J.V. Lamouroux

PN *Jania longifurca* Zanardini

PN *Jania rubens* (Linnaeus) J.V. Lamouroux

PN *Jania squamata* (Linnaeus) J.H. Kim, Guiry & H.-G. Choi

PN *Lithophyllum esperi* (M. Lemoine) South & Tittley

PN *Lithophyllum pustulatum* (J.V. Lamouroux) Foslie

PN *Lithophyllum tortuosum* (Esper) Foslie

PN *Lithophyllum vickersiae* M. Lemoine

**Hapalidiaceae**

PN *Melobesia membranacea* (Esper) J.V. Lamouroux

PN *Phymatolithon lenormandii* (J.E. Areschoug) W.H. Adey

Subclasse **Hildenbrandiophycidae**

Ordem **Hildenbrandiales**

**Hildenbrandiaceae**

PN *Hildenbrandia rubra* (Sommerfelt) Meneghini

Subclasse **Nemaliophycidae**

Ordem **Nemaliales**

**Liagoraceae**

PN *Liagora distenta* (Mertens ex Roth) J.V. Lamouroux

PI *Liagora divaricata* C.K. Tseng

PN *Liagora viscida* (Forsskål) C. Agardh

PN *Nemalion helminthoides* (Vellay) Batters

**Scinaiaceae**

PN *Scinaia furcellata* (Turner) J. Agardh

PN *Scinaia interrupta* (A.P. de Candolle) M.J. Wynne

Subclasse **Rhodymeniophycidae**Ordem **Acrochaetiales****Acrochaetiaceae**

- PN *Acrochaetium microscopicum* (Nägeli ex Kützing) Nägeli  
 PN *Rhodochorton purpureum* (Lightfoot) Rosenvinge

Ordem **Acrosymphytales****Acrosymphytaceae**

- PN *Acrosymphyton purpuriferum* (J. Agardh) Sjöstedt  
 PN *Schimmelmannia schousboei* (J. Agardh) J. Agardh

Ordem **Bonnemaisoniales****Bonnemaisoniaceae**

- INV *Asparagopsis armata* Harvey  
 PN *Asparagopsis taxiformis* (Delile) Trevisan de Saint-Léon  
 PN *Bonnemaisonia asparagoides* (Woodward) C. Agardh  
 i *Bonnemaisonia hamifera* Hariot

Ordem **Ceramiales****Callithamniaceae**

- PN *Aglaothamnion feldmanniae* Halos  
 PN *Aglaothamnion gallicum* (Nägeli) L'Hardy-Halos & Ardré  
 PN *Aglaothamnion hookeri* (Dillwyn) Maggs & Hommersand  
 PN *Aglaothamnion roseum* (Roth) Maggs & L'Hardy-Halos  
 PN *Aglaothamnion tenuissimum* (Bonnemaison) Feldmann-Mazoyer  
 PN *Balliella cladoderma* (Zanardini) Athanasiadis  
 PN *Callithamnion corymbosum* (Smith) Lyngbye  
 PN *Callithamnion granulatum* (Ducluzeau) C. Agardh  
 PN *Callithamnion pseudobyssoides* P.L. Crouan & H.M. Crouan  
 PN *Callithamnion tetragonum* (Withering) S.F. Gray  
 PN *Callithamnion tetricum* (Dillwyn) S.F. Gray  
 PN *Crouania attenuata* (C. Agardh) J. Agardh

