

## Charophyta Japonica (IV).

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森岡英男：日本産車軸藻類(其四)

4) **Chara Braunii** Gmelin, Fl. Bad. IV 646, no. 1407 (1826); REICHENBACH, Iconograph. Bot. IX, tab. DCCCII, fig. 1082-1084, et tab. DCCCIII, fig. 1085 (1831); WALLMAN, Fam. Charac., 49 (1854); GROVES, Not. Brit. Char. in Journ. Bot. XIII, 3 (1884) cum icon.; SAIDA in Bot. Mag. Tokyo I-1, 35 (1887); NORDSTEDT, Austral. Charac. Part 1, Pl. VII (1891); GROVES in Journ. Linn. Soc. Bot. XLVI, 372 (1924); MAKINO in Journ. Japan. Bot. VI, 372 (1929); AGHARKAR et KUNDU in Calcutta Univ. Journ. Depart. Sci. I-1, 12 (1937) cum icon.

*Chara coronata* A. BRAUN in Ann. Sci. Nat. ser. 2, III, 353 (1834); in Flora XVIII, 59 (1835); in HOOKER, Journ. Bot. I, 295 (1849); KÜTZING, Spec. Alg., 520 (1849); A. BRAUN et NORDST., Fragm. Monog. Charac., 108 (1882); NORDST. in Hedwigia XXVII, Heft 7, 188 et 195 (1888); in Alg. et Charac., 21 et 32 (1889); SYDOW, Europ. Charac., 48 (1882); HAUCK in Hedwigia XXVII, 17 (1888); MIGULA in RABENH., Kryptog.-Fl. ed. 2, V, 321 (1891); Synop. Charac. Europ., 72 (1898); in MIGULA, Kryptog.-Fl. II-2, 286 (1909); in PASCHER, Süßwass.-Fl. Heft 11, 225 (1925); in Hedwigia LXX, 215 (1930); ALLEN in Bull. Torr. Bot. Club. XXI, 523 (1894) et XXII, 68 (1895); MAKINO in Journ. Japan. Bot. VI, 372 (1929); Illustr. Fl. Nippon, 1068, no. 3201 (1940).

*Chara lemosperma* RUPR., Symb. ad hist. pl. Ross., 80 (1846); WALLMAN, Fam. Charac., 50 (1854).

*Charopsis Braunii* KÜTZING, Phycol. Gener., 319 (1843).

*Nitella coronata* ALLEN in herb. (Charac. Japon. exsic.)

Planta monoecia, omnino ecorticata, 5-40 cm longa. Caulis diaphanus, flaccidus vel robustus, 350-750 $\mu$  crassus, omnino ecorticatus. Internodia quam ramuli longiora vel breviora. Stipulodia uniseriata, acuta, longitudine variabilis et inaequalis, rarius inchoata. Verticilli ramulorum 8-12, incurvati vel

recti, segmentis 3-6 (plerumque 4-5); cellula ultima brevissima et angusta, bracteis nodorum ultimorum fere aequilonga. Bracteae 4-7, plerumque 5. Bracteolae quam fructus longiores vel breviores.

Gametangia ad nodos omnes ramulorum. Antheridium solitarium, 260-320 $\mu$  in diam. Oogonia plerumque solitaria, rarus geminata, 850-1050 $\mu$  longa; cellulae spirales 9-11 convolutae; coronula 100-200 $\mu$  alta. Oospora nigra, ovali-ellipsoides vel ovoideo-cylindrica, 450-650 $\mu$  longa, 300-400 $\mu$  lata, 8-10 convolutis.

Nom. Jap. *Syazikumo* (MATSUMURA, SAIDA).

Hab. in

Hondo. Prov. Musasi: Tôkyô (T. F. ALLEN, no. 2 et 3 in herb. Univ. Imp. Tokyo.); in pelvi sponte nascit in Univ. Imp. Tokyo. (Ego ipse, no. 1-5, 7, 8, Mai. et Jun.; no. 13, Aug. 3; no. 32, Sept. 22, 1939); in stagno septae Inokasira (no. 10, Jul. 1, 1939.—sterilis); in pelvi Horti Botanici Koisikawensi sponte nascit (Ego ipse, no. 35-41, Oct. 4, 1939); in stagno Sanboike in septae Syakuzii (Ego ipse, no. 42, Oct. 7, 1939); Inada-noborito (K. HISAUTI, Sept. 12, 1932; Ego ipse, no. 62, Oct. 29, 1939); Senzyu, Tôkyô (SAIDA, Sep. 20, 1886). Prov. Simousa; in lacu Teganuma (Ego ipse no. 59—sterilis, no. 60, 61, Oct. 15; no. 66, Nov. 5; no. 84, 85, Nov. 25, 1939); in lacu Inbanuma (Ego ipse, no. 78, 79, 80—sterilis, 81, 82, Nov. 12, 1939). Prov. Hitati: in lacu Kitaura (S. YAMAMOTO, Aug. 10, 1939). Prov. Sagami: in lacu Asinoko (Ego ipse, Aug. 26, 1939). Prov. Izu: oppid. Misima (K. HISAUTI, Jul. 23, 1927). Prov. Sinano: in lacu Suwako (K. HÔGETSU, Jul. 5, 1939). Prov. Rikuzen: Sendai (E. IISHIBA, Aug. 23, 1929). Prov. Ettyû: circa urb. Toyama (H. YAMASITA, Jul. 1939). Prov. Hôki: prope oppid. Hamasaka (ex MIGURA in Hedwigia LXX, 215, 1930). Prov. Ise (ex ALLEN in Bull. Torr. Bot. Club. XXII (1895) 68).

