

Supplementary Table S1. Internal transcribed spacers and cytochrome *c* oxidase 1 sequences used to construct the phylogenetic trees

GenBank accession n.				<i>Clinostomum</i> ID	Host	Locality	Reference
ITS	COX	specimen n.					
KY865644	KY865661	197/16	1	Morphotype 4	<i>Barbus trimaculatus</i>	Middle Letaba dam, Limpopo province, South Africa (SA)	Present study
KY865645	KY865662	197/16	3	Morphotype 2	<i>Marcusenius macrolepidotus</i>	Bubiana River, Zimbabwe	Present study
KY865646	KY865663	197/16	4	Morphotype 2	<i>Marcusenius macrolepidotus</i>	Nwanedi-Luphephe dam, Limpopo province, SA	Present study
No product	KY865664	197/16	5A	Morphotype 2	<i>Marcusenius macrolepidotus</i>	Latonyanda River, Venda, Limpopo province, SA	Present study
No product	KY865665	197/16	5B	Morphotype 2	<i>Marcusenius macrolepidotus</i>	Latonyanda River, Venda, Limpopo province, SA	Present study
KY865647	KY865666	197/16	6	Morphotype 2	<i>Marcusenius pongolensis</i>	Xihlakati, Limpopo province, SA	Present study
Not sequenced	KY906227	197/16	9A	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Phalaborva barrage, Limpopo province, SA	Present study
Not sequenced	KY906228	197/16	9B	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Phalaborva barrage, Limpopo province, SA	Present study
Not sequenced	KY906229	197/16	9C	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Phalaborva barrage, Limpopo province, SA	Present study
Not sequenced	KY906230	197/16	10A	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Matlala dam ,Limpopo province, SA	Present study
Not sequenced	KY906231	197/16	10B	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Matlala dam ,Limpopo province, SA	Present study
Not sequenced	KY906232	197/16	12	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Rhenosterkop dam, Mpumalanga province, SA	Present study
Not sequenced	KY906233	197/16	13A	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Rhenosterkop dam, Mpumalanga province, SA	Present study
Not sequenced	KY906234	197/16	13B	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Rhenosterkop dam, Mpumalanga province, SA	Present study
Not sequenced	KY906235	197/16	14	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Phalaborva barrage, Limpopo province, SA	Present study
Not sequenced	KY906236	197/16	15	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Loskop dam, Mpumalanga province, SA	Present study
Not sequenced	KY906237	197/16	16	<i>C. phalacrocoracis</i>	<i>Oreochromis mossambicus</i>	Phalaborva barrage, Limpopo province, SA	Present study
KY865648	KY865667	197/16	17A	Morphotype 3	<i>Amphilius uranoscopus</i>	Venda, Limpopo province, SA	Present study
KY865649	KY865668	197/16	17B	Morphotype 3	<i>Amphilius uranoscopus</i>	Venda, Limpopo province, SA	Present study
KY865650	KY865669	197/16	18A	Morphotype 3	<i>Amphilius uranoscopus</i>	Sabie river, Lydenburg, Mpumalanga province, SA	Present study
KY865651	KY865670	197/16	18B	Morphotype 3	<i>Amphilius uranoscopus</i>	Sabie river, Lydenburg, Mpumalanga province, SA	Present study

KY865652*	KY865671	197/16	18C	Morphotype 3	<i>Amphilius uranoscopus</i>	Sabie river, Lydenburg, Mpumalanga province, SA	Present study
KY865653	KY865672	197/16	18D	Morphotype 3	<i>Amphilius uranoscopus</i>	Sabie river, Lydenburg, Mpumalanga province, SA	Present study
KY865654	KY865673	197/16	19	Morphotype 3	<i>Amphilius uranoscopus</i>	Sabie river, Lydenburg, Mpumalanga province, SA	Present study
Not sequenced	KY906238	197/16	20B	<i>C. phalacrocoracis</i>	<i>Clarias gariepinus</i>	Phalaborva barrage, Limpopo province, SA	Present study
No product	KY865674	197/16	23	Morphotype 3	<i>Chiloglanis pretoriae</i>	Dzindi, Venda, Limpopo province, SA	Present study
KY865655	KY865675	197/16	24	Morphotype 3	<i>Chiloglanis pretoriae</i>	Sabie river, Lydenburg, Mpumalanga province, SA	Present study
KY865656	KY865676	197/16	25A	Morphotype 1	<i>Schilbe intermedius</i>	Nandoni dam, Limpopo province, SA	Present study
KY865657	KY865677	197/16	25B	Morphotype 1	<i>Schilbe intermedius</i>	Nandoni dam, Limpopo province, SA	Present study
No product	KY865678	197/16	26	Morphotype 1	<i>Schilbe intermedius</i>	Flag boshielo dam, Marble hall, Limpopo province, SA	Present study
KY865658	KY865679	197/16	27A	Morphotype 1	<i>Schilbe intermedius</i>	Nwanedi-Luphephe dams, Limpopo province, SA	Present study
KY865659*	KY865680	197/16	27B	Morphotype 1	<i>Schilbe intermedius</i>	Nwanedi-Luphephe dams, Limpopo province, SA	Present study
KY865660	KY865681	197/16	27C	Morphotype 1	<i>Schilbe intermedius</i>	Nwanedi-Luphephe dams, Limpopo province, SA	Present study
KY865609	KY865627	172/15	1	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865610	KY865628	172/15	2	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865611	KY865629	172/15	3	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865612*	KY865630	172/15	4	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865613*	KY865631	172/15	5	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865614	KY865632	172/15	6	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865615	KY865633	172/15	8	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865616	KY865634	172/15	9	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865617	KY865635	172/15	10	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865618	KY865636	172/15	11	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865619	KY865637	172/15	12	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865620	KY865638	172/15	13	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study

