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## Checklist of the Cestoda (Platyhelminthes) of Switzerland

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**Abstract:** A checklist, including all the cestode taxa recorded from Switzerland, their hosts, as well as deposited specimens available in scientific collections, is provided. The country has one of the richest European cestode faunas consisting of 251 species, almost all of them cyclophyllideans, that were identified in 190 vertebrate and 24 invertebrate host species. This is a very significant increase over the previous similar list that was established one century ago by Fuhrmann (1926). Since then, advances have been particularly important for parasites of mammals and birds although an important margin of progress remains for the latter as several bird families have been surprisingly little studied in the country. A large proportion of species described in Switzerland, including 22 that are represented by types, are available in public collections, most of them at the Muséum d'histoire naturelle de Genève. New reports were numerous in the second half of last century but have become scarce in recent decades. Today, tapeworms have been identified in no more than one third of Swiss vertebrate species and despite one century of progress, the true diversity of this fauna in the country remains to be determined.

**Keywords:** Biodiversity - Platyhelminthes - Fauna - Tapeworms.

### INTRODUCTION

Human-created borders obviously do not limit biological taxa, and it may look somewhat archaic to establish national checklists for the latter. However, despite their artificiality, such lists remain useful as practical tools in many domains, not least for conservation management. Furthermore, they allow aggregating hard to find and dispersed data, especially for poorly studied groups; or facilitate faunistic comparisons between regions. Although checklists are regularly published for better known groups, like vertebrates or some arthropods, this is generally not the case for less popular taxa, whatever their diversity or ubiquity. Parasitic helminths, and among them cestodes, certainly belong to this category, even though Switzerland was home to some of the most famous and prolific cestodologists of the 20th century, like Otto Fuhrmann (1871-1945) or Jean-Georges Baer (1902-1975). However, although these authors, and their students, contributed significantly to knowledge of the Swiss fauna, they never particularly focused on it. Today, the single exhaustive list of Cestoda found in Switzerland

remains that of Fuhrmann (1926) published almost a century ago.

Similar global checklists are also rare for most other countries, the most notable and recent exception in Europe being the “*Checklist of tapeworms of vertebrates in Finland*” (Haukisalmi, 2015). A few other ones in Belarus (Merkusheva & Bobkova, 1981), the Iberian Peninsula (Cordero del Campillo *et al.*, 1994), Slovakia (Macko *et al.*, 1993, 1994; Hanzelova *et al.*, 1995; Hanzelova & Ryšavý, 1996, 1999) and Poland (Pojmanska *et al.*, 2007) also exist. An ancient checklist for France (Joyeux & Baer, 1936) was ill named, as it also covered many taxa absent from this country. On-line checklists are available for Italy (<http://www.faunaitalia.it/checklist/index.html>) (Stoch, 2003), as well as for the United Kingdom (<https://www.nhm.ac.uk/research-curation/scientific-resources/taxonomy-systematics/host-parasites/database/index.jsp>) (Natural History Museum, London, 2007), although with limited updates or accompanying information.

A recent and comprehensive list for Western Europe is therefore lacking. The goal of this study is to provide a complete summary of the known fauna of cestodes in

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Switzerland. This list includes the names of the parasites, their known hosts, a simplified distribution in the country, a selective bibliography as well as a list of the known specimens kept in scientific institutions.

It should be emphasized that such a compilation is not a taxonomic work. As far as possible, historic names of parasites are listed under their presently accepted synonymy and they are placed in the most recent higher systematics of the group (Caira & Jensen, 2017), however no nomenclatural act is made here. This checklist aims at being a practical reference and tool for researchers and other users of biodiversity information.

