

Table 2 *C. gigas* (), *C. sikamea* (), (*H*) (*I*)

Date	Location	Depth (m)	Temperature (°C)	Salinity (‰)	pH	Survival (%)				
						12h	21h	120h	210h	240h
1	0.1	4.1	2.1	1.1	2	.	4.	2.1	1.02	
2	0.1	2.	1.1	.1	24	11.	1.	.	1.	
	1.1	0	.	2.	1	.	.	.2	0.	
4	1.2	.1	1.1	1.1	1	4.	.1	.02	0.1	
1	1.1	0.2	1.1	1.2	12	2	4.	2.2	1.1	
2		4.2	0.	.	1.	.	.2	4.0	2	
4		1	1.	.	2	10	1.	.	2.	
		1.0	.14	1.1	0	.	.0	.4	2.0	
4		.	.	.4	.	.	.	.1	1.0
1		1.1	.2	1.2	12	0.	1.	2	1.1	
2		1.2	0.	.	.	.	.	4.4	0.2
4		0.2	0.0	.	.	.	.	.	.
		0.0	0.0	2	.	.	.	.	.
1	4.1	.	1.	1.1	.	.	.	.	1.
2	4.4	.1	.	2.22	20	.	.2	4.1	0.1	
	44.02	1.4	.4	.1	1	4.	2.1	1.24	0.41	
4	4	4.44	.	2.4	40	12	.	1.4	1.4	
1	4.4	0.4	1.1	1.0	14.4	2	11.	1.0	0.1	
<i>H</i> (%)		4.24	4.	1.1	2	1.	2.2	2.1		
<i>I</i> (%)		.	.4	11.	11.	.1	0.	40.4	.2	

Survival data for *C. gigas* and *C. sikamea* at different depths and locations. *n* = 120 (4 replicates). Error bars represent standard deviation. *p* < 0.05.

Survival data for *C. gigas* and *C. sikamea* at different depths and locations. *n* = 4 (4 replicates). Error bars represent standard deviation. *p* < 0.05.

Statistical analysis

Survival data for *C. gigas* and *C. sikamea* at different depths and locations. *n* = 120 (4 replicates). Error bars represent standard deviation. *p* < 0.05.

$$H_1(\%) = (2SG - GG - SS) / (GG + SS) \times 100,$$

$$I_{SG}(\%) = (X_{F1} - X_{Ai}) \times 100 / X_{Ai},$$

Results

Survival

Fertilization

C. gigas and *C. sikamea* fertilization results. *C. gigas* fertilization: 1.1, 4.4, 1.1, 2.12% survival. *C. sikamea* fertilization: 0.1%, 0.1%, 2.12% survival. (Table 2). Survival percentages: 0.1%, 0.1%, 2.12%, 0.1%, 0.1%, 2.12%, 0.1%, 0.1%, 2.12%.

Table 3 - fertilization results

Fertilization	n	Fertilization			Survival		
		F	Mean	SD	F	Mean	SD
1.1	2	0.004	0.003	0.002**	0.00	11.0	0.001***
		0.00	.1	0.001***	0.00	20.3	0.001***
		0.00	2.03	0.001***	0.00	111.3	0.001***
4.4	2	0.00	10.32	0.001***	0.00	0.40	0.001***
		0.00	20.3	0.001***	0.00	0.40	0.001***
		0.00	2.03	0.001***	0.00	111.3	0.001***
1.1	2	0.143	1.311	0.001***	0.20	1.130	0.001***
		0.0	3.00	0.001***	0.00	0.3	0.001***
		0.10	111.3	0.001***	0.00	0.40	0.001***
2.12	2	0.034	124.	0.001***	0.00	0.40	0.001***
		0.030	120.0	0.001***	0.00	0.40	0.001***
		0.041	1.3	0.001***	0.00	1.03	0.001***
0.1	2	0.0	4.1	0.001***	0.4	0.4	0.001***
		0.122	3.0	0.001***	0.03	0.3	0.40
		0.0	44.34	0.001***	0.00	0.3	0.33
0.1	2	0.02	3.401	0.002**	2.	143.432	0.001***
		0.1	20.221	0.001***	0.03	4.34	0.004**
		0.0	.1	0.001***	0.1	.02	0.001***
0.1	2	0.10	4.03	0.02 *	2.14	10.2	0.001***
		0.10	.	0.001***	0.0	2.1	0.04 *
		0.0	2.02	0.03*	0.0	2.3	0.00 **
0.1	2	0.41	4.240	0.02 *	0.23	4.13	0.001***
		0.03	0.333	0.41	0.00	0.	0.4
		0.212	2.1	0.034	0.01	2.004	0.04

*p 0.05; **p 0.01; ***p 0.001

... *I* ... 0. % ... 120 ... 40.4 % ... *I* ... 2.2% ... 120 ... 24.4 % ... *N V* ... (*p* 0.0) (... 2); ... - ... (*p* 0.001) (...).

Growth

... *C. gigas* ... *C. sikamea* ... *Hin* ... (*p* 0.0 ; ... , 4).

Genetic con rmation

... *C. gigas* ... *C. sikamea* ... *Hin* ... (200 ... 00), ... *C. sikamea*, ... (... 1) (... . 1).

