

***Furgasonia theresae***

**(Fabre-Domergue, 1891) Foissner, Agatha & Berger, 2002**

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

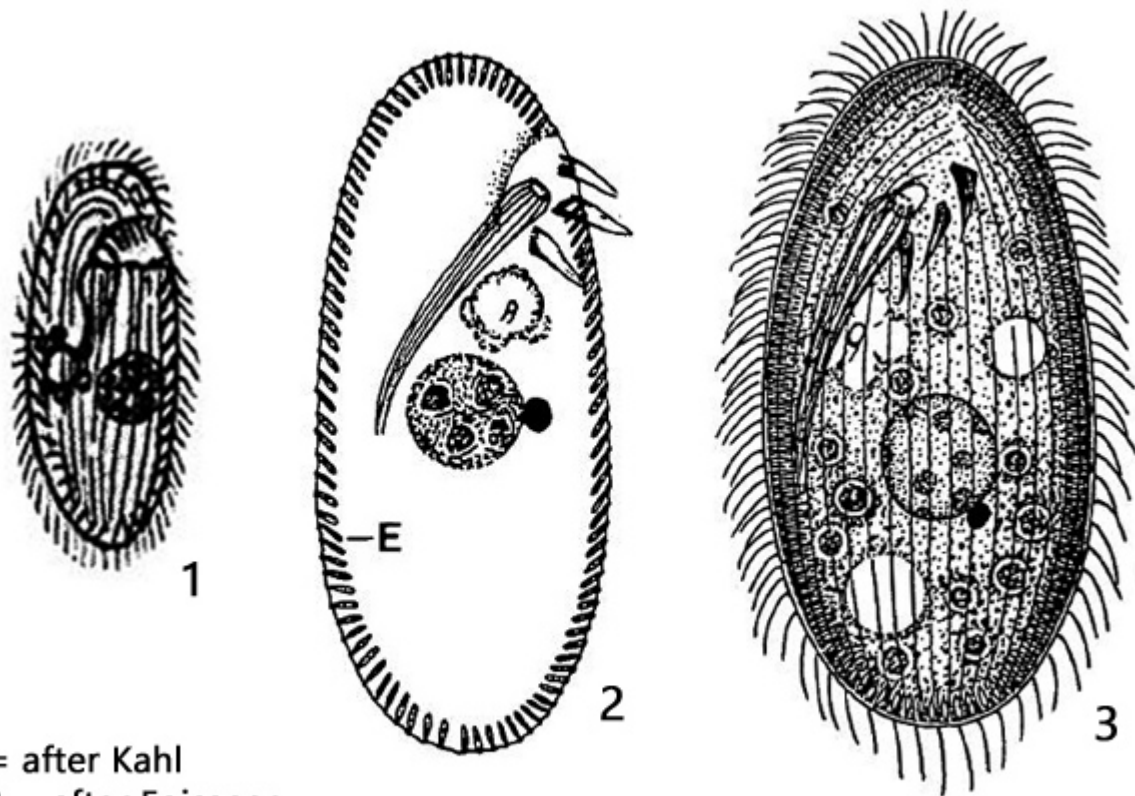
**Synonym:** *Cyclogramma trichocystis*, *Nassula trichocystis*, *Nassula theresae*

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

**Phylogenetic tree:** [Furgasonia theresae](#)

**Diagnosis:**

- length about 70 µm
- outline oval to elongate
- Without nassulid fringe of membranelles oral aperture as in *Nassula*
- three membranelles on the left of oral aperture
- plasm colorless or slightly reddish/orange
- lateral extrusomes are directed to the posterior end
- the pharyngeal rods do not reach the surface



1 = after Kahl

2,3 = after Foissner

### *Furgasonia theresae*

I have found *Furgasonia theresae* exclusively in [Simmelried](#) in floating, decaying plants. The distinction from *Nassula* is best made on the basis of the backward directed extrusomes, and the sunken pharyngeal basket, which does not reach the surface (s. fig. 2 a). The population in [Simmelried](#) also shows a reddish-orange coloration as already described by Kahl (as *Cyclogramma trichocystis*).

Furthermore, *Furgasonia theresae* is with 70 µm smaller than most representatives of the genus *Nassula*. The adoral membranelles of *Furgasonia*, which are located to the left of the mouth opening, are difficult to see light microscopically (s. fig. 3).

The history of the taxonomic classification of *Furgasonia theresae* is interesting and complex. The species was first referred to as *Nassula theresae* by Fabre-Domergue (1889). Five years later it was published independently of Fabre-Domergue as *Nassula trichocystis* by Stokes (1895). Kahl, as the first reviser of the group, could not obtain the publication of Fabre-Domergue and treated *Nassula trichocystis* as *Cyclogramma (Nassula) trichocystis* (Kahl, 1931). The genus *Cyclogramma* was later declared as invalid, due to the lack of a genus diagnosis. Then in 1989 by Foissner *Nassula theresae* and *Nassula trichocystis* were synonymized to *Nassula theresae* (because of the earlier publication by Fabre-Domergue) and transferred into the genus *Furgasonia*, defined before by Jankowski (1964), so that the species is called *Furgasonia theresae* today.