## HISTORICAL CONTEXT

The earliest report of an identifiable parasitic worm in Switzerland seems to be that of *Diphyllobothrium latum* by Dunus (1592). It was followed by a few publications in the 17th century on parasites of humans. Later reports became more common but remained mostly limited to common parasites of domesticated animals until the mid-19th century when a more diverse and steady flux of publications started. A rather large spectrum of authors has contributed to the knowledge of the Swiss fauna, but only a few have built a consistent body of work. The most important of them being Friedrich Zschokke (1860-1936) in Basel, who published essentially on parasites of fish; Bruno Galli-Valerio (1867-1943) in Lausanne, veterinarian and physician, who probably examined the largest diversity of Swiss vertebrates through numerous publications (see Gaschen, 1950); Otto Fuhrmann (1871-1945) in Neuchâtel, one of the giants of cestodology, who worked on most tapeworm groups and contributed significantly to the knowledge of Swiss Cyclophyllidea; Bernd Hörning (1931-2012) in Bern, a veterinarian with interest in many wild animals (see in particular: Hörning, 1963); and Claude Vaucher (1942-) in Geneva, who decisively contributed to the knowledge of the helminthofauna of micromammals.

Besides parasites of domestic animals (and humans), the focus of cestodes biodiversity research in Switzerland long concentrated on parasites of fish from the country's major lakes, resulting in plethora, and often repetitive, observations, especially at the turn of the 20th century. These are particularly problematic when considering the extremely complex fish diversity in Alpine lakes (see below). Works by K. Wolffhügel (1869-1951) or Fuhrmann then progressively expanded our knowledge of the bird fauna, but a new focus on wild mammals only appeared in the 1960s. However, the latter two classes of vertebrates remain relatively poorly known, with significant gaps for example in passerines, or in chiropterans. As for amphibians and reptiles, only a very few isolated publications exist. Reports from larval forms in invertebrates are also limited and mostly ancient, as research on life cycles progressively became

unfashionable. The last significant reports in this field in Switzerland are from the late 1980s (Szelenbaum-Cielecka *et al.*, 1988).

The last two new cestode species descriptions from Swiss vertebrates, one in very common Song Thrushes and one in Great crested Grebes, are respectively over 30 and 20 years old (Gigon & Beuret, 1991; Vasileva *et al.*, 2000).

## MATERIAL AND METHODS

### Sources:

- 1) Museum data. Muséum d'histoire naturelle de Genève (MHNG) holds one of the major collections of cestodes worldwide (>22'000 lots), including most historic collections of Swiss cestodologists. Its catalogue provided the backbone of the present list. Additional data were requested from other Swiss Museums that maintain scientific collections as well as from major foreign Museums likely keeping Swiss specimens.
- 2) Other institutions data. Some veterinary or para-medical institutions in Switzerland were asked for archives or registers.
- 3) Bibliography. Searches were made with appropriate taxonomical and geographical filters in Web of Science's Zoological Record (© Clarivate).
- 4) Several unpublished student works from parasitology departments in Swiss institutes.

### Conditions for listing:

For a species to be included in the checklist, at least one of two nonexclusive conditions had to be met: The taxon had to be published with an explicit mention of its Swiss origin and/or specimens labeled as of Swiss origin had to be registered in collections in an academic institution. For the sake of consistency, and contrary to Fuhrmann (1926), observations from bordering foreign localities (e.g., "Salève" or "Black Forest") are not included here, leading to the exclusion of a few taxa that were listed in Fuhrmann's catalogue.

### Data provided (Table 1, Annex 1):

**Cestodes specific identification (generic in a few cases):** Except in rare instances, identifications have not been checked. Thus, the original publication/label name is reported, either as the valid or synonym name of the taxon. A synonym list is provided but does not aim at comprehensiveness: only names that have been used when specifically referring to specimens in Switzerland are mentioned.

**Hosts:** All hosts, both final and intermediate, belonging to the Swiss fauna are reported.

For vertebrates, hosts are listed under their present taxonomic status according to Fishbase (Froese & Pauly, 2021), Amphibian Species of the World (Frost,

2021), The Reptile Database (Uetz & Etzold, 1996), Avibase (Lepage, 2018), and Aulagnier *et al.* (2008) respectively for fish, amphibians, reptiles, birds and mammals (all online references accessed in 2021). Ancient host names have been updated in accordance. Parasites of captive hosts not belonging to the Swiss fauna are not listed.

