

# Diatom Flora of the Low Countries

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## ***Gomphonema pumilum* var. *rigidum* E. Reichardt et H. Lange-Bertalot in E. Reichardt 1997.**

**Basionym:** *Gomphonema pumilum* var. *rigidum* E. Reichardt et H. Lange-Bertalot 1997

**Synonym:** none

### **Morphology**

Valves linear to linear-lanceolate, blunt rounded ends. Axial area narrow, central area clear broad transverse rectangular. Raphe pretty straight, filiform to lateral. Striae very weak radiate to parallel and hardly curved.

### **Morphometrics**

Source	Length (µm)	Width (µm)	Striae (in 10 µm)	Areolae (in 10 µm)
Own data (n=8)	7.8-18.7	3.8-4.6	14-16	
Reichardt 1997 (type)	12-36	(3)3.5-5.3	11.5-14	
Levkov et al. 2016	12-24	3.0-4.5	12-16	

### **Related species**

*Gomphonema pumilum* (Grunow) Reichardt & Lange-B. (axial area wide, central area less clear, valve more lanceolate, greatest width at the height of the central nodules); *Gomphonema pumilum* var. *elegans* Reichardt & Lange-B (raphe clearly curved, striae strong radiate a bit curved).

### **Distribution**

Type location Alesheimer Weiher in district Weissenburg-Gunzenhausen Mittelfranken (D); Brielse meer, Elderse Turfvaart, Lange Water, Aalskreek, Vestinggracht Klundert, Lemstervaart, De Zate Dronten, 't Weerwater, Plas Vliegveld Lelystad, Winkeltocht, Kavelsloot Stobbentocht, Galjoottocht, Strandgapertocht, Hoge Knartocht, Vaartplas, Ooievaarsplas, Gemaal Eendracht Nieuwendijk, Watergang Nieuwe Merwedeweg, Gemaal Galathee aan Mariadijk, Kuipersveer Oude Maas, Sliedrechtse Biesbosch, Stevensweerd aanlegsteiger, Foreldorado bron, Scheumerbeek zijtak, In het Diepe Broek bronloop, Eijsden Bovenmaas, Belfeld Zandmaas, Oude Bornschebeek, Boven Dinkel (NL); Bolissenbeek, Demer, Lokanaal, Itterbeek, Zwartwater, Poekebeek, Munsterbeek, Abeek, Kalkenvaart, Dender, Herk en kleine Herk, Poversbeek, Scheibeek (B).

### **Ecology**

Occurs in streams, rivers and lakes. Calcium-bicarbonate rich, oligosaprobic to  $\beta$ -mesosaprobic freshwater habitats with medium to high trophic levels.

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## Ecological values

Indicator values (Van Dam et al. 1994)

R	H	N	O	S	T	M
4	2	2	2	2	7	3

IPS  
(Cemagref 1982)

IPS-S	IPS-V
3.5	1

Rott et al. 1997, 1999

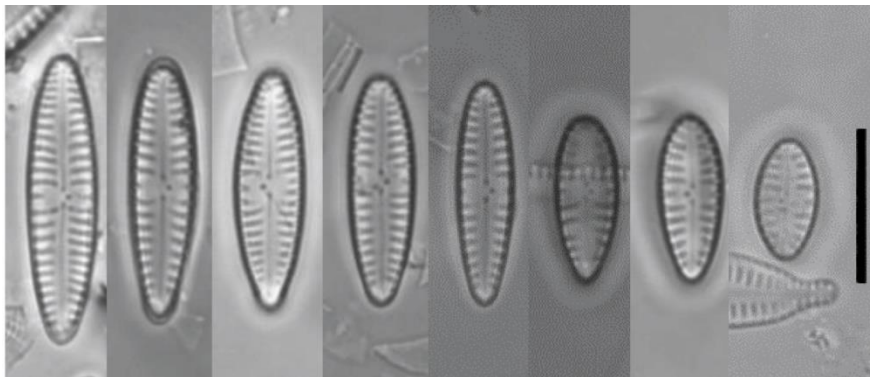
Rott SI s	Rott SI v	Rott TI s	Rott TI v

TDI  
(Kelly & Whitton 1995)

TI-S	TI-V
3	1

## Remarks

*G. pumilum* var. *rigidum* in Levkov (2016) doesn't fit the type.



The Netherlands

## References:

Levkov, Z., D. Mitić-Kopanja & E. Reichardt (2016) The diatom genus *Gomphonema* from the Republic of Macedonia. *Diatoms of Europe* 8.

Reichardt, E. (1997) Taxonomische Revision des Artenkomplexes um *Gomphonema pumilum* (Bacillariophyceae).

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