

THE MARINE ALGÆ OF TASMANIA.

A CLASSIFIED LIST OF THE ALGÆ WHICH HAVE BEEN
RECORDED FROM TASMANIA AND THE ADJACENT ISLANDS.

By

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This Record is based on the labours of many workers.

Probably the first Tasmanian seaweed to receive a scientific name was the largest, though not the longest, of them all, the giant kelp, *Sarcophycus potatorum*, gathered during the survey of the Huon River and D'Entrecasteaux Channel made by the *Recherche* and the *Espérance* in 1792-3. The specific name was given to it by the French botanist Labillardière, who observed that the natives of Tasmania "used portions of its great leaves folded into the form of "a pouch, for the purpose of keeping fresh water."

Robert Brown, the "Botanicorum Princeps" of his day, as naturalist of the Expedition of Captain Flinders, spent some time in Tasmania, 1804, and, while making his great collections of land plants, did not neglect the seaweeds. He described and named a number of species, especially amongst the *Fucoideæ*.

Dr., afterwards Sir Joseph, Hooker was the naturalist of the Expedition of Sir James Ross with the *Erebus* and *Terror*, 1839-43. He stayed in Hobart as the guest of Sir John and Lady Franklin, and doubtless gathered the seaweeds as well as the land plants, in preparation for his proposed *Flora of Tasmania*. The Hookers, Sir William and (Sir) Joseph, were fortunate in securing the aid of the keen and accomplished local naturalists, Ronald Gunn and William Archer, to whom the *Flora*, when published, was dedicated. They collected far and wide, by land and by sea, and forwarded their collections to Kew.

In 1847 Professor W. H. Harvey, of Trinity College, Dublin, published his *Nereis Australis* on the Algæ of the Southern Ocean. Harvey worked in close conjunction with the Hookers, and described in the *Nereis*, with many coloured plates, the Algæ obtained by Hooker in the Antarctic voyage. Amongst these several of the Tasmanian plants are figured.

In 1854-5 Harvey made his celebrated voyage—*illud iter*, as Agardh admiringly calls it—to Ceylon, Australia, and the Friendly Islands in quest of Algæ, making prodigious collections. At George Town he was the guest of the Rev. John and Mrs. Fereday, who entered heart and soul into his project. Mr. Fereday had already discovered the haunts of *Claudea* and other beautiful algæ for which the Tamar is famed, and both he and Mrs. Fereday laboured day after day with Harvey, gathering and mounting "thousands of "specimens." Harvey went on to Port Arthur and collected there.

The results of Harvey's voyage to Australia and Tasmania were embodied in his magnificent work, the *Phycologia Australica*, issued in five volumes, 1858-63. Harvey was our greatest British phycologist and possessed conspicuous artistic ability, and in the 300 coloured plates of the work many of the Tasmanian algæ are beautifully delineated. Two of the volumes are appropriately dedicated to Ronald Gunn and the Rev. John Fereday respectively.

During the publication of the *Phycologia*, Dr. Hooker's *Flora of Tasmania* appeared, in 1860. In this work Harvey dealt with the algæ and gave further descriptions and figures of Tasmanian plants, using his own material as well as that supplied by Gunn and Archer to Hooker, and collections made by C. Stuart at Southport and Dr. Jeannerett at Port Arthur. In the *Flora* 300 marine algæ are enumerated, 22 *Chlorophyceæ*, 60 *Phæophyceæ* and 218 *Rhodophyceæ*.

In 1874 G. Zanardini, a well-known Italian phycologist, published a paper *Phyceæ Australasicæ novæ vel minus cognitæ (Flora)*. He described Tasmanian plants, especially those collected by Mrs. Goodwin at George Town. Several of his species require verification and elucidation.

In his various works 1860-94 the great Swedish phycologist J. G. Agardh recorded and described other Australian and Tasmanian plants. To him Mrs. L. A. Meredith consigned the algæ she had collected during her residence at Orford.

Lastly, G. B. de Toni in his monumental work, the *Sylloge Algarum*, has given a complete account of the algæ of the world, with full descriptions of all known species arranged according to the most recent classification.

I have been engaged in my leisure time for many years in the study of Australian, including Tasmanian, marine algæ, and have had the opportunity of investigating several

valuable collections of Tasmanian forms. In the National Herbarium, Sydney, the algæ of which are under my care, we have fortunately two of the sets of *Algæ Australicæ exsiccatae*, providing some 600 species distributed and named by Harvey. In addition there are a good many plants, usually not named, gathered by W. Archer and Samuel Hannaford. Professor Ewart, of Melbourne, while Government Botanist of Victoria, sent me a considerable collection made by Mrs. Spong in King Island. Mr. Quaife gave me a large collection of well selected and mounted plants mostly from the Tamar. Mr. L. Rodway generously handed over to me his very large collection, gathered in many years and from many localities, but chiefly from the South. Mrs. F. Perrin, of Launceston, also very kindly gave me the freest use of the plants she had gathered at Low Head. I have examined the collections in the Hobart Museum by the courtesy of Mr. Clive Lord and those in the Launceston Museum by favour of Mr. Scott. I have also worked several days in the National Herbarium, Melbourne, which possesses the algæ of Sonder's herbarium.

