GREEN SEAWEEDS EXTRACTED FROM THE MOST RECENT BRITISH SEAWEED CHECK-LIST OF BRODIE.

I have entered notes on identification on various groups in red and also indicated thos most likely to be foundon quick shore surveys in Scotland. Abbreviations in the notes refer to identification books: Burrows – *Seaweeds of the British Isles* vol 2 1987; GSBI – *Green Seaweeds of Britain and Ireland* 2007; Newton – *Handbook of the British Seaweeds* 1931. FW means freshwater.

Martin Wilkinson – 16 March 2016

CHLOROPHYTA Pascher 1914

Class Trebouxiophyceae Friedl 1995
Order Prasiolales J.H.Schaffner 1922
Family Prasiolaceae F.F.Blackman & Tansley 1902

PRASIOLA (C.Agardh) Meneghini 1838
Prasiola calophylla (Carmichael ex Greville) Kützing
Prasiola crispa (Lightfoot) Kützing
Prasiola furfuracea (Mertens ex Hornemann) Trevisan
Prasiola stipitata Suhr ex Jessen

ROSENVINGIELLA P.C.Silva 1957
Rosenvingiella polyrhiza (Rosenvinge) P.C.Silva
**Rosenvingiella radicans* (Kützing) Rindi, McIvor & Guiry
[Not listed by Hardy & Guiry (2003) but noted in text for *R. polyrhiza* map; later confirmed from Britain by Rindi *et al.* (2004).]

STICHOCOCCUS Nägeli 1849
Stichococcus bacillaris Nägeli
[Included in the Klebsormidiales in Hardy & Guiry (2003).]

Class Ulvophyceae Mattox & K.D.Stewart 1984
Order Cladophorales Haeckel 1894
Family Cladophoraceae Wille 1884, *nom. cons.*

Prasiola may look just like a small foliose plant. You could mistake it for a small Ulva or *Monostroma*. But under the microscope there's no mistake. Cells in very regular square grid pattern. A central, axile chloroplast, though that can be hard to see. Monostromatic. On the open coast most common is ***P.stipitata*** with multicellular stipe. Can be highest seaweed on shore. When reproductive it has rectangular groups of gametangial cells of a different colour dotted around. ***P.calophylla*** less common on shore. Stipe only one cell thick. Plant elongated like a small strap. ***P.furfuracea*** rare has short stipe and small (2mm). ***P.crispa*** is the only one without a stipe but ribbon-like blades can give false impression of one. Can be rounded or ribbon-like to several cm. GSBI excellent pictures and descriptions. ***P.stipitata*** marine. Other three can be terrestrial and FW as well.

Rosenvingiella more common than many think. You need to look for it. Often present in mats of ***Prasiola*** and in top shore filamentous mixtures with ***Ulothrix*** etc. and in green mats in estuaries. Traditionally we have called all specimens ***R.polyrhiza***. but this is no longer acceotable. Many of past records are ***R.radicans.*** Can be confused with Ulothrix but has axile, stellate chloroplast and false branching. Use GSBI to tell the two species apart. Prasiolales in GSBI written by Fabio Rindi who really knows his stuff.

Stichococcus is like a very small, simple Ulothrix but you are very unlikely to find it. Not in GSBI but in Burrows without picture. It is really a FW species.

AEGAGROPILA Kützing 1843
Aegagropila linnaei Kützing
[As *Cladophora aegagropila* (Linnaeus) Trevisan in Hardy & Guiry (2003).]

