

## Note on the Marine Algal Flora in the Middle Part of the Japan Sea Coast of Honshū II. Rhodophyta\*

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Researches on the marine algal flora in the middle part of the Japan Sea coast of Honshū including Sado Isl. were carried out by the writer at the 19 stations shown in the previous report in 1967, 1977, 1978 and 1979 (At and Off Tassha, Sado Isl., July 27-30). As a result of the present researches, the writer could collect 281 spp. of marine algae including 30 spp. of Cyanophyta, 34 spp. of Chlorophyta, 77 spp. of Phaeophyta reported in the previous paper, and 141 spp. of Rhodophyta belonging to 68 genera and 28 families which are reported together with the two spp. of sea-grasses in this paper this time.

The following 8 spp. marked with © in the list are new to the Japan Sea: *Goniotrichum cornu-cervi*, *Pikea californica*, *Griffithsia corallina*, *Wrangelia tagoi*, *Polysiphonia fruticulosa*, *Polysiphonia tongatensis*, *Hypoglossum geminatum* and *Dasyopsis plumosa*. The following 3 spp. marked with ○ are new records to the middle part of the Japan Sea coast of Honshū: *Gracilaria incurvata*, *Binghamiella californica*, *Hemineura schmitziana*. *Microcladia dentata* and *Erythroglossum repens* marked with ※ are new entries to the marine flora of the Sado Isl..

### RHODOPHYTA BANGIOPHYCEAE PORPHYRIDIALES GONIOTRICHACEAE

141. *Goniotrichum alsidii* (ZANARDINI) HOWE

Mar. Alg. Peru, pp. 75-77, 1914; TANAKA, T., Syst. Stud. Jap. Protofloridae, pp. 5-7, fig. 2-3, 1952; TAYLOR, W. R., Mar. Alg. N.E. Coast N. Am., p. 202, pl. 28, fig. 1-4, 1966.

*Japanese name*: Benimidoro.

*Habitat*: 1 m, on *Cladophora* sp.; Drifting, on *Sphacelaria* sp.: Akasaki.

©142. *Goniotrichum cornu-cervi* (REINSCH) HAUCK

in HOWE, M. A., Mar. Alg. Peru, pp. 76-77, 1914; TANAKA, T., Syst. Stud. Jap. Protofloridae, pp. 9-10, fig. 5, 1952.

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*Japanese name:* Kazuno-hoshinoito.

*Habitat:* 1.5 m, on *Cladophora ohkuboana*: Sotomo.

BANGIALES  
ERYTHROPELTIDACEAE

143. *Erythrotrichia biseriata* TANAKA

in TANAKA, T., Syst. Stud. Jap. Protofloridae, p. 17, fig. 8, 1952.

*Japanese name:* Hime-ribon.

*Habitat:* At low-tide-level, on *Ceramium japonicum*; 1 m, on *Asparagopsis taxiformis*: Hyūga, Akasaki.

144. *Erythrotrichia carnea* (DILLWYN) J. AGARDH

in TANAKA, T., Syst. Stud. Jap. Protofloridae, pp. 14-16, fig. 7, 1952; TAYLOR, W. R., Mar. Alg. N.E. Coast N. Am., pp. 202-203, pl. 28, fig. 13-15, 1966.

*Japanese name:* Hoshinoito.

*Habitat:* 1.5 m, on *Hypoglossum geminatum*: Sotomo, Tassha.

145. *Erythrotrichia carnea* (DILLWYN) J. AGARDH f. *tenuis* TANAKA

Syst. Stud. Jap. Protofloridae, p. 16, fig. 7, 1952.

*Japanese name:* Hoso-hoshinoito.

*Habitat:* 1.5 m, on *Hypoglossum geminatum*; 1 m, on *Polysiphonia kampsaxii*: Sotomo, Akasaki.

146. *Erythrotrichia reflexa* (CROUAN) THURET

in TANAKA, T., Syst. Stud. Jap. Protofloridae, p. 17, fig. 9, 1952.

*Japanese name:* Yumigata-hoshinoobi.

*Habitat:* 1.5 m, on *Cladophora ohkuboana*: Sotomo.

BANGIACEAE

147. *Bangia ciliaris* CARMICHAEL

in YENDO, K., Notes Alg. New Jap., IV., p. 51, 1916; TAYLOR, W. R., Mar. Alg. N.E. Coast N. Am., p. 204, pl. 28, fig. 5-9, 1966.

*Japanese name:* Hime-ushike-nori.

*Habitat:* 1.5 m, on *Cladophora ohkuboana*: Sotomo.

148. *Bangia fuscopurpurea* (DILLWYN) LYNGBYE

in TANAKA, T., Syst. Stud. Jap. Protofloridae, pp. 23-24, pl. II, fig. 2, 1952; TAYLOR, W. R., Mar. Alg. N.E. Coast N. Am., p. 204, pl. 28, fig. 10-12, 1966.

*Japanese name:* Ushike-nori.

*Habitat:* 1 m, on *Sphacelarias* and *Sargassa*: Hyūga.

149. *Bangia gloiopeltidicola* TANAKA

Sp. *Bangia* Jap., pp. 163-165, fig. 1-2, 1950; FUKUHARA, E., holdf. *Bangia fusco-purpurea* (DILLWYN) LYNGB. and *B. gloiopeltidicola* TANAKA, pp. 41-46, fig. 1-2, 1967.

*Japanese name:* Funorino-ushige.

*Habitat*: 0.5 m, on *Gloiosiphonia capillaris*: Hyūga.

150. *Porphyra tenera* KJELLMAN

in UEDA, S., Syst. Stud. Jap. *Porphyra* (in Jap.), pp. 20–23, pl. 1, fig. 4, 12, pl. 3, fig. 14, pl. 4, fig. 1–10, pl. 14, fig. 2–3, pl. 15, fig. 1–3, pl. 16, fig. 1–2, 1932; TANAKA, T., Syst. Stud. Jap. Protofloridae, pp. 51–54, pl. 10–11, text-fig. 25, 1952.

*Japanese name*: Asakusa-nori.

*Habitat*: At low-tide-level, on *Corallina pihulifera*: Sotomo.

151. *Porphyra yezoensis* UEDA

Syst. Stud. Jap. *Porphyra* (in Jap.), pp. 23–24, pl. 1, fig. 9–14, pl. IV, fig. 11–17, pl. XVI, fig. 3–4, 1932; TANAKA, T., Syst. Stud. Jap. Protofloridae, pp. 39–41, pl. V, VII, fig. 3, text-fig. 19, 1952.

*Japanese name*: Susabi-nori.

*Habitat*: At low-tide-level, on *Gelidium amansii*: Sotomo.

## FLORIDEOPHYCEAE

### NEMALIALES

#### ACROCHAETIACEAE

152. *Colaconema simplex* INAGAKI

in OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 372, fig. 178, 1956.

*Japanese name*: Beni-mayudama.

*Habitat*: At low-tide-level, in *Sargassum* sp.; Drifting, in *Polysiphonia* sp.: Okazaki, Akasaki.

153. *Acrochaetium crassipes* BØRGESEN

in BØRGESEN, F., Mar. Alg. Dan. W. Ind. III Rhodophyceae, pp. 20–21, 1915; YENDO, K., Notes Alg. New Jap., VII., pp. 201–202, 1917.

*Habitat*: 0.5 m, on *Sphacelaria* sp.: Sotomo, Akasaki, Tassha.

## HELMINTHOCLADIACEAE

154. *Nemalion vermiculare* SURINGAR

in OKAMURA, K., Icon. Jap. Alg. Vol. IV., pp. 28–30, pl. 158, fig. 1–16, 1951; Descr. Jap. Alg. (in Jap.), pp. 413–414, fig. 191, 1956.