The Swiss vertebrate fauna is well known, and most names are unambiguous. A significant exception to this statement concerns the fish, and especially the whitefishes (*Coregonus* spp., Salmonidae). Over the years, a very large number of names, both scientific and vernacular, have been used for these fish, especially in Swiss lakes. This is due to a complex history of speciation, colonization, hybridization, human transfers, and local extinctions. Revisions and descriptions of new taxa have been numerous (e.g., Selz *et al.*, 2020). Up to 35 species may presently be living in Swiss lakes, but revisions keep diverging both in the number and names of these taxa. Despite several attempts to clarify their systematic status (e.g., Steinmann, 1950; Kottelat & Freyhof, 2007) no taxonomical consensus presently exists. Even the species concept best adapted to *Coregonus* taxa is not clear as so called “speciation reversals” seem to be the norm under changing ecological conditions (Vonlanthen *et al.*, 2012). The problem is further enhanced when trying to match often partial or imprecise historical observations to present day nomenclature, a close to impossible task. Hence, I chose to retain the limited number of *Coregonus* species names that are recognized as valid in Fishbase (Froese & Pauly, 2021) even though this can lead to some inconsistencies. For example, in Lake Geneva, historical species are now considered extinct (Vonlanthen *et al.*, 2012), but I nevertheless use their names, as in the original publications, as no consensus exists on other ones. It is most likely that each significant water body in the country hosts its own fish population/parasite population fauna (with possible speciation for either or both in some cases), but no convenient nomenclatural system, neither for hosts nor for parasites, has yet been accepted to adequately represent this situation.

In addition, some rare ambiguities may occur for reports from domestic mammals that have a wild conspecific in the country, in particular for cats, with both *Felis s. silvestris* and *F. s. catus* living in Switzerland. Unless specified otherwise, reports are assumed to be from the domesticated form.

**Developmental stage:** Hosts of larval forms are mentioned as such. Note that in a few cases both adult and larval worms can be found in the same host.

**Localities:** Detailed localities are not reported (and, most often, not available); only cantons and large water bodies are mentioned when such information exists. In some cases, especially for collection specimens, only the mention “Switzerland” is available, resulting in this field being kept empty. Cantons and water bodies

mentioned might in some cases refer to the same observation from different sources.

Standard Swiss cantons abbreviations (<https://www.iso.org/obp/ui/#iso:code:3166:CH>) are used, except for BA (Basel) being used as a collective for BL and BS (Basel state and Basel city). The main water bodies are abbreviated as follows: A: Lake Maggiore; B: Lake Biel/Bienne; L: Lake Geneva/Léman; M: Lake Morat; N: Lake Neuchâtel; O: Lake Constance/Bodensee; T: Lake Thun; U: Lake Zug; V: Lake Lucerne/Vierwaldstättersee; Z: Lake Zürich. In a few cases CH is used for a documented countrywide distribution.

**Collection dates:** Only unambiguously reported collection years (which can significantly differ from publication dates) are mentioned. In most cases, especially for more ancient records, this information is lacking.

**References:** Bibliographic references are not listed exhaustively. A subjective selection of the most relevant publications citing the taxon is mentioned. For many specimens in collections, no associated publication is known.

**Specimens:** All databased specimens I am aware of are listed here with their accession number, and type status where appropriate. There are, however, a few unregistered samples from the large common species (*Taenia*, *Diphyllobothrium*, *Ligula*, ...) on display, or in the collections, of many smaller institutions. Museum acronyms: IPCAS: Institute of Parasitology, Czech Academy of Sciences; MHNf: Musée d'histoire naturelle, Fribourg; MHNG-PLAT: Muséum d'histoire naturelle de Genève, Platyhelminthes Collections; MUW: Department of General Biology and Parasitology, Medical University of Warsaw; GBIFCH: Musée de Zoologie, Lausanne, Invertebrates collections (=MZL-Invert); NMB-CEST: Naturhistorisches Museum, Basel, Cestodes collections; NHM: Natural History Museum, London; NSW: Naturmuseum Winterthur; USNM: National Museum of Natural History, Smithsonian Institution, Washington, DC; ZMZ: Zoologisches Museum Zürich.

## RESULTS

Mentions of at least 251 cestode species [in 125 genera and 21 families] forming 689 host/parasites pairs could be traced in Switzerland (including 5 *species inquirendae*) (Tables 1, 3). This is, respectively, a 99 and 132% increase on Fuhrmann's (1926) list. The main cestode order present in Switzerland is, by far, the Cyclophyllidea (218 spp. or 87% from total) with Hymenolepididae (111 spp.) followed by Dilepididae (36 spp.) as the most represented families. Altogether 214 species of hosts, 24 invertebrates and 190 vertebrates, have been recorded harboring cestode parasites. The cestode fauna of birds



is the most diversified (Table 2). Eight species are known only from their metacestodes.