**Ceramiaceae**

- PN *Antithamnion decipiens* (J. Agardh) Athanasiadis  
 i *Antithamnion diminuatum* Wollaston  
 PN *Antithamnion heterocladum* Funk  
 i *Antithamnion pectinatum* (Montagne) J. Brauner  
 PN *Antithamnionella spirographidis* (Schiffner) E.M. Wollaston  
 PN *Bornetia secundiflora* (J. Agardh) Thuret  
 PN *Callithamniella tingitana* (Schousboe ex Bornet) Feldmann-Mazoye  
 PN *Centroceras clavulatum* (C. Agardh) Montagne  
 PN *Ceramium botryocarpum* A.W. Griffiths ex Harvey  
 PN *Ceramium ciliatum* (J. Ellis) Ducluzeau  
 PN *Ceramium cimbricum* H.E. Petersen  
 PN *Ceramium circinatum* (Kützing) J. Agardh  
 PN *Ceramium derbesii* Solier ex Kützing  
 PN *Ceramium diaphanum* (Lightfoot) Roth  
 PN *Ceramium echionotum* J. Agardh  
 PN *Ceramium gaditanum* (Clemente y Rubio) Cremades  
 PN *Ceramium pennatum* P.L. Crouan & H.M. Crouan  
 PN *Ceramium secundatum* Lyngbye  
 PN *Ceramium tenuicorne* (Kützing) Waern  
 PN *Ceramium virgatum* Roth  
 PN *Gayliella flaccida* (Harvey ex Kützing) T.O. Cho & L.J. McIvor  
 PN *Gymnothamnion elegans* (Schousboe ex C. Agardh) J. Agardh  
 PN *Pterothamnion crispum* (Ducluzeau) Nägeli  
 PN *Pterothamnion plumula* (J. Ellis) Nägeli  
 i *Scageliopsis patens* Wollaston

END – endêmica (endemic); MAC – Macaronésia (Macaronesia); PN - nativa provável (probably native); i - introduzida (introduced); INV – invasora (invasive)

**D G ESPÉCIES (SPECIES)****Dasyaceae**

- PN *Dasya baillouviana* (S.G. Gmelin) Montagne  
PN *Dasya corymbifera* J. Agardh  
PN *Dasya hutchinsiae* Harvey  
PN *Dasya ocellata* (Grateloup) Harvey  
PN *Eupogodon planus* (C. Agardh) Kützing  
PN *Heterosiphonia crispella* (C. Agardh) M.J. Wynne

**Delesseriaceae**

- PN *Acrosorium ciliolatum* (Harvey) Kylin  
PN *Apoglossum ruscifolium* (Turner) J. Agardh  
PN *Cryptopleura ramosa* (Hudson) L. Newton  
PN *Erythroglossum laciniatum* (Lightfoot) Maggs & Hommersand  
PN *Haraldiophyllum bonnemaisonii* (Kylin) A.D. Zinova  
PN *Hypoglossum hypoglossoides* (Stackhouse) F.S. Collins & Hervey  
PN *Myriogramme minuta* Kylin  
PN *Nitophyllum punctatum* (Stackhouse) Greville  
PN *Radicilingua thysanorhizans* (Holmes) Papenfuss  
PN *Taenioma nanum* (Kützing) Papenfuss  
PN *Taenioma perpusillum* (J. Agardh) J. Agardh

**Rhomelaceae**

- PN *Boergeseniella fruticulosa* (Wulfen) Kylin  
PN *Bostrychia scorpioides* (Hudson) Montagne  
PN *Chondria capillaris* (Hudson) M.J. Wynne  
PN *Chondria coerulescens* (J. Agardh) Falkenberg  
PN *Chondria dasyphylla* (Woodward) C. Agardh  
PN *Digenea simplex* (Wulfen) C. Agardh  
PN *Erythrocytis montagnei* (Derbès & Solier) P.C. Silva  
PN *Herposiphonia secunda* (C. Agardh) Ambronn  
PN *Laurencia microcladia* Kützing  
PN *Laurencia obtusa* (Hudson) J.V. Lamouroux  
MAC *Laurencia viridis* Gil-Rodríguez & Haroun  
PN *Lophosiphonia obscura* (C. Agardh) Falkenberg  
PN *Lophosiphonia reptabunda* (Suhr) Kylin  
PN *Ophidocladus simpliciusculus* (P.L. Crouan & H.M. Crouan)  
PN *Osmundea hybrida* (A.P. de Candolle) K.W. Nam  
PN *Osmundea pinnatifida* (Hudson) Stackhouse  
PN *Polysiphonia atlantica* Kapraun & J.N. Norris  
PN *Polysiphonia brodiei* (Dillwyn) Sprengel  
PN *Polysiphonia denudata* (Dillwyn) Greville ex Harvey  
PN *Polysiphonia elongata* (Hudson) Sprengel  
PN *Polysiphonia fibrillosa* (Dillwyn) Sprengel  
PN *Polysiphonia flocculosa* (C. Agardh) Endlicher  
PN *Polysiphonia foetidissima* Cocks ex Bornet  
PN *Polysiphonia fucoides* (Hudson) Greville  
PN *Polysiphonia furcellata* (C. Agardh) Harvey  
PN *Polysiphonia havanensis* Montagne  
PN *Polysiphonia nigra* (Hudson) Batters  
PN *Polysiphonia opaca* (C. Agardh) Moris & De Notaris  
PN *Polysiphonia stricta* (Dillwyn) Greville  
PN *Pterosiphonia ardreana* Maggs & Hommersand  
PN *Pterosiphonia parasitica* (Hudson) Falkenberg  
PN *Pterosiphonia pennata* (C. Agardh) Sauvageau  
i *Symphyocladia marchantioides* (Harvey) Falkenberg

