

Supplementary information

Table S11. Results of the linear mixed model examining the effect of ostracod abundance on the time inside the Petri dish. Fixed effects are given as estimates ($\pm$ Standard Errors), degrees of freedom, t-values, and p-values. Random effects are reported as variance and standard deviation for the intercept associated with individual identity.

Fixed effects					
	Estimate	Std. Error	df	t value	p-value
0 ostracods	6.8940	0.1905	72.4152	36.158	<0.001
50 ostracods	-0.7396	0.2226	58	-3.323	0.00155
100 ostracods	-1.1187	0.2226	58	-5.025	<0.001
Random effects					
	Variance	Std. Dev.			
Individuals	0.3456	0.5878			
Residual	0.7434	0.8622			

Table S12. Estimated marginal means (emmeans) of time spent inside the Petri dish for each ostracod treatment and pairwise comparisons between treatments. Means are presented on the response scale with standard errors (SE) and 95% confidence intervals. Pairwise comparisons are expressed as ratios with associated t-values and p-values. Estimates are derived from a linear mixed model including individual identity as a random effect.

Treatments	Response	SE	df	Lower CL	Upper CL
0 ostracods	986	188.0	Inf	675	1442
50 ostracods	521	89.7	Inf	322	688
100 ostracods	322	61.4	Inf	220	471

Contrast	Ratio	SE	df	Null	T ratio	p-value
0 ostracods / 50 ostracods	2.10	0.466	58	1	3.323	0.0044
0 ostracods / 100 ostracods	3.06	0.681	58	1	5.025	<0.001
50 ostracods / 100 ostracods	1.96	0.325	58	1	2.324	0.025

Table SI3. Results of the generalized linear mixed model examining the effect of ostracod abundance on the probability to leave the Petri dish. Fixed effects are given as estimates ($\pm$ Standard Errors), degrees of freedom, z-values, and p-values. Random effects are reported as variance and standard deviation for the intercept associated with individual identity.

Fixed effects				
	Estimate	Std. Error	z value	p-value
0 ostracods	-0.9675	0.5554	-1.742	0.0814
50 ostracods	2.5816	0.8650	2.985	0.0028
100 ostracods	3.7987	1.0898	3.486	0.0004
Random effects				
	Variance	Std. Dev.		
Individuals	1.783	1.335		

Table SI4. Estimated marginal means (emmeans) of the probability of avoidance behavior for each treatment and pairwise comparisons between treatments. Means are presented as predicted probabilities (back-transformed from the logit scale) with standard errors (SE) and 95% confidence intervals. Pairwise comparisons are expressed as odds ratios with corresponding z-values and p-values. Estimates are derived from a binomial generalized linear mixed model including individual identity as a random effect.

Treatments	Probability	SE	df	Asymp.LCL	Asymp.UCL
0 ostracods	0.275	0.1110	Inf	0.113	0.530
50 ostracods	0.834	0.0892	Inf	0.587	0.947
100 ostracods	0.944	0.0461	Inf	0.752	0.990

Contrast	Odd ratio	SE	df	Null	Z ratio	p-value
0 ostracods / 50 ostracods	0.0757	0.0654	Inf	1	-2.985	0.0080
0 ostracods / 100 ostracods	0.0224	0.0244	Inf	1	-3.486	0.0014
50 ostracods / 100 ostracods	0.2961	0.2480	Inf	1	-1.454	0.3134

Table SI5. Results of the generalized linear mixed model examining the effect of ostracod abundance on the rate of defensive displays. Fixed effects are given as estimates ($\pm$ Standard Errors), degrees of freedom, t-values, and p-values. Random effects are reported as variance and standard deviation for the intercept associated with individual identity. Observation time was included as a log-transformed offset.

Fixed effects				
	Estimate	Std. Error	z value	p-value
50 ostracods	-3.07199	0.09286	-33.081	<0.001
100 ostracods	0.17074	0.04911	3.477	0.0005
Random effects				
	Variance	Std. Dev.		
Individuals	0.2131	0.4617		

Table SI6. Estimated marginal means (emmeans) of defensive behavior rates for each ostracod treatment and pairwise comparisons between treatments. Means are presented on the response scale (back-transformed from the log scale) with standard errors (SE) and 95% confidence intervals. Pairwise comparisons are expressed as rate ratios with associated z-values and p-values. Estimates are derived from a Poisson generalized linear mixed model including individual identity as a random effect and observation time as an offset.

Treatments	Rate	SE	df	Asymp.LCL	Asymp.UCL
50 ostracods	0.0463	0.00430	Inf	0.0386	0.0556
100 ostracods	0.0550	0.00516	Inf	0.0457	0.0661

Contrast	Ratio	SE	df	Null	Z ratio	p-value
50 ostracods / 100 ostracods	0.843	0.0414	Inf	1	-3.477	0.0005