

A Checklist of Cestode Species from Asian Insectivora

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Abstract: A checklist of cestode species from Asian Insectivora (Soricidae and Talpidae) has been prepared from the available literature before 1998.

Keywords: Cestode species; Taxonomy; Insectivora; Asian checklist

Introduction

A perusal of the available literature has revealed that very little is known of cestode fauna of insectivores living in the Philippines, People's Republic of China, Mongolia, Socialist Republic of Vietnam, People's Republic of Bangladesh and Kingdom of Cambodia.

I have gathered references reported from various parts of Asia and produced a checklist of the cestode species from Asian Insectivora. Taxonomy used is that of original source. The scientific names of cestode species are listed as they have been described in the literature, no attempt at synonyms has been made. Experimental infections are not included.

Table 1. Cestode species from insectivores in Asia

Locality	Insectivorous host	Cestode species
Japan		
Hokkaido	<i>Sorex unguiculatus</i>	1) <i>Staphylocystis</i> (<i>Staphylocystis</i>) <i>toxometra</i> (Baer, 1932) Yamaguti, 1959 2) <i>Staphylocystis</i> (<i>Staphylocystis</i>) <i>furcata</i> (Stieda, 1862) Spassky, 1950 3) <i>Hymenolepis magnirostellata</i> Sawada et Kaneno, 1992 4) <i>Ditestolepis crassisaccata</i> Sawada et Asakawa, 1992 5) <i>Neoskrjabinolepis singularis</i> (Cholodkovsky, 1912) Spassky, 1954 6) <i>Coronacanthus parvihatatus</i> Sawada et Koyasu, 1990

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- 7) *Soricinia japonica* Sawada et Koyasu, 1991
 8) *Insectivorolepis macracetabulosa* Sawada et Koyasu, 1991
 9) *Skrjabinacanthus diploconatus* Spassky et Morozov, 1959
 10) *Lineolepis skrjabini* Spassky et Morozov, 1959
 11) *Pseudodiorchis prolifer* (Villet, 1890) Kisielewska, 1960
 12) *Choanotaenia baicalensis* (Eltyshev, 1975) Schmidt, 1986
- Sorex gracillimus* 13) *Neoskrjabinolepis schaldybini* Spassky, 1947
 5) *Neoskrjabinolepis singularis*
 6) *Coronacanthus parvihamatus*
 9) *Skrjabinacanthus diploconatus*
 11) *Pseudodiorchis prolifer*
 13) *Neoskrjabinolepis schaldybini*
 14) *Ditestolepis longicirrosa* Sawada et Harada, 1990
 15) *Ditestolepis ezoensis* Sawada et Koyasu, 1990
 16) *Skrjabinacanthus jacutensis* Spassky et Morozov, 1959
 17) *Ditestolepis cyclocephala* Sawada et Koyasu, 1991
- Sorex caecutiens saevus* 5) *Neoskrjabinolepis singularis*
 9) *Skrjabinacanthus diploconatus*
 13) *Neoskrjabinolepis schaldybini*
- Honshu *Sorex caecutiens* 18) *Sinuterilepis ezoensis* Sawada et Koyasu, 1995
 19) *Vampirolepis hakusanensis* Sawada, Harada et Koyasu, 1992
 20) *Ditestolepis grandiovarium* Sawada, Harada et Koyasu, 1992
 14) *Ditestolepis longicirrosa*
 15) *Ditestolepis ezoensis*
 5) *Neoskrjabinolepis singularis*
 6) *Coronacanthus parvihamatus*
 7) *Soricinia japonica*
 8) *Insectivorolepis macracetabulosa*
- Sorex hosonoi* 5) *Neoskrjabinolepis singularis*
Sorex sadonis 21) *Ditestolepis minuta* Sawada et Koyasu, 1991
 17) *Ditestolepis cyclocephala*
 5) *Neoskrjabinolepis singularis*
 6) *Coronacanthus parvihamatus*
- Crocidura dsinezumi* 22) *Vampirolepis notoensis* Sawada et Harada, 1986
 23) *Staphylocystis (Staphylocystis) toyamaensis* Sawada et Harada, 1990

