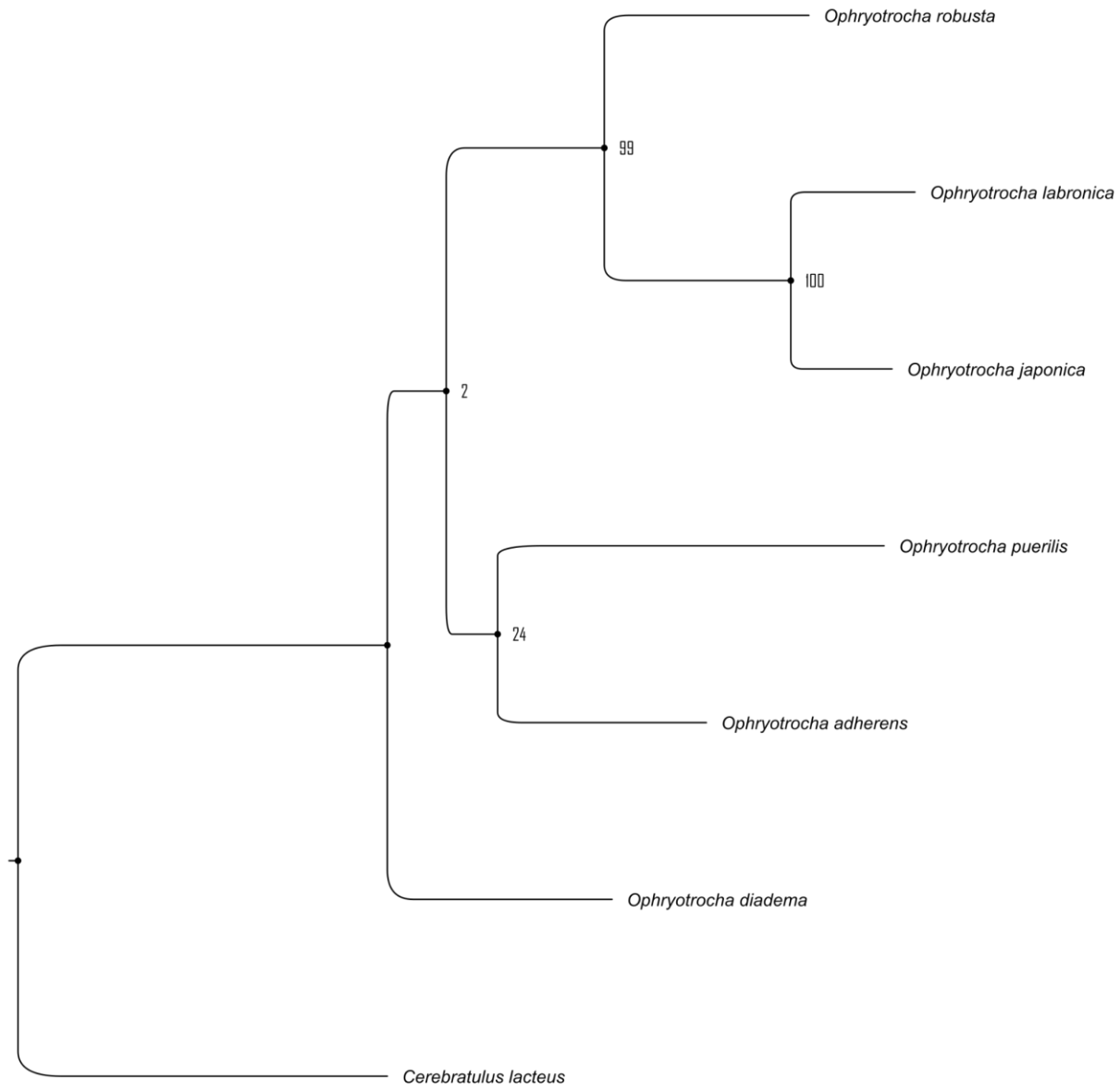
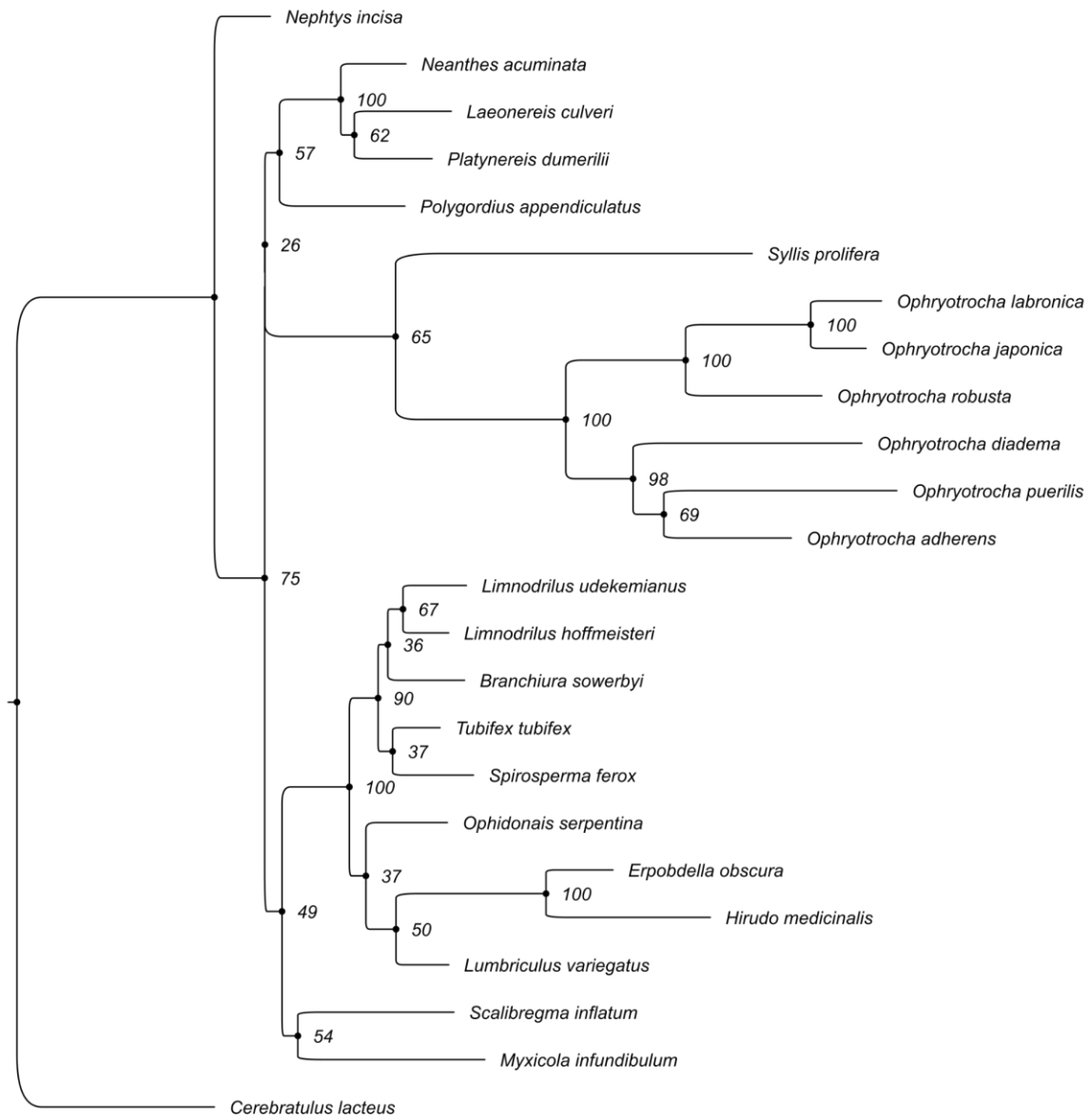