CHAETOMORPHA Kützing 1845, *nom. cons.*
Chaetomorpha aerea (Dillwyn) Kützing
"*Chaetomorpha ligustica* (Kützing) Kützing
[Requires further investigation; see Guiry (2012).]
Chaetomorpha linum (O.F.Müller) Kützing
[*Chaetomorpha crassa* (C.Agardh) Kützing included as a synonym in Leliaert & Boedeker (2007); see Guiry (2012).]
Chaetomorpha litorea Harvey
Chaetomorpha melagonium (F.Weber & D.Mohr) Kützing

CLADOPHORA Kützing 1845, *nom. cons.*
Cladophora albida (Nees) Kützing
Cladophora battersii Hoek
Cladophora coelothrix Kützing
Cladophora dalmatica Kützing
Cladophora flexuosa (O.F.Müller) Kützing
"*Cladophora fracta* (O.F.Müller ex Vahl) Kützing
[Freshwater species penetrating into brackish waters; see Leliaert & Boedeker (2007).]
Cladophora globulina (Kützing) Kützing
"*Cladophora glomerata* (Linnaeus) Kützing
[Freshwater species penetrating into brackish waters; see Leliaert & Boedeker (2007).]
Cladophora hutchinsiae (Dillwyn) Kützing
Cladophora laetevirens (Dillwyn) Kützing
Cladophora lehmanniana (Lindenberg) Kützing
Cladophora liniformis Kützing
Cladophora pellucida (Hudson) Kützing
Cladophora prolifera (Roth) Kützing
Cladophora pygmaea Reinke
Cladophora retroflexa (Bonnemaison ex P.L.Crouan & H.M.Crouan) Hamel
"*Cladophora rhodolithicola* Leliaert
[Recently described species; see Leliaert *et al.* (2009).]
Cladophora rupestris (Linnaeus) Kützing
Cladophora sericea (Hudson) Kützing
Cladophora vagabunda (Linnaeus) Hoek

RHIZOCLONIUM F.T. Kützing 1843
Rhizoclonium riparium (Roth) Harvey

WITTROCKIELLA Wille 1909
Wittrockiella amphibia (Collins) C.Boedeker & G.I.Hansen
[As *Wittrockiella paradoxa* Wille in Hardy & Guiry (2003).]

Class Bryopsidophyceae Bessey 1907
Order Bryopsidales J.H.Schaffner 1922
Family Chaetosiphonaceae F.F.Blackman & Tansley 1902

BLASTOPHYSA Reinke 1889
[Taxonomic placement uncertain.]
Blastophysa rhizopus Reinke

Family Bryopsidaceae Bory de Saint-Vincent 1829

BRYOPSIS J.V.Lamouroux 1809
Bryopsis hypnoides J.V.Lamouroux
Bryopsis plumosa (Hudson) C.Agardh

Chaetomorpha and ***Cladophora*** have similar cells. They have a reticulate chloroplast (netlike) but the reticulum can be so dense that it looks like a solid green block in the cell. They have numerous pyrenoids per cell. Larger specimens may have different layers of cellulose visible in the cell wall under good microscopy. These layers may allow other green endophytic species to live in the cell wall so look for them. They may also have microscopic red epiphytes so always look for these under the microscope even if you can identify the plant with the naked eye.

Chaetomorpha is always unbranched. ***Cladophora*** is always branched but beware that the straggling freshwater species that occur in estuaries, ***C.glomerata*** and ***C.fracta*** can have long unbranched sections between branched portions.

Chaetomorpha is relatively straightforward. ***C.melagonium*** has giant (1mm length or diam) cells visible to naked eye. In rock pools as single filaments so need to search. ***C.linum*** has filaments 100 to 300 um diam often in tough woolly masses like steel wool on rock surface. ***C.ligustica*** is 40-80 um thick and forms soft cotton-wool like masses on other algae in summer. Used to be called ***C.meditteranea***. For other forms and ***C.aerea*** see GSBI.

Cladophora – a minefield. Beware of overidentification. Just because something is in a book you don't have to find it on every shore. Pp146-148 of GSBI have summary table of species and there is a simple table from Juliet Brodie. The most likely ones for you to find are:
C.albida - very small cells (down to 20um) at least in ultimate branches. Often weakly green
C. laetevirens - see GSBI
C. pellucida – commoner in west – gigantic basal cells visible to naked eye are giveaway
C.rupoestris – harsh, dark green, multidichotomous branching (up to 6 bches) most common one in rock pools, can be done with naked eye
C.sericea – second most common, second (comb-like) branching.