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- 24) *Staphylocystis* (*Staphylocystis*) *dsinezumi* Sawada et Koyasu, 1990
- 25) *Staphylocystis* (*Staphylocystis*) *curiosihamata* Sawada et Koyasu, 1990
- 26) *Staphylocystis* (*Staphylocystis*) *naganoensis* Sawada et Koyasu, 1990
- 27) *Pseudhymenolepis japonica* Sawada et Harada, 1991
- Mogera kobeeae* 28) *Hymenolepis mogerae* Sawada et Koyasu, 1991
- Dymecodon pilirostris* 29) *Hymenolepis dymecodontis* Sawada et Harada, 1990
- Urotrichus talpoides* 29) *Hymenolepis dymecodontis*
- 30) *Amoebotaenia urotrichi* Sawada et Harada, 1990
- Kyushu *Crocidura horsfieldi* 31) *Vampirolepis amamiensis* Sawada et Harada, 1986
- Crocidula suaveolens* 32) *Vampirolepis tsushimaensis* Sawada, Uematsu et Sakai, 1993
- Okinawa *Crocidura horsfieldi* 31) *Vampirolepis amamiensis*
- Suncus murinus* 33) *Vampirolepis jakounezumi* Sawada et Hasegawa, 1992
- 34) *Vampirolepis okinawaensis* Sawada et Hasegawa, 1992
- 35) *Vampirolepis gracilistrobila* Sawada et Harada, 1989
- 36) *Staphylocystis* (*Staphylocystis*) *suncusensis* Olsen et Kuntz, 1978
- Korea**
- Crocidura lasiura* 37) *Pseudhymenolepis* sp. 1
- Taiwan**
- Soriculus fumidus* 38) *Vampirolepis soriculi* Sawada et Harada, 1996
- Crocidura hosletti* 36) *Staphylocystis* (*Staphylocystis*) *suncusensis*
- 39) *Vampirolepis alishanensis* Sawada et Koyasu, 1991
- Crocidura attenuata* 36) *Staphylocystis* (*Staphylocystis*) *suncusensis*
- 40) *Pseudhymenolepis* sp. 2
- 41) *Vampirolepis* sp. 1
- Suncus murinus* 42) *Vampirolepis sessilihamata* Sawada et Harada, 1989
- 43) *Vampirolepis gracilistrobila* Sawada et Harada, 1989
- 44) *Vampirolepis sunci* Sawada et Harada, 1989

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- 45) *Vamprolepis microscolex* Sawada et Koyasu, 1991
 2) *Staphylocystis (Staphylocystis) furcata*
 36) *Staphylocystis (Staphylocystis) suncusensis*
 46) *Staphylocystis (Staphylocystis) delicata* Sawada et Koyasu, 1991
- Anourosorex squamipes* 47) *Vamprolepis magnihamata* Sawada et Harada, 1989
 48) *Vamprolepis formosana* Sawada et Harada, 1989
 39) *Vamprolepis alishanensis*
 49) *Choanotaenia (Choanotaenia) tubirostellata* Sawada et Harada, 1989
 50) *Choanotaenia (Choanotaenia) multitesticularis* Sawada, Harada et Lin, 1996
 36) *Staphylocystis (Staphylocystis) suncusensis*
- India**
- Sorex caerulescens* 51) *Longirostrum humidii* Malhotra et Nanda, 1986
 52) *Staphylocystis (Staphylocystis) chattoraji* Malhotra et Capoor, 1984
- Crocidura caerulea* 53) *Vamprolepis bahli* (Singh, 1958) Schmidt, 1986
 54) *Soricinia macyi* (Locker et Rausch, 1952) Zarnowski, 1986
- Suncus murinus* 55) *Vamprolepis allahabadensis* Srivastava et Pandey, 1981
 56) *Vamprolepis jacobsoni* (Linstow, 1907) Schmidt, 1986
 57) *Vamprolepis molus* Srivastava et Capoor, 1979
 58) *Pseudhymenolepis lucknowensis* Gupta et Parman, 1988
 59) *Staphylocystis (Staphylocystis) indica* Nanda et Malhotra, 1990
 60) *Staphylocystis (Staphylocystis) magnisaccus* Sawada et Ohno, 1993
 61) *Staphylocystis (Staphylocystis) multihamata* Sawada et Ohno, 1993
 62) *Staphylocystis (Staphylocystis) kathmanduensis* Sawada, Koyasu et Shrestha, 1992
- Suncus murinus sindensis* 63) *Staphylocystis (Staphylocystis) sanchorensis* Name et Khichi, 1975
 64) *Staphylocystis (Staphylocystis) sindensis* Name, 1976
- Suncus striatus* *65) *Pseudhymenolepis guptai* Gupta et Singh, 1978
 *66) *Pseudhymenolepis suncusi* Gupta et Sinha, 1984