**Sarcomeniaceae**

- PN *Cottoniella filamentosa* (M.A. Howe) Børgesen  
PN *Platysiphonia delicata* (Clemente) Cremades

**Spyridiaceae**

- PN *Spyridia filamentosa* (Wulfen) Harvey

**Wrangeliaceae**

- PN *Anotrichium barbatum* (C. Agardh) Nägeli  
PN *Anotrichium furcellatum* (J. Agardh) Baldock  
PN *Anotrichium tenue* (C. Agardh) Nägeli

END – endêmica (endemic); MAC – Macaronésia (Macaronesia); PN - nativa provável (probably native); i - introduzida (introduced); INV – invasora (invasive)

## D G ESPÉCIES (SPECIES)

### Wrangeliaceae (cont.)

PN	<i>Compothamnion decompositum</i> (J. Agardh) Maggs & L'Hardy-Halos
PN	<i>Griffithsia corallinoides</i> (Linnaeus) Trevisan
PN	<i>Griffithsia globulifera</i> Harvey ex Kützing
PN	<i>Griffithsia phyllamphora</i> J. Agardh
PN	<i>Halurus equisetifolius</i> (Lightfoot) Kützing
PN	<i>Halurus flosculosus</i> (J. Ellis) Maggs & Hommersand
PN	<i>Monosporus pedicellatus</i> (Smith) Solier
PN	<i>Pleonosporium borneri</i> (Smith) Nägeli
PN	<i>Spermothamnion repens</i> (Dillwyn) Rosenvinge
PN	<i>Sphondylothamnion multifidum</i> (Hudson) Nägeli
PN	<i>Tiffaniella capitata</i> (Schousboe ex Bornet) Doty & Meñez
PN	<i>Vickersia baccata</i> (J. Agardh) Karsakoff
PN	<i>Wrangelia argus</i> (Montagne) Montagne
PN	<i>Wrangelia penicillata</i> (C. Agardh) C. Agardh

### Ordem Gelidiales

#### Gelidiaceae

PN	<i>Gelidiella acerosa</i> (Forsskål) Feldmann & G. Hamel
MAC	<i>Gelidiella tinereensis</i> Seoane-Camba
PN	<i>Gelidium microdon</i> Kützing
PN	<i>Gelidium pusillum</i> (Stackhouse) Le Jolis
PN	<i>Gelidium sesquipedale</i> (Clemente) Thuret
PN	<i>Gelidium spinosum</i> (S.G. Gmelin) P.C. Silva
PN	<i>Parviphycus tenuissimus</i> (Feldmann & Hamel) B. Santelices
PN	<i>Pterocладиella capillacea</i> (S.G. Gmelin) Santelices & Hommersand

### Ordem Gigartinales

#### Caulacanthaceae

PN	<i>Catenella caespitosa</i> (Withering) L.M. Irvine
PN	<i>Caulacanthus ustulatus</i> (Mertens ex Turner) Kützing