Rhizoclonium – commonest green in estuaries. Only occasionally branched. Bches 1-3 cells only. Open reticulate chloroplast.

Bryopsis – both species have feather like branching.
B.plumosa is flattened in one plane like a feather
B.hypnoides has bches all around axis
Need to search in pools. On most open coast shores in small amounts in summer. Likes disturbed shores.

Family Codiaceae Kützing 1843

CODIUM Stackhouse 1797
Codium adhaerens C.Agardh
Codium bursa (Olivi) C.Agardh
Codium fragile subsp. *atlanticum* (Cotton) P.C.Silva
[Previously considered to be non-native, but recently shown to be native.]
Codium fragile (Suringar) Hariot subsp. *fragile* (Maggs & Kelly, 2007)
[Non-native; Table 3.]
Codium tomentosum Stackhouse
Codium vermilara (Olivi) Delle Chiaje

Family Derbesiaceae Hauck 1884

DERBESIA Solier 1846
Derbesia marina (Lyngbye) Solier
Derbesia tenuissima (Moris & De Notaris) P.L.Crouan & H.M.Crouan

Family Ostreobiaceae P.C.Silva ex Maggs & J.Brodie 2007

OSTREOBIUM Bornet & Flahault 1889
Ostreobium quekettii Bornet & Flahault

CHARACIUM A.Braun 1849
Characium marinum Kjellman

CHLOROCHYTRIUM Cohn 1872
Chlorochytrium cohnii E.P.Wright
[Listed with the Chlorococcales in Hardy & Guiry (2003).]
Chlorochytrium dermatocolax Reinke
[Listed with the Chlorococcales in Hardy & Guiry (2003).]

CHLOROCOCCUM Meneghini 1842
Chlorococcum submarinum Ålvik

SYKIDION E.P.Wright 1881
Sykidion dyeri E.P.Wright

Order Ulotrichales Borzi 1895
Family Chlorocystidaceae Kornmann & Sahling 1983

HALOCHLOROCOCCUM P.J.L.Dangeard 1965, *nom. inval.*
Halochlorococcum moorei (N.L.Gardner) Kornmann & Sahling, *nom. inval.*
[Included in the Chlorocistidales in Hardy & Guiry (2003).]

Family Ulotrichaceae Kützing 1843

ACROSIPHONIA J.Agardh 1846
Acrosiphonia arcta (Dillwyn) Gain
[Included in the Acrosiphoniales in Hardy & Guiry (2003); see Brodie & Bunker (2007).]

SPONGOMORPHA Kützing 1843
Spongomorpha aeruginosa (Linnaeus) Hoek
[Included in the Acrosiphoniales in Hardy & Guiry (2003); see Brodie & Bunker (2007).]

Codium should be no problem to identify to genus level. But to take to species level.
C.bursa and ***C.adhaerens*** have distinctive forms – see GSBI photos – but you still need to look at filaments under microscope to verify it is ***Codium*** with coenocytic filaments.
All other species are erect branched ones made up of intertwined coecocytic filaments and to tell these apart you must look at filaments under microcope. You need to see size and nature of utricles (club-shaped brabches) and see whether they are mucronate (have pointed or blunt ends) and how long is the point (Mucron). See GSBI or Burrows. Basic taxonomy hasn't changed since Silva in 1955 except for a difference in name of subspecies. Subsp. ***tomentosoid***es in Burrows is subsp. ***fragile*** in GSBI.

Derbesia – not common

Ostreobium – coenocytic shell-borer with irregular outline in dead shells, usually sublittoral and can be in very deep water. Not the commonest shell-borer but can be found.

