

*A GUIDE TO THE LITERATURE AND DISTRIBUTION OF
THE BENTHIC MARINE ALGAE IN CHILE **

Part I. Chlorophyceae, Phaeophyceae

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Chilean marine flora has been described in a great deal of publications and in various countries. Moreover, recently considerable changes in taxonomical nomenclature have occurred and these complicate the identification from earlier works. The aim of this work is to make a catalogue of the algological literature and at the same time to compile all the accepted generic and specific names concerning benthic marine algae in Chile.

This is not a complete guide. It was quite impossible to review all the existing literature and information which are badly scattered and largely inaccessible. The author, however, has tried to do his best in assembling here all the published records of determination and distribution of benthic marine algae in Chile.

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Arrangements of the taxa are based on the publication of Parke and Dixon (1968), and great part of the literature concerning antarctic and subantarctic marine algae is introduced from Papenfuss (1964). The specific names of algae are alphabetically arranged in a genus, and its geographical distribution is arranged in the following order: Main land (from North to South including Antarctic region), Juan Fernandez Islands, San Ambrosio Island, San Felix Island and Easter Island. Many new places which could have been included in this work were eliminated because they have not yet been recorded in any publication. Only the recorded localities are shown with their respective literatures cited.

Species which are solely known from Juan Fernandez Islands, San Ambrosio Island and Easter Island, but not from the coast of the main land are marked with a "§".

Citation of all the relationated references to any given species has not been possible, but the references cited include the most indispensable ones, and will serve in each case as a key to the other literatures.

The present work contains 103 species of Chlorophyceae and 119 of Phaeophyceae. More information, if available, will be greatly welcomed, and Part II, Rhodophyceae, is expected to be published soon.

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C H L O R O P H Y C E A E
C H L O R O C O C C A L E S
C H A R A C I A C E A E

Codiolum A. Braun, 1852

1. §*Codiolum kuckuckii* Skottsberg et Levring

Levring, 1941, p. 604, fig. 1a.

Chilean records: Islas Juan Fernández, Isla San Félix (Levring *loc. cit.*).

ENDOSPHAERACEAE

Chlorochytrium Cohn, 1872

2. *Chlorochytrium inclusum* Kjellman

Kjellman, 1883, p. 320, pl. 31, figs. 8 - 17. Hariot, 1889, p. 14. Cotton, 1915, p. 159. Zinova, 1958, p. 47. Papenfuss, 1964, p. 5.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

Note: Papenfuss (1964, p. 5, f.n.) writes, "Jónsson (1959) and Kornmann (1961) have shown that in Europe *Chlorochytrium inclusum* is the sporophyte of *Spongomorpha lanosa*."

Gomontia Bornet et Flahault, 1888

3. *Gomontia archiza* Hariot

Hariot, 1891, p. 417; 1892; p. 1431. Papenfuss, 1964, p. 7.

Chilean record: Tierra del Fuego (Hariot, 1892, *loc. cit.*).

Note: Papenfuss (1964, p. 7, f.n.) writes, "the type species of *Gomontia*, *G. polyrhizum*, has been shown by Kornmann (1959) to be a species of *Codiolum*, in which genus it was placed when first described."

PRASIOLALES

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Prasiola (C. Agardh) Meneghini, 1838

4. *Prasiola crispa* subsp. *antarctica* (Kützing) Knebel f. *antarctica*

Knebel, 1935, p. 21, figs. 10e-10g. Papenfuss, 1964, p. 4.

Records under other names:

Prasiola antarctica Kützing, 1849, p. 473; 1855, p. 13, pl. 40, fig. IV. J. Agardh, 1883, p. 84. Svedelius, 1900, p. 289, figs. 2b and 2c, pl. 16, fig. 5. Hariot, 1907, p. 3.

Prasiola rothii β *falklandica* Kützing, 1849, p. 473.

Prasiola falklandica (Kützing), Kützing, 1855, p. 13, pl. 40, fig. 3.

Ulva crispa Lightfoot. J. D. Hooker, 1847, p. 498.

Prasiola crispa (Lightfoot) Kützing Hariot, 1889, p. 30. Wille, 1902, p. 209, pl. 3, figs. 1-20, pl. 4, fig. 1. Reinbold, 1908, p. 186. Cotton, 1915, p. 161. Hylmæ, 1919, p. 8.

Chilean records: Tierra del Fuego (Svedelius, J. D. Hooker *loc. cit.*).

5. *Prasiola stipitata* Suhr

Suhr in Jenssen, 1848, p. 16. Hamel, 1931, p. 17. Kylin, 1949, p. 31. Levring, 1960, p. 10.

Chilean records: Bahía San Vicente, Bahía de Ancud, Archipiélago de los Chonos, Canal Moraleda, Estero Reloncaví (Levring *loc. cit.*).

6. *Prasiola tessellata* (J. D. Hooker et Harvey) Kützing

Kützing, 1849, p. 473; 1855, p. 14, pl. 40, fig. 7. Hariot, 1887*b*, pp. 231-233; 1889, p. 29, pl. 2; 1891, p. 417. Knebel, 1935, p. 45, fig. 24. Papenfuss, 1964, p. 5.

Records under syns.:

Ulva tessellata J. D. Hooker et Harvey, 1845, p. 297.

Mastodia tessellata (J. D. Hooker et Harvey) J. D. Hooker et Harvey in J. D. Hooker, 1847, p. 499, pl. 194, fig. 2.

Chilean records: Bahía Orange, Tierra del Fuego (Hariot, 1889, *loc. cit.*).

MONOSTROMACEAE

Monostroma Thuret, 1854

7. *Monostroma applanatum* Gain

Gain, 1811*b*, p. 484; 1912, p. 22, figs. 16-22, pl. 6, fig. 8. Hylmæ, 1919, p. 4, fig. 11. Papenfuss, 1964, p. 2.

Chilean records: Isla Decepción, Isla Wienche (Gain, 1912, *loc. cit.*).

Note: Antarctic type.

8. *Monostroma fuscum* (Postels et Ruprecht) Wittrock

Wittrock, 1866, p. 53, pl. 4, fig. 13.

Record under syn.:

Ulva fusca Postels et Ruprecht, 1840, p. 21, pl. 37.

Chilean record: Tierra del Fuego (Postels and Ruprecht *loc. cit.*).

9. *Monostroma grevillei* (Thuret) Wittrock

Wittrock, 1866, p. 57, pl. 4, fig. 14. J. Agardh, 1882*a*, p. 101. Hariot, 1889, p. 26. Piccone, 1889, p. 16. Papenfuss, 1964, p. 3.

Records under other names:

Ulva grevillei? Thuret. Le Jolis, 1863, p. 37.

Ulva lactuca sensu J. D. Hooker, 1847, p. 498.

Monostroma lactuca sensu Reinbold, 1908, p. 186.

Chilean records: Tierra del Fuego (J. D. Hooker *loc. cit.*).

Note: See Papenfuss (1964, p. 2, f.n.) for the discussion of Reinbold's material from Iles Kerguelen.

10. *Monostroma hariotii* Gain

Gain, 1911a, p. 726; 1912, p. 18, pl. 1, figs. 7-11. Hylmæ, 1919, p. 4, figs. 12-21. Levring, 1944, p. 3, figs. 1a-1b. Skottsberg, 1953, p. 555. Llaña, 1948a, p. 21. Delépine and Hureau, 1963, p. 112. Papenfuss, 1964, p. 2.

Chilean record: Antártica (Gain, 1912, *loc. cit.*).

Note: Antarctic type.

11. *Monostroma splendens* (Ruprecht) Wittrock

Wittrock, 1866, p. 50, pl. 3, figs. 12a-12b. J. Agardh, 1882, p. 112, pl. 3, figs. 91-92. Hylmæ, 1919, p. 7, figs. 22-26; 1938, p. 7. Papenfuss, 1964, p. 2.

Record under another name:

Ulvaria splendens Ruprecht, 1848, p. 218. De Toni, 1864, p. 107. *Monostroma endiviifolium* sensu Cotton, 1915, p. 159 (see Chamberlain, 1963).

Chilean record: Tierra del Fuego (Hylmæ, 1938, *loc. cit.*).

ULOTHRICHACEAE

Ulothrix Kützing, 1833

12. *Ulothrix australis* Gain

Gain, 1911b, p. 483; 1912, p. 15, figs. 1-6. Skottsberg, 1953, p. 531. Delépine and Hureau, 1963, p. 112. Papenfuss, 1964, p. 1.

Chilean record: Antártica (Gain *loc. cit.*).

Note: Antarctic type.

13. *Ulothrix flacca* (Dillwyn) Thuret

Gain, 1912, p. 17. Skottsberg, 1953, p. 532, fig. 1. Papenfuss, 1964, p. 1.

Records under other names:

?*Conserva flacca* Dillwyn, 1809, pl. 49.

Ulothrix isagona Thuret. Hariot, 1889, p. 25.

Chilean records: Tierra del Fuego, Antártica (Gain, *loc. cit.*).

14. *Ulothrix implexa* (Kützing) Kützing

Kützing, 1849, pp. 349; 1852, p. 30, pl. 94, fig. 2. Ardissonne, 1888, p. 210. Papenfuss, 1964, p. 1.

Records under syns.:

Hormidium implexum Kützing. De Toni, 1864, p. 168.

Hormiscia implexa (Kützing) De Toni, 1864, p. 168.

Chilean record: Tierra del Fuego (Ardissonne? *loc. cit.*).

ULVACEAE

Blidingia Kylin, 1947

15. *Blidingia minima* (Nageli ex Kützing) Kylin

Kylin, 1947, p. 181. Levring, 1960, p. 9.

Records under other names:

Enteromorpha minima Kützing, 1856, p. 16, pl. 43, fig. III.

Bliding, 1938, p. 84.

Enteromorpha micrococca Kützing, 1856, p. 11, pl. 30, fig. 2.

Enteromorpha nana (Sommerfelt) Sjøæstedt (see Levring *loc. cit.*).

Chilean records: Estero Reloncaví, Bahía Herradura de Guayacán (Levring *loc. cit.*).

Enteromorpha Link in Nees, 1820

16. *Enteromorpha bulbosa* (Suhr) Montagne

Montagne, 1846, p. 3; 1852, p. 372. Kützing, 1849, p. 482. J. Agardh, 1882, p. 139. Svedelius, 1900, p. 288. Hariot, 1907, p. 3. Reinbold, 1907, p. 554; 1908, p. 185. Gain, 1912, p. 26. Howe, 1914, p. 22. Cotton, 1915, p. 160. Hylmæ, 1919, p. 3, figs. 4-10; 1938, p. 4. Taylor, 1939, p. 130; 1947, p. 59. Levring, 1944, p. 3, figs. 1c-1f; 1953, p. 531; 1960, p. 8. Skottsberg, 1953, p. 531. Dawson, Acleto and Foldvik, 1964, p. 6. Papenfuss, 1964, p. 2.

Records under other names:

Solenia bulbosa Suhr, 1839, p. 72, pl. 4, fig. 46.

Enteromorpha novae-hollandiae Kützing. Hohenacker, 1860, N° 418. Reinsch, 1890, p. 419.

Enteromorpha hookeriana Kützing, 1849, p. 480.

Ulva bulbosa (Suhr) Hariot, 1889, p. 28.

Enteromorpha flexuosa sensu Svedelius?, 1900, p. 286.

Enteromorpha bulbosa f. *novae-hollandiae* (Kützing) Chapman, 1956, p. 411, fig. 54.

Enteromorpha bulbosa f. *cornucopiae* Chapman, 1956, p. 412, fig. 56.

Chilean records: Valparaíso (Montagne, 1852, *loc. cit.*); Caldera (Taylor, 1947, *loc. cit.*); various places between Chiloé and Iquique, Bahía Tandy (Skottsberg *loc. cit.*); Tierra del Fuego (Hariot, 1889, *loc. cit.*).

17. *Enteromorpha clathrata* (Roth) J. Agardh

J. Agardh, 1883, p. 153. Llaña, 1948b, p. 82. Cotton, 1915, p. 161. Papenfuss, 1964, p. 2.

Records under *syns.*:

Conferva clathrata Roth, 1806, p. 175.

Zignoa clathrata (Roth) Trevisan. Montagne, 1845, p. 30.

Ulva clathrata (Roth) C. Agardh. Ardissonne, 1888, p. 210.

Chilean records: Valparaíso (Llaña *loc. cit.*); Tierra del Fuego (Montagne *loc. cit.*).

18. *Enteromorpha compressa* (Linnaeus) Greville

Greville, 1830, p. 180, pl. 18. J. D. Hooker, 1847, p. 500. Bailey and Harvey, 1862, p. 160. Dickie, 1876*c*, p. 46; 1876*e*, p. 203; 1879, p. 63. Rabenhorst, 1878, p. 66. Hemsley, 1884, p. 242. Safford, 1888, p. 19. Reinbold, 1908, p. 185. Laing, 1909, p. 494. Cotton, 1915, p. 160. Setchell and Gardner, 1920, p. 251, pl. 14, figs. 7-8, pl. 16, fig. 3. De Wildeman, 1935, p. 15. Taylor, 1937, p. 64, pl. 3, fig. 3; 1939, p. 130; 1947, p. 60; 1960, p. 60. Dawson, 1944, p. 203. Smith, 1944, p. 52, pl. 5, fig. 7. Llaña, 1948*b*, p. 82. Chapman, 1956, p. 406. Etcheverry, 1960, p. 89. Dawson, Acleto and Foldvik, 1964, p. 6, pl. 2, fig. A. Papenfuss, 1964, p. 3. Santelices, 1966, p. 19.

Records under other names:

Ulva compressa Linnaeus, 1755, p. 433. Gaudichaud, 1826, p. 128.

Conserva crinita Roth, 1797, p. 62, pl. 1, fig. 3.

Enteromorpha crinita (Roth) J. Agardh, 1822, p. 144.

Solenia compressa (Linnaeus) C. Agardh. Bory, 1826-1828, p. 201.

Enteromorpha complanata Kützing. Kützing, 1849, p. 480, *pro parte*.

Enteromorpha compressa var. *crinita* Montagne, 1852, p. 371.

Ulva enteromorpha var. *compressa* (Linnaeus) Le Jolis. Hariot, 1889, p. 28; 1891, p. 416.

Chilean records: Antofagasta, Iquique, Arica (Santelices *loc. cit.*); Valparaíso (Llaña *loc. cit.*); Tierra del Fuego (J. D. Hooker, Hariot *loc. cit.*); Islas Juan Fernández (Etcheverry, 1960, p. 89).

19. *Enteromorpha gunniana* J. Agardh

J. Agardh, 1882, p. 122. Hylmæ, 1938, p. 6. Zinova, 1958, p. 47. Levring, 1960, p. 8. Papenfuss, 1964, p. 3.

Chilean records: Archipiélago de los Chonos, Canal Moraleda (Levring *loc. cit.*).

20. *Enteromorpha flexuosa* (Wulfen) J. Agardh

J. Agardh, 1882, p. 126. Svedelius, 1900, p. 126. Levring, 1960, p. 8.

Record under syn:

Ulva flexuosa Wulfen, in Roth, 1797, p. 188.

Chilean records: Laguna San Rafael, Golfo de Ancud (Levring *loc. cit.*); Tierra del Fuego (Svedelius *loc. cit.*).

21. *Enteromorpha intestinalis* (Linnaeus) Link

Link, 1820, p. 5. Greville, 1830, p. 179. Montagne, 1839, p. 5. J. D. Hooker, 1847, p. 500. Dickie, 1879, p. 63. Hemsley, 1884, p. 242.

Svedelius, 1900, p. 287. Howe, 1914, p. 24. Cotton, 1915, p. 160. De Toni, 1920a, p. 200. Setchell and Gardner, 1920, p. 252. Taylor, 1937, p. 65, pl. 3, fig. 7, pl. 4, figs. 4-5; 1939, p. 131; 1947, p. 60; 1960, p. 62. Levring, 1941, p. 605. Dawson, 1944, p. 203. Smith, 1944, p. 49, pl. 5, figs. 4-6. Llaña, 1948b, p. 83. Chapman, 1956, p. 404. Etcheverry, 1960, p. 89. Dawson, Acleto and Foldvik, 1964, p. 6. Papenfuss, 1964, p. 3. Navas, 1966, p. 96, pl. I, fig. 1. Santelices, 1966, p. 16.

Records under other names:

Ulva intestinalis Linnaeus, 1753, p. 418.

Ulva enteromorpha Le Jolis. Ardissonne, 1888, p. 210.

Ulva bulbosa var. *intestinalis* (Linnaeus) Hariot, 1889, p. 29.

Ulva enteromorpha var. *intestinalis* (Linnaeus) Hariot, 1891, p. 417.

Chilean records: Antofagasta (*Santelices loc. cit.*); Quintero (Navas *loc. cit.*); Valparaíso (Llaña *loc. cit.*); Ancud (De Toni *loc. cit.*); Tierra del Fuego (J. D. Hooker *loc. cit.*); Islas Juan Fernández (Levring, Etcheverry *loc. cit.*).

22. *Enteromorpha lingulata* J. Agardh

J. Agardh, 1822, p. 143. Taylor, 1942, p. 13; 1947, p. 60.

Chilean record: Arica (Taylor, 1947, *loc. cit.*).

23. *Enteromorpha linza* (Linnaeus) J. Agardh

J. Agardh, 1883, p. 134, pl. 4, figs. 110-112. Howe, 1914, pp. 24. Cotton, 1915, p. 160. Taylor, 1937, p. 68, pl. 3, fig. 8; 1939, p. 131; 1947, p. 60; 1960, p. 63. Llaña, 1948b, p. 83. Dawson, Acleto and Foldvik, 1964, p. 7. Papenfuss, 1964, p. 3.

