

## Nomenclatural and taxonomic notes on species of *Entogoniopsis* and *Flexibiddulphia* (*Bacillariophyceae*)

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Two species of *Triceratium* Ehrenberg (1839: 156) recently transferred to the genus *Entogoniopsis* P.A.Sims, Strelnikova, J.Witkowski & D.M.Williams (in Witkowski & al. 2015: 10) cited incorrect basionyms, and the combinations are thus invalidly published (ICN Art 45.1; Turland & al. 2018). Both species were illustrated, but not described, by Hustedt in Schmidt's *Atlas der Diatomaceen-Kunde* (Hustedt in Schmidt 1930: pl. 372) but were also invalidly published (ICN Art. 38.7). Simonsen later provided validating descriptions for both (Simonsen 1987: 127–8). The two new combinations are corrected here.

***Entogoniopsis hannaiana*** (Hustedt ex Simonsen) J.Witkowski, P.A.Sims, Strelnikova & D.M.Williams, *comb. nov.*

Basionym: *Triceratium hannaianum* Hustedt ex Simonsen *Atlas and Catalogue of the Diatom Types of Friedrich Hustedt*: 128, pl. 210: figs 3, 4, 1987.

Designation: *Triceratium hannaianum* Hustedt (in Schmidt), pl. 372: fig. 8, 1930, *invalid*.

Type locality: USA, Santa Monica, California (Hustedt 1930: pl. 372: fig. 8, plate legend, ‘Santa Monica, f.m. (Trockensystem)’)

Holotype: **BRM** H4/2, ‘Sa Monica’, illustrated in Simonsen (1987: pl. 210: figs 3, 4, one specimen).

Registration: <http://phycobank.org/104593>

Note: *Triceratium hannaianum* Hustedt was invalid as it was not accompanied by a description (ICN Arts 38.5, 28.9, 38.10).

***Entogoniopsis varians*** (Hustedt ex Simonsen) J.Witkowski, P.A.Sims, Strelnikova & D.M.Williams, *comb. nov.*

Basionym: *Triceratium varians* Hustedt ex Simonsen *Atlas and catalogue of the diatom types of Friedrich Hustedt*: 127, pl. 210: figs 1, 2, 1987.

Designation: *Triceratium varians* Hustedt (in Schmidt): pl. 372, fig. 7, 1930, *nom. inval.*

Type locality: USA, Santa Monica, California (Hustedt 1930: pl. 372: fig. 7, plate legend, ‘Santa Monica, f.m. (Trockensystem)’).

Holotype: **BRM** H5/82, designated by Simonsen (1987: pl. 210: figs 1, 2).

Registration: <http://phycobank.org/104594>

*Flexibiddulphia* Simonsen (1987: 263) has nomenclatural priority over the name *Euodiella* P.A.Sims (Sims 2000: 385, see Williams & Sims 2022). Accordingly, the recently described species *Euodiella beatae* J.Witkowski (2022: 129) is here transferred to *Flexibiddulphia*.

***Flexibiddulphia beatae*** (J.Witkowski) J.Witkowski, *comb. nov.*

Basionym: *Euodiella beatae* J.Witkowski *Nova Hedwigia, Beiheft* 152: 129, pl. 50: figs 1-8; pl. 51: figs 1-6; pl. 52: figs 1-6, 2022.

Type locality: Western North Atlantic Ocean, Blake Nose, leg. 171B, site 1050.

Holotype: **SZCZ** 27581; illustrated in Witkowski 2022: pl. 51, figs 1, 2).

Registration: <http://phycobank.org/104595>

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