Nos. 120.
Prepared from strain Ak880 (voucher specimens: TNS·AL·61880 in TNS). This culture strain was prepared from TNS·AL·57761 in TNS. Nagahama port, Lake Biwa, Shiga Pref. Coll. A. Tuji, 12/iii/2013.

Basionym: *Melosira binderana* Kütz., Bacill. 55. pl. 2. f. 1. 1844.
Lectotype locality: “Moorgräben bei Hamburg”, leg. F. Binder (Germany).
Epitype locality: “Spree bei Berlin”(Germany), September 1924.

This taxon is very closed to *S. binderanus* var. *oestrupii* (A.Cléve) A.Cléve. The variety *oestrupii* is also known from Lake Biwa (Tuji & Houki 2001), and it might be same species. Both variety are differ in spine morphology, but very difficult to divide and need further work on these two varieties. Jahn & Håkansson in Geissler et al. (2006) designated the lectotype and epitype for this species, however they only presented the LM photograph not SEM, and the ultra-structure of spines was not examined for this designated types.
Nos. 120.