Records under other names:

Ulva linza Linnaeus, 1753, p. 1163. Setchell and Gardner, 1920, p. 262, pl. 12, figs. 1-4. Levring, 1937, p. 18; 1941, p. 605; 1960, p. 10. Hylmo, 1938, p. 6. Smith, 1944, p. 44, pl. 3, figs. 4-5. Chapman, 1956, p. 386, fig. 30. Etcheverry, 1960, p. 88. Navas, 1966, p. 97, pl. 1, fig. 4. Santelices, 1966, p. 29, fig. 5.

Ulva enteromorpha var. *lanceolata* (Linnaeus) Le Jolis. Hariot, 1889, p. 27.

Enteromorpha bertoloni var. *lanceolata* Grunow. Rabenhorst, 1878, p. 66.

Chilean records: Arica (Taylor, 1947, *loc. cit.*); Arica, Antofagasta, Iquique (*Santelices loc. cit.*); Valparaíso (Hylmo, Llaña *loc. cit.*); Quintero (Navas *loc. cit.*); Canal Tenglo (Levring, 1960, *loc. cit.*); Tierra del Fuego (Hariot, Taylor, 1939, *loc. cit.*); Islas Juan Fernández (Levring, 1941, Etcheverry *loc. cit.*).

24. *Enteromorpha pacifica* Montagne

Montagne, 1852, p. 372.

Chilean record: Copiapó (Montagne *loc. cit.*).

Note: See Etcheverry (1958, p. 180).

25. *Enteromorpha prolifera* (O. F. Müller) J. Agardh

J. Agardh, 1883, p. 129, pl. 4, figs 103 and 104. Howe, 1914, p. 23. Setchell and Gardner, 1920, p. 254. Taylor, 1937, p. 65, pl. 3, fig. 2; 1960, p. 59. Dawson, 1944, p. 204. Chapman, 1956, p. 408. Dawson, Acleto and Foldvik, 1964, p. 7. Santelices, 1966, p. 22.

Record under another name:

Ulva prolifera O. F. Müller, 1778, pl. 763, fig. 1.

Chilean record: Bahía Antofagasta, Iquique (Santelices *loc. cit.*).

26. *Enteromorpha ramulosa* (J. E. Smith) J. D. Hooker

J. D. Hooker, 1833, p. 319. Kützing, 1856, p. 12, pl. 33, fig. II. Rabenhorst, 1878, p. 66. Taylor, 1939, p. 132. Llaña, 1948a, p. 23. Levring, 1960, p. 8. Papenfuss, 1964, p. 3.

Chilean records: Estero Reloncaví (Levring *loc. cit.*); Bahía Borja, Bahía Tandy, Puerto Mayne, Caleta Latitud (Taylor *loc. cit.*); Estrecho de Magallanes (Llaña *loc. cit.*).

Percursaria Bory, 1823

27. *Percursaria percursa* (C. Agardh) Rosenvinge

Rosenvinge, 1893, p. 963. Svedelius, 1900, p. 288. Kylin, 1949, p. 16. Levring, 1960, p. 9. Papenfuss, 1964, p. 4.

Record under another name:

Enteromorpha percursa (C. Agardh) J. Agardh, 1842, p. 15. Hylmæ, 1938, p. 7.

Chilean records: Estero Reloncaví (Levring *loc. cit.*); Estrecho de Magallanes (Hylmæ *loc. cit.*); Tierra del Fuego (Svedelius *loc. cit.*).

*Ulva** Linnaeus, 1753

28. *Ulva lactuca* L. var. *lactuca*

Linnaeus, 1753, p. 1163. Montagne, 1846, p. 5. Le Jolis, 1863, p. 38. Ardissonne, 1888, p. 210. Hariot, 1889, p. 27; 1891, p. 416. Hylmæ, 1938, p. 3. Llaña, 1948a, p. 22; 1948b, p. 83. Levring, 1941, p. 605; 1960, p. 9. Etcheverry, 1960, p. 87. Dawson, Acleto and Foldvik, 1964, p. 7, pl. 8, fig. G. Papenfuss, 1964, p. 4.

Records under other names:

Ulva rigida C. Agardh, 1822, p. 410.

Phycoseris myriotrema sensu Rabenhorst, 1878, p. 66.

* See Papenfuss (1960) regarding name and typification.

Chilean records: Known from the whole Chilean coast (Levring *loc. cit.*); Islas Juan Fernández (Etcheverry *loc. cit.*); Isla de Pascua (Børgesen, 1924, p. 248).

Note: See Levring (1960).

29. *Ulva lactuca* var. *latissima* (Linnaeus) De Candolle

De Candolle, 1805, p. 9. Hariot, 1889, p. 27. Howe, 1914, p. 19. Taylor, 1937, p. 75, pl. 4, fig. 6; 1939, p. 132; 1947, p. 60. Etcheverry, 1958, p. 180. Dawson, Acleto and Foldvik, 1964, p. 8, pl. 4. Papenfuss, 1964, p. 4.

Records under other names:

Ulva latissima Linnaeus, 1753, p. 1163. Montagne, 1852, p. 369.

Ulva latissima var. *longissima* Montagne, 1839, p. 5.

Chilean records: Arica (Taylor, 1947, *loc. cit.*); Valparaíso, Concepción (Montagne, 1852, *loc. cit.*); Tierra del Fuego (Hariot *loc. cit.*); Isla Hermite, Cabo de Hornos (J. D. Hooker, 1847, p. 498).

30. *Ulva lactuca* f. *genuina* Hauck

Hauck, 1885, p. 435, fig. 191.

Chilean record: Chile (Hauck *loc. cit.*).

Note: Nomenclatural investigation is required on the typification and application of the name of forma.

31. *Ulva lactuca* f. *lacunculata* (Kützinger) Hauck

Hauck, 1885, p. 347.

Record under syn.:

Phycoseris lacunculata Kützinger, 1849, p. 476; 1856, p. 9, pl. 21.

Chilean record: Arica, Mejillones, Valparaíso (Hauck *loc. cit.*).

Note: Nomenclatural investigation is required on the typification and application of the name of forma.

32. *Ulva lactuca* f. *myriotrema* (Lenormand) J. Agardh

J. Agardh, 1882, p. 169. De Toni and Forti, 1920, p. 699.

Records under other names:

Phycoseris myriotrema Lenormand in Kützinger, 1849, p. 477; 1856, p. 9, pl. 23, fig. I.

Ulva myriotrema Crouan, 1867, p. 131. Piccone, 1886, p. 21.

Chilean record: Valparaíso, Isla Cuptana in Province of Chiloé (De Toni and Forti *loc. cit.*).

33. *Ulva nematoidea* Bory

Bory, 1826-1828, p. 190. Montagne, 1846, p. 6. Levring, 1941, p. 605; 1960, p. 9. Santelices, 1966, p. 32, fig. 5.

Records under other names:

Phycoseris lobata Kützinger, 1849, p. 477; 1856, p. 10, pl. 27.

Phycoseris nematoidea Montagne, 1852, p. 368.

Ulva fasciata f. *costata* Howe, 1914, p. 20, pls. 1-2, figs. 10-23.

Taylor, 1947, p. 60. Dawson, Acleto and Foldvik, 1964, p. 8, pl. 3. *Ulva lobata* (Kützinger) Setchell et Gardner. Setchell and Gardner, 1920, p. 268. Smith, 1944, p. 46, pl. 4, figs. 4-5. Taylor, 1945, p. 43.

Chilean records: Various places between Tocopilla and Chiloé (Levring, 1960, *loc. cit.*); Bahía Mejillones del Sur (Santelices *loc. cit.*); Concepción (Bory *loc. cit.*); Islas Juan Fernández (Levring, 1941, *loc. cit.*).

34. *Ulva reticulata* Forskaal

Forskaal, 1775, p. 187. Montagne, 1845, p. 33. J. Agardh, 1882, p. 166. Okamura, 1912, p. 182, pl. 100. Levring, 1941, p. 606. Chapman, 1956, p. 394. Papenfuss, 1964, p. 4.

Chilean records: Arica (Montagne? *loc. cit.*); Islas Juan Fernández (Levring *loc. cit.*).

35. *Ulva rigida* C. Agardh) Thuret

Montagne, 1846, p. 5. J. D. Hooker, 1847, p. 498. Piccone, 1886, p. 21. Svedelius, 1900, p. 284, fig. 1. Laing, 1909, p. 494. Levring, 1944, p. 3, figs. 1g and 1h; 1945, p. 5. Zinova, 1958, p. 47. Papenfuss, 1964, p. 4.

Records under other names:

Ulva rigida C. Agardh, 1822, p. 410; 1824, p. 189.

Ulva lactuca var. *rigida* (C. Agardh) Le Jolis, 1863, p. 38. Hariot, 1889, p. 26. Howe, 1914, p. 18. De Toni and Forti, 1920a, p. 699. Taylor, 1937, p. 75; 1939, p. 133; 1947, p. 60. Chapman, 1956, p. 388. Etcheverry, 1960, p. 88. Dawson, Acleto and Foldvik, 1964, p. 8.

Ulva rigida var. *laciniata* (Wulfen) J. Agardh, 1882, p. 169. Piccone, 1889, p. 17.

Ulva lactuca f. *rigida* (C. Agardh) Hylmæ, 1919, p. 1, figs. 1-3; 1938, p. 3. Llaña, 1948a, p. 22.

Chilean records: Coquimbo (Montagne *loc. cit.*); Valparaíso (Llaña *loc. cit.*); Cartajena in Bahía de San Rafael of Province of Llanquihue, Quemchi, Ancud and Quilén in Province of Chiloé (De Toni and Forti *loc. cit.*); Tierra del Fuego (J. D. Hooker *loc. cit.*); Islas Juan Fernández, Islas San Ambrosio (Etcheverry *loc. cit.*).

CHAETOPHORALES

CHAETOPHORACEAE

Ectochaete (Huber) Wille, 1909

36. §*Ectochaete pacifica* Levring

Levring, 1941, p. 611, figs. 3a-3e.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

37. §*Ectochaete ramosa* Levring

Levring, 1941, p. 612, figs. 3f-3k.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

Entocladia Reinke, 1879

38. *Entocladia maculans* (Cotton) Papenfuss

Papenfuss, 1964, p. 1.

Record under syn.:

Endoderma maculans Cotton, 1915, p. 161, pl. 6, figs. 1-2.

Chilean record: Antártica (Cotton *loc. cit.*).

Note: Type locality is Islas Malvinas in a species of *Nitophyllum*.

39. *Entocladia viridis* Reinke

Reinke, 1879, p. 476, pl. 6, figs. 6-9. Kylin, 1938, p. 67. Levring, 1941, p. 612; 1944, p. 5; 1945; p. 6; 1960, p. 12. Skottsberg, 1953, p. 532. Papenfuss, 1964, p. 2.

Records under syn.:

Endoderma viride (Reinke) Lagerheim, 1883, p. 75. Børgesen, 1924, p. 248, fig. 1.

Chilean records: Bahía San Vicente, Bahía de Ancud (Levring, 1960, *loc. cit.*); Islas Juan Fernández (Levring, 1941, *loc. cit.*); Isla de Pascua (Børgesen *loc. cit.*); Antártica (Skottsberg *loc. cit.*).

TRENTEPOHLIACEAE

Trentepohlia Martius, 1817

40. *Trentepohlia polycarpa* Nees et Montagne

Nees and Montagne, in Montagne, 1836, p. 70; 1846, p. 16. Hariot, 1889, p. 23. Etcheverry, 1958, p. 168.

Records under another name:

Chroolepus flavum Kützing, 1843, p. 284; 1849, p. 428.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

ACROSIPHONIALES

ACROSIPHONIACEAE

Spongomorpha Kützing, 1843

41. *Spongomorpha arcta* (Dillwyn) Kützing

Kützing, 1854, p. 16, pl. 74, fig. II. Taylor, 1937, p. 43; 1939, p. 134.
Levring, 1960, p. 12. Papenfuss, 1964, p. 8.

Records under other names:

Conserva arcta Dillwyn, 1809, p. 67. C. Agardh, 1824, p. 118.

Cladophora arcta (Dillwyn) Kützing, 1843, p. 263. J. D. Hooker, 1847, p. 495. Dickie, 1876c, p. 47; 1876e, p. 203; 1879, p. 64. Hemsley, 1884, p. 242. Askenasy, 1888, p. 4. Hariot, 1889, p. 21. p. 163.

Reinsch, 1890, p. 424. Reinbold, 1908, p. 186. Cotton, 1915, *Acrosiphonia arcta* (Dillwyn) J. Agardh. Hohenacker, 1853, N^o 101a. Gain, 1912, pp. 31 and 118, figs. 31-35.

Chilean records: Tierra del Fuego (J. D. Hooker, Hariot *loc. cit.*); Bahía Sholl (Taylor, 1939, *loc. cit.*); Isla Decepción (Gain *loc. cit.*).

Note: See Hylmæ (1938, pp. 11-13).

42. *Spongomorpha oxyclada* (Montagne) Kützing

Kützing, 1854, p. 17, pl. 79, fig. II. Taylor, 1939, p. 134. Levring, 1960, p. 12. Papenfuss, 1964, p. 8.

Records under other names:

Conserva oxyclada Montagne, 1839, p. 5, pl. 4, fig. I.

Conserva aculeata Montagne, 1839, p. 4, pl. 4, fig. I (non Suhr).

Cladophora oxyclada (Montagne) Kützing, 1849, p. 419. Hariot, 1889, p. 22. Hylmæ, 1938, p. 14, fig. 3.

Chilean records: Caleta Latitud (Taylor, 1939, *loc. cit.*); Tierra del Fuego (Montagne, Hylmæ, Kützing *loc. cit.*).

43. *Spongomorpha pacifica* (Montagne) Kützing

Kützing, 1854, p. 17, pl. 78, fig. II. Levring, 1960, p. 12. Papenfuss, 1964, p. 8.

Records under other names:

Conserva pacifica Montagne, 1842, p. 16; 1845, p. 7, pl. 14, fig. 2. Harvey and J. D. Hooker, 1845, p. 192.

Cladophora hookeriana Kützing, 1849, p. 418. Piccone, 1886, p. 28; 1889, p. 18. Askenasy, 1888, p. 5. Hariot, 1889, p. 22. Cotton, 1915, p. 163.

Cladophora pacifica (Montagne) Kützing, 1849, p. 419. Rabenhorst, 1878, p. 66. Hariot, 1889, p. 22. Reinbold, 1907, p. 559;

1908, p. 186. Laing, 1909, p. 495. Cotton, 1915, p. 163. Hylmæ, 1919, p. 11; 1938, p. 11, fig. 2. Chittleborough, 1956, p. 70.
Spongomorpha hookeriana (Kützing, 1854, p. 16, pl. 77, fig. I.
Acrosiphonia pacifica (Montagne) J. Agardh, in Hohenacker, 1857, N^o 256. Svedelius, 1900, p. 295, pl. 17, figs. 7-13. Levring, 1944, p. 5; 1945, p. 5. Chapman, 1956, p. 443, fig. 95.
Cladophora aegiceras sensu Askenasy, 1888, p. 4.
Chilean records: Laguna San Rafael in Province of Aisen (Levring, 1960, *loc. cit.*); Tierra del Fuego (Hylmo *loc. cit.*); Antártica (Levring, 1945, *loc. cit.*).

44. *Spongomorpha spinescens* (Kützing) Kützing

Kützing, 1854, p. 16, pl. 75, fig. II. Taylor, 1937, p. 94; 1939, p. 134. Levring, 1960, p. 12. Papenfuss, 1964, p. 8.

Record under syn.:

Cladophora spinescens Kützing, 1849, p. 418; 1854, p. 16, pl. 75, fig. II.

Chilean record: Bahía Sholl in Tierra del Fuego (Taylor, 1939, *loc. cit.*).

Urospora Areschoug, 1866

45. *Urospora penicilliformis* (Roth) J. E. Areschoug

J. E. Areschoug, 1866, p. 15. Reinbold, 1908, p. 186. Gain, 1912, p. 32, figs. 36-42. Hylmæ, 1919, p. 11. Papenfuss, 1964, p. 8.

Records under other names:

Conferva penicilliformis Roth, 1806, p. 272.

Urospora mirabilis J. E. Areschoug. Levring, 1944, p. 4. Skottsberg, 1953, pp. 533 and 555.

Chilean records: Tierra del Fuego, Tierra de Graham in Antártica (Hylmæ *loc. cit.*); Isla Decepción (Gain *loc. cit.*).

CLADOPHORALES

CLADOPHORACEAE

Chaetomorpha Kützing, 1845

46. *Chaetomorpha aerea* (Dillwyn) Kützing

Kützing, 1849, p. 379; 1853, p. 19, pl. 59, fig. 1. Hauck, 1885, p. 438. Taylor, 1937, p. 81, pl. 1, figs. 10-12; 1960, p. 72. Llaña, 1948b, p. 83. Levring, 1941, p. 608; 1960, p. 10. Chapman, 1956, p. 460, figs. 116a-116b. Etcheverry, 1960, p. 93. Santelices, 1966, p. 36, fig. 7.

Records under other names:

Conserva aerea Dillwyn, 1809, p. 48, pl. 80.

Conserva antennina Bory, 1804, p. 161; 1826-1828, p. 227. Montagne, 1852, p. 378.

Chaetomorpha antennina (Bory) Kützing, 1849, p. 379. Taylor, 1945, p. 52; 1947, p. 61. Levring, 1941, p. 608.

Chilean records: Arica, Antofagasta, Tocopilla (*Santelices loc. cit.*); Iquique, Bahía San Vicente, Lota, Bahía de Ancud, Seno Reloncaví, Estero Reloncaví (Levring, 1960, *loc. cit.*); Valparaíso (Llaña *loc. cit.*); Islas Juan Fernández (Levring, Etcheverry *loc. cit.*).

47. *Chaetomorpha clavata* (C. Agardh) Kützing

Kützing, 1847, p. 166. Etcheverry, 1958, p. 181.

