Tenebriella curviceps

(C.Agardh ex Gomont)

Hauerová, Hauer & Kaštovský, 2021

Most likely ID: n.a.

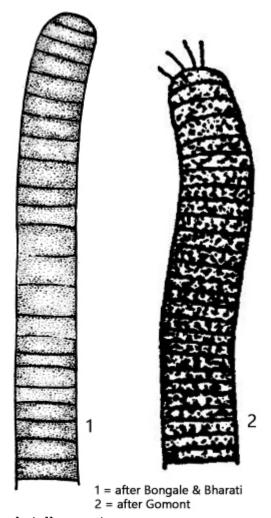
Synonym: Oscillatoria curviceps

Sampling location: Simmelried

Phylogenetic tree: <u>Tenebriella curviceps</u>

Diagnosis:

- formig black-greenish or blue-green mats
- filaments solitary, straight or slightly curved
- cells 9-12 μm wide, 2-5 μm long
- filaments slightly curved at end
- cross walls not constricted
- ends of filaments slightly tapered
- terminal cells rounded, not capitate
- apices of terminal cells sometimes with bacteria
- cells colored blue-green
- sometimes accumulations of granules near cross walls



Tenebriella curviceps

I regularly find *Tenebriella curviceps* on the topmost layer of mud in the <u>Simmelried</u>. This cyanobacterium was originally described as Oscillatoria curviceps and was transferred to the newly established genus Tenebriella by Hauer & Kaštovský in 2021.

The filaments of my population were between 9-11.5 µm wide and the cells between 2.3-3.0 um long. The cells are not constricted at the cross walls, and the ends of the filaments are only slightly tapered. The apices of the terminal cells are broadly rounded and not capitate. Huber-Pestalozzi (1938) mentions that the terminal cells of Tenebriella curviceps can be covered with epiphytic bacteria and shows a drawing by Gomont (s. drawing 2, above). In my population, I could frequently find short rods on the apices of the terminal cells but could not determine whether these were really bacteria or possibly slime secretions. The cells were consistently blue-green in color and often contained small vesicles as shown in the images below.

The similar species *Oscillatoria tenuis* has significantly thinner filaments (5–6 μ m), and Oscillatoria princeps, which also has broadly rounded terminal cells, has filaments with a thickness of 27-29 μm .

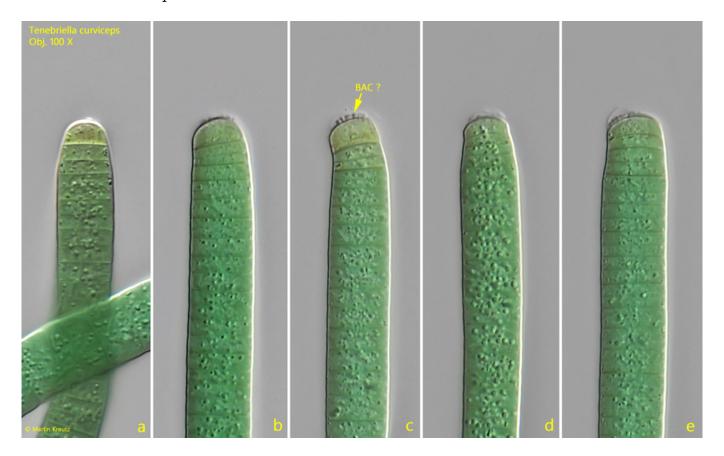


Fig. 1 a-e: Tenebriella curviceps. The shape of the terminal ends of 5 filaments. The apices of the terminal cells are broadly rounded. Some apices are covered with short rods similar to bacteria (BAC?). Obj. 100 X.

