

## ***Synura spinosa* Korshikov, 1929**

**Most likely ID:** n.a.

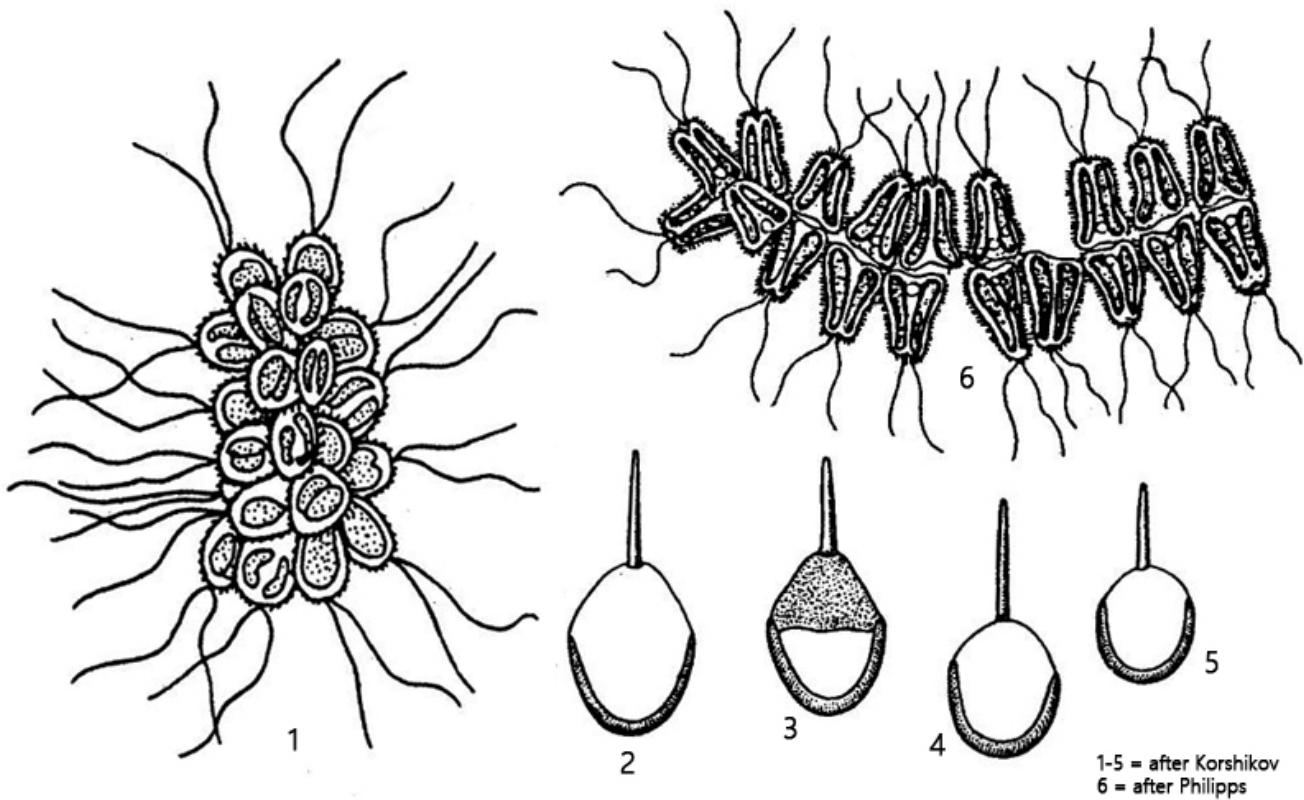
**Synonym:** *Chlorodesmus hispidus*

**Sampling location:** [Simmelried](#)

**Phylogenetic tree:** [Synura spinosa](#)

### **Diagnosis:**

- colonies spherical, oblong or ribbon-shaped
- cells obovoid, trigonal or club-shaped
- length 20–40 µm (of cells)
- cells covered with a layer of silica scales
- scales elliptical with a straight spine, 3–5 µm long
- 2 flagella of equal length
- 2 brownish-yellow chloroplasts
- eyespot absent
- contractile vacuole posterior



### *Synura spinosa*

So far I have only been able to find *Synura spinosa* in the [Simmelried](#), where the species is very rare. The species usually occurs mainly in spring.

