

Global macroecological patterns of larval size in decapods are governed by temperature and dissolved oxygen

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Table S1. Parameters of the phylogenetic generalised least squares (PGLS) analyses modelling log-transformed carapace length on environmental variables and number of larval stages.^(a) square-rooted values. N, indicates the number of species used for the PGLS models. Bold values indicate significant relationships between the variables. and lambda “Λ” is the estimated Pagel’s parameter scaling branch lengths in each PGLS analysis.

Variables	N	Slope	<i>P</i> value	Λ
Maximum depth ^(a)	615	0.0056	<0.001	0.932
Latitude ^(a)	617	0.0227	<0.001	0.931
Temperature	607	-0.0042	<0.001	0.928
Oxygen	610	0.0009	<0.001	0.927
Chlorophyll-a	610	-0.0058	0.7043	0.937
Salinity	606	0.0006	0.8487	0.937
Larval stages	406	-0.0414	<0.001	0.905

Table S2. Fit of the 32 multiple generalised models assessed for carapace length. The number of explanatory variables, differential of the Akaike information criterion (ΔAICc), and lambda “ Λ ” estimator of Pagel are shown for each model. CL = carapace length; Chla = Chlorophyll a.

Variables	Model	ΔAICc	Λ
0	CL ~ 1	84.530	0.922
1	CL ~ 1 + Stages	10.995	0.905
	CL ~ 1 + Salinity	86.474	0.921
	CL ~ 1 + Chla	86.480	0.922
	CL ~ 1 + Depth	78.386	0.909
	CL ~ 1 + Latitude	79.106	0.909
2	CL ~ 1 + Salinity + Stages	12.945	0.904
	CL ~ 1 + Chla + Stages	12.995	0.905
	CL ~ 1 + Chla + Salinity	88.318	0.921
	CL ~ 1 + Depth + Stages	4.194	0.888
	CL ~ 1 + Depth + Salinity	79.841	0.905
	CL ~ 1 + Depth + Chla	80.385	0.909
	CL ~ 1 + Latitude + Stages	4.356	0.888
	CL ~ 1 + Latitude + Salinity	80.942	0.910
	CL ~ 1 + Latitude + Chla	78.272	0.907
	CL ~ 1 + Latitude + Depth	75.103	0.898
3	CL ~ 1 + Chla + Salinity + Stages	14.919	0.904
	CL ~ 1 + Depth + Salinity + Stages	5.642	0.883
	CL ~ 1 + Depth + Chla + Stages	6.135	0.887
	CL ~ 1 + Depth + Chla + Salinity	81.687	0.905
	CL ~ 1 + Latitude + Salinity + Stages	6.132	0.889
	CL ~ 1 + Latitude + Chla + Stages	3.911	0.887
	CL ~ 1 + Latitude + Chla + Salinity	80.095	0.905
	CL ~ 1 + Latitude + Depth + Stages	<0.001	0.873
	CL ~ 1 + Latitude + Depth + Salinity	77.085	0.897
	CL ~ 1 + Latitude + Depth + Chla	75.531	0.897
4	CL ~ 1 + Depth + Chla + Salinity + Stages	7.620	0.883
	CL ~ 1 + Latitude + Chla + Salinity + Stages	5.834	0.886
	CL ~ 1 + Latitude + Depth + Salinity + Stages	1.994	0.873
	CL ~ 1 + Latitude + Depth + Chla + Stages	0.765	0.874
	CL ~ 1 + Latitude + Depth + Chla + Salinity	76.940	0.893
5	CL ~ 1 + Latitude + Depth + Chla + Salinity + Stages	2.363	0.870