Records under another name:

Conserva clavata C. Agardh, 1824, p. 99. Montagne, 1852, p. 380

Chilean record: Chiloé (Montagne *loc. cit.*).

48. *Chaetomorpha crassa* (C. Agardh) Kützing

Kützing, 1845, p. 204; 1853, p. 19, pl. 59, fig. 2. Etcheverry, 1958, p. 181.

Records under other names:

Conserva crassa C. Agardh, 1824, p. 99. Kützing, 1843, p. 260.

Chaetomorpha linum (O. F. Müller) Kützing, 1845, p. 204; 1849, p. 378; 1853, p. 18, pl. 55, fig. 3. Levring, 1941, p. 608. Llaña, 1948b, p. 83.

Conserva linum Roth. Montagne, 1852, p. 379.

Chilean records: Valparaíso (Llaña *loc. cit.*); Islas Juan Fernández (Levring *loc. cit.*).

49. *Chaetomorpha darwinii* Kützing

Kützing, 1849, p. 380.

Record under syn.:

Conserva clavata var. *darwinii* J. D. Hooker, 1847, p. 493, pl. 192, fig. 1.

Chilean record: Tierra del Fuego (J. D. Hooker *loc. cit.*).

50. *Chaetomorpha dubyana* Kützing

Kützing, 1853, p. 18, pl. 56, fig. 1. Piccone, 1886, p. 26. De Toni and Forti, 1920a, p. 701. Papenfuss, 1964, p. 5.

Chilean records: Ancud, Bahía San Rafael in Province of Llanquihue (De Toni and Forti *loc. cit.*); Tierra del Fuego (Piccone *loc. cit.*).

51. *Chaetomorpha firma* Levring

Levring, 1941, p. 609, figs. 2a-2b. Etcheverry, 1960, p. 93.

Chilean records: Islas Juan Fernández (Levring, Etcheverry *loc. cit.*);
Isla de Pascua (Etcheverry *loc. cit.*).

52. *Chaetomorpha linoides* Kützing

Kützing, 1847, p. 167; 1853, p. 17, pl. 53, fig. 1. Etcheverry, 1958,
p. 181.

Records under other names:

Chaetomorpha linoides var. *restricta* (Suhr) Kützing, 1849, p. 377.

Conserva linoides C. Agardh, 1824, p. 98. Montagne, 1852, p. 379.

Chilean records: Valparaíso (Montagne, 1852, *loc. cit.* See Etcheverry,
1958, p. 181); Islas Juan Fernández (Montagne, 1835. See Etche-
verry, 1958, p. 141.

53. *Chaetomorpha melagonium* (Weber et Mohr) Kützing

Kützing, 1845, p. 204; 1849, p. 379; 1853, p. 19, pl. 61, fig. 1. Llaña,
1948b, p. 83.

Record under syn.:

Conserva melagonium Weber et Mohr, 1804, p. 194, pl. 3, fig. 2.

Chilean record: Valparaíso (Llaña *loc. cit.*).

54. *Chaetomorpha nodosa* Kützing

Kützing, 1849, p. 376. De Toni, 1889, p. 25. Papenfuss, 1964, p. 5.

Chilean record: Tierra del Fuego (De Toni *loc. cit.*).

Cladophora Kützing, 1843

55. *Cladophora arcta* var. *pescettii* Piccone

Piccone, 1889, p. 18. Papenfuss, 1964, p. 6.

Chilean record: Tierra del Fuego (Piccone *loc. cit.*).

56. *Cladophora australis* Rabenhorst

Rabenhorst, Algen Europas, N^o 2385 (see Hariot, 1889, p. 19). Pa-
penfuss, 1964, p. 6.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

57. *Cladophora confusa* Hariot

Hariot, 1891, p. 417 (note). Cotton, 1915, p. 163. Papenfuss, 1964,
p. 5.

Records under other names:

Cladophora kuetzingii Hariot, 1889, p. 20 (non Ardissonne).

Cladophora repens sensu Kützing, in Hohenacker, 1860b, N^o 411.

Cladophora complicata sensu Kützing, in Hohenacker, 1862,
N^o 468.

Chilean record: Tierra del Fuego (Hariot, 1891, *loc. cit.*).

58. *Cladophora falklandica* (J. D. Hooker et Harvey) J. D. Hooker et Harvey

J. D. Hooker and Harvey, in J. D. Hooker, 1847, p. 495, pl. 193, fig. I. Kützing, 1849, p. 408. Hariot, 1889, p. 20. Cotton, 1915, p. 162. Hylmæ, 1919, p. 9; 1938, p. 14. Taylor, 1939, p. 133. Levring, 1960, p. 11. Papenfuss, 1964, p. 6.

Record under syn.:

Conserva falklandica J. D. Hooker et Harvey, 1845, p. 294.

Chilean records: Canal Chacao, Seno Almirantazgo (Levring *loc. cit.*); Calera Latitud (Taylor *loc. cit.*); Tierra del Fuego (Hylmæ, 1938, *loc. cit.*).

59. *Cladophora fascicularis* Mertens) Kützing

Kützing, 1843, p. 268; 1849, p. 393; 1853, p. 26, pl. 90, fig. II. Howe, 1914, p. 34. Levring, 1941, p. 610. Dawson, Acleto and Foldvik, 1964, p. 10, pl. 6.

Record under syn.:

Conserva fascicularis Mertens. C. Agardh, 1824, p. 114. Montagne, 1839, p. 4, pl. 7, fig. 1; 1852, p. 381.

Cladophora hariotiana Howe, 1914, p. 32, pl. 4.

Chilean records: Tierra del Fuego (Montagne, 1839, *loc. cit.*); Islas Juan Fernández (Levring *loc. cit.*).

60. *Cladophora fracta* (O. F. Müller ex Vahl) Kützing

Kützing, 1843, p. 263, pl. 11, fig. I. Etcheverry, 1958, p. 181.

Records under other names:

Conserva fracta Dillwyn, 1809, pl. 14.

Conserva heterocladia Kützing. Montagne, 1852, p. 382.

?*Conserva heterocladia* var. *chilensis* Kützing. Montagne, 1852, p. 382.

Chilean record: Chile? (see Montagne *loc. cit.*).

61. *Cladophora glaucescens* (Griffith) J. D. Hooker et Harvey

J. D. Hooker and Harvey, in J. D. Hooker, 1847, p. 496. Kützing, 1854, p. 5, pl. 24, fig. I. Hariot, 1889, p. 20. Newton, 1931, p. 85. Papenfuss, 1964, p. 6.

Record under syn.:

Conserva glaucescens Griffith. De Toni, 1864, p. 320.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

62. *Cladophora incompta* (J. D. Hooker et Harvey) J. D. Hooker et Harvey

J. D. Hooker and Harvey, in J. D. Hooker, 1847, p. 496, pl. 192, figs. III. Hariot, 1889, p. 21. Svedelius, 1900, p. 292, pl. 17, figs. 1-6. Reinbold, 1907, p. 559. Hylmæ, 1919, p. 10; 1938, p. 16. Levring, 1960, p. 12. Papenfuss, 1964, p. 6.

Records under other names:

Conserua incompta J. D. Hooker et Harvey, 1845, p. 294.

Cladophora incompta f. *tenuis* Reinbold, 1908, p. 187.

Rhizoclonium pachydermum subsp. *maclovianum* Carlson, 1913, p. 53, fig. 19. Cotton, 1915, p. 162.

Chilean records: Seno Reloncaví, Archipiélago de los Chonos, Canal Moraleda (Levring *loc. cit.*); Tierra del Fuego (Svedelius, Hylmo *loc. cit.*).

63. *Cladophora magellanica* Ardissonne

Ardissonne, 1888, p. 210. Papenfuss, 1964, p. 7.

Chilean record: Tierra del Fuego (Ardissonne *loc. cit.*).

64. §*Cladophora perpusilla* Skottsberg et Levring

Skottsberg et Levring, *in* Levring, 1941, p. 611, figs. 2c-2f.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

65. *Cladophora peruviana* (Taylor) Dawson, Acleto et Foldvik

Dawson, Acleto and Foldvik, 1964, p. 12, pl. 5, figs. F-G.

Record under syn.:

Chaetomorpha peruviana Taylor, 1947, p. 61.

Chilean record: Lota (Taylor *loc. cit.*).

66. *Cladophora repens* (J. Agardh) Harvey

Harvey, 1851, pl. 236. Kützing, 1849, p. 416. Hariot, 1889, p. 18.

Papenfuss, 1964, p. 7.

Record under syn.:

Aegagropila repens (J. Agardh) Kützing, 1845, p. 15, pl. 70, fig. II.

Gain, 1912, p. 27, figs. 24-30.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*). Antártica (Gain *loc. cit.*).

67. *Cladophora rupestris* (Linnaeus) Kützing

Kützing, 1843, p. 270; 1849, p. 396; 1854, p. 1, pl. 3, fig. I. J. D.

Hooker, 1847, p. 495. Dickie, 1876c, p. 47; 1879, p. 64. Hemsley,

1884, p. 242. Hariot, 1889, p. 18. De Wildeman, 1935, p. 23.

Papenfuss, 1964, p. 7.

Records under syn.:

Conserua rupestris Linnaeus, 1791, p. 1395.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

68. §*Cladophora socialis* Kützing

Kützing, 1849, p. 416. Børgesen, 1924, p. 249, fig. 2.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

69. *Cladophora subsimplex* Kützing

Kützing, 1849, p. 411; 1854, p. 11, pl. 54, fig. II. Hariot, 1889, p. 21. Reinbold, 1908, p. 187. Cotton, 1915, p. 162. Hylmæ, 1919, p. 10; 1938, p. 15. Levring, 1960, p. 11. Papenfuss, 1964, p. 7.

Records under other names:

Conferva simpliciuscula J. D. Hooker et Harvey, 1845, p. 295.

Cladophora simpliciuscula (J. D. Hooker et Harvey) J. D. Hooker et Harvey, in J. D. Hooker, 1847, p. 496, pl. 192, fig. 4 (non Kützing). Dickie, 1876e, p. 203; 1879, p. 64. Hemsley, 1884, p. 242.

Cladophora subsimplex var. *fuegiana* De Toni, 1889, p. 25.

Chilean records: Bahía de Ancud, Canal Chacao, Seno Reloncaví (Levring *loc. cit.*); Tierra del Fuego (J. D. Hooker, 1847, Hariot, Hylmæ *loc. cit.*).

Rhizoclonium Kützing, 1843

70. *Rhizoclonium ambiguum* (J. D. Hooker et Harvey) Kützing

Kützing, 1849, p. 387. Dickie, 1879, p. 64. Hemsley, 1884, p. 242. Askenasy, 1888, p. 4. Hariot, 1889, p. 18; 1891, p. 417. Papenfuss, 1964, p. 7.

Records under other names:

Conferva ambiguum J. D. Hooker et Harvey, 1845, p. 295. J. D. Hooker, 1847, p. 494, pl. 191, fig. I.

Conferva linum sensu J. D. Hooker, 1847, p. 493.

Rhizoclonium hookeri Kützing, 1849, p. 383; 1853, p. 21, pl. 67, fig. III. Laing, 1909, p. 495, pl. 24, figs. 5 and 6. Levring, 1945, p. 5. Chapman, 1956, p. 468, fig. 126a.

Lychaete tortuosa sensu J. Agardh, in Hohenacker, 1857, N^o 253.

Chaetomorpha linum sensu Dickie, 1879, p. 64. Sensu Hemsley, 1884, p. 242.

Chilean record: Tierra del Fuego (J. D. Hooker, Hariot *loc. cit.*).

71. *Rhizoclonium capillare* Kützing

Kützing, 1847, p. 166. Hariot, 1889, p. 17.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

72. *Rhizoclonium riparium* (Roth) Harvey

Harvey, 1851, pl. 238; 1857, p. 92. Dickie, 1879, p. 56. Hemsley, 1884, p. 242. Hylmæ, 1938, p. 17. Levring, 1960, p. 11. Taylor, 1960, p. 76. Papenfuss, 1964, p. 8.

Record under syn.:

Conferva riparia Roth, 1806, p. 261.

Gladophora riparia (Roth) J. D. Hooker, 1847, p. 495.

Chilean records: Bahía de Ancud, Seno Reloncaví, Estero Reloncaví (Levring *loc. cit.*); Tierra del Fuego (Hylmæ *loc. cit.*).

73. *Rhizoclonium tortuosum* (Dillwyn) Kützing
Kützing, 1845, p. 205; 1849, p. 384; 1853, p. 21, pl. 68, fig. I. Hariot, 1889, p. 17. Setchell and Gardner, 1920, p. 185. De Wildeman, 1935, p. 22. Taylor, 1937, p. 83; 1947, p. 62. Etcheverry, 1958, p. 181. Levring, 1960, p. 11. Papenfuss, 1964, p. 8.

Records under other names:

Conserva tortuosa Dillwyn, 1805, p. 46, pl. 46.

Conserva implexa Dillwyn, 1809, p. 46, pl. B. Montagne, 1852, p. 381.

Chaetomorpha tortuosa Kützing, 1849, p. 376; 1853, p. 17, pl. 51, fig. II. Ardissonne, 1888, p. 210.

Rhizoclonium capillare sensu Hariot, 1889, p. 17 (cf. Hariot, 1892, p. 1430).

?*Chaetomorpha breviararticulata* Hauck, 1885, p. 440.

Chilean records: Arica (Taylor, 1947, *loc. cit.*); Seno Reloncaví (Levring *loc. cit.*); Tierra del Fuego (Hariot *loc. cit.*).

VALONIACEAE

*Cladophoropsis** Børgesen, 1905

74. *Cladophoropsis brachyartra* (Svedelius) Børgesen

Hylmæ, 1938, p. 11. Levring, 1960, p. 10. Papenfuss, 1964, p. 9.

Record under syn.:

Siphonocladus brachyartrus Svedelius, 1900, p. 304, fig. 3, pl. 16, figs. 2 and 3, pl. 18.

Chilean records: Quemchi in Chiloé (Hylmæ *loc. cit.*); Estero Reloncaví (Levring *loc. cit.*); Tierra del Fuego (Svedelius, Hylmæ *loc. cit.*).

75. *Cladophoropsis voluticola* (Hariot) Børgesen

Papenfuss, 1964, p. 9.

Record under syn.:

Siphonocladus voluticola Hariot, 1887a, p. 56, fig. [1]; 1889, p. 22, pl. 1, figs. 2-4.

Chilean record: Tierra del Fuego (Hariot *loc. cit.*).

Halicystis Areschoug, 1850

76. §*Halicystis pyriformis* Levring

Levring, 1941, p. 612, figs. 3L-3P.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

* See Papenfuss (1964).

*Microdictyon** Decaisne, 1839

77. §*Microdictyon japonicum* Setchell

Setchell, 1925, p. 107; 1929, p. 528, figs. 49-56. Levring, 1941, p. 607.
Taylor, 1947, p. 61.

Chilean records: Islas Juan Fernández (Levring, Taylor *loc. cit.*).

78. §*Microdictyon umbilicatum* (Velley) Zanardini

Zanardini, 1860, p. 79, pl. 19. Børgesen, 1924, p. 253, fig. 5.

Record under syn.:

Conserva umbilicata Velley. De Toni, 1864, p. 361.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

Rhipidiphyllon Heydrich, 1894

79. §*Rhipidiphyllon reticulatum* (Askenasy) Heydrich

Heydrich, 1894, p. 281. Børgesen, 1924, p. 251, figs. 3 and 4.

Record under syn.:

Anadyomene reticulata Askenasy, 1888, p. 5.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

Valonia Ginnani, 1757

80. §*Valonia ventricosa* J. Agardh

J. Agardh, 1887, p. 96. Børgesen, 1924, p. 251.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

CAULERPALES
BRYOPSISIDACEAE

Bryopsis Lamouroux, 1809

81. *Bryopsis australis* Sonder

Sonder, 1847, p. 152. Kützing, 1849, p. 492. Hylmæ, 1919, p. 15,
figs. 31 and 32; 1938, p. 17. Taylor, 1939, p. 135. Papenfuss, 1964,
p. 9.

Chilean record: Tierra del Fuego (Hylmæ *loc. cit.*).

82. *Bryopsis magellanica* Hylmæ

Hylmæ, 1919, p. 16, fig. 33. Papenfuss, 1964, p. 9.

Chilean record: Tierra del Fuego (Hylmæ *loc. cit.*).

* See Levring (1941, p. 607).

83. *Bryopsis plumosa* (Hudson) C. Agardh

C. Agardh, 1822, p. 448. J. D. Hooker, 1847, p. 492. Dickie, 1876*e*, p. 203; 1879, p. 63. Hemsley, 1884, p. 242. Hariot, 1889, p. 31. Papenfuss, 1964, p. 9.

Chilean records: Tierra del Fuego (J. D. Hooker, Hariot *loc. cit.*).

84. *Bryopsis rosae* Gaudichaud ex C. Agardh

C. Agardh, 1822, p. 450. Gaudichaud, *in* Mirbel, 1825, p. 96. Gaudichaud, 1826, pp. 128 and 158. Bory, 1826*c*, p. 593; 1826-1828, p. 211, pl. 24, fig. 1. J. D. Hooker, 1847, p. 492. Montagne, 1852, p. 276. Kützing, 1856, p. 29, pl. 84, fig. II. J. Agardh, 1887, p. 25. Hariot, 1889, p. 32. Cotton, 1915, p. 164. Hylmæ, 1919, p. 14, figs. 29 and 30. Taylor, 1939, p. 135; 1947, p. 63. Levring, 1960, p. 13. Papenfuss, 1964, p. 9. Santelices, 1966, p. 45, pl. 9.

Record under another name:

?*Bryopsis agardhii* Montagne, 1852, p. 277. Etcheverry, 1958, p. 168.

