

## ***Brachysira garrensis* (Lange-Bertalot & Krammer) Lange-Bertalot 1994**

**Basionym:** *Anomoeoneis garrensis* Lange-Bertalot & Krammer 1985

### **Morphology**

Valves (elliptic-) lanceolate with more or less protracted, rostrate apices. Sometimes a little asymmetric to the transapical axis. Raphe straight, filiform with small, clearly visible proximal endings. Axial area very narrow, often widening towards the central area. Central area sometimes, absent, usually small, elliptical to rounded. Voigt-discordance not visible. Striae composed elongated areolae (latter barely visible in LM), radiate throughout the entire valve. Typical *Brachysira* design pattern present. Spines absent. Apical and axial ribs weakly developed (sometimes better visible as a result of corrosion).

### **Morphometrics**

| source                               | Length<br>(µm) | Width<br>(µm) | Striae<br>(in 10 µm) | Areolae<br>(in 10 µm) |
|--------------------------------------|----------------|---------------|----------------------|-----------------------|
| Own data (n=25)                      | 11-20          | 3.5-4.5       | 36-41                | -                     |
| Krammer & Lange-Bertalot (1997-2004) | 8.3-32         | 3-6.5         | 36-40                | -                     |
| Lange-Bertalot & Moser (1994)        | 8.3-32         | 3-6.5         | 36-40                | -                     |

### **Related species**

*Brachysira neoexilis* Lange-Bertalot (more protracted, usually capitate. Lower striae density); *Brachysira neglectissima* Lange-Bertalot (usually larger valves); *Brachysira procera* Lange-Bertalot & Moser (lower striae density, more slender, elongated valves).

### **Distribution**

Possibly cosmopolitan, likely very often confused with related species. Type locality Garrensee (D). Groot Ganzenven, De Zanderijen, Achterste Goorven, Bosveen Uffelte, Kliplo, Bergeven, Wiekermedenven, Roderveldpoel, Teesselinkven, Broddebroekven Noord, Oude Spartelvijver, Bergvennen 1957, Haeselaarsbroek poel, Lossing uit 't Loom (Nartheciumbeek) (NL).

### **Ecology**

Usually in electrolyte poor, fresh waters, low in nitrogen.

In the Netherlands found in the Beuven, a large moorland pool with a Lobelia vegetation. Characteristic parameters for Beuven:

pH 5,5-6,5    conductivity 50-100 µS/m    total N < 2 mg/l

### **Ecological values**

Indicator values (Van Dam et al. 1994)

| R | H | N | O | S | T | M |
|---|---|---|---|---|---|---|
| 2 | 1 | 1 | 1 | 1 | 1 | 2 |

# Diatom Flora of the Low Countries

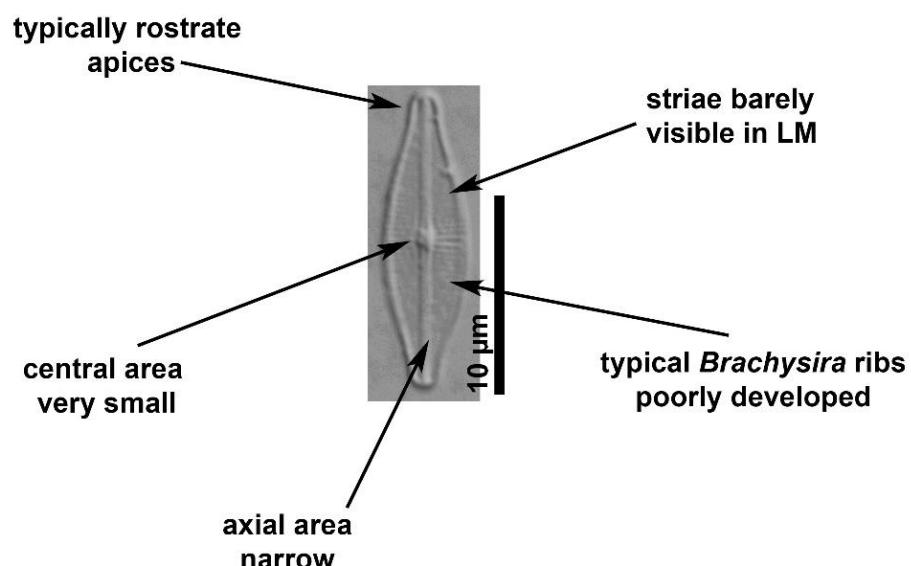
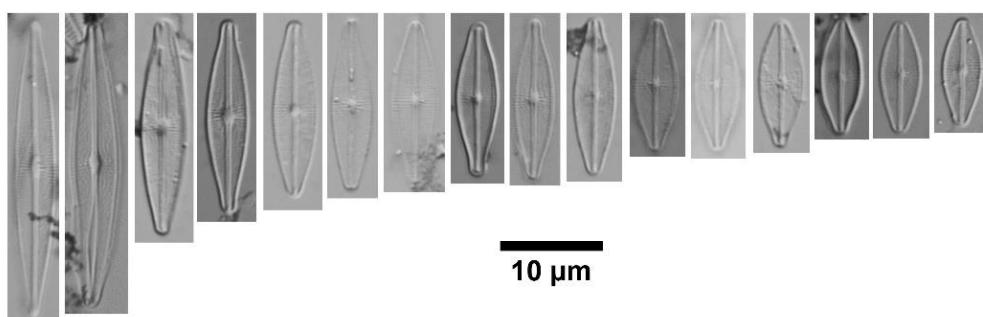
| IPS<br>(Cemagref 1982) |       |
|------------------------|-------|
| IPS-S                  | IPS-V |
| 3                      | 1     |

| Rott et al. 1997, 1999 |           |           |           |
|------------------------|-----------|-----------|-----------|
| Rott SI s              | Rott SI v | Rott TI s | Rott TI v |
|                        |           |           |           |

| TDI<br>(Kelly & Whitton 1995) |      |
|-------------------------------|------|
| TI-S                          | TI-V |
| 1                             | 3    |

## Remarks

Moorland pool Beuven (NL)



## References:

- Krammer, K. & H. Lange-Bertalot (1997-2004) Bacillariophyceae. Süßwasserflora von Mitteleuropa 2/1-4.  
Lange-Bertalot, H. & G. Moser (1994) *Brachysira* Monographie der Gattung.

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