Micrasterias ralfsii

(Brébisson ex Ralfs) Škaloud, Nemjova, Vesela, Černá & Neustupa, 2011

Most likely ID: n.a.

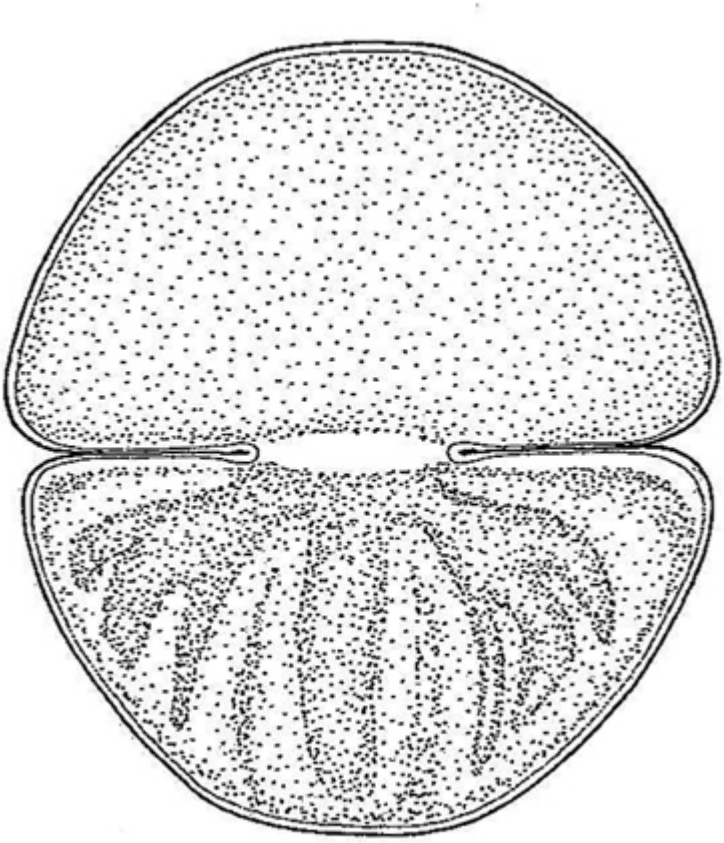
Synonym: *Cosmarium ralfsii*

Sampling location: Lauchsee Moor (Austria)

Phylogenetic tree: *Micrasterias ralfsii*

Diagnosis:

- cells almost circular, slightly longer than wide
- length 90–120 µm, width 80–110 µm
- semi-cells almost semi-circular, rounded basal angles
- apices flat, slightly convex
- cell wall finely punctate with scattered pores
- sinus deep, linear, laterally strongly widened
- chloroplasts with several, scattered pyenoids



after Lenzenweger

Micrasterias ralfsii

The original name *Cosmarium ralfsii* was set invalid by Škaloud et al. in 2011 on the basis of genetic studies and the species was transferred to the genus *Micrasterias*.

I have only found *Micrasterias ralfsii* in the Lauchsee Moor in June 2024. The alga was quite common there. It is similar in shape to *Cosmarium circulare*, but has flattened apices and has several, scattered pyrenoids, while *Cosmarium circulare* has only 2 pyrenoids per semi-cell.

