

Additional File 1. Description of *Daphnia* isolates included in this study.

The labels of the isolates are composites of their characteristics. The first two letters represent the mitochondrial haplotypes (AR = *D. arenata*, EPC = European *D. pulicaria*, EPX = European *D. pulex*, MI = *D. middendorffiana*, PC = *D. pulicaria*, PX = *D. pulex*, TE= *D. tenebrosa*) followed by the ploidy level (2 or 3), a 2 letter country or state/province code and the isolate number. Sequences marked with an asterisk (*) were obtained from a RT-PCR product. Accession numbers refer to *Pokey* sequences amplified from *Daphnia* isolates.

Isolates	mitochondrial haplotype	Ploidy level	<i>Ldh</i> genotype	Accession number	Geographic location
PX2-MB-1	North-American <i>D. pulex</i>	2x	SS	/	Churchill, MB, CAN
PX2-MB-2	North-American <i>D. pulex</i>	2x	SS	/	Churchill, MB, CAN
PX2-ON-3	North-American <i>D. pulex</i>	2x	SS	/	Windsor, ON, CAN
PX2-ON-4	North-American <i>D. pulex</i>	2x	SS	/	Windsor, ON, CAN
PX2-ON-9	North-American <i>D. pulex</i>	2X	SS	[JX848694]	Windsor, ON, CAN
PX2-MB-3	North-American <i>D. pulex</i>	2x	SF	[JX838828]	Churchill, MB, CAN
PX2-ON-2	North-American <i>D. pulex</i>	2x	SF	/	Windsor, ON, CAN
PX2-ON-10	North-American <i>D. pulex</i>	2x	SF	/	Windsor, ON, CAN
PX2-QC-5	North-American <i>D. pulex</i>	2x	SF	/	Ste-Foy, QC, CAN
PX2-QC-6	North-American <i>D. pulex</i>	2x	SF	/	Ste-Foy, QC, CAN
PX2-MI-11	North-American <i>D. pulex</i>	2x	SF	/	MI, USA
PX2-QC-8	North-American <i>D. pulex</i>	2x	SF	[JX838839 to JX838845]	Kuujjarapik, QC, CAN
PX2-QC-9	North-American <i>D. pulex</i>	2x	SF	/	Métis, QC, CAN
PX2-QC-12	North-American <i>D. pulex</i>	2x	SF	/	Métis, QC, CAN
PX3-QC-1	North-American <i>D. pulex</i>	3x	SF	[JX838848 to JX838850]	Kuujjarapik, QC, CAN
PX3-QC-2	North-American <i>D. pulex</i>	3x	SF	/	Kuujjarapik, QC, CAN

PC3-QC-1	Eastern <i>D. pulicaria</i>	3x	SF	[JX838851]	Kuujarapik, QC, CAN
PC3-QC-2	Eastern <i>D. pulicaria</i>	3x	SF	/	Kuujarapik, QC, CAN
PC3-QC-3	Eastern <i>D. pulicaria</i>	3x	SF	[JX838846, JX838847]	Kuujarapik, QC, CAN
PX2-IL-1	North-American <i>D. pulex</i>	2x	FF	/	Vermillion County, IL, USA
PX2-IL-2	North-American <i>D. pulex</i>	2x	FF	/	Vermillion County, IL, USA
PX2-IL-3	North-American <i>D. pulex</i>	2x	FF	/	Vermillion County, IL, USA
PX2-IL-4	North-American <i>D. pulex</i>	2x	FF	/	Vermillion County, IL, USA
PC3-MB-4	Polar <i>D. pulicaria</i>	3x	SF	/	Churchill, MB, CAN
PC3-MB-5	Polar <i>D. pulicaria</i>	3x	SF	[JX838811, JX838812]	Churchill, MB, CAN
PC2-IN-1	Western <i>D. pulicaria</i>	2x	FF	/	IN, USA
PC2-IN-2	Western <i>D. pulicaria</i>	2x	FF	/	IN, USA
PC2-MB-3	Western <i>D. pulicaria</i>	2x	FF	/	Winnipeg, MB, CAN
PC2-QC-4	Western <i>D. pulicaria</i>	2x	FF	[JX838808 to JX838810]	Kuujarapik, QC, CAN
PC3-MB-6	Western <i>D. pulicaria</i>	3x	SF	/	Churchill, MB, CAN
PC3-MB-7	Western <i>D. pulicaria</i>	3x	SF	/	Kuujarapik, QC, CAN
MI3-MB-1	<i>D. Middendorffiana s.s.</i>	3x	SF	/	Churchill, MB, CAN
MI3-MB-2	<i>D. Middendorffiana s.s.</i>	3x	SF	[JX838813]	Churchill, MB, CAN
TE2-MB-1	<i>D. tenebrosa</i>	2x	UN	[JX838832, JX838833]	Churchill, MB, CAN

TE2-MB-2	<i>D. tenebrosa</i>	2x	UN	[JX838836]	Churchill, MB, CAN
TE2-MB-3	<i>D. tenebrosa</i>	2x	UN	[JX838837, JX838838]	Churchill, MB, CAN
TE3-MB-1	<i>D. tenebrosa</i>	3x	UN	[JX838819 to JX838822]	Churchill, MB, CAN
TE3-MB-2	<i>D. tenebrosa</i>	3x	UN	[JX838823 to JX838827]	Churchill, MB, CAN
TE3-MB-3	<i>D. tenebrosa</i>	3x/4x	UN	[JX838829 to JX838831]	Churchill, MB, CAN
TE3-MB-4	<i>D. tenebrosa</i>	3x	SS	[JX838814 to JX838818]	Churchill, MB, CAN
EPC2-CZ-1	European <i>D. pulicaria</i>	2x	UN	[JX838834]	Lowland, CZE
EPC2-SP-2	European <i>D. pulicaria</i>	2x	UN	[JX838835]	Catalonia, ESP
EPC2-DE-3	European <i>D. pulicaria</i>	2x	UN	[AY630582.1]	Grosser Binnense, DEU
EPX2-DE-1	European <i>D. pulex</i>	2x	UN	[AY630583.1]	Grebin, DEU
EPX2-DE-2	European <i>D. pulex</i>	2x	UN	[AY630584.1]	Malente, DEU
PC2-SK-5	<i>D. pulicaria</i>	2x	FF	[AY630577.1, AY630578.1]	Humbolt Lake, SK, CAN
PX2-IL-5	North-American <i>D. pulex</i>	2x	SS	[AY630581.1]	Vermillion County, IL, USA
PX2-IN-6	North-American <i>D. pulex</i>	2x	SS		Warren County, IN, USA
PX2-ON-7	North-American <i>D. pulex</i>	2x	SS	[AY630579.1]	Essex County, ON, CAN
PX2-QC-13	North-American <i>D. pulex</i>	2x	SS	[AY630580.1]	La Tuque, QC, CAN
AR2-OR-1	North-American <i>D. pulex</i>	2x	UN	[AY630585.1]	Florence, OR, USA