#### Cruoriaceae

PN	<i>Cruoria pellita</i> (Lyngbye) Fries
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#### Cystocloniaceae

PN	<i>Hypnea arbuscula</i> P. Dangeard
PN	<i>Hypnea musciformis</i> (Wulfen) J.V. Lamouroux
PN	<i>Hypnea spinella</i> (C. Agardh) Kützing
PN	<i>Rhodophyllis divaricata</i> (Stackhouse) Papenfuss

#### Dumontiaceae

PN	<i>Dudresnaya crassa</i> M. A. Howe
PN	<i>Dudresnaya verticillata</i> (Withering) Le Jolis

#### Gigartinaceae

PN	<i>Chondracanthus acicularis</i> (Roth) Fredericq
PN	<i>Chondracanthus teedei</i> (Mertens ex Roth) Kützing
PN	<i>Gigartina pistillata</i> (S.G. Gmelin) Stackhouse

#### Kallymeniaceae

PN	<i>Kallymenia reniformis</i> (Turner) J. Agardh
PN	<i>Meredithia microphylla</i> (J. Agardh) J. Agardh

#### Phylloporaceae

PN	<i>Ahnfeltiopsis devoniensis</i> (Greville) P.C. Silva & DeCew
PN	<i>Erythrodermis traillii</i> (Holmes ex Batters) Guiry & Garbary
PN	<i>Gymnogongrus crenulatus</i> (Turner) J. Agardh
PN	<i>Gymnogongrus griffithsiae</i> (Turner) Martius
PN	<i>Gymnogongrus tenuis</i> (J. Agardh) J. Agardh
PN	<i>Phyllophora crispa</i> (Hudson) P.S. Dixon
MAC	<i>Phyllophora gelidioides</i> P.L. Crouan & H.M. Crouan ex Karsakoff
PN	<i>Phyllophora sicula</i> (Kützing) Guiry & L.M. Irvine
PN	<i>Schottera niceaënsis</i> (J.V. Lamouroux ex Duby) Guiry & Hollenberg
PN	<i>Stenogramme interrupta</i> (C. Agardh) Montagne ex Harvey

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## D G ESPÉCIES (SPECIES)

### Solieriaceae

- MAC *Meristotheca decumbens* Grunow  
PN *Wurdemannia miniata* (Sprengel) Feldmann & G. Hamel

### Sphaerococcaceae

- PN *Sphaerococcus coronopifolius* Stackhouse

## Ordem Gracilariales

### Gracilariaceae

- PN *Gracilaria gracilis* (Stackhouse) M. Steentoft, L.M. Irvine & W.F. Farnham  
PN *Gracilaria multipartita* (Clemente) Harvey

## Ordem Halymeniales

### Halymeniaceae

- PN *Corynomorpha prismatica* (J. Agardh) J. Agardh  
PN *Cryptonemia lomation* (Bertoloni) J. Agardh  
PN *Cryptonemia seminervis* (C. Agardh) J. Agardh  
PN *Grateloupia dichotoma* J. Agardh  
PN *Grateloupia filicina* (J.V. Lamouroux) C. Agardh

## Ordem Nemastomatales

### Nemastomataceae

- PN *Itonoa marginifera* (J. Agardh) Masuda & Guiry  
PN *Nemastoma confusum* Kraft & D.M. John  
END *Predaea feldmannii* subsp. *azorica* Gabriel

### Schizymeniaceae

- PN *Platoma cyclocolpum* (Montagne) F. Schmitz  
PN *Schizymenia apoda* (J. Agardh) J. Agardh

## Ordem Peyssonneliales

### Peyssonneliaceae

- PN *Peyssonnelia coriacea* Feldmann  
PN *Peyssonnelia polymorpha* (Zanardini) F. Schmitz  
PN *Peyssonnelia rosa-marina* Boudouresque & Denizot  
PN *Peyssonnelia rubra* (Greville) J. Agardh  
PN *Peyssonnelia squamaria* (S.G. Gmelin) Decaisne