In my two years' residence in Tasmania, and in previous and later visits, I have been enabled to study the weeds in their natural habitats, and have made full collections in the Derwent and Channel and in the Tamar, as well as at Burnie, Ulverstone, Orford, Eaglehawk, Port Arthur, and Port Esperance. Mrs. Perrin and I have dredged in the Tamar, and I also used the dredge in the Derwent and Channel and Ports Arthur and Esperance. Mrs. Perrin has from time to time forwarded packets from Low Head, Mr. Lord from Bruny and the Derwent, Mr. C. Davis from Dover, and Mr. Ernest Mawle from Port Arthur.

The above then have constituted the sources of my information. I have endeavoured to make the List as complete as possible and as accurate. Freshwater algæ and the *Cyanophyceæ* have not been included, as our knowledge of these forms is, so far, meagre and fragmentary. The list includes 44 *Chlorophyceæ*, 90 *Phæophyceæ*, and 284 *Rhodophyceæ*, in all 418 species. The arrangement followed is that of De Toni in the *Sylloge Algarum*.

Most of the Tasmanian algæ occur on both sides of Bass Strait. A few are also found in New Zealand. A very few, as *Ulva*, *Enteromorpha*, *Dictyota dichotoma*, *Cladostephus spongiosus*, are cosmopolitan. I have marked with an asterisk those species which, so far as is known at present, are endemic.

CHLOROPHYCEÆ (Ag.), Falk.

Family 1. ULVACEÆ (Lamour.), Rabenh.

Ulva, L.

- U. lactuca*, L. *Passim*.
U. lætevirens, Aresch.

Enteromorpha, Link.

- **E. gunniana*, J. Ag. Thouin Bay, East Coast (Rodway).
E. flexuosa (Wulf.), J. Ag.
E. prolifera (Muell.), J. Ag.
E. intestinalis (L.), Link.
E. linza (L.), J. Ag.
E. compressa (L.), Grev.
E. bulbosa (Suhr), Kuetz.
E. lingulata, J. Ag.
E. clathrata (Roth), J. Ag.
E. ramulosa, Hook.
E. acanthophora, Kuetz.

Family 2. CLADOPHORACEÆ (Hassall), Wittrock.

Chaetomorpha, Kuetz.

- C. darwinii* (Hook.), Kuetz. *Passim*.
C. coliformis (Mont.), Kuetz. Southport (Stuart).
C. valida (H. & H.), Kuetz.
C. aerea (Dillw.), Kuetz.

Cladophora, Kuetz.

- C. pellucida* (Huds.), Kuetz.
 **C. stuartii*, Harv.
C. bainesii, Harv. Tamar.
C. gracilis (Griff.), Kuetz.
 **C. gracillima*, Harv.
 **C. feredayi*, Harv. Tamar; Derwent.
 **C. ferruginea*, Harv.

Dictyosphaeria, Dene.

- D. sericea*, Harv.

Harvey in *Flor. Tasm.* writes "I venture to introduce this plant as *probably* occurring on the outer coasts of T." I know of no positive record.

Apjohnia, Harv.

- A. lætevirens*, Harv. Reminé (Rodway).

Family 3. BRYOPSISACEÆ (Bory), Thur.

Bryopsis, Lamour.

- B. plumosa* (Huds.), Ag. *Passim*.
B. hypnoides, Lamour. Eaglehawk (Rodway).

Family 4. CAULERPACEÆ, Reichb.

Caulerpa, Lamour.

- C. scalpelliformis* (R. Br.), Ag.
C. trifaria, Harv. Port Esperance; Channel (Lucas);
 Orford (Mrs. Meredith).
C. harveyi, F.v.M. North Coast.
C. sonderi, F.v.M. North Coast.
C. brownii, Endl. *Passim*.
 **C. flexilis*, Lamour.
C. hypnoides (R. Br.), Ag.
C. muelleri, Sond. *Passim*.
C. sedoides (R. Br.), Ag. *Passim*.
C. vesiculifera, Harv.
C. simpliciuscula, Ag.
C. cactoides (Turn.), Ag. *Passim*. Dredged 20 fm. at
 Actæon Islands (Rodway).
Codium, Stackh.
C. bursa (L.), Ag. Derwent (Lucas).
C. muelleri, Kuetz. North Coast.
C. galeatum, J. Ag. Derwent (Rodway).
C. mucronatum, J. Ag. *Passim*.

FUCOIDEÆ (Ag.), J. Ag.

=PHÆOPHYCÆ (Thur.), Kjellm.

Order 1. CYCLOSPORINÆ, Aresch.

Family 1. SARGASSACEÆ, Decaisne.

Sargassum, Ag.Subgenus *Phyllotricha* (Aresch.), J. Ag.

- S. heteromorphum*, J. Ag. Low Head (Lucas).
S. sonderi, J. Ag. Low Head; Derwent.
S. muriculatum, J. Ag. T., King Island (Mrs. Spong).
S. varians, Sond. Low Head (Lucas).
S. decipiens (R. Br.), J. Ag. South Arm (Lucas).
S. verruculosum (Mert.), Ag. Channel; Port Esperance;
 Port Arthur.
 Subgenus *Arthrophyucus*, J. Ag.
S. bracteolosum, J. Ag. Burnie.
S. lævigatum, J. Ag.
S. paradoxum (R. Br.), Harvey. Orford.
S. vestitum (R. Br.), Ag. Kent Islands; Burnie; Derwent.
 **S. rhyncophorum*, J. Ag.

- **S. gunnianum*, J. Ag. Low Head (Lucas).
S. grande, J. Ag. Port Esperance.
S. undulatum, J. Ag.
S. membranaceum, J. Ag.

Subgenus *Eu-Sargassum*, J. Ag.

So far, no forms belonging to this Section of the genus,
 which is dominant in the North, have been definitely recorded
 from Tasmania.