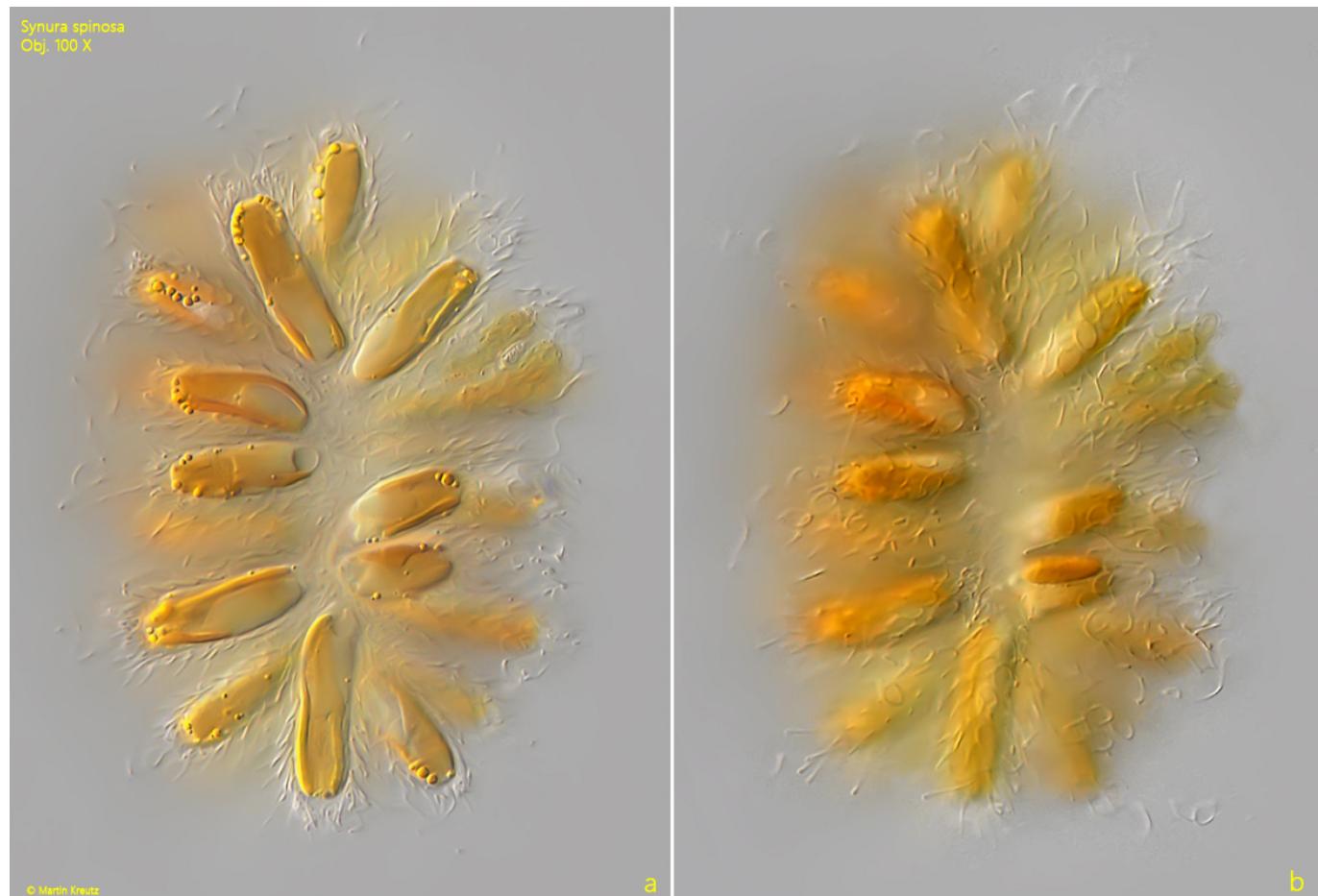
The shape of the cells and colonies of *Synura spinosa* is very variable. Mostly I find oval colonies with slender, slightly club-shaped cells. Very rarely I find ribbon-shaped colonies with almost triangular cells (s. figs 1 a-b and 3 a-b). The latter variant was named *Chlorodesmus hispidus* by Philipps (1882). In 1994, however, Calado and Rino were able to show that it is also *Synura spinosa*, due to the identical scale shape.

