梅崎 勇*: 志摩半島海産藍藻類 (2)

Isamu UMEZAKI*: Marine Cyanophyceae from the Shima Peninsula (2)

30. **Spirulina attenuata** Umezaki.

Hab. Wagu (Jun. 9), among the filaments of *Calothrix crustacea* Thur., abundant; Ō-shima (Jun. 10), in other Cyanophycean masses, abundant.

31. **Spirulina socialis** Gardner.

Hab. Wagu (Mar. 12: Jun. 9), on the sheaths of *Hydrocoleum lyngbyaceum* Kuetz. and *Hyd. cantharidosmum* (Mont.) Gom., abundant; Ō-shima (Oct. 5), on *Hydrocoleum lyngbyaceum* Kuetz., abundant.

32. **Spirulina subsalsa** Oersted.

Japanese name. Rasenmo (I. Umezaki, 1950).

Hab. Ō-shima (Mar. 12), among the young plants of *Enteromorpha* sp., *Centroceras clavulatum* (Ag.) Mont. and other small algae, scarce; Goza (Jun. 11), on a pearl-oyster, one meter below the sea-level, scarce.

33. **Spirulina major** Kuetzing.

Hab. Wagu (Jun. 9), among the filaments of *Ectocarpus* sp., scarce.—New record to the marine flora of Japan.

34. **Spirulina labyrinthiformis** (Menegh.) Gomont.

Japanese name. Hime-rasenmo (n. n.).

Hab. Ō-shima (Oct. 5), among the filaments of other Cyanophyceae, scarce.

35. **Oscillatoria laetevirens** Crouan.

Hab. Goza (Jun. 11), on a pearl-oyster, one meter below the sea-level, scarce.

36. **Oscillatoria nigro-viridis** Thwaites.

Japanese name. Kuro-yuremo (I. Umezaki, 1951).

Hab. Goza (Mar. 12), on a pearl-oyster, one meter below the sea-level, scarce; Ō-shima (Mar. 12), on rocks or on *Herposiphonia* sp. in the littoral zone, abundant.

Goza specimens—Trichomes 7.6–8.5 μ diam.; cells 3–4.6 μ long. Ō-shima specimens—Trichomes 6.5–9 μ diam.; cells 2–4.6 μ long.

37. **Oscillatoria Corallinae** (Kuetz.) Gomont.

Hab. Wagu (Mar. 12; Jun. 9), on *Caulacanthus Okamurai* Yam. and *Nema-*

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lion pulvinatum Grun., abundant (common); Goza (Jun. 9), on *Codium coarctatum* Okam. in the lower littoral zone, abundant; Ō-shima (Oct. 5), on rocks in the littoral zone, associated with other Cyanophyceae, abundant (common).

38. **Oscillatoria Bonnemaisonii** Crouan.

Hab. Wagu (Oct. 4), among other small algae, scarce; Ō-shima (Oct. 5), intermixed with *Bryopsis caespitosa* Sur., scarce.—New to Japan.

Trichomes somewhat regularly or loosely twisted, 18.5–22 μ diam., rose- or lavender-blue; cellus 3–6 μ long, 3–6 times shorter than the diameter.

39. **Phormidium epiphyticum** Gardner.

Hab. Wagu (Jun. 9), on the sheaths of *Hydrocoleum cantharidosmum* (Mont.) Gom., abundant.

40. **Phormidium tenue** (Menegh.) Gomont.

Hab. Matoya (Oct. 6), on the wall of a glass vessel in which natural sea water is filled up, in a room of the Matoya Oyster Laboratory, abundant.—New record to Japanese marine flora.

Fronds thin, membranaceous, bright blue-green; sheaths thin, diffluent; trichomes slightly tapering at the extremities or not, 1.3–1.8 μ diam.; cells 2.5–5 μ long; terminal cells long-conical or rounded. Fig. 2 A.

Phormidium tenue is properly an inhabitant of freshwater, but the present specimen agrees well with the discription of the species.

41. **Phormidium crosbyanum** Tilden.

Hab. Wagu (Jun. 9), on rocks in the littoral zone, abundant.—New to Japan.