Characium, Chlorochytrium, Sykidion, Halochlorococcum
These are four genera of unicells which are large – from about 30um to 1mm and may occur as turfs on the rock surface or as endophytes in other algae. Not the commonest on the shore but worth searching for. Look for ***H.moorei*** in ***Blidingia***. These periodically vanish from check-lists because some of their species may be sporophyte phases of larger greens. See GSBI

Acrosiphonia and ***Spongomorpha***
Superficially like Cladophora with brabched filaments made of large cells with many pyrenoids and reticulate chloroplasts. But chloroplast is much more open and pale green, it can even falsely appear discoid because swellings around pyrenoids can be seen but linking fibrils are faint.
A.arcta has two forms. Early in season it may be very bright green with smooth axes. As the season advance it becomes the dark green colour ***of Cladophora rupestris*** and branches become rough and main axes knotted into ropes. This is because it produces two abnormal branch types. Downgrowing rhizoidal branches with little colour latch onto the rock. Recurved hook like crampons, only a few cells long, bind the axes into ropes.
S. aeruginosa lacks the rhizoids and crampons but has the open cells with false discoid chloroplasts. It forms turfs on rocks and grows epiphytically on other algae.

ULOTHRIX Kützing 1833
Ulothrix flacca (Dillwyn) Thuret
Ulothrix implexa (Kützing) Kützing
Ulothrix speciosa (Carmichael) Kützing
Ulothrix subflaccida Wille

UROSPORA J.E.Areschoug 1866, *nom. cons.*
Urospora penicilliformis (Roth) J.E.Areschoug
Urospora wormskioldii (Mertens ex Hornemann) Rosenvinge

Order Scotinosphaerales Škaloud, Kalina, Nemjová, De Clerck & Leliaert 2013
Family Scotinophaeaceae Škaloud, Kalina, Nemjová, De Clerck & Leliaert 2013

SCOTINOSPHAERA Klebs 1881
Scotinosphaera paradoxa Klebs
[Included in the Chlorococcales as *Chlorochytrium facciolaae* (Borzi) Bristol in Hardy & Guiry (2003).]

Order Ulvales P.P.Blackman & Tansley 1902
Family Bolbocoleaceae ['Bolbocoleonaceae'] O'Kelly & Rinkel 2007

BOLBOCOLEON N.Pringsheim 1863
Bolbocoleon piliferum N.Pringsheim
[Included in the Chaetophorales in Hardy & Guiry (2003); see O'Kelly *et al.* (2007).]

Family Capsosiphonaceae V.J.Chapman 1952

CAPSOSIPHON Gobi 1879
Capsosiphon fulvescens (C.Agardh) Setchell & N.L.Gardner

Family Gayraliaceae K.L.Vinogradova 1969

GAYRALIA K.L.Vinogradova 1969
Gayralia oxysperma (Kützing) K.L.Vinogradova ex Scagel *et al.*
[As *Monostroma oxyspermum* (Kützing) Doty in Hardy & Guiry (2003).]
PROTOMONOSTROMA K.L.Vinogradova 1969
Protomonostroma undulatum (Wittrock) K.L. Vinogradova

Family Gomontiaceae De Toni 1889

EUGOMONTIA Kornmann 1960
Eugomontia sacculata Kornmann
[Included in the Ulotrichales in Hardy & Guiry (2003); see John (2007).]

GOMONTIA Bornet & Flahault 1888
Gomontia polyrhiza (Lagerheim) Bornet & Flahault
[Included the Chlorococcales in Hardy & Guiry (2003); see John (2007).]

MONOSTROMA Thuret 1854
Monostroma grevillei (Thuret) Wittrock

Ulothrix - uniseriate unbranched filaments with a single interrupted band-shaped. One or more pyrenoids in cell. Spp differ in size and length/breadth ratio of cell, number of pyrenoids, whether surface appears rough or smooth because of adhering small particles, filaments straight or curved, and unusual wall thickening. Ian Fuller's typescript key better than GSBI or Burrows. Beware that cells dividing contents into spores may falsely appear to have reticulate chloroplasts and to be bigger, giving possible confusion with ***Urospora*** (see below).

Urospora – do not confuse with reproductive ***Ulothrix*** (see above). Has reticulate chloroplast. The two species are really different – see GSBI
U.penicilliformis is the commoner one.
U.wormskioldii is so much bigger with distinctive barrel-shaped cells. Both form strata on the upper shore but wormskioldii can also be primary coloniser of new concrete. Has unicellular ***Codiolum*** phase in life cycle which can form green strata on upper shore.

