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# Diatom Flora of the Low Countries

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## *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  $\alpha$ -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

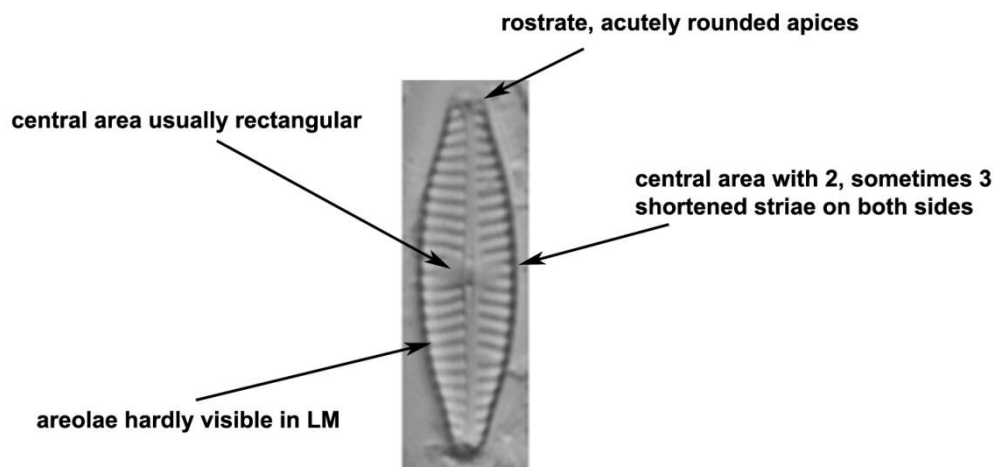
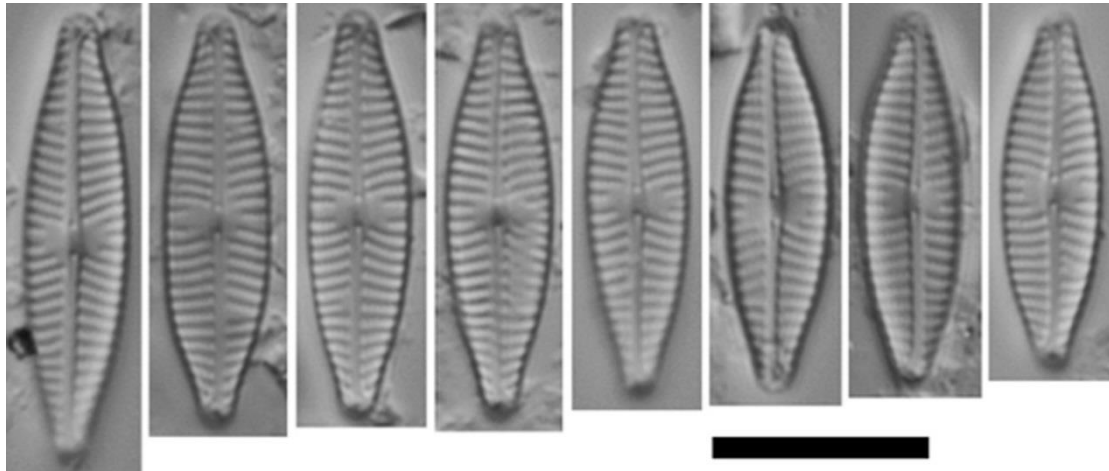
IPS-V	IPS-I
1.0	2.0

TDI

TI-V	TI-S
5	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

## Citation:

B. Van de Vijver & A. Mertens (2019) *Navicula veneta*. In Diatom Flora of the Low Countries. NVKD. Retrieved from <http://www.diatom.nl/species>