## Ordem Plocamiales

### Plocamiaceae

- PN *Plocamium cartilagineum* (Linnaeus) P.S. Di

## Ordem Rhodymeniales

### Champiaceae

- PN *Champia parvula* (C. Agardh) Harvey  
PN *Gastroclonium clavatum* (Roth) Ardissonne  
PN *Gastroclonium ovatum* (Hudson) Papenfuss  
PN *Gastroclonium reflexum* (Chauvin) Kützing

### Hymenocladaceae

- PN *Asteromenia peltata* (W.R. Taylor) Huisman & A.J.K. Millar

### Incertae sedis

- PN *Agardhinula browneae* (J. Agardh) De Toni  
PN *Rhodymenia holmesii* Ardissonne  
PN *Rhodymenia pseudopalmata* (J.V. Lamouroux) P.C. Silva

### Lomentariaceae

- PN *Gelidiopsis intricata* (C. Agardh) Vickers  
PN *Lomentaria articulata* (Hudson) Lyngbye  
PN *Lomentaria clavellosa* (Turner) Gaillon

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D G ESPÉCIES (SPECIES)

**Rhodymeniaceae**

- PN *Botryocladia botryooides* (Wulfen) Feldmann  
PN *Botryocladia bullosa* (Levring) J. Norris & Ballantine  
MAC *Botryocladia macaronesica* Afonso-Carillo, Sobrino, Tittley & Neto

**Subfilo Metarhodophytina**  
**Classe Compsopogonophyceae**

**Ordem Erythropeltidales**

**Erythrotrichiaceae**

- PN *Erythrotrichia carnea* (Dillwyn) J. Agardh  
PN *Porphyrostromium ciliare* (Carmichael) M.J. Wynne

**Subfilo Rhodophytina**  
**Classe Stylonematophyceae**

**Ordem Stylonematales**

**Stylonemataceae**

- PN *Stylonema alsidii* (Zanardini) K.M. Drew  
PN *Stylonema cornu-cervi* Reinsch

**Subreino Viridaeplantae**  
**Filo Chlorophyta**  
**Classe Bryopsidophyceae**

**Ordem Bryopsidales**

**Bryopsidaceae**

- PN *Bryopsis cupressina* J.V. Lamouroux  
PN *Bryopsis hypnoides* J.V. Lamouroux  
PN *Bryopsis penicillata* Suhr  
PN *Bryopsis pennata* J.V. Lamouroux  
PN *Bryopsis plumosa* (Hudson) C. Agardh

**Caulerpaceae**

- INV *Caulerpa webbiana* Montagne

**Ordem Codiiales**

**Codiaceae**

- PN *Codium adhaerens* C. Agardh  
PN *Codium decorticatum* (Woodward) M.A. Howe  
MAC *Codium elisabethae* O.C. Schmidt  
i *Codium fragile* subsp. *atlanticum* (A.D. Cotton) P.C. Silva  
INV *Codium fragile* subsp. *fragile* (Suringar) Hariot  
PN *Codium taylorii* P.C. Silva  
PN *Codium tomentosum* Stackhouse

**Derbesiaceae**

- PN *Derbesia marina* (Lyngbye) Solier  
PN *Pedobesia simplex* (Meneghini ex Kützing) M.J. Wynne & Leliaert

**Udoteaceae**

- PN *Pseudochlorodesmis furcellata* (Zanardini) Børgesen

**Classe Ulvophyceae**

**Ordem Cladophorales**

**Anadyomenaceae**

- PN *Anadyomene stellata* (Wulfen) C. Agardh  
PN *Microdictyon calodictyon* (Montagne) Kützing

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## D G ESPÉCIES (SPECIES)

### Cladophoraceae

PN	<i>Chaetomorpha fibrosa</i> (Kützing) Kützing
PN	<i>Chaetomorpha ligustica</i> (Kützing) Kützing
PN	<i>Chaetomorpha linum</i> (O.F. Müller) Kützing
PN	<i>Chaetomorpha pachynema</i> (Montagne) Kützing
PN	<i>Cladophora albida</i> (Nees) Kützing
PN	<i>Cladophora coelothrix</i> Kützing
PN	<i>Cladophora hutchinsiae</i> (Dillwyn) Kützing
PN	<i>Cladophora laetevirens</i> (Dillwyn) Kützing
PN	<i>Cladophora pellucida</i> (Hudson) Kützing
PN	<i>Cladophora prolifera</i> (Roth) Kützing
PN	<i>Rhizoclonium africanum</i> Kützing

