

Table S1. Accession numbers, origin and dataset designation for sequences of the current study, as well as reference sequences retrieved from GenBank.

Dataset	Accession no	Species	Genotype	Country	Host	Publication	DOI
A	KY766906	<i>E. ortleppi</i>	G5	India	buffalo	Kinkar et al. 2017	10.1016/j.meegid.2017.04.023
A	KY766907	<i>E. ortleppi</i>	G5	India	buffalo	Kinkar et al. 2017	
A	KY766908	<i>E. ortleppi</i>	G5	India	buffalo	Kinkar et al. 2017	
A	MH300952	<i>E. canadensis cluster*</i>	G6	Sudan	sheep	Laurimäe et al. 2018	10.1016/j.meegid.2018.06.016
A	MH300939	<i>E. canadensis cluster</i>	G6	Sudan	camel	Laurimäe et al. 2018	
A	MH300950	<i>E. canadensis cluster</i>	G6	Sudan	camel	Laurimäe et al. 2018	
A	MH300940	<i>E. canadensis cluster</i>	G6	Sudan	sheep	Laurimäe et al. 2018	
A	MH300941	<i>E. canadensis cluster</i>	G6	Sudan	sheep	Laurimäe et al. 2018	
A	MH300942	<i>E. canadensis cluster</i>	G6	Sudan	sheep	Laurimäe et al. 2018	
A	MH300943	<i>E. canadensis cluster</i>	G6	Sudan	goat	Laurimäe et al. 2018	
A	MH300951	<i>E. canadensis cluster</i>	G6	Sudan	goat	Laurimäe et al. 2018	
A	MH300944	<i>E. canadensis cluster</i>	G6	Sudan	cattle	Laurimäe et al. 2018	
A	MH300945	<i>E. canadensis cluster</i>	G6	Sudan	cattle	Laurimäe et al. 2018	
A	MH300946	<i>E. canadensis cluster</i>	G6	Sudan	cattle	Laurimäe et al. 2018	
A	MH300947	<i>E. canadensis cluster</i>	G6	Sudan	sheep	Laurimäe et al. 2018	
A	MH300948	<i>E. canadensis cluster</i>	G6	Sudan	sheep	Laurimäe et al. 2018	
A	MH300949	<i>E. canadensis cluster</i>	G6	Sudan	goat	Laurimäe et al. 2018	
A	MH300936	<i>E. canadensis cluster</i>	G6	Kenya, Turkana	human	Laurimäe et al. 2018	
A	MH300938	<i>E. canadensis cluster</i>	G6	Kenya, Turkana	human	Laurimäe et al. 2018	
A	MH300937	<i>E. canadensis cluster</i>	G6	Kenya, Turkana	human	Laurimäe et al. 2018	
A	MH300931	<i>E. canadensis cluster</i>	G6	Iran	camel	Laurimäe et al. 2018	
A	MH300930	<i>E. canadensis cluster</i>	G6	Iran	camel	Laurimäe et al. 2018	
A	MH300932	<i>E. canadensis cluster</i>	G6	Iran	camel	Laurimäe et al. 2018	
A	MH300929	<i>E. canadensis cluster</i>	G6	Iran	camel	Laurimäe et al. 2018	
A	MH300933	<i>E. canadensis cluster</i>	G6	Argentina	goat	Laurimäe et al. 2018	
A	MH300934	<i>E. canadensis cluster</i>	G6	Argentina	goat	Laurimäe et al. 2018	
A	MH300935	<i>E. canadensis cluster</i>	G6	Argentina	goat	Laurimäe et al. 2018	
A	MH300953	<i>E. canadensis cluster</i>	G6	Mauritania	camel	Laurimäe et al. 2018	
A	MH300954	<i>E. canadensis cluster</i>	G6	Mauritania	camel	Laurimäe et al. 2018	
A	MH300969	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300984	<i>E. canadensis cluster</i>	G7	Serbia	pig	Laurimäe et al. 2018	
A	MH300972	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300979	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300978	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300974	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300981	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300975	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300976	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300977	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300980	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300973	<i>E. canadensis cluster</i>	G7	Mexico	pig	Laurimäe et al. 2018	
A	MH300983	<i>E. canadensis cluster</i>	G7	Romania	sheep	Laurimäe et al. 2018	
A	MH300982	<i>E. canadensis cluster</i>	G7	Romania	sheep	Laurimäe et al. 2018	
A	MH300985	<i>E. canadensis cluster</i>	G7	Spain	pig	Laurimäe et al. 2018	
A	MH300959	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300960	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300968	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300962	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300970	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300963	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300965	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300961	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300967	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300957	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300964	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300966	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300958	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300955	<i>E. canadensis cluster</i>	G7	Argentina	pig	Laurimäe et al. 2018	
A	MH300986	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300995	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300996	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300997	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300989	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300987	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300999	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300998	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300992	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH301002	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300990	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300991	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300993	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH301000	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH301001	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300994	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH300988	<i>E. canadensis cluster</i>	G7	France (Corsica)	pig	Laurimäe et al. 2018	
A	MH301003	<i>E. canadensis cluster</i>	G7	Poland	human	Laurimäe et al. 2018	
A	MH301007	<i>E. canadensis cluster</i>	G7	Poland	human	Laurimäe et al. 2018	
A	MH301005	<i>E. canadensis cluster</i>	G7	Poland	human	Laurimäe et al. 2018	
A	MH301022	<i>E. canadensis cluster</i>	G7	Ukraine	pig	Laurimäe et al. 2018	
A	MH301004	<i>E. canadensis cluster</i>	G7	Poland	pig	Laurimäe et al. 2018	
A	MH301020	<i>E. canadensis cluster</i>	G7	Lithuania	pig	Laurimäe et al. 2018	
A	MH301006	<i>E. canadensis cluster</i>	G7	Poland	pig	Laurimäe et al. 2018	
A	MH301021	<i>E. canadensis cluster</i>	G7	Ukraine	pig	Laurimäe et al. 2018	