*Japanese name*: Umizomen.

*Habitat*: At low-tide-level, on rocky bottom: Hyūga, Akasaki, Tassha.

## CHAETANGIACEAE

155. *Sciniaia japonica* SETCHELL

*Sciniaia* Assembl., pp. 98–99, pl. 11, fig. 16–18, 1914.

*Japanese name*: Fusa-nori.

*Habitat*: 15 m, on shell of molluscs: Off Ogi.

## BONNEMAISONIACEAE

156. *Bonnemaisonia hamifera* HARIOT

*Asparagopsis hamifera* (HARIOT) OKAM., in OKAMURA, K., Icon. Jap. Alg. Vol. IV., pp. 131–133, pl. 183, fig. 10–11, pl. 184, fig. 10–16, 1951; Descr. Jap. Alg. (in Jap.), pp. 430–431, fig. 200, 1956.

*Japanese name*: Kagi-nori.

*Habitat*: 1 m, 25 m, on *Sargassum piluliferum*, on stone: Hyūga, Tassha, Off Tassha.

157. *Asparagopsis taxiformis* (DELILE) COLLINS et HERVEY

Contrib. Bermuda Biol. Sta. Res., No. 69. Alg. Bermuda, p. 117, 1917.

*Japanese name*: Kagike-nori.

*Habitat*: 1.5 m, on *Laurencia intermedia*, *Griffithsia japonica*, *Sargassum patens*: Sotomo, Akasaki.

## GELIDIACEAE

158. *Gelidium amansii* LAMOUROUX

in OKAMURA, K., Icon. Jap. Alg. Vol. III., pp. 25–26, 27–29, pl. 106, fig. 1–8, 1951; Descr. Jap. Alg. (in Jap.), pp. 458–459, fig. 210, 1956.

*Japanese name*: Makusa.

*Habitat*: 0.5 m, on rocky bottom: Hyūga, Tassha.

159. *Gelidium divaricatum* MARTENS

in OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 456, 1956; SEGAWA, S., mar. alg. Susaki, Prov. Idzu, its vicin., p. 73, 1935.

*Japanese name*: Hime-ten-gusa.

*Habitat*: 1 m, on rocky bottom: Okazaki.

160. *Gelidium japonicum* OKAMURA

*Gelidium Pterocladia* Jap., p. 52, pl. 18, fig. 2, 1934; Descr. Jap. Alg. (in Jap.), p. 458, 1956; SEGAWA, S., mar. alg. Susaki, Prov. Idzu, its vicin., pp. 73–74, 1935.

*Japanese name*: Oni-kusa.

*Habitat*: At low-tide-level, on rocky bottom: Sotomo.

161. *Gelidium pusillum* (STACKHOUSE) LE JOLIS

in OKAMURA, K., Icon. Jap. Alg. Vol. II., pp. 11–13, pl. 54, fig. 10–14, 1951; TAYLOR, W. R., Mar. Alg. E. Trop. Subtrop. Coasts Am., pp. 354–355, pl. 45, fig. 4, 1960.

*Japanese name*: Hai-ten-gusa.

*Habitat*: 1 m, on sponge: Mikuni, Akasaki.

162. *Pterocladia tenuis* OKAMURA

*Pterocladia capillaceae* (GMELIN) BORNET et THURET, in OKAMURA, K., Icon. Jap. Alg. Vol. III., pp. 50–53, pl. 115, fig. 1–11, 1951.

*Japanese name*: Oba-kusa.

*Habitat*: 0.3 m, on rocky bottom: Hyūga.

163. *Pterocladia densa* OKAMURA

*Gelidium Pterocladia* Jap., p. 63, pl. 30, fig. 1-2, pl. 33, fig. 4-8, 1934; Descr. Jap. Alg. (in Jap.), pp. 468-469, 1956.

*Japanese name*: Kata-oba-kusa.

*Habitat*: 0.5 m, on rocky bottom: Tassha.

## CRYPTONEMIALES

## DUMONTIACEAE

164. *Hyalosiphonia caespitosa* OKAMURA

Icon. Jap. Alg. Vol. II., pp. 51-59, pl. 65, fig. 1-6, 1951; Descr. Jap. Alg. (in Jap.), pp. 478-479, fig. 221, 1956.

*Japanese name*: Isomume-modoki.

*Habitat*: Drifting: Okazaki.

©165. *Pikea californica* HARVEY

Ner. Bor.-Am., II, Rhodospermae, Red Alg., pp. 246-247, 1853.

*Japanese name*: Michigae-so.

*Habitat*: At low-tide-level, on rocky bottom: Matsuzaki.

## GLOIOSIPHONIACEAE

166. *Gloiosiphonia capillaris* (HUDSON) CARMICHAEL

in NARITA, S., Enum. Sp. Nematolionis Helminthocladiae Jap., p. 191, pl. 4, fig. 1, 1918; OKAMURA, K., Icon. Jap. Alg. Vol. III., 86-90, pl. 124, fig. 1-13, 1951.

*Japanese name*: Ito-funori.

*Habitat*: 0.5 m, on rocky bottom: Hyūga.

## ENDOCLADIACEAE

167. *Gloiopeltis furcata* POSTELS et RUPRECHT

in OKAMURA, K., Icon. Jap. Alg. Vol. V., pp. 164-167, pl. 244, fig. 1-18, 1951; Descr. Jap. Alg. (in Jap.), p. 562, fig. 264, 1956.

*Japanese name*: Fukuro-funori.

*Habitat*: At low-tide-level, on rocky bottom: Hyūga.

## PEYSSONELIACEAE

168. *Peyssonelia caulifera* OKAMURA

in Descr. Jap. Alg. (in Jap.), pp. 493-494, fig. 230, 1956.

*Japanese name*: Etsuki-iwano-kawa.

*Habitat*: 1 m, on *Amphiroa zonata*; 50 m, on Melobesioideae: Mikuni, Off Ogi.

## HILDENBRANDIACEAE

169. *Hildenbrandia rosea* KÜTZING  
 in YENDO, K., Notes Alg. New Jap., VII., p. 207, 1917; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 496, 1956.  
*Japanese name:* Beni-madara.  
*Habitat:* 50 m, on stone: Off Ogi.

## CORALLINACEAE

170. *Heteroderma sargassi* FOSLIE f. *parvula* MASAKI  
 Stud. Melobesioideae Jap., pp. 26–27, pl. 13, fig. 2, 1968.  
*Japanese name:* Sozo-goromo.  
*Habitat:* 1 m, on *Laurencia intermedia*: Mikuni.
171. *Lithophyllum okamurai* FOSLIE  
 in OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 512, fig. 241, 1956.  
*Japanese name:* Hiraibo.  
*Habitat:* 0.5 m, on rocky bottom; 50 m, on sandy and muddy bottom: Obama, Off Ogi, Tassha.
172. *Dermatolithon tumidulum* (FOSLIE) FOSLIE  
 in MASAKI, T., Stud. Melobesioideae Jap., pp. 53–55, 1968.  
*Japanese name:* Norimaki.  
*Habitat:* 1 m, on *Gymnogongrus flabelliformis*: Okazaki.
173. *Fosliella zostericola* (FOSLIE) SEGAWA  
*Heteroderma zostericola* FOSLIE, in OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 507–508, 1956.  
*Japanese name:* Mokasa.  
*Habitat:* 15 m, on the leaves of *Zostera marina*: Off Ogi.
174. *Lithothamnium erubescens* FOSLIE f. *madagascarensis* FOSLIE  
 in MASAKI, T., Stud. Melobesioideae Jap., pp. 12–14, pl. 7–8, pl. 42, fig. 4–7, 1968.  
*Japanese name:* Edauchi-ishimo.  
*Habitat:* 50 m, on Melobesioideae: Off Ogi.
175. *Amphiroa zonata* YENDO  
 Corallinae Jap., pp. 10–11, pl. I, fig. 11–14, pl. IV, fig. 9, 1902; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 517, 1956.  
*Japanese name:* Usukawa-kaninote.  
*Habitat:* 1.5 m, on rocky bottom: Sotomo, Akasaki, Tassha.
176. *Marginisporum crassissimum* (YENDO) JOHANSEN et CHIHARA  
 Morphol. System. Coralline Alg. Spec. Ref. *Calliarthron*, pp. 65–66, 1969; *Amphiroa crassissima* YENDO, YENDO, K., Corallinae Jap., p. 16, pl. I, fig. 27–28, pl. V, fig. 5–6, 1902.  
*Japanese name:* Heritori-kaninote.

