Dexiotricha granulosa

(Kent, 1881) Foissner, Berger & Kohmann, 1994

Most likely ID: n.a.

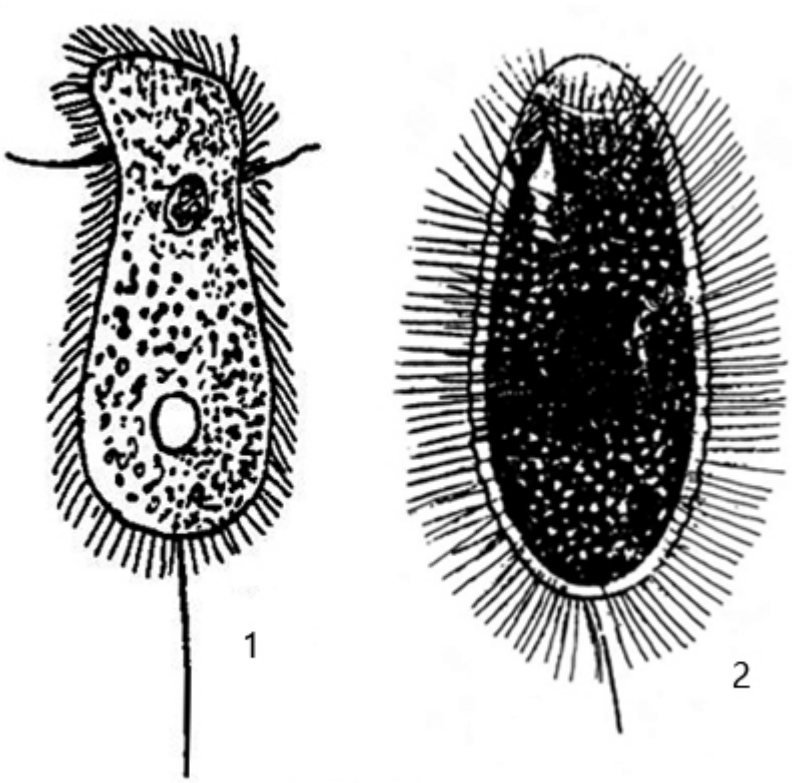
Synonyms: *Dexiotricha plagia*, *Loxocephalus granulosus*

Sampling locations: Simmelried, Purren pond, Ulmisried, Bussenried, Bündtlisried, Mainau pond

Phylogenetic tree: *Dexiotricha granulosa*

Diagnosis:

- body slender to broadly ovoid, anterior part slightly depressed
- length 40–80 µm
- oral apparatus sub-apical, small with C-shaped undulation membrane
- cyotplasm densely filled with ring-shaped granules
- macronucleus globular in mid-body
- one spherical micronucleus adjacent to macronucleus
- contractile vacuole in midbody or slightly below equator
- extrusomes rod-shaped, inconspicuous
- one rigid and straight caudal cilium
- fast moving, often resting



1 = after Kahl
2 = after Behrend

Dexiotricha granulosa

Dexiotricha granulosa is a very common ciliate that occurs in all my localities with an anaerobic mud layer. At low magnifications it appears brown or black because the specimens are usually densely filled with ring-shaped granules.

The specimens swim quickly, but often rest attached to particles or detritus flakes with splayed cilia. However, if the layer thickness is too low, the cells denature quickly and deliquesce. This makes precise examination at high magnification difficult.

Dexiotricha granulosa can easily be confused with *Loxocephalus plagius*, as both species are somewhat the same size and are filled with granules. However, the granules of *Loxocephalus plagius* are not ring-shaped, but consist of irregularly filled granules. The mouth opening of *Loxocephalus plagius* also has a characteristic angle of about 120° at the left edge of the mouth opening, whereas it is C-shaped in *Dexiotricha granulosa*.


Dexiotricha granulosa
Obj. 60 X
FP
CC
a
Ma
Mi
FV
b
MO
GR
c
© Martin Kreutz
CV
d

Fig. 1 a-d: *Dexiotricha granulosa*. L = 74 µm. Different focal planes of a resting specimen from ventral. CC = caudal cilium, CV = contractile vacuole, GR = ring-shaped granula, MO = mouth opening. Obj. 60 X.



Fig. 2 a-c: *Dexiotricha granulosa*. L = 69 µm. A resting specimen from right (a, b) and from ventral (c). CC = caudal cilium, CV = contractile vacuole, MO = mouth opening. Obj. 100 X.



Fig. 3: *Dexiotricha granulosa*. L = 81 µm. A specimen densely filled with ring-shaped granula from left. Obj. 60 X.



