

Supplementary table S1. List of species and 28S rDNA sequences used in this study (the second and the third datasets).

Species	Host	Stage	GenBank accession number/reference
Auridistomidae			
<i>Auridistomum chelydrae</i> (Stafford, 1900)	<i>Chelydra serpentina</i>	Unspecified	AY116872 [34]
Brachycladiidae			
<i>Brachycladium goliath</i> (van Beneden, 1858)	<i>Balaenoptera acutorostrata</i>	Marita	KR703279 [81]
<i>Zalophotrema hepaticum</i> Stunkard & Alvey, 1929	<i>Zalophus californianus</i>	Marita	AY222255 [34]
Choanocotylidae			
<i>Choanocotyle hobbsi</i> Platt and Tkach, 2003	<i>Chelodina oblonga</i>	Marita	EU196356 [82]
Collyriclidae			
<i>Collyriclum faba</i> (Bremser in Schmalz, 1831)	<i>Saxicola rubetra</i>	Unspecified	JQ231122 [83]
Eucotylidae			
<i>Paratanaisia bragai</i> (Santos, 1934)	<i>Numida meleagris</i>	Marita	JX231098 [84]
<i>Tanaisia fedtschenkoi</i> Skrjabin, 1924	<i>Anas platyrhynchos</i>	Marita	AY116870 [34]
Family unknown			
<i>Cercaria nigrospora</i> Wergun, 1957	Unspecified	Cercaria	MK259981 [85]
Microphalloidea gen. sp.	<i>Pila ovata</i>	Cercaria	KX022508 Unpublished
Microphalloidea gen. sp.	<i>Pila ovata</i>	Cercaria	KX022509 Unpublished
Faustulidae			
<i>Antorchis pomacanthi</i> (Hafeezullah & Siddiqi, 1970)	<i>Pomacanthus semicirculatus</i>	Marita	KR149729 [86]
<i>Bacciger lesteri</i> Bray, 1982	<i>Selenotoca multifasciata</i>	Marita	AY222269 [34]
<i>Trigonocryptus conus</i> Martin, 1958	<i>Arothron nigropunctatus</i>	Marita	AY222270

			[34]
Haematoloechidae			
<i>Haematoloechus abbreviatus</i> (Bychowsky, 1932)	Unspecified	Unspecified	AF184251 [87]
Lecithodendriidae			
<i>Gyrabascus</i> sp.	<i>Dromiciops bozinovici</i>	Unspecified	KY921598 [88]
Macroderoididae			
<i>Paramacroderoides echinus</i> Venard, 1941	<i>Lepisosteus osseus</i>	Unspecified	MH041375 [89]
Microphallidae			
<i>Levinseniella</i> sp.	<i>Somateria mollissima</i>	Marita	MG783585 [15]
<i>Longiductotrema tethepae</i> Kudlai, Cribb & Cutmore, 2016	<i>Grapsus albolineatus</i>	Metacercaria	KX712084 [90]
<i>Maritrema oocysta</i> (Lebour, 1907)	<i>Hydrobia ulvae</i>	Unspecified	AY220630 [34]
<i>Maritrema subdolum</i> Jägerskiöld, 1909	Unspecified	Marita	AF151926 [91]
<i>Microphallus abortivus</i> Deblock, 1974	<i>Hydrobia ulvae</i>	Unspecified	AY220626 [92]
<i>Microphallus ochotensis</i> Galaktionov & Blasco-Costa, 2018	<i>Falsicingula kurilensis</i>	Metacercaria	MG783588 [15]
<i>Microphallus piriformes</i> Galaktionov, 1983	<i>Littorina saxatilis</i>	Sporocyst	HM584122 [56]
<i>Microphallus pygmaeus</i> (Levinsen, 1881)	<i>Littorina saxatilis</i>	Sporocyst	HM584133 [56]
<i>Microphallus similis</i> (Jägerskiöld, 1900)	<i>Carcinus maenas</i>	Metacercaria	AY220625 [92]
Omphalometridae			
<i>Omphalometra flexuosa</i> (Rudolphi, 1809)	<i>Planorbis planorbis</i>	Unspecified	AF300333 [93]
Pachypsolidae			
<i>Pachypsolus irroratus</i> (Rudolphi, 1819)	<i>Lepidochelys olivacea</i>	Marita	AY222274 [34]
Plagiorchiidae			
<i>Choledocystus hepaticus</i> (Lutz, 1928)	<i>Bufo marinus</i>	Marita	AY875679 [94]

