

Raphidiophrys cf. ovalis

(Nicholls & Dürschmidt, 1985) Siemensma & Roijacker, 1988

Most likely ID: n.a.

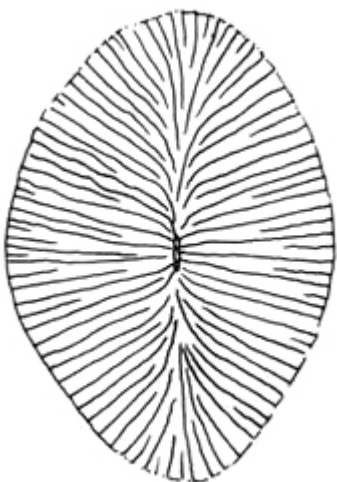
Synonym: n.a.

Sampling location: [Simmelried](#)

Phylogenetic tree: [Raphidiophrys cf. ovalis](#)

Diagnosis:

- cells about 30 µm in diameter (without scales)
- scales 6.4–12.7 X 3.0–6.4 µm, L/W-ratio 1.4–2.3
- scales oval, lateral margins curved upwards
- scales covering the bases of the axopodia
- axopodia up to 170 µm long
- centroplast in the center of the cell
- nucleus in eccentric position
- up to 5 contractile vacuoles



after Siemensma

Raphidiophrys cf. ovalis

In January 2023 I found several specimens of the genus *Raphidiophrys* in the [Simmelried](#). The species of this genus differ essentially in the shape of the tangential scales that cover the body.

In my specimens the scales were long oval in shape, sometimes also somewhat asymmetrical (s. fig. 3). The length of the scales was 7–10 μm , but mostly around 9 μm . The width of the scales was 3.3–3.9 μm (s. fig. 4). This results in a length-to-width ratio of 1.8–2.9, which is somewhat higher than the range of 1.4–2.3 given by Siemensma (2024). The lateral margins of the scales were raised high, so that the shape of the scales resembles a gutter (s. fig. 4).

With this size and shape of the scales, most species within the genus *Raphidiophrys* can be excluded. Only the scales of *Raphidiophrys ovalis* are this large. However, the length-to-width ratio of the scales is somewhat higher, due to the narrower shape of the scales. According to Siemensma (2024) they are described and drawn as somewhat wider (s. drawing above). Therefore, for the time being, I designate the species as *Raphidiophrys* cf. *ovalis*.

More images and information on *Raphidiophrys ovalis*: [Ferry Siemensma-Microworld-Raphidiophrys ovalis](#)