Seirococcus, Grev.

- S. axillaris* (R. Br.), Grev. *Passim*.

Scytothalia, Grev.

- S. dorycarpa* (Turn.), Grev. Kent Islands.

This record of R. Brown's needs to be verified in
 the case of a plant which is typically West Australian,
 and has not been found in Victoria.

Cystophora, J. Ag.

- C. uvifera* (Ag.), J. Ag.
C. cephalornithos (Lab.), J. Ag. Maria Island (Rodway).
C. platylobium (Mert.), J. Ag.
 **C. xiphocarpa*, Harv. Port Arthur (Harvey); Muddy
 Plains (Rodway); Brown's River; Southport.
C. scalaris, J. Ag.
C. retorta (Mert.), J. Ag.
C. retroflexa (Labill.), J. Ag. *Passim*.
C. siliquosa, J. Ag. Burnie.
C. torulosa (R. Br.), J. Ag. Devonport; Southport (Rod-
 way); Swansea.
C. grevillei (Ag.), J. Ag.

This species, recorded from Herb. Zanardini,
 requires verification. It is a West Australian form.

- C. spartioides* (Turn.), J. Ag. *Passim*.
C. monilifera, J. Ag.
C. paniculata (Turn.), J. Ag. *Passim*.

Cystophyllum, J. Ag.

- C. muricatum* (Turn.), J. Ag.

Scaberia, Grev.

- S. agardhii*, Grev. North Coast.
S. rugulosa, J. Ag. (sec. Harvey.)

Phyllospora, Ag.

- P. comosa* (Labill.), Ag.

Carpoglossum, Kuetz.

- C. confluens* (R. Br.), Kuetz.

Family 2. FUCACEÆ (Lamour.), Kjellm:

Hormosira, Endl.*H. banksii* (Turn.), Decaisne.*Myriodesma*, Decaisne.*M. integrifolium*, Harv. Ulverstone; Tamar.*Xiphophora*, Mont.*X. billardieri*, Mont.*X. chondrophylla* (R. Br.), Mont.

Family 3. DURVILLEACEÆ, Olt.

Sarcophycus, Kuetz.*S. potatozum* (Labill.), Kuetz.*Splanchnidium*, Grev.*S. rugosum* (L.), Grev.*Notheia*, Bail. & Harv.*N. anomala*, Bail. & Harv.

The only known parasitic Tasmanian alga.

Order 2. TETRASPORINÆ, De Toni.

Family 1. DICTYOTACEÆ (Lamour.), Zan.

Zonaria (Draparn.), J. Ag.*Z. turneriana*, J. Ag.*Homæostrichus*, J. Ag.*H. stuposus* (R. Br.), J. Ag. Kent Islands.*Haliseris*, Targ.-Tozz.*H. muelleri*, Sond.*H. acrostichoides*, J. Ag.*Dictyota*, Lamour.*D. vittarioides*, J. Ag. King Island (Mrs. Spong).*D. nigricans*, J. Ag. Orford.*D. dichotoma* (Huds.), Lamour. *Passim*.*D. ocellata*, J. Ag.*D. diemensis*, Sond. George Town; Channel (Rodway).*Pachydictyon*, J. Ag.*P. paniculatum*, J. Ag. *Passim*.*Dilophus*, J. Ag.*D. gunnianus*, J. Ag.*D. fasciculatus*, J. Ag.*D. tæniæformis*, J. Ag. Low Head (Mrs. Perrin).

Order 3. PHÆOZOOSPORINÆ, Thuret.

Family 1. CUTLERIACEÆ, Zan.

Cutleria, Grev.*C. multifida* (Sm.), Grev.

Family 2. LAMINARIACEÆ (Bory), Rostaf.

Adenocystis, H. & H.*A. lessonii*, Hook. & Harv. Port Arthur (Harvey).*Ecklonia*, Hornem.*E. radiata* (Turn.), J. Ag. *Passim*.*Macrocystis*, Ag.*M. pyrifera* (Turn.), Ag. *Passim*.

Family 3. SPOROCHNACEÆ (Reichb.), Dcne.

Bellotia, Harv.*B. eriophorum*, Harv. N. Coast (Lucas); Dredged 20 fm. Actæon Islands (Rodway).*Perithalia*, J. Ag.*P. inermis* (R. Br.), J. Ag. *Passim*.*Sporochnus*, Ag.*S. comosus*, Ag. *Passim*, especially North Coast.**S. herculeus*, J. Ag. George Town.*S. radiceformis* (R. Br.), Ag. Derwent (Rodway).**S. apodus*, Harv. George Town.The two George Town plants, both extremely rare, may be abnormal forms of *S. comosus*, which grows abundantly in the Tamar.

Family 4. STILOPHORACEÆ (Naeg.), De Toni & Levi.

Stilophora, J. Ag.**S. australis*, Harv. Widely distributed.

Family 5. CHORDARIACEÆ (Ag.), Zan.

Myrionema, Grev.**M. leclancherü* (Chauv.), Harv. Frequent on *Ulva*.*Eudesme*, J. Ag.*E. australis* (Harv.), J. Ag. Low Head; Orford.*Bactrophora*, J. Ag.*B. vermicularis*, J. Ag. Eaglehawk (Rodway).*B. nigrescens* (Harv.), J. Ag.

