

Nos. 010

Katata-naiko pond near Lake Biwa, Shiga Pref., Japan. [35°06.809' N, 135°55.430" E]

Date: 3/iii/2000.

Coll. A. Tuji (duplicate of TNS-AL-56303m in TNS).

Aulacoseira pusilla (F.Meister) Tuji et Houki, Bull. Natn. Sci. Mus. Tokyo ser. B. **30**: 38. 2004.

≡ *Melosira pusilla* F.Meister, Arch. Hydrobiol. **8**: 306. *pl. IV. f. 2*. 1913.

(Figs 1-7)

Synonym: *Aulacoseira subborealis* (Nygaard) Denys, Muylaert & Krammer, Nova Hedw. **77**: 410. ≡

Melosira italica var. *subborealis* Nygaard, Folia Limnol. Scand. **8**: 74. *pl. 1. f. 8. pl. 2. f. 13-19. pl. 6. f. 24-25*. 1956.

Type locality: Lake Suwa, Nagano Pref., Japan.

Lectotype: A slide numbered "A3/61" with Meister's label in BRM, designated by Tuji et Houki, Bull. Natn. Sci. Mus. Tokyo ser. B **30**: 38. *f. 55-60*. 2004.

Isotype: A slide in Collection Tempère et Peragallo (2nd edition) no. 801. BM69152 in BM, examined by Tuji & Williams, Diat. **22**: 70-73. *f. 3-14*. 2006.

SEM examination: Tuji & Houki, Lake Biwa Study Monogr. **7**: 33. *pl. 11. f. 1. pl. 12. f. 1-2*. 2001.

Ecology: Common in eutrophic pond, dam and small lakes as a plankton (Tuji pers. obs.). Since the identification of this taxon had been confusing, the reliable ecological information is not exist for this taxon.

Discostella woltereckii (Hust.) Houk et Klee, Diat. Res. **19**: 223. 2004.

≡ *Cyclotella woltereckii* Hust. Arch. Hydrobiol. **42**: 16. *f. 11-13*. 1942.

(Fig. 8)

Holotype: A slide Ac/68 in BRM, examined by Simonsen, Atlas Cat. Diat. Typ. Fr. Hust. *pl. 400. f. 7-14*. 1987.

Lectotype: An individual at position 467.1 on the holotype slide BRM Ac/68, designated in Tuji & Williams, Bull. Natn. Sci. Mus. Tokyo ser. B. **32**: *f. 1 a-d*. 2006; micrograph presented by Simonsen, Atlas Cat. Diat. Typ. Fr. Hust. *pl. 400. f. 9*. 1987.

Discostella pseudostelligera (Hust.) Houk et Klee, Diat. Res. **19**: 223. 2004.

≡ *Cyclotella pseudostelligera* Hust., Abh. Naturw. Ver. Bremen **31**: 591. *f. 1-2*. 1942.

(Fig. 9)

Lectotype: BRM 51/1. Ems, bei Papenburg. 197, designated by by Simonsen, Atlas Cat. Diat. Typ. Fr. Hust. *pl. 371. f. 29-29*. 1987.

SEM examination: Tuji & Houki, Lake Biwa Study Monogr. **7**: 32. *pl. 11. f. 1-3*. 2001.

Ecology: The ecology of *Discostella* species complex seems to be different each other. However, the taxonomy of this complex has been confusing in Japan, and we need the new ecological study for this complex.

Stephanodiscus hantzschii f. *tenuis* (Hust.) Håk. et Stoermer, Nova Hedw. 39: 486. 1984.

(Figs 2-3)

SEM examination: Tuji & Houki, Lake Biwa Study Monogr. 7: 46. pl. 18. f. 1-6. 2001.

Ecology: indifferent, alkaliphilous.