A)



B)



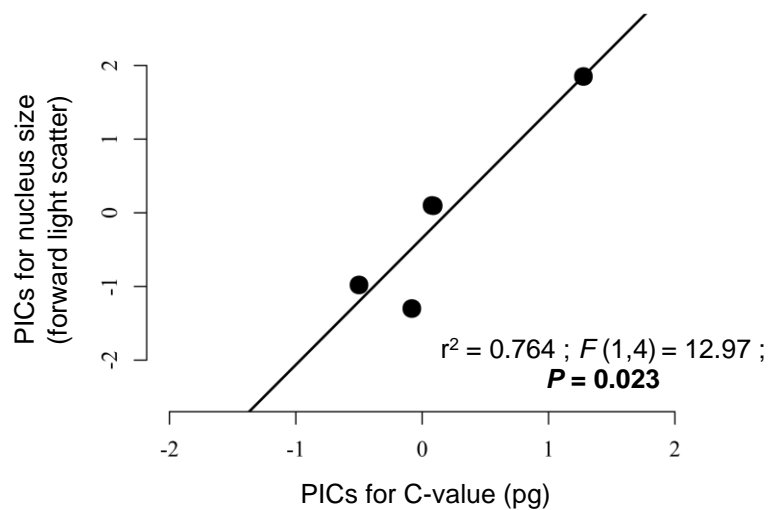


Figure 3. Positive linear relationship between genome size (C-value in picograms) and nucleus size estimated from forward light scatter in flow cytometry. Forward light scatter correlates closely to particle size and has previously been used as an index of nucleus size in *Daphnia*. The data points were corrected by phylogenetically independent contrasts applied using a cytochrome oxidase I and 16S maximum likelihood (RAxML-HPC2) phylogeny detailed in the present paper.

