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ACCEPTED MANUSCRIPT

Methanogenic Degradation of Tetramethylammonium

Hydroxide by Methanomethylovorans and Methanosarcina

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Highlights

- *Methanomethylovorans* were responsible for methanogenic degradation of TMAH in bioreactor.
- An isolated *Methanosarcina mazei* was able to degrade TMAH.
- A low TMAH condition favored *Methanomethylovorans hollandica*, while a higher TMAH condition proliferated *Methanosarcina mazei*.

Abstract

This study evaluated the methanogens responsible for methanogenic degradation

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