

Electronic Supplementary Material (ESI) for RSC Advances.

Biofilm formation potential and chlorine resistance of typical bacteria isolated from drinking water distribution systems

Zebing Zhu,^{ab} Lili Shan,^{*a} Fengping Hu,^{*a} Zehua Li,^a Dan Zhong,^b Yixing Yuan^b and Jie Zhang^b

a. School of Civil Engineering and Architecture, East China Jiao Tong University, Nanchang, 330013, China. E-mail: hitshanlili@163.com; hufengping1968@126.com

b. State Key Laboratory of Urban Water Resource and Environment, School of Environment, Harbin Institute of Technology, Harbin, 150090, China

Table S1 Basic information of tested bacteria strains.

GeneBank Accession NO.	Identified bacteria (similarity)	Taxonomy	Colony morphology	Cell morphology		
				Shape	Gram	Biochemical reaction
MT279969	<i>Sphingomonas</i> sp. (DQ840049, 99%)	Alphaproteobacteria	Round, uniaquaversal upwarping, smooth, yellowish brown/bright yellow	Short rod (oval)	G ⁻	oxidase positive, catalase positive
MT279968	<i>Acidovorax defluvii</i> (NR026506, 99%)	Betaproteobacteria	Convex surface, smooth, beige/light yellow	Straight rod	G ⁻	oxidase egative, catalase positive
MT279971	<i>Acinetobacter</i> sp. (FR677019, 99%)	Gammaproteobacteria	Round, convex surface, smooth, slightly opaque, light yellow	Short rod (round)	G ⁻	oxidase egative, catalase positive
MT279970	<i>Bacillus cereus</i> (GQ462533, 99%)	Firmicutes, Bacilli	Round, not smooth, irregular edge, milky	Rod	G ⁺	oxidase egative, catalase positive
MT279967	<i>Microbacterium laevaniformans</i> (JQ229810, 99%)	Actinobacteria, Actinobacteridae	Round, slight bulge, rough, opaque yellow	Fine, long and irregular rod (V shape)	G ⁺	oxidase egative, catalase positive

Note: G⁺: Gram-positive bacteria, G⁻: Gram-negative bacteria.