Specimens from 208 (84%) of the species known from Switzerland are preserved in academic institutions, including 6 holotypes, 1 lectotype, 14 syntypes, 15 paratypes and 2 “types” specimens/lots representing 22 cestode species. These are distributed in 1250 lots, over 93% of them kept in the Muséum d’histoire naturelle de Genève (Annex 1). About 82% of the specimens with associated collection data were gathered in the second half of the last century. Parasites were recorded from all over Switzerland, although with a marked bias toward the Southern Alpine and Western parts of the country (Table 1).

## REMARKS

### a) Numbered remarks in Table 1:

- [1] Locality uncertain and host probably *Marmota* sp. (Global Cestode Database, Caira *et al.*, 2023)
- [2] Possibly imported from Eastern Europe.
- [3] This material is wrongly reported as *D. columbina* instead of *D. columbae* in the USNM database.
- [4] As *Taenia blanchardi* in Fuhrmann (1926).
- [5] Possibly also Galli-Valerio 1929 in VD (Gaschen, 1950).
- [6] One record (MHNG-PLAT-55742) of this species is reported from *Aythya marila* (Anatidae), a probable mislabeling.
- [7] Observation in a zoological garden, but the host is present in Switzerland.
- [8] Dubious as only *H. hibernia* Montgomery, Montgomery & Dunn seems to parasitize *Apodemus* (Nkouawa *et al.*, 2016)
- [9] Marked “*H. phasianina*”.
- [10] These records are dubious and likely due to mislabeling as these species are parasites of shrews (V. Haukisalmi, pers. communication).
- [11] One slide (MHNG-PLAT-40931) is marked with *Mergus serrator* as host, but the specimens are misidentified.
- [12] Original report mentions *Anser arvensis*, interpreted as *A. fabalis*.
- [13] Published information (Vaucher & Hunkeler, 1967); however, the single matching slide in collections (MHNG-PLAT-18532) indicates *R. straminea*.
- [14] Dubious. Vaucher (1971) considers the taxon as a specific parasite of *Crocidura*.
- [15] Possibly also intermediate host (Eckert & Deplazes, 2004).
- [16] Both in wild and domestic cats (Gaschen, 1950).
- [17] Uncertain. Reported by Fuhrmann (1926) from an observation of Galli-Valerio (1916).
- [18] According to Hörning (1963), only imported hares were positive.
- [19] Domestic.
- [20] Host inferred.
- [21] These records are suspicious as rodents are normal intermediate hosts of *V. mustelae*.
- [22] *Diphyllobothrium* sp. interpreted as *D. latum*.
- [23] According to Wicht (2008), *D. latum* does not develop in coregonids and probably also not in salmonids. Reports in these hosts may concern *D. dendriticum* (or possibly *D. ditremus*).
- [24] Local contamination but imported intermediate host.
- [25] *Proteocephalus* host list. Multiple confusions due to the close morphological similarity between *P. longicollis* with *P. exiguus*, *P. fallax*, *P. alosa* (now synonymized), *P. fillicollis* and *P. percae* have been the norm during most of the 20th century. This resulted in the mention of these worms in a variety of hosts, but many of these are most certainly misidentifications or accidental infections.
- [26] *P. fillicollis* is a parasite of *Gasterosteus aculeatus* and *Coregonus fera* is probably a postcyclic host (i.e., an additional host becoming infected with an adult worm through predation).
- [27] *P. longicollis* is a parasite of Salmonidae, but its presence in *Alosa agone* is possible. Reports in other fishes are likely misidentifications. Report in *Natrix* is certainly accidental/postcyclic. *M. leuckarti* has been found to be an unsuitable experimental host (T. Scholz, pers. communication).
- [28] A recent molecular analysis (Brabec *et al.*, 2023) suggested, however, that *P. fallax* may be a valid species parasite in *Coregonus* sp. while *P. longicollis* would be restricted to *Salmo* spp. hosts.
- [29] *P. percae* is a parasite of *Perca fluviatilis* and *Esox lucius* (postcyclic). *Proteocephalus ocellatus* (Rudolphi, 1802) was not recognized by Fuhrmann (1926) and is considered a synonym of *P. percae* (Muller, 1780) by Scholz & Hanzelova (1999). The numerous mentions of “*P. ocellatus*” in fish of other families, mostly in old records (e.g., Zschokke, 1884; Nufer, 1905) are most likely accidental or misidentifications.
- [30] *P. torulosus* is a parasite of Cypriniforms and records in other fishes should be considered accidental or misidentifications.