*Habitat*: 1 m, on rocky bottom: Mikuni, Akasaki, Tassha.

177. *Alatocladia modesta* (YENDO) JOHANSEN

Morphol. System. Coralline Alg. Spec. Ref. *Calliarthron*, p. 55, 1969; *Cheilosporum anceps* YENDO var. *modesta* YENDO, YENDO, K., Corallinae Jap., p. 19, pl. II, fig. 9, pl. VI, fig. 3, 1902.

*Japanese name*: Yahazu-shikoro.

*Habitat*: 0.5 m, on rocky bottom in a shaded place: Sotomo, Tassha.

178. *Corallina officinalis* LINNÉ

in YENDO, K., Corallinae Jap., pp. 28–30, pl. 3, fig. 11–13, pl. 7, fig. 10–13, 1902; OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 526–527, fig. 248, 1956.

*Japanese name*: Sangomo.

*Habitat*: 0.5 m, on rocky bottom: Tassha.

179. *Corallina pilulifera* POSTELS et RUPRECHT

in YENDO, K., Corallinae Jap., pp. 30–31, pl. III, fig. 14–16, pl. VII, fig. 14–16, 1902; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 527, 1956.

*Japanese name*: Piri-hiba.

*Habitat*: 0.5 m, on rocky bottom: Sotomo, Akasaki, Tassha.

180. *Corallina squamata* ELLIS et SOLANDER

in YENDO, K., Corallinae Jap., p. 32, pl. III, fig. 17, pl. VII, fig. 17, 1902; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 528, 1956.

*Japanese name*: Miya-hiba.

*Habitat*: At low-tide-level, on rocky bottom: Sotomo.

181. *Jania arborescens* YENDO

*Corallina arborescens* YENDO, in YENDO, K., Corallinae Jap., pp. 25–26, pl. III, fig. 5, pl. VII, fig. 5, 1902; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 531, 1956.

*Japanesename*: Kiburi-mosazuki.

*Habitat*: 0.5 m, on rocky bottom: Tassha.

182. *Jania decussato-dichotoma* YENDO

*Corallina decussato-dichotoma* YENDO, in YENDO, K., Corallinae Jap., p. 25, pl. III, fig. 1–3, pl. VII, fig. 3–4, 1902; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 530, 1956.

*Japanese name*: Hime-mosazuki.

*Habitat*: 1 m, on Melobesioideae: Mikuni.

### CRYPTONEMIACEAE

183. *Grateloupia divaricata* OKAMURA

New Little Know. Alg. Jap., pp. 482–480, fig. 1–2, 1895; Icon. Jap. Alg. Vol. III., pp. 55–59, pl. 116, 117, fig. 12–18, 1951.

*Japanese name*: Kata-nori.

*Habitat*: At low-tide-level, on rocky bottom: Hyūga, Yokohama.

184. *Grateloupia filicina* (WULFEN) J. AGARDH

in TAYLOR, W. R., Mar. Alg. E. Trop. Subtrop. Coasts Am., p. 424, pl. 54, fig. 2–3, 1960; OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 538–539, fig. 253, 1956.

*Japanese name:* Mukade-nori.

*Habitat:* At low-tide-level, on rocky bottom: Hyūga, Tassha.

185. *Grateloupia imbricata* HOLMES

New Mar. Alg. Jap., p. 255, pl. VIII, fig. 2a-2b, 1895; OKAMURA, K., Icon. Jap. Alg. Vol. VII., p. 29, pl. 316, fig. 1-3, 1962.

*Japanese name:* Sakura-nori.

*Habitat:* At low-tide-level, on rocky bottom: Okazaki, Yokohama, Tassha.

186. *Grateloupia livida* (HARVEY) YAMADA

Notes Some Jap. Alg. II., pp. 74-75, 1931; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 541, 1956.

*Japanese name:* Hira-mukade.

*Habitat:* At low-tide-level, on rocky bottom: Okazaki.

187. *Grateloupia okamurai* YAMADA

Notes Some Jap. Alg. IX., pp. 204-205, 1941.

*Japanese name:* Kyōno-himo.

*Habitat:* At low-tide-level, on rocky bottom: Hyūga, Yokohama, Tassha.

188. *Grateloupia ramosissima* OKAMURA

Icon. Jap. Alg. Vol. III., pp. 60-62, pl. 68, fig. 1-11, 1951; Descr. Jap. Alg. (in Jap.), p. 142, 1956.

*Japanese name:* Suji-mukade.

*Habitat:* At low-tide-level, on rocky bottom: Akasaki.

189. *Grateloupia turuturu* YAMADA

Notes Some Jap. Alg. IX., pp. 205-206, pl. XLVI, 1941.

*Japanese name:* Tsurutsuru.

*Habitat:* At low-tide-level, on rocky bottom: Hyūga, Tassha.

190. *Carpopeltis affinis* (HARVEY) OKAMURA

Icon. Jap. Alg. Vol. VII., pp. 30-31, pl. 316, fig. 4-15, 1962; Descr. Jap. Alg. (in Jap.), pp. 553-554, fig. 260, 1956.

*Japanese name:* Matsu-nori.

*Habitat:* At low-tide-level, on rocky bottom: Hyūga.

#### KALLYMENIACEAE

191. *Callophyllis adnata* OKAMURA

Icon. Jap. Alg. Vol. VI., pp. 79-80, 75-76, pl. 289, fig. 1-6, 1961.

*Japanese name:* Nezashino-tosaka-modoki.

*Habitat:* 1.5 m, on *Jania* sp.: Sotomo, Akasaki.

#### GIGARTINALES NEMASTOMACEAE

192. *Schizymenia dubyi* (CHAUVIN) J. AGARDH



in OKAMURA, K., Icon. Jap. Alg. Vol. VII., pp. 10–11, 10–11, pl. 307, fig. 1–5, pl. 308, fig. 12, 1962; INAGAKI, K., Mar. Rhodophyceae coll. Oshoro Bay its vicin. (in Jap.), p. 38, fig. 18, 1933.

*Japanese name:* Beni-sunago.

*Habitat:* 0.3 m, on rocky bottom: Okazaki, Tassha.

#### GRACILARIACEAE

193. *Gracilaria compressa* (C. AGARDH) GREVILLE

in OKAMURA, K., Icon. Jap. Alg. Vol. V., pp. 160–162, 171–172, pl. 242, fig. 5–10, 1951; Descr. Jap. Alg. (in Jap.), pp. 630–631, fig. 299, 1956.

*Japanese name:* Shiramo.

*Habitat:* Drifting: Yokohama.