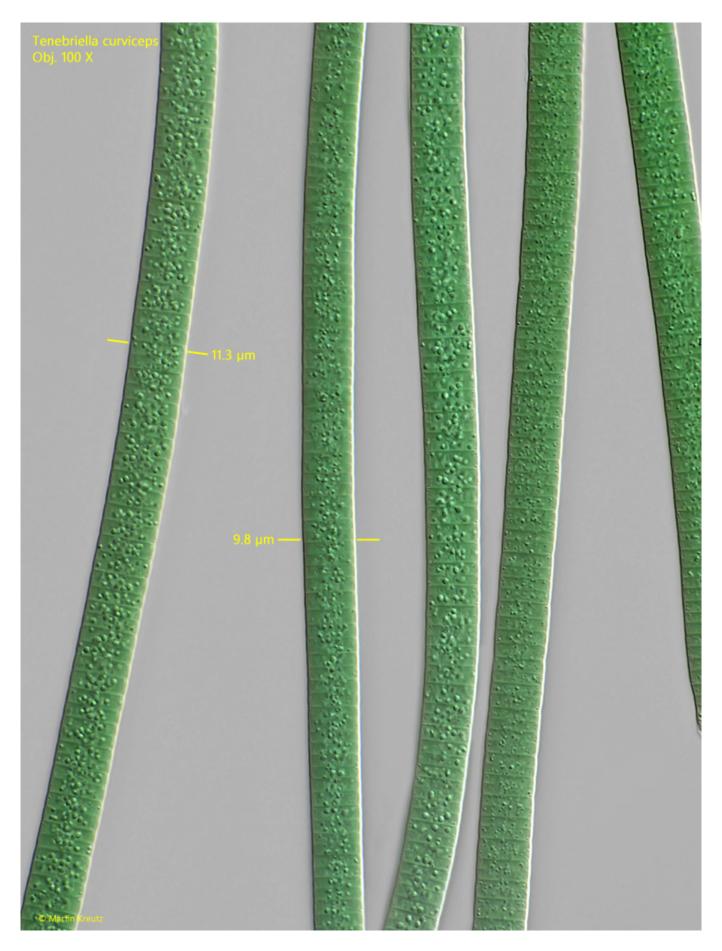


Fig. 2: Tenebriella curviceps. Some filaments with a diameter of 9.5–11.5 μm . Obj. 100 X.



Fig. 3: Tenebriella curviceps. A second set of filamants with a diameter of 10–11 $\mu m.$ Obj. 100 X.

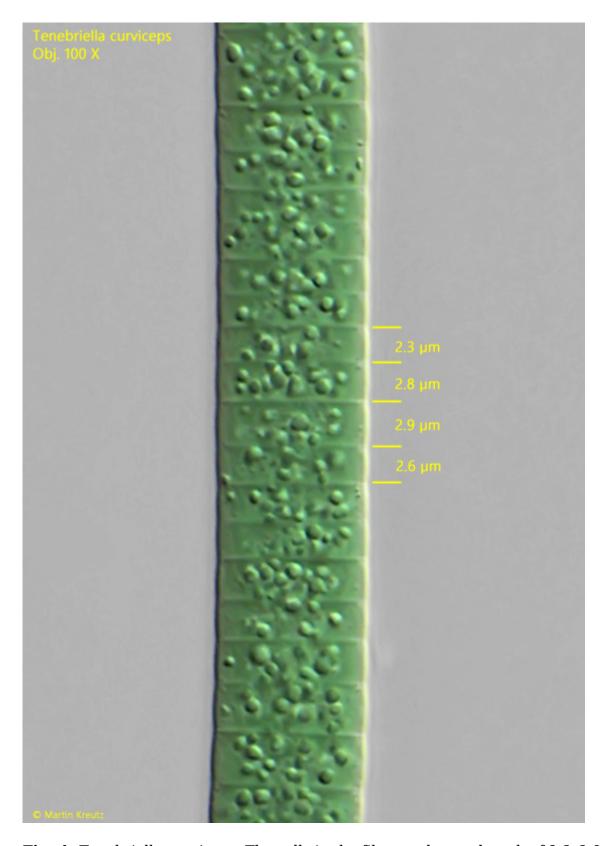


Fig. 4: Tenebriella curviceps. The cells in the filament have a length of 2.3–2.9 μm . Obj. 100 Χ.