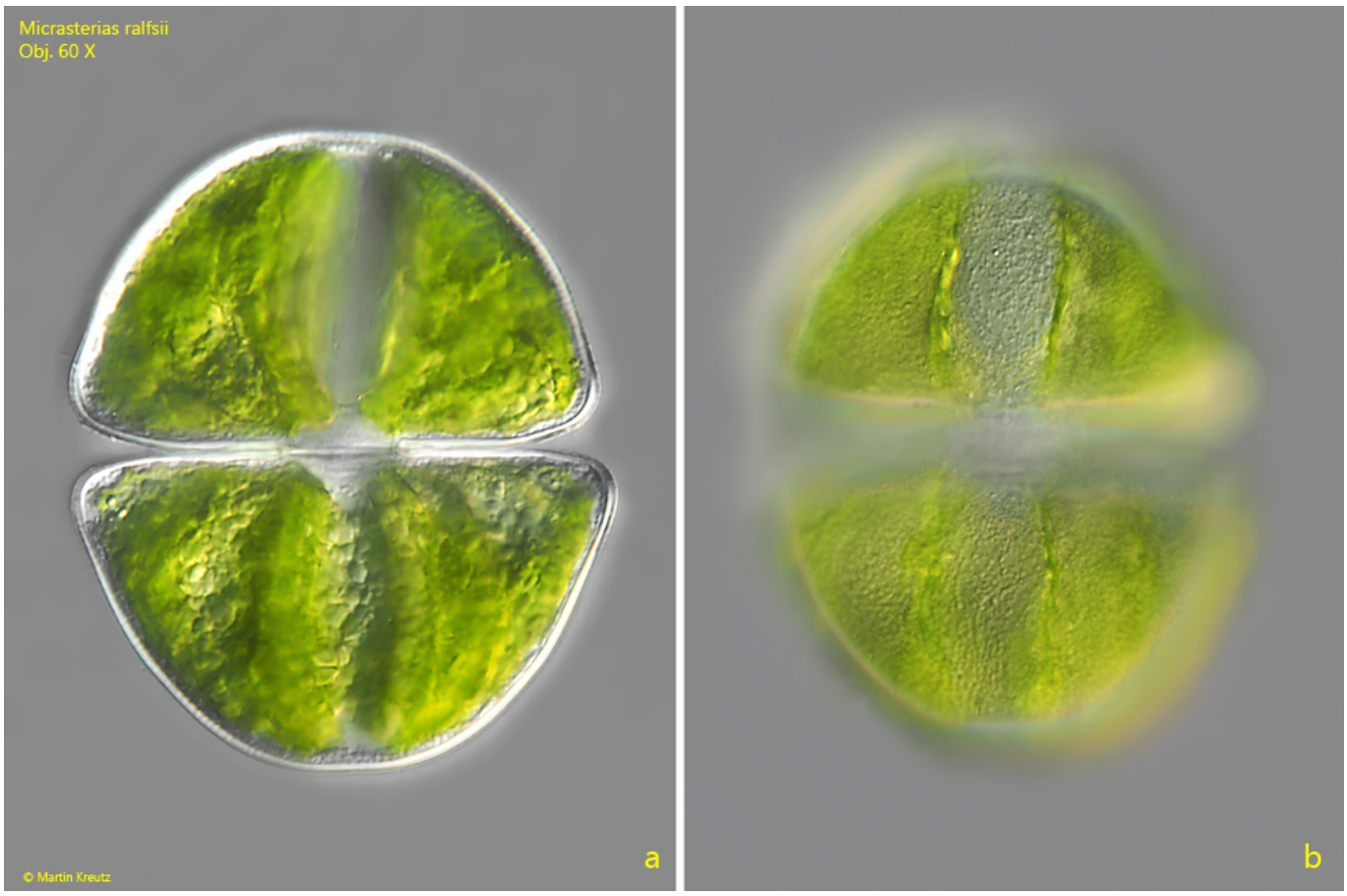


Fig. 1 a-b: *Micrasterias ralfsii*. L = 116 µm. Focal planes on the isthmus (a) and the finely punctate cells wall (b). Obj. 100 X.

