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A CHECK LIST OF THE PARASITES  
OF THE ORDER PETROMYZONTIFORMES (LAMPREYS)

by

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The order Petromyzontiformes (Petromyzontia; Hyperoartii) contains a number of species which have undergone parasitological examinations in Asia, Europe, and North America. An attempt has been made here to list the species of lampreys studied, together with their parasite fauna. Included are seven hosts and fifty-nine parasites.

The check list is composed of two parts. Firstly, fish are listed by scientific name, followed by the name of all parasites recorded from that species. Secondly, the parasites themselves are listed, and these in turn are followed by the name of the host, or hosts which they parasitize.

The parasite classification follows:

Breed, Murray and Smith (1957), Coker (1923), Pavlovskii

(1962), Pennak (1953), Surber (1912), Yamaguti (1958-1963), Yamaguti (1963).

Synonymy has been reduced to a minimum but was retained in eight of the parasitic listings where it was deemed necessary to avoid confusion.

ORDER - Petromyzontiformes

FAMILY - Petromyzontidae

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HOST	PARASITE	CLASS
<i>Caspiomyzon wagneri</i> Kessler		<i>Pelecypoda</i>
	<i>Corynosoma strumosum</i>	<i>Acanthocephala</i>
<i>Lampetra fluviatilis</i> von Linné	<i>Bartonella pavlovskii</i>	<i>Microtato-</i> <i>biotes</i>
	<i>Bothriocephalus</i> sp. <i>Diphyllobothrium</i> sp. larva "B" <i>Eubothrium crassum</i> <i>Eubothrium</i> sp. <i>Proteocephalus percae</i> <i>Proteocephalus</i> sp. <i>Scolex pleuronectis</i> ( <i>Scolex polymorphus</i> ) <i>Triaenophorus nodulosus</i>	<i>Cestoda</i>
	<i>Brachyphallus crenatus</i> <i>Diplostomulum petro-</i> <i>myzontis-fluviatilis</i> ( <i>Diplostomulum petro-</i> <i>myzi-fluviatilis</i> ) <i>Diplostomum spathaceum</i> ( <i>Diplostomulum spatha-</i> <i>ceum</i> )	<i>Trematoda</i>
	<i>Distomum inerme</i> ( <i>Distomum semiflavum</i> ) <i>Hemiurus appendiculatus</i> <i>Sphaerostoma bramae</i>	

HOST	PARASITE	CLASS
	<i>Anisakis</i> sp. <i>Contracaecum aduncum</i> <i>Cucullanus stelmioides</i>	Nematoda
	<hr/>	
	<i>Corynosoma semerme</i>	Acanthocephala
	<i>Corynosoma strumosum</i> <i>Echinorhynchus salmonis</i> ( <i>Echinorhynchus coregoni</i> ) ( <i>Metechinorhynchus salmonis</i> )	
	Empty cysts	Miscellaneous
<i>Lampetra japonica</i> Martens	<i>Eubothrium crassum</i> <i>Nybelinia</i> sp. <i>Pseudophyllidea</i> sp. larva II <i>Scolex pleuronectis</i> ( <i>Scolex polymorphus</i> )	Cestoda
	<i>Brachyphallus crenatus</i> <i>Lecithaster gibbosus</i>	Trematoda
	<i>Anisakis</i> sp. <i>Contracaecum aduncum</i> <i>Terranova decipiens</i>	Nematoda
	<i>Corynosoma semerme</i>	Acanthocephala
<i>Lampetra lamottei</i> LeSueur	<i>Aeromonas liquifaciens</i>	Schizomycetes
	<i>Cucullanus</i> sp.	Nematoda

HOST	PARASITE	CLASS
<i>Lampetra mariae</i> Berg	<i>Bartonella pavlovskii</i>	Microtato- biotes
	Acanthocolpidae gen and sp.	Trematoda
	Apophallus sp. 1	
	<i>Diplostomulum petro- myzontis-fluviatilis</i> ( <i>Diplostomulum petro- myzi-fluviatilis</i> )	
	<i>Diplostomum spathaceum</i> ( <i>Diplostomulum spatha- ceum</i> )	
	<i>Metorchis</i> sp.	
	<i>Neodiplostomulum hughesi</i>	
	<i>Orientocreadium siluri</i> ( <i>Paratormopsolus siluri</i> )	
	<i>Tetracotyle</i> sp. IV	
	<i>Cucullanus stelmioides</i>	Nematoda
	<i>Gordius</i> sp.	
	<i>Lampetra planeri</i> Bloch	<i>Bartonella pavlovskii</i>
<i>Argulus foliaceus</i>		Crustacea
<i>Ligula intestinalis</i>		Cestoda
<i>Diplostomulum petro- myzontis-fluviatilis</i> ( <i>Diplostomulum petro- myzi-fluviatilis</i> )		
<i>Diplostomum spathaceum</i> ( <i>Diplostomulum spa- thaceum</i> )		
<i>Neodiplostomulum hughesi</i>		

