

Supplemental Material

Appendix S1. DNA Extraction Protocol

- Add 300µl of Cell lysis buffer (10mM Tris, 2% SDS, 0.1M EDTA pH 8.0) into tube containing tissue.
- Add 1.5µl of Proteinase K.
- Vortex briefly at low speed.
- Incubate at 55 °C overnight.
- Place samples in ice for 2 min.
- Add 100µl of 7.5 M Ammonium Acetate.
- Vortex at maximum speed for 20 sec.
- Incubate on ice for 5 min.
- Centrifuge at 14,000 rpm for 5 min and place tube on ice.
- Prepare new screw tube and put the supernatant in it.
- Add 300µl of 100% isopropanol and 1µl of Glycogen.
- Mix inverting 50 times and incubate at -20 °C over night.
- Centrifuge at 12,000 rpm for 20 min.
- Pour off the supernatant.
- Add 300µl of 70% Ethanol and invert 10 times.
- Centrifuge at 12,000 rpm for 8 min.
- Pour off the Ethanol and let tubes dry for 3 hours.
- Add 50µl of TLE ((10mM Tris, 0.1mM EDTA pH 8.0).
- Incubate at room temperature overnight.
- Vortex for 10 sec.
- Quick spin.
- Store at -20 °C.

Table S1. Accession numbers

Rotifers			Tardigrades		
Code	Species	accession No.	Code	Species	accession No.
R1_CoastL	<i>Philodina</i> sp.	MF503413	T1_BlueL	<i>Diphascoen</i> sp.	MF503448
R2_BlueL	<i>Philodina</i> sp	MF503414	T2_BlueL	<i>Diphascoen</i> sp.	MF503449
R3_BlueL	<i>Philodina</i> sp	MF503415	T3_BlueL	<i>Diphascoen</i> sp.	MF503450
R4_BlueL	<i>Philodina</i> sp	MF503416	T4_BlueL	<i>Macrobiotus</i> sp.	MF503451
R5_BlueL	<i>Habrotrocha antarctica</i>	MF503417	T5_BlueL	<i>Macrobiotus</i> sp.	MF503452
R6_BlueL	<i>Habrotrocha antarctica</i>	MF503418	T6_BlueL	<i>Macrobiotus</i> sp.	MF503453
R7_ClearL	<i>Habrotrocha antarctica</i>	MF503419	T7_BlueL	<i>Macrobiotus</i> sp.	MF503454
R8_ClearL	<i>Habrotrocha antarctica</i>	MF503420	T8_CoastL	<i>Acutuncus antarcticus</i>	MF503455
R9_ClearL	<i>Philodina gregaria</i>	MF503421	T9_ClearL	<i>Acutuncus antarcticus</i>	MF503456
R10_ClearL	<i>Philodina gregaria</i>	MF503422	T10_CoastL	<i>Acutuncus antarcticus</i>	MF503457
R11_ClearL	<i>Philodina gregaria</i>	MF503423	T11_CoastL	<i>Acutuncus antarcticus</i>	MF503458
R12_ClearL	<i>Philodina gregaria</i>	MF503424	T12_CoastL	<i>Acutuncus antarcticus</i>	MF503459
R13_CoastL	<i>Adineta grandis</i>	MF503425	T13_CoastL	<i>Acutuncus antarcticus</i>	MF503460
R14_CoastL	<i>Adineta grandis</i>	MF503426	T14_CoastL	<i>Acutuncus antarcticus</i>	MF503461
R15_GreenL	<i>Adineta grandis</i>	MF503427	T15_ClearL	<i>Acutuncus antarcticus</i>	MF503462
R16_GreenL	<i>Adineta grandis</i>	MF503428	T16_ClearL	<i>Acutuncus antarcticus</i>	MF503463
R17_CoastL	<i>Adineta grandis</i>	MF503429	T17_CoastL	<i>Acutuncus antarcticus</i>	MF503464
R18_CoastL	<i>Adineta grandis</i>	MF503430	T18_ClearL	<i>Acutuncus antarcticus</i>	MF503465
R19_GreenL	<i>Adineta grandis</i>	MF503431	T19_ClearL	<i>Acutuncus antarcticus</i>	MF503466
R20_ClearL	<i>Adineta grandis</i>	MF503432	T20_ClearL	<i>Acutuncus antarcticus</i>	MF503467
R21_ClearL	<i>Adineta grandis</i>	MF503433	T21_ClearL	<i>Acutuncus antarcticus</i>	MF503468
R22_ClearL	<i>Adineta grandis</i>	MF503434			
R23_ClearL	<i>Adineta grandis</i>	MF503435			
R24_GreenL	<i>Adineta grandis</i>	MF503436			
R25_ClearL	<i>Adineta grandis</i>	MF503437			
R26_GreenL	<i>Adineta grandis</i>	MF503438			
R27_GreenL	<i>Adineta grandis</i>	MF503439			
R28_GreenL	<i>Adineta grandis</i>	MF503440			
R29_GreenL	<i>Adineta grandis</i>	MF503441			
R30_CoastL	<i>Adineta grandis</i>	MF503442			
R31_ClearL	<i>Adineta grandis</i>	MF503443			
R32_GreenL	<i>Adineta grandis</i>	MF503444			
R33_GreenL	<i>Adineta grandis</i>	MF503445			
R34_GreenL	<i>Adineta grandis</i>	MF503446			
R35_CoastL	Monogonont	MF503447			

Nematodes		
Code	Species	accession No.
N1_BlueL	<i>Plectus frigophilus</i>	MF503469
N2_CoastL	<i>Plectus frigophilus</i>	MF503470
N3_BlueL	<i>Plectus frigophilus</i>	MF503471
N4_CoastL	<i>Plectus frigophilus</i>	MF503472
N5_BlueL	<i>Plectus frigophilus</i>	MF503473
N6_CoastL	<i>Plectus frigophilus</i>	MF503474
N7_CoastL	<i>Plectus frigophilus</i>	MF503475
N8_BlueL	<i>Plectus frigophilus</i>	MF503476
N9_BlueL	<i>Plectus frigophilus</i>	MF503477
N10_BlueL	<i>Plectus frigophilus</i>	MF503478