○194. *Gracilaria incurvata* OKAMURA

Icon. Jap. Alg. Vol. VI, pp. 41–42, pl. 273, fig. 1–6, 1961.

*Japanese name:* Mizo-ogo-nori.

*Habitat:* At low-tide-level, on rocky bottom: Tassha.

195. *Gracilaria textorii* SURINGAR

in OHMI, H., Sp. *Gracilaria Gracilariopsis* Jap. Adj. Waters, pp. 40–44, text-fig. 20–21, 1958; OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 632–633, 1956; INAGAKI, K., Mar. Rhodophyceae coll. Oshoro Bay its vicin. (in Jap.), p. 37, fig. 12, 1933.

*Japanese name:* Kaba-nori.

*Habitat:* At low-tide-level, on rocky bottom; 15 m, on *Lithothamnium* sp.: Okazaki, Off Ogi, Tassha.

196. *Gracilaria verrucosa* (HUDSON) PAPENFUSS

in OHMI, H., Sp. *Gracilaria Gracilariopsis* Jap. Adj. Waters, pp. 6–10, pl. I, fig. A–D, text-fig. 1–2, 1958; *Gracilaria confervoides* (L.) GREV., in OKAMURA, K., Icon. Jap. Alg. Vol. IV., pp. 1–4, pl. 151, fig. 1–9, 1951.

*Japanese name:* Ogo-nori.

*Habitat:* Drifting: Wada.

#### PLOCAMIACEAE

197. *Plocamium leptophyllum* KÜTZING var. *flexuosum* J. AGARDH

in OKAMURA, K., Icon. Jap. Alg. Vol. III., pp. 14–15, pl. 103, fig. 6–7, 1951; Descr. Jap. Alg. (in Jap.), p. 616, 1956.

*Japanese name:* Hosoyukari.

*Habitat:* Drifting; 25 m, on stone: Tassha, Off Tassha.

198. *Plocamium telfairiae* HARVEY

in YENDO, K., Notes Alg. New Jap., III., pp. 111–113, 1915; *Plocamium abnorme* HOOK. et HARV., in OKAMURA, K., Icon. Jap. Alg. Vol. III., pp. 1–6, pl. 101, fig. 1–14, 1951.

*Japanese name:* Yukari.

*Habitat:* 1.5 m, 25 m, on rocky bottom, *Halopteris filicina*; Drifting: Sotomo, Tassha, Off Tassha.

## SOLIERIACEAE

199. *Solieria mollis* (HARVEY) KYLIN  
 in YAMADA, Y., Notes Some Jap. Alg. VI., p. 35, pl. 12, fig. 2, 1935; *Rhabdonia mollis* HARVEY,  
 in YENDO, K., Notes Alg. New Jap.. III., p. 109, 1915.  
*Japanese name*: Hosoba-mirin.  
*Habitat*: Drifting: Tsuruga.
200. *Solieria robusta* (GREVILLE) KYLIN  
*Rhabdonia robusta* J. AG., in YENDO, K., Notes Alg. New Jap.. II., pp. 273-276, 1914; OKAMURA,  
 K., Icon. Jap. Alg. Vol. IV., pp. 102-105, pl. 174, fig. 1-10, 1951.  
*Japanese name*: Mirin.  
*Habitat*: Drifting: Yokohama.

## HYPNEACEAE

201. *Hypnea charoides* LAMOUROUX  
 in TANAKA, T., Gen. *Hypnea* Jap., pp. 243-245, fig. 16, 1941; *Hypnea seticulosa* J. AGARDH  
 var. ?, in OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 611-612, 1956.  
*Japanese name*: Ibara-nori.  
*Habitat*: 1 m, at low-tide-level, on *Marginisporum* sp.: Mikuni, Tassha.
202. *Hypnea pannosa* J. AGARDH?  
 in TANAKA, T., Gen. *Hypnea* Jap., pp. 247-248, text-fig. 20, 1941; OKAMURA, K., Icon. Jap.  
 Alg. Vol. I., pp. 47-49, pl. 10, fig. 18-20, 1951.  
*Japanese name*: Koke-ibara.  
*Habitat*: 0.5 m, on *Carpopeltis* sp.: Hyūga.

## PHYLLOPHORACEAE

203. *Gymnogongrus flabelliformis* HARVEY  
 in MIKAMI, H., Syst. stud. Phylloporaceae Gigartinaceae Jap. its Vicin., pp. 183-187, fig. 2-3,  
 1965; OKAMURA, K., Icon. Jap. Alg. Vol. IV., pp. 128-129, 139-140, pl. 181, fig. 7-9, pl. 182, fig. 9-  
 14, 1951.  
*Japanese name*: Okitsu-nori.  
*Habitat*: 0.5 m, on rocky bottom: Hyūga, Tassha.

## GIGARTINACEAE

204. *Gigartina intermedia* SURINGAR  
 in MIKAMI, H., Syst. Stud. Phylloporaceae Gigartinaceae Jap. its Vicin., pp. 205-207, fig. 14,  
 1965; OKAMURA, K., Icon. Jap. Alg. Vol. I., pp. 172-173, pl. 35, fig. 1-5, 1951.

*Japanese name:* Kai-nori.

*Habitat:* 1 m, on rocky bottom: Mikuni.

205. ***Gigartina tenella*** HARVEY

in MIKAMI, H., Syst. Stud. Phylloporaceae Gigartinaceae Jap. its Vicin., pp. 207–210, fig. 15–16, 1965; OKAMURA, K., Icon. Jap. Alg. Vol. I., pp. 159–163, pl. 33, fig. 1–8, 1951.

*Japanese name:* Sugi-nori.

*Habitat:* At low-tide-level, on *Sargassum thunbergii*: Hyūga, Tassha.

206. ***Chondrus ocellatus*** HOLMES

New Mar. Alg. Jap., pp. 252–253, pl. IX, fig. 2, 1895; MIKAMI, H., Syst. Stud. Phylloporaceae Gigartinaceae Jap. its Vicin., pp. 229–230, 1965.

*Japanese name:* Tsuno-mata.

*Habitat:* At low-tide-level, on rocky bottom: Okazaki, Tassha.

RHODYMENIALES  
RHODYMENIACEAE

207. ***Gloioderma iyoensis*** OKAMURA?

Icon. Jap. Alg. Vol. VII, pp. 27–28, pl. 315, fig. 1–10, 1962.

*Japanese name:* Hime-hishi-bukuro.

*Habitat:* At low-tide-level, on rocky bottom in a shaded place: Tassha.

CHAMPIACEAE

208. ***Lomentaria catenata*** HARVEY

in INAGAKI, K., Mar. Rhodophyceae coll. Oshoro Bay its vicin. (in Jap.), pp. 40–41, 1933; OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 683–684, fig. 326, 1956.

*Japanese name:* Fushi-tsunagi.

*Habitat:* 0.5 m, on rocky bottom: Tassha.

209. ***Lomentaria hakodatensis*** YENDO

Nov. Alg. Jap., Dec. I–III, p. 6, 1920; INAGAKI, K., Mar. Rhodophyceae coll. Oshoro Bay its vicin. (in Jap.), pp. 41–42, fig. 14–15, 1933.

*Japanese name:* Kosuji-fushi-tsunagi.

*Habitat:* At low-tide-level, on rocky bottom: Hyūga.

210. ***Champia bifida*** OKAMURA

Illust. Mar. Alg. Jap. Vol. I(5), pp. 95–98, pl. 24, fig. 1–11, 1901.

*Japanese name:* Hira-watsunagi-so.

*Habitat:* 1 m, on *Cystophyllum sisymbrioides*: Hyūga.

