

***Epipyxis utriculus* var. *acuta***

**(J. Schiller) D.K. Hilliard & Asmund, 1963**

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

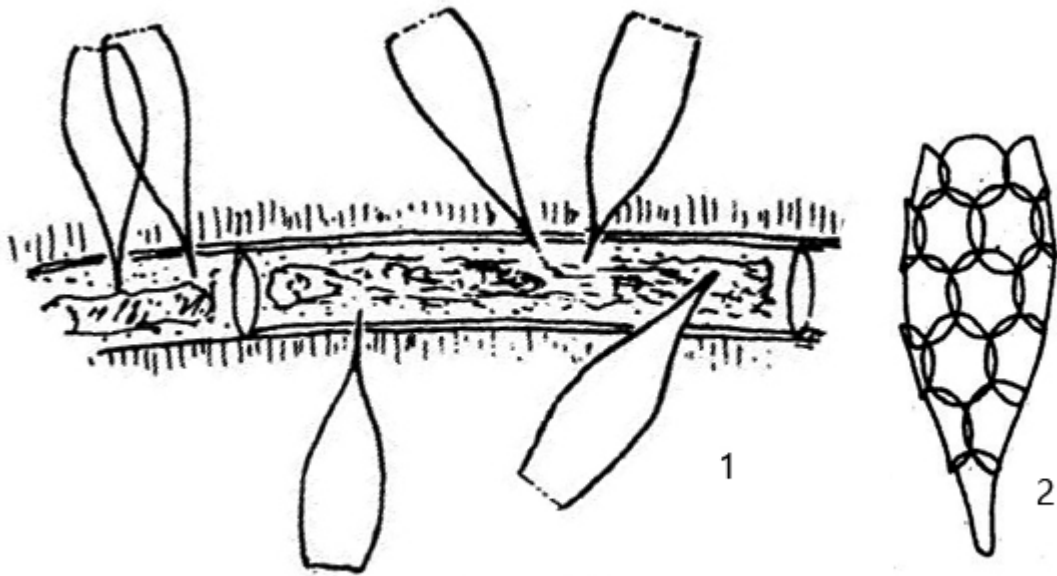
**Synonym:** *Dinobryon utriculus* var. *acutum*

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

**Phylogenetic tree:** [Epipyxis utriculus](#) var. *acuta*

**Diagnosis:**

- lorica spindle-shaped, aperture constricted
- length 20–28  $\mu\text{m}$ , width 5–7  $\mu\text{m}$  (of lorica)
- lorica composed of disc-shaped scales (hard to see)
- tapered end of lorica with disc-shaped holdfast
- cells spindle shaped
- one chloroplasts with stigma
- one contractile vacuole near mid-body
- cells solitary