Chilean records: Arica (Taylor, 1947, *loc. cit.*); Antofagasta (Santelices *loc. cit.*); Chiloé (Montagne *loc. cit.*); Tierra del Fuego (J. D. Hooker, Hariot, Hylmæ, Levring *loc. cit.*).

CAULERPACEAE

Caulerpa. Lamouroux, 1809

85. *Caulerpa clavifera* (Turner) C. Agardh

C. Agardh, 1822, p. 437. Montagne, 1852, p. 375.

Records under other names:

Fucus clavifer Turner, 1808, pl. 57.

Chauvinia macrophysa Kützing, 1857, p. 6, pl. 15, fig. II.

Chauvinia clavifera Bory, 1826-1828, p. 207.

Chilean record: Concepción (Bory *loc. cit.*).

86. *Caulerpa freycinetii* C. Agardh

C. Agardh, 1822, p. 446; 1824, p. 184. Bory, 1826-1828, p. 192, pl. 22, fig. 2. Montagne, 1852, p. 376. Kützing, 1857, p. 2, pl. 4, fig. III.

Chilean records: Valparaíso (see Grunow, 1870, p. 34); Concepción (Bory *loc. cit.*).

87. *Caulerpa plumaris* Forskaal

Forskaal, 1775, p. 190. C. Agardh, 1822, p. 436. Bory, 1826-1828, p. 193, pl. 22, fig. 4. Montagne, 1852, p. 376. Harvey, 1857, p. 17, fig. 38. Kützing, 1857, p. 4, pl. 6, fig. IV.

Chilean records: Valparaíso (see Grunow, 1870, p. 34); Concepción (Bory *loc. cit.*).

CODIACEAE

Codium Stackhouse, 1797

88. §*Codium cerebriforme* Setchell

Setchell, 1937, p. 588, pl. 34, figs. 1-3, pl. 39, figs. 1-5. Levring, 1941, p. 614.

Chilean records: Islas Juan Fernández (Setchell, Levring *loc. cit.*).

89. *Codium contractum* Kjellman

Kjellman, 1897, p. 35, pl. 7, figs. 1-3. Svedelius, 1900, p. 300. Schmidt, 1923, p. 57. Setchell, 1937, p. 597. Papenfuss, 1964, p. 10.

Chilean records: Tierra del Fuego del territorio de Argentina (Svedelius *loc. cit.*); Islas Juan Fernández (Setchell *loc. cit.*).

90. *Codium difforme* Kützing

Kützing, 1843, p. 300; 1856, p. 35, pl. 99, fig. II. Askenasy, 1888, p. 10. Hariot, 1889, p. 32. Reinbold, 1908, p. 187. Cotton, 1915, p. 164. Hylmæ, 1919, p. 12, fig. 27; 1938, p. 18. Schmidt, 1923, p. 31. Taylor, 1939, p. 135. Levring, 1960, p. 13. Papenfuss, 1964, p. 10.

Chilean records: Montemar, Ramuncho, Estrecho de Magallanes (Levring *loc. cit.*); Tierra del Fuego (Hariot, Hylmæ *loc. cit.*).

91. *Codium dimorphum* Svedelius

Svedelius, 1900, p. 300. Gardner, 1919, p. 487, pl. 42. Setchell and Gardner, 1920, p. 168, pl. 9, figs. 7-8. Setchell, 1937, p. 590, pl. 36. Levring, 1960, p. 13. Navas, 1966, p. 99, pl. II, fig. 4. Santelices, 1966, p. 39, fig. 8.

Chilean records: Arica, Tocopilla, Antofagasta (Santelices *loc. cit.*); Quintero (Navas *loc. cit.*); Tierra del Fuego del territorio de Argentina (Svedelius, Gardner *loc. cit.*); Islas Juan Fernández (Setchell, 1937, *loc. cit.*).

92. §*Codium faveolatum* Howe

Howe, 1914, pp. 45 and 46, text figs. 15-19, pl. 10. Setchell, 1937, p. 397.

Chilean record: Islas Juan Fernández (Setchell *loc. cit.*).

93. §*Codium fernandezianum* Setchell

Setchell, 1937, p. 592, pls. 35-38, figs. 5-15, pls. 41-48, figs. 9-49. Levring, 1941, p. 614. Taylor, 1947, p. 64.

Chilean records: Islas Juan Fernández (Setchell, Levring *loc. cit.*).

94. *Codium fragile* (Suringar) Hariot

Hariot, 1889, p. 32. Schmidt, 1923, p. 47. Hylmæ, 1938, p. 18. Taylor, 1939, p. 135. Levring, 1945, p. 8. Papenfuss, 1964, p. 10.

Records under other names:

Acanthocodium fragile Suringar, 1870, p. 23, pl. 8.

Codium tomentosum sensu J. D. Hooker, 1847, p. 491.

Codium mucronatum J. Agardh, 1886, p. 43, pl. I, fig. 3b. Svedelius, 1900, p. 299, pl. 17, figs. 14 and 15. Cotton, 1915, p. 165. Hylmœ, 1919, p. 14, fig. 28.

Codium mucronatum var. *atlanticum* Cotton, 1912, p. 114, figs. 3-5, pls. 7 and 8. Setchell, 1937, p. 598.

Chilean records: Tierra del Fuego (J. D. Hooker, Hylmœ *loc. cit.*); Islas Juan Fernández (Setchell *loc. cit.*).

95. §*Codium peruvianum* (Hower) Setchell

Setchell, 1937, p. 597.

Record under syn.:

Codium tomentosum var. *peruvianum* Howe, 1914, pp. 43 and 44, text figs. 9-14, pl. 9.

Chilean record: Islas Juan Fernández (Setchell *loc. cit.*).

96. §*Codium pocockiae* Silva

Silva, 1959, p. 138, pl. 12, fig. 14. Etcheverry, 1960, p. 90, pl. I, figs. 1 and 2.

Chilean record: Isla de Pascua (Etcheverry *loc. cit.*).

97. *Codium setchelli* Gardner

Gardner, 1919, p. 489, pl. 42, figs. 10 and 11. Schmidt, 1923, p. 28. Taylor, 1939, p. 135; 1947, p. 64.

Chilean record: Tocopilla (Taylor *loc. cit.*).

98. *Codium spongiosum* Harvey

Harvey, 1855, p. 565; 1858, pl. 55. De Toni, 1964, p. 488. Ardissonne, 1888, p. 211. Papenfuss, 1964, p. 10.

Chilean record: Tierra del Fuego (Ardissonne *loc. cit.*).

99. *Codium tomentosum* Stackhouse

Stackhouse, 1801, p. 24. Montagne, 1845, p. 35; 1852, p. 275. Harvey, and J. D. Hooker, in J. D. Hooker, 1847, p. 193. Bailey and Harvey, 1862, p. 160. Dickie, 1876c, p. 46; 1879, p. 63. Hemsley, 1884, p. 242. Ardissonne, 1888, p. 211. Safford, 1888, p. 19. Hariot, 1889, p. 33. Laing, 1909, p. 496. Etcheverry, 1958, p. 168. Papenfuss, 1964, p. 10.

Records under syn.:

Spongodium tomentosum Lamouroux. Gaudichaud, 1826, p. 129. Bory, 1826c, p. 595.

Chilean records: Concepción (Montagne, 1852, *loc. cit.*); Tierra del Fuego (Hariot *loc. cit.*).

100. *Codium unilaterale* Setchell et Gardner

Setchell and Gardner, 1924, p. 710. Levring, 1941, p. 614.

Record under another name:

Codium unilaterale f. *skottsbergianum* Setchell, 1937, p. 596, pl. 38, fig. 16. Taylor, 1947, p. 64.

Chilean records: Islas Juan Fernández (Setchell, Levring, Taylor *loc. cit.*).

***Halimeda* Lamouroux, 1812**

101. §*Halimeda opuntia* Lamouroux

Lamouroux, 1816, p. 308. Etcheverry, 1960, p. 89.

Records under other names:

Halimeda opuntia Lamx. f. *reinschii* (Hauck) Barton, 1901, p. 21, figs. 22 and 22a. Okamura, 1915, p. 208, pl. 148, figs. 8-12. Børgesen, 1924, p. 254.

Halimeda reinschii Hauck, 1886, p. 167. De Toni, 1864, p. 525.

Chilean records: Isla de Pascua (Børgesen, Etcheverry *loc. cit.*).

DERBESIACEAE

***Derbesia* Solier, 1846**

102. *Derbesia antarctica* Skottsberg

Skottsberg, 1953, p. 533, figs. 2-4. Papenfuss, 1964, p. 9.

Chilean record: Antártica (Skottsberg *loc. cit.*).

Note: See Papenfuss (1960).

103. *Derbesia marina* (Lyngbye) Solier

Solier, 1847, p. 158. De Toni, 1864, p. 426. Setchell and Gardner, 1920, p. 165, pl. 15, fig. 3.

Records under other names:

Vaucheria marina Lyngbye, 1819, p. 79, pl. 22, fig. A. C. Agardh, 1824, p. 172.

Ectosperma marina Bory, 1822-1825, p. 213.

Chilean record: Concepción (Bory *loc. cit.*).

Note: Haploid phase of this species is *Halicystis ovalis* (Lyngbye) Areschoug.

P H A E O P H Y C E A E

ECTOCARPALES

ECTOCARPACEAE

***Bachelotia* (Bornet) Kueckuck ex Hamel, 1939**

1. *Bachelotia antillarum* (Grunow) Gerloff

Gerloff, 1959, p. 38. Papenfuss, 1964, p. 11.

Records under other names:

Ectocarpus antillarum Grunow, 1870, p. 46, pl. 4, fig. 2.

Pylaiella littoralis f. *rigidiuscula* Skottsberg, 1921, p. 5, fig. 1a.

Levring, 1945, p. 8.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

Compsonema Kuckuck, 1899

2. §*Compsonema ramulosum* Setchell et Gardner

Setchell and Gardner, 1922, p. 362, pl. 39, figs. 1-5; 1925, p. 486.

Levring, 1941, p. 618.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

Ectocarpus Lyngbye, 1819

3. §*Ectocarpus arabicus* Figari et De Notaris

Figari et De Notaris, 1851, p. 39, figs. 5a-5c. Kützing, 1855, p. 21, pl. 72, fig. II. Levring, 1941, p. 615.

Records under another names:

Ectoscarpus coniferus Børgesen, 1914, p. 164; 1937, p. 5.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

4. *Ectocarpus berteroanus* Montagne

Montagne, 1852, p. 272.

Chilean record: Costa de Chile (Montagne *loc. cit.*).

5. §*Ectocarpus breviararticulatus* J. Agardh

J. Agardh, 1847, p. 7. Børgesen, 1924, p. 256, fig. 7.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

6. *Ectocarpus chilensis* Reinsch

Reinsch, 1875, p. 12, pl. 20a, figs. a-c.

Chilean record: Chiloé (see Hohenacker, 1852-1862?).

7. §*Ectocarpus chnoosporae* Børgesen

Børgesen, 1924, p. 255, fig. 6.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

Note: Endemic.

8. *Ectocarpus confervoides* (Roth) Le Jolis

Le Jolis, 1863, p. 75. Kjellman, 1872, p. 67. Askenasy, 1888, p. 18, pl. 5, fig. 12. Hariot, 1889, p. 35. Skottsberg, 1907, p. 8; 1921,

p. 7. Setchell and Gardner, 1925, p. 415. Taylor, 1937, p. 109, pl. 8, figs. 1-3; 1939, p. 136; 1960, p. 200. Levring, 1941, p. 615; 1960, p. 14. Rosenvinge and Lund, 1941, p. 14. Dawson, 1944, p. 220. Smith, 1944, p. 84. Etcheverry, 1960, p. 95. Lindauer, Chapman and Aiken, 1961, p. 144, fig. 3. Papenfuss, 1964, p. 11. Santelices, 1966, p. 49, fig. 10.

Records under other names:

Ceramium confervoides Roth, 1797, pp. 151 and 152.

Ectocarpus confervoides f. *siliculosa* (Dillwyn) Kjellman, 1872, p. 73. Rosenvinge and Lund, 1941, p. 34.

Ectocarpus confervoides f. *penicillata* (C. Agardh) Kjellman, 1872, p. 80. Rosenvinge and Lund, 1941, p. 34.

Ectocarpus confervoides f. *typica* Kjellman, 1883, p. 342. Rosenvinge and Lund, 1941, p. 21.

Ectocarpus penicillatus (C. Agardh) Kjellman, 1890, p. 76.

Ectocarpus confervoides f. *dasycarpa* (Kuckuck) Rosenvinge et Lund, 1941, p. 26.

Chilean records: Arica, Iquique, Tocopilla, Antofagasta (Santelices *loc. cit.*); Coquimbo, Laguna San Rafael, Seno Reloncaví, Seno Almirantazgo (Levring, 1960, *loc. cit.*); Tierra del Fuego (Skottsberg, Taylor, 1939, *loc. cit.*); Islas Juan Fernández (Levring, 1941, Etcheverry *loc. cit.*).

9. *Ectocarpus constanciae* Hariot

Hariot, 1887a, p. 56, figs. [2]A and [2]B; 1889, p. 36, pl. 3, figs. 3 and 4; 1891, p. 418. Askenasy, 1888, p. 17, pl. 5, figs. 5 and 8. Skottsberg, 1907, p. 7; 1921, p. 7. Cotton, 1915, p. 174. Taylor, 1939, p. 136. Levring, 1960, p. 14. Papenfuss, 1964, p. 11.

Chilean records: Tierra del Fuego (Hariot, Skottsberg, Taylor *loc. cit.*).

10. *§Ectocarpus cylindricus* Saunders

Saunders, 1898, p. 150. Setchell and Gardner, 1925, p. 432. Levring, 1941, p. 616.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

11. *Ectocarpus exiguus* Skottsberg

Skottsberg, 1907, p. 5, fig. 1; 1921, p. 6. Cotton, 1915, p. 174. Levring, 1960, p. 14. Papenfuss, 1964, p. 11.

Record under another name:

Ectocarpus humilis Reinsch, 1890, p. 411, figs. 4a-4c (non Kützing, 1849, p. 457).

Chilean records: Tierra del Fuego (Skottsberg *loc. cit.*).

12. *§Ectocarpus granulosus* (J. E. Smith) C. Agardh

C. Agardh, 1828, p. 45. Setchell and Gardner, 1925, p. 434. Levring,

1941, p. 615. Lindauer, Chapman and Aiken, 1961, p. 145, fig. 4.
Record under syn.:

Conferva granulosa J. E. Smith, in J. E. Smith and J. Sowerby,
1790-1814, pl. 2351.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

13. §*Ectocarpus hemisphericus* Saunders

Saunders, 1898, p. 151. Setchell and Gardner, 1925, p. 434. Levring,
1941, p. 617.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

14. §*Ectocarpus minutissimus* Skottsberg et Levring

Skottsberg and Levring, in Levring, 1941, p. 616, fig. 4.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

15. *Ectocarpus penicillatus* C. Agardh

C. Agardh, 1824, p. 162. Skottsberg, 1907, p. 10; 1921, p. 7. Papenfuss,
1964, p. 11.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

16. §*Ectocarpus pusillus* Griffiths

Griffiths, in Wyatt, 1835, Nº 212. De Toni, 1895, p. 566. Børgesen,
1926, p. 30, figs. 15-17. Levring, 1941, p. 616.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

17. *Ectocarpus siliculosus* (Dillwyn) Lyngbye

Lyngbye, 1819, p. 131. J. D. Hooker and Harvey, 1845, p. 252. J. D.
Hooker, 1847, p. 469. Hariot, 1895, p. 96. Skottsberg, 1907, p. 8;
1921, p. 7. Cotton, 1915, p. 174. Taylor, 1939, p. 136. Papenfuss,
1964, p. 11.

Chilean records: Tierra del Fuego (J. D. Hooker, Hariot, Skottsberg,
Taylor *loc. cit.*).

Feldmannia Hamel, 1939

18. *Feldmannia chitonicola* (Saunders) Levring

Levring, 1960, p. 15, fig. 1.

Records under syn.:

Ectocarpus chitonicolus Saunders, 1898, p. 150, pl. 15, figs. 1-4.

Setchell and Gardner, 1925, p. 436. Smith, 1944, p. 88.

Chilean record: Coquimbo, Bahía Herradura de Guayacán, Bahía de
Ancud, Seno Reloncaví (Levring *loc. cit.*).

Geminocarpus Skottsberg, 1907

19. *Geminocarpus geminatus* (J. D. Hooker et Harvey) Skottsberg

Skottsberg, 1907, p. 13; 1921, p. 9; 1953, p. 555. Reinbold, 1908, p. 190. Gain, 1912, p. 36. Cotton, 1915, p. 175. Lucas, 1919, p. 10. Levring, 1941, p. 618; 1944, p. 5; 1960, p. 16. Lindauer, Chapman and Aiken, 1961, p. 150. Papenfuss, 1964, p. 11.

Records under syn.:

Ectocarpus geminatus J. D. Hooker et Harvey, 1845, p. 251. J. D. Hooker, 1847, p. 469. Dickie, 1876*c*, p. 44; 1876*e*, p. 199; 1879, p. 56. Hemsley, 1884, p. 241. Askenasy, 1888, p. 16, pl. 5, figs. 3, 6, 7, and 9. Hariot, 1889, pl. 3, figs. 1 and 2; 1895, p. 96; 1907, p. 4. Gepp and Gepp, 1907, p. 9. Reinbold, 1907, p. 565.

Chilean records: Tierra del Fuego (J. D. Hooker, Hariot, Skottsberg *loc. cit.*); Antártica (Gain *loc. cit.*); Islas Juan Fernández (Levring, 1941, *loc. cit.*).

Note: This species is the type of *Geminocarpus*.