211. ***Champia japonica*** OKAMURA

Icon. Jap. Alg. Vol. VI., pp. 49–50, 52–53, pl. 276, fig. 1–14, 1961.

*Japanese name:* Hera-watsunagi-so.

*Habitat:* 15 m, on *Lithothamnium* sp.: Off Ogi.

212. *Champia parvula* (AGARDH) J. AGARDH  
 in HARVEY, W. H., Ner. Bot.-Am., II, Rhodosperrmae., p. 76, 1853; OKAMURA, K., Icon. Jap. Alg. Vol. II., pp. 89-91, pl. 76, fig. 1-14, 1951.  
*Japanese name*: Watsunagi-so.  
*Habitat*: 1.5 m, on rocky bottom: Sotomo, Akasaki, Tassha.
- 213. *Binghamiella californica* (FARLOW) SETCHELL et DAWSON  
*Binghamia californica* FARLOW MSCR., in INAGAKI, K., Mar. Rhodophyceae coll. Oshoro Bay its vicin. (in Jap.), pp. 43-45, fig. 16-17, 1933; OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 689-690, fig. 329, 1956.  
*Japanese name*: Kaerude-gusa.  
*Habitat*: 25 m, on rocky bottom: Off Tassha.

CERAMIALES  
 CERAMIACEAE

214. *Callithamnion callophyllidicola* YAMADA  
 Notes Some Jap. Alg. IV., pp. 270-273, pl. 5, pl. 6, fig. b, text-fig. 3-a, b, 1932.  
*Japanese name*: Kinu-ito-gusa.  
*Habitat*: 1.5 m, on *Dictyota* sp., *Amphiroa* sp.: Sotomo, Akasaki.
215. *Antithamnion nipponicum* YAMADA et INAGAKI  
*Acrothamnion pulchellum* J. AGARDH (?), in YAMADA, Y., Rep. Biol. Surv. Mutsu Bay. 9. Mar. Alg. Mutsu Bay Adj. Waters. II., pp. 528-529, fig. 22, 1928; YENDO, K., Notes Alg. New Jap., V., pp. 262-263, 1916.  
*Japanese name*: Futatsu-gasane.  
*Habitat*: 0.5 m, on *Codium adhaerens*: Sotomo, Tassha.
216. *Platythamnion yezoense* INAGAKI (?)  
 in OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 709-710, fig. 337, 1956.  
*Japanese name*: Yotsuba-gusa.  
*Habitat*: Drifting; 25 m, on *Plumularia* sp., *Coccophora langsdorfii*: Tassha, Off Tassha.
217. *Spermothamnion cladophorae* YAMADA et TANAKA  
 in OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 695-696, fig. 331, 1956.  
*Japanese name*: Ito-hibidama.  
*Habitat*: 15 m, on *Sargassum piluliferum*; 0.5 m, on *Sargassa*: Off Ogi, Tassha.
218. *Spermothamnion codicola* YAMADA et TANAKA  
 in OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 696-697, 1956.  
*Japanese name*: Miru-hibidama.  
*Habitat*: 0.5 m, on *Codium adhaerens*: Sotomo.
219. *Crouania attenuata* (BONNEMAISON) J. AGARDH  
 in HARVEY, W. H., Ner. Bor.-Am., II, Rhodosperrmae, Red Alg., p. 226, Tab. 31, D., 1853; OKAMURA, K., Icon. Jap. Alg. Vol. V., pp. 124-125, 133, pl. 235, fig. 15-21, 1951.

*Japanese name:* Yotsuno-sade.

*Habitat:* 1 m, on *Amphiroa* sp.: Akasaki, Tassha.

220. *Wrangelia japonica* NODA

*Wrangelia* Sado Isl. Jap. Sea, pp. 17–18, fig. 1, 1964.

*Japanese name:* Rangeria.

*Habitat:* 1 m, at low-tide-level, on *Marginisporum crassissimum*: Mikuni, Tassha.

©221. *Wrangelia tagoi* (OKAMURA) OKAMURA et SEGAWA

*Dasyphila Tagoi* OKAMURA, OKAMURA, K., Icon. Jap. Alg. Vol. II., pp. 132–133, 135–136, pl. 87, fig. 1–11, 1951; Descr. Jap. Alg. (in Jap.), pp. 713–714, fig. 339, 1956.

*Japanese name:* Tago-nori.

*Habitat:* 1.5 m, on rocky bottom: Sotomo.

222. *Griffithsia coacta* OKAMURA

in Descr. Jap. Alg. (in Jap.), pp. 718–719, fig. 343, 1956.

*Japanese name:* Watage-kazashi-gusa.

*Habitat:* 1 m, on *Corallina* sp.: Akasaki.

©223. *Griffithsia corallina* C. AGARDH

Plate I, Fig. 1

in FRITSCH, F. E., Struct. Reprod. Alg. Vol. II Foreword, Phaeophyceae, Rhodophyceae, Myxophyceae, p. 520, fig. 185 (J–L), 1959; YAMADA, Y., Rep. Biol. Surv. Mutsu Bay. 9. Mar. Alg. Mutsu Bay Adj. Waters. II., pp. 526–528, fig. 20, 1928.

*Japanese name:* Kotsubu-kazashi-gusa.

*Habitat:* At low-tide-level, on *Corallina* sp.: Tassha.

224. *Griffithsia japonica* OKAMURA

Icon. Jap. Alg. Vol. VI., pp. 36–37, pl. 270, fig. 1–15, 1961; Descr. Jap. Alg. (in Jap.), pp. 716–717, fig. 342, 1956.

*Japanese name:* Kazashi-gusa.

*Habitat:* 1.5 m, on *Corallina* sp.: Sotomo.

225. *Griffithsia tenuis* C. AGARDH

in OKAMURA, Icon. Jap. Alg. Vol. VII., pp. 2–3, 2–3, pl. 302, fig. 1–6, pl. 303, fig. 4–7, 1962; Descr. Jap. Alg. (in Jap.), pp. 719–720, 1956.

*Japanese name:* Ke-kazashi-gusa.

*Habitat:* 0.5 m, on *Corallina* sp.: Tassha.

226. *Spyridia filamentosa* (WULFEN) HARVEY

Ner. Bor.-Am. II, Rhodosperrmae, Red Alg., pp. 204–205, Tab. 34, A., 1853.

*Japanese name:* Ubuge-gusa.

*Habitat:* 1 m, on rocky bottom: Mikuni.

227. *Ceramium boydenii* GEPP

in NAKAMURA, Y., Sp. Gen. *Ceramium Campylaephora* Esp. Thos. N. Jap., pp. 160–163, fig. 15–16, 1965; OKAMURA, K., Icon. Jap. Alg. Vol. I., pp. 248–251, pl. 50, fig. 1–18, 1951.

*Japanese name:* Ami-kusa.

*Habitat:* Drifting, on *Cystophyllum* sp.: Tassha.