1 = after Schiller  
2 = after Hilliard & Asmund

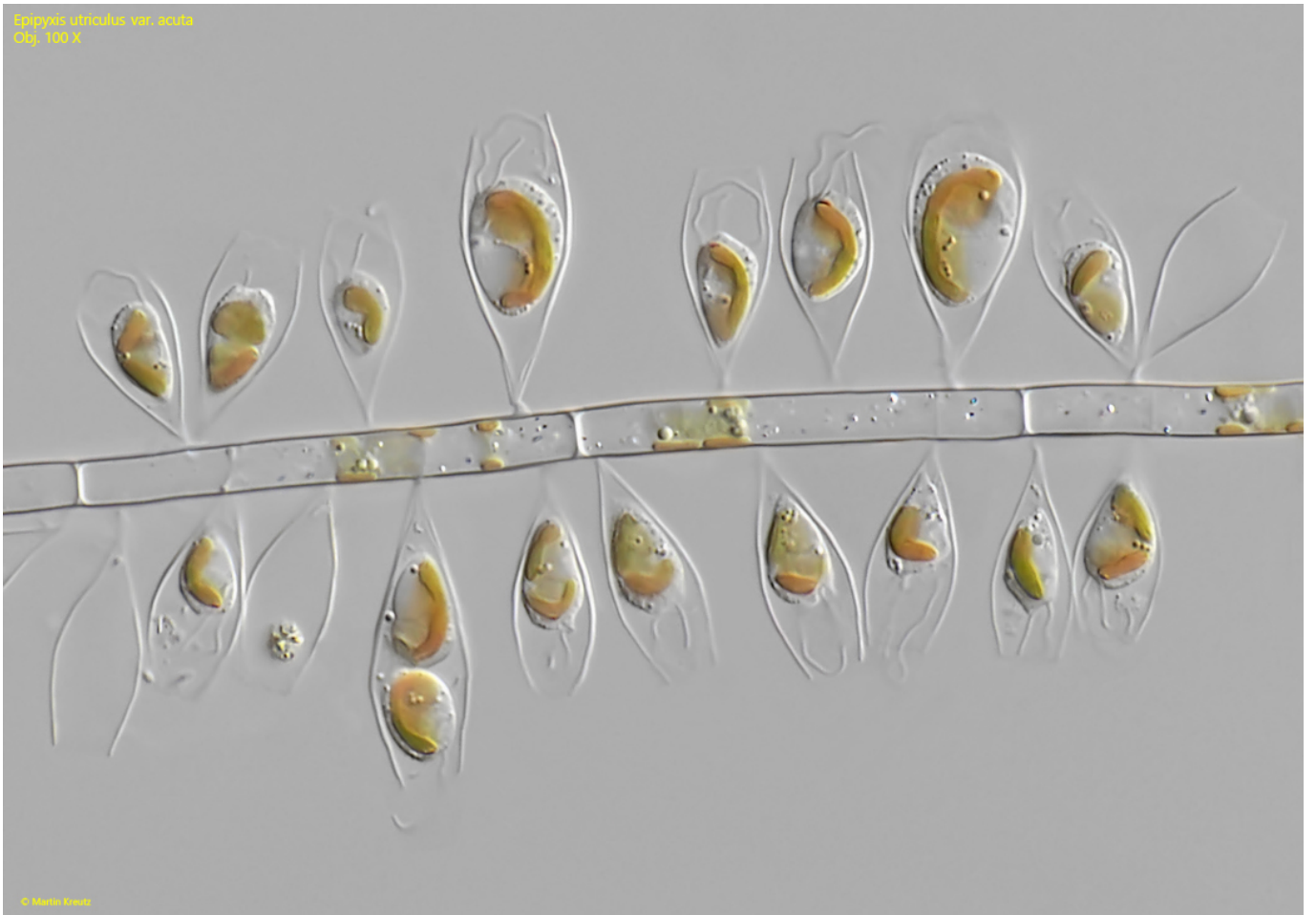
### *Epipyxis utriculus* var. *acuta*

So far, I have found *Epipyxis utriculus* var. *acuta* only very rarely and exclusively in the [Simmelried](#). There, I mostly find the specimens on algal filaments, which are often densely colonized (s. fig. 1).

*Epipyxis utriculus* var. *acuta* can be recognized by the typical shape of its lorica. It somewhat resembles an ice cream cone, with the front third slightly narrowed. The evenly tapering rear part of the shell ends in an adhesive disc, with which the specimens attach themselves to the substrate. The lorica