Dinobryon divergens Imhof, 1887

Most likely ID: n.a.

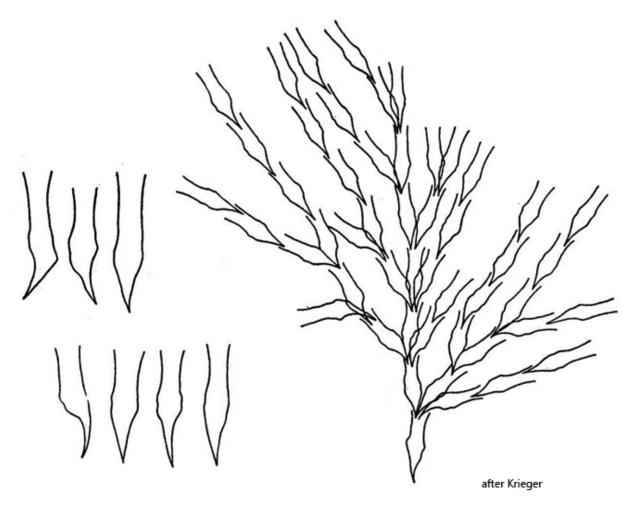
Synonym: n.a.

Sampling location: Pond of the disposal company Constance, Mühlweiher Liztelstetten, Hagstaffel pond, Mühlenhalden pond

Phylogenetic tree: <u>Dinobryon divergens</u>

Diagnosis:

- cells spindle-shaped in a vase-shaped lorica
- cells attached with a tapered stalk of cytoplasm to the posterior part of the Iorica
- two golden brown chloroplasts
- the anterior chloroplast with an eyespot
- two flagella of different lengths
- one spherical nucleus between chloroplasts
- two contractile vacuoles in midbody
- length of lorica 30-65 μm
- lorica with a distinctly widened median part, often with 1-2 undulations
- cells forming a branched colony
- angle between branches of the colony large



Dinobryon divergens

I find *Dinopbryon divergens* in the plankton of most of my sampling sites. The colonies can grow up to 500 µm in size. Even at low magnifications they are conspicuous due to their widely spread and loose structure. The angle between the branches of the colonies is much larger than in the similar species *Dinobryon* <u>sertularia</u> (s. fig. 2). Another important characteristic of *Dinobryon divergens* is the distinct widening in the middle part of the lorica (s. fig. 3). This broadening also often shows 1-2 undulations. This is a major distinguishing feature from <u>Dinobryon</u> sertularia, whose lorica is smooth and somewhat bulbous in the middle.

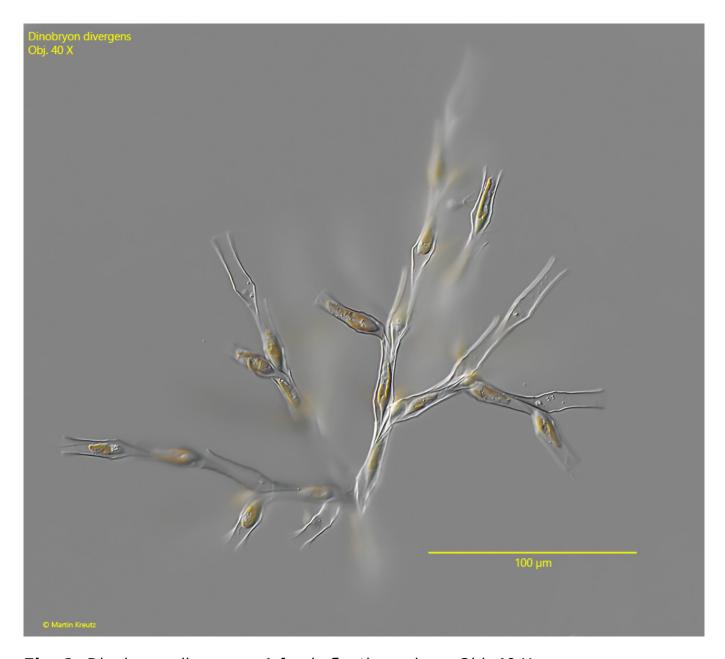


Fig. 1: Dinobryon divergens. A freely floating colony. Obj. 40 X.



Fig. 2: Dinobryon divergens. A part of a slightly squashed colony. Note the large angles between the branches of the colony. Obj. 100 X.

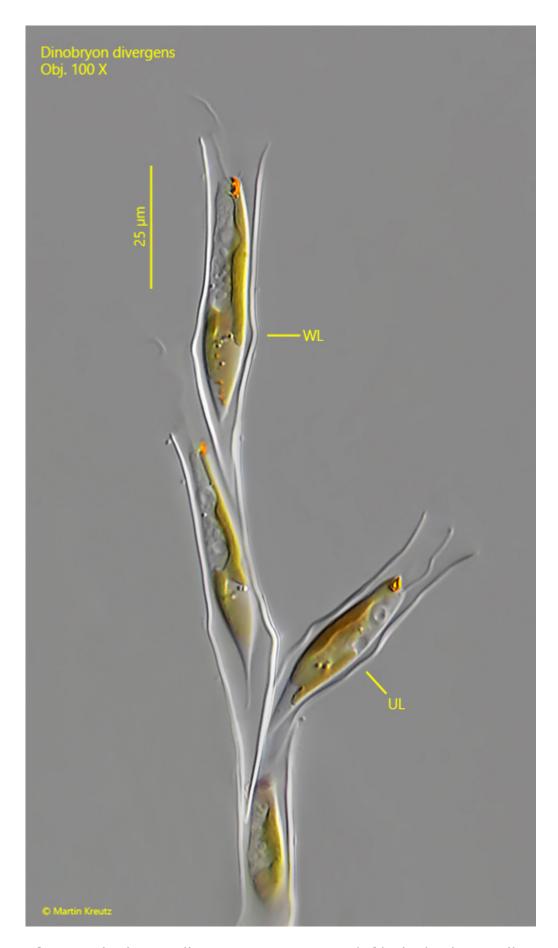


Fig. 3: Dinobryon divergens. $L=52\ \mu m$ (of lorica). The median part of the loricae are distinctly widened (WL) or undulated (UL). Obj. 100 X.



Fig. 4: Dinobryon divergens. Some squashed specimens of a colony. Chl 1-2 =chloroplasts, CV = contractile vacuoles, ES = eyespot, Nu = nucleus. Obj. 100 X.