***Staurodemsus extensus* (Borge) Teiling, 1948**

Most likely ID: n.a.

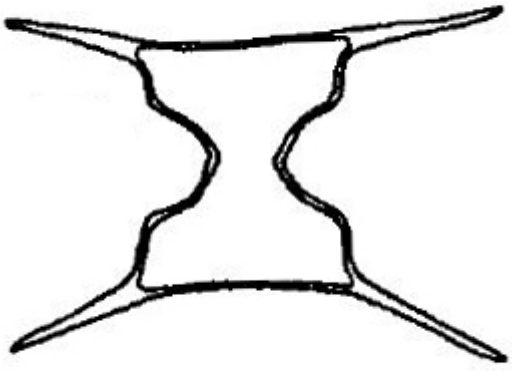
Synonym: *Arthrodesmus incus var. extensus*

Sampling location: Simmelried

Phylogenetic tree: *Staurodemus extensus*

Diagnosis:

- cells biradial
- length 13–21 µm, width 16–30 µm
- semi-cells almost rectangular or trapezoidal
- each semi-cell with two spines at the apical edges
- apices almost straight, sometimes slightly concave
- isthmus about 5–7 µm wide
- each semi-cell with a central pyrenoid
- nucleus centrally in the isthmus



after Brook

Staurodesmus extensus

I find *Staurodesmus extensus* regularly in the Simmelried, both in floating plant

masses and in the mud. Although this desmid alga is very small, it can be recognized quite well even at low magnifications by its spines, which protrude almost horizontally from each semi-cell. In addition, the semi-cells taper abruptly to the isthmus, resulting in an almost right-angled transition. *Staurodesmus extensus* secretes a mucilage sheath, but this can usually only be seen when the sheath is interspersed with fine filaments (s. fig. 3).

