

Supplementary information

Supplementary figures

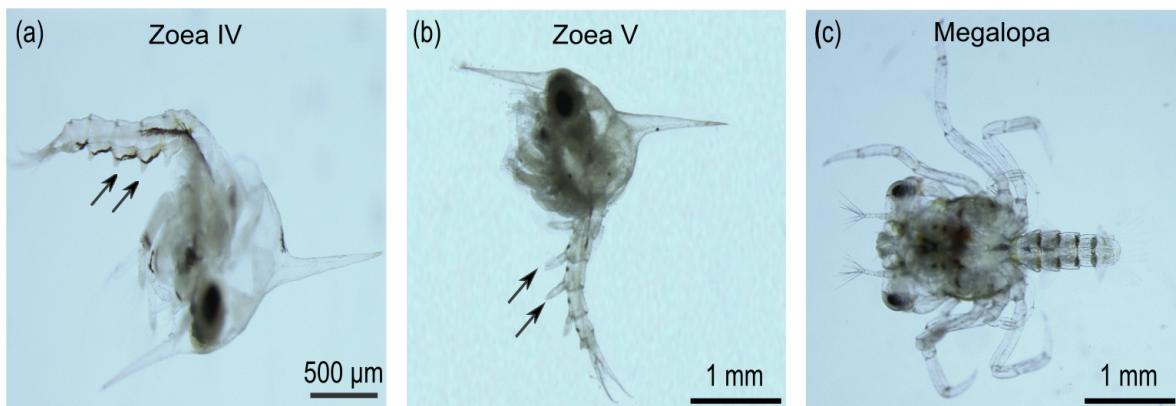


Figure S1. *Hemigrapsus takanoi* (a) Zoea IV with endopod buds (black arrows), (b) Zoea V with biramous pleopods (black arrows), and (c) a megalopa stage.