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Sri Lanka

- Suncus murinus montanus* 67) *Vampirolepis montana* Crusz et Sanmugasunderam, 1971
 68) *Hymenolepis sunci* Crusz et Sanmugasunderam, 1971
 69) *Pseudhymenolepis eisenbergi* Crusz et Sanmugasunderam, 1971
Solisorex pearsoni 70) *Vampirolepis solisoricis* Crusz et Sanmugasunderam, 1971

Pakistan

- Suncus murinus* 71) *Hymenolepis mujibi* Bilqees et Malik, 1974
 56) *Vampirolepis jacobsoni*

Afghanistan

- Suncus murinus* 71) *Hymenolepis mujibi*
 72) *Hymenolepis sunci* Vaucher et Tenora, 1971
 56) *Vampirolepis jacobsoni*

Nepal

- Soriculus caudatus* 73) *Lineolepis soriculi* Sawada et Harada, 1995
Soriculus nigrescens 74) *Lineolepis brevis* Sawada et Harada, 1995
 75) *Lineolepis serrata* Sawada et Harada, 1995
 76) *Ditestolepis macrostrobila* Sawada et Harada, 1995
 77) *Staphylocystis (Staphylocystis) kunisakii* Sawada et Harada, 1995
 78) *Vampirolepis nepalensis* Sawada et Harada, 1995
 79) *Vampirolepis magniovifera* Sawada et Harada, 1995
 6) *Coronacanthus parvihamatus*
Soriculus leucops 77) *Staphylocystis (Staphylocystis) kunisakii*
Suncus murinus 80) *Pseudhymenolepis nepalensis* Sawada et Koyasu, 1991
 62) *Staphylocystis (Staphylocystis) kathmanduensis*
 81) *Staphylocystis (Staphylocystis) trisuliensis* Sawada, Koyasu et Shrestha, 1993

Myanmar

- Suncus murinus* 82) *Staphylocystis (Staphylocystis) minutissima* (Meggitt, 1927) Yamaguti, 1959
 † 83) *Staphylocystis (Staphylocystis) solitaria* (Meggitt, 1927) Yamaguti, 1959
 2) *Staphylocystis (Staphylocystis) furcata*

Thailand

Suncus murinus

84) *Vampirolepis nana* (Siebold, 1852) Spassky, 1954

85) *Raillietina* (R.) *madagascariensis* (Davaine, 1869) Fuhrmann, 1924

Indonesia

Java Island

Suncus murinus

56) *Vampirolepis jacobsoni*

2) *Staphylocystis* (*Staphylocystis*) *furcata*

62) *Staphylocystis* (*Staphylocystis*) *kathmanduensis*

60) *Staphylocystis* (*Staphylocystis*) *magnisaccus*

61) *Staphylocystis* (*Staphylocystis*) *multihamata*

Kalimantan Island

Suncus murinus

86) *Pseudhymenolepis* sp. 3

2) *Staphylocystis* (*Staphylocystis*) *furcata*

62) *Staphylocystis* (*Staphylocystis*) *kathmanduensis*







60) *Staphylocystis* (*Staphylocystis*) *magnisaccus*

61) *Staphylocystis* (*Staphylocystis*) *multihamata*















* Rostellar hooks were not illustrated in the original source.

† No illustrations except rostellar hooks have been available to the author.















Table 2. Comparison of rostellar hooks of the species with armed rostellum

Cestode species	No.	Length	Shape†
1) * <i>Staphylocystis</i> (S.) <i>toxometra</i>	10-12	0.036-0.040	
2) <i>S.</i> (S.) <i>furcata</i>	26-30	0.025-0.028	
5) <i>Neoskrjabinolepis singularis</i>	10	0.035-0.039	
6) <i>Coronacanthus parviamatus</i>	120-130	0.004	
9) <i>Skrjabinacanthus diplocoronatus</i>	31-33	0.028-0.040	
10) <i>Lineolepis skrjabini</i>	8-10	0.032-0.035	