Myriocladia, J. Ag.*M. sciurus*, Harv. Derwent (Rodway).*Polycerea*, J. Ag.**P. ramulosa*, J. Ag.*Leathesia*, Gray.*L. difformis* (L.), Aresch. Low Head; Ulverstone.*Liebmannia*, J. Ag.**L. harveyana*, J. Ag. Ulverstone (Lucas).*Chordaria*, Ag.*C. cladosiphon*, Kuetz. *Passim*.*C. incurvata*, J. Ag. Perhaps a form of the preceding.

Family 6. ELACHISTACEÆ, Kjellm.

Elachista, Duby.*E. australis*, J. Ag. Derwent (Rodway).

Family 7. DICTYOSIPHONACEÆ (Kuetz.), Thur.

Scytothamnus, H. & H.*S. australis* (J. Ag.), H. & H. Low Head (Lucas).

Family 8. STRIARIACEÆ, Kjellm.

Stictyosiphon, Kuetz.*S. decaisnei* (H. & H.), Murray.

Family 9. ENCELIACEÆ (Kuetz.), Kjellm.

Scytosiphon, Ag.*S. lomentarius* (Lyngb.), J. Ag. *Passim*.*Phyllitis*, Kuetz.*P. fascia* (Muell.), Kuetz. Tamar (Quaife).*Colpomenia*, Derb. & Sol.*C. sinuosa* (Röth), Derb. & Sol. *Passim*.*Asperococcus*, Lamour.*A. bullosus*, Lamour. *Passim*.

Family 10. SPHACELARIACEÆ (Dcne), Kuetz.

Cladostephus, Ag.*C. spongiosus* (Lightf.), Ag. *Passim*.*Stypocaulon*, Kuetz.*S. paniculatum* (Suhr), Kuetz. *Passim*.*Xanthosiphonia*, J. Ag.*X. wattsi*, J. Ag. Tamar (Mrs. Perrin); Port Arthur (Lucas).

Family 11. ECTOCARPACEÆ (Ag.), Kuetz.

Ectocarpus, Lyngb.*E. siliculosus* (Dillw.), Lyngb.*E. fasciculatus* (Griff.), Harv. T. (Harvey).**E. sordidus*, Harv. George Town.

FLORIDEÆ, Lamour.

= *Rhodophyceæ*, Ruprecht.

Subclass 1. BANGOIDEÆ, De Toni.

Family 1. BANGIACEÆ (Zan.), Berth.

Bangia, Lyngb.**B. ciliaris*, Carm. Subspecies *B. pulchella*, Harv. George Town (Harvey).*B. atropurpurea* (Roth), Ag. Derwent.*Porphyra*, Ag.**P. woolhousiæ*, Harv.*Wildemania*, De Toni.*W. laciniata* (Lightf.), De Toni. *Passim*.

Subclass 2. EU-FLORIDEÆ, De Toni.

Order 1. NEMALIONINÆ, Schmitz.

Family 1. HELMINTHOCLADIACEÆ (Harv.), Schmitz.

Batrachospermum, Roth.*B. moniliforme*, Roth.*B. dillenii*, Bory. Esk.*B. vagum*, Ag.**B. sp.* Eve River, tributary of Gordon River (Mrs. Perrin).*Gulsonia*, Harv.*G. annulata*, Harv. George Town (Harvey).*Helminthocladia*, J. Ag.*H. densa* (Harv.), Schmitz. Tamar; Ulverstone (Mrs. Perrin).*Liagora*, Lamour.*L. viscida* (Forsk.), Ag. George Town (Harvey).

Family 2. CHÆTANGIACEÆ, Schmitz.

Scinaia, Bivona.*S. furcellata*, Turn. Bivona.*Chætangium*, Kuetz.**C. lingula*, Harv. Brown's River (Gunn); Huon (Rodway); Eaglehawk (Lucas).**C. flabellatum*, Harv. Port Arthur (Harvey).

Family 3. GELIDIACEÆ (Kuetz.), Schmitz.

Wrangelia, Ag.

- W. mucronata*, Harv.
 **W. gunniana*, J. Ag.
 **W. jeannerettii*, H. & H. Port Arthur (Harvey).
W. protensa, Harv. George Town (Harvey).
W. crassa, H. & H. George Town (Gunn).
 **W. ballioides*, J. Ag. Tamar (Mrs. Perrin).
 **W. nobilis*, Harv. Tamar. Abundant.
 **W. setigera*, Harv. Tamar (Harvey); Port Esperance (Lucas).
W. plumosa, Harv. *Passim*.
Gelidium, Lamour.
G. australe, J. Ag.
G. glandulæfolium, H. & H.

Order 2. GIGARTININÆ, Schmitz.

Family 1. GIGARTINACEÆ, Schmitz.

Ectoelinium, J. Ag.

E. dentatum, J. Ag.

Iridæa, Bory.

- I. australasica*, J. Ag.
 **I. foliifera*, Harv.
 **I. harveyi*, J. Ag.
 **I. polycarpa*, Harv.
I. prolifera, J. Ag.
 **I. purpurea*, J. Ag.
 (?) *I. latissima* (H. & H.), Grunow. A New Zealand form.

Gigartina, Stackhouse.

- G. brachiata*, Harv. George Town (Harvey).
 **G. aciculifera*, Zan. Derwent (Rodway).
 **G. binderi*, Harv. Hobart (Binder Herb.); Burnie (Lucas).
G. flabellata, J. Ag.
G. pinnata, J. Ag. *Passim*.
G. congesta, Zan.
G. livida, J. Ag. A very doubtful species.
 **G. ancistroclada*, Mont. Derwent (Gunn, Rodway).
G. gigantea, J. Ag.
G. radula, J. Ag.

