

Supplementary Material for:

**The Responses of Cladoceran Communities to the Single and Simultaneous Effects of  
Environmentally Relevant Increases in Temperature and Phosphorus Concentration in  
Freshwater Ecosystems**

Małgorzata Adamczuk

Department of Hydrobiology and Protection of Ecosystems, University of Life Sciences,

B. Dobrzańskiego 37, 20-262 Lublin, Poland

Table S1. Results of one-way ANOVA for functional and compositional resistance of cladoceran communities. Results are significant at  $p < 0.05$

Effect	MS	$F_{1,2}$	p-value
Resist <sub>D</sub>	0.159	139.120	$p < 0.01$
Resist <sub>C</sub>	0.120	2.769	ns

ns – not significant

Table S2. Results of Tukey HSD tests showing pairwise comparisons between functional or compositional resistances of cladoceran communities

	Temperature	Phosphorus load
Resist <sub>D</sub>		
Phosphorus load	$p < 0.01$	
Temperature x phosphorus	$p < 0.01$	$p < 0.01$
Resist <sub>C</sub>		
Phosphorus load	ns	
Temperature x phosphorus	ns	ns

ns – not significant

Table S3. Results of one-way ANOVA for functional and compositional resilience of cladoceran communities. Results are significant at  $p < 0.05$

Effect	MS	$F_{1,2}$	p-value
Resil <sub>D</sub>	0.115	29.003	$p < 0.01$
Resil <sub>C</sub>	0.003	34.111	$p < 0.01$

Table S4. Results of Tukey HSD tests showing pairwise comparisons between functional or compositional resistances of cladoceran communities

	Temperature	Phosphorus load
Resist <sub>D</sub>		
Phosphorus load	ns	
Temperature x phosphorus	$p < 0.01$	$p < 0.01$
Resist <sub>C</sub>		
Phosphorus load	ns	
Temperature x phosphorus	$p < 0.01$	$p < 0.01$

ns – not significant

Table S5. Results of one-way ANOVA for functional and compositional stability of cladoceran communities. Results are significant at  $p < 0.05$

Effect	MS	$F_{1,2}$	p-value
Stab <sub>D</sub>	0.061	1.718	ns
Stab <sub>C</sub>	5.013	7.053	$p < 0.01$

ns – not significant

Table S6. Results of Tukey HSD tests showing pairwise comparisons between functional or compositional stability of cladoceran communities

	Temperature	Phosphorus load
Resist <sub>D</sub>		
Phosphorus load	ns	
Temperature x phosphorus	ns	ns
Resist <sub>C</sub>		
Phosphorus load	$p < 0.01$	
Temperature x phosphorus	$p < 0.01$	ns

ns – not significant

Table S7. Results of one-way ANOVA for functional and compositional similarity between disturbed and prior-disturbed cladoceran communities. Results are significant at  $p < 0.05$

Effect	MS	$F_{1,2}$	p-value
Simil <sub>D</sub>	1.098	145.297	$p < 0.01$
Simil <sub>C</sub>	0.254	32.714	$p < 0.01$

Table S8. Results of Tukey HSD tests showing pairwise comparisons between functional and compositional similarity of cladoceran communities

	Temperature	Phosphorus load
Simil <sub>D</sub>		
Phosphorus load	ns	
Temperature x phosphorus	$p < 0.01$	$p < 0.01$
Simil <sub>C</sub>		
Phosphorus load	$p < 0.01$	
Temperature x phosphorus	$p < 0.01$	ns

ns – not significant