*Furgasonia theresae*  
Obj. 60 X



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**a**

Furgasonia theresae  
Obj. 60 X





**Fig. 1 a-c:** *Furgasonia theresae*. L = 70  $\mu$ m. Three focal planes of a freely swimming specimen. AM = adoral membranelle. Obj. 60 X.



*Furgasonia theresae*  
Obj. 100 X



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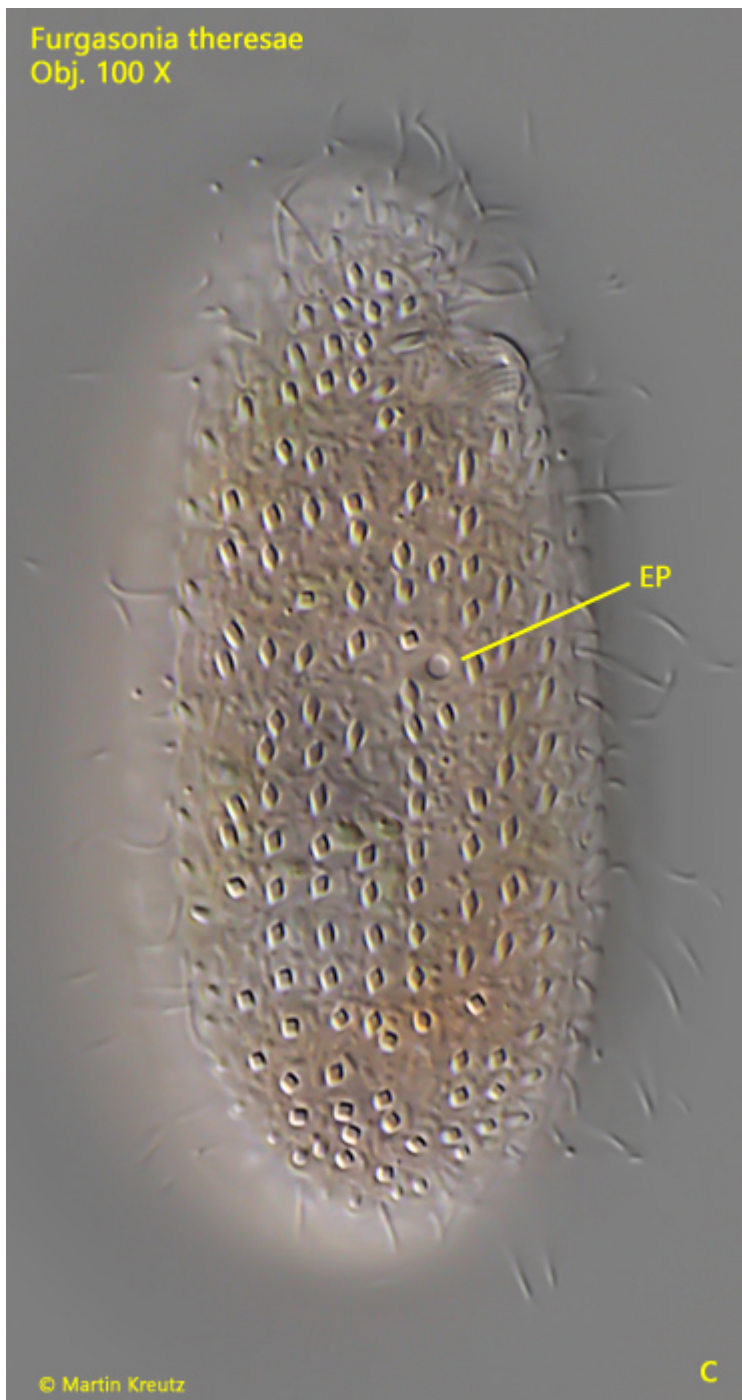
a

*Furgasonia theresae*  
Obj. 100 X



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b



**Fig. 2 a-c:** *Furgasonia theresae*. L = 70  $\mu$ m. Three focal planes of a slightly squashed specimen. CV = contractile vacuole, EP = excretion porus, EX = extrusomes, Ma = macronucleus, PB = pharyngeal basket. Obj. 100 X.





**Fig. 3:** *Furgasonia theresae*. The adoral membranelles (AM) at the left side of the mouth opening in a squashed specimen. Obj. 100 X.



**Fig. 4:** *Furgasonia theresae*. L = 55 µm. Focal plane on the macronucleus (Ma) and micronucleus (Mi) in a slightly squashed specimen. EX = extrusomes, PB = pharyngeal basket. Obj. 100 X.