HOST	PARASITE	CLASS
	<i>Orientocreadium siluri</i> ( <i>Paratormopsolus siluri</i> )	
	<i>Tetracotyle</i> sp. I	
	<i>Tetracotyle</i> sp. II	
	<i>Tetracotyle</i> sp. III	
	<i>Cucullanus stelmioides</i>	Nematoda
	<i>Cucullanus truttae</i> ( <i>Dachitis globosa</i> )	
	<i>Gordius</i> sp.	
<i>Petromyzon marinus</i> von Linné		
	<i>Bartonella pavlovskii</i>	Microtato- biotes
	<i>Pseudomonas fluorescens</i>	Schizomycetes
	Fungus	
	<i>Ichthyophthirius multi- filis</i>	Ciliata
	<i>Trichodina</i> sp.	
	<i>Saprolegnia parasitica</i>	Oomycetes
	<i>Ergasilus caeruleus</i>	Crustaces
	<i>Anodontoides ferus- sacianus</i>	Pelecypoda
	<i>Piscicola milneri</i>	Hirudinea
	<i>Abothrium</i> sp.	Cestoda
	<i>Proteocephalus exiguus</i>	
	<i>Proteocephalus laruei</i>	
	<i>Proteocephalus</i> sp.	
	<i>Triaenophorus crassus</i>	

HOST	PARASITE	CLASS
	<i>Diplostomulum</i> sp. <i>Diplostomum huronense</i> <i>Plagioporus lepomis</i>	Trematoda
	<i>Camallanus</i> sp. <i>Cucullanus stelmioides</i> <i>Cystidicola stigmatura</i>	Nematoda
	<hr/>	
	<i>Echinorhynchus leidy</i>	Acanthocephala
	<i>Echinorhynchus salmonis</i> ( <i>Echinorhynchus coregoni</i> ) ( <i>Metechinorhynchus salmonis</i> ) <i>Neoechinorhynchus cylindratum</i>	
	Spores Empty cysts	Miscellaneous
<i>Petromyzon</i> sp.	<i>Trypanorhyncha</i> sp. <i>Diplostomulum petromyzontis fluviatilis</i> ( <i>Diplostomulum petromyzi-fluviatilis</i> ) <i>Tetracotyle petromyzontis</i> ( <i>Neuronaia lampetrae</i> )	Cestoda Trematoda

MICROTATOBIOITES

PARASITE	HOST	REFERENCE
<i>Bartonella pavlovskii</i> Epshteyn (1939)	<i>Lampetra fluviatilis</i> <i>Lampetra mariae</i> <i>Lampetra planeri</i> <i>Petromyzon marinus</i>	17; 48; 69. 48; 68. 48; 68. 17; 48; 69.

SCHIZOMYCETES

PARASITE	HOST	REFERENCE
<i>Aeromonas liquifaciens</i> (Beijerinck) Kluyver and van Niel, 1936.	<i>Lampetra lamottei</i>	59; 61.
<i>Pseudomonas fluorescens</i> Migula, 1895.	<i>Petromyzon marinus</i>	59.
Fungus	<i>Petromyzon marinus</i>	59.

CILIATA

PARASITE	HOST	REFERENCE
<i>Ichthyophthirius multifiliis</i> Fouquet, 1876.	<i>Petromyzon marinus</i>	33.
<i>Trichodina</i> sp.	<i>Petromyzon marinus</i>	20; 69.

OOMYCETES

PARASITE	HOST	REFERENCE
<i>Saprolegnia parasitica</i> Coker, 1923.	<i>Petromyzon marinus</i>	33.

CRUSTACEA

PARASITE	HOST	REFERENCE
<i>Argulus foliaceus</i> Linné, 1758.	<i>Lampetra planeri</i>	19; 48.
<i>Ergasilus caeruleus</i> Wilson, 1911.	<i>Petromyzon marinus</i>	59; 60; 61.

PELECYPODA

PARASITE	HOST	REFERENCE
<i>Anodontooides ferus-sacianus</i> Lea, 1834.	<i>Petromyzon marinus</i>	59; 60; 61.
	<i>Caspiomyzon wagneri</i>	48; 65.

HIRUDINEA

PARASITE	HOST	REFERENCE
<i>Piscicola milneri</i> Verrill, 1847.	<i>Petromyzon marinus</i>	1.

