

DNA-Analysis Biology-Check

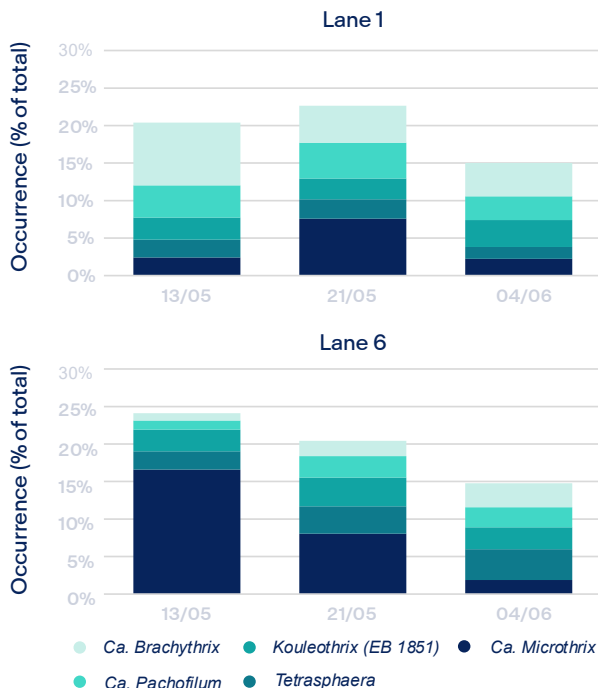


Operational problems in wastewater treatment plants can have various biological causes. Therefore, we recommend the Biology Check as a two-month bacterial inventory assessment to address these issues (e.g., nitrification, denitrification, sedimentation).

Included services

- Preliminary phone consultation for sampling instructions
- Sampling and shipping material for 3×2 samples (biweekly)
- DNA extraction, PCR, DNA sequencing, microscopy if required
- Bioinformatics and quality control
- Results as PDF report and raw data (CSV)
- Consulting (approx. 3 hours)

Case study Aluminum treatment, ARA REAL



Procedure

- DNA analyses on lanes 1 and 6
- Determination of filamentous bacteria
- Evaluations and recommendations

Results (see figure)

- *Microthrix* is the dominant filamentous bacterium, especially on lane 6
- Reduction of filamentous bacteria through selected treatment (aluminum)
- Sludge settling improved through these measures
- The effectiveness of the precipitant can be monitored

Recommendations

- DNA analyses for elevated SVI values
- Use of precipitants or process engineering measures according to identified bacteria