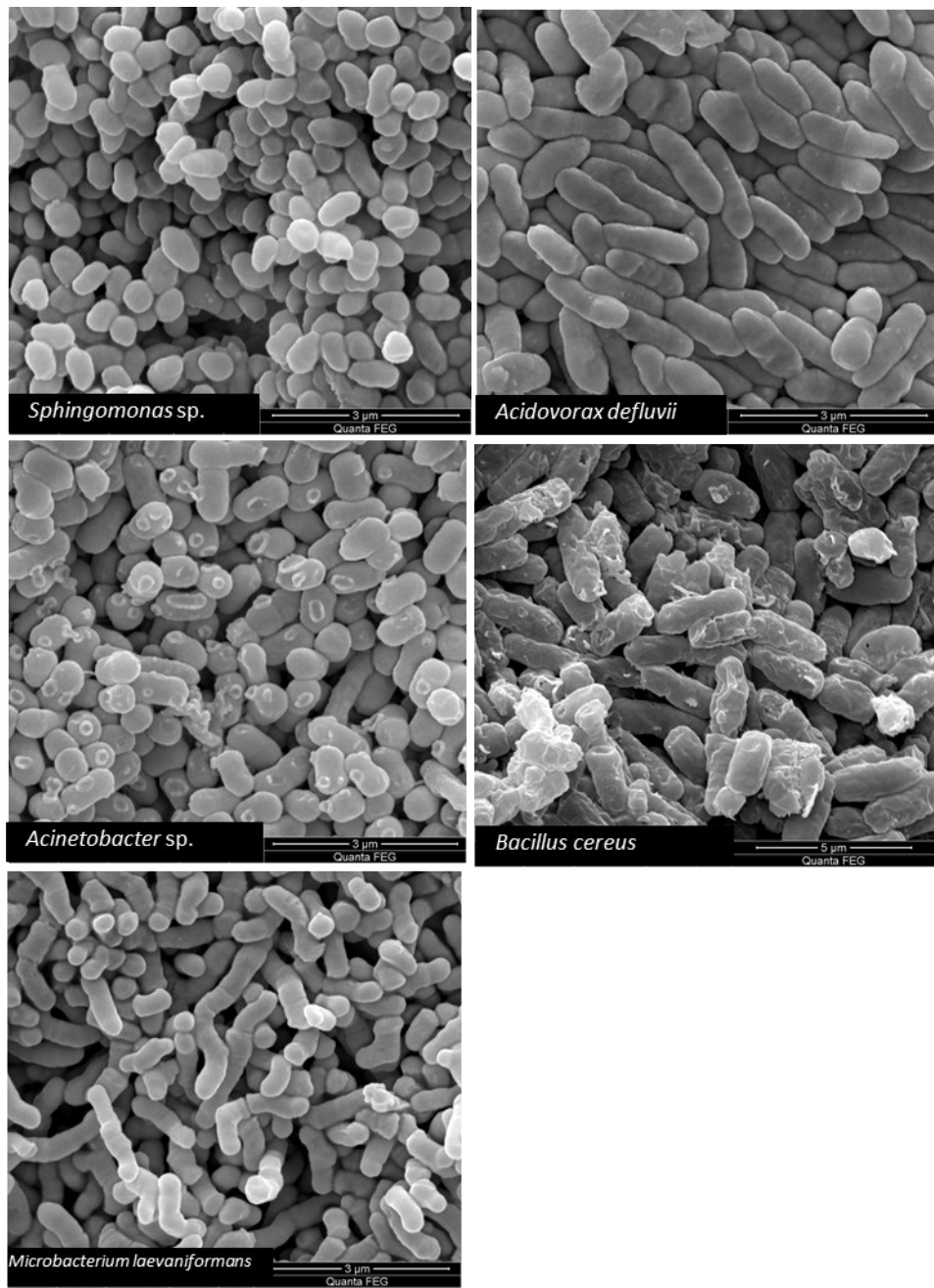


Fig. S1 SEM images of tested bacteria strains (40 000 \times or 20 000 \times).

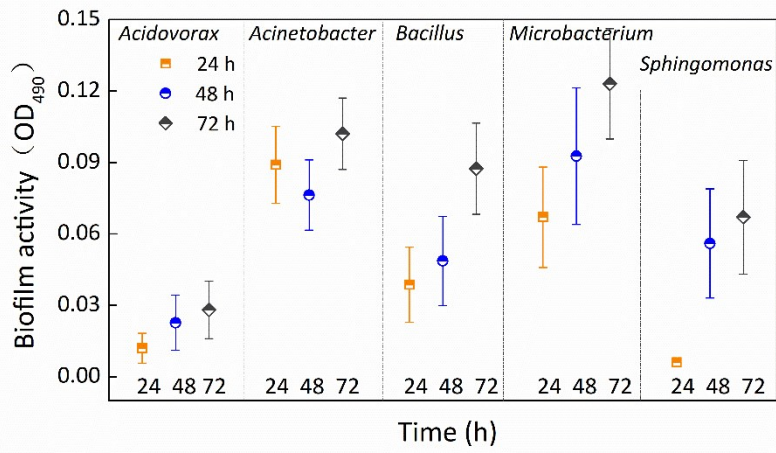


Fig. S2 Biofilm activity of single-species biofilm at different incubation times. The average error bar percentages are 48.04% for *Acidovorax defluvii*, 17.30% for *Acinetobacter* sp., 33.58% for *Bacillus cereus*, 27.03% for *Microbacterium laevaniformans*, and 34.90% for *Sphingomonas* sp..