Bolbocoleon is an endophyte in fleshy larger algae such as ***Chorda***. It has hairs with a distinctive type of base which separates it from other endopfytes – GSBI

Capsosiphon superficially like ***Enteromorpha*** - not common but when it occurs can sometimes be in a dense, short-lived stand. Tubular but highly characteristic is the packaging of the cells into gelatinous packets of 2, 4 or 8 cells. They may be arranged spirally around the tube – See GSBI.

Gayralia oxysperma is a monostromatic foliose green, formerly known as ***Monostroma oxyspermum*** or ***Ulvaria oxysperma***. It is common in mid-reaches of estuaries and can occur very rarely on the open coast. It differs from ***Monostroma*** in developing from a single cell attached by rhizoids (like ***Enteromorpha***) rather than upwelling from a basal disc. This means the base will have long rhizoidal cells. See GSBI for photographs of the distinctive types of cell which confirm this species.

Monostroma grevillei very thin and filmy, one cell thick, upwells from basal disc which you may see if you get the base. See GSBI for distinctive types of cell along plant. Only on shore in spring. Rest of year as shell-boring ***Codiolum*** phase. Appears first in upper shore pools and migrates down as spring progresses.

Eugomontia and ***Gomontia*** – shell bores. See intro in GSBI

Family Kornmanniaceae Golden & K.M.Cole 1986

BLIDINGIA Kylin 1947
Blidingia marginata **(J.Agardh) P.J.L.Dangeard ex Bliding**
Blidingia minima **(Nägeli ex Kützing) Kylin**

PSEUDENDOCLONIUM Wille 1901
******Pseudendoclonium dynamenae* **R.Nielsen**
[Now confirmed for Britain; see Nielsen (2007).]
Pseudendoclonium fucicola **(Rosenvinge) R.Nielsen**
[Included in the Chaetophorales in Hardy & Guiry (2003); see Maggs (2007).]
Pseudendoclonium submarinum **Wille**
[Included in the Chaetophorales in Hardy & Guiry (2003); see Maggs (2007).]

TELLAMIA Batters 1895
Tellamia contorta **Batters**
[Included in the Chaetophorales in Hardy & Guiry (2003); see Maggs (2007).]

Family Phaeophilaceae Chappell, O'Kelly, L.W.Wilcox & G.L.Floyd 1990

PHAEOPHILA Hauck 1876
Phaeophila dendroides **(P.L.Crouan & H.M.Crouan) Batters**
[Included in the Phaeophilales in Hardy & Guiry (2003); see Maggs (2007).]

Family Ulvaceae J.V.Lamouroux ex Dumortier 1822

OCHLOCHAETE Thwaites 1849
Ochlochaete hystrix **Thwaites**

PERCURSARIA Bory de Saint-Vincent 1823
Percursaria percursa **(C.Agardh) Rosenvinge**

RUTHNIELSENIA O'Kelly, Wysor & Bellows 2004
******Ruthnielsenia tenuis* **(Kylin) O'Kelly, Wysor & Bellows**
[Not listed by Hardy & Guiry (2003); see also Nielsen (2007).]

ULVA Linnaeus 1753, ***nom. et typ. cons.***
******Ulva californica* **Wille**
[Not listed in Hardy & Guiry (2003); reported from Scotland by Hayden & Waaland (2004); potentially non-native; Table 3.]
Ulva clathrata **(Roth) C.Agardh**
[Included as a synonym of ***Enteromorpha muscoides*** **(Clemente) Cremades in Hardy & Guiry (2003); see Maggs** ***et al.*** **(2007).]**
Ulva compressa **Linnaeus**
[As ***Enteromorpha compressa*** **(Linnaeus) Nees in Hardy & Guiry (2003).]**
Ulva flexuosa **Wulfen**
[As ***Enteromorpha flexuosa*** **(Wulfen) J.Agardh in Hardy & Guiry (2003).]**
Ulva intestinalis **Linnaeus**
[As ***Enteromorpha intestinalis*** **(Linnaeus) Nees in Hardy & Guiry (2003).]**
******Ulva intestinaloides* **(Koeman & Hoek) Hayden, Blomster, Maggs, P.C.Silva, M.J.Stanhope & J.R.Waaland**

