## Fragilaria capucina (Desmazières, 1830)

Most likely ID: n.a.

Synonym: n.a.

**Sampling location:** <u>Pond of the disposal company Constance</u>, <u>Mühlenhalden pond</u>, <u>Hagstaffel pond</u>, <u>Lake Constance</u>

Phylogenetic tree: Fragilaria capucina

## **Diagnosis**:

- colonies of parallel arranged cells, ribbon-shaped
- cells rectangular in girdle view, length 25–100  $\mu m$  , width 2–5  $\mu m$
- in valve view elongated oval, narrowed to cell poles
- valve with transversal striation, interrupted in a central field
- one parietal chloroplast, golden brown
- planktonic lifestyle



after Streble

## Fragilaria capucina

*Fragilaria capucina* is a very common, colony-forming diatom, which I find in the plankton samples from many of my sampling sites. The cells are connected parallel to each other via the valve side. This means that the cells can almost always be seen from the girdle side. The colonies can be very long. According to my measurements, up to 500  $\mu$ m, which is about 100 cells.



**Fig. 1:** *Fragilaria capucina*.  $L = 350 \mu m$  (of colony). Total view of a colony of about 70 parallel arranged cells. Obj. 60 X.



**Fig. 2:** *Fragilaria capucina*.  $L = 52 \mu m$  (of cells). A part of the colony as shown in fig. 1 in detail. Note the very small nuclei in the center of the cells (arrows). In each cell one parietal chloroplast (Chl) is present. OD = oil droplets. Obj. 100 X.



**Fig. 3:** Fragilaria capucina. L = 52  $\mu$ m (of cells). Focal plane on the shells in girdle view. Obj. 100 X.