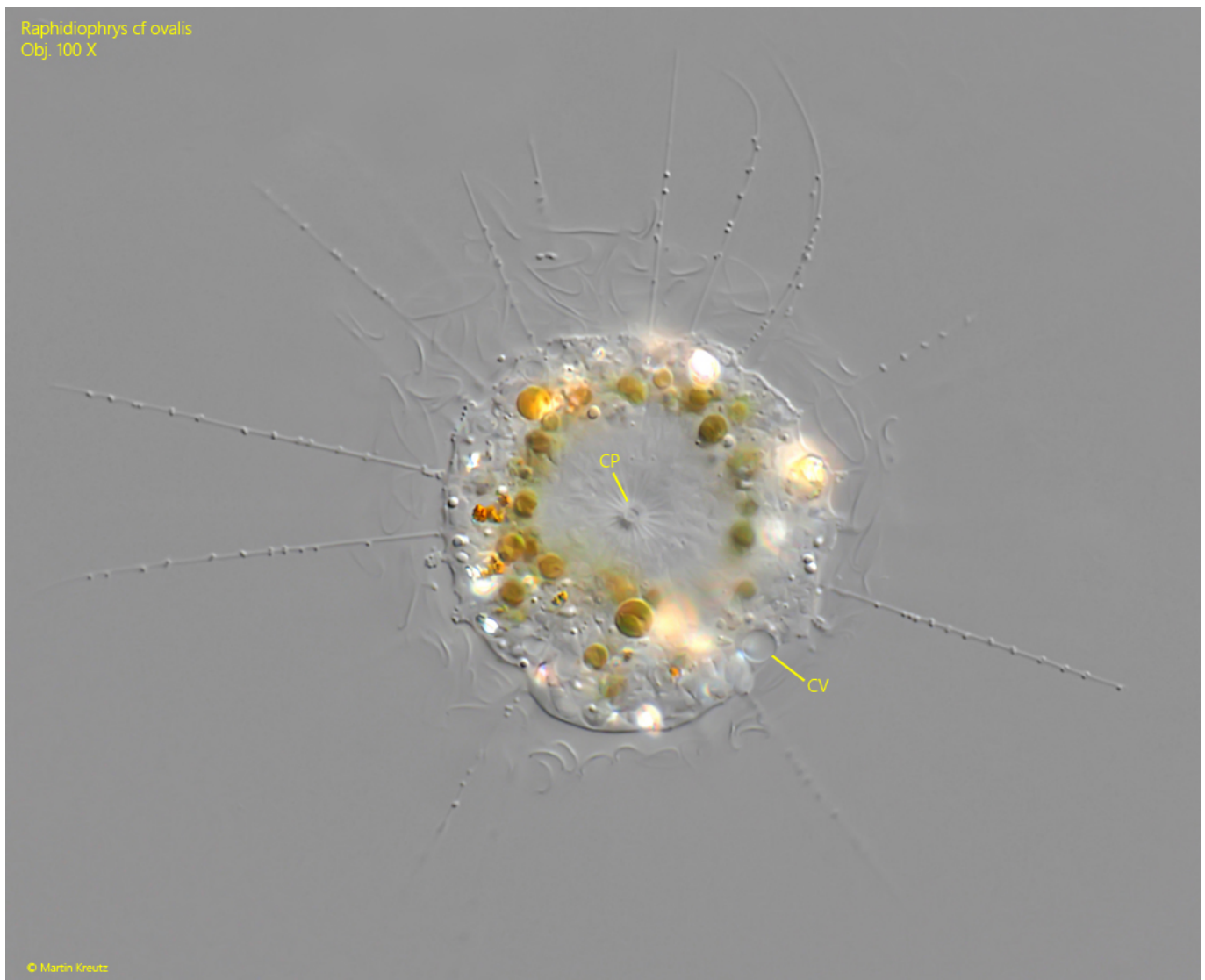


Fig. 1: *Raphidiophrys* cf. *ovalis*. D = 42 μm (without scales). A squashed specimen with elongated Axopodia. CP = centroplast, CV = one of the contractile vacuoles. Obj. 100 X.