228. *Ceramium cimbricum* H. PETERSEN  
in NAKAMURA, Y., Sp. Gen. *Ceramium Campylaephora* Esp. Those N. Jap., pp. 127–129, pl. 1, fig. 2, text-fig. 2–3, 1965.  
*Japanese name*: Matsubara-igisu.  
*Habitat*: 1 m, on *Gelidium pusillum*: Mikuni.
229. *Ceramium fastigiatum* HARVEY  
Ner. Bor.-Am., II, Rhodosperrae, Red Alg., p. 217, 1853; NAKAMURA, Y., Sp. Gen. *Ceramium Campylaephora* Esp. Those N. Jap., pp. 129–132, pl. 1, fig. 3, text-fig. 4, 1965.  
*Japanese name*: Hime-igisu.  
*Habitat*: 0.5 m, on *Codium adhaerens*: Sotomo.
230. *Ceramium japonicum* OKAMURA  
Contrib. Knowl. Mar. Alg. Jap. II., pp. 38–39, pl. 3, fig. 24–28, 1896; NAKAMURA, Y., Sp. Gen. *Ceramium Campylaephora* Esp. Those N. Jap., pp. 152–155, fig. 12–13, 1965.  
*Japanese name*: Hane-igisu.  
*Habitat*: 1 m, on *Gymnogongrus flabelliformis*: Okazaki, Akasaki.
231. *Ceramium paniculatum* OKAMURA  
Contrib. Knowl. Mar. Alg. Jap. II., pp. 36–37, pl. 3(7), fig. 22–23, 1896.  
*Japanese name*: Hari-igisu.  
*Habitat*: 1.5 m, on *Hypoglossum geminatum*: Sotomo.
232. *Ceramium tenerrimum* (MARTENS) OKAMURA  
Icon. Jap. Alg. Vol. IV., pp. 112–114, 121–122, pl. 179, fig. 1–7, 1951; NAKAMURA, Y., Sp. Gen. *Ceramium Campylaephora* Esp. Those N. Jap., pp. 133–135, pl. 1, fig. 4, text-fig. 5, 1965.  
*Japanese name*: Ke-igisu.  
*Habitat*: 1 m, on *Corallina pilulifera*: Mikuni, Tassha.
233. *Campylaephora crassa* (OKAMURA) NAKAMURA  
New *Ceramiums Campylaephoras* Jap., pp. 166–170, text-fig. 6–7, 1950; Sp. Gen. *Ceramium Campylaephora* Esp. Those N. Jap., pp. 163–166, pl. IX, 2–4, pl. X–XII, text-fig. 17–18, 1965; TOKIDA, J., Mar. Alg. S. Saghalien, pp. 204–205, 1954.  
*Japanese name*: Futo-igisu.  
*Habitat*: 0.5 m, on *Sargassum* sp.: Tassha.
234. *Campylaephora hypnaeoides* J. AGARDH  
in NAKAMURA, Y., Sp. Gen. *Ceramium Campylaephora* Esp. Those N. Jap., pp. 170–173, text-fig. 19, 1965.  
*Japanese name*: Ego-nori.  
*Habitat*: At low-tide-level, on *Sargassum* sp.: Okazaki, Tassha.
235. *Centroceras clavulatum* (C. AGARDH) MONTAGNE  
in FELDMANN-MAZOYER, G., Cérarniacées Médit. Occ., pp. 337–341, fig. 128–129, 1940; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 743, fig. 355, 1956.  
*Japanese name*: Toge-igisu.  
*Habitat*: 1 m, on *Corallina pilulifera*: Mikuni.
- ※236. *Microcladia dentata* OKAMURA  
Icon. Jap. Alg. Vol. 4., pp. 46–47, pl. 162, fig. 4–9, 1951.

*Japanese name*: Kosuji-saeda.

*Habitat*: At low-tide-level, on *Marginisporum crassissimum*: Tassha.

#### RHODOMELACEAE

236. *Polysiphonia decumbens* SEGI  
Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 218–221, pl. 7, fig. 2, text-fig. 17–18, 1951.  
*Japanese name*: Ribon-ito-gusa.  
*Habitat*: At low-tide-level, on rocky bottom: Sotomo.
- ©237. *Polysiphonia fruticulosa* (WULFENI) SPRENGEL Plate I, Fig. 2  
in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 264–266, pl. 15, fig. 2, 1951.  
*Japanese name*: Harima-ito-gusa.  
*Habitat*: 5 m, on *Sargassum piluliferum*: Off Urasoko.
238. *Polysiphonia harlandii* HARVEY  
in YAMADA, Y., Notes Some Jap. Alg. V., pp. 283–284, pl. 13, fig. 3, 1933; SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 216–218, pl. 7, fig. 1, text-fig. 16, 1951.  
*Japanese name*: Taiwan-ito-gusa.  
*Habitat*: 1.5m, on *Hyalosiphonia caespitosa*: Hyūga.
239. *Polysiphonia kampsaxii* BØRGESEN  
in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 183–185, pl. II, fig. 2, text-fig. 2, 1951.  
*Japanese name*: Take-ito-gusa.  
*Habitat*: 5 m, on *Sargassa*: Urasoko, Yokohama, Akasaki, Tassha.
240. *Polysiphonia morrowii* HARVEY  
in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 244–247, pl. 11, fig. 2, text-fig. 28, 1951; TOKIDA, J., Mar. Alg. S. Saghalien, pp. 219–220, 1954.  
*Japanese name*: Moro-ito-gusa.  
*Habitat*: 1 m, on *Sargassum tortile*: Okazaki.
241. *Polysiphonia pulvinata* J. AGARDH  
in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 195–197, pl. III, 5, text-fig. 7, 1951.  
*Japanese name*: Hina-ito-gusa.  
*Habitat*: 1.5 m, on *Champia* sp.: Sotomo.
242. *Polysiphonia savatieri* HARIOT  
in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 202–207, pl. III, fig. 8, text-fig. 10–11, 1951; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 830, 1956.  
*Japanese name*: Hime-ito-gusa.  
*Habitat*: 0.5 m, on *Grateloupia filicina*: Hyūga.
243. *Polysiphonia senticulosa* HARVEY  
in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 247–251, pl. 12, text-fig. 29–30, 1951; INAGAKI, K., Mar. Rhodophyceae Coll. Oshoro Bay Its Vicin. (in Jap.), pp. 60–61, fig. 25, 1933.  
*Japanese name*: Mutsu-ito-gusa.

*Habitat*: 1 m, on rocky bottom: Okazaki.

244. *Polysiphonia subtilissima* MONTAGNE

in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 197–199, pl. III, 6, text-fig. 8, 1951; HARVEY, W. H., Ner. Bor.-Am.. II, Rhodospermae, pp. 34–35, 1853.

*Japanese name*: Kinukomachi.

*Habitat*: 1 m, on rocky bottom in a shaded place: Okazaki.

245. *Polysiphonia tapinocarpa* SURINGAR

in SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 254–256, pl. XIII, fig. 3, text-fig. 32, 1951; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 835, 1956.

*Japanese name*: Ke-ito-gusa.

*Habitat*: Drifting, on *Sargassum* sp.: Tassha.

246. *Polysiphonia tokidae* SEGI

Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 192–194, pl. III, fig. 3–4, text-fig. 6, 1951.

*Japanese name*: Usu-ito-gusa.

*Habitat*: 0.5 m, on rocky bottom: Hyūga, Yokohama, Tassha.

©247. *Polysiphonia tongatensis* HARVEY Plate I, Fig. 3–4

in SETCHELL, W. A. and GARDNER, N. L., Mar. Alg. Revillagigedo Isls. Exped., p. 160, 1930; SEGI, T., Syst. Stud. Gen. *Polysiphonia* Jap. Its Vicin., pp. 207–209, text-fig. 12–13, pl. IV–V, 1, 1951.

*Japanese name*: Benihossu.

*Habitat*: Drifting: Tassha.

248. *Polysiphonia urceolata* (DILLWYN) GREVILLE

in YENDO, K., Notes Alg. New Jap.. IV., pp. 60–61, 1916; SEGI, T., Syst. Stud. *Polysiphonia* Jap. Its Vicin., pp. 239–244, pl. X, XI, fig. 1, text-fig. 26–27, 1951.

*Japanese name*: Syōjōke-nori.

*Habitat*: 1 m, on *Sargassa*: Hyūga, Tassha.