Giffordia Batters, 1893

20. *Giffordia mitchellae* (Harvey) Hamel

Hamel 1939, p.14. Levring, 1960, p. 14. Taylor, 1960, p. 206, pl. 29, figs. 1 and 2. Santelices, 1966, p. 53, fig. 11.

Records under other names:

Ectocarpus mitchellae Harvey, 1852, p. 142, pl. 12G. Saunders, 1898, p. 153, pl. 21, figs. 1 and 2. Børgesen, 1914, p. 162. Setchell and Gardner, 1925, p. 428. Taylor, 1937, p. 111. Levring, 1941, p. 615. Dawson, 1944, p. 220. Etcheverry, 1960, p. 96. Dawson, Acleto and Foldvik, 1964, p. 16, pl. 13, fig. A.

Ectocarpus virescens Thuret, *in* Flahault, 1888, p. 382. Sauvageau, 1896, p. 17. Børgesen, 1926, p. 18.

Chilean records: Antofagasta (Santelices *loc. cit.*); Coquimbo (Levring, 1941, *loc. cit.*); Islas Juan Fernández (Levring, 1960, *loc. cit.*); Isla de Pascua (Etcheverry *loc. cit.*).

Gononema Kuckuck et Skottsberg, 1921

21. *Gononema ramosum* (Skottsberg) Kuckuck et Skottsberg

Kuckuck and Skottsberg, *in* Skottsberg, 1921, p. 11, figs. 2d-2f, 4. Levring, 1960, p. 16. Papenfuss, 1964, p. 12.

Record under syn.:

Elachista? ramosa Skottsberg, 1907, p. 54, figs. 66-68.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

Note: The systematic position of *Gononema* is uncertain (cf. Skottsberg, 1953, p. 539).

Pylaiella Bory, 1825

22. *Pylaiella litoralis* (Linnaeus) Kjellman

Kjellman, 1872, p. 99; 1890, p. 83. Piccone, 1889, p. 22. Skottsberg, 1907, p. 3; 1921, p. 5, *pro parte.*, figs. 1b-1d. Cotton, 1915, p. 174. Taylor, 1939, p. 136. Zinova, 1958, p. 47. Levring, 1960, p. 13. Lindauer, Chapman and Aiken, 1961, p. 141, fig. 1A. Papenfuss, 1964, p. 12. Asensi, 1966, p. 3, figs. 1-11.

Record under syn.:

Conserva litoralis Linnaeus, 1753, p. 1165.

Chilean records: Coquimbo, Puerto Montt, Bahía de Ancud, Estero Reloncaví, Seno Reloncaví (Levring *loc. cit.*); Tierra del Fuego (Skottsberg, Taylor *loc. cit.*).

Spongonema Kützing, 1849

23. *Spongonema tomentosum* (Hudson) Kützing

Kützing, 1849, p. 461; 1855, p. 25, pl. 83, fig. I. Hamel, 1939, p. 18. Kylin, 1947, p. 12. Levring, 1960, p. 14. Papenfuss, 1964, p. 12.

Records under syns.:

Conserva tomentosa Hudson, 1762, p. 594.

Ectocarpus tomentosus (Hudson) Lyngbye, 1819, p. 132, pl. 44.

J. D. Hooker and Harvey, 1845, p. 252. J. D. Hooker, 1847, p. 469. Hariot, 1889, p. 37. Kjellman, 1890, p. 73. Skottsberg, 1907, p. 10; 1921, p. 9.

Chilean records: Tierra del Fuego (Skottsberg *loc. cit.*).

Note: Skottsberg (1907, p. 11) is of the opinion that Hooker's material may be representative of *Ectocarpus siliculosus*.

Streblonema Derbés et Solier, 1851

24. *Streblonema patagonicum* Skottsberg

Skottsberg, 1953, p. 539, fig. 7. Papenfuss, 1964, p. 12.

Chilean record: Antártica (Skottsberg *loc. cit.*).

RALFSIACEAE

Lithoderma J. E. Areschoug, 1875

25. *Lithoderma antarcticum* Skottsberg

Skottsberg, 1953, p. 539, fig. 7. Papenfuss, 1964, p. 12.

Chilean record: Antártica (Skottsberg *loc. cit.*).

Mesospora Weber van Bosse, 1910

26. §*Mesospora vanbosseae* Børgesen

Børgesen, 1924, p. 258, fig. 9.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

Note: Endemic.

Ralfsia Berkeley, 1831

27. *Ralfsia australis* Skottsberg

Skottsberg, 1921, p. 20, fig. 8n. Levring, 1960, p. 19. Papenfuss, 1964, p. 12.

Chilean record: Iquique, Bahía Herradura de Guayacán, Bahía San Vicente, Canal Chacao, Bahía de Ancud, Golfo de Ancud, Canal San Antonio (Levring *loc. cit.*).

Note: Antarctic type.

28. *Ralfsia californica* Setchell et Gardner

Setchell and Gardner, 1925, p. 497, pl. 36, fig. 22. Taylor, 1945, p. 81. Levring, 1960, p. 19.

Chilean record: Iquique, Coquimbo, Bahía Herradura de Guayacán, Bahía de Ancud (Levring *loc. cit.*).

29. §*Ralfsia expansa* J. Agardh

J. Agardh, 1848, p. 63. Børgesen, 1912, p. 123; 1914, p. 189; 1924, p. 260. Weber van Bosse, 1913, p. 146. Levring, 1941, p. 619.

Chilean records: Islas Juan Fernández (Levring *loc. cit.*); Isla de Pascua (Børgesen, 1924, *loc. cit.*).

MYTRIONEMATACEAE

Hecatonema Sauvageau, 1879

30. *Hecatonema macuians* (Collins) Sauvageau

Skottsberg, 1921, p. 15, figs. 6a-6c. Papenfuss, 1964, p. 16.

Records under other names:

Hecatonema terminalis (Kützing) Kylin, 1947, p. 15. Levring, 1960, p. 16.

Ectocarpus terminalis Kützing, 1855, p. 22, pl. 74, fig. III.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

Myrionema Greville, 1827

31. *Myrionema densum* Skottsberg

Skottsberg, 1907, p. 50, figs. 52-55; 1921, p. 17, figs. 7e-7l. Cotton,

1915, p. 169. Levring, 1960, p. 18. Papenfuss, 1964, p. 16.
Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

32. *Myrionema fuegianum* Skottsberg

Skottsberg, 1921, p. 17, fig. 7m. Levring, 1960, p. 18. Papenfuss, 1964, p. 16.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

33. *Myrionema incomodum* Skottsberg

Skottsberg, 1907, p. 52, figs. 56-60; 1921, p. 15, figs. 6d-6h; 1953, p. 539. Levring, 1960, p. 18. Papenfuss, 1964, p. 16.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

34. *Myrionema macrocarpum* Skottsberg

Skottsberg, 1907, p. 49, figs. 48-51; 1921, p. 17, figs. 7a-7d. Cotton, 1915, p. 169. Papenfuss, 1964, p. 16.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

35. *Myrionema patagonicum* Skottsberg

Skottsberg, 1921, p. 18, ifgs. 7n-7p. Levring, 1960, p. 18. Papenfuss, 1964, p. 16.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

36. *Myrionema strangulans* Greville

Greville, 1823-1829, p. 40. Kylin, 1934, p. 5. Levring, 1941, p. 618; 1960, p. 18. Papenfuss, 1964, p. 16.

Records under other names:

Myrionema vulgare Thuret. Sauvageau, 1879, p. 185. Skottsberg, 1921, p. 16.

Myrionema vulgare var. *maculaeformis* (Kützing) Piccone, 1889, p. 22.

Chilean records: Bahía de Ancud, Canal Tenglo, Isla Tenglo, Seno Reloncaví (Levring, 1960, *loc. cit.*); Tierra del Fuego (Skottsberg *loc. cit.*); Islas Juan Fernández (Levring, 1941, *loc. cit.*).

ELACHISTACEAE

Elachista Duby, 1830

37. *Elachista antarctica* Skottsberg

Skottsberg, 1953, p. 537, fig. 6. Papenfuss, 1964, p. 16.

Chilean record: Antártica (Skottsberg *loc. cit.*).

38. §*Elachista?* sp.

Børgesen, 1924, p. 261, fig. 10.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

CORYNOPHLAEACEAE

Leathesia S. F. Gray, 1821

39. *Leathesia difformis* (Linnaeus) Aretschoug

Aretschoug, 1847, p. 154. Kuckuck, 1929, p. 43. Skottsberg, 1921, p. 26.
Levring, 1960, p. 20. Lindauer, Chapman and Aiken, 1961, p. 220,
fig. 44. Papenfuss, 1964, p. 17.

Record under syn.:

Tremella difformis Linnaeus, 1755, p. 429.

Chilean records: Canal Chacao, Bahía de Ancud (Levring *loc. cit.*);
Tierra del Fuego (Skottsberg *loc. cit.*).

Myriactula Kuntze, 1898

40. *Myriactula pusilla* (Skottsberg) Skottsberg

Skottsberg, 1953, p. 539. Papenfuss, 1964, p. 17.

Records under syn.:

Elachista pusilla Skottsberg, 1921, p. 23, figs. 9c, 9d, 10d, and
10e. Levring, 1960, p. 19.

Chilean record: Tierra del Fuego (Skottsberg, 1921, *loc. cit.*).

41. *Myriactula rosarioides* (Skottsberg) Skottsberg

Skottsberg, 1953, p. 539. Papenfuss, 1964, p. 17.

Records under syn.:

Elachista rosarioides Skottsberg, 1921, p. 21, figs. 9a, 9b, 10a-10c.
Levring, 1960, p. 19.

Chilean record: Tierra del Fuego (Skottsberg, 1921, *loc. cit.*).

CHORDARIACEAE

Caepidium J. Agardh, 1880

42. *Caepidium antarcticum* J. Agardh

J. Agardh, 1880, p. 60. Hariot, 1889, p. 52. Skottsberg, 1907, p. 40,
figs. 36-47; 1921, p. 27, fig. 12. Reinbold, 1908, p. 191. Cotton,
1915, p. 168. Kylin, 1940, p. 42. Levring, 1945, p. 9; 1960, p. 23.
Lindauer, Chapman and Aiken, 1961, p. 233, fig. 55. Papenfuss,
1964, p. 17.

Records under other names:

?*Asperococcus sinuosus* sensu J. D. Hooker, 1846, p. 468.

?*Hydroclathrus sinuosus* sensu Hariot, 1889, p. 47.

?*Colpomenia* sp. sensu Cotton, 1915, p. 173.

Chilean records: Tierra del Fuego (Skottsberg, 1907, Levring, 1960,
loc. cit.).

Chordaria C. Agardh, 1817

43. *Chordaria linearis* (J. D. Hooker et Harvey) Cotton

Cotton, 1915, p. 169, pl. 5 and 6, figs. 3 and 4. Skottsberg, 1921, p. 27, fig. 13b. Kylin, 1940, p. 41. Levring, 1960, p. 21. Papenfuss, 1964, p. 17.

Records under syn.:

Mesogloia linearis J. D. Hooker et Harvey, 1845, p. 251. J. D. Hooker, 1847, p. 470. Hariot, 1889, p. 40.

Chilean records: Tierra del Fuego (J. D. Hooker and Harvey, Skottsberg, Hariot *loc. cit.*).

Note: Kylin (1940, p. 41) is inclined to doubt that *Chordaria linearis* sensu Cotton is the same species as *Mesogloia linearis* J. D. Hooker et Harvey.

44. *Chordaria magellanica* Kylin

Kylin, 1940, p. 40, fig. 21D. Levring, 1960, p. 20. Papenfuss, 1964, p. 17.

Records under other names:

Chordaria flagelliformis sensu Hohenacker, 1859, N^o 311. Sensu Hariot, 1889, p. 40. Sensu Skottsberg, 1921, p. 26. Sensu Taylor, 1939, p. 138.

?*Chordaria hippuroides* Bory, 1826-1828, p. 139.

Chilean records: Concepción (Bory *loc. cit.*); Tierra del Fuego (Skottsberg, Taylor *loc. cit.*).

Cladosiphon Kützing, 1843

45. *Cladosiphon zosterae* (J. Agardh) Kylin

Kylin, 1940, p. 28. Levring, 1960, p. 20. Papenfuss, 1964, p. 17.

Records under syns.:

Myriocladia zosterae J. Agardh, 1841, p. 49; 1849, p. 53.

Castagne zosterae (Morh) Thuret. Skottsberg, 1921, p. 24, figs. 11a and 11b.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

Note: See Papenfuss (1964).

Eudesme J. Agardh, 1880

46. *Eudesme virescens* (Carmichael ex Harvey in J. D. Hooker) J. Agardh

J. Agardh, 1880, p. 31. Papenfuss, 1964, p. 17.

Records under syns.:

Mesogloia virescens Carmichael, in J. D. Hooker, 1853, p. 387.

Aegira virescens (Carmichael) Setchell et Gardner. Taylor, 1937, p. 140; 1939, p. 137.
Chilean record: Tierra del Fuego (Taylor *loc. cit.*).
Note: See Papenfuss (1964).

Myriogloia Kuckuck, 1929

47. *Myriogloia chilensis* (Montagne) Llaña

Llaña, 1948a, p. 60. Etcheverry, 1958, p. 168. Levring, 1960, p. 20, figs. 2 and 3.

Record under syn.:

Thorea chilensis Montagne, 1852, p. 270, pl. 15, fig. 2.

Chilean records: Chiloé (Llaña *loc. cit.*); Chile (Montagne *loc. cit.*).

48. *Myriogloia grandis* (Howe) Levring

Levring, 1939, p. 44. Juhl-Noodt, 1958, p. 168. Dawson, Acleto and Foldvik, 1964, p. 18, pl. 14. Santelices, 1966, p. 61, pl. 14.

Records under syn.:

Myriocladia grandis Howe, 1914, p. 53, pls. 12 and 13, figs. 10-20.

Taylor, 1947, p. 64.

Chilean record: Antofagasta (Santelices *loc. cit.*).

Papenfussiella Kylin, 1940

49. §*Papenfussiella moseleyi* Levring

Levring, 1941, p. 624, fig. 8.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

Stereocladon J. D. Hooker et Harvey, 1845

50. *Stereocladon rugulosus* (Bory) Hariot

Hariot, 1889, p. 41. Skottsberg, 1921, p. 31, figs. 13c-13g. Levring, 1960, p. 21. Papenfuss, 1964, p. 18.

Records under other names:

Rhodomela rugulosa Bory, 1826c, p. 593. Gaudichaud, 1826, p. 151.

Gigartina rugulosa (Bory) Bory, 1826-1828, p. 151.

Scytothamnus rugulosus (Bory) De Toni, 1895, p. 454. Holmes, 1905, p. 197; 1912, p. 87. Skottsberg, 1907, p. 49. Cotton, 1915, p. 170.

Stereocladon lyallii J. D. Hooker et Harvey, 1845, p. 250. J. D. Hooker, 1847, p. 468, pl. 174.

Dictyosiphon lyallii (J. D. Hooker et Harvey) Kützing, 1849, p. 485; 1856, p. 19, pl. 53, fig. II.

Stereothalia lyallii (J. D. Hooker et Harvey) Trevisan, 1849,
p. 446.
Chilean record: Tierra del Fuego (Hariot *loc. cit.*).
Note: See Papenfuss (1964).

SPERMATOCHNACEAE

Chordariopsis Kylin, 1940

51. *Chordariopsis capensis* (C. Agardh) Kylin

Kylin, 1940, p. 54, fig. 30. Zinova, 1958, p. 47. Papenfuss, 1964, p. 18.
Records under syn.:

Chordaria capensis (C. Agardh) Kützing. Askenasy, 1888, p. 22.
Skottsberg, 1907, p. 56. Cotton, 1915, p. 169.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).
Note: See Papenfuss (1964).

SPLACHNIDIACEAE

Splachnidium Greville, 1830

52. §*Splachnidium rugosum* (Linnaeus) Greville

Greville, 1830, p. 36. Harvey, 1858, pl. 14. Kützing, 1860, p. 4, pl. 8,
fig. I. Skottsberg, 1920, p. 277. Kuckuck, 1929, p. 77. Kylin, 1940,
p. 55. Levring, 1941, p. 624. Lindauer, Chapman and Aiken,
1961, p. 236, fig. 57.

Record under syn.:

Ulva tubulosa ramosa rugosa Linnaeus, 1767, p. 311.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

DICTYSIPHONALES

CHNOOSPORACEAE

Chnoospora J. Agardh, 1847

53. §*Chnoospora fastigiata* var. *pacifica* J. Agardh

J. Agardh, 1848, p. 171. Børgesen, 1924, p. 263, figs. 11 and 12.
Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

Scytothamnus J. D. Hooker et Harvey, 1845

54. *Scytothamnus australis* (J. Agardh) J. D. Hooker et Harvey

J. D. Hooker and Harvey, 1845, p. 531. Skottsberg, 1907, p. 48. Levring, 1941, p. 627, fig. 9.

Record under syn.:

Chordaria australis J. Agardh, 1841, p. 47.

Chilean records: Tierra del Fuego (Skottsberg *loc. cit.*); Islas Juan Fernández (Levring *loc. cit.*).

55. *Scytothamnus fasciculatus* (J. D. Hooker et Harvey) Cotton

Cotton, 1915, p. 170. Skottsberg, 1921, p. 34, figs. 14a and 14b. Taylor, 1939, p. 139. Levring, 1945, p. 9, fig. 3; 1960, p. 24. Llaña, 1948a, p. 27. Papenfuss, 1964, p. 20.

Records under other names:

Dictyosiphon? fasciculatus J. D. Hooker et Harvey, in Harvey and J. D. Hooker, 1845, p. 178, pl. 69, fig. 1. J. D. Hooker, 1847, p. 467. Hemsley, 1884, p. 241. Harriot, 1889, p. 44. Reinhold, 1908, p. 192. Laing, 1909, p. 497.