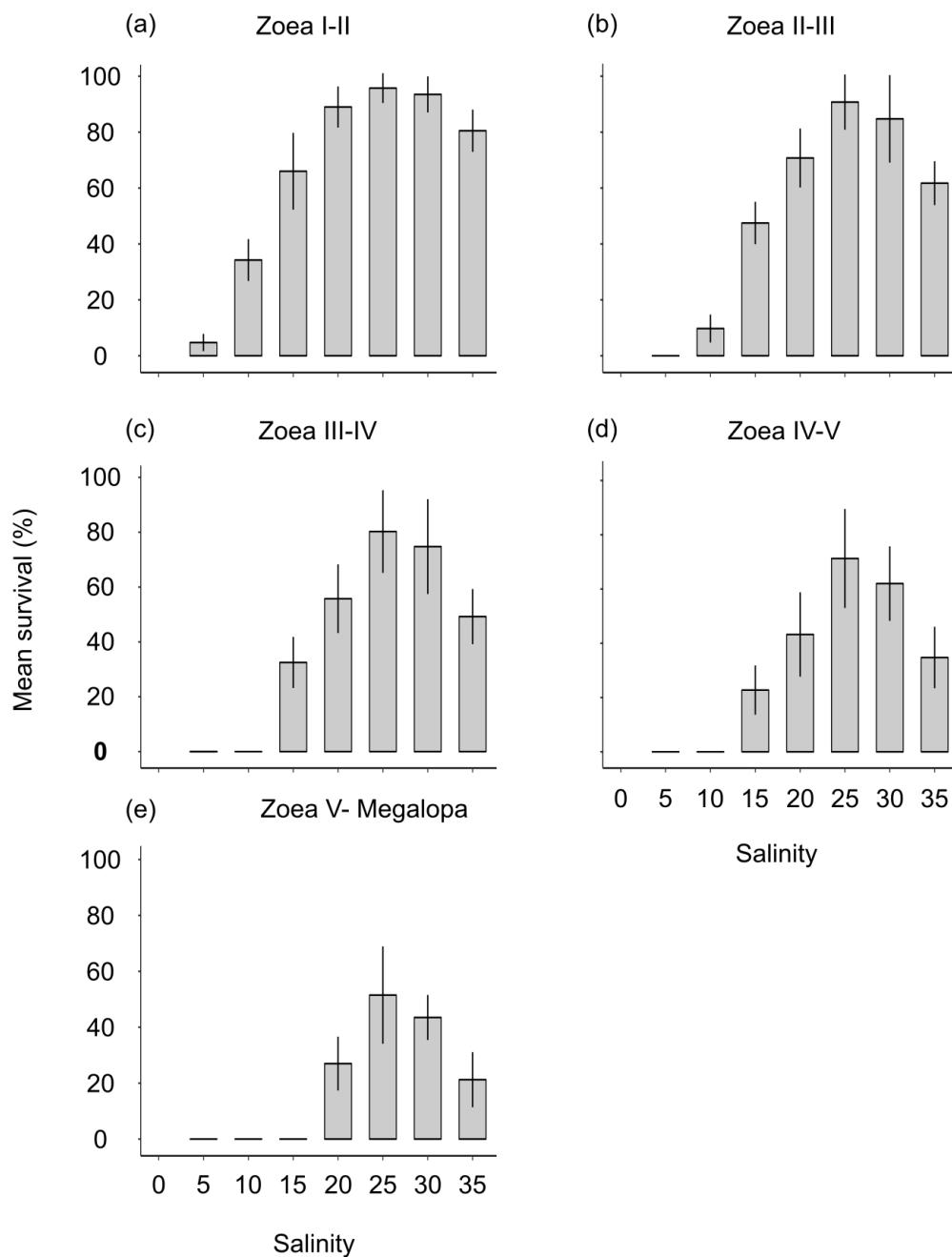


Figure S2. Influence of salinity (5 – 35) on survival of *Hemigrapsus takanoi* larvae (means \pm SD). Percentage values of Zoea I – II (a), are calculated from initially 10 larvae reared in each of 10 vials per salinity level. Larvae came from four different females, while for Zoea II-megalopa stages (b–e), values are related to the values resulting from the moulting of the respective former stage.

Supplementary tables

Table S1: Results of pairwise Peto and Peto tests indicating significant differences in survival rates of *Hemigrapsus takanoi* larvae from Kiel Fjord between different salinity regimes. Significant results ($p \leq 0.05$) are highlighted in bold.

Salinity	0	5	10	15	20	25	30
5	<0.001	-	-	-	-	-	-
10	<0.001	<0.001	-	-	-	-	-
15	<0.001	<0.001	<0.001	-	-	-	-
20	<0.001	<0.001	<0.001	<0.001	-	-	-
25	<0.001	<0.001	<0.001	<0.001	0.76	-	-
30	<0.001	<0.001	<0.001	<0.001	0.29	0.28	-
35	<0.001	<0.001	<0.001	<0.001	0.24	0.21	0.051

Table S2: Percentage of individuals of *Hemigrapsus takanoi* from Kiel Fjord at different Zoea larval stages that survived to the megalopa stage under eight different salinity regimes (mean \pm SD; n = 4 females).

Stage \ Salinity	0	5	10	15	20	25	30	35
Zoea I – II	0.0	4.7 \pm 3.0	34.2 \pm 7.5	66.0 \pm 13.7	89.0 \pm 7.3	95.7 \pm 5.3	93.5 \pm 6.4	80.5 \pm 7.5
Zoea II – III	0.0	0.0	9.7 \pm 4.9	47.5 \pm 7.5	70.7 \pm 10.5	90.7 \pm 9.8	84.7 \pm 15.6	61.7 \pm 7.8
Zoea III – IV	0.0	0.0	0.0	32.5 \pm 9.3	55.7 \pm 12.5	80.2 \pm 15	74.7 \pm 17.2	49.2 \pm 10.0
Zoea IV – V	0.0	0.0	0.0	22.7 \pm 9.0	43.2 \pm 15.5	71.2 \pm 18.2	62.0 \pm 13.7	34.7 \pm 11.3
Zoea V – megalopa	0.0	0.0	0.0	0.0	27.0 \pm 9.6	51.5 \pm 17.4	43.5 \pm 8.0	21.2 \pm 9.8