Stenogramma, Harv.

S. interruptum (Ag.), Mont. Derwent (Lucas).

Gymnogongrus, Mart.

**G. fastigiatus*, Harv. Forester's River (Gunn).

Mychodea, Harv.

- M. terminalis*, Harv. Tamar (Harv.).
M. membranacea, Harv.
M. carnosae, Harv. Tamar (Lucas).
M. hamata, Harv. *Passim*.
 **M. disticha*, Harv. East Coast (Gunn).

Callophyllis, Kuetz.

- C. harveyana*, J. Ag.
C. lambertii (Turn.), Grev. North Coast.
C. coccinea, Harv. *Passim*.

Polycælia, J. Ag.

**P. fastigiata*, Harv. Tamar (Harvey).

Callymenia, J. Ag.

- C. cribrosa*, Harv. Tamar (Fereday).
C. tasmanica, Harv. Tamar (Harvey).

Meredithia, J. Ag.

M. polycælioides, J. Ag.

Family 2. RHODOPHYLLIDACEÆ, Schmitz.

Meristotheca, J. Ag.

**M. tasmanica*, J. Ag. Orford (Mrs. Meredith).

Rhodophyllis, Kuetz.

- R. membranacea*, Harv.
R. gunnii, Harv. Tamar (Mrs. Perrin, Lucas).
R. multipartita, Harv.
 **R. goodwinixæ*, J. Ag. Tamar (Mrs. Goodwin).
R. hypneoides, Harv.

Erythroclonium, Sonder.

E. muelleri, Sond. Actæon Islands, 20 fm. (Rodway).

Rhabdonia, Harv.

- R. nigrescens*, Harv.
R. coccinea, Harv.
R. verticillata, Harv. Tamar (Harvey); Channel (Lucas); Orford (Mrs. Meredith).
 **R. umbellata*, Zan.
 **R. compressa*, J. Ag.

Eucheuma, J. Ag.

E. speciosum (Sond.), J. Ag. T. (Sonder record).

Areschougia, Harv.

- A. laurencia* (H. & H.), Harv.
A. stuartii, Harv. Southport (Stuart); Port Esperance (Lucas).

Order 3. RHODYMENINÆ, Schmitz.

Family 1. SPHÆROCOCCACEÆ (Dum.), Schmitz.

Phacelocarpus, Endl. & Dies.*P. complanatus*, Harv. Southport (Stuart).*P. alatus*, Harv.*P. labillardieri* (Mert.), J. Ag. *Passim*.*Nizymania*, Sond.*N. australis*, Sond.*Trematocarpus*, Kuetz.**T. concinnus* (R. Br.), J. Ag. Kent Islands (R. Brown).*Melanthalia*, Mont.*M. obtusata* (Labill.), J. Ag.*Curdia*, Harv.*C. laciniata*, Harv. Orford (Mrs. Meredith).**C. meredithiæ*, J. Ag. Orford (Mrs. Meredith).*Gracilaria*, Grev.*G. confervoides* (L.), Grev. Derwent (Rodway, Lucas).**G. spinescens* (Kuetz.), J. Ag. Doubtfully identical.*Hypnea*, Lamour.*H. episcopalis*, H. & H. *Passim*.*H. seticulosa*, J. Ag. *Passim*.*Rhododactylis*, J. Ag.**R. bulbosa* (Harv.), J. Ag.

Family 2. RHODYMENIACEÆ (Naeg.), J. Ag.

Gloioderma, J. Ag.=*Horea*, Harv.*G. australe*, J. Ag. = *Horea polycarpa*, Harv.*G. tasmanicum*, Zan. = *Horea speciosa*, Harv.*Hymenocladia*, J. Ag.*H. polymorpha* (Harv.), J. Ag.*Rhodymenia*, Grev.*R. foliifera*, Harv.*R. linearis*, J. Ag.**R. prolificans*, Zan.**R. pinnulata*, Zan.*Epymenia*, Kuetz.*E. halymenioides*, J. Ag. Channel (Lucas); Orford (Mrs. Meredith).**E. cuneata* (Harv.), J. Ag. East Coast (Gunn); Port Esperance (Lucas).*E. membranacea*, Harv. Southport (Stuart).*Halichrysis* (Schousb.), Schmitz.*H. meredithiana* (J. Ag.), De Toni. Orford (Mrs. Meredith).*Chrysomenia*, J. Ag.*C. obovata*, Sond.*C. brownii* (Harv.), J. Ag. Tamar; Ulverstone; Channel (Lucas).**C. coccinea*, Harv. Van Diemen's Land (Harvey).*Bindera*, Harv.*B. saccata* (Harv.), J. Ag. George Town (Archer).*Champia*, Desv.*C. parvula* (Ag.), J. Ag.*C. affinis* (H. & H.), J. Ag. *Passim*.*C. obsoleta*, Harv.*C. tasmanica*, Harv.*Chylocladia*, Grev.*C. clavellosa* (Turn.), Grev. George Town (Harvey).*Plocamium*, Lamour.*P. leptophyllum*, Kuetz. The Australian form of *P. coccineum* (Huds.), Lyngb.*P. flexuosum* (J. Ag.), Lucas. *Passim*. = *P. leptophyllum* var. *flexuosum*, J. Ag.*P. angustum* (J. Ag.), H. & H. *Passim*.*P. costatum* (J. Ag.), H. & H.**P. gracile*, J. Ag.*P. mertensii* (Grev.), Harv. *Passim*.*P. procerum* (J. Ag.), Harv. *Passim*.**P. dilatatum*, J. Ag.