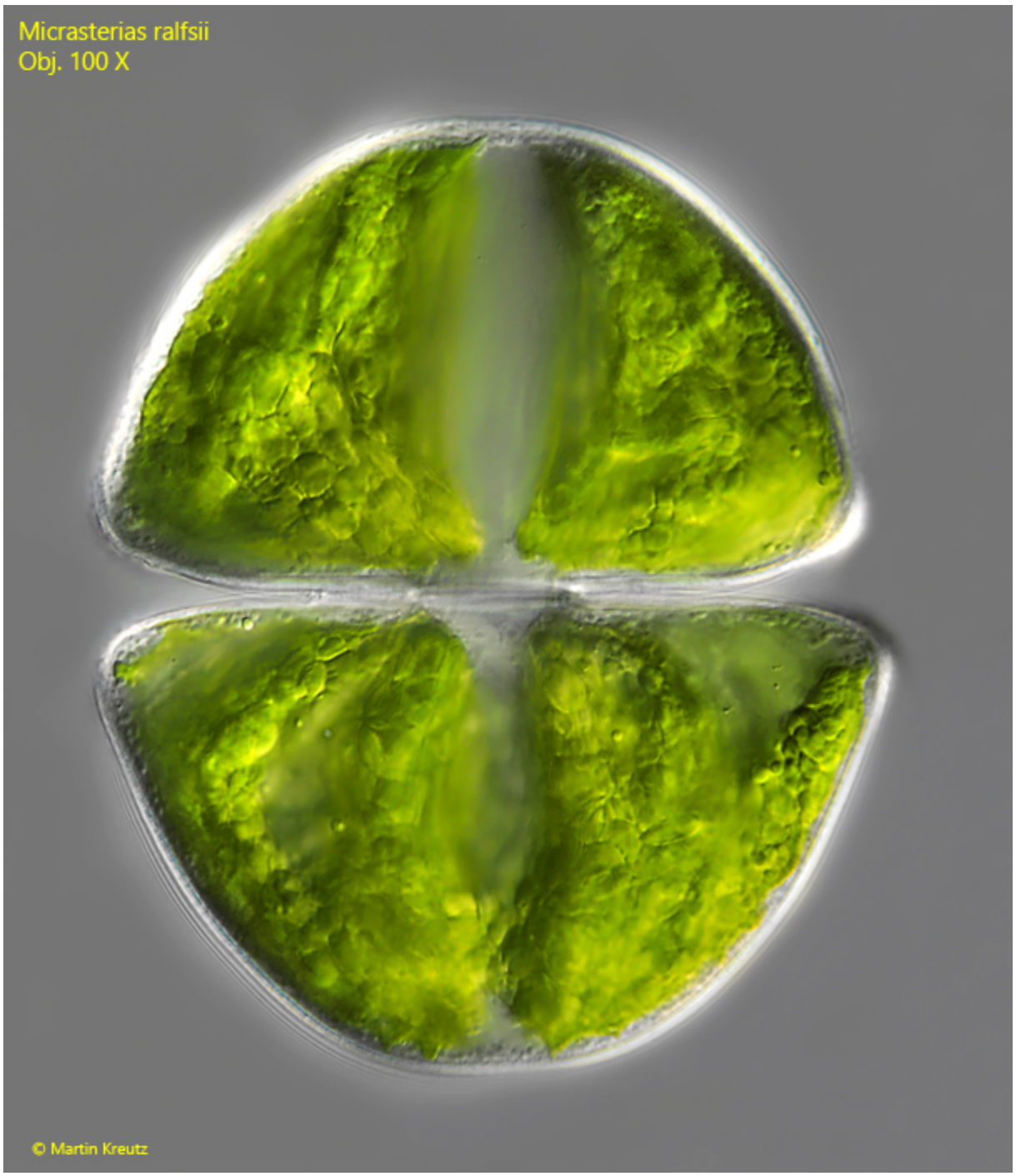


Fig. 2: *Micrasterias ralfsii*. L = 116 µm. The specimen as shown in fig. 1 a-b at higher magnification. Obj. 100 X.

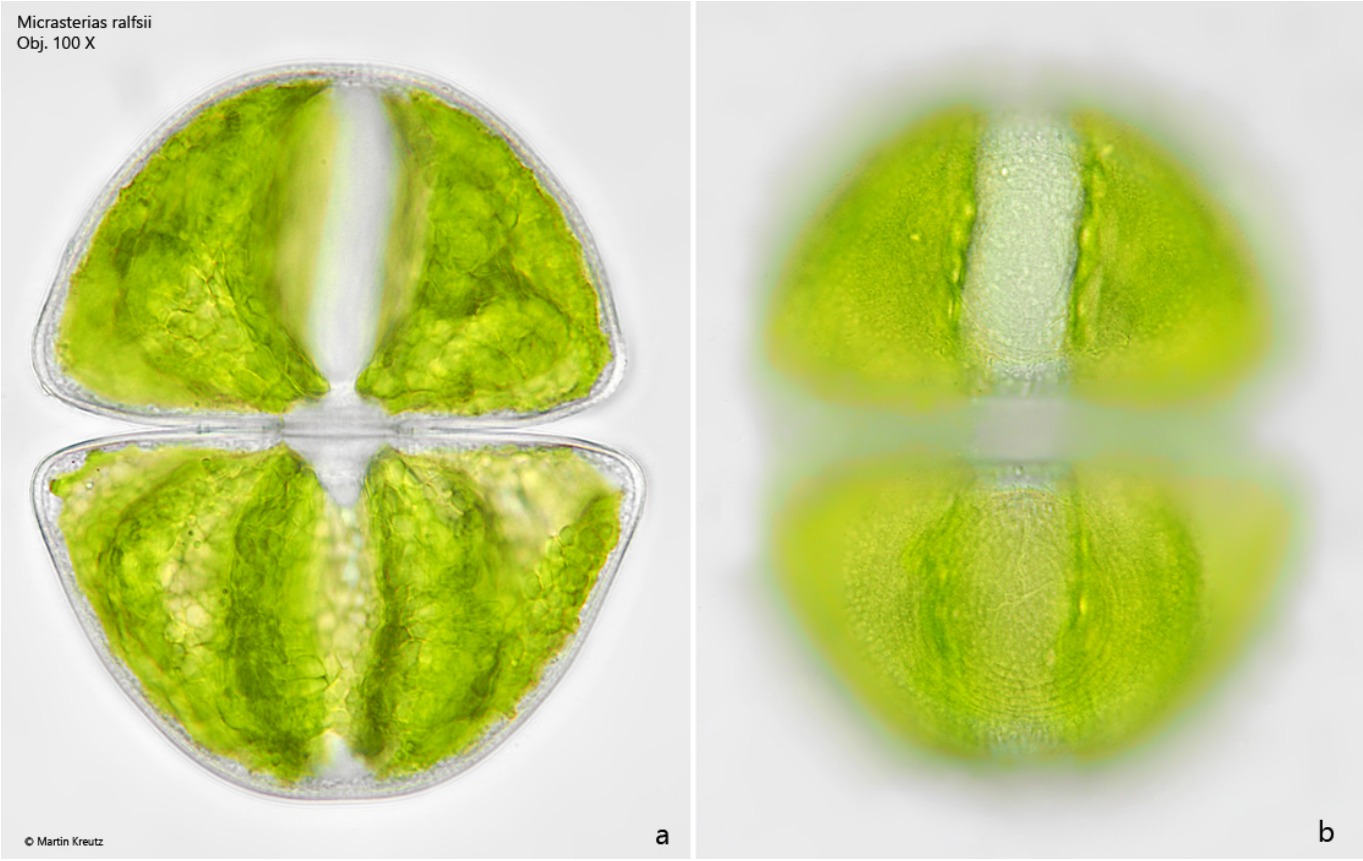


Fig. 3 a-b: *Micrasterias ralfsii*. L = 116 µm. The specimen as shown in fig. 1 a-b in brightfield illumination. Obj. 100 X.