### Ordem Siphonocladales

#### Boodleaceae

PN	<i>Cladophoropsis membranacea</i> (Hofman Bang ex C. Agardh) Børgesen
PN	<i>Phyllocladon anastomosans</i> (Harvey) Kraft & M.J. Wynne

#### Valoniaceae

PN	<i>Ernodesmis verticillata</i> (Kützing) Børgesen
PN	<i>Valonia macrophysa</i> Kützing
PN	<i>Valonia utricularis</i> (Roth) C. Agardh

### Ordem Ulotrichales

#### Gomontiaceae

PN	<i>Monostroma grevillei</i> (Thuret) Wittrock
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#### Ulotrichaceae

PN	<i>Ulothrix flacca</i> (Dillwyn) Thuret
PN	<i>Urococcus hookerianus</i> (Berk. & Hassall) Kützing

### Ordem Ulvales

#### Gayraliaceae

PN	<i>Gayralia oxysperma</i> (Kützing) K.L. Vinogradova ex Scagel et al.
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#### Kornmanniaceae

PN	<i>Blidingia marginata</i> (J. Agardh) P.J.L. Dangeard
PN	<i>Blidingia minima</i> (Nägeli ex Kützing) Kylin

#### Ulvaceae

PN	<i>Ulva clathrata</i> (Roth) C. Agardh
PN	<i>Ulva compressa</i> Linnaeus
PN	<i>Ulva intestinalis</i> Linnaeus
PN	<i>Ulva lactuca</i> Linnaeus
PN	<i>Ulva linza</i> Linnaeus
PN	<i>Ulva prolifera</i> O.F. Müller
PN	<i>Ulva rigida</i> C. Agardh
PN	<i>Ulva torta</i> (Mertens) Trevisan

#### Ulvellaceae

PN	<i>Acrochaete viridis</i> (Reinke) R. Nielsen
PN	<i>Pringsheimiella scutata</i> (Reinke) Marchewianka
PN	<i>Ulvella lens</i> P.L. Crouan & H.M. Crouan

## Filo Heterokontophyta Classe Phaeophyceae

### Ordem Tilopteridales

#### Cutleriaceae

PN	<i>Cutleria multifida</i> (Turner) Greville
PN	<i>Zanardinia typus</i> (Nardo) P.C. Silva

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## D G ESPÉCIES (SPECIES)

### Ordem Dictyotales

#### Dictyotaceae

PN	<i>Dictyopteris polypodioides</i> (A.P. De Candolle) J.V. Lamouroux
PN	<i>Dictyota adnata</i> Zanardini
PN	<i>Dictyota bartayresiana</i> J.V. Lamouroux
PN	<i>Dictyota dichotoma</i> (Hudson) J.V. Lamouroux
PN	<i>Dictyota implexa</i> J.V. Lamouroux
PN	<i>Dictyota liturata</i> J. Agardh
PN	<i>Dictyota menstrualis</i> (Hoyt) Schnetter, Hörning & Weber-Peukert
PN	<i>Lobophora variegata</i> (J.V. Lamouroux) Womersley ex Oliveira
PN	<i>Padina pavonica</i> (Linnaeus) Thivy
PN	<i>Taonia atomaria</i> (Woodward) J. Agardh
PN	<i>Zonaria tournefortii</i> (J.V. Lamouroux) Montagne