Family 3. DELESSERIACEÆ (Naeg.), Schmitz.

Martensia, Hering.*M. australis*, Harv. T. (Gunn, Fereday).**M. gigas*, Harv. Tamar (Harvey).*Nitophyllum*, Grev.*N. crispum* (Kuetz.), J. Ag. Esp. North Coast.*N. gunnianum*, Harv.*N. endivæfolium* (H. & H.), J. Ag.**N. gattyanum*, J. Ag. Derwent (Lucas).*N. affine*, Harv.*N. multipartitum*, H. & H.*N. polyanthum*, J. Ag.*N. curdieanum*, Harv. Tamar (Lucas).

- Platyclinia*, J. Ag.
P. stipitata (Harv. ?), J. Ag. T. (Gunn, Mrs. Meredith).
Hypoglossum, Kuetz.
H. heterocystideum, J. Ag. Channel (Rodway).
Phitymophora, J. Ag.
P. imbricata, J. Ag. *Passim*.
Apoglossum, J. Ag.
A. ruscifolium (Turn.), J. Ag. Tamar (Lucas, Mrs. Perrin).
 **A. tasmanicum* (F.v.M.), J. Ag. Ralph's Bay (Rodway);
 Tamar (Harvey); Port Esperance (Lucas).
Hemineura, Harv.
H. frondosa, Harv. *Passim*.
H. wilsonis, J. Ag. Tamar (Lucas, Mrs. Perrin).
Halicnide, J. Ag.
H. similans, J. Ag. Tamar (Harvey).
Caloglossa, Harv.
C. leprieurii (Mont.), J. Ag.
Sarcomenia, Sond.
S. dasyoides, Harv. Ulverstone (Lucas).
Sonderella, Schmitz.
S. linearis (Harv.), Schmitz. Prob. Tamar (Quaife).
Claudea, Lamour.
C. elegans, Lamour. Tamar (Harvey, Fereday).
 Family 4. BONNEMAISONIACEÆ (Trev.), Schmitz.
Leptophyllis, J. Ag.
L. conferta (R. Br.), J. Ag. Southport (Rodway).
Ptilonia, J. Ag.
P. australasica, Harv. Port Esperance (Lucas).
 **P. intermedia*, Lucas. Channel (Rodway).
Delisea, Lamour.
D. elegans (Ag.), Mont. North Coast.
D. hypneoides, Harv. Tamar (Mrs. Perrin).
D. pulchra (Grev.), Mont.
Asparagopsis, Mont.
A. armata, Harv. Tamar (Mrs. Perrin); Eaglehawk
 (Lucas).

Family 5. RHODOMELACEÆ (Reichb.), Harv.

Subfamily 1. LAURENCIÆ (Harv.), Zan.

Laurencia, Lamour.

- L. filiformis* (Ag.), Mont.
L. forsteri (Mert.), Grev.
L. heteroclada, Harv. King Island (Mrs. Spang).
L. obtusa (Huds.), Lamour. *Passim*.
L. tasmanica, H. & H. Tamar; Eaglehawk (Lucas);
 Maria Island (Rodway).
L. botryoides (Turn.), Gaill. Derwent; Huon (Rodway).
L. elata (Ag.), Harv. *Passim*.

Subfamily 2. CHONDRIÆ (Kuetz.), Schmitz.

Cœloclonium, J. Ag.

- C. verticillatum* (Harv.), J. Ag. Tamar (Lucas, Mrs. Perrin).
C. incrassatum, J. Ag. (Mrs. Meredith).
Dolichoscelis, J. Ag.
D. clavifera, J. Ag. (Mrs. Meredith).
Chondria, Ag.
C. fusifolia, Hook. & Harv. Huon (Rodway); Derwent
 (Lucas).
C. debilis, Harv. Tamar (Gunn).
C. harveyana, J. Ag. Channel (Rodway).

Subfamily 3. POLYSIPHONIÆ (Kuetz.), Schmitz & Falk.

Lophurella, Schmitz.

- L. perulados* (Sond.), Schmitz. Derwent (Rodway).

Falkenbergia, Schmitz.

- F. vagabunda* (Harv.), Falk. Eaglehawk (Harvey).

Polysiphonia, Grev.Section 1. *Oligosiphonia*, J. Ag. 4 siphons.

- P. mollis*, H. & H. *Passim*.
 **P. succulenta*, Harv. One specimen, George Town (Gunn).
P. abscissa, H. & H. Ulverstone; Port Esperance (Lucas).
 **P. laxa*, Harv. East Coast (Gunn).
 **P. crassiuscula*, Harv. East Coast (Gunn).
P. ferulacea, Suhr. Table Cape (Miss Mackenzie); Burnie
 (H. J. Carter).
 **P. macrarthra*, Zan. George Town (Mrs. Goodwin).
 **P. flavescens*, Zan. George Town (Mrs. Goodwin).

- **P. spinuligera*, Zan. George Town (Mrs. Goodwin).
P. hookeri, Harv. *Passim*.
P. hystrix, H. & H. *Passim*.
P. mallardix, Harv. Snug (Lucas).
 **P. dasyoides*, Zan. George Town (Mrs. Goodwin).

Section 2. *Polysiphonia*, J. Ag.

- P. frutex*, Harv. } *Passim*. Hardly distinguishable.
P. cancellata, Harv. }
P. fuscescens, Harv. Southport (Rodway).

Bryocladia, Schmitz.

- **B. ericoides* (Harv.), Schmitz. Eaglehawk (Lucas).