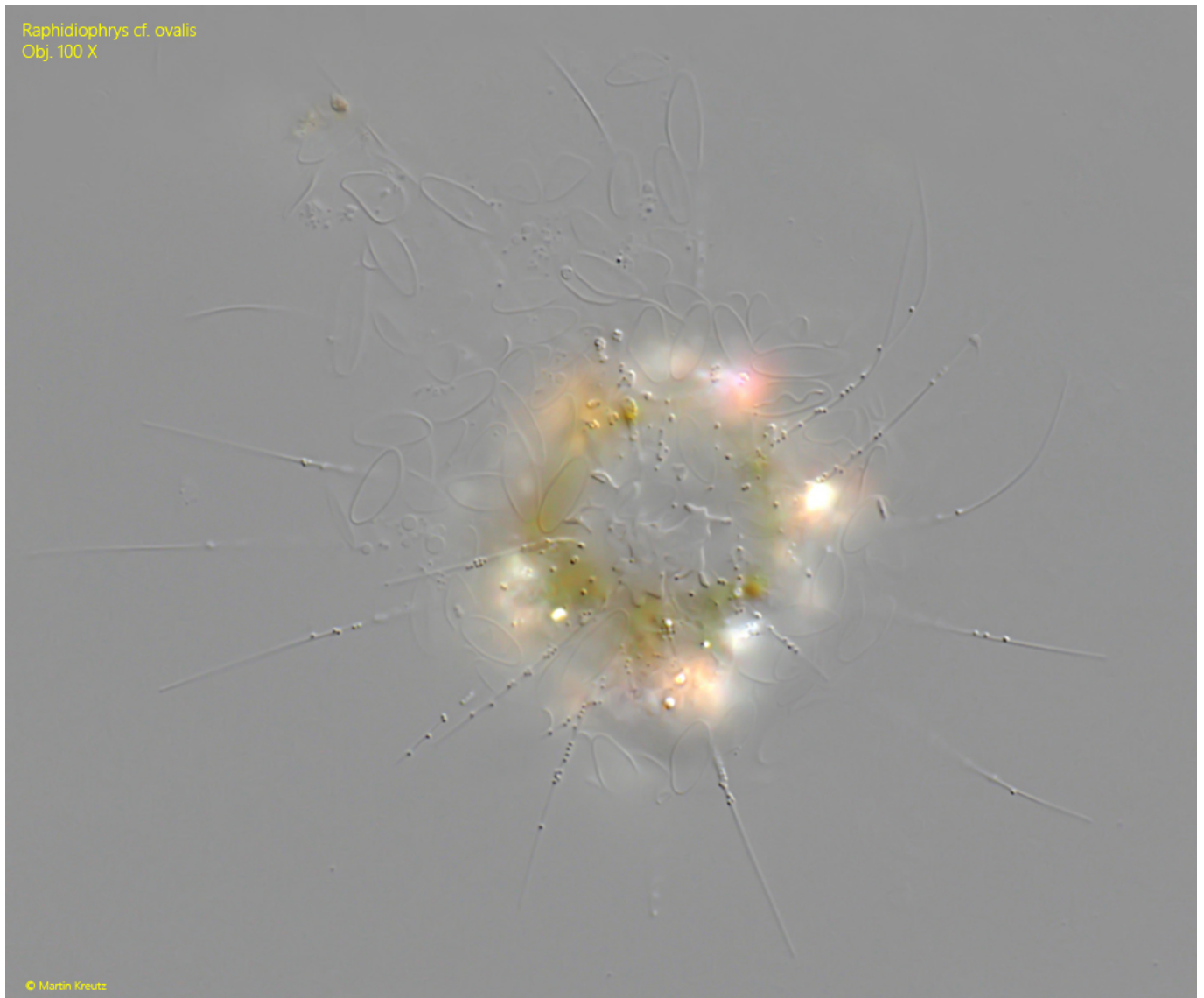


Fig. 2: *Raphidiophrys* cf. *ovalis*. D = 42 μ m (without scales). Focal plane on some detached scales of the same specimen as shown in fig. 1. Obj. 100 X.

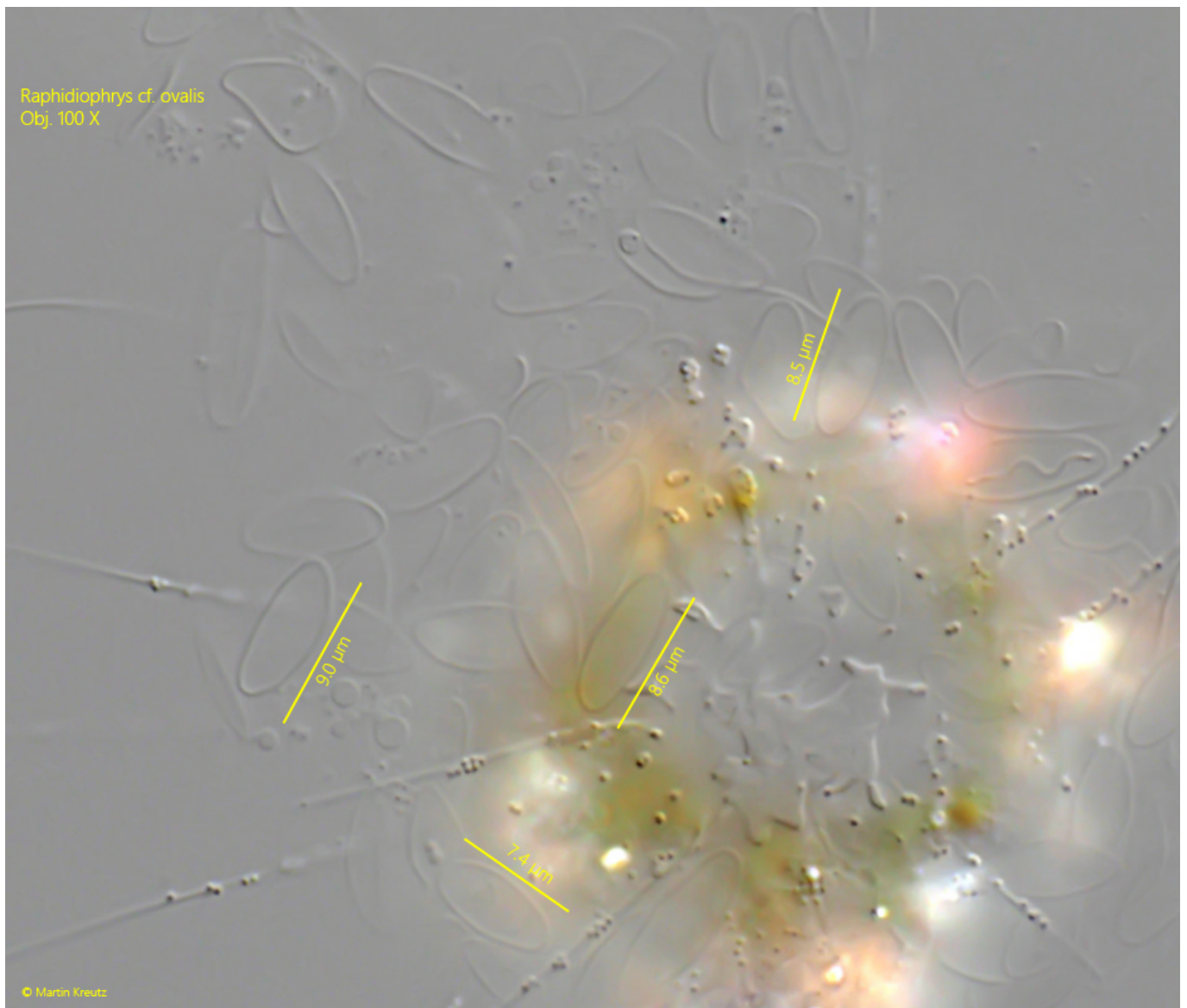


Fig. 3: *Raphidiophrys* cf. *ovalis*. A crop of the fig. 2. The scales have an elongated oval shape, sometimes slightly asymmetrical. The length of the scales is 7–10 µm. The width is 3.3–3.9 µm. Obj. 100 X.