Kyûsyû. Prov. Satuma: oppid. Miyakônozyô; in stagno Unagigaike (ex MIGULA, l. c.). Prov. Oosumi: insul. Amami-ôshima et Okinoerabuzima (ex MIGULA, l. c.).

Sikoku. Prov. Sanuki (ex MIGULA, l. c.).

Planta cosmopolitana.

5) **Chara fragilis** DESVAUX in LOISELEUR, DESLONGCHAMPS, Not. Pl. Fl. France 137 (1810); Fl. Gall. 2 ed. II, 355 (1828); A. BRAUN in Ann. Sc. Nat. 2 sér. I, 356 (1834); in Flora XVIII, 68 (1835); in Linnaea XXV, 709 (1852); MUTEL, Fl. Franc. IV, 164 (1837); KÜTZING, Phycol. gener., 319 (1843); Spec. Alg., 521 (1849); BABINGTON in Trans. Bot. Soc. Edinb. IV, 41 (1850); WALLMAN, Fam. Charac., 84 (1854); GROVES in Journ. Bot. IX, 101 (1880); X, 353 (1881); XII, 20 (1883); XIII, 3 (1884); XXV, 1 (1886); in Journ. Linn. Soc. Bot. XLVI, 375 (1924); XLVIII, 135 (1928); SYDOW, Europ. Charac. 94 (1882); A. BRAUN et NORDST., Fragm. Monog. Charac., 181 (1882); NORDST. in Hedwigia XXVII, 192 et 195 (1888); Alg. et Charac. 21 et 38 (1889); HAUCK in Hedwigia XXVII, 17 (1888); SONDER, Charac. in Inaug.-Diss. 60 (1890); ALLEN in Bull. Torr. Bot. Club XXI, 523 (1894); MIGURA in RABENH., Kryptog.-Fl. ed. 2, V, 722 (1897); Synop. Charac. Europ. 158 (1898); in MIGULA, Kryptog.-Fl. II-2, 353 (1909); in PASCHER, Süßwass.-Fl. Heft 11, 241 (1925); HOLTZ in Kryptog.-Fl. Mark Brandenburg IV-1, 115 (1903); MAKINO in Journ. Japar. Bot. VI, 372 (1929); Illustr. Fl. Nippon, 1068, no. 3202 (1940); AGHARKAR et KUNDU in Calcutta Univ. Journ. Depart. Sci. I-1, 17 (1937) cum icon.; VERDAM in Blumea III-1, 31 (1938); ZANEVELD in Blumea III-2, 38 (1939).

*Chara vulgaris* L., Fl. Suec. 2 ed., 427 (1755) ex p.

*Chara capillacea* WALLMANN, Fam. Charac. 85 (1854).—non THULLIER, Fl. environs de Paris, 2 ed., 474 (1799).

*Chara Hedwigii* AG., Syst. Alg. 129 (1824).

*Chara hirta* MEYEN in Linnaea II, 78 (1827).

*Chara virgata* KÜTZING in Flora I, 705 (1834).

*Chara trichodes* KÜTZING in Flora I, 705 (1834).

Planta monoecia, 10–50 cm longa, colore viridis—atrovirens, saepe incrustata. Caulis potius robustus, 400–530 $\mu$  diametro; internodia ramulis fere aequalonga. Stipulodia inchoata, biseriata. Cortex triplostichus; series primaria quam secundaria leviter vel vix prominens. Verticilli ramulorum (6)–8. Segmenta ramulorum superiora 2–3 eorticata, cetera omnia corticata. Cortex triplostichus; cellulae serium primariarum et secundariarum aequaliter prominentes. Cellulae bractearum inchoatae. Bracteolae fructum sesquiplo superantes.

Gametangia in tribus nodis infimis gerentia. Antheridia  $300-410\mu$  diametro. Oogonia  $880-1130\mu$  (coronula inclusa) longa,  $570-680\mu$  lata; cellulae spirales ca. 13-convolutis; coronula recta,  $150-170\mu$  alta. Oospora nigra,  $550-730\mu$  longa,  $400-550\mu$  lata, costis spiralibus 11-12.

Nom. Jap. *Kata-syazikumo*.

Hab. in

Hondo. Prov. Musasi: Tôkyô, in stagno Horti Botanici Koisikawensi (Ego ipse, no. 6, Mai. 12, 1939); in stagno septae Inokasira (Ego ipse, no. 11, Jul. 1, 1939.—sterilis); Prov. Simotuke: in lacu Yunoko (T. NAKAI, Jul. 4, 1931.—steril.; A. YAMAMOTO, Jul. 1926.—steril.); in lacu Tyûzenziko (S. YOSHIMURA, Aug. 26, 1939, herb. ips. no. 26, 27). Prov. Simousa: in lacu Inbanuma (Ego ipse, no. 76, Nov. 12, 1939—steril.). Prov. Sagami: in lacu Asinoko (Ego ipse, no. 20, Aug. 26, 1939—steril.). Proc. Musasi: prope Yokohama (K. HISAUTI, Jun. 19, 1910—steril.). Prov. Mutu: in lacu Tutanuma (Ego ipse, no. 15, Jul. 15, 1939—steril.); in lacu Towadako (Ego ipse, no. 16, Jul. 17, 1939—steril.).

Planta cosmopolitana.