Pityopsis, Falk.

- **P. tasmanica* (Sond.), Falk. George Town (Harvey).

Chiracantha, Falk.

- **C. arborea* (Harv.), Falk. Tamar (Harvey).

Subfamily 4. *PTEROSIPHONÆ*, Falk.*Pollexfenia*, Harv.

- P. pedicellata*, Harv. *Passim*.
P. lobata (Lamour), Falk. *Passim*.

Dictymenia, Grev.

- D. harveyana*, Sond. *Passim*.
 **D. myriacantha*, Kuetz. George Town (Harvey).

Subfamily 5. *LOPHOTHALIEÆ*, Schmitz & Falk.*Brongniartella*, Bory.

- B. australis* (Ag.), Schmitz. Tamar (Mrs. Perrin).
B. patersonis (Sond.), De Toni. (C. Stuart.)
B. sarcoaulon (Harv.), Schmitz. North Coast (sec. J. G. Agardh).

- **B. feredayæ* (Harv.), De Toni. George Town (Mrs. Fereday).

Lophiothalia, Kuetz.

- **L. verticillata* (Harv.), Kuetz. George Town (Harvey).
L. hormocladus, J. Ag. Tamar (Harvey).

Doxodasya, Schmitz.

- D. bolbochæte* (Harv.), Falk. George Town (Harvey).

Subfamily 6. *POLYZONIEÆ*, Schmitz.*Euzoniella*, Falk.

- E. incisa* (J. Ag.), Falk. North Coast.

Subfamily 7. *HERPOSIPHONIEÆ*, Schmitz & Falk.*Herposiphonia*, Naegeli.

- H. versicolor* (H. & H.), Falk. *Passim*.
 **H. monilifera* (H. & H.), Falk. (Gunn.)

Herpopteros, Falk.

- H. fallax*, Falk.

Subfamily 8. *RYTIPHLOEÆ* (Dene), Kuetz.*Lenormandia*, Sond.

- L. marginata*, H. & H. *Passim*.
L. prolifera (Ag.), J. Ag.
L. smithiæ (H. & H.), Falk.

Subfamily 9. *BOSTRYCHIEÆ*, Falk.*Bostrychia*, Mont.

- B. mixta*, H. & H. Port Arthur (Harvey).
B. harveyi, Mont. (C. Stuart.)

Subfamily 10. *DASYEÆ* (Kuetz.), Schmitz & Falk.*Dasya*, Ag.

- D. hapalathrix*, Harv. George Town (Harvey).
 **D. meredithiæ*, J. Ag. (Mrs. Meredith.)
D. haffiæ, Harv. Table Cape (sec. Harvey).
D. naccarioides, Harv. *Passim*.
 **D. tasmanica*, Sond. George Town (Harvey).
D. capillaris, H. & H. Tamar (Harvey).
D. villosa, Harv. *Passim*.
D. urceolata, Harv. Derwent (Rodway).
D. ceramioides, Harv. Huon; Actæon Islands, 20 fm. (Rodway).
 **D. feredayæ*, Harv. George Town (Mrs. Fereday).

Heterosiphonia, Mont.

- **H. archeri* (Harv.), De Toni. George Town (W. H. Archer).
H. gunniana (Harv.), Falk. *Passim*.
H. muelleri (Sond.), De Toni. Ulverstone; Tamar (Mrs. Perrin).

Family 6. *CERAMIACEÆ* (Bonnem.), Naeg.Subfamily 1. *SPERMOTHAMNIEÆ*, Schmitz.*Spermothamnion*, Aresch.

- S. turneri* (Mert.), Aresch. (sec. Harvey.)

Subfamily 2. GRIFFITHSIEÆ, Schmitz.

Griffithsia, Ag.

- **G. gunniana*, J. Ag. (Gunn.)
 **G. flabelliformis*, Harv.
G. monile, Harv. Bellerive (Rodway).
 **G. gracilis*, Harv. George Town (Harvey).

Subfamily 3. MONOSPOREÆ, Schmitz.

Bornetia, Thuret.

- B. antarctica* (H. & H.), De Toni.
B. meredithiana, J. Ag. Orford (Mrs. Meredith).

Monospora, Solier.

- M. arachnoides* (Harv.), J. Ag.
M. griffithsioides (Sond.), De Toni.
M. elongata (Harv.), De Toni.

Pleonosporium, Naeg.

- P. comatum* (J. Ag.), De Toni.

Subfamily 4. CALLITHAMNIEÆ (Kuetz.), Schmitz.

Callithamnion, Lyngb.

- **C. fastigiatum*, Harv. George Town (Gunn).
C. laricinum, Harv.

Seirospora, Harv.

- S. byssoides* (Arnott), De Toni, var. *caulescens*, J. Ag.

Subfamily 5. SPONGOCLONIEÆ, Schmitz.

Spongoclonium, Sond.

- S. latissimum* (H. & H.), De Toni. North Coast.
S. angustatum (H. & H.), De Toni. George Town (Harvey).
 **S. violaceum* (Harv.), De Toni. Tamar (Harvey); Derwent (Lucas).
S. scoparium, J. Ag. Orford (Mrs. Meredith).
S. paradoxum (Harv.), De Toni. Derwent (Lucas).

Haloplegma, Mont.

- H. preissii*, Sond. North Coast.

Warrenia (Harv. MS.), Kuetz.

- W. comosa*, Harv. Tamar (Harv.); Derwent (Rodway).

Subfamily 6. PTILOTEÆ, Cramer.

