

Table S2. Distances of phenotypes in each category among *Daphnia pulex* JPN1 clones (A1, A3, A5, A6 and B). The phenotypic distance was calculated using difference in BLUPs between clones.

Trait type	Clone	2.0 mg C L ⁻¹				0.2 mg C L ⁻¹				Combined			
		A3	A5	A6	B	A3	A5	A6	B	A3	A5	A6	B
Digestive	A1	3.25	3.24	3.54	4.03	3.27	2.46	1.93	4.28	3.07	2.19	2.34	4.22
	A3		2.13	0.97	1.52		2.56	2.35	3.35		2.20	2.10	3.43
	A5			2.44	3.20			1.77	2.11			2.16	2.52
	A6				1.08				3.10				3.24
Life history	A1	1.66	2.17	1.51	3.76	2.42	2.90	3.29	4.19	1.25	2.96	2.60	4.40
	A3		1.32	0.79	4.40		2.41	2.58	3.34		2.07	1.53	4.36
	A5			1.44	4.33			2.03	2.86			1.75	4.06
	A6				4.57				4.64				4.90
Morphology	A1	3.81	3.60	4.24	4.36	3.68	3.26	4.87	4.60	4.12	4.14	5.14	4.79
	A3		1.31	2.94	2.97		1.15	2.16	2.19		0.73	1.30	2.30
	A5			1.98	2.38			2.30	2.70			1.39	2.61
	A6				2.85				2.76				2.63
All	A1	5.28	5.31	5.73	7.03	5.63	5.17	6.31	7.66	5.28	5.54	6.21	7.75
	A3		2.72	3.43	5.47		3.72	4.12	5.22		3.15	3.11	6.11
	A5			3.46	5.89			3.56	4.48			3.11	5.45
	A6				5.49				6.22				6.44