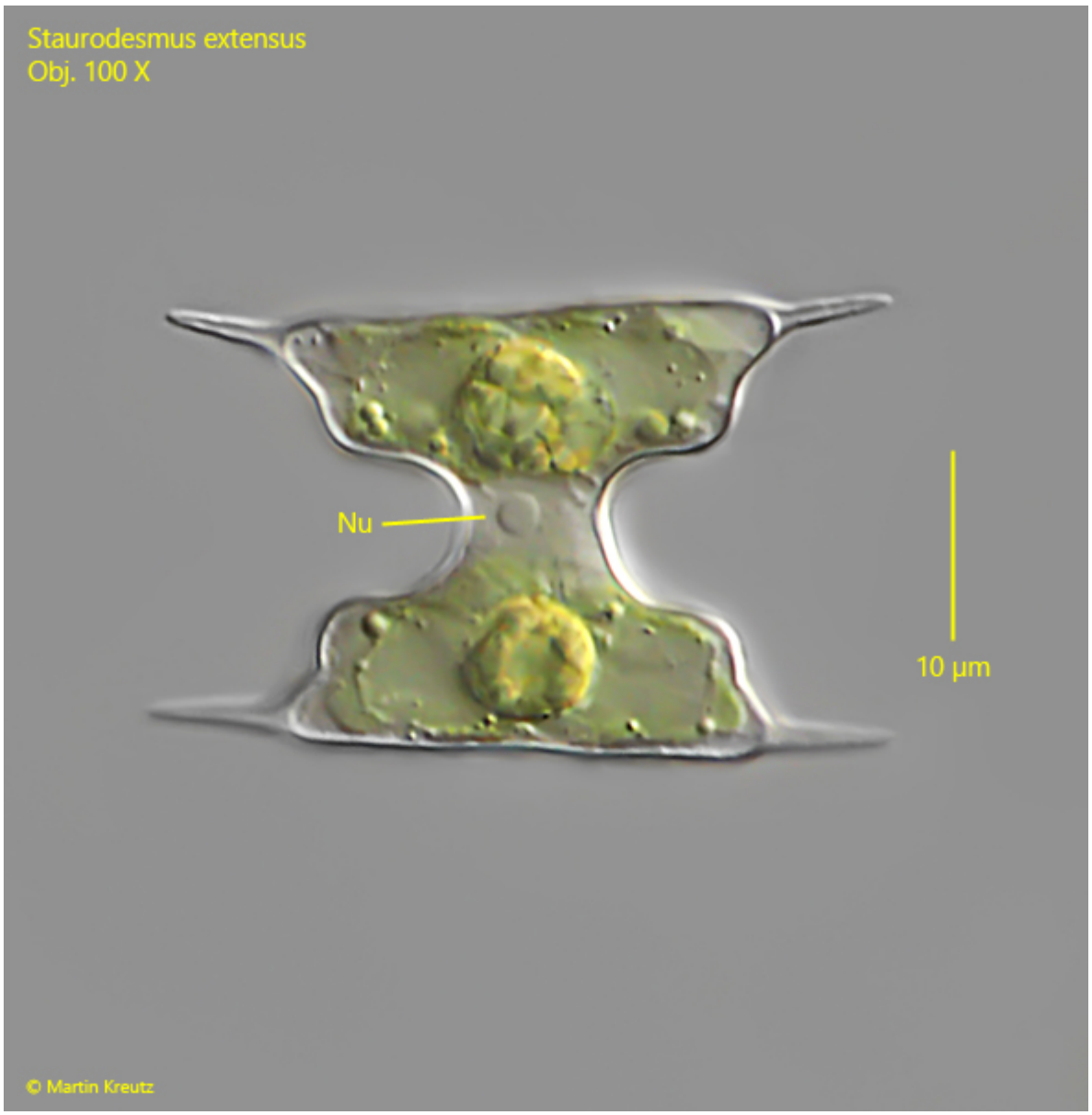


Fig. 1: *Staurodesmus extensus*. L = 21 µm. A slightly squashed specimen with the nucleus (Nu) centrally located in the isthmus. Obj. 100 X.

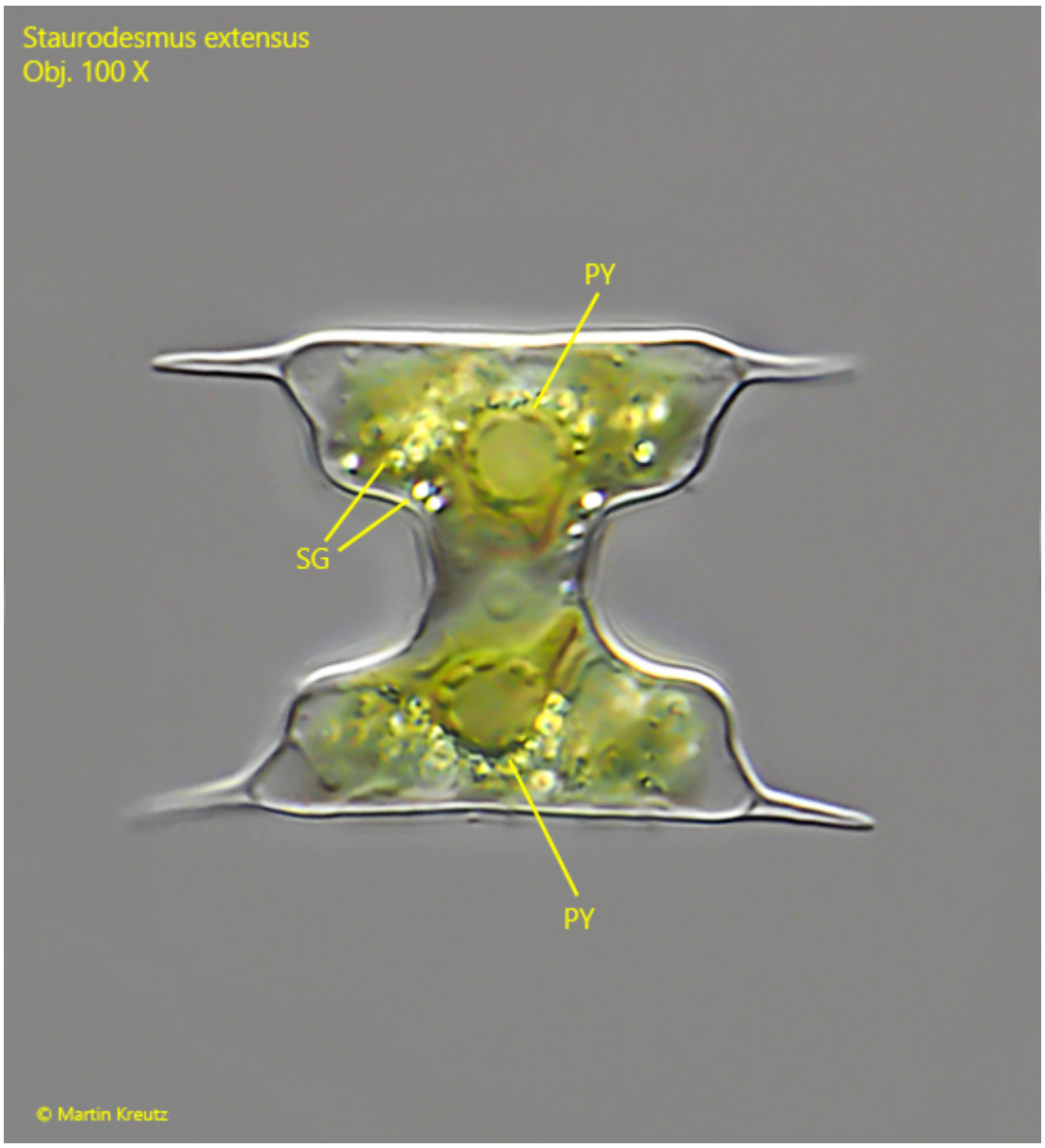


Fig. 2: *Staurodesmus extensus*. L = 22 µm. A second specimen with the pyrenoids (PY) in each semi-cell surrounded by starch grains (SG), shining bright in DIC. Obj. 100 X.