Fronds not impregnated with lime, somewhat thick, up to 3 cm. diam.; filaments parallel with each other or entangled; trichomes 1–2 μ diam.; cells 1.8–4.3 μ long.

42. **Lyngbya epiphytica** Hieron.

Japanese name. Itomakimo (I. Umezaki, 1950).

Hab. Koshika (Mar. 11), on *Calothrix* sp. in the littoral zone, abundant; Ō-shima (Oct. 5), on *Calothrix crustacea* Thur. and other filamentous blue-green algae, abundant.

43. **Lyngbya Nordgardhii** Wille.

Hab. Ō-shima (Mar. 12), on *Calothrix* sp., abundant; Wagu (Mar. 12; Oct. 4), on *Calothrix* sp. and *Caulacanthus Okamurai* Yam., scarce.

44. **Lyngbya sordida** (Zanard.) Gomont.

Hab. Ō-shima (Oct. 5), on *Griffithsia* sp., scarce.

Filaments 2–3 μ long, 24–28 μ diam.; trichomes 21–24 μ diam., bluish violet; cells 2–7 times shorter than the diameter.

Though in length the filaments are much shorter than those of the type, making a comparison between this specimen and those from Maizuru, Wakasa-takahama and Shirahama collected by the writer himself till now, it is considered to be placed under the species referred above.

45. **Lyngbya majuscula** Harvey.

Hab. Ō-shima (Oct. 5), on *Corallina* sp. near the low tide level, abundant.

Filaments up to 1 cm lyng, 34–43 μ diam.; sheaths 4.5–9 μ thick; trichomes grayish violet, 20–28 μ diam.; cells 1.5–4 μ long. Fig. 2 B.

46. **Lyngbya confervoides** C. Agardh.

Hab. Wagu (Jun. 9), on rocks in the littoral zone, abundant.

47. **Lyngbya lutea** (Ag.) Gomont.

Hab. Wagu (Jun. 9), on rocks and on *Ahnfeltia paradoxa* (Sur.) Okam., abundant; Ō-shima (Jun. 10), on *Ahnfeltia paradoxa* (Sur.) Okam., abundant.

The trichomes whose terminal cells have various shaped calyptras were found among Ō-shima's specimens.

48. **Lyngbya semiplena** J. Agardh.

Hab. Ō-shima (Mar. 12: Oct. 5), on rocks near the high tide level and in the upper littoral zone, abundant; Kashiko-jima (Oct. 4), on rocks or on concrete near the high tide level, abundant.

49. **Lyngbya aestuarii** Liebm.

The following two formae were collected.

Forma **aeruginea** Gomont.

Hab. Ō-shima (Oct. 5), on rocks near the low tide level, abundant; Wagu (Oct. 4), on rocks or on *Caulacanthus Okamurai* Yam., abundant.—New to Japan.

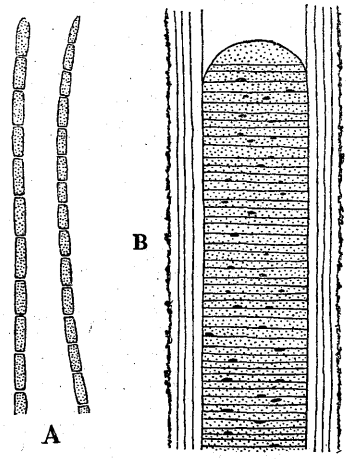

Fig. 2. A. *Phormidium tenue* (Menegh.) Gomont. (×300). B. *Lyngbya majuscula* Harvey. (×300).

Plant mass pale blue-green; filaments rarely branched, 16–21.5 μ diam.; sheaths thin, up to 2 μ thick, not lamellated; trichomes 11–15.5 μ diam.; cells 2–4 μ long.

Forma **spectabilis** Gomont.

Hab. Ō-shima (Oct. 5), on rocks in the littral zone, in company with other

Cyanophyceae, abundant.—New to Japan.

