

Supplementary Material

Protective Effects of Bacteriophages against *Aeromonas hydrophila* Species Causing Motile Aeromonas Septicemia (MAS) in Striped Catfish

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Table S1. Growth of *A. hydrophila* N17 under the effect of Mitomycin C.

Mitomycin C concentration	OD _{550nm}						
	0 h	1 h	2 h	3 h	4 h	5 h	6 h
0 ug/mL (Control)	0.200 ± 0.081	0.948 ± 0.011	2.566 ± 0.082	4.295 ± 0.658	5.855 ± 0.997	6.210 ± 0.651	5.560 ± 0.184
0.1 ug/mL		0.957 ± 0.023	2.488 ± 0.034	4.625 ± 0.290	5.440 ± 0.283	5.355 ± 0.318	5.430 ± 0.368
0.5 ug/mL		0.933 ± 0.004	2.038 ± 0.122	2.585 ± 0.092	2.295 ± 0.120	1.755 ± 0.290	1.224 ± 0.122

Table S2. Host range of the phages against *Aeromonas* species.

Bacteria	Strain codes	Isolation location *	Date of collection	Gene	LD ₅₀ (CFU/mL)	Φ2	Φ5
<i>A. hydrophila</i> strains	Ah 01	VL	24/06/2014	g14		+	+
	Ah 02	VL	03/10/2012	g14		+	+
	Ah 03	VL	03/10/2012	g14		+	+
	Ah 04	CT	12/01/2013	g14		+	+
	Ah 08	DT	14/01/2013	g14		+	+
	Ah 13	BT	02/02/2013	g11		+	+
	B122	CT	03/10/2012	g14		+	+
	B126	AG	16/08/2012	g10		+	+
	B167	BT	02/02/2013	g14		+	+
	B173	BT	02/02/2013	g14		+	+
	B44	VL	02/10/2012	g14		+	+
	B60	VL	03/10/2012	g14	3.3 × 10 ²	+	+
	B61	VL	03/10/2012	g14		+	+
	B64	VL	03/10/2012	g14		+	+
	B65	VL	03/10/2012	g14		+	+
	B66	VL	03/10/2012	g14		+	+
	N17	AG	12/11/2012	g14	5.7 × 10 ⁴	PH	PH
<i>Aeromonas</i> spp. (23).	ATCC 35654					+	+
	Ac11	VL	25/09/2012	g03		-	-
	Av12	DT	14/01/2013	g01		-	-
	B101	CT	12/11/2012	g01		-	-
	B105					-	-
	B110	DT	11/01/2013	g02		-	-
	B12	AG	23/08/2012	g13		-	-
	B168	BT	02/02/2013	g03		-	-
	B174	BT	02/02/2013	g01		-	-
	B45	VL	02/10/2012	g02		-	-
	B58	VL	03/10/2012	g13		-	-
	B71	CT	24/09/2012	g08		-	-
	B85	DT	30/10/2012	g09		-	-
	B87	DT	30/10/2012	g13		-	-
	B88	DT	30/10/2012	g05		-	-

Bacteria	Strain codes	Isolation location *	Date of collection	Gene	LD ₅₀ (CFU/mL)	Φ2	Φ5
	CL73	TG	06/08/2014	g13		-	-
	K13	DT	11/10/2012	g14		-	-
	K7	DT	11/10/2012	g14		-	-
	N1	AG	15/08/2012	g13		-	-
	N15	VL	13/10/2012	g13		-	-
	N19	DT	11/01/2013	g02		-	-
	N21	DT	11/01/2013	g01		-	-
	N4	AG	16/08/2012	g09		-	-
	N40	DT	14/01/2013	g09		-	-
	N6	AG	16/08/2012	g10		-	-
	<i>A. caviae</i> (ATCC 15468)					-	-
	<i>A. salmonicida</i> (ATCC 33658)					-	-
	<i>A. salmonicida</i> (ATCC 7965)					-	-
<i>Edwardsiella tarda</i>	ATCC 15947					-	-
<i>Edwardsiella ichtaluri</i>	LMG 7860					-	-
<i>Hafnia alvei</i>	ATCC 51815					-	-
<i>Streptococcus agalactiae</i>	ATCC 12386					-	-
<i>Vibrio parahaemolyticus</i>	ATCC 17802					-	-

“+”: susceptible to phage lysis; “-”: not susceptible to phage lysis; * Locations in Vietnam: VL: Vinh Long; CT: Can Tho; DT: Dong Thap; BT: Ben Tre; AG: An Giang.; PH: propagation host; g01: no toxic gene; g02: *alt*, g03: *alt-ahpA*; g04: *ahh1-alt*, g05: *ahh1-alt-lip*; g06: *ahh1-alt-ahpA*; g07: *ahh1-alt-ahpA-ast*; g08: *ahh1-alt-ahpA-lip*; g09: *aerA-ahh1-alt*; g10: *aerA-ahh1-alt-lip*; g11: *aerA-ahh1-alt-ast*; g12: *aerA-ahh1-alt-ahpA*; g13: *aerA-ahh1-alt-ahpA-lip*; g14: *aerA-ahh1-alt-ahpA-lip-ast*.