

Supplementary material for the paper
 Epibionts of an introduced king crab in the Barents Sea: a second five-year study
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Table S1. Comparisons of prevalence levels (%) of common taxa on mature male and female red king crabs with new shells in Dalnezelenetskaya Bay in summers during the period 2009–2013.

Taxa	Male	Female	Chi-square	df	p
<i>Patinella verrucaria</i>	0.0	2.7	0.60	1	0.438
<i>Harpacticus chelifer</i>	4.5	1.6	0.91	1	0.341
<i>Circeis armoricana</i>	4.5	2.1	0.49	1	0.485
<i>Tricellaria arctica</i>	4.5	2.7	0.00	1	0.953
<i>Callopora lineata</i>	4.5	3.2	0.34	1	0.562
<i>Semibalanus balanoides</i>	4.5	4.3	0.11	1	0.742
<i>Margarites groenlandicus</i>	4.5	4.3	0.00	1	0.953
<i>Nemertini g. sp.1</i>	4.5	8.0	0.25	1	0.619
<i>Cyclopina gracilis</i>	4.5	8.0	0.34	1	0.562
<i>Harmothoe imbricata</i>	9.1	13.4	0.32	1	0.571
<i>Johanssonia arctica</i>	9.1	28.9	3.93	1	0.047
<i>Ischyrocerus latipes</i>	13.6	1.6	10.22	1	0.001
<i>Obelia longissima</i>	13.6	8.6	0.61	1	0.433
<i>Mytilus edulis</i>	18.2	8.6	2.11	1	0.147
<i>Ischyrocerus anguipes</i>	22.7	32.1	0.80	1	0.370
<i>Mesochra pygmaea</i>	27.3	11.8	4.08	1	0.043
<i>Balanus crenatus</i>	31.8	17.6	2.55	1	0.110
<i>Harpacticus uniremis</i>	31.8	50.3	2.68	1	0.101
<i>Tisbe furcata</i>	77.3	90.9	3.89	1	0.049
<i>Ischyrocerus commensalis</i>	95.5	100.0	8.54	1	0.003

Note: df – degree of freedom, p – probability level.

Table S2. Comparisons of prevalence levels (%) of common taxa on immature and mature red king crabs from Dalnezelenetskaya Bay in summers during the period 2009–2013.

Taxa	Immature	Mature	Chi-square	df	p
<i>Semibalanus balanoides</i>	2.0	4.6	1.87	1	0.172
<i>Callopora lineata</i>	2.0	5.5	2.86	1	0.091
<i>Harpacticus chelifer</i>	0.7	5.5	6.17	1	0.013
<i>Patinella verrucaria</i>	1.3	5.5	4.30	1	0.038
<i>Margarites groenlandicus</i>	0.0	5.5	8.57	1	0.003
<i>Ectinosoma neglectum</i>	1.3	5.9	4.90	1	0.027
<i>Hiatella arctica</i>	0.7	5.9	6.83	1	0.009
<i>Ischyrocerus latipes</i>	0.0	5.9	9.25	1	0.002
<i>Tricellaria arctica</i>	2.6	5.9	2.21	1	0.137
<i>Cyclopina gracilis</i>	0.0	6.8	10.63	1	0.001
<i>Circeis armoricana</i>	1.3	7.2	6.77	1	0.009
<i>Nemertini g. sp.1</i>	1.3	8.9	9.39	1	0.002
<i>Tisbe minor</i>	0.0	9.7	15.58	1	< 0.001
<i>Mytilus edulis</i>	10.6	13.1	0.53	1	0.465
<i>Obelia longissima</i>	4.0	13.1	8.87	1	0.003
<i>Mesochra pygmaea</i>	1.3	16.5	22.35	1	< 0.001
<i>Harmothoe imbricata</i>	3.3	17.7	17.99	1	< 0.001
<i>Ectinosoma normani</i>	1.3	18.1	25.45	1	< 0.001
<i>Balanus crenatus</i>	5.3	19.4	15.33	1	< 0.001
<i>Johanssonia arctica</i>	0.0	26.6	47.92	1	< 0.001
<i>Ischyrocerus anguipes</i>	17.9	33.3	11.09	1	0.001
<i>Harpacticus uniremis</i>	0.7	47.7	98.27	1	< 0.001
<i>Tisbe furcata</i>	6.6	90.3	264.63	1	< 0.001
<i>Ischyrocerus commensalis</i>	34.4	99.6	204.58	1	< 0.001

Note: df – degree of freedom, p – probability level.

Table S3. Comparisons of prevalence levels (%) of common taxa on mature red king crabs with new and old shells in Dalnezeleetskaya Bay in summers during the period 2009–2013.

Taxa	New shell	Old shell	Chi-square	df	p
<i>Cyclopina gracilis</i>	7.7	0.0	2.05	1	0.152
<i>Semibalanus balanoides</i>	4.3	8.0	0.68	1	0.410
<i>Margarites groenlandicus</i>	4.3	16.0	5.82	1	0.016
<i>Balanus crenatus</i>	19.1	20.0	0.01	1	0.918
<i>Nemertini g. sp.1</i>	7.7	20.0	4.17	1	0.041
<i>Johanssonia arctica</i>	26.8	24.0	0.09	1	0.765
<i>Callopora lineata</i>	3.3	24.0	18.15	1	< 0.001
<i>Patinella verrucaria</i>	2.4	28.0	30.10	1	< 0.001
<i>Tricellaria arctica</i>	2.9	28.0	26.87	1	< 0.001
<i>Ischyrocerus latipes</i>	2.9	32.0	33.68	1	< 0.001
<i>Harpacticus chelifer</i>	1.9	36.0	49.44	1	< 0.001
<i>Mytilus edulis</i>	9.6	40.0	18.50	1	< 0.001
<i>Obelia longissima</i>	9.1	44.0	24.35	1	< 0.001
<i>Mesochra pygmaea</i>	13.4	44.0	15.06	1	< 0.001
<i>Circeis armoricana</i>	2.4	44.0	60.68	1	< 0.001
<i>Harpacticus uniremis</i>	48.3	44.0	0.17	1	0.682
<i>Ischyrocerus anguipes</i>	31.1	52.0	4.39	1	0.036
<i>Harmothoe imbricata</i>	12.9	56.0	28.68	1	< 0.001
<i>Tisbe furcata</i>	89.5	96.0	1.07	1	0.300
<i>Ischyrocerus commensalis</i>	99.5	100.0	0.12	1	0.729