Fig. 4: *Dexiotricha granulosa*. L = 73 µm. A resting specimen from ventral. Note the apical ring of elongated cilia. MO = mouth opening. Obj. 100 X.

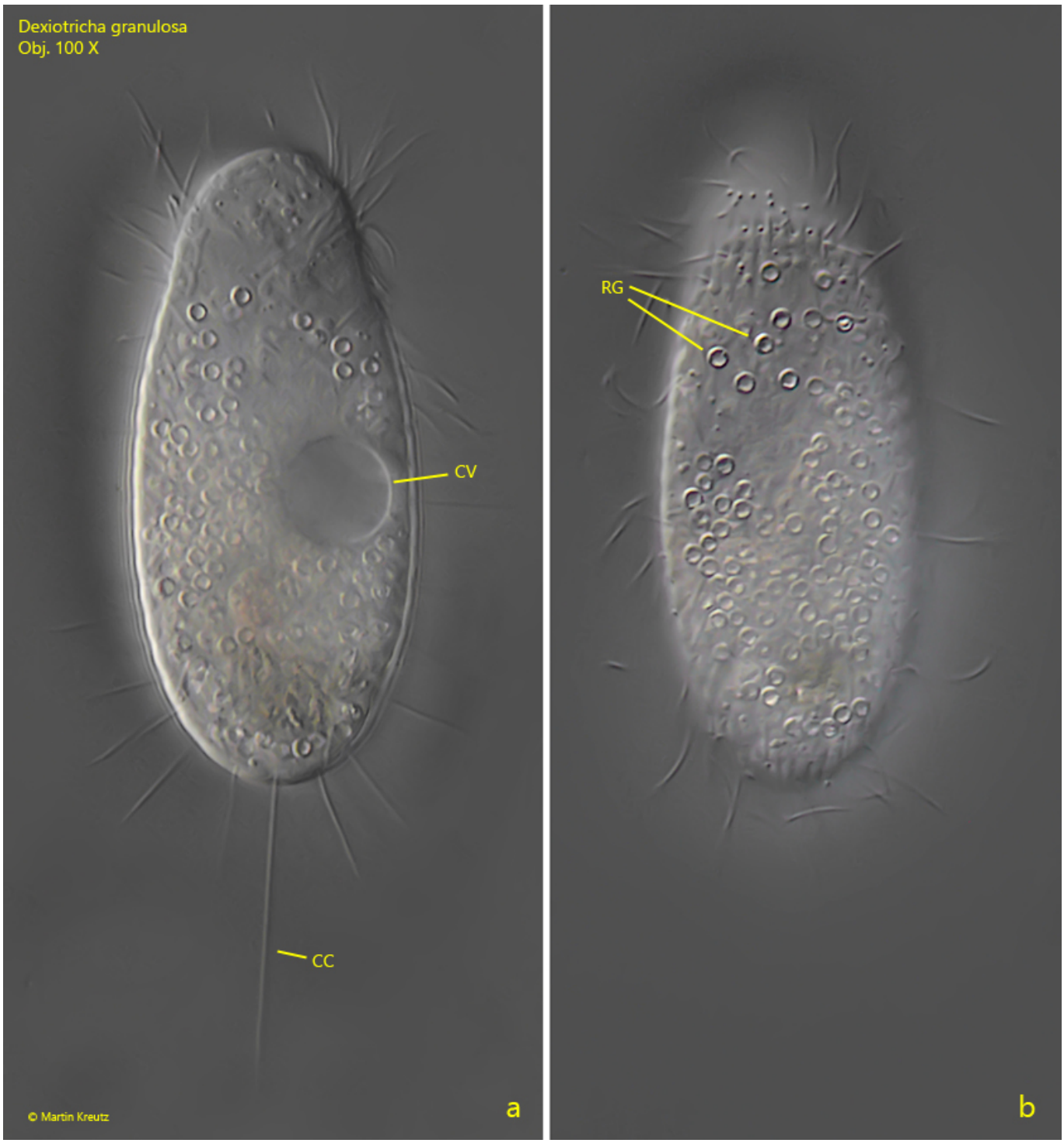


Fig. 5 a-b: *Dexiotricha granulosa*. L = 56 µm. Two focal planes of a resting specimen from left. CV = contractile vacuole, RG = ring-shaped granula. Obj. 100 X.



Fig. 6 *Dexiotricha granulosa*. A strongly squashed specimen. The ring-shaped granules have a diameter of about 2 µm. Obj. 100 X.



Fig. 7: *Dexiotricha granulosa*. L = 71 µm. Two specimens in conjugation. Obj. 60 X.