

Diatom Flora of the Low Countries

Navicula veneta (C.Agardh) Ehrenberg 1838

Basionym: *Frustulia lanceolata* C.Agardh 1827

Synonyms : none

Morphology

Valves lanceolate with bluntly rounded, non-protracted apices. Raphe filiform. Proximal raphe endings deflected to the primary side of the valve. Distal raphe endings hooked to the secondary side. Axial area narrow, linear. Central area rather large, rounded to rectangular and even square. Striae radiate, more convergent near the valve apices. Lineolae discernible in LM.

Morphometrics

source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data	31-74	8.5-10.5	11-12	30-35
Krammer & Lange-Bertalot 1986	28-70	(8)9-12	10-13	32
Lange-Bertalot 2001	28-70	(8)9-12	10-13	32
Potapova 2009	30-60	9-12	10-13	32
Lange-Bertalot et al. 2017	28-70	8-12	10-13	32

Related species

Navicula germainii Wallace (apiculate apices, lower valve width, lower stria density);
Navicula viridula (Kützing) Ehrenberg (larger, lower stria and areola density)

Distribution

Present from the Arctic to the Tropics, one of the most common species in Europe.

Ecology

Clear indicator of eutrophy. Present in eutrophic to hypertrophic water showing a broad ecological spectrum.

Present in springs but also in brackish water

Oligo- to α -mesosaprobic

Usually at low temperatures, less present in summer. Known to show winter/spring blooms

Ecological values

Indicator values (Van Dam et al. 1994)

R	H	N	O	S	T	M
4	3	2	4	4	5	3

IPS
(Cemagref 1982)

IPS-S	IPS-V
2.2	2

Rott et al. 1997, 1999

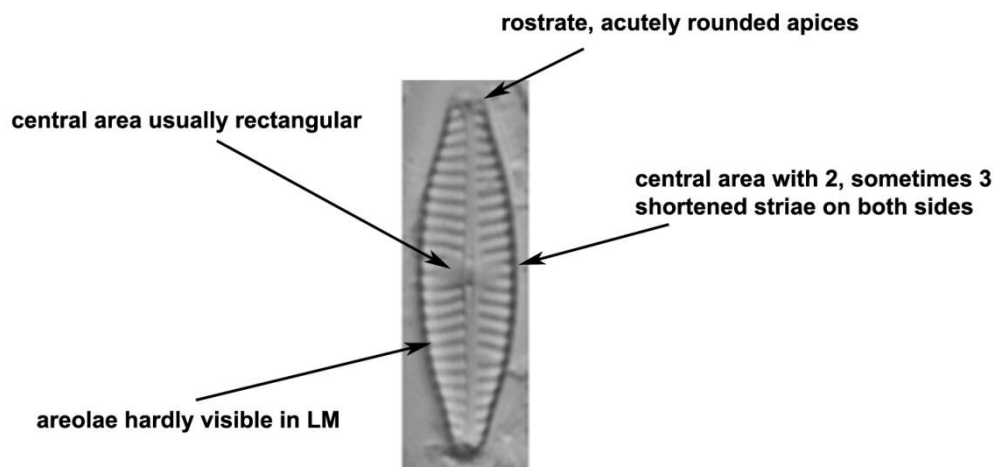
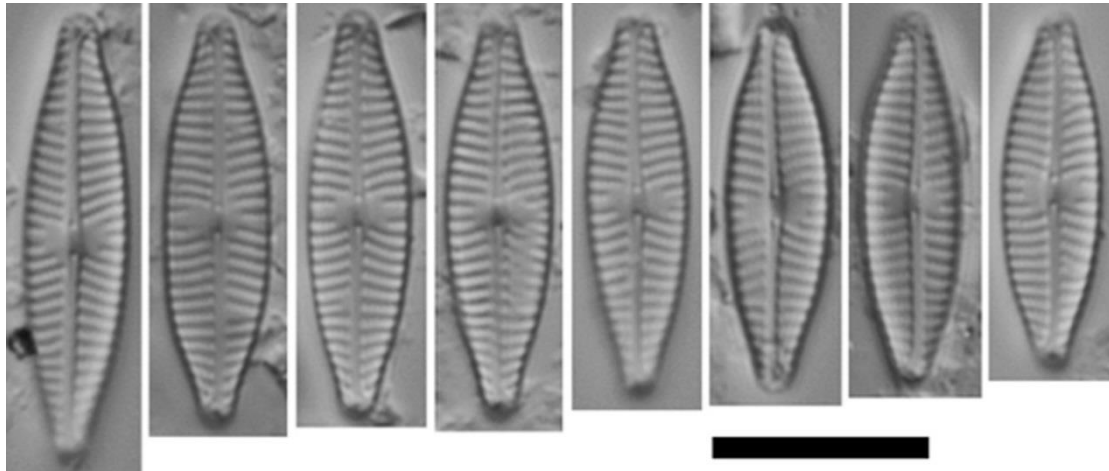
Rott SI s	Rott SI v	Rott TI s	Rott TI v
3.3	2	3.5	5

TDI
(Kelly & Whitton 1995)

TI-S	TI-V
4	1

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Remarks



Pictures Kleine Netebekken (B)
08/10/1994

References:

Lange-Bertalot (2001) Diatoms of Europe 2: p. 87, figs p. 314

Lange-Bertalot H. et al. (2017) Freshwater Benthic Diatoms of Central Europe p. 412, figs p. 692

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