249. *Chondria crassicaulis* HARVEY

in OKAMURA, K., Icon. Jap. Alg. Vol. I., pp. 12–16, pl. III, fig. 1–15, 1951; HOLMES, E. M., New Mar. Alg. Jap., p. 256, pl. VIII, fig. 4a–c, 1895.

*Japanese name*: Yuna.

*Habitat*: 0.5 m, on rocky bottom: Hyūga, Tassha.

250. *Chondria expansa* OKAMURA

Icon. Jap. Alg. Vol. V., pp. 163–164, 174–175, pl. 243, fig. 9–17, 1951.

*Japanese name*: Mosa-yanagi.

*Habitat*: 1 m, on *Dilophus okamurai*: Mikuni.

251. *Laurencia brongniartii* J. AGARDH

in SAITO, Y. and TAKATA, A., *Laurencia brongniartii* Jap., pp. 83–89, text-fig. 1–3, 1974; *Laurencia Grevilleana* HARVEY, in OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 860, 1956.

*Japanese name*: Sozo-no-hana.

*Habitat*: 15 m, on *Lithothamnium* sp.: Off Ogi.

252. *Laurencia hamata* YAMADA

Notes Some Jap. Alg. IV, pp. 274–275, pl. 8, 1932.

*Japanese name*: Kagi-sozo.



*Habitat*: Drifting: Tassha.

253. *Laurencia intermedia* YAMADA

in SAITO, Y., Stud. Jap. Sp. *Laurencia*, Sp. Ref. Their Comp. Morph., pp. 39–45, pl. XII, fig. 1–7, pl. XIII, fig. 1–14, text-fig. 31–35, 1967; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 853, fig. 399, 1956.

*Japanese name*: Kuro-sozo.

*Habitat*: 1.5 m, on rocky bottom: Sotomo, Akasaki, Tassha.

254. *Laurencia obtusa* (HUDSON) LAMOUREUX

in SAITO, Y., Stud. Jap. Sp. *Laurencia*, Sp. Ref. Their Comp. Morphol., pp. 5–11, pl. 1, 2, text-fig. 1–5, 1967; YAMADA, Y., Notes *Laurencia* Sp. Ref. Jap. Sp., pp. 222–226, pl. 16, fig. a, b, c, pl. 17, fig. a, b, c, 1931.

*Japanese name*: Magire-sozo.

*Habitat*: 0.5 m, on *Sargassum piluliferum*: Hyūga.

255. *Laurencia okamurai* YAMADA

in SAITO, Y., Stud. Jap. Sp. *Laurencia*, Sp. Ref. Their Comp. Morphol., pp. 21–29, pl. VII, fig. 1–3, pl. VIII, fig. 1–4, pl. IX, fig. 1–12, text-fig. 15–21, 1967; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 856, 1956.

*Japanese name*: Mitsude-sozo.

*Habitat*: Drifting: Matsuzaki, Akasaki.

256. *Laurencia pinnata* YAMADA

in SAITO, Y., Stud. Jap. Sp. *Laurencia*, Sp. Ref. Their Comp. Morphol., pp. 37–39, pl. IV, fig. 8–9, text-fig. 30, 1967; OKAMURA, K., Descr. Jap. Alg. (in Jap.), p. 859, 1956.

*Japanese name*: Hane-sozo.

*Habitat*: 0.5 m, on rocky bottom: Hyūga, Tassha.

257. *Laurencia undulata* YAMADA

Notes *Laurencia* Sp. Ref. Jap. Sp., pp. 243–244, pl. 29, fig. a, text-fig. T, 1931.

*Japanese name*: Kobu-sozo.

*Habitat*: 0.5 m, on rocky bottom: Hyūga, Akasaki, Tassha.

258. *Pterosiphonia pennata* (ROTH) FALKENBERG

in OKAMURA, K., Icon. Jap. Alg. Vol. I., pp. 125–126, 128–129, pl. 27, fig. 1–11, 1951; Descr. Jap. Alg. (in Jap.), pp. 862–863, fig. 402, 1956.

*Japanese name*: Hane-gusa.

*Habitat*: 1 m, on *Amphiroa* sp.: Akasaki, Tassha.

259. *Symphyocladia marchantioides* (HARVEY) FALKENBERG

in OKAMURA, K., Icon. Jap. Alg. Vol. II., pp. 152–157, pl. 93, fig. 1–17, 1951; *Pterosiphonia pumila* YENDO, in YENDO, K., Nov. Alg. Jap., Dec. I–III., p. 7, 1920.

*Japanese name*: Kozanemo.

*Habitat*: 0.5 m, on rocky bottom; 15 m, on *Lithothamnium* sp.: Sotomo, Off Ogi, Tassha.

260. *Symphyocladia pennata* OKAMURA

Icon. Jap. Alg. Vol. IV., pp. 186–188, 197–198, pl. 196, fig. 7–9, pl. 197, fig. 9–13, 1951; *Pterosiphonia parasitica* FKBG., in YENDO, K., Notes Alg. New Jap., VIII., p. 78, 1918.

*Japanese name*: Hime-kozane.

*Habitat*: 0.3 m, 25 m, on *Amphiroa* sp., *Sargassum serratifolium*, *Halopteris filicina*: Sotomo, Akasaki, Tassha, Off Tassha.

261. *Herposiphonia fissidentoides* (HOLMES) OKAMURA

Contrib. Knowl. Mar. Alg. Jap. III., pp. 36–37, fig. 9–11, 1899.

*Japanese name*: Hime-goke.

*Habitat*: 1 m, on *Dictyopteris undulata*: Sotomo.

262. *Herposiphonia subdisticha* OKAMURA

Contrib. Knowl. Mar. Alg. Jap. III., pp. 37–38, fig. 12–14, 1899.

*Japanese name*: Kuro-hime-goke.

*Habitat*: 1 m, on *Amphiroa zonata*, *Coccophora langsdorfii*: Mikuni, Tassha.

263. *Herposiphonia tenella* (C. AGARDH) NAEGELI

in OKAMURA, K., Icon. Jap. Alg. Vol. VI., pp. 22–23, pl. 264, fig. 1–9, 1961; Descr. Jap. Alg. (in Jap.), p. 870–871, fig. 405, 1956.

*Japanese name*: Kumonosu-hime-goke.

*Habitat*: 1 m, on *Corallina pilulifera*; 15 m, on *Lithothamnium* sp.: Mikuni, Off Ogi.

264. *Euzoniella flaccida* (HARVEY) FALKENBERG

in OKAMURA, K., Icon. Jap. Alg. Vol. I., pp. 151–152, pl. 32, fig. 1–6, 1951; Descr. Jap. Alg. (in Jap.), pp. 876–877, fig. 408, 1956.

*Japanese name*: Kushinoha.

*Habitat*: Drifting; 25 m, on *Sargassum serratifolium*, on stone: Tassha, Off Tassha.

265. *Leveillea jungermannioides* (MARTENS et HERING) HARVEY

in OKAMURA, K., Icon. Jap. Alg. Vol. II., pp. 148–152, pl. 192, fig. 1–10, 1951; Descr. Jap. Alg. (in Jap.), pp. 878–879, fig. 409, 1956.

*Japanese name*: Jabara-nori.

*Habitat*: 1 m, on *Cystophyllum sisymbrioides*, *Sargassum piluliferum*: Hyūga, Akasaki, Tassha.

#### DELESSERIACEAE

○266. *Hemineura schmitziana* DE TONI et OKAMURA

Neue Meeresalg., pp. 76–77, Taf. 16, fig. 6–12, 1894.

*Japanese name*: Habutae-nori.

*Habitat*: Drifting; 25 m, on stone: Tassha, Off Tassha.

