

Electronic supplementary information (ESI) for the article: “Rainwater harvesting solar pasteurization treatment systems for the provision of an alternative water source in peri-urban informal settlements”.

Table S1 Primers and PCR cycling parameters for the detection of indigenous rainwater pathogens.

Organism	Primers	Primer sequence (5'-3')	[Primer]	*PCR Cycling Parameters	Gene (bp)	References
<i>Aeromonas</i> spp.	Aero-F	TGTCGGSGATGACATGGAYGTG	0.1 µM	2 min at 95 °C; 35 cycles of 94 °C for 1 min, 62 °C for 1 min, 72 °C for 2.5 min	<i>Aerolysin</i> (720)	1
	Aero-R	CCAGTTCCAGTCCCACCACTTCA				
<i>Bacillus</i> spp.	p-gyrAF	CAGTCAGGAAATGCGTACGTCCTT	0.8 µM	4 min at 94 °C; 35 cycles of 94 °C for 30 s, 60 °C for 30 s, 72 °C for 1 min	<i>Gyrase A</i> (928)	2
	p-gyrAR	CAAGGTAATGCTCCAGGCATTGCT				
<i>Enterococcus</i> spp.	ECST784F	AGAAATTCCAAACGAACTTG	0.5 µM	5 min at 95 °C; 50 cycles of 95 °C for 15 s, 60 °C for 1 min, 72 °C for 20 s	23S rRNA (75)	3
	ENC854R	CAGTGCTCTACCTCCATCATT				
<i>Klebsiella</i> spp.	gyrA-A	CGCGTACTATACGCCATGAACGTA	0.3 µM	3 min at 95 °C; 35 cycles of 94 °C for 1 min, 50 °C for 30 s, 72 °C for 30 s	<i>Gyrase A</i> (383)	4
	gyrA-C	ACCGTTGATCACTTCGGTCAGG				
<i>Legionella</i> spp.	JFP	AGGGTTGATAGGTTAAGAGC	0.5 µM	5 min at 95 °C; 40 cycles of 94 °C for 1 min, 57 °C for 1.5 min, 72 °C for 1 min	16S rRNA (386)	5
	JRP	CCAACAGCTAGTTGACATCG				
<i>Pseudomonas</i> spp.	PA-GS-F	GACGGGTGAGTAATGCCTA	0.4 µM	2 min at 95 °C; 25 cycles of 94 °C for 20 s, 54 °C for 20 s, 72 °C for 40 s	16S rRNA (618)	6
	PA-GS-R	CACTGGTGTTCCCTTCCTATA				

<i>Salmonella</i> spp.	IpaB-F	GGACTTTTTTAAAAGCGGCGG	0.1 µM	2 min at 95 °C; 35 cycles of 94 °C for 1 min, 62 °C for 1 min, 72 °C for 2.5 min	<i>IpaB</i> (314)	1
	IpaB-R	GCCTCTCCCAGAGCCGTCTGG				
<i>Serratia</i> spp.	Fpfs1	CCGGCATCGGCAAAGTCT	0.3 µM	5 min at 94 °C; 30 cycles of 94 °C for 45 s, 55 °C for 30 s, 72 °C for 15 s	<i>pfs</i> (193)	7
	Rpfs2	ATCTGGCCCCGGCTCGTAGCC				
<i>Shigella</i> spp.	IpaH-F	CCTTGACCGCCTTTCCGATA	0.1 µM	2 min at 95 °C; 35 cycles of 94 °C for 1 min, 62 °C for 1 min, 72 °C for 2.5 min	<i>IpaH</i> (606)	1
	IpaH-R	CAGCCACCCTCTGAGGTACT				
<i>Staphylococcus</i> spp.	PanStaphF	CAATGCCACAAACTCG	1 µM	5 min at 95 °C; 45 cycles of 95 °C for 30 s, 61 °C for 30 s, 72 °C for 30 s	<i>tuf</i> (462)	8
	PanStaphR	GCTTCAGCGTAGTCTA				
<i>Streptomyces</i> spp.	StrepB	ACAAGCCCTGGAAACGGGGT	0.2 µM	5 min at 98 °C; 30 cycles of 95 °C for 45 S, 54 °C for 40S, 72 °C for 2 min	16S rRNA (519)	9
	StrepE	CACCAGGAATTCCGATCT				
<i>Yersinia</i> spp.	227Fmod	GTCTGGGCTTTGCTGGTC	0.3 µM	5 min at 95 °C; 40 cycles of 94 °C for 20 s, 60 °C for 20 s, 72 °C for 15 s	<i>ompF</i> (428 - 465)	10
	669R	GCGTCGTATTTAGCACCAACG				
Adenovirus	AQ1	GCCACGGTGGGGTTTCTAACTT	0.3 µM	2 min at 95 °C; 35 cycles of 94 °C for 30 sec, 55 °C for 1 min, 72 °C for 1 min	<i>Hexon</i> (110)	11
	AQ2	GCCCCAGTGGTCTTACATGCACATC				

* A final elongation step of 10 min at 72 °C was included for each PCR assay.

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