Note: df – degree of freedom, p – probability level.

Table S4. Comparisons of prevalence levels (%) of common taxa on adult red king crabs with new shells in Dalnezelenetskaya Bay in summers during the 2004–2008 and 2009–2013 periods.

Taxa	2004–08	2009–2013	Chi-square	df	p
<i>Callopora lineata</i>	3.1	5.5	1.80	1	0.180
<i>Harpacticus chelifer</i>	0.0	5.5	14.70	1	< 0.001
<i>Patinella verrucaria</i>	0.4	5.5	11.83	1	0.001
<i>Margarites groenlandicus</i>	0.4	5.5	11.83	1	0.001
<i>Ectinosoma neglectum</i>	0.0	5.9	15.86	1	< 0.001
<i>Hiatella arctica</i>	3.1	5.9	2.38	1	0.123
<i>Ischyrocerus latipes</i>	0.0	5.9	15.86	1	< 0.001
<i>Tricellaria arctica</i>	1.5	5.9	6.82	1	0.009
<i>Cyclopina gracilis</i>	0.0	6.8	18.21	1	< 0.001
<i>Circeis armoricana</i>	3.8	7.2	2.70	1	0.100
<i>Nemertini g. sp.1</i>	3.1	8.9	7.61	1	0.006
<i>Tisbe minor</i>	0.0	9.7	26.56	1	< 0.001
<i>Mytilus edulis</i>	11.1	13.1	0.45	1	0.500
<i>Obelia longissima</i>	12.6	13.1	0.02	1	0.884
<i>Mesochra pygmaea</i>	0.0	16.5	46.60	1	< 0.001
<i>Harmothoe imbricata</i>	6.5	17.7	14.94	1	< 0.001
<i>Ectinosoma normani</i>	0.0	18.1	51.83	1	< 0.001
<i>Balanus crenatus</i>	9.6	19.4	9.82	1	0.002
<i>Johanssonia arctica</i>	5.7	26.6	40.82	1	< 0.001
<i>Ischyrocerus anguipes</i>	42.9	33.3	4.82	1	0.028
<i>Harpacticus uniremis</i>	0.0	47.7	160.97	1	< 0.001
<i>Tisbe furcata</i>	0.0	90.3	413.25	1	< 0.001
<i>Ischyrocerus commensalis</i>	96.6	99.6	5.78	1	0.016

Note: df – degree of freedom, p – probability level.

Table S5. Comparisons of mean intensities (individuals per crab) of common taxa on adult red king crabs with new shells in Dalnezelenetskaya Bay in summers during the 2004–2008 and 2009–2013 periods.

Taxa	2004–2008		2009–2013		One-way ANOVA			Kruskal-Wallis test		
	X	SE	X	SE	F	df	p	H	df	p
Immature crabs										
<i>Mytilus edulis</i>	1.8	0.6	2.6	1.1	0.18	1	0.676	–	–	–
<i>Ischyrocerus anguipes</i>	2.7	0.4	2.8	0.5	0.04	1	0.840	–	–	–
<i>Ischyrocerus commensalis</i>	3.4	0.6	4.3	0.6	0.50	1	0.482	–	–	–
Mature crabs										
<i>Gamarellus homari</i>	1.4	0.3	1.0	0.0	–	–	–	0.66	1	0.171
<i>Crangonobdella fabricii</i>	1.0	0.0	1.2	0.1	–	–	–	0.38	1	0.325
<i>Harmothoe imbricata</i>	1.9	0.4	1.6	0.2	0.52	1	0.475	–	–	–
<i>Johanssonia arctica</i>	1.6	0.2	1.9	0.2	0.46	1	0.498	–	–	–
<i>Hiatella arctica</i>	2.4	0.7	1.9	0.4	0.40	1	0.535	–	–	–
<i>Eumida sanguinea</i>	1.0	0.0	2.3	1.0	–	–	–	0.50	1	0.232
<i>Nemertini g. sp.1</i>	2.4	0.7	2.5	0.8	0.01	1	0.941	–	–	–
<i>Ischyrocerus anguipes</i>	7.2	1.2	2.5	0.3	–	–	–	19.39	1	< 0.001
<i>Mytilus edulis</i>	2.6	0.4	2.8	0.7	0.05	1	0.816	–	–	–
<i>Balanus crenatus</i>	2.9	0.5	5.1	1.6	1.04	1	0.312	–	–	–
<i>Heteranomia scuamula</i>	1.6	0.2	14.8	10.7	–	–	–	0.24	1	0.602
<i>Circeis armoricana</i>	8.8	5.5	47.9	19.2	–	–	–	2.50	1	0.107
<i>Ischyrocerus commensalis</i>	56.6	3.3	75.7	3.9	–	–	–	17.51	1	< 0.001

Note: X – mean, SE – standard error, F – F-value, H – Chi-square value, df – degree of freedom, p – probability level.