Blidingia – superficially like ac small Enteromorpha. It's tubular but with very small cells – less than about 8um. This means that chloroplast cannot usually be distinguished. Upwells from basal disc which you might find if you get whole plant off rock. Otherwise it's the small cells and lack of basal rhizoidal cells that will distinguish from ***Enteromorpha.*** The two species are quite distinct – ***marginata*** has distinct margins and regularly arranged cells, ***minima*** is bullate in outline, not marginate and with irregular cells. Unfortunately there can be intermediates which has given rise to var.***subsalsa*** in British Columbia but not recognized here. Occurs as turfs in estuaries, on upper shore in turfs, on limpet shells. Beware of confusing with small ***Enteromorpha prolifera***, especially on limpet shells.

Pseudendoclonium dynamenae occurs in hydroids along with two other greens. See Martin's notes to separate these and Ruth Nielsen in GSBI.

Tellamia is a shell borer which does not bore through the calcium carbonate but lodges between the protein periostracum and the calcareous layer almost always in flat periwinkles. Has distinctive spindle shaped cells. Although different forms exist they are now all the one species. See MS's shell-borer notes and Ruth Nielsen's species description in GSBI.

Phaeophila and ***Ochlochaete*** are endophytes in other fleshy algae. See distinctive features in GSBI.

Percursaria is not uncommon but is so easily confused. It is a biseriate filament. It has square or rectangular cells with a single parietal chloroplast. The cells may often be a little offset in the two filaments, not occurring exactly side by side. Beware of confusing with early stages of ***Enteromorpha (Ulva) prolifera*** or ***torta.*** Occurs in estuaries and salt-marshes including ones just at top of rocky shore. Often just as isolated filaments.

Ruthnielsenia is an endophyte and a shell-borer. Only found a few times in Scotland as ***Entocladia tenuis*** but known under this name from Sweden in 1930s as a common shell-borer.

[Previously confused with other species of the genus; see Maggs *et al.* (2007).]

Ulva lactuca Linnaeus[iii]

[This name has been erroneously applied to other species of the genus.]

Ulva linza Linnaeus

[As *Enteromorpha linza* (Linnaeus) J.Agardh in Hardy & Guiry (2003).]

Ulva prolifera O.F.Müller

[As *Enteromorpha prolifera* (O.F.Müller) J.Agardh in Hardy & Guiry (2003).]

˟*Ulva pseudocurvata* Koeman & Hoek

[Previous confusion based on a misidentification of original material; see Maggs *et al.* (2007).]

Ulva ralfsii (Harvey) Le Jolis

[As *Enteromorpha ralfsii* Harvey in Hardy & Guiry (2006).]

Ulva rigida C.Agardh

[This name has been erroneously applied to other species of the genus.]

Ulva torta (Mertens) Trevisan

[As a synonym of *Enteromorpha prolifera* (O.F.Müller) J.Agardh in Hardy & Guiry (2006).]

ULVARIA Ruprecht 1850

Ulvaria obscura (Kützing) Gayral ex Bliding

[As *Monostroma obscurum* (Kützing) J.Agardh in Hardy & Guiry (2003).]

Ulvaria splendens (Ruprecht) K.L.Vinogradova

[As *Ulvaria fusca* Postels & Ruprecht in Hardy & Guiry (2003).]

UMBRAULVA E.H.Bae & I.K.Lee 2002

Umbraulva dangeardii M.J.Wynne & G.Furnari

[As *Umbraulva olivascens* (P.J.L.Dangeard) E.H.Bae & I.K.Lee, *nom. inval.*, in Hardy & Guiry (2003). Non-native; Table 3.]

Family Ulvellaceae Schmidle 1899

EPICLADIA Reinke 1889

Epicladia flustrae Reinke

Epicladia perforans (Huber) R.Nielsen

˟*Epicladia phillipsii* R.Nielsen.

