

Monitoring Opportunistic Pathogens in Domestic Wastewater from a Pilot-Scale Anaerobic Biofilm Reactor to Reuse in Agricultural Irrigation

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Table S1. qPCR primer sequences and reaction conditions.

	Targeted genes	Primer sequences (5'→3')	Amplicon size (bp)	T _m (°C)	Reference
<i>Aeromonas hydrophila</i>	<i>aerA</i>	F: GAGAAGGTGACCACCAAGAACA R: AACTGACATCGGCCTTGAATC	232	60	Kingombe <i>et al.</i> , 1999
<i>Arcobacter</i> sp.	23S rRNA	F: GTCGTGCCAAGAAAAGCCA R: TTCGCTTGCGCTGACAT	331	60	Bastyns <i>et al.</i> , 1995
<i>Bacillus cereus</i>	Hemolysin	F: CTGTAGCGAATCGTACGTATC R: TACTGCTCCAGCCACATTAC	185	60	Wang <i>et al.</i> , 1997
<i>Bacteroides</i> sp.	16S rRNA	F: AACGCTAGCTACAGGCTT R: CAATCGGAGTTCTTCGTG	700	53	Bernhard <i>et al.</i> , 2000
<i>Escherichia coli</i>	<i>uidA</i>	F: CTGCTGCTGTCGGCTTTA R: CCTTGCGGACGGGTAT	205	60	Kaushik <i>et al.</i> , 2012
<i>Legionella</i> sp.	16S rRNA	F: GAGGGTTGATAGGTTAAGAGC R: GTCAACTTATCGCGTTTGCT	430	60	Miyamoto <i>et al.</i> , 1997
<i>Mycobacterium</i> sp.	16S rRNA	F: ATGCACCACCTGCACACAGG R: GGTGGTTTGTGCGTTGTTC	470	55	Mendum <i>et al.</i> , 2000
Total bacteria	16S rRNA	F: ACTCCTACGGGAGGCAGCAG R: ATTACCGCGGCTGCTGG	200	55	Boon <i>et al.</i> , 2006
Total fungi	18S rRNA	F: GTAGTCATATGCTTGTCTC R: ATTCCCCGTTACCCGTTG	400	57	May <i>et al.</i> , 2001

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Table S2. The standard curve showed a linear relationship.

	R^2	linear relation	Eff.
<i>Aeromonas hydrophila</i>	0.99 3	$Y = -3.382 \cdot \text{LOG}(X) + 43.61$	97.60%
<i>Arcobacter</i> sp.	0.99 7	$Y = -3.531 \cdot \text{LOG}(X) + 49.49$	92.00%
<i>Bacillus cereus</i>	0.99 5	$Y = -3.602 \cdot \text{LOG}(X) + 46.79$	91.50%
<i>Bacteroides</i> sp.	0.99 3	$Y = -3.862 \cdot \text{LOG}(X) + 49.36$	89.50%
<i>E. coli</i>	0.99 1	$Y = -3.490 \cdot \text{LOG}(X) + 45.21$	110.00 %
<i>Legionella</i> sp.	0.98 9	$Y = -3.658 \cdot \text{LOG}(X) + 47.03$	89.40%
<i>Mycobacterium</i> sp.	0.99 9	$Y = -3.398 \cdot \text{LOG}(X) + 43.58$	96.90%
Total bacteria	0.99 2	$Y = -3.441 \cdot \text{LOG}(X) + 43.80$	95.30%
Total fungi	0.99 5	$Y = -3.265 \cdot \text{LOG}(X) + 45.42$	102.40 %