Euptilota, Kuetz.

- E. articulata* (J. Ag.), Schmitz. *Passim*.
E. coralloidea (J. Ag.), Kuetz. King Island (Mrs. Spong).
E. jeannerettii (Harv.), Schmitz. Port Arthur (Dr. Jeannerett); Southport (Stuart).

Rhodocalis, Kuetz.

- R. elegans*, Kuetz. Southport (Stuart); Actæon Islands, 20 fm. (Rodway).

Subfamily 7. DASYPHILEÆ, Schmitz.

Muellerena, Schmitz.

- M. insignis* (Harv.), De Toni. Ulverstone (Lucas); Low Head (Mrs. Perrin).

Subfamily 8. CROUANIEÆ, Schmitz.

Ballia, Harv.

- B. callitricha* (Ag.), Mont. *Passim*.
B. robertiana, Harv. Southport (Stuart).
B. scoparia, Harv. Reminé (Rodway); Port Arthur (Lucas).

Antithamnion, Naegeli.

- A. plumula* (Ellis), Thuret. George Town (Harvey); Derwent (Lucas).
A. nodiferum, J. Ag. Port Arthur (Lucas).
A. dispar (Harv.), J. Ag. East Coast (Gunn).
A. divergens (J. Ag.), De Toni. George Town (Gunn, Harvey).
A. mucronatum (J. Ag.), De Toni. *Passim*.

Crouania, J. Ag.

- **C. gracilis*, J. Ag. T. (Gunn).
C. australis (Harv.), J. Ag. Table Cape (sec. Harvey); Low Head (Lucas).

Lasiothalia, Harv.

- L. hirsuta*, Harv. Ulverstone (Lucas).

Subfamily 9. SPYRIDIEÆ, J. Ag.

Spyridia, Harv.

- S. biannulata*, J. Ag.
S. breviararticulata, J. Ag.
S. opposita, Harv. T. (Stuart).

Subfamily 10. CERAMIEÆ (Dumort), Schmitz.

Ceramium, Wiggers.

- C. ramulosum*, H. & H. Tamar (Gunn).
C. puberulum, Sond. Tamar (Lucas).
C. stichidiosum, J. Ag.
C. subcartilagineum, J. Ag. *Passim*.
 **C. divergens*, J. Ag. T. (sec. J. Agardh).
C. deslongchampi, Chauv. (sec. Harvey).
 **C. monacanthum*, J. Ag. Derwent (Rodway).
C. isogonum, Harv. T. (McGowan).
C. nobile, J. Ag. Derwent (Lucas).
C. gracillimum, Griff. and Harv. George Town (Harvey).
C. æquabile, J. Ag. *Passim*.
 **C. torulosum*, J. Ag. Maria Island (Rodway).
C. excellens, J. Ag. Derwent (Lucas).
C. clavulatum, Ag. *Passim*.

Subfamily 11. THAMNOCARPEÆ.

Thamnocarpus, Harv.

- T. gunnarius*, Harv. George Town (Harvey).
 **T. harveyanus*, J. Ag.

Order 4. CRYPTONEMINÆ, Schmitz.

Family 1. GRATELOUPIACEÆ, Schmitz.

Halymenia, C. Ag.

- **H. chondropsidea*, J. Ag.
 **H. speciosa*, Zan. George Town (Mrs. Goodwin).
Grateloupia, C. Ag.
 **G. prolifera*, J. Ag. (Mrs. Meredith).
G. filicina (Wulf.), Ag. *Passim*.
 **G. dubia*, Zan. Hobart (sec. Zan.).

Pachymenia, J. Ag.

P. apoda, J. Ag.

Carpopeltis, Schmitz.

C. phyllophora (H. & H.), Schmitz. Port Arthur
 (Jeannerett).

Thamnoclonium, Kuetz.

T. claviferum, J. Ag. *Passim*.

Family 2. DUMONTIACEÆ (Bory), Schmitz.

Dasyphlæa, Mont.

D. tasmanica, Harv.

Family 3. NEMASTOMACEÆ (J. Ag.), Schmitz.

Nemastoma, J. Ag.

- N. feredayæ*, Harv. George Town (Mrs. Fereday).
N. palmata, Harv. T. (Miss Browne).

Family 4. SQUAMARIACEÆ (Zan.), J. Ag.

Peyssonnelia, Dene.

- P. gunniana*, J. Ag. Tamar (Mrs. Perrin).
P. australis, Sond. *Passim*.

Family 5. CORALLINACEÆ (Gray), Harv.

Lithothamnion, Phil.

- L. lichenoides* (Ell. & Sol.), Heydrich. *Passim* on *Ballia*
callitricha.

Mastophora, Dene.

- M. lamourouxii*, Dene. *Passim*.
M. canaliculata, Harv. (C. Stuart.)

Amphiroa, Lamour.

- **A. tasmanica*, Sond. (C. Stuart.)

Metagoniolithon, Weber de Bosse.

- M. charoides* (Lamour.), Weber de Bosse. North Coast.
M. stelligerum (Lamarck), Weber de Bosse. *Passim*.

Cheilosporum, Aresch.

- C. mallardix* (Harv.), De Toni. *Passim*.

Corallina (Tournefort), Lamour.Subgenus *Jania*, Lamour.

- J. micrarthrodia*, Lamour.

Subgenus *Eu-Corallina*, Yondo.

- C. officinalis*, L. *Passim*.
C. cuvieri, Lamour. *Passim*.

The Corallines of Tasmania have been very imperfectly studied.