

Navicula flandriae B. van de Vijver et A. Mertens 2015.

Morphology

Valves narrowly lanceolate to weakly elliptic-lanceolate in smaller specimens. Valve margins linear to slightly convex, gradually narrowing towards the non-protracted, acutely rounded to wedge-shaped apices. Axial area very narrow, linear, weakly widening near the central area. Central area small, rounded to almost rectangular, usually slightly asymmetric, bordered by several more distantly spaced, irregularly shortened striae. Raphe filiform with almost straight, clearly expanded proximal raphe endings. Striae radiate and geniculate near the valve center, becoming rapidly parallel and even convergent near the apices. Voigt discordance clearly visible. Lineolae weakly discernible.

Morphometrics

Source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data (n=)				
Beauger et al. 2015	35-65	7.0-9.5	12-13	30-34

Related species

Navicula recens (Lange-B.) Lange-B. (more elliptic-lanceolate and less linear-lanceolate valve outline with convex margins and a different striation pattern in the central area only 2, rarely 3, are shortened and more or less parallel); *N. marginalithii* Lange-B. (less acutely rounded apices and more parallel margins, only narrowing close to the apices; shortened striae in the central area is lower (up to 2–3) and the striae have a more parallel orientation; central area clearly asymmetrical); *N. korzeniewskii* Witkowski (more convex and much wider valves 9.5-11.5 µm and slightly lower striae density, 11 in 10 µm).

Distribution

Hoofdwatgang Boutweg, Gemaal de Biersum Schuddebeursedijk, Gemaal Zuiderdieppolder, Gemaal de Krammersepolders, Gouderak Noord Hollandse IJssel, Boezem K. van Steelandpolder, Goese Polder (NL); Lokanaal, Zwartesluisbeek, Blankenbergsevaart-Noordede, Ringvaart, Kanaal Charleroi-Brussel, Provinciegeleed, Kanaal Duinkerke-Nieuwpoort, Stenenschuurbrug Leopoldkanaal type location (B).

Ecology

Occurs in alkaline canals and rivers with high conductivity and moderate nutrient levels.

Diatom Flora of the Low Countries

Ecological values

Indicator values (Van Dam et al. 1994)

R	H	N	O	S	T	M
4	2	2			5	1

IPS
(Cemagref 1982)

IPS-S	IPS-V

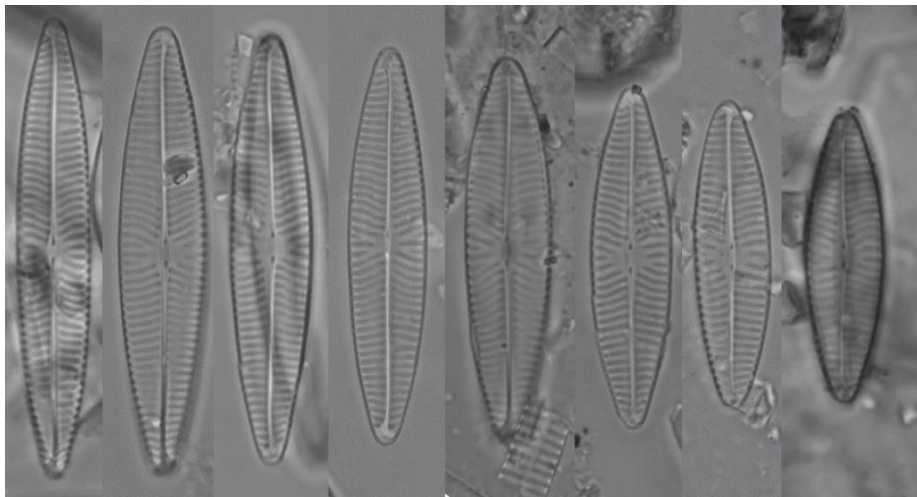
Rott et al. 1997, 1999

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

TDI
(Kelly & Whitton 1995)

TI-S	TI-V

Remarks



The Netherlands

References:

Beauger, A., O. Voltaire, A. Mertens, R. le Cohu et B. van de Vijver (2015) Two new *Navicula* species (Bacillariophyceae) from Western Europe.

Citation:

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