CESTODA

PARASITE	HOST	REFERENCE
<i>Bothriocephalus</i> sp.	<i>Lampetra fluviatilis</i>	14; 25; 69.
<i>Diphyllobothrium</i> sp. larva "B"	<i>Lampetra fluviatilis</i>	25; 48.
<i>Abothrium</i> sp.*	<i>Petromyzon marinus</i>	1; 20; 69.
<i>Eubothrium crassum</i> Bloch, 1779.	<i>Lampetra fluviatilis</i>	14; 25; 48; 69.
	<i>Lampetra japonica</i>	48; 49; 69.
<i>Eubothrium</i> sp.	<i>Lampetra fluviatilis</i>	14; 47.
<i>Ligula intestinalis</i> Linnaeus, 1758.	<i>Lampetra planeri</i>	44; 50.
<i>Nybelinia</i> sp.	<i>Lampetra japonica</i>	48.
<i>Proteocephalus</i> <i>exiguus</i> LaRue, 1911.	<i>Petromyzon marinus</i>	20; 69.

\*Possibly *Eubothrium* sp. as *Abothrium gadi* is the only fully recognized species for the genus *Abothrium*.

PARASITE	HOST	REFERENCE
<i>Proteocephalus</i> <i>laruei</i> Faust, 1920.	<i>Petromyzon marinus</i>	2.
<i>Proteocephalus</i> <i>percae</i> Müeller, 1780.	<i>Lampetra fluviatilis</i>	14; 25; 40; 69.
<i>Proteocephalus</i> sp.	<i>Lampetra fluviatilis</i>	13; 14; 47; 48; 69.
	<i>Petromyzon marinus</i>	2; 59; 60; 61.
<i>Pseudophyllidea</i> sp. larva II	<i>Lampetra japonica</i>	48; 49; 69.
<i>Scolex pleuronectis</i> Müller, 1788.	<i>Lampetra fluviatilis</i>	26; 44.
( <i>Scolex polymorphus</i> Rudolphi, 1819).	<i>Lampetra japonica</i>	48; 49; 69.
<i>Triaenophorus crassus</i> Forel, 1868.	<i>Petromyzon marinus</i>	1; 2; 20; 33; 59; 60; 61; 69.
<i>Triaenophorus nodulo-</i> <i>sus</i> Pallas, 1760.	<i>Lampetra fluviatilis</i>	14; 25; 40; 48; 69.
<i>Trypanorhyncha</i> sp.	<i>Petromyzon</i> sp.	44.
	<i>Petromyzon marinus</i>	1; 33.

TREMATODA

PARASITE	HOST	REFERENCE
<i>Acanthocolpidae</i> gen. and sp.	<i>Lampetra mariae</i>	69.
<i>Apophallus</i> sp. 1	<i>Lampetra mariae</i>	69.
<i>Brachyphallus crenatus</i> Rudolphi, 1802.	<i>Lampetra fluviatilis</i>	14; 40.
	<i>Lampetra japonica</i>	48; 49; 69.
<i>Diplostomulum petromyzontis fluviatilis</i> Diesing, 1850.	<i>Lampetra fluviatilis</i>	11; 14; 39; 47; 48; 69.
	<i>Lampetra mariae</i>	69.
	<i>Lampetra planeri</i>	69.
( <i>Diplostomulum petromyzi-fluviatilis</i> )	<i>Lampetra fluviatilis</i>	40.
	<i>Petromyzon</i> sp.	23; 44.
<i>Diplostomulum</i> sp.	<i>Petromyzon marinus</i>	2.
<i>Diplostomum huronense</i> LaRue, 1927.	<i>Petromyzon marinus</i>	59; 60; 61.
<i>Diplostomum spathaceum</i> Rudolphi, 1819.	<i>Lampetra fluviatilis</i>	40.
	<i>Lampetra planeri</i>	40.
( <i>Diplostomulum spathaceum</i> Hughes, 1929).	<i>Lampetra fluviatilis</i>	13; 14; 47; 48; 69.
	<i>Lampetra mariae</i>	69.
	<i>Lampetra planeri</i>	69.