Table 4 ... *C. gigas* (...), *C. sikamea* (...), ... (...) ... (*H*) ... - ... -

	à ()	à 12 ()	à 21 ()	à 120 ()	à 210 ()	à 20 ()
1	122.40	141.	2 1. 1	12.	14.4	1.1
2	1 .42	1 .2*	2 *.	12.	1 . 4	2.01
	121.1	142.	2* . 4	14.44	1 .22	2*.
4	12 .	140.2	2* .2	14.2	1 .0	2. *.
à	12 .1 2 .4 ^a	1 . . ^a	2 0. * ^a 4 .2 ^a	1 . 0. ^a	1 .02 0.41 ^a	2.1 . 2 ^a
1	102.	11 .	21 .	.	11.01	0.20
2	.0	11 . 0	21 .	10. 2	.	2*.01
	102. 2	11 .	21 .2	. 1	10. 1	2*.14
4	*.2	11 .	210. *.	*.4	10.42	2 .
à	100. 1 .	11 *.* 2 *.	214.1 42*.* ^c	*. 2 1.	10. 0.4	2*. 2 1.1
1	10 . 1	12 . 1	2 *.*.0	*.2	*.*.4	2*.1
2	104.	11 . 0	2 4.4*	. 2	. 4	2 .2
	104.	112. 4	2 2. 4	. 2	. 2	2 :.2
4	*. 0	11 .41	2 .	*.*	. 2	24. 4
à	100*.* 2*.	1*.* 0.	2 . *.*1	.0 0*.* ^c	*. 1 1. ^c	2 .2 4. * ^c
<i>H</i> (%)	11.	.2	21. 4	1 .	10.00	2.2
<i>I</i> (%)	0.2	1.14	1 .	2 . 2	24.4	*.*

... , *n* 120 ... *p* 0.0).

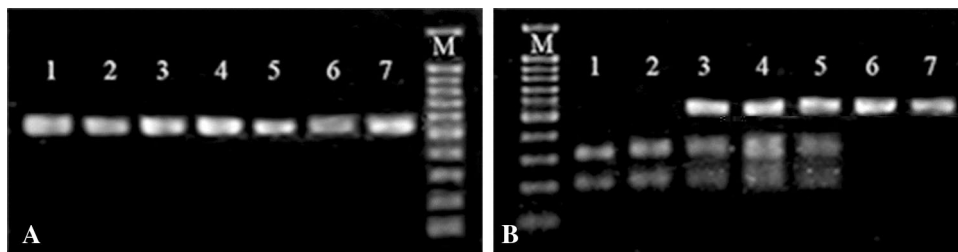


Fig. 1 ... *C. gigas*, *C. sikamea* ... *Hin* ... *C. gigas* ... *C. sikamea* ...

Crassostrea virginica () *C. rivularis* () *C. gigas* (). 11 2 2*

(1 4) *Crassostrea gigas* *C. sikamea*. 121 12 1 (2001) - c c 10 2 (200*)

Crassostrea ariakensis *Crassostrea virginica* ? 2 00 (200*) *Crassostrea sikamea* - N 2 1 22 (1) L (*Argopecten circularis*, P*) 212 110 L, (200) *Crassostrea gigas*. 24 21 22 L, (2010) *Crassostrea gigas*. c 2 21 2 (200) (201) *Crassostrea sikamea* (1) 14 22* (200) *Crassostrea gigas*. 2 21 2 *Crassostrea sikamea* (1) cc c 1 * (2012) *Crassostrea sikamea* c * 2 2 (201) *Crassostrea hongkongensis* ♀. *Crassostrea ariakensis* ♂ 2 * (2011) *Haliotis* 4 V, Y (201*) NL, N (201*) *Panopea zelandica*. // . /10.101 / 002 1 41 001 * L, L (2011) *Crassostrea gigas*. 4 4* V, Vac V (200*) *Crassostrea gigas*. 42 21 220 (2012) (*Crassostrea virginica*) 2 1 (200) *Mytilus edulis* *M. trossulus*. 14 1 2 (1) c c - . 1 1 1

(200*) Y c 214 c , L (2002) *Crassostrea gigas*, *C. angulata* Y, L , Y, Y, Y, L , L (201) - , acc c c 12 01 2 1 (200*) *Crassostrea ariakensis* 2 4* 1 4* Y, (200*) c c 2 4* 4 (2004) *Crassostrea rivularis* (, P* 1) c c 242 1 1 , L , L, Y (2012) c (*Crassostrea gigas*). c 11 41 4 P* L, (201) cc c *Crassostrea sikamea* (1 2*) 2 4 4* , L , L , Y, , L , L (201) c- c c 4 2 0 2 , Y, L L, (2011) *Crassostrea sikamea*, *Crassostrea*. 0 4 , L , (200) L *Crassostrea ariakensis* *C.* 2* 4 4 * Y , , L (201) *Haliotis discus hannai* *H. fulgens*. 44* 24 24 Y c V, V (201) ? 1 1 11 L, Y, Y, Y, L , L , L Y, (2012) 1 1 2 Y, , L , Y, Y (201) c c *Crassostrea hongkongensis* (L & , 200) 4* 1 11 Y, Y, L, Y, Y (201) *Crassostrea hongkongensis* ♀. *C. angulata* ♂ 4 40 Y, Y, L , Y, Y (201 c) c c c *Crassostrea hongkongensis*. *C. gigas* c . 4 0 101 Y, L , Y, Y, Y (201) - c c *Crassostrea hongkongensi* *Crassostrea sikamea* . 4 10 1

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