Scytothamnus australis sensu Skottsberg, 1907, p. 48.

Chilean records: Canal Tenglo, Seno Reloncaví, Laguna San Rafael, (Levring, 1960, *loc. cit.*); Tierra del Fuego (Skottsberg, Taylor *loc. cit.*); Antártica (Llaña *loc. cit.*).

DICTYOSIPHONACEAE

Cladothele J. D. Hooker et Harvey, 1845

56. *Cladothele decaisnei* J. D. Hooker et Harvey

J. D. Hooker and Harvey, 1845, p. 293. J. D. Hooker, 1847, p. 492, pl. 190, fig. I. Harriot, 1889, p. 41. Skottsberg, 1921, p. 36, figs. 15a-15f. Levring, 1960, p. 25. Papenfuss, 1964, p. 20.

Records under syn.:

Stictyosiphon decaisnei (J. D. Hooker et Harvey) G. Murray, 1891, p. 196, pl. 306. Skottsberg, 1907, p. 33. Cotton, 1915, p. 172.

Chilean records: Seno Almirantazgo (Levring *loc. cit.*); Tierra del Fuego (Skottsberg *loc. cit.*).

57. *Cladothele striarioides* (Skottsberg) Zinova

Zinova, 1954, p. 241, fig. 8. Papenfuss, 1964, p. 21.

Records under syn.:

Cladothele decaisnei var. *striarioides* Skottsberg, 1921, p. 38, figs. 15g-15o. Lindauer, Chapman and Aiken, 1961, p. 266.

Chilean distribution: Tierra del Fuego (Skottsberg *loc. cit.*).

PUNTARIACEAE

Adenocystis J. D. Hooker et Harvey, 1847

58. *Adenocystis utricularis* (Bory) Skottsberg

Skottsberg, 1907, p. 39; 1921, p. 39, figs. 16a-16f; 1953, p. 540. Reinbold, 1908, p. 190. Laing, 1909, p. 498. Cotton, 1915, p. 166. Taylor, 1939, pp. 139 and 140. Levring, 1944, p. 6; 1960, p. 23. Llaña, 1948a, p. 26. Zinova, 1958, p. 47. Delépine, 1963, p. 10. Lindauer, Chapman and Aiken, 1961, p. 258, figs. 67, N^o 1-6. Papenfuss, 1964, p. 18. Navas, 1966, p. 100, pl. 3, fig. 2. Santelices, 1966, p. 63, fig. 15.

Records under other names:

Asperococcus utricularis Bory, 1826c, p. 594. Gaudichaud, 1826, p. 129.

Scytosiphon utricularis (Bory) Trevisan, 1849, p. 431.

Adenocystis lessonii (Bory) J. D. Hooker et Harvey, in Harvey and J. D. Hooker, 1845, p. 179, pl. 69, fig. II (*nom. illeg.*). J. D. Hooker, 1847, p. 468. Kützing, 1858, p. 8, pl. 16. Dickie, 1876c, p. 44; 1876e, p. 198; 1879, p. 56. Farlow, 1876, p. 30. Hemsley, 1884, p. 241. Piccone, 1886, p. 26. Hariot, 1889, p. 47, pl. 5, figs. 1-3; 1907, p. 5. Gepp and Gepp, 1905a, p. 106; 1912, p. 77. Reinbold, 1907, p. 563. Gain, 1912, p. 43, figs. 46-49. De Wildeman, 1935, p. 44.

Asperococcus lessonii (Bory) Kützing, 1849, p. 549. (*nom. illeg.*).

Chorda lessonii (Bory) Kützing, 1849, p. 549. (*nom. illeg.*).

Encoelium bullosum sensu Gaudichaud, in Mirbel, 1825, p. 97.

Chroa sacculiformis Reinsch, 1888b, p. 145; 1890, p. 403, pl. 18, figs. 1-5.

?*Chorda rimosa* Montagne, 1842, p. 12; 1845, p. 44. Kützing, 1849, p. 548; 1858, p. 7, pl. 15, fig. II.

?*Scytosiphon rimosus* (Montagne) Endlicher, 1843, p. 25.

Chilean records: Arica, Antofagasta (*Santelices loc. cit.*); Iquique, (Levring, 1960, *loc. cit.*); Valparaíso (Levring, 1960, Navas *loc. cit.*); Concepción (Bory, 1826-1828, p. 199); Seno Reloncaví, Seno Almirantazgo, Laguna San Rafael (Levring, 1960, *loc. cit.*); Tierra del Fuego (Hooker, Hariot, Gain, Taylor, Levring, 1960, *loc. cit.*); Antártica (Llaña *loc. cit.*).

Note: See Papenfuss (1964).

Corycus Kjellman, 1889

59. *Corycus lanceolatus* (Kützing) Skottsberg

Skottsberg, 1921, p. 35. Levring, 1960, p. 24. Papenfuss, 1964, p. 19.

Records under other names:

- Phycolapathum lanceolatum* Kützing, 1849, p. 484; 1856, p. 17, pl. 47, fig. II.
Punctaria lanceolata (Kützing) Hariot, 1889, p. 44. Cotton, 1915, p. 200.
Corycus nigrescens Kjellman, 1889, p. 18, figs. 24-28.
Corycus prolifer (Hariot) Kjellman, 1893, p. 202. Skottsberg, 1907, p. 31, figs. 28-32. Cotton, 1915, p. 172. Llaña, 1948a, p. 25.
Asperococcus prolifer J. Agardh, in Hohenacker, 1855, N° 215 (nom. nud.).
Chilean records: Tierra del Fuego (Skottsberg, Llaña, Levring *loc. cit.*).

SCYTOSIPHONALES

SCYTOSIPHONACEAE

Colpomenia Derbés et Solier, 1850

60. *Colpomenia sinuosa* (Roth) Derbés et Solier

Derbés and Solier, 1856, p. 11, pl. 22, figs. 18-20. Howe, 1914, p. 50. Børgesen, 1924, p. 262. Setchell and Gardner, 1925, p. 539, pl. 45, figs. 82-86. Taylor, 1939, p. 139; 1942, p. 51; 1945, p. 83; 1947, p. 64; 1960, p. 24. Dawson, 1944, p. 232. Smith, 1944, p. 128, pl. 20, fig. 1. Llaña, 1948b, p. 84. Etcheverry, 1960, p. 103. Lindauer, Chapman and Aiken, 1961, p. 261, pl. 4. Dawson, Acleto and Foldvik, 1964, p. 24, pl. 2, fig. C. Papenfuss, 1964, p. 19. Navas, 1966, p. 100, pl. 3, fig. 3. Santelices, 1966, p. 68, fig. 17.

Records under other names:

Ulva sinuosa Roth, 1806, p. 327, pl. 12.

Hydroclathrus sinuosus (Roth) Zanardini, 1860, p. 109.

Asperococcus sinuosus Roth. Dickie, 1876e, p. 198; 1879, p. 56. Hemsley, 1884, p. 241.

Colpomenia sinuosa f. *lacunosa* Taylor, 1947, p. 65.

Chilean records: Arica (Santelices *loc. cit.*); Iquique, Tocopilla (Levring, 1960, *loc. cit.*); Antofagasta (Levring, 1960, Santelices *loc. cit.*); Coquimbo (Levring, 1960, *loc. cit.*); Valparaíso (Llaña, Navas *loc. cit.*); Bahía de Ancud (Levring, 1960, *loc. cit.*); Islas Juan Fernández (Levring, 1941, *loc. cit.*); Isla de Pascua (Børgesen, Etcheverry *loc. cit.*).

Endarachne J. Agardh, 1896

61. *Endarachne binghamiae* J. Agardh

J. Agardh, 1896, p. 27, pl. 1, fig. 5. Llaña, 1948b, p. 85.

Chilean record: Between provinces of Coquimbo and Valparaíso (Llaña *loc. cit.*).

Hydroclathrus Bory, 1826

62. §*Hydroclathrus clathratus* Bory) Howe

Howe, 1920, p. 590. Levring, 1941, p. 626.

Records under syn.:

Hydroclathrus cancellatus Bory, 1825, p. 419. Mitchell, 1893, p. 53, pl. 15. Børgesen, 1924, p. 263.

Chilean records: Islas Juan Fernández (Levring *loc. cit.*); Isla de Pascua (Børgesen *loc. cit.*).

Petalonia Derbés et Solier, 1850

63. *Petalonia fascia* (O. F. Müller) O. Kuntze

O. Kuntze, 1898, p. 419. Taylor, 1937, p. 172, pl. 14, fig. 5, pl. 15, fig. 3; 1960, p. 258. Levring, 1941, p. 626; 1960, p. 24. Etcheverry, 1960, p. 104. Lindauer, Chapman and Aiken, 1961, p. 255, fig. 64. Papenfuss, 1964, p. 20. Santelices, 1966, p. 65, fig. 16.

Records under other names:

Fucus fascia O. F. Müller, 1782, p. 7, pl. 768.

Ilea fascia (O. F. Müller) Fries, 1835, p. 321. Skottsberg, 1921, p. 35. Setchell and Gardner, 1925, p. 535, pl. 44, figs. 68-71, and 73. Smith, 1944, p. 126, pl. 20, fig. 4. Chittleborough, 1956, p. 70.

Phyllitis fascia (O. F. Müller) Kützing, 1843, p. 342. Skottsberg, 1907, p. 35. Reinbold, 1907, p. 566. Cotton, 1915, p. 172. Llaña, 1948b, p. 84.

Laminaria fascia (O. F. Müller) C. Agardh. J. D. Hooker, 1847, p. 466.

Phyllitis fascia β *curvata* Kützing, 1849, p. 567.

Phyllitis fascia var. *latior* Hariot, 1889, p. 46.

Phyllitis debilis (C. Agardh) Kützing. Piccone, 1889, p. 25.

Chilean records: Iquique (Levring, 1960, *loc. cit.*); Antofagasta (Santelices *loc. cit.*); Coquimbo (Levring, 1960, *loc. cit.*); Valparaíso (Llaña *loc. cit.*); Tierra del Fuego (Skottsberg, 1921, *loc. cit.*); Islas Juan Fernández (Levring, 1941, Etcheverry *loc. cit.*).

Scytosiphon C. Agardh, 1811

64. *Scytosiphon lomentaria* (Lyngbye) J. Agardh

J. Agardh, 1848, p. 126. Hemsley, 1884, p. 241. Hariot, 1889, p. 45. Skottsberg, 1907, p. 34; 1921, p. 36. Cotton, 1915, p. 172. Taylor, 1939, p. 139. Kylin, 1947, p. 78. Llaña, 1948*b*, p. 85. Levring, 1941, p. 626; 1960, p. 24. Lindauer, Chapman and Aiken, 1961, p. 256, fig. 65. Papenfuss, 1964, p. 20.

Records under syn.:

Chorda lomentaria Lyngbye, 1819, p. 74, pl. 18. Harvey and J. D. Hooker, 1845, p. 179. J. D. Hooker, 1847, p. 468. Laing, 1909, p. 498.

Chilean records: Coquimbo, Valparaíso, Seno Reloncaví, Canal Fitz Roy (Levring, 1960, *loc. cit.*); Tierra del Fuego (Skottsberg, Taylor *loc. cit.*); Islas Juan Fernández (Levring, 1941, *loc. cit.*).

Note: The sporophytic phase of this species is possibly *Microspongium globosum*; see S. Lund (1966), but see also Wynne (1966).

Utriculidium Skottsberg, 1907

65. *Utriculidium durvillaei* (Bory) Skottsberg

Skottsberg, 1907, p. 36, figs. 34 and 35; 1921, p. 42. Reinbold, 1908, p. 191. Cotton, 1915, p. 173. Levring, 1944, p. 5; 1945, p. 9. Llaña, 1948*a*, p. 26. Papenfuss, 1964, p. 20.

Records under other names:

Asperococcus durvillaei Bory, 1826-1828, p. 200, pl. 11, fig. 3.

Adenocystis durvillaei (Bory) J. D. Hooker et Harvey, in J. D. Hooker, 1847, p. 468.

Chorda durvillaei (Bory) Kützing, 1849, p. 549.

Scytosiphon urvillaei (Bory) Trevisan, 1849, p. 432. Hariot, 1889, p. 45, pl. 6, fig. 1.

Encoelium durvillaei (Bory) Kützing, 1859, p. 3, pl. 6, fig. III.

Chilean records: Concepción (Bory *loc. cit.*); Tierra del Fuego (Skottsberg, 1921, Hariot *loc. cit.*); Antártica (Llaña *loc. cit.*).

Note: According to Skottsberg (1907, pp. 36 and 37), it is not certain that Bory's type is representative of this species. (See Papenfuss *loc. cit.*).

DESMARESTIALES

DESMARESTIACEAE

Desmarestia Lamouroux, 1813

66. *Desmarestia anceps* Montagne

Montagne, 1842, p. 13; 1845, p. 51. J. Agardh, 1848, p. 170. Kützing, 1849, p. 571; 1859, p. 41, pl. 98, figs. c and d. Skottsberg, 1907, p. 20, pl. 3. Gain, 1912, p. 39, figs. 43-45, pl. 5, figs. 2-6. De Toni and Forti, 1920a, p. 696; 1920b, p. 282. Papenfuss, 1964, p. 14.

Chilean record: Tierra del Fuego (De Toni and Forti *loc. cit.*); Antártica (Montagne, Gain, Skottsberg *loc. cit.*).

67. *Desmarestia distans* (C. Agardh) J. Agardh

J. Agardh, 1848, p. 168. Hariot, 1889, p. 43, pl. 5, fig. 4. De Toni and Forti, 1920a, p. 696. Papenfuss, 1964, p. 14.

Record under syn.:

Sporochnus ligulatus β *distans* C. Agardh, 1824, p. 261.

Chilean record: Cucao in Chiloé (De Toni and Forti *loc. cit.*).

Note: See Skottsberg (1921, p. 21).

68. *Desmarestia gayana* Montagne

Montagne, 1852, p. 243, pl. 14, fig. 1.

Chilean record: Isla de Chiloé (Montagne *loc. cit.*).

69. *Desmarestia herbacea* (Turner) Lamouroux

Lamouroux, 1813, p. 25. J. D. Hooker, 1847, p. 467. Montagne, 1846, p. 50; 1852, p. 242. Kützing, 1859, p. 42, pl. 100. Hariot, 1889, p. 43. Skottsberg, 1921, p. 21. Smith, 1944, p. 121. Levring, 1960, p. 23. Papenfuss, 1964, p. 14.

Records under other names:

Fucus herbaceus Turner, 1809, pl. 99.

Desmarestia ligulata var. *herbacea* (Turner) J. Agardh, 1848, p. 169.

Chilean records: Valparaíso, Concepción (Montagne, 1852, *loc. cit.*); Canal Chacao, Golfo de Ancud, Bahía de Ancud (Levring *loc. cit.*); Tierra del Fuego (Montagne, 1852, Hariot *loc. cit.*).

70. *Desmarestia ligulata* (Lightfoot) Lamouroux

Lamouroux, 1813, p. 25. Bory, 1826c, p. 594. Gaudichaud, 1826, p. 129. J. D. Hooker, 1847, p. 467. Piccone, 1886, p. 39. Hariot, 1889, p. 43; 1907, p. 5. Reinsch, 1890, p. 411. Laing, 1909, p. 496. Gain, 1912, p. 38. Cotton, 1915, p. 171. Skottsberg, 1921, p. 21; 1953, p. 536. Taylor, 1939, p. 138. Levring, 1944, p. 6; 1945,

p. 10; 1960, p. 23. Papenfuss, 1964, p. 15.

Records under other names:

Fucus ligulatus Lightfoot, 1777, pl. 29. Turner, 1809, pl. 98.

Sporochmus ligulatus (Lightfoot) C. Agardh. Gaudichaud, in Mirbel, 1825, p. 97.

Desmarestia firma sensu Skottsberg, 1907, p. 21, figs. 15-17. Sensu Cotton, 1915, p. 171.

Chilean records: Bahía de Ancud, Golfo de Ancud, Golfo Corcovado (Levring, 1960, *loc. cit.*); Tierra del Fuego (J. D. Hooker, Hariot, Skottsberg *loc. cit.*); Antártica (Gain *loc. cit.*).

Note: See Papenfuss (1964).

71. *Desmarestia menziesii* J. Agardh

J. Agardh, 1848, p. 165. Skottsberg, 1953, pp. 536 and 555, fig. 5. Delépine and Hureau, 1963, p. 112. Papenfuss, 1964, p. 15.

Records under other names:

Trinitaria durvillaei Montagne, 1852, p. 245. Etcheverry, 1958, p. 165.

Desmarestia aculeata var. *compressa* Reinsch, 1888a, p. 190; 1888b, p. 145; 1890, p. 408, pl. 17, fig. 3.

Desmarestia harveyana A. et E. S. Gepp, 1905, p. 106; 1907, p. 7., pl. 3, figs. 11-15. Hariot, 1907, p. 4. Cotton, 1915, p. 171. Skottsberg, 1921, p. 20.

Desmarestia compressa (Reinsch) Skottsberg, 1907, p. 19, pl. 2. Gain, 1912, p. 37. Lucas, 1919, p. 10. Llaña, 1948a, p. 24.

Desmarestia media sensu J. D. Hooker, 1847, p. 466. Dickie, 1876c, p. 44; 1876e, p. 198.

Desmarestia aculeata var. *media* sensu Dickie, 1879, p. 55. Hemsley, 1884, p. 241.

Chilean records: Concepción (Montagne *loc. cit.*); Tierra del Fuego (Skottsberg, 1921, *loc. cit.*); Antártica (J. D. Hooker, Skottsberg, 1953, Hariot, Gain, Llaña *loc. cit.*).