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11) <i>Pseudodiorchis prolifer</i>	about 120	0.005-0.006	
12) <i>Choanotaenia baicalensis</i>	20	0.063-0.077	
13) <i>N. schaldybini</i>	10	0.038-0.043	
16) <i>S. jacutensis</i>	13-14	0.037-0.053	
19) <i>Vampirolepis hakusanensis</i>	30-31	0.028	
22) <i>V. notoensis</i>	23	0.014	
23) <i>S. (S.) toyamaensis</i>	16	0.014	
24) <i>S. (S.) dsinezumi</i>	23	0.020	
25) <i>S. (S.) curiosihamata</i>	15	0.018	
26) <i>S. (S.) naganoensis</i>	14	0.018	
27) <i>Pseudhymenolepis japonica</i>	16-19	0.018	
30) <i>Amoebotaenia urotrichi</i>	10-11	0.014	
31) <i>V. amamiensis</i>	15	0.018	
32) <i>V. tsushimaensis</i>	14-15	0.018	













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33) <i>V. jakounezumi</i>	13-14	0.018	
34) <i>V. okinawaensis</i>	28	0.018	
35) <i>V. gracilistrobila</i>	33	0.014	
36) <i>S. (S.) suncusensis</i>	11-14	0.0162-0.0184	
38) <i>V. soriculi</i>	20	0.016	
39) <i>V. alishanensis</i>	35	0.028-0.030	
42) <i>V. sessilihamata</i>	10	0.018	
43) <i>V. gracilistrobila</i>	33	0.014	
44) <i>V. sunci</i>	16	0.014	
45) <i>V. microscolex</i>	30-32	0.011	
46) <i>S. (S.) delicata</i>	10	0.014	
47) <i>V. magnihamata</i>	16-18	0.063-0.070	
48) <i>V. formosana</i>	28-30	0.021	
49) <i>Choanotaenia (C.) tubirostellata</i>	18	0.060-0.063	






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50) <i>C. (C.) multitesticularis</i>	8-10	0.076-0.086	
51) <i>Longirostrum humidii</i>	7-8	0.012-0.014	
52) <i>S. (S.) chattraji</i>	29-35	0.0132-0.0173	
53) <i>V. bahli</i>	10	0.018	
55) <i>V. allahabadensis</i>	14	0.018	
56) <i>V. jacobsoni</i>	10	0.018-0.021	
57) <i>V. molus</i>	26-32	0.015-0.019	
58) <i>P. lucknowensis</i>	24-26	0.016-0.018	
59) <i>S. (S.) indica</i>	12-14	0.01-0.02	
60) <i>S. (S.) magnisaccus</i>	32-39	0.014-0.018	
61) <i>S. (S.) multihamata</i>	60-67	0.014	
62) <i>S. (S.) kathmanduensis</i>	13	0.018	
63) <i>S. (S.) sanchorensis</i>	30	0.015-0.017	
64) <i>S. (S.) sindensis</i>	20	0.022-0.023	

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65) <i>P. guptai</i>	14	0.010-0.015	indistinct
66) <i>P. suncusi</i>	30-50	0.010-0.020	indistinct
67) <i>V. montana</i>	24-28	0.0533-0.0650	
68) <i>H. sunci</i>	51-66	0.013-0.014	
69) <i>P. eisenbergi</i>	13	0.0697-0.0820	
70) <i>V. solisoricis</i>	49	0.0492	
71) <i>H. mujibi</i>	11	0.029	
73) <i>L. soriculi</i>	8	0.042-0.047	
74) <i>L. brevis</i>	8	0.035	
75) <i>L. serrata</i>	11	0.039	
77) <i>S. (S.) kunisakii</i>	10	0.028	
78) <i>V. nepalensis</i>	28-30	0.035	
79) <i>V. magniovifera</i>	45	0.035	
80) <i>P. nepalensis</i>	15	0.025	

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81) <i>S. (S.) trisuliensis</i>	21-22	0.018	
82) <i>S. (S.) minutissima</i>	12	0.016-0.018	
83) <i>S. (S.) solitaria</i>	16	0.016-0.017	
84) <i>V. nana</i>	20-26	0.016-0.020	
85) <i>R. (R.) madagascariensis</i>	80-82	0.020-0.024	

*Species number corresponds to that in Table 1.

† Scale of magnification of hooks not uniform.

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