◎267. *Hypoglossum geminatum* OKAMURA

Icon. Jap. Alg. Vol. I., pp. 156–159, pl. 32, fig. 7–12, 1951.

*Japanese name*: Beniha-nori.

*Habitat*: 1.5 m, on *Corallina squamata*: Sotomo.

268. *Erythroglossum minimum* OKAMURA

- Icon. Jap. Alg. Vol. VI., pp. 92–93, 88–89, pl. 297, fig. 1–16, 1961.  
*Japanese name*: Hime-usubeni.  
*Habitat*: 1.5 m, 25 m, on *Corallina pilulifera*, sponge in a shaded place,  
*Halopteris filicina*: Sotomo, Tassha, Off Tassha.
- ※269. *Erythroglossum repens* OKAMURA  
 Icon. Jap. Alg. Vol. VI, pp. 9–10, pl. 256, fig. 1–10, 1961.  
*Japanese name*: Usubeni.  
*Habitat*: 1 m, on sponge in a shaded place: Tassha.
270. *Nienburgia japonica* (YAMADA) KYLIN  
*Heteronema japonica* YAMADA, in YAMADA, Y., Notes Some Jap. Alg. I., pp. 34–35, fig. 2, 1930;  
 OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 776–777, fig. 374, 1956.  
*Japanese name*: Hasuji-ginu.  
*Habitat*: 0.5 m, on Melobesioideae: Sotomo.
271. *Schizoseris subdichotoma* (SEGAWA) YAMADA  
 Notes Some Jap. Alg. X., p. 25, 1944.  
*Japanese name*: Hime-beni-yahazu.  
*Habitat*: 1 m, on *Marginisporum* sp.: Sotomo.
272. *Acrosorium flabellatum* YAMADA  
 Notes Some Jap. Alg. I., pp. 31–32, pl. 4, fig. 3, 1930.  
*Japanese name*: Yare-usuba-nori.  
*Habitat*: At low-tide-level, on *Corallina* sp.; Drifting: Sotomo, Tassha.
273. *Acrosorium polyneurum* OKAMURA  
 Descr. Jap. Alg. (in Jap.), pp. 787–788, 1956.  
*Japanese name*: Suji-usuba-nori.  
*Habitat*: 0.5 m, on *Pterocladia* sp.: Tassha.
274. *Acrosorium uncinatum* (J. AGARDH) KYLIN  
 Stud. Delesseriaceen, p. 78, fig. 61, 1924; Calif. Rhodophyceen, p. 32, 1941.  
*Japanese name*: Kagi-usuba-nori.  
*Habitat*: 0.5 m, 15 m, on sponge, *Sargassum piluliferum*: Off Ogi, Tassha.
275. *Acrosorium yendoi* YAMADA  
 Notes Some Jap. Alg. I., pp. 33–34, pl. V, fig. 4, 1930; *Nitophyllum monanthos* J. AG., in YENDO,  
 K., Notes Alg. New Jap.. VIII., pp. 69–71, 1918.  
*Japanese name*: Hai-usuba-nori.  
*Habitat*: At low-tide-level, on *Corallina* sp.; 15 m, on *Sargassum piluliferum*:  
 Sotomo, Off Ogi, Tassha.

## DASYACEAE

276. *Heterosiphonia japonica* YENDO  
 Nov. Alg. Jap.. Dec. I–III., pp. 8–9, 1920; OKAMURA, K., Icon. Jap. Alg. Vol. IV., pp. 68–72,  
 pl. 167, fig. 1–16, 1951.  
*Japanese name*: Isohagi.

*Habitat*: 0.5 m, on the holdfast of *Undaria pinnatifida*; Drifting: Sotomo, Tassha.

277. *Heterosiphonia pulchra* (OKAMURA) FALKENBERG

in INAGAKI, K., Mar. Rhodophyceae coll. Oshoro Bay its vicin. (in Jap.), pp. 67–68, fig. 28, 1933; OKAMURA, K., Icon. Jap. Alg. Vol. IV., pp. 63–68, pl. 166, fig. 1–13, 1951.

*Japanese name*: Shima-dajia.

*Habitat*: 0.5 m, on *Marginisporum* sp.: Sotomo.

278. *Dasya scoparia* HARVEY

in OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 801–802, 1956.

*Japanese name*: Mosa-dajia.

*Habitat*: 0.5 m, on *Amphiroa* sp.: Akasaki.

279. *Dasya sessilis* YAMADA

Rep. Biol. Surv. Mutsu Bay. 9. Mar. Alg. Mutsu Bay Adj. Waters. II., pp. 524–526, fig. 19(a, b, c), 1928.

*Japanese name*: Enashi-dajia.

*Habitat*: 1 m, on rocky bottom: Mikuni, Yokohama, Akasaki, Tassha.

280. *Dasya villosa* HARVEY

in YENDO, K., Notes Alg. New Jap., V., p. 262, 1916; OKAMURA, K., Descr. Jap. Alg. (in Jap.), pp. 803–804, 1956.

*Japanese name*: Kebuka-dajia.

*Habitat*: 1 m, on rocky bottom; 15 m, on *Lithothamnium* sp.: Mikuni, Off Ogi.

©281. *Dasyopsis plumosa* (BAIL et HARVEY) SCHMITZ

in OKAMURA, K., Icon. Jap. Alg. Vol. II., pp. 95–98, pl. 78, fig. 1–7, 1951; Descr. Jap. Alg. (in Jap.), pp. 805–806, fig. 386, 1956.

*Japanese name*: Daji-modoki.

*Habitat*: 0.5 m, on the holdfast of *Undaria pinnatifida*: Sotomo.

SPERMATOPHYTA  
ANGIOSPERMAE  
MONOCOTYLEDONEAE  
HELOBIALES  
ZOSTERACEAE

282. *Zostera marina* LINNÉ

in OHWI, J., Fl. Jap. (in Jap.), p. 60, 1953; DEN HARTOG, C., Sea-Grass. World, pp. 44–60, fig. 11, 1970.

*Japanese name*: Amamo.

*Habitat*: 0.5 m, on sandy and muddy bottom: Urasoko, Akasaki, Tassha.

283. *Zostera noltii* HORNEMANN

in DEN HARTOG, C., Sea-Grass. World, pp. 64–71, fig. 12–14, 1970; *Zostera nana* ROTH, in OHWI, J., Fl. Jap. (in Jap.), p. 60, 1953.

*Japanese name:* Ko-amamo.

*Habitat:* 0.5 m, on sandy and muddy bottom: Urasoko, Akasaki.

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- (1916) Notes on Algae New to Japan. V. *Ibid.* **30(355)**: 243–263.
- (1917) Notes on Algae New to Japan. VII. *Ibid.* **31(367)**: 183–207.
- (1918) Notes on Algae new to Japan. VIII. *Ibid.* **32(376)**: 65–81.

### Explanation of Plate

#### Plate I

##### *Griffithsia corallina* C. AGARDH

- Fig. 1. Part of a tetrasporophyte preserved in formalin-seawater, collected at Tassha, on June 30, 1979, showing a fruiting branch.

##### *Polysiphonia fruticulosa* (WULFENI) SPRENGEL

- Fig. 2. Part of a tetrasporophyte preserved in formalin-seawater, collected at Urasoko, on March 22, 1977, showing the fruiting branches and spirally twisted pericentral cells.

##### *Polysiphonia tongatensis* HARVEY

- Fig. 3. Part of a tetrasporophyte preserved in formalin-seawater, collected at Tassha, on June 27, 1979, showing the prominent nodes.
- Fig. 4. Part of a tetrasporophyte, showing the stichidia.