72. *Desmarestia rosii* J. D. Hooker et Harvey

J. D. Hooker and Harvey, 1845, p. 249. J. D. Hooker, 1847, p. 467, pls. 172 and 173. J. Agardh, 1848, p. 167. Kützing, 1849, p. 571; 1859, p. 41, pl. 98, figs. a and b. Bailey and Harvey, 1862, p. 160. Dickie, 1876c, p. 44; 1876d, p. 47; 1876e, p. 198; 1879, p. 55. Hemsley, 1884, pp. 241 and 257. Askenasy, 1888, p. 22. Ardissonne, 1888, p. 211. Hariot, 1889, p. 42; 1891, p. 418. Barton, 1902, p. 320. Gepp and Gepp, 1905a, p. 106; 1912, p. 77. Skottsberg, 1907, p. 20; 1921, p. 21. Cotton, 1915, p. 171. De Wildeman, 1935, p. 45. Taylor, 1939, p. 138. Zinova, 1958, p. 47. Levring, 1960, p. 22. Papenfuss, 1964, p. 15.

Chilean records: Golfo de Ancud (Levring *loc. cit.*); Tierra del Fuego (J. D. Hooker, Hariot, Skottsberg, Levring *loc. cit.*); Antártica (Skottsberg, 1906, p. 263, Zinova *loc. cit.*).

Note: According to Levring (1944, p. 6, f.n.) *Desmarestia chordalis* may be the same as this species.

73. *Desmarestia viridis* (O. Müller) Lamouroux

Lamouroux, 1813, p. 25. Kützing, 1859, p. 39, pl. 92. Piccone, 1889, p. 28. Barton, 1902, p. 320. Papenfuss, 1964, p. 15.

Record under syn.:

Fucus viridis O. F. Müller, 1778, pl. 886.

Chilean record: Punta Arenas to Tierra del Fuego (Piccone *loc. cit.*).

Note: Papenfuss (1964) writes that above records require confirmation.

74. *Desmarestia willii* Reinsch

Reinsch, 1888a, p. 191; 1890, p. 409, pl. 17, figs. 2a and 2b. Skottsberg, 1907, p. 16, figs. 13 and 14, pl. 1; 1921, p. 20. Reinbold, 1908, pp. 191 and 201. Laing, 1909, p. 497. Gain, 1912, p. 36, pl. 5, fig. 1. Cotton, 1915, p. 170. Taylor, 1939, p. 138. Levring, 1944, p. 6. Llaña, 1948a, p. 24, fig. 8. Zinova, 1958, p. 47. Papenfuss, 1964, p. 15.

Records under other names:

Desmarestia viridis auct. Harvey and J. D. Hooker, in J. D. Hooker, 1845, p. 178; 1847, p. 466. Dickie, 1876b, p. 42; 1876c, pp. 44; 1876e, p. 198; 1879, p. 55. Farlow, 1876, p. 30. Hemsley, 1884, pp. 204 and 241. Ardissonne, 1888, p. 211. Askenasy, 1888, p. 22.

Desmarestia viridis var. *distans* J. D. Hooker, 1847, p. 466. Askenasy, 1888, p. 22.

Dichloria viridis sensu Hariot, 1889, p. 42, pl. 6, fig. 2; 1895, p. 96.

?*Trinitaria confervoides* Bory, 1826-1828, p. 216, pl. 24, fig. 2.

Chilean records: Punta Arenas (Llaña *loc. cit.*); Tierra del Fuego (Skottsberg, Llaña *loc. cit.*); Antártica (Gain, Llaña *loc. cit.*).

Note: See Skottsberg (1921).

Phaeurus Skottsberg, 1907

75. *Phaeurus antarcticus* Skottsberg

Skottsberg, 1907, p. 24, figs. 18-22, pl. 4. Papenfuss, 1964, p. 16.

Chilean record: Antártica (Skottsberg *loc. cit.*).

Note: Reproductive organs are as yet unknown.

LAMINARIALES

ALARIACEAE

Ecklonia Hornemann, 1828

76. *Ecklonia biruncinata* (Bory). Papenfuss

Papenfuss, 1944, p. 341; 1964, p. 22. Lindauer, Chapman and Aiken, 1961, p. 280.

Records under other names:

Laminaria biruncinata Bory, 1826-1828, p. 101, pl. 10.

Capea biruncinata (Bory) Montagne. J. D. Hooker, 1847, p. 466.

Fucus radiata Turner, 1809, p. 134.

Laminaria radiata β *exasperata* Turner, 1809, p. 161.

Ecklonia radiata f. *exasperata* Turner. Etcheverry, 1958, p. 166.

Ecklonia radiata (Turner) J. Agardh, 1848, p. 146. Børgesen, 1926, p. 81.

Chilean records: Concepción? (Montagne *loc. cit.*); Tierra del Fuego (J. D. Hooker *loc. cit.*).

Note: Børgesen (1926) and Papenfuss (1964, p. 22, f.n.) doubt the occurrence of this species in Chile.

HIMANTOTHALLACEAE

Phyllogigas Skottsberg, 1907

77. *Phyllogigas grandifolius* (A. et E. S. Gepp) Skottsberg

Skottsberg, 1907, p. 63, figs. 73-80, pl. 6; 1921, p. 46; 1953, p. 556, figs. 17c and 17d. Gain, 1912, p. 47. Gepp and Gepp, 1917, p. 18. Lucas, 1919, p. 7, pls. 1-3. Lami, 1954, p. 45. Skottsberg and Neushul, 1960, pp. 164-172, figs. 1-3. Neushul, 1963, p. 23, figs. 3E and 3F. Delépine and Hureau, 1963, p. 113. Papenfuss, 1964, p. 22.

Records under other names:

Lessonia grandifolia A. et E. S. Gepp, 1905, pl. 470, fig. 6; 1907, p. 3, pl. 1, figs. 1-4 and pl. 2, figs. 5-9.

Himantothallus grandifolius (a. et E. S. Gepp) Zinova, 1959, p. 378, figs. 4_{1a}, 4_{1b}, 4_{3a} — 4_{3c}, 4₄.

Lessonia simulans A. et E. S. Gepp, 1906, p. 425; 1907, p. 5, pl. 2, fig. 10.

Phyllogigas simulans (A. et E. S. Gepp) A. et E. S. Gepp, 1912, p. 75, pl. 1, figs. 6 and 7.

Himantothallus spiralis Skottsberg, 1907, p. 143, figs. 173-176, pl. 10.

Phyllogigas skottsbergii Zinova, 1959, p. 378, figs. 5 and 6.

Phyllogigas korotkeviczii Zinova, 1959, p. 378, figs. 1 and 2.

Laminaria saccharina var. *angustata* Reinsch?, 1890, p. 414.

Chilean record: Antártica (Skottsberg, 1907, *loc. cit.*).

Note: Papenfuss (1964) mentions, "the systematic position of *Phyllogigas* is wholly uncertain".

LAMINARIACEAE

Phaeoglossum Skottsberg, 1907

78. *Phaeoglossum monacanthum* Skottsberg

Skottsberg, 1907, p. 59, figs. 69-72, pl. 5. Llaña, 1948a, p. 27.

Papenfuss, 1964, p. 21.

Chilean records: Antártica (Skottsberg, Llaña *loc. cit.*).

Note: Papenfuss (1964) shows, "*Phaeoglossum* is a monotypic genus whose affinities within the order Laminariales are uncertain".

LESSONIACEAE

Lessonia Bory, 1825

79. *Lessonia fuscescens* Bory

Bory, 1826b, p. 322; 1826-1828, p. 75, pl. 2, fig. 2 and pl. 3. J. D.

Hooker, 1847, p. 457, pls. 167 and 168, fig. A, and pl. 171, fig. D.

Montagne, 1852, p. 254. Dickie, 1876c, p. 44; 1879, p. 55. Raben-

horst, 1878, p. 68. Hemsley, 1884, p. 241. Hariot, 1889, p. 49.

Papenfuss, 1964, p. 21.

Records under other names:

Lessonia flavicans Bory, 1826c, p. 594. Gaudichaud, 1826, p. 129.

Hariot, 1889, p. 49. Skottsberg, 1907, p. 73, figs. 89 and 90,

pl. 7; 1921, p. 47. Cotton, 1915, p. 167. Taylor, 1939, p. 140.

Levring, 1960, p. 25.

Lessonia ovata J. D. Hooker et Harvey, in J. D. Hooker, 1847,

p. 459, pls. 167 and 168, fig. B, and pl. 171, fig. C. Montagne,

1852, p. 255. Dickie, 1876d, p. 47. Hemsley, 1884, p. 258.

Chilean records: Valparaíso (Montagne *loc. cit.*); Concepción (Bory,

1826-1828, Montagne *loc. cit.*); Canal Chacao, Golfo Corcovado

(Levring *loc. cit.*); Tierra del Fuego (J. D. Hooker, Hariot,

Taylor, Levring *loc. cit.*).

80. *Lessonia nigrescens* Bory

Bory, 1826*b*, p. 322; 1826-1828, p. 80, pl. 5. J. D. Hooker, 1847, p. 458, pls. 167 and 168, fig. C. Bailey and Harvey, 1862, p. 160. Montagne, 1852, p. 253. Dickie, 1876*d*, p. 47. Hemsley, 1884, p. 257. Hariot, 1889, p. 49. Skottsberg, 1907, p. 69, figs. 81-88; 1921, p. 47. Howe, 1914, p. 58, pl. 17. Cotton, 1915, p. 166. De Toni and Forti, 1920*a*, p. 695. Taylor, 1939, p. 140; 1947, p. 68. Llaña, 1948*b*, p. 85. Etcheverry, 1951, p. 61, fig. 11. Juhl-Noodt, 1958, p. 169. Levring, 1960, p. 25. Dawson, Acleto and Foldvik, 1964, p. 26. Papenfuss, 1964, p. 21. Navas, 1966, p. 101, pl. 4, fig. 2. Santelices, 1966, p. 72, fig. 18.

Records under other names:

Lessonia subrii J. Agardh, 1848, p. 150. Grunow, 1870, p. 51. Howe, 1914, p. 60.

Lessonia berteroana Montagne, 1852, p. 253.

Chilean records: Arica, Antofagasta (*Santelices loc. cit.*); Caldera, Valparaíso, Provincia de Cautín (Taylor, 1947, *loc. cit.*); Cartagena in Province of Santiago (De Toni and Forti *loc. cit.*); Iquique, Tocopilla, Bahía Herradura de Guayacán, Valparaíso, Canal Chacao (Levring *loc. cit.*); Costa de Chile to Tierra del Fuego (Llaña *loc. cit.*); Tierra del Fuego (Bory, J. D. Hooker, Hariot, Skottsberg *loc. cit.*).

Note: 1) See Papenfuss (1964, p. 21 f.n.).

2) Popular name in Chile: "Berga", "Chascon".

Macrocystis C. Agardh, 1821

81. *Macrocystis integrifolia* Bory

Bory, 1826*d*, p. 9, pls. 6 and 8; 1826-1828, p. 87, pl. 6. Howe, 1914, p. 60, pls. 19-22. Setchell and Gardner, 1925, p. 628, pl. 62. Setchell, 1932, pp. 448 and 459, pls. 33-38. Taylor, 1947, p. 68. Dawson, Acleto and Foldvik, 1964, p. 24, pl. 22. Santelices, 1966, p. 74, fig. 19.

Records under other names:

?*Macrocystis angustifolia* Bory, 1826-1828, p. 94, pl. 9. ?Montagne, 1852, p. 249. Areschoug, 1883, p. 22. De Toni and Forti, 1920*a*, p. 695.

Chilean records: Arica, Iquique, Tocopilla (*Santelices loc. cit.*); Antofagasta (Taylor, *Santelices loc. cit.*); Caldera (Taylor *loc. cit.*); Valparaíso (Navas, 1966, p. 102); Concepción (Bory, 1826, *loc. cit.*).

Note: See Womersley (1954) and also Santelices (1966).

82. *Macrocystis pyrifera* (Linnaeus) C. Agardh

C. Agardh, 1821a, p. 47. Gaudichaud, in Mirbel, 1825, p. 97. Harvey, and J. D. Hooker, 1841, pp. 178 and 461, pls. 169 and 170. Bailey and Harvey, 1862, p. 160. Dickie, 1876b, p. 42; 1876c, p. 44; 1876e, p. 198; 1879, p. 55. Farlow, 1876, p. 30. Rabenhorst, 1878, p. 68. Hemsley, 1884, pp. 204 and 241. Piccone, 1886, p. 38. Askenasy, 1888, p. 23. Safford, 1888, p. 15. Hariot, 1889, p. 50; 1891, p. 418; 1907, p. 6. Reinsch, 1890, p. 417 (as var. *longibullata*). Skottsberg, 1907, p. 80, figs. 91-170, pl. 9; 1921, p. 49. Reinbold, 1907, p. 563; 1908, p. 189. Laing, 1909, p. 499. Howe, 1914, p. 64, pl. 14, fig. B, pls. 23 and 24 (as var. *humboldtii*). Cotton, 1915, p. 167. Setchell and Gardner, 1925, p. 627, pls. 64 and 65. Taylor, 1939, p. 140; 1947, p. 68. Levring, 1944, p. 6; 1945, p. 10; 1960, p. 25. Llaña, 1948a, p. 27, fig. 9. Womersley, 1954, p. 118, map. Zinova, 1958, p. 48. Delépine, 1963, p. 8, figs. 5 and 6. Dawson, Acleto and Foldvik, 1964, p. 25, pl. 21, figs. A and B (as var. *humboldtii*). Papenfuss, 1964, p. 22.

Records under other names:

Fucus pyriferus Linnaeus, 1771, p. 311.

Fucus humboldtii Bonpland. Humboldt and Bonpland, 1808, p. 7, pl. 68.

Macrocystis humboldtii C. Agardh, 1824, p. 293. Montagne, 1839, p. 35; 1852, p. 248. Piccone, 1886, p. 38.

Macrocystis communis Bory, 1826c, p. 596; 1896d, p. 9; 1826-1828, p. 90. Gaudichaud, 1826, p. 129.

Fucus giganteus Gaudichaud, 1826, p. 121 (*nom. illeg.*).

Macrocystis latifrons Bory, 1826-1828, p. 88, pl. 7.

?*Macrocystis pomifera* Bory, 1826-1828, p. 94, pl. 9.

Macrocystis orbigniana Montagne, 1839, p. 12, pl. 1 and pl. 3, fig. 1.

Macrocystis latifolia Bory. Montagne, 1845, p. 49.

Macrocystis angustifolia Bory. Hohenacker, 1857, N^o 268.

Macrocystis luxurians (J. D. Hooker et Harvey) J. Agardh. Piccone, 1886, p. 39; 1889, p. 27.

Chilean records: Tocopilla, Ramuncho, Puerto Montt, Canal Tenglo, Canal Chacao, Bahía de Ancud, Seno Reloncaví, Estero Reloncaví, Golfo Corcovado, Estrecho de Magallanes (Levring, 1960, *loc. cit.*); Southern Chile to Talcahuano (Etcheverry, 1958, p. 167); Tierra del Fuego (Gaudichaud, J. D. Hooker, Hariot, 1889, *loc. cit.*); Antártica (J. D. Hooker, Llaña *loc. cit.*).

Note: Popular name in Chile; "Huiro".

SPHACELARIALES

CLADOSTEPHACEAE

Cladostephus C. Agardh, 1817

83. *Cladostephus hariotii* Sauvageau

Sauvageau, 1914, p. 604. Papenfuss, 1964, p. 13.

Record under another name:

Chaetopteris antarctica sensu Hariot, 1889, p. 40.

Chilean record: Tierra del Fuego (Sauvageau *loc. cit.*).

Note: See Skottsberg (1921, p. 44).

84. *Cladostephus setaceus* Suhr

Suhr, 1836, p. 347, fig. 35. Skottsberg, 1907, p. 58; 1921, p. 44, figs. 18a and 18b. Cotton, 1915, p. 173. Taylor, 1939, p. 137.

Levring, 1960, p. 17. Papenfuss, 1964, p. 14.

Records under other names:

Cladostephus antarcticus Kützing, 1856, p. 4, pl. 8, fig. II. Hariot, 1889, p. 40. Skottsberg, 1921, p. 44, figs. 18c and 18d. Taylor, 1939, p. 137. Levring, 1960, p. 17.

Cladostephus spongiosus sensu J. D. Hooker, 1847, p. 469. Sensu Hariot, 1889, p. 39.

Chilean records: Tierra del Fuego (Hariot, Skottsberg, Taylor, Levring *loc. cit.*).

Note: See Papenfuss (1964, p. 14, f.n.).

85. *Cladostephus spongiosus* (Hudson) C. Agardh

C. Agardh, 1824, p. 168. Skottsberg, 1921, p. 46, fig. 18f. Levring, 1960, p. 17. Papenfuss, 1964, p. 14.

Record under syn.:

Conferva spongiosa Hudson. Lightfoot, 1777, p. 983.

Chilean record: Tierra del Fuego (Skottsberg *loc. cit.*).

86. *Cladostephus verticellatus* (Lightfoot) C. Agardh

C. Agardh, 1817, p. 25. Lindauer, Chapman and Aiken, 1961, p. 175, fig. 24.

Record under syn.:

Conferva verticillata Lightfoot, 1777, pl. 984.

Chilean record: (See Sauvageau, 1900-1904).

Note: It needs to confirm the occurrence in Chile.

SPHACELARIACEAE

Sphacelaria Lyngbye, 1819

87. *Sphacelaria bornetii* Hariot

Hariot, 1887a, p. 57, figs. [3]A - [3]B; 1889, p. 38, pl. 4, figs. 1-4.
Sauvageau, 1900, p. 34. Papenfuss, 1964, p. 13.
Chilean record: Tierra del Fuego (Hariot, 1889, *loc. cit.*).

