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Insights into the effects of bio-augmentation on the granule-based anammox process under continuous oxytetracycline stress: performance and microflora structure

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Abstract: Three up-flow anaerobic sludge blanket bioreactors treating wastewater containing 2 mg L⁻¹ oxytetracycline (OTC) were used to examine the enhancement of bio-augmentation (BA) tactics on the resistance and resilience of the anammox performance. The BA tactics were carried out by the BA-addition and BA-exchange modes, and the optimized mode was first proposed. The results showed that prior to OTC suppression, excellent anammox performance was observed in the reactors, with a total nitrogen removal efficiency (TNRE) above 92.0 % and a nitrogen removal rate

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