For a reliable identification of *Synura spinosa* it is necessary to evaluate the exact shape of the silica scales covering the body of the cells. In *Synura spinosa* these are oval with a thickened margin and a straight spine (s. figs. 2 and 4). The spine is about as long as the scale. The scales of *Synura spinosa* in my population were 6.3-6.7 µm long.

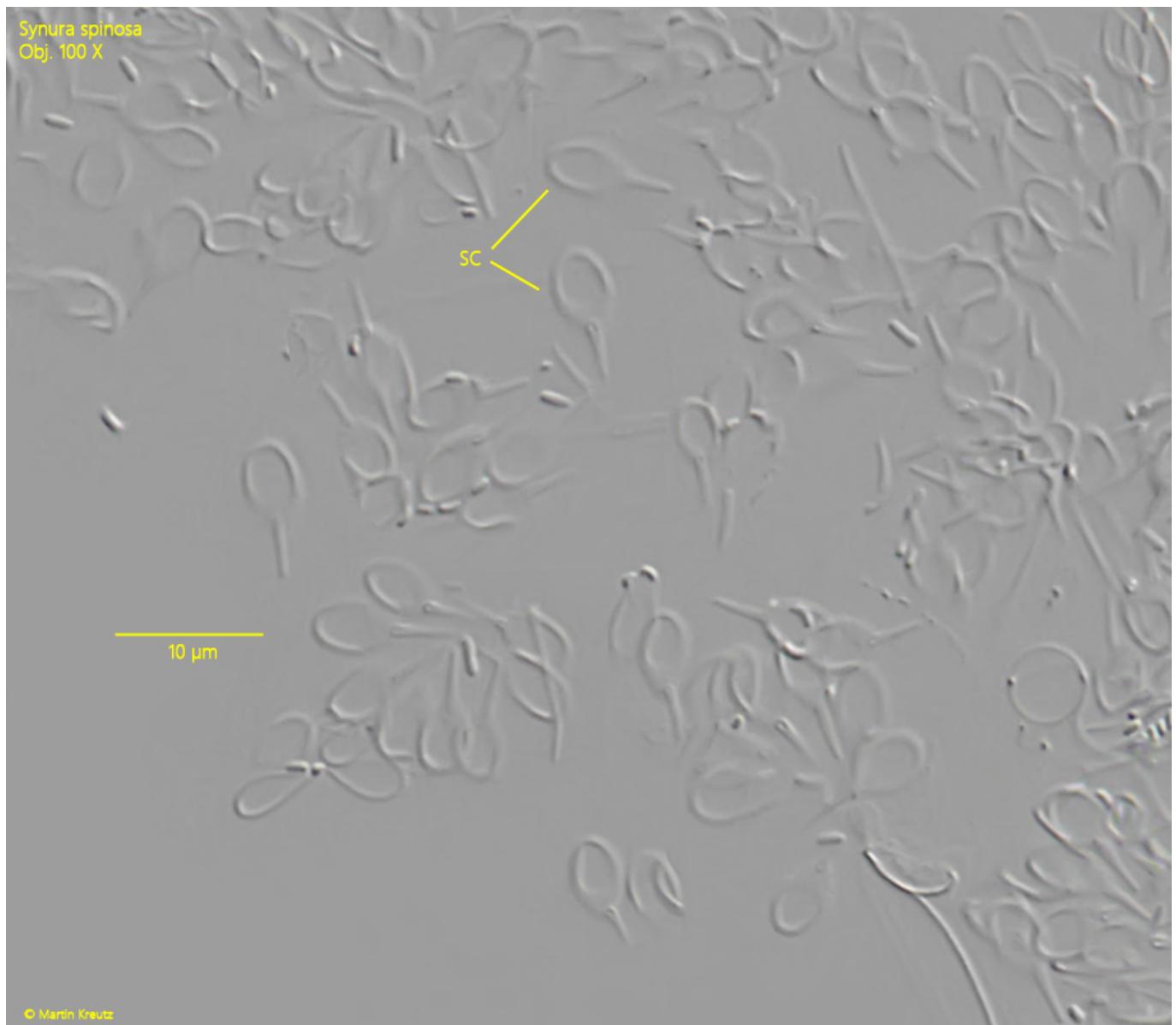
Since I found both oval colonies with club-shaped cells and the ribbon-shaped colonies with triangular cells, which Philipps described as *Chlorodesmus hispidus*, I was able to compare the scales of both shape variants directly. They are absolutely

identical (s. figs. 2 and 4) and I can therefore confirm the synonymization with *Synura spinosa* by Calado and Rino.