<i>Dolichosaccus rastellus</i> (Olsson, 1876) (= <i>Lecithopyge rastellus</i>)	Unspecified	Marita	AF151932 [91]
<i>Neoglyphe sobolevi</i> (Shaldybin, 1953)	<i>Sorex araneus</i>	Marita	AF300329 [93]
<i>Plagiorchis elegans</i> (Rudolphi, 1802)	<i>Austrolittorina antipodum</i>	Cercaria	KJ533393 [95]
Pleurogenidae			
<i>Allassogonoporus amphoraeformis</i> (Mödlinger, 1930)	<i>Pipistrellus kuhli</i>		AF151924 [91]
<i>Collyricloides massanae</i> Vaucher, 1969	<i>Erithacus rubecula</i>	Unspecified	KP682451 [96]
<i>Parabascus duboisi</i> (Hurkova, 1961)	<i>Myotis daubentoni</i>	Unspecified	AY220618 [92]
Prosthogonimidae			
<i>Prosthogonimus cuneatus</i> (Rudolphi, 1809)	<i>Sturnus vulgaris</i>	Marita	AY220634 [92]
<i>Schistogonimus rarus</i> (Braun, 1901)	<i>Anas querquedula</i>	Marita	AY116869 [92]
Reniferidae			
<i>Lechriorchis tygarti</i> Talbot, 1934	<i>Lithobates sylvaticus</i>	Metacercaria	JF820601 [97]
Renicolidae			
<i>Renicola</i> sp.	<i>Austrolittorina antipodum</i>	Cercaria	KJ868215 [98]
<i>Renicola</i> sp.	<i>Numenius arquata</i>	Marita	AY116871 [34]
Zoogonidae			
<i>Deretrema nahaense</i> Yamaguti, 1942	<i>Thalassoma lunare</i>	Marita	AY222273 [34]
<i>Diptherostomum</i> sp.	<i>Scolopsis monogramma</i>	Marita	AY222272 [34]
<i>Lecithostaphylus brayi</i> Cabañas-Granillo, Solórzano-García, Mendoza-Garfias & Pérez-Ponce de León, 2020	<i>Tylosurus pacificus</i>	Marita	MT704138 [99]
<i>Lecithostaphylus halongi</i> Atopkin, Besprozvannykh, Ha, Nguyen & Nguyen, 2022	Unspecified	Marita	OK636407 [40]
<i>Lepidophyllum cameroni</i> Arai, 1969	<i>Gymnocanthus detrisus</i>	Marita	MN217108 Unpublished
<i>Lepidophyllum steenstrupi</i> Odhner, 1902	<i>Anarhichas lupus</i>	Marita	AY157175 [100]

<i>Proctophantastes gillissi</i> (Overstreet & Pritchard, 1977)	<i>Muraenolepis marmorata</i>	Marita	KU163452 [38]
<i>Pseudozoogonoides subaequiporus</i> (Odhner, 1911)	<i>Anarhichas lupus</i>	Marita	OP956068 This study
<i>Steganoderma</i> cf. <i>eamiqtrema</i> Blend and Racz, 2020	<i>Chionoecetes bairdi</i>	Metacercaria	MW264135 [39]
<i>Zoogonoides viviparus</i> (Olsson, 1868) Odhner, 1902	<i>Callionymus lyra</i>	Marita	AY222271 [34]
Urotrematidae			
<i>Urotrema scabridum</i> Braun, 1900	<i>Eptesicus innoxius</i>	Unspecified	MK477545 [101]

Supplementary Figure S1. Analysis of the second dataset. Phylogenetic position of *Pseudozoogonoides subaequiporus* (indicated bold) based on 28S rDNA sequence data analysis inferred with Bayesian inference (BI) and maximum likelihood (ML). Nodal support: ML/BI. Scale bar shows the substitution rate. Model of nucleotide substitution: GTR+G+I.

