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Appendix B. Results of nonparametric, Hellinger distance-based MANOVA of zooplankton community-composition response to the treatments, using Anderson's (2001*a,b*) method.

Effect	SS	df	MS	<i>F</i>	<i>P</i> (H)	<i>P</i> (B-C)	<i>P</i> (Chd)	<i>P</i> (Eucl)
<i>R</i>	0.93	2	0.47	2.11	<b>0.0019</b>	<b>0.0002</b>	<b>0.0026</b>	<b>0.0026</b>
<i>S</i>	1.38	1	1.38	6.22	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>
<i>L</i>	1.72	1	1.72	7.78	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>
<i>T</i>	0.76	1	0.76	3.46	<b>&lt;0.0001</b>	<b>0.0005</b>	<b>0.0001</b>	<b>&lt;0.0001</b>
<i>R</i> × <i>S</i>	0.95	2	0.47	2.14	<b>0.0021</b>	<b>0.0001</b>	<b>0.0037</b>	<b>0.0045</b>
<i>R</i> × <i>L</i>	0.96	2	0.48	2.18	<b>0.0009</b>	<b>0.0008</b>	<b>0.0133</b>	<b>0.0121</b>
<i>R</i> × <i>T</i>	0.46	2	0.23	1.04	0.41	0.18	0.54	0.53
<i>S</i> × <i>L</i>	0.79	1	0.79	3.57	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>
<i>S</i> × <i>T</i>	0.28	1	0.28	1.26	0.22	0.11	0.052	0.055
<i>L</i> × <i>T</i>	0.14	1	0.14	0.65	0.83	0.84	0.94	0.95
<i>R</i> × <i>S</i> × <i>L</i>	0.53	2	0.26	1.19	0.23	0.40	0.20	0.20
<i>R</i> × <i>S</i> × <i>T</i>	0.43	2	0.22	0.98	0.48	0.36	0.50	0.50
<i>R</i> × <i>L</i> × <i>T</i>	0.42	2	0.21	0.94	0.55	0.64	0.64	0.62
<i>S</i> × <i>L</i> × <i>T</i>	0.16	1	0.16	0.73	0.73	0.87	0.83	0.83
<i>R</i> × <i>S</i> × <i>L</i> × <i>T</i>	0.36	2	0.18	0.82	0.72	0.70	0.82	0.82
Residual	10.61	48	0.22					
Total	20.89	71						
				<i>R</i> <sup>2</sup> (%)	49.2	55.5	50.6	50.6

*Notes:* *P* values were calculated based on 9,999 randomizations. Other *P* values given are based on analyses of Bray-Curtis (B-C), Chord (Chd), and Euclidean (Eucl) distance metrics. Bolded *P* values are statistically significant at  $\alpha = 0.05$ . Treatments include nutrient ratio (*R*, three levels), nutrient supply (*S*, two levels), light (*L*, two levels), and trophic structure (*T*, two levels).

### Literature cited

Anderson, M. J. 2001*a*. A new method for non-parametric multivariate analysis of variance. *Austral Ecology* 26:32–46.

Anderson, M. J. 2001*b*. Permutation tests for univariate or multivariate analysis of variance and regression. *Canadian Journal of Fisheries and Aquatic Sciences* 58:629–636.

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