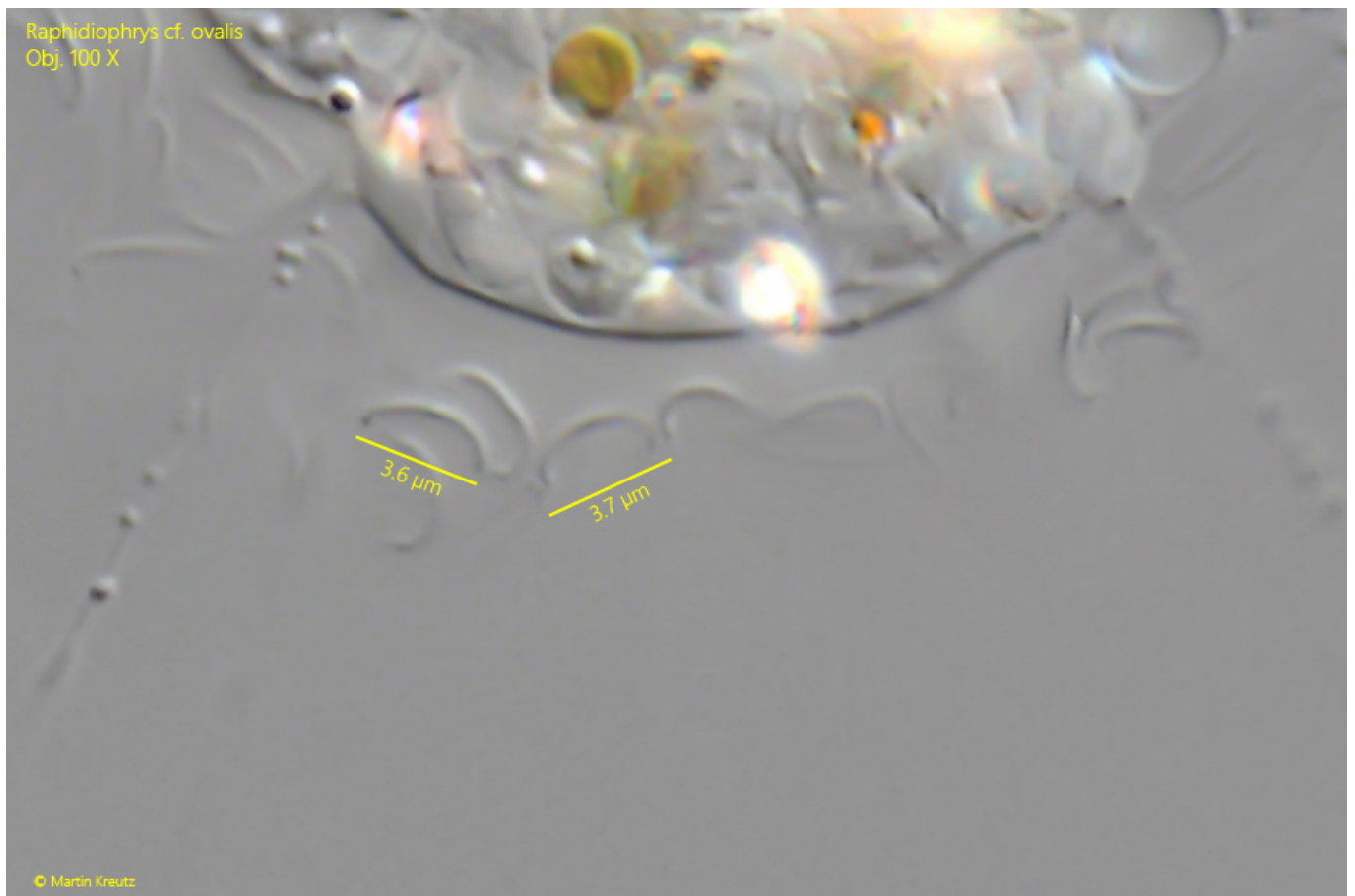


Fig. 4: *Raphidiophrys cf. ovalis*. A crop of the fig. 1 with some cross-section of the scales. The scales are gutter-shaped with highly curved lateral margins. Obj. 100 X.