More images and information on *Synura spinosa*: [Michael Plewka-Freshwater life-  
\*Synura spinosa\*](#)

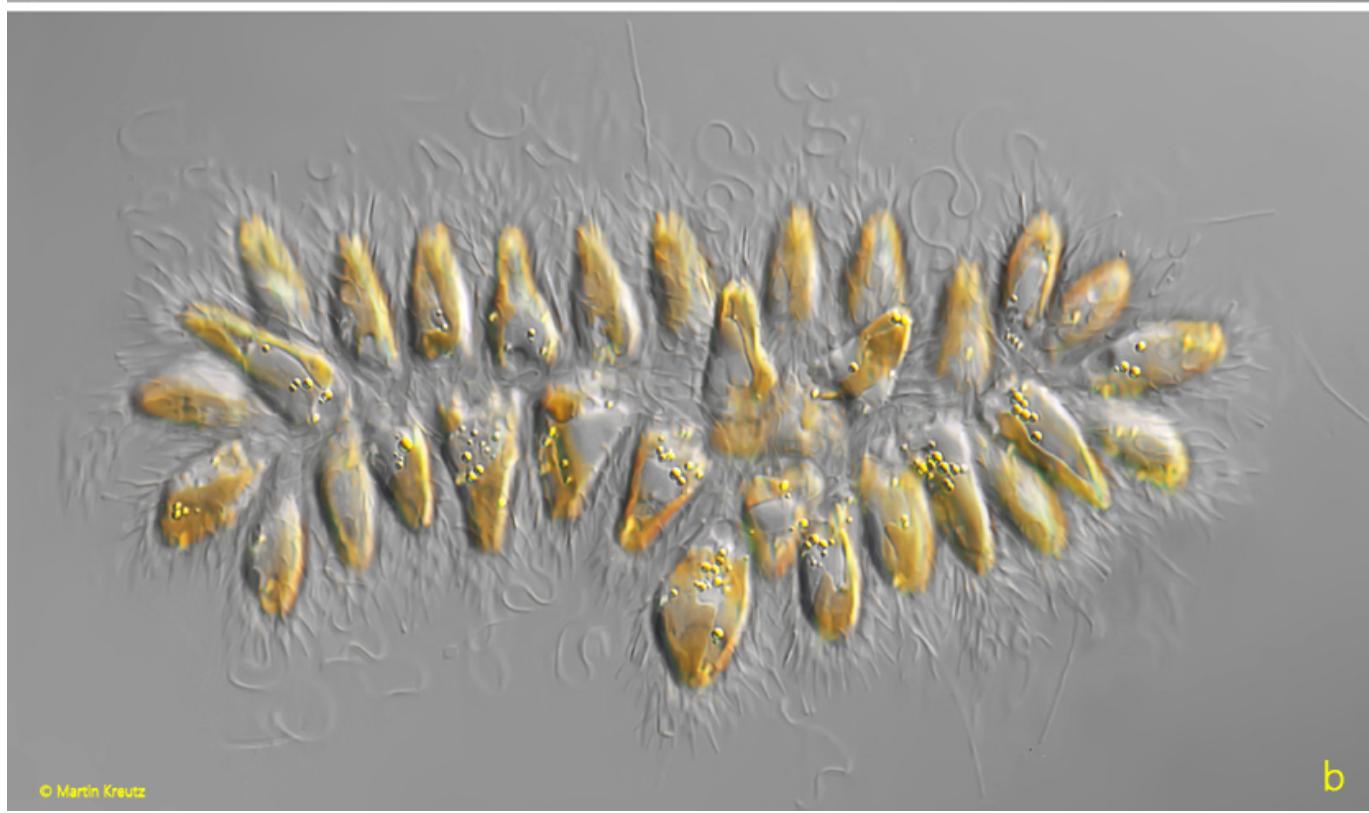


**Fig. 1 a-b:** *Synura spinosa*. L = 94  $\mu$ m (of colony). Two focal planes of an oval colony of about 30 cells. Obj. 100 X.



