

Diatom Flora of the Low Countries

Cymbella tumida (L.A. de Brébisson ex F.T. Kützing) H.F. van Heurck 1880

Synonyms: *Cocconema tumidum* Brébisson ex Kützing 1849; *Cymbella stomatophora* Grunow 1875

Morphology

Valve strongly dorsiventral, dorsal margin convex sometimes slightly undulate, ventral margin weakly convex to weakly concave slightly inflated in the center. Ends protracted, broadly rounded. Axial area relatively narrow. Central area rather large roundish to rhombic about a third to a half of the valve width. Raphe follows the median line of the valve, internal and external fissures parallel, central ends bend to ventral, terminal ends sickle-shaped and bend to dorsal. Striae radiate in the center becoming slightly radiate to parallel towards the ends. One stigma with a clear oblique canal or tube which ended about between the two central nodules.

Morphometrics

Source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data (n=9)	44-83	16-23	9-11	19-21
Krammer & Lange-Bertalot 1997-2004	35-120	12-25	8-10 up to 13 at the ends	16-20
Krammer 2002; Lange-Bertalot et al. 2017	35-95	16-22	8-11 up to 12-13 at ends	14-19

Related species

None in central Europe.

Distribution

Central Europe, Germany. Vledder Aa, Ruiner Aa, Nieuwkoopse plassen, Maaltocht Oud en Nieuw Reyerwaard, Gemaal aan de Schenkelsdijk Spijkenisse, Duifpolder, Kuipersveer Oude Maas, Ankeveense Plassen, Prins Karelpolder, Tonnekreek, Rietkreek, Kleine Melanen, Wiel Elshoutse Zeedijk, Klein Koppelwiel, Rijswijkse Wiel a/d Maasdijk, Belversven, Gracht sportpark Polderkwartier, Grave beneden sluis, Hagestein boven sluis, Sloten stadsgracht (NL).

Ecology

In meso-eutrophic, oligosaprobic standing and flowing freshwaters with medium electrolyte content.

Ecological values

Indicator values (Van Dam et al. 1994)

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

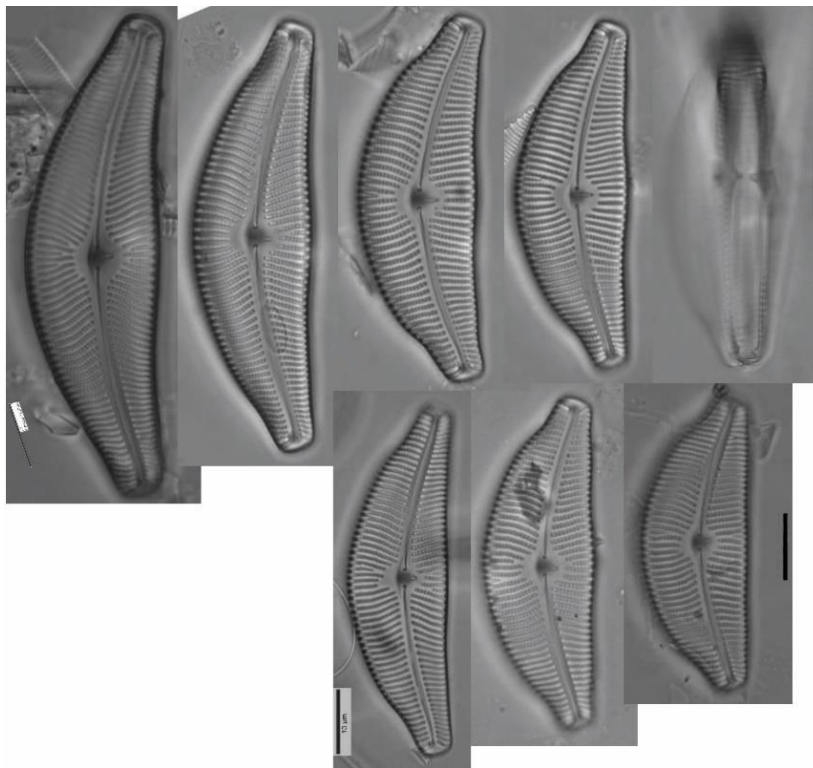
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IPS (Cemagref 1982)	
IPS-S	IPS-V
3	3

Rott et al. 1997, 1999			
Rott SI s	Rott SI v	Rott TI s	Rott TI v
1.6	4	2.5	2

TDI (Kelly & Whitton 1995)	
TI-S	TI-V
4	2

Remarks



The Netherlands

References:

- Krammer, K. (2002) *Cymbella*. Diatoms of Europe 3.
Krammer, K. & H. Lange-Bertalot (1997-2004) Bacillariophyceae. Süßwasserflora von Mitteleuropa 2/1-4.
Lange-Bertalot, H., G. Hofmann, M. Werum & M. Cantonati (2017) Freshwater Benthic Diatoms of Central Europe.

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