is assembled of very delicate, round scales that can only be seen with staining or in phase contrast (s. drawing 2 above). In DIC, these scales are difficult to visualize (s. fig. 4).

The cells are spindle-shaped, with the hyaline posterior end being difficult to see because it tapers almost thread-like. The cell is attached to the bottom of the lorica. There is only one chloroplast, topped by a small eyespot (s. fig. 3). The cells have two flagella of different lengths, and the contractile vacuole is located near the middle of the body (s. fig. 2).

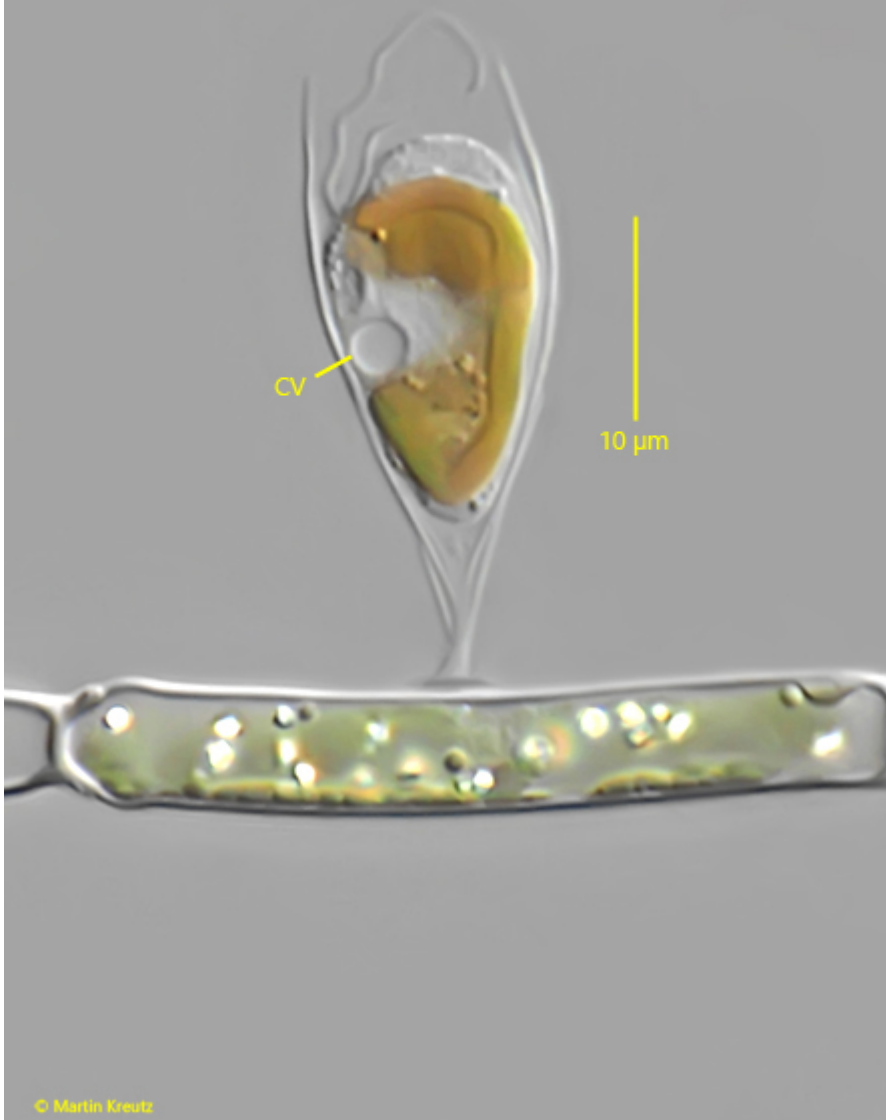
*Epipyxis utriculus* var. *acuta*  
Obj. 100 X