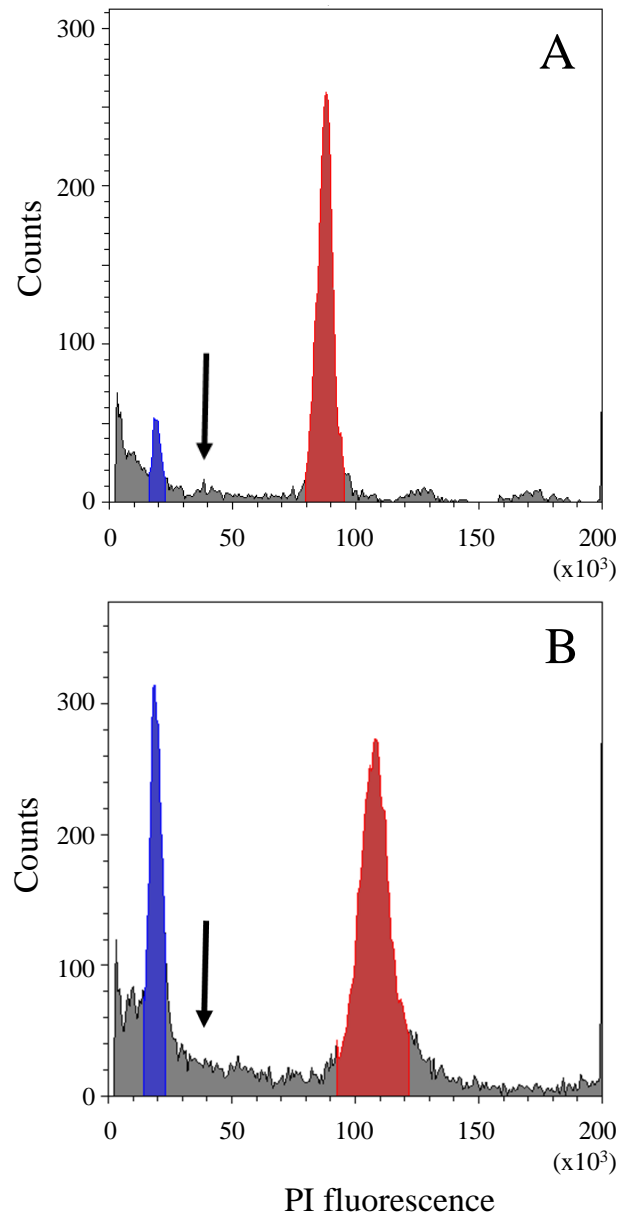


Figure S1: Frequency histograms of isolated nuclei propidium iodide fluorescence; (A) *O. diadema* and (B) *O. labronica*. *Daphnia pulex* nuclei peaks are blue and *Ophryotrocha* nuclei peaks in red. The black arrow indicates where the supposed *Ophryotrocha* peaks would be found according to the genome size values reported by Sella *et al.*, (1993).

Species	C-value (pg)	s.d.	n	Egg size (µm)	s.d.	Fecundity (eggs clutch ⁻¹)	s.d.	Lifetime fecundity (eggs)	s.d.	Body size (mm)	s.d.	Lifespan (d)	s.d.	Age at first deposition (d)	s.d.	Growth rate (chaetigers . day ⁻¹)	s.d.	Sources
<i>O. adherens</i>	0.8031 ^A	0.0274	3	115	2	43	6	394	155	2.5	0.2	58	9	18	2	0.33	0.02	(Grandi 2009, Massamba N'Siala, unpublished data)
<i>O. diadema</i>	1.0370 ^B	0.0174	3	152	5	25	6	478	209	4.1	0.4	203	24	30	4	0.17	0.01	(Grandi 2009, Massamba N'Siala, unpublished data)
<i>O. labronica</i>	1.2253 ^{BC}	0.0528	3	122	6	189	38	1712	562	4.3	0.6	141	33	38	3	0.19	0.01	(Grandi 2009, Massamba N'Siala, unpublished data)
<i>O. japonica</i>	1.4015 ^{CD}	0.0283	3	147	2	205	14	1796	314	7	-	217	22	34.94	1.3	0.12	0.01	(Simonini and Prevedelli 2003, Paxton and Åkesson 2010, Massamba N'Siala, unpublished data)
<i>O. puerelis</i>	1.4548 ^D	0.1224	7	126	5	123	29	830	395	8.4	1.3	156	34	43	4	0.24	0.04	(Grandi 2009 Massamba N'Siala, unpublished data)
<i>O. robusta</i>	1.4741 ^D	0.0542	7	131	4	165	39	1302	519	4.7	0.7	240	89	45	4	0.14	0.02	(Grandi 2009, Massamba N'Siala, unpublished data)