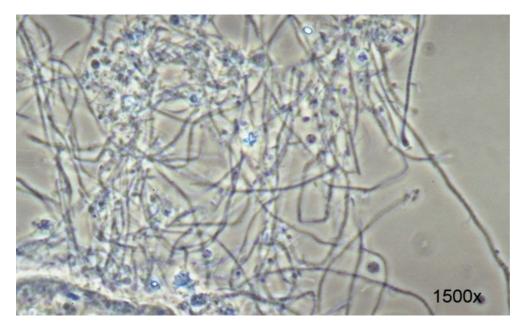
Type IF-59

Resembles: "*Candidatus* Microthrix calida" [1], see remark *Probes*: not available

Frequency occurrence (200 samples; 175 WTPs):

- observed with a $FI \ge 1$ in 4 samples
- observed with a $FI \ge 3$ in 4 samples



Characteristics

- bent/coiled, tangled filaments;
- mainly inside the flocs;
- filament length > 200 μ m;
- filaments not branched;
- not motile;
- cell diameter 0.3 µm;
- no sheath;
- hardly any attached growth;
- septa not visible;
- no sulphur storage;
- Gram negative;
- Neisser negative.

Remark

Type IF-59 resembles "*Candidatus* Microthrix calida", but stains Gram negative and does not hybridise with probe MPAall-1410 or MPA-T1-1260 [1].

Physiology

No information available.

Occurrence in activated sludge

Type IF-59 was observed in WTPs treating wastewater from starch industries. Due to the limited number of observations, it is not possible, however, to draw final conclusions concerning a possible correlation of this morphotype with a specific wastewater.

Control options

Experience with controlling this filamentous morphotype is not available. See Type IF-4 lemma for general 'bulking control rules'.

Reference

1. Levantesi, C., S. Rossetti, K. Thelen, C. Kragelund, J. Krooneman, D. Eikelboom, P. H. Nielsen and V. Tandoi (2006) Phylogeny, physiology and distribution of "*Candidatus* Microthrix calida", a new *Microthrix* species isolated from industrial activated WWTPs. Accepted for publication in Environmental Microbiology

Images

Only one micrograph available, showing a floc intertwined by this morphotype