[See Nielsen (2007).]

PSEUDOPRINGSHEIMIA Wille 1909

Pseudopringsheimia confluens (Rosenvinge) Wille.

[Listed in the Chaetophorales in Hardy & Guiry (2003); see Nielsen (2007).]

[iii]The type of *Ulva lactuca* Linnaeus (Linnaeus 1753) has been reported to be identical molecularly to the species currently known as *Ulva fasciata* Delile (see O'Kelly *et al.* 2010, and included references), a species originally described from Alexandria in Egypt (Delile 1813) that is not known in Britain. However, the species routinely determined as *U. lactuca* in the north-eastern Atlantic is clearly not the same as what is known as *U. fasciata* in the Mediterranean (Cormaci *et al.* 2014). While O'Kelly *et al.* (2010) have treated *U. fasciata* as a 'junior synonym' [heterotypic later synonym] of *U. lactuca*, this is only in terms of the molecular identity of the type of *U. lactuca*. The taxonomic issue may be best resolved by nomenclatural conservation of *Ulva lactuca* Linnaeus with a neotype consistent with its long-term morphotaxonomic identity in the north-eastern Atlantic.

SYNCORYNE R.Nielsen & P.M.Pedersen 1977 — not common

"*Syncoryne reinkei* R.Nielsen & P.M.Pedersen
[Previously confused with *Ulvella scutata* (Reinke) R.Nielsen; see Nielsen (2007).]

ULVELLA P.L.Crouan & H.M.Crouan 1859
[See Nielsen *et al.* (2013).]

Ulvella heteroclada (J.A.Correa & R.Nielsen) R.Nielsen, C.J.O'Kelly & B.Wysor — not common
[As *Acrochaete heteroclada* J.A.Correa & R.Nielsen in Hardy & Guiry (2003).]

"*Ulvella inflata* (Ercegovic) R.Nielsen, C.J.O'Kelly & B.Wysor — not common
[Not included in Hardy & Guiry (2003); recorded from Britain; see Nielsen *et al.* (2007).]

Ulvella lens P.L.Crouan & H.M.Crouan — distinctive lens shaped epiphytic disc - not uncommon

Ulvella leptochaete (Huber) R.Nielsen, O'Kelly & B.Wysor — not uncommon - hard to separate from viridis & wittrockii see Burrows and GSBI
[As *Entocladia leptochaete* (Huber) Burrows in Hardy & Guiry (2003).]

Ulvella operculata (J.A.Correa & R.Nielsen) R.Nielsen, O'Kelly & B.Wysor — not uncommon. Can be with or without hairs. see GSBI
[As *Acrochaete operculata* J.A.Correa & R.Nielsen in Hardy & Guiry (2003).] *Ulvella repens* (Pringsheim) R.Nielsen, O'Kelly & B.Wysor
[As *Acrochaete repens* Pringsheim in Hardy & Guiry (2003).]

Ulvella scutata (Reinke) R.Nielsen, O'Kelly & B.Wysor — very thin epiphytic form - not lens shaped like U. lens quite common
[As *Pringsheimiella scutata* (Reinke) Marchewianka in Hardy & Guiry (2003).]

"*Ulvella setchellii* P.J.L.Dangeard — not common
[Confirmed in Britain by Nielsen (2007).]

Ulvella viridis (Reinke) R.Nielsen, O'Kelly & B.Wysor — 2 commonest endophytic filamentous greens See GSBI for how to separate
[As *Acrochaete viridis* (Reinke) R.Nielsen in Hardy & Guiry (2003).]

Ulvella wittrockii (Wille) R.Nielsen, O'Kelly & B.Wysor
[As *Acrochaete wittrockii* (Wille) R.Nielsen in Hardy & Guiry (2003).]

Order Sphaeropleales Luerssen 1877
Family Microsporaceae Bohlin 1901

MICROSPORA Thuret

Microspora ficulinae P.J.L.Dangeard — not common
[Listed with the Microsporales in Hardy & Guiry (2003).]