### Ordem Ectocarpales

#### Chordariaceae

PN	<i>Elachista flaccida</i> (Dillwyn) Fries
PN	<i>Hecatonema terminale</i> (Kützing) Kylin
PN	<i>Leathesia marina</i> (Lyngbye) Decaisne
PN	<i>Liebmannia leveillei</i> J. Agardh
PN	<i>Mesogloia lanosa</i> P.L. Crouan & H.M. Crouan
PN	<i>Myriactula rivulariae</i> (Suhr) Feldmann
PN	<i>Myriactula stellulata</i> (Harvey) Levring
PN	<i>Myrionema strangulans</i> Greville
i	<i>Papenfussiella kuromo</i> (Yendo) Inagaki
PN	<i>Punctaria tenuissima</i> (C. Agardh) Greville
PN	<i>Sphaerotrichia divaricata</i> (C. Agardh) Kylin
PN	<i>Spongonema tomentosum</i> (Hudson) Kützing

#### Ectocarpaceae

PN	<i>Ectocarpus fasciculatus</i> Harvey
PN	<i>Ectocarpus siliculosus</i> (Dillwyn) Lyngbye
PN	<i>Ectocarpus virescens</i> Thuret ex Sauvageau
PN	<i>Feldmannia irregularis</i> (Kützing) G. Hamel
PN	<i>Feldmannia padinae</i> (Buffham) G. Hamel
PN	<i>Feldmannia paradoxa</i> (Montagne) G. Hamel

#### Petrospingiaceae

PN	<i>Petrospingium berkeleyi</i> (Greville) Nägeli ex Kützing
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#### Scytosiphonaceae

PN	<i>Colpomenia sinuosa</i> (Mertens ex Roth) Derbès & Solier
PN	<i>Compsonea saxicola</i> (Kuckuck) Kuckuck
i	<i>Endarachne binghamiae</i> J. Agardh
PN	<i>Hydroclathrus clathratus</i> (C. Agardh) M.A. Howe
PN	<i>Scytosiphon lomentaria</i> (Lyngbye) Link

### Ordem Fucales

#### Fucaceae

PN	<i>Fucus spiralis</i> Linnaeus
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#### Sargassaceae

PN	<i>Cystoseira abies-marina</i> (S.G. Gmelin) C. Agardh
PN	<i>Cystoseira compressa</i> (Esper) Gerloff & Nizamuddin
PN	<i>Cystoseira foeniculacea</i> (Linnaeus) Greville
PN	<i>Cystoseira humilis</i> Schousboe ex Kützing
PN	<i>Cystoseira tamariscifolia</i> (Hudson) Papenfuss
PN	<i>Sargassum cymosum</i> C. Agardh
PN	<i>Sargassum desfontainesii</i> (Turner) C. Agardh
PN	<i>Sargassum vulgare</i> C. Agardh

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**D G ESPÉCIES (SPECIES)**

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Ordem **Incertae sedis**

**Incertae sedis**

- PN *Bachelotia antillarum* (Grunow) Gerloff  
PN *Pseudolithoderma roscoffense* Loiseaux

Ordem **Laminariales**

**Laminariaceae**

- PN *Laminaria ochroleuca* Bachelot de la Pylaie

Ordem **Nemodermatales**

**Nemodermataceae**

- PN *Nemoderma tingitanum* Schousboe ex Bornet

Ordem **Ralfsiales**

**Ralfsiaceae**

- PN *Ralfsia verrucosa* (J.E. Areschoug) J.E. Areschoug

Ordem **Sphacelariales**

**Incertae sedis**

- PN *Cladostephus spongiosus* (Hudson) C. Agardh  
PN *Halopteris filicina* (Grateloup) Kützing  
PN *Sphacelaria cirrosa* (Roth) C. Agardh  
PN *Sphacelaria fusca* (Hudson) S.F. Gray  
PN *Sphacelaria nana* Nägeli ex Kützing  
PN *Sphacelaria plumula* Zanardini  
PN *Sphacelaria rigidula* Kützing  
PN *Sphacelaria tribuloides* Meneghini  
PN *Stypocaulon scoparium* (Linnaeus) Kützing

Ordem **Sporochneales**

**Sporochnaceae**

- PN *Carpomitra costata* (Stackhouse) Batters  
PN *Sporochnus pedunculatus* (Hudson) C. Agardh