88. *Sphacelaria cirrosa* (Roth) C. Agardh

C. Agardh, 1824, p. 164; 1828, p. 27. Skottsberg, 1907, p. 57. Levring, 1941, p. 619. Lindauer, Chapman and Aiken, 1961, p. 159, fig. 16.
Papenfuss, 1964, p. 13.

Record under syn.:

Conserva cirrhosa Roth, 1797-1806, p. 214.

Chilean records: Tierra del Fuego (Skottsberg *loc. cit.*); Islas Juan Fernández (Levring *loc. cit.*).

89. *Sphacelaria furcigera* Kützing

Kützing, 1855, p. 27, pl. 90. Sauvageau, 1900-1904, p. 156. Skottsberg, 1907, p. 58. Cotton, 1915, p. 173. Setchell and Gardner, 1924, p. 724, pl. 19, fig. 58. Levring, 1960, p. 16. Papenfuss, 1964, p. 13.
Chilean records: Bahía Herradura de Guayacán, Bahía de Ancud, Seno Reloncaví, Estero Reloncaví (Levring *loc. cit.*); Tierra del Fuego (Skottsberg *loc. cit.*).

90. §*Sphacelaria* sp.

Børgesen, 1924, p. 265.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

STYPOCAULACEAE

Alethocladus Sauvageau, 1903 ?

91. *Alethocladus corymbosus* (Dickie) Sauvageau

Sauvageau, 1903, p. 288, fig. 54. Reinbold, 1907, p. 565; 1908, p. 190.
Papenfuss, 1964, p. 13.

Records under other names:

Sphacelaria corymbosa Dickie, 1876a, p. 50; 1876e, p. 199; 1879, p. 56. Hemsley, 1884, p. 241.

Sphacelaria funicularis sensu Farlow, 1876, p. 30. Sensus Askenasy?, 1888, p. 21.

Chilean record: Tierra del Fuego? (Papenfuss *loc. cit.*).

92. §*Halopteris filicina* (Grateloup) Kützing

92. §*Halopteris filicina* (Grateloup) Kützing

Kützing, 1843, p. 292; 1849, p. 462; 1855, p. 25, pl. 85, fig. I.
Sauvageau, 1900-1914, p. 294. Levring, 1941, p. 619.

Record under syn.:

Ceramium filicinum Grateloup, 1806, p. 33.

Chilean record: Islas Juan Fernández (Levring *loc. cit.*).

93. *Halopteris funicularis* (Montagne) Sauvageau

Sauvageau, 1904, p. 393, fig. 80. Skottsberg, 1907, p. 58; 1921, p. 44.
De Toni and Forti, 1920a, p. 698. Cotton, 1915, p. 174. Levring,
1945, p. 8. Moore, 1953, p. 16, map. 7. Papenfuss, 1964, p. 13.

Records under syns.:

Sphacelaria funicularis Montagne, 1842, p. 13; 1845, p. 38, pl. 14,
fig. 1; 1852, p. 267. Harvey and J. D. Hooker, 1845, p. 180.
J. D. Hooker, 1847, p. 469. Rabenhorst, 1878, p. 66. Ardissonne,
1888, p. 211. Hariot, 1889, p. 37, pl. 3, fig. 5.

Stypocaulon funiculare (Montagne) Kützing, 1855, p. 97. Laing,
1909, p. 496.

Chilean records: Isla de Chiloé (Montagne, 1845, *loc. cit.*); Bahía
San Rafael in Province of Llanquihue (De Toni and Forti *loc. cit.*);
Tierra del Fuego (Hariot *loc. cit.*).

94. *Halopteris hordacea* (Harvey) Sauvageau

Sauvageau, 1900-1914, p. 432. Taylor, 1947, p. 66, pl. 1, fig. 1, pl. 3.
Levring, 1960, p. 16. Lindauer, Chapman and Aiken, 1961,
p. 170, fig. 22. Papenfuss, 1964, p. 13. Santelices, 1966, p. 56,
fig. 12.

Records under syns.:

Sphacelaria hordacea Harvey, 1844, p. 614.

Chilean records: Arica (Santelices *loc. cit.*); Antofagasta (Taylor,
Levring, Santelices *loc. cit.*); Tocopilla; Isla Gualafo, Estrecho de
Magallanes (Levring *loc. cit.*).

95. *Halopteris obovata* (J. D. Hooker et Harvey) Sauvageau

Sauvageau, 1904, p. 336, figs. 65 and 66. Skottsberg, 1907, p. 58; 1921,
p. 43. Cotton, 1915, p. 174. Papenfuss, 1964, p. 13.

Records under syns.:

Sphacelaria obovata J. D. Hooker et Harvey, 1845, p. 251. J. D.
Hooker, 1847, p. 469. Hariot, 1889, p. 37; 1895, p. 96.

Chilean records: Tierra del Fuego (J. D. Hooker, Hariot, Skottsberg
loc. cit.).

DICTYOTALES

DICTYOTACEAE

***Dictyopteris* Lamouroux, 1809**

96. §*Dictyopteris repens* (Okamura) Børgesen

Børgesen, 1924, p. 265, fig. 13. Etcheverry, 1960, p. 99, pl. III, figs. 1 and 2.

Record under syn.:

Haliseris repens Okamura, 1916, p. 8, pl. I, figs. 7-18.

Chilean record: Isla de Pascua (Børgesen, Etcheverry *loc. cit.*).

***Dictyota* Lamouroux, 1809**

97. §*Dictyota cervicornis* Kützing

Kützing, 1859, p. 11, pl. 24, fig. II. Etcheverry, 1960, p. 99, pl. II, figs. 1-5.

Chilean record: Isla de Pascua (Etcheverry *loc. cit.*).

98. *Dictyota dichotoma* (Hudson) Lamouroux

Lamouroux, 1809, p. 42. Montagne, 1839, p. 34. Kützing, 1859, p. 5, pl. 10, fig. 1. Howe, 1914, p. 71. Zinova, 1958, p. 47. Levring, 1960, p. 17. Papenfuss, 1964, p. 14.

Record under syn.:

Ulva dichotoma Hudson, 1762, p. 476.

Chilean records: Cobija (Montagne *loc. cit.*); Seno Reloncaví (Levring *loc. cit.*).

99. *Dictyota flabellata* (Collins) Setchell et Gardner

Setchell and Gardner, 1924, p. 12; 1925, p. 652. Smith, 1944, p. 101. Taylor, 1945, p. 88. Levring, 1960, p. 17.

Chilean record: Iquique (Levring *loc. cit.*).

100. §*Dictyota phycetaenodes* Montagne

Montagne, 1852, p. 260. Levring, 1941, p. 620.

Chilean records: Islas Juan Fernández (Montagne, Levring *loc. cit.*).

***Distromium* Levring, 1940**

101. §*Distromium skottsbergii* Levring

Levring, 1941, p. 619.

Chilean records: Islas Juan Fernández (Levring *loc. cit.*).

Glossophora J. Agardh, 1880

102. *Glossophora kunthii* (C. Agardh) J. Agardh

J. Agardh, 1882, p. 108. Piccone, 1886, p. 33. Howe, 1914, p. 72, pl. 28. Levring, 1941, p. 621, figs. 6 and 7; 1960, p. 18. Taylor, 1947, p. 66. Llaña, 1948*b*, p. 84. Juhl-Noodt, 1958, p. 170. Etcheverry, 1960, p. 101. Dawson, Adeto and Foldvik, 1964, p. 21, fig. 17. Navas, 1966, p. 100, pl. 3, fig. 1. Santelices, 1966, p. 60, fig. 13.

Records under syns.:

Zonaria kunthii C. Agardh, 1821*b*, pl. 15.

Dictyota kunthii Kützing, 1849, p. 556; 1859, p. 13, pl. 30, fig. 1.

Glossophora harveyi J. Agardh, 1887, p. 111.

Chilean records: Arica, Iquique, Tocopilla, Antofagasta (Santelices *loc. cit.*); Pisagua, Antofagasta (Taylor *loc. cit.*); Valparaíso (Llaña, Levring, 1960, Navas *loc. cit.*); Canal Chacao (Levring, 1960, *loc. cit.*); Islas Juan Fernández (Levring, 1941, Etcheverry *loc. cit.*).

Padina Adanson, 1763

103. *Padina durvillaei* Bory

Bory, 1826-1828, p. 147, pl. 21, fig. 1.

Record under another name:

Zonaria durvillaei sensu Kützing, 1849, p. 565.

Chilean record: Concepción (Bory *loc. cit.*).

104. §*Padina fernandeziana* Skottsberg et Levring

Skottsberg and Levring, *in* Levring, 1941, p. 620, figs. 5A-5E, pl. 49, fig. 2. Etcheverry, 1960, p. 97.

Chilean records: Islas Juan Fernández (Levring, Etcheverry *loc. cit.*); Isla San Ambrosio (Etcheverry *loc. cit.*).

105. §*Padina tristromatica* Levring

Levring, 1942, p. 60, figs. 1 and 2.

Chilean record: Isla San Ambrosio and San Félix (Levring *loc. cit.*).

Pocockiella Papenfuss, 1943

106. §*Pocockiella variegata* (Lamouroux) Papenfuss

Papenfuss, 1943, p. 467.

Records under syns.:

Zonaria variegata (Lamouroux) C. Agardh, 1817, p. 20. Børgesen, 1924, p. 266, fig. 14.

Dictyota variegata Lamouroux, 1809, p. 331; 1813, p. 57, pl. 5, figs. 7-9.

Gymnosorus variegatus (Lamouroux) J. Agardh, 1894, p. 11, pl. 1, figs. 1 and 2.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

Note: Papenfuss (*loc. cit.*) considers that *Aglaozonia canariensis* is a synonym of this species (see Børgesen, 1914, pp. 37-39, fig. 24).

Zonaria C. Agardh, 1817

107. §*Zonaria crenata* J. Agardh

J. Agardh, 1872, p. 48. Børgesen, 1924, p. 267.

Chilean record: Isla de Pascua (Børgesen *loc. cit.*).

FUCALES

ASCOSEIRACEAE

Ascoseira Skottsberg, 1907

108. *Ascoseira mirabilis* Skottsberg

Skottsberg, 1907, p. 149, figs. 178-187; 1921, p. 50, figs. 19 and 20; 1953, p. 541. Llaña, 1948a, p. 30. Neushul, 1963, p. 20, figs. 1, 2 and 3A-3D. Papenfuss, 1964, p. 23.

Records under other names:

Lessonia dubia Gain, 1912, p. 48, fig. 50.

?*Lessonia fuscescens* sensu Montagne, 1845, p. 50.

Lessonia fuscescens var. *linearis* Reinsch, 1890, p. 416.

Chilean records: Antártica (Skottsberg, Gain, Llaña *loc. cit.*).

Note: This remarkable monotypic genus is doubtfully placed in the Fucales (Papenfuss *loc. cit.*).

CYSTOSEIRACEAE

Cystophyllum J. Agardh, 1848

109. *Cystophyllum muricatum* (Turner) J. Agardh

J. Agardh, 1848, p. 231. Harvey, 1860, p. 285. Etcheverry, 1958, p. 176.

Records under other names:

Fucus muricatus Turner, 1809, p. 108, pl. 112.

Polycladia commersoni Montagne, 1852, p. 329; 1856, p. 430.

Chilean record: Tierra del Fuego? (Montagne, 1852, *loc. cit.*).

Note: See Etcheverry (1958, p. 176).

DURVILLEACEAE

Durvillea Bory, 1826

110. *Durvillea antarctica* (Chamisso) Hariot

Hariot, 1892, p. 1432. Skottsberg, 1907, p. 140, fig. 172; 1921, p. 54. Laing, 1909, p. 499. Gain, 1912, p. 51. Cotton, 1915, p. 165. Taylor, 1939, p. 141. Llaña, 1948*b*, p. 85. Chittleborough, 1956, p. 70. Delépine, 1963, p. 5, fig. 4. Papenfuss, 1964, p. 23.

Records under other names:

Fucus antarcticus Chamisso, in Choris, 1822, p. 7, pl. 7.

Durvillea utilis Bory, 1826*a*, p. 192; 1826*c*, p. 594; 1826-1828, p. 65, pl. 1 and pl. 2, fig. 1. Gaudichaud, 1826, p. 129. Harvey and J. D. Hooker, 1845, p. 176. J. D. Hooker, 1847, p. 454. Montagne, 1846, p. 38. Bailey and Harvey, 1862, p. 160. Dickie, 1876*c*, p. 43; 1876*e*, p. 198; 1879, p. 55. Farlow, 1876, p. 30. Hemsley, 1884, p. 241. Askenasy, 1888, p. 23. Safford, 1888, p. 19. Hariot, 1889, p. 53. Reinhold, 1907, p. 563; 1908, p. 189.

Chilean records: Between Los Vilos and Cabo de Hornos (Llaña *loc. cit.*); between Valparaíso and Cabo de Hornos (Skottsberg *loc. cit.*).

Note: Popular names in Chile; "Cochayuyo", "Huilte", "Ulte" or "Coyofe".

111. *Durvillea caepaestipes* (Montagne) Chapman and Aiken

Chapman and Aiken, in Lindauer, Chapman and Aiken, 1961, p. 286, pl. 66. Zinova, 1958, p. 48. Delépine, 1963, p. 5, fig. 3. Papenfuss, 1964, p. 23.

Records under other names:

Laminaria caepaestipes Montagne, 1839, p. 11, pl. 2.

Ecklonia caepaestipes (Montagne) Endlicher, 1843, p. 27.

Durvillea harveyii J. D. Hooker, in J. D. Hooker and Harvey, 1845, p. 249. J. D. Hooker, 1847, p. 456, pls. 165 and 166. Dickie, 1876*c*, p. 44; 1876*e*, p. 198; 1879, p. 55. Farlow, 1876, p. 30. Hemsley, 1884, p. 241. Hariot, 1889, p. 53. Skottsberg, 1907, p. 141; 1921, p. 54. Reinhold, 1908, p. 189. Cotton, 1915, p. 166, pl. 4, fig. 1. Levring, 1960, p. 26.

Durvillea montagnei Kützing, 1849, p. 585. Rabenhorst, 1878, p. 67.

Chilean records: Same as *Durvillea antarctica* (Levring *loc. cit.*); Tierra del Fuego (J. D. Hooker, Hariot, Skottsberg, 1907, *loc. cit.*).

112. *Durvillea potatorum* (Labillardière) J. E. Areschoug

J. E. Areschoug, 1854?, p. 17. Papenfuss, 1964, p. 23.

Records under syns.:

?*Laminaria potatorum* Lamouroux, 1813, p. 22. Bory, 1826-1828, p. 100. J. D. Hooker, 1847, p. 456.

Sarcophycus potatorum (Labillardière) Kützing, 1860, p. 3, pl. 7, fig. II. Rabenhorst, 1878, p. 67.

Chilean record: Valparaiso (Bory *loc. cit.*).

Note: The occurrence of this species in Chile requires confirmation.

FUCACEAE

Cystophaera Skottsberg, 1907

113. *Cystophaera jacquinotii* (Montagne) Skottsberg

Skottsberg, 1907, p. 146, fig. 177; 1953, p. 540. Gain, 1912, p. 52, pl. 5, fig. 7. Llaña, 1948a, p. 29, fig. 10. Pontiroli, 1949, p. 329, fig. 2. Neushul, 1963, p. 21. Papenfuss, 1964, p. 23.

Records under syns.:

Scytothalia jacquinotii Montagne, 1842, p. 11; 1845, p. 86, pl. 4. J. D. Hooker, 1847, p. 456. Hariot, 1907, p. 5. De Wildeman, 1935, p. 44.

Marginaria jacquinotii (Montagne) Kützing, 1849, p. 637; 1861, p. 17, pl. 54.

Chilean records: Antártica (J. D. Hooker, Hariot, Skottsberg, Llaña *loc. cit.*).

SARGASSACEAE

*Sargassum** C. Agardh, 1821

114. *Sargassum divaricatum* var. ?*chilensis* Grunow

Grunow, 1915, p. 329?. Dawson, 1962, p. 66.

Chilean record: Concepción (Grunow *loc. cit.*).

115. *Sargassum gracile* J. Agardh

J. Agardh, 1848, p. 310. Montagne, 1852, p. 236.

Records under another name:

?*Sargassum granuliferum* C. Agardh, 1824, p. 305. Bory, 1826-1828, p. 125.

Chilean record: Concepción (Bory *loc. cit.*).

* The records of *Sargassum* in Chile are quite uncertain except *S. skottsbergii* Sjøstedt to be found in Isla de Pascua. It is extremely doubtful that this tropical and subtropical plant occurs in subantarctic region. (See also Etcheverry, 1958, p. 164).

116. *Sargassum oocyste* J. Agardh

J. Agardh, 1848, p. 317. Etcheverry, 1958, p. 164.

Records under other names:

Sargassum esperi Bory, 1826-1828, p. 124.

Sargassum compactum Bory, 1826-1828, p. 126. Montagne, 1852, p. 235.

Chilean record: Concepción (Bory *loc. cit.*).

117. *Sargassum pacificum* Bory

Bory, 1826-1828, p. 123. Montagne, 1852, p. 235. Howe, 1914, p. 66.

Chilean record: Southern Chile (Bory *loc. cit.*).

118. *Sargassum skottsbergii* Sjøstedt

Sjøstedt, 1924, p. 311, figs. 1-5.

Shilean record: Isla de Pascua (Sjøstedt *loc. cit.*).

Turbinaria Lamouroux, 1825

119. *Turbinaria ornata* J. Agardh

J. Agardh, 1848, p. 266. Okamura, 1931, p. 104; 1936, p. 313.

Record under syn.:

Turbinaria denudata Bory, 1826-1828, p. 117. Montagne, 1852, p. 238.

Chilean record: Concepción (Bory *loc. cit.*).

Note: The occurrence of this species in Chile is uncertain (see Etcheverry, 1958, p. 164).