Filaments 24.5–30.5 μ diam., rarely branched; sheaths up to 8 (or 10) μ thick, hyaline on the exterior, light brown on the intertor, distinctly lamellated; trichomes 14.5–16.5 μ diam.; cells 2.5–5.5 μ long.

50. **Microcoleus Boergesenii** (Gardn.) Frémy.

Hab. Wagu (Jun. 9), among the fronds of *Sphacelaria* sp., abundant; Ō-shima (Oct. 5), among the masses of various Cyanophyceae and *Corallina* sp., abundant.

Wagu specimens—Filaments 35–65 μ diam. at the middle; trichomes 2–8 within the sheath, 5.5–6.2 μ diam.; cells 1.2–2 μ long. Ō-shima specimens—Filaments 30–60 μ diam. at the middle; trichomes 6.1–6.8 μ diam., 3–10 within the sheath.

51. **Microcoleus tenerrimum** Gomont.

Japanese name. Hoso-konawamo (n.n.).

Hab. Wagu (Jun. 9), among the fronds of *Hydrocoleum cantharidosmum* (Mont.) Gom., scarce; Ō-shima (Oct. 5), among the stratum of various Cyanophyceae, a little abundant.

52. **Microcoleus chthonoplastes** Thuret.

Japanese name. Ko-nawamo (n.n.).

Hab. Ō-shima (Oct. 5), among other Cyanophycean fronds, scarce.

Trichomes 2.5–5 μ diam.; cells 2.5–7.5 μ long.

53. **Hydrocoleum lyngbyaceum** Kuetzing.

Japanese name. Ō-nawamo (n.n.).

Hab. Wagu (Mar. 12: Jun. 9), among other blue-green algae and on *Nemalion pulvinatum* Grun., abundant; Ō-shima (Oct. 5), among other biue-green algae and on *Laurencia* sp., abundant.

Trichomes 9–12.5 μ diam.; cells 2.5–3 μ long.

54. **Hydrocoleum cantharidosmum** (Mont.) Gomont.

Japanese name. Futo-ōnawamo (n.n.).

Hab. Goza (Mar. 11), on a pearl-oyster, one meter below the sea-level, scarce; Wagu (Jun. 9), on rocks in the littoral zone, abundant; Ō-shima (Jun. 10), on *Laurencia* sp. in association with other Cyanophyceae, abundant.

Goza specimens—Trichomes 18.5–24.5 μ diam. Wagu and Ō-shima specimens—Trichomes 17–20 μ diam.

55. **Hydrocoleum glutinosum** (Ag.) Gomont.

Hab. Goza (Mar. 11), on a pearl-oyster, one meter beiow the sea-level, scarce. —New to Japan.

Fronds very gelatinous; sheaths almost diffluented; trichomes 15-18 μ diam.; cells 2.5-4.5 μ long.

56. **Hydrocoleum codicola** Setch. et Gardn.

Japanese name. Miru-ōnawamo (n.n.).

Hab. Wagu (Jun. 9), among the utricles of *Codium adhaerens* (Carb.) A. Ag., abundant.

Filaments much branched; sheaths hyaline, delicate; trichomes light blue-green, 2.7-3.2 μ diam.; cells $^1/_2$-1.5 times as long as the diameter; terminal cells somewhat enlarged, rounded, with thickened end walls.

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Correction of the first report 〔Journ. Jap. Bot. **30** (2): 61〕

(for) 28. **Microchaete aeruginea** Batters (?)

(read) 28. **Fremyella aeruginea** (Batters) De Toni (?)

○ ツキヌキサイコの新産地 (津山尚). Takasi TUYAMA: New locality of *Bupleurum rotundifolium* L. 本誌 **26** (11): 349 で奥山春季氏が表題の植物を唯1本東京都品川区五反田駅近くの路傍で発見同定され，また神奈川県藤沢で採集されたものも同種であると報告された。今回，和歌山県日高郡御坊町大字島で芝口常楠氏が採集された植物（昭和27年5月 某家の生垣の根元に唯一本）を小川由一氏から送付されたが，これも同一種であることが判つた。本種は欧洲原産で今は北米で畠の雑草となつているが，関西では初めての報告である。（お茶の水女子大学）。