TREMATODA

PARASITE	HOST	REFERENCE
<i>Distomum inerme</i> Von Linstow, 1879.	<i>Lampetra fluviatilis</i>	3; 29; 32; 48; 69.
( <i>Distomum semi- flavum</i> Von Linstow, 1880).	<i>Lampetra fluviatilis</i>	3; 30; 32; 48; 69.
<i>Hemiurus appendi- culatus</i> Rudolphi, 1802.	<i>Lampetra fluviatilis</i>	9; 44; 69.
<i>Lecithaster gibbosus</i> Rudolphi, 1802.	<i>Lampetra japonica</i>	48; 49; 69.
<i>Metorchis</i> sp.	<i>Lampetra mariae</i>	69.
<i>Neodiplostomulum hughesi</i> Markevich, 1934.	<i>Lampetra mariae</i>	69.
	<i>Lampetra planeri</i>	69.
<i>Orientocreadium siluri</i> Bychovsky and Dubinina, 1954.		
( <i>Paratormopsolus siluri</i> )	<i>Lampetra mariae</i>	14; 48; 68; 69.
	<i>Lampetra planeri</i>	14; 48; 66; 68; 69.
<i>Plagioporus lepomis</i> Dobrovolny, 1939.	<i>Petromyzon marinus</i>	59; 60; 61.
<i>Sphaerostoma bramae</i> Müller, 1776.	<i>Lampetra fluviatilis</i>	40; 47; 48; 69.

TREMATODA

PARASITE	HOST	REFERENCE
<i>Tetracotyle petromyzontis</i> Brown, 1899.	<i>Petromyzon</i> sp.	5.
( <i>Neuronaia lampetrae</i> Gulliver, 1872).	<i>Petromyzon</i> sp.	21.
<i>Tetracotyle</i> sp. I	<i>Lampetra planeri</i>	69.
<i>Tetracotyle</i> sp. II	<i>Lampetra planeri</i>	69.
<i>Tetracotyle</i> sp. III	<i>Lampetra planeri</i>	69.
<i>Tetracotyle</i> sp. IV	<i>Lampetra mariae</i>	69.

NEMATODA

PARASITE	HOST	REFERENCE
<i>Anisakis</i> sp.	<i>Lampetra fluviatilis</i>	14.
	<i>Lampetra japonica</i>	48; 49; 69.
<i>Camallanus</i> sp.	<i>Petromyzon marinus</i>	33.
<i>Contracaecum aduncum</i> Rudolphi, 1802.	<i>Lampetra fluviatilis</i>	14.
	<i>Lampetra japonica</i>	48; 49; 69.
<i>Cucullanus stel- mioides</i> Vessichelli, 1910.	<i>Lampetra fluviatilis</i>	14; 40; 47; 48.
	<i>Lampetra mariae</i>	48; 67; 69.
	<i>Lampetra planeri</i>	31; 44; 48; 55; 64; 67; 68.
	<i>Petromyzon marinus</i>	59; 60.
<i>Cucullanus truttae</i> Fabricius, 1794.  ( <i>Dacnitis globosa</i> Zeder, 1800).	<i>Lampetra planeri</i>	48; 52.
	<i>Lampetra lamottei</i>	61.
<i>Cystidicola stig- matura</i> Leidy, 1886.	<i>Petromyzon marinus</i>	20; 69.
<i>Gordius</i> sp.	<i>Lampetra mariae</i>	48; 67; 69.
	<i>Lampetra planeri</i>	15; 48; 67; 69.
<i>Terranova decipiens</i> Krabbe, 1878.	<i>Lampetra japonica</i>	48; 49; 69.
	<i>Lampetra fluviatilis</i>	14; 47.
	<i>Petromyzon marinus</i>	1; 33.

ACANTHOCEPHALA

PARASITE	HOST	REFERENCE
<i>Corynosoma semerme</i> Forssell, 1904.	<i>Lampetra fluviatilis</i>	14; 25; 48; 69.
	<i>Lampetra japonica</i>	43; 44; 48; 49; 69.
<i>Corynosoma strumosum</i> Rudolphi, 1802.	<i>Caspiomyzon wagneri</i>	44; 48; 65; 69.
	<i>Lampetra fluviatilis</i>	14; 25; 44; 48; 69.
<i>Echinorhynchus leidyi</i> Van Cleave, 1924.	<i>Petromyzon marinus</i>	20; 33; 69.
<i>Echinorhynchus salmonis</i> Müller, 1784.	<i>Lampetra fluviatilis</i>	14; 25; 44; 48; 50; 69.
	<i>Petromyzon marinus</i>	59; 60; 61.
( <i>Echinorhynchus coregoni</i> Linkins-Nybelin, 1924)	<i>Petromyzon marinus</i>	1; 20; 33; 69.
( <i>Metechinorhynchus salmonis</i> Petrotschenko, 1956)	<i>Lampetra fluviatilis</i>	40.
	<i>Petromyzon marinus</i>	2.
<i>Neoechinorhynchus cylindratum</i> Van Cleave, 1913.	<i>Petromyzon marinus</i>	20; 69.

MISCELLANEOUS

PARASITE	HOST	REFERENCE
Spores	<i>Petromyzon marinus</i>	59.
Empty Cysts	<i>Petromyzon marinus</i>	59.
	<i>Lampetra fluviatilis</i>	48.

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