

Diatom Flora of the Low Countries

***Navicula cryptocephala* Kützing 1844**

Basionym: *Navicula cryptocephala* Kützing 1844

Synonym: *Navicula cryptocefalsa* Lange-Bertalot 1993

Morphology

Valves (narrowly) lanceolate to rhombic-lanceolate with gradually narrowing, protracted to weakly rostrate apices. Raphe filiform. Proximal raphe endings almost straight to weakly deflected to secondary side. Axial area (very) narrow, linear. Central area small to moderately large, round to elliptical. Striae strongly radiate, more convergent near the valve apices. Lineolae not discernible in LM.

Morphometrics

source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data	24-36	6-7	16-17	>35
Krammer & Lange-Bertalot 1986	20-40	5-7	14-17	c. 40
Lange-Bertalot 2001	20-40	5-7	14-18	c. 40
Potapova 2011	21-34	5.2-6.5	15-17	c. 35
Hofmann et al. 2011	20-40	5-7	14-18	c. 40

Related species

Navicula exilis Kützing (lower striae density, smaller central area, broader apices);
Navicula cryptofallax Lange-Bertalot & Hofmann (lower valve width, lower striae density, smaller central area, more (sub)capitate apices)

Distribution

Widespread, one of the most common species in Europe.

Ecology

Present in eutrophic to polytrophic water, with moderate to higher electrolyte contents, circumneutral to weakly alkaline.

Tolerant for higher levels of saprobity (up to β- α-mesosaprobic)

Ecological values

Indicator values (van Dam et al. 1994)

R	H	N	O	S	T	M
3	2	3	3	3	7	2

IPS
(Cemagref 1982)

IPS-S	IPS-V
3.5	2

Rott et al. 1997, 1999

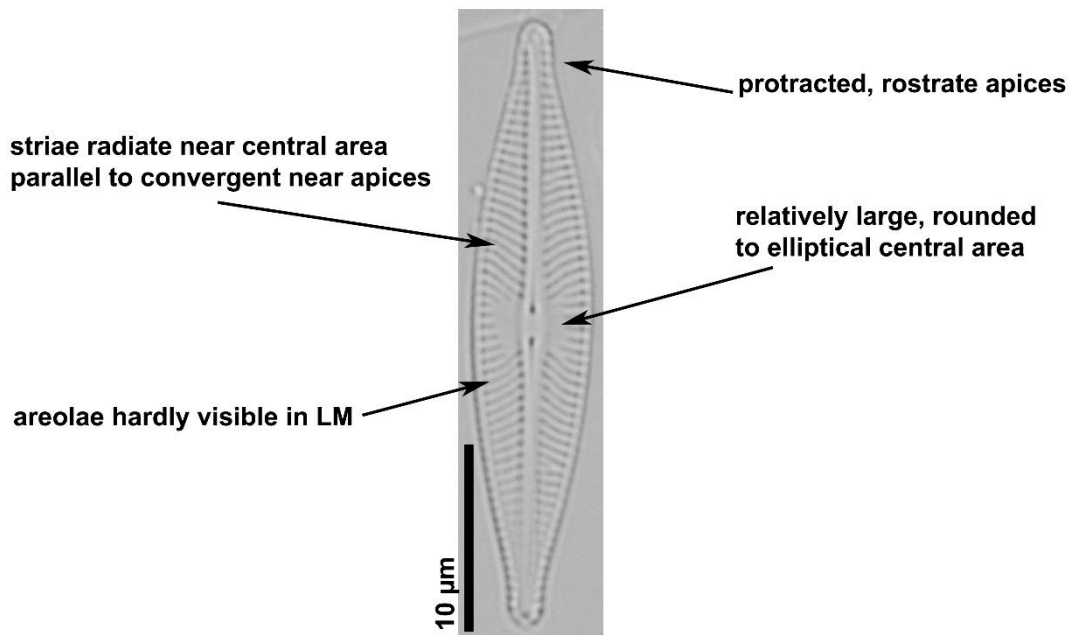
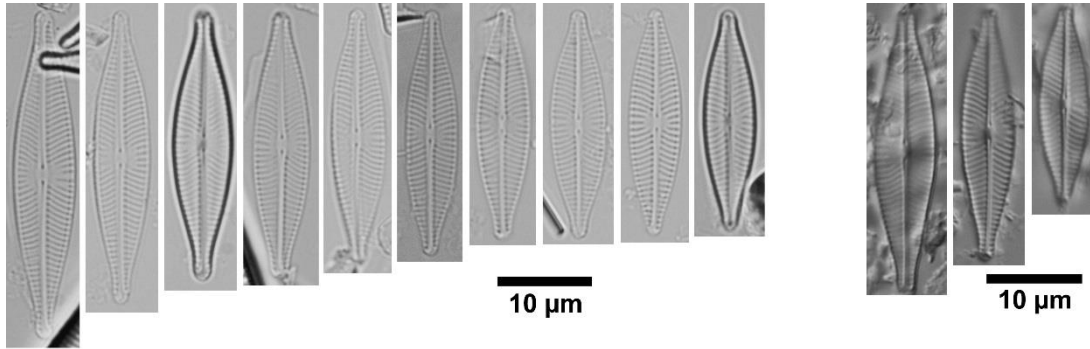
Rott SI s	Rott SI v	Rott TI s	Rott TI v
2.5	2	3.5	4

TDI
(Kelly & Whitton 1995)

TI-S	TI-V
4	1

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Remarks



Oude Strijper Aa (NL)
02/06/1982

Type material
sample 209 Kützing coll.

References:

- Hofmann et al. (2011) Diatomeen im Süßwasser-Benthos von Mitteleuropa p. 377, figs p. 664
- Krammer, K. & H. Lange-Bertalot (1997-2004) Bacillariophyceae. Süßwasserflora von Mitteleuropa 2/1-4. Gustav Fischer Verlag.
- Lange-Bertalot (2001) Diatoms of Europe 2: p. 27, figs p. 270, 272
- Potapova, M. (2011) *Navicula cryptocephala*. In Diatoms of the United States. Retrieved July 02, 2017, from http://westerndiatoms.colorado.edu/taxa/species/navicula_cryptocephala

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