

Nos. 42.

Prepared from TNS-AL-56488 in TNS. This culture strain was prepared from the sample (TNS-AL-56374 in TNS). Lake Kitaura, Ibaraki Pref. Coll. A. Tuji 13/3/08.

Synedra filiformis Grunow in Cleve & Grunow, Kongl. Svenska-Vetensk. Akad. Handl. **17**: 160. pl. 6. f. 116. 1880.

This strain is very closed to *Fragilaria gracilis* Östrup. However the form of apical pore field and punctae are differ from the type specimen of *F. gracilis* examined by Tuji (2007). *F. gracilis* is usually found in low electric conductivity water such as moor. The locality of this strain, L. Kitaura, is freshwater – brackish and ecology is very different.

I have not examined the type material for *S. filiformis*, and the information of this taxon is very limited because of very narrow width and fine striae. The identification might have some problem.

One rimoportula is found per a valve, and this strain should be includes genus *Fragilaria*. We need more work on the taxonomy of this taxon.