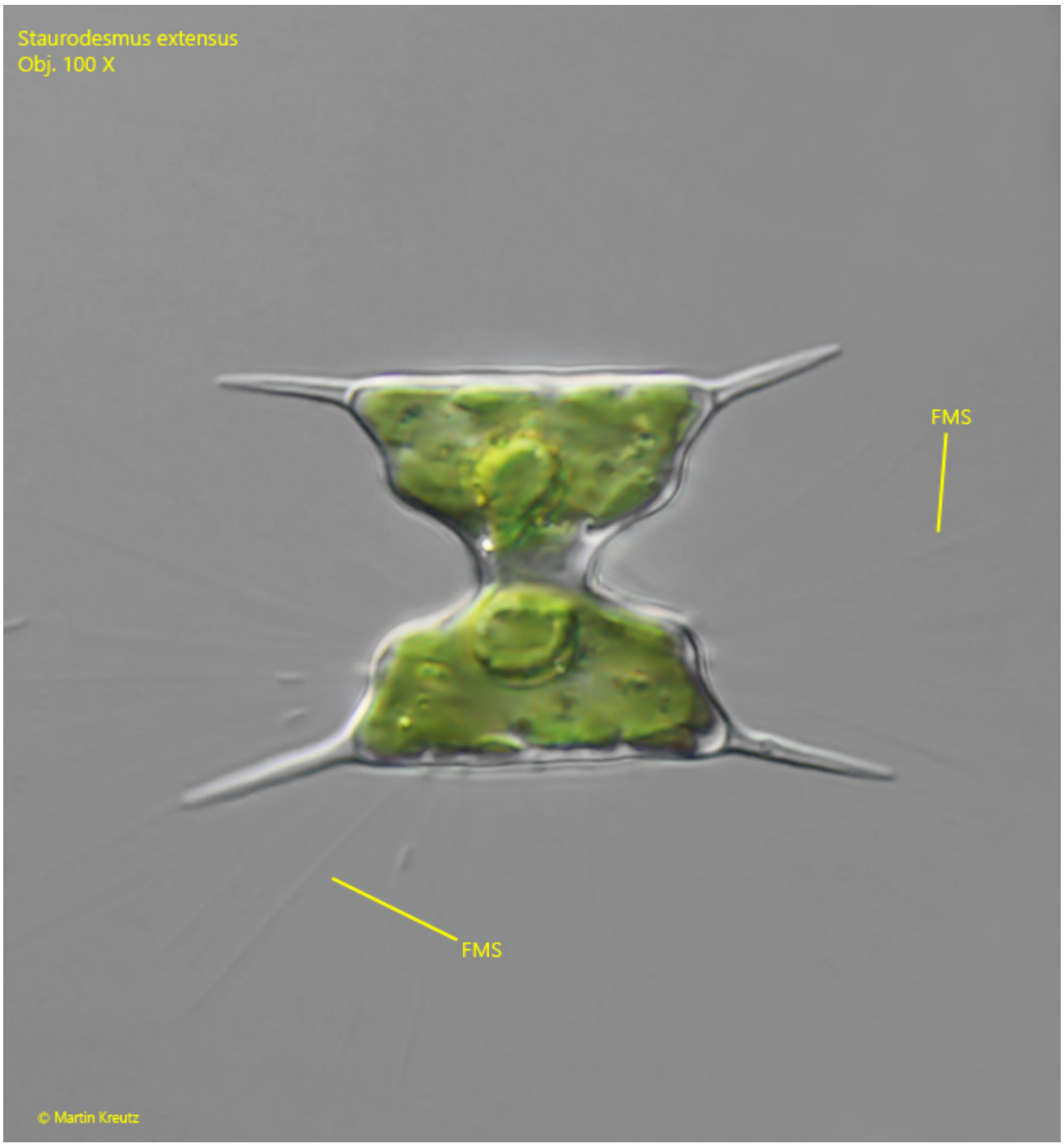


Fig. 3: *Staurodesmus extensus*. L = 22 µm. This specimen is surrounded by a mucilage sheath. Note the delicate filaments in the mucilage sheath (FMS). Obj. 100 X.