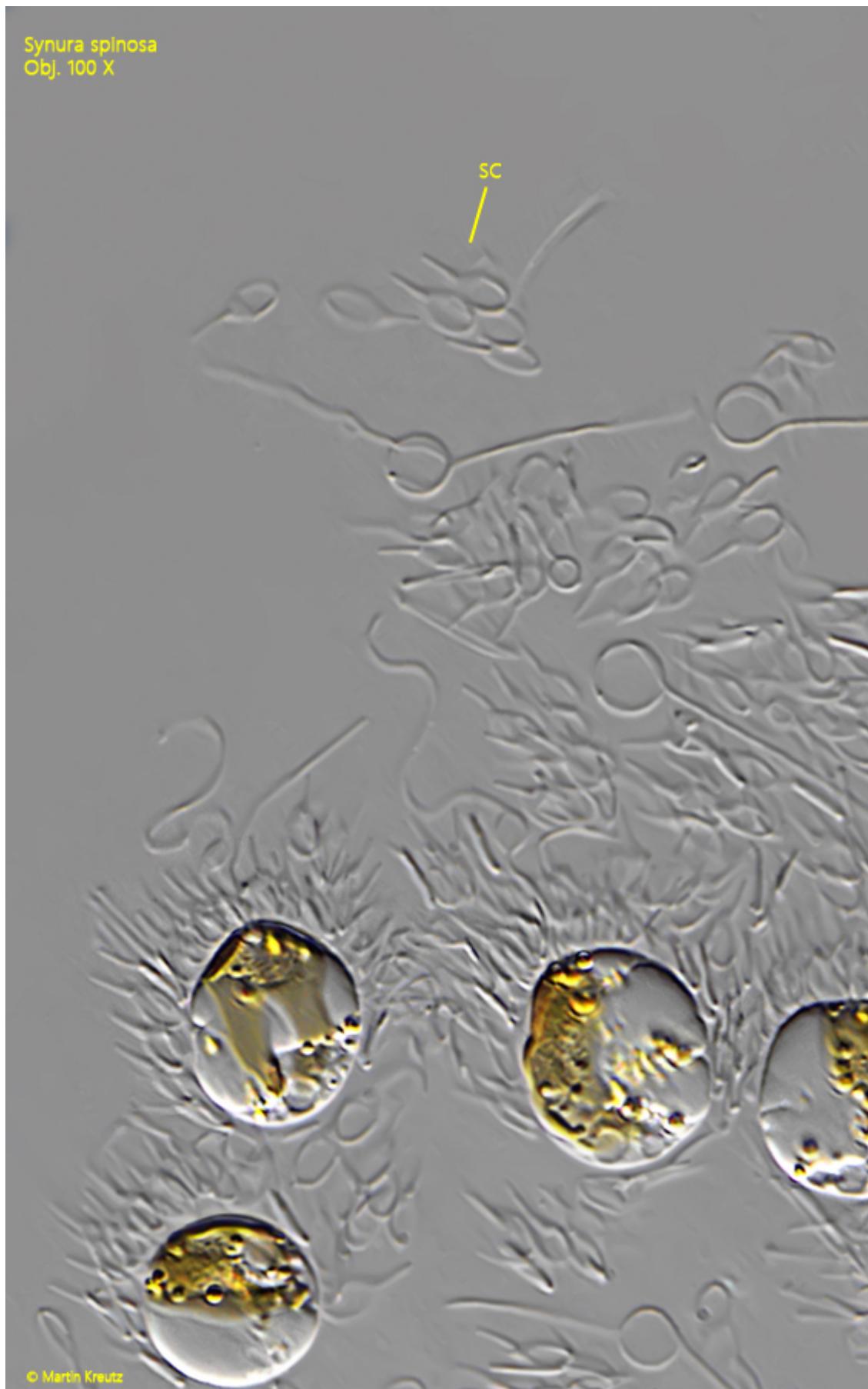
**Fig. 2:** *Synura spinosa*. The silica scales of the cells from the colony as shown in fig. 1 a-b. The scales are oval with a thickended margin and a straight spine. Obj. 100 X.

*Synura spinosa*  
Obj. 100 X



**Fig. 3 a-b:** *Synura spinosa*. L = 134  $\mu$ m (of colony). Two focal planes of a ribbon-shaped colony of almost trigonal cells. Obj. 100 X.

*Synura spinosa*  
Obj. 100 X



**Fig. 4:** *Synura spinosa*. The scales of the cells from the colony as shown in fig. 3 a-b. Obj. 100 X.