

Diatom Flora of the Low Countries

***Planothidium rostratoholarcticum* H. Lange-Bertalot et M. Båå 2014.**

Synonyms: *Achnanthes lanceolata* var. *rostrata* Hustedt in Hustedt (1911, p. 279) sensu Simonsen (1987, p. 20, pl. 4, figs 6, 7); *Achnanthes lanceolata* var. *rostrata* (Østrup) Hustedt in Hustedt (1930, p. 208); *Achnanthes lanceolata* f. *rostrata* (Østrup) Hustedt in Hustedt (1957, p. 251); *Achnanthes lanceolata* ssp. *rostrata* (Østrup) Lange–Bertalot in Krammer & Lange-Bertalot (1991, pl. 43, figs 1–4); *Achnanthes lanceolata* ssp. *frequentissima* var. *rostratiformis* Lange-Bertalot in Lange-Bertalot (1993, p. 5) comb. inval.

Morphology

Valves linear to linear-lanceolate with almost parallel margins with only weakly elongated apices, usually more broadly protracted, rostrate but truncated. RLV: axial area narrow, straight, linear. Central area unilateral, large horseshoe-shaped hyaline area with a cavum. On the opposite side, striae not shortened, always reaching the axial area. Striae weakly radiate throughout. RV: axial area very narrow, linear. Central area irregular, bordered on each side by usually one shortened stria. Fascia absent. Raphe branches straight with expanded, drop-like proximal raphe endings. Terminal raphe fissures unilaterally deflected. Striae radiate throughout.

Morphometrics

Source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data (n=10)	7.5-14.0	4.6-5.7	RL: 12-16; RV: 13	
Wetzel et al. 2019	6.4-13.5	3.8-6.4	RL:13-17 RV: 14-17	

Related species

Planothidium rostratum (Østrup) Lange-Bertalot (valves elliptical with broadly convex margins; apices long protracted and narrowly rostrate); *Planothidium dubium* (Grunow) Round & Bukhtiyarova (RLV has no cavum); *Planothidium reichardtii* Lange-Bertalot & Werum (RLV has no cavum, valve ends protracted subcapitate to capitate).

Distribution

Itterbeek, Kattebeek, Grote Vijver Mechelen (B), Kuipersveer Oude Maas, Poederrijen Afdamde Maas, Sliedrechtse Biesbosch (NL).

Ecology

In eutrophic alkaline lakes and slow running rivers, with medium to high conductivity.

Ecological values

Indicator values (Van Dam et al. 1994)

R	H	N	O	S	T	M
4	2				5	

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IPS
(Cemagref 1982)

IPS-S	IPS-V
4.4	1

Rott et al. 1997, 1999

Rott SI s	Rott SI v	Rott TI s	Rott TI v
2.5	0	2.8	3

TDI
(Kelly & Whitton 1995)

TI-S	TI-V
3	1

Remarks



The Netherlands

References:

- Lange-Bertalot, H., G. Hofmann, M. Werum & M. Cantonati (2017) Freshwater Benthic Diatoms of Central Europe.
- Van de Vijver, B., L. Ector et C.E. Wetzel (2019) Taxonomic Diatom Workshop *Planothidium*
- Wetzel, C., B. Van de Vijver, S. Blanco & L. Ector (2019) On some common and new cavum-bearing *Planothidium* (Bacillariophyta) species from freshwater.

Citation:

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