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**Fig. 1:** *Epipyxis utriculus* var. *acuta*. Some specimens on an algae filament. Obj. 100 X.

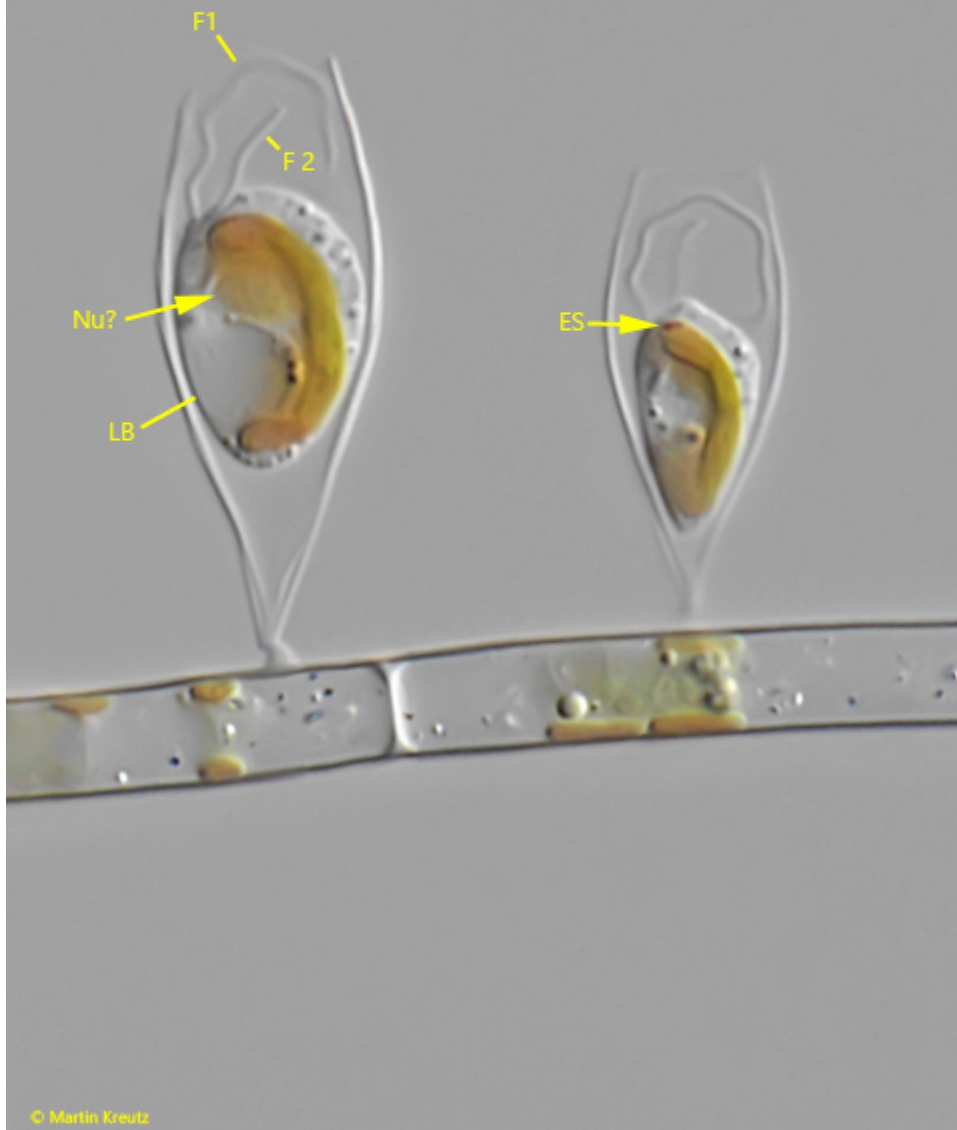
Epipyxis utriculus var. acuta  
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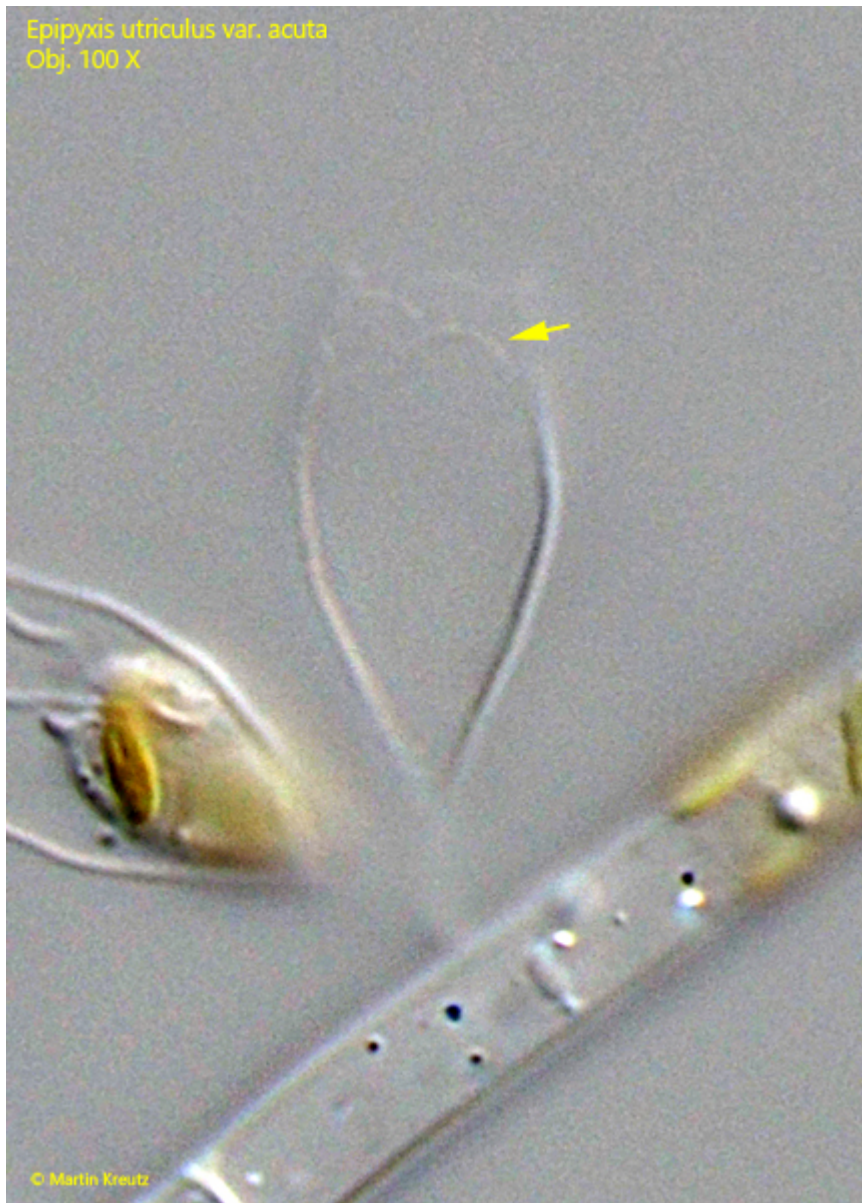
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**Fig. 2:** *Epipyxis utriculus* var. *acuta*. A specimen in detail. The contractile vacuole (CV) is located near mid-body. Obj. 100 X.

Epipyxis utriculus var. acuta  
Obj. 100 X



**Fig. 3:** *Epipyxis utriculus* var. *acuta*. Two specimens on an algae filament. The eyespot (ES) is also called stigma and located at the anterior end of the chloroplast. The flagella (F1, F2) have different length. In the center of the cell probably the nucleus (Nu?) is visible. LB = leukosine body. Obj. 100 X.



**Fig. 4:** *Epipyxis utriculus* var. *acuta*. A highly contrasted image to visualize the disc-shaped scales (arrow) that make up the lorica. Obj. 100 X.