KY865621	KY865639	172/15	15	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865622	KY865640	172/15	16	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865623	KY865641	172/15	18	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865624	KY865642	172/15	19	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865625	KY865643	172/15	17	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY865626	No sequence	172/15	14	Morphotype 1	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649349	KY649357	172/15	A1	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649350*	KY649358	172/15	A2	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649351	KY649359	172/15	A3	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649352*	KY649360	172/15	B1	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649353	KY649361	172/15	7	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649354	KY649362	172/15	20	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649355	KY649363	172/15	21	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
KY649356	KY649364	172/15	22	<i>C. tilapiae</i>	<i>Synodontis batensoda</i>	Anambra River Basin, Nigeria	Present study
JF718629	JF718595			<i>C. complanatum</i>	<i>Barbus barbus</i>	Italy	Caffara <i>et al.</i> (2011)
JF718634	JF718600			<i>C. marginatum</i>	<i>Perca flavescens</i>	Canada	Caffara <i>et al.</i> (2011)
KC894798	KC894795			<i>Euclinostomum</i> sp.	<i>Trichopsis vittata</i>	Thailand	Senapin <i>et al.</i> (2014)
KJ477612	KJ477498			<i>Clinostomum</i> sp. Lin 3 or Lin 4	<i>Tigrisoma mexicanum</i>	Mexico	Pérez-Ponce de León <i>et al.</i> (2016)
KJ477619				<i>Clinostomum</i> sp. Lin 5 or Lin 2	<i>Ardea alba</i>	Mexico	Pérez-Ponce de León <i>et al.</i> (2016)
KJ786975	KJ786967			<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KJ786976	KJ786968			<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KJ786977	KJ786969			<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KJ786978	KJ786970			<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KJ786979	KJ786971			<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)

KJ786980	KJ786972	<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KJ786981	KJ786973	<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KJ786982	KJ786974	<i>C. phalacrocoracis</i>	Cichlids	Israel	Caffara <i>et al.</i> (2014a)
KM518259	KM518253	<i>C. complanatum</i>	<i>Triturus carnifex</i>	Italy	Caffara <i>et al.</i> (2014b)
KM676409	KU156779	<i>Clinostomum</i> sp. Lin 4	<i>Profundulus punctatus</i>		Pérez-Ponce de León <i>et al.</i> (2016)
KP110564	KP110515	<i>C. cutaneum</i>	<i>Oreochromis niloticus</i> <i>niloticus</i>	Kenya	Locke <i>et al.</i> (2015a)
KP110565	KP110516	<i>C. cutaneum</i>	<i>Ardea cinerea</i>	Kenya	Locke <i>et al.</i> (2015a)
KP110567	KP110521	<i>C. phalacrocoracis</i>	<i>Oreochromis niloticus</i> <i>niloticus</i>	Kenya	Locke <i>et al.</i> (2015a)
KP110568	KP110522	<i>C. phalacrocoracis</i>	<i>Ardea cinerea</i>	Kenya	Locke <i>et al.</i> (2015a)
KP110571	KP110524	<i>Clinostomum</i> sp. 1	<i>Rhamdia guatemalensis</i>	Mexico	Locke <i>et al.</i> (2015a)
	KP110526	<i>Clinostomum</i> sp. 2	<i>Sicydium salvini</i>	Mexico	Locke <i>et al.</i> (2015a)
KP110573	KP110530	<i>Clinostomum</i> sp. 3	<i>Poecilia mexicana</i>	Mexico	Locke <i>et al.</i> (2015a)
KP110574	KP110531	<i>Clinostomum</i> sp. 4	<i>Apistogramma</i> sp.	Perù	Locke <i>et al.</i> (2015a)
KP110576	KP110533	<i>Clinostomum</i> sp. 5	<i>Cichlasoma boliviense</i>	Bolivia	Locke <i>et al.</i> (2015a)
KP110577	KP110534	<i>Clinostomum</i> sp. 6	<i>Cichlasoma boliviense</i>	Bolivia	Locke <i>et al.</i> (2015a)
KP110585	KP110542	<i>Clinostomum</i> sp. 8	<i>Ctenopharyngodon idella</i>	Cina	Locke <i>et al.</i> (2015a)
KP721439	KP721421	<i>E. heterostomum</i>	Cichlids	Israel	Caffara <i>et al.</i> (2016)
KU156742	KU156776	<i>C. tataxumui</i>	<i>Tigrisoma mexicanum</i>	Mexico	Pérez-Ponce de León <i>et al.</i> (2016)
	KP110561	<i>C. tataxumui</i>	<i>Eleotris picta</i>	Mexico	Locke <i>et al.</i> (2015a)
KU156743	KU156782	<i>Clinostomum</i> sp. Lin 1	<i>Rhamdia guatemalensis</i>	Mexico	Pérez-Ponce de León <i>et al.</i> (2016)
KU156747	KU156786	<i>Clinostomum</i> sp. Lin 2	<i>Astyanax aeneus</i>	Mexico	Pérez-Ponce de León <i>et al.</i> (2016)
KU708008	KU708010	<i>C. album</i>	<i>Ardea alba</i>	USA	Rosser <i>et al.</i> (2017)
	KJ818259	<i>Clinostomum</i> sp.	<i>Poecilia reticulata</i>	Brazil	Pinto <i>et al.</i> (2015)
	JF718587	<i>C. attenuatum</i>	<i>Lithobates pipiens</i>	Canada	Caffara <i>et al.</i> (2011)

KP110517

*C. detruncatum*

*Symbranchus marmoratus*

Brazil

Acosta *et al.* (2016)

KP110523

*C. philippinense*

*Trichogaster microlepis*

Thailand

Locke *et al.* (2015a)

**\*not included in ITS tree**