Sample ID:

A	B	OQ161094	<i>E. canadensis cluster</i>	G8	Latvia	wolf	current study	Sample1
A	B	OQ161095	<i>E. canadensis cluster</i>	G8	Latvia	wolf	current study	Sample2
A	B	OQ161096	<i>E. canadensis cluster</i>	G8	Latvia	wolf	current study	Sample3

A	B	OQ161097	<i>E. canadensis cluster</i>	G8	Latvia	wolf	current study		Sample4
A	B	OQ161098	<i>E. canadensis cluster</i>	G8	Poland	wolf	current study		Sample5
A	B	OQ161099	<i>E. canadensis cluster</i>	G8	Poland	wolf	current study		Sample6
A	B	OQ161100	<i>E. canadensis cluster</i>	G8	Estonia	wolf	current study		Sample7
A	B	OQ161101	<i>E. canadensis cluster</i>	G8	Estonia	roe deer	current study		Sample8
A	B	OQ161102	<i>E. canadensis cluster</i>	G8	Estonia	moose	current study		Sample9
A	B	OQ161103	<i>E. canadensis cluster</i>	G8	Estonia	moose	current study		Sample10
A	B	OQ161104	<i>E. canadensis cluster</i>	G8	Estonia	moose	current study		Sample11
A	B	OQ161105	<i>E. canadensis cluster</i>	G8	Estonia	moose	current study		Sample12
A	B	OQ161106	<i>E. canadensis cluster</i>	G8	Estonia	moose	current study		Sample13
A	B	OQ161107	<i>E. canadensis cluster</i>	G8	Estonia	moose	current study		Sample14
A	B	OQ161108	<i>E. canadensis cluster</i>	G10	Estonia	moose	current study		Sample15
A	B	OQ161109	<i>E. canadensis cluster</i>	G10	Finland	moose	current study		Sample16
A	B	OQ161110	<i>E. canadensis cluster</i>	G10	Finland	moose	current study		Sample17
A	B	OQ161111	<i>E. canadensis cluster</i>	G10	Finland	moose	current study		Sample18
A	B	OQ161112	<i>E. canadensis cluster</i>	G10	Finland	moose	current study		Sample19
A	B	OQ161113	<i>E. canadensis cluster</i>	G10	Finland	reindeer	current study		Sample20
A	B	OQ161114	<i>E. canadensis cluster</i>	G10	Finland	reindeer	current study		Sample21
A	B	OQ161115	<i>E. canadensis cluster</i>	G10	Finland	reindeer	current study		Sample22
A	B	OQ161116	<i>E. canadensis cluster</i>	G10	Finland	reindeer	current study		Sample23
A	B	OQ161117	<i>E. canadensis cluster</i>	G10	Finland	reindeer	current study		Sample24
A	B	OQ161118	<i>E. canadensis cluster</i>	G10	Russia (Arkhangelsk region)	moose	current study		Sample25
A	B	OQ161119	<i>E. canadensis cluster</i>	G10	Russia (Arkhangelsk region)	moose	current study		Sample26
A	B	OQ161120	<i>E. canadensis cluster</i>	G10	Russia (Arkhangelsk region)	moose	current study		Sample27
A	B	OQ161121	<i>E. canadensis cluster</i>	G10	Russia (Arkhangelsk region)	moose	current study		Sample28
A	B	OQ161122	<i>E. canadensis cluster</i>	G10	Sweden	reindeer	current study		Sample29

* - name and designation as according to Vuitton et al. 2020; DOI: <https://doi.org/10.1051/parasite/2020024>