

Diatom Flora of the Low Countries

Stauroforma atomus (F. Hustedt) D. Talgatti, C.E. Wetzel, E.A. Morales et L.C. Torgan 2014.

Basionym: *Fragilaria atomus* Hust. (1931: 164, fig. 672B).

Synonyms: *Fragilaria virescens* var. *subsalina* f. *oviformis* Cleve-Euler 1953 pro parte; *Martyana atomus* (Hust.) Snoeijs 1991

Morphology

Valves heteropolar, clavate to ovate (nearly elliptic in smaller individuals) with rounded ends. Striae distinct, uniseriate, opposite, parallel at center, slightly radiate toward apices. Axial area absent or very narrow and linear. Spines and rimoportulae absent.

Morphometrics

Source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data (n=6)	3.8-4.8	2.4-3.0	24-26	
Talgatti et al. 2014	4.5-7	2.5-3.5	25-30	
Witkowski & Lange-Bertalot 1993	4-10	2.5-3.5	20-26	

Related species

Fragilaria schulzii C. Brockmann (has broader length range 5–50 µm, a lower stria density 13–16 in 10 µm); *Fragilaria cassubica* Witkowski & Lange-Bert. (presence of spines with which it forms chains, valve length 9–20 µm and stria density 15–18 in 10 µm); *Stauroforma exiguiiformis* (Lange-Bert.) Flower, V.J. Jones & Round (lower stria density 19–22 in 10 µm, has spines and forms chains, different ecology); *Staurosira reimeri* Morales, Manoylov et Bahls (isopolar, cuneate to truncate, chain forming).

Distribution

Sediment Hoogevaart, sediment Moerspui Kreek, Schildmeer, Roggesloot Texel, Winderdiep, Peizerdiep, Vledder Aa, Oude Diep, Oosterstroom, Haven Middelharnis, Oostvoornse Meer, Gemaal Kilhaven, Terschellingerpolder Liessluis, Brabantse Biesbosch, Gouderak Noord (NL); Waaslandkanaal Kallosluis (B).

Ecology

Occurs in brackish water.

Ecological values

Indicator values (Van Dam et al. 1994)

R	H	N	O	S	T	M
4	4	1	1		5	4

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IPS
(Cemagref 1982)

IPS-S	IPS-V

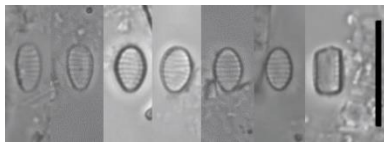
Rott et al. 1997, 1999

Rott SI s	Rott SI v	Rott TI s	Rott TI v

TDI
(Kelly & Whitton 1995)

TI-S	TI-V
5	2

Remarks



The Netherlands

References:

- Talgatti, D., C. E. Wetzel, E. A. Morales, L. Ector & L. Carvalho Torgan (2014) Transfer of *Fragilaria atomus* Hust. to the genus *Stauroforma* (Bacillariophyta).
- Witkowski, A. & H. Lange-Bertalot (1993) Established and new diatom taxa related to *Fragilaria schultzei* Brockmann. *Limnologica* 23: 59-70.
- Witkowski, A., H. Lange-Bertalot & D. Metzeltin (2000) Diatom Flora of Marine Coasts 1. *Iconographia Diatomologica* 7.

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