### b) Other remarks

- Two taxa reported by Fuhrmann (1899), *Acoleus vaginatus* (Acoleidae) in *Himantopus himantopus* and *Gyrocoelia perversus* (= *perversa*) (Dioicocestidae) in *Limosa lapponica*

are not considered herein. This material was given for determination to Fuhrmann by the MHNG, but I could find no indication that it originated from Geneva (or Switzerland). As no further reports of these taxa have been published, their presence in the country remains uncertain.

- Fuhrmann (1926) similarly reports the presence of *Diplophallus polymorphus* in *Recurvirostra avosetta* in Basel. A possible match for this material could be MHNG-PLAT-55673 that originates from the University of Neuchâtel collection, although no locality is mentioned on the label. Furthermore, the specimens, originally reported by Wolffhügel (1900), come from a “Zoologischer Garten von der Nordsee”. In consequence this taxon has most likely not been found in Switzerland and I haven’t considered it in the table.
- An occurrence of *Grillotia erinaceus* (van Beneden, 1858) is mentioned in *Lota lota* in the early literature (e.g., Zschokke, 1903; Fuhrmann, 1926). Both the freshwater host and the locality (Lake Geneva) of this single record are highly improbable for a trypanorhynch cestode. No material is known. I have removed this host-parasite occurrence from the list.
- A type of *Proteocephalus abcisus* [= *Choanoscolex abcisus* (Riggenbach, 1895) La Rue, 1911] is registered from Switzerland in the USNM (#1349984). Origins of this material are unclear, but the species is from the Neotropics and does not belong to the Swiss fauna.
- Some data of Vaucher (1971) are difficult to interpret as a detailed host-parasite list by locality is not given. Geographical locations were ascertained on labels linked to specimens when available. In a few cases I considered that the parasite was present in Switzerland in each of its reported hosts whose distribution encompassed the country.

## DISCUSSION

### Sources

It should be noted that an important part of the data collected in this work comes from natural history collections material, highlighting the crucial importance of these institutions for our understanding of the biodiversity through time. Given their highly specialized nature, only a few museums maintain scientific collections of tapeworms and therefore I assume that a very high proportion of the existing information could be accessed. A similar level of confidence could also be reached for published information through the rich bibliographic database of the MHNG library and bibliographic

software. A few host/parasite reports were nevertheless difficult to track, especially when published in very local veterinary journals and a few have certainly been missed. Globally, though, I am confident that the information gathered in Table 1 is comprehensive. In addition to these traditional sources, a single occurrence of an unusual and quite unexpected host-parasite association was revealed through DNA sequencing (*Taenia martis* in *H. sapiens*, see Table 1). This is not surprising as only few sequences of cestodes of Swiss origin, mostly from Taeniidae and Proteocephalidae, are available in Genbank.

### Available material

It is remarkable that a very high proportion (84%) of the species known from Switzerland are represented by at least one sample in academic institutions (Annex 1). This is the direct consequence of the intense activity of researchers at the University of Neuchâtel during most of the last century. Their collections (as well as samples entrusted to them) were ultimately kept at the museum of natural history of this city, then transferred to the MHNG, which became a major repository for helminthological collections. Interestingly, only 22 species from this large pool are represented by types. These types are mostly from parasites of micromammals and have almost all been published either by Baer and collaborators in the 30s or by recent authors (e.g., Makarikov & Kontrimavichus, 2011). No parasites from birds were described in the country since Vasileva *et al.* (2000). Some material may have been registered without mention of their type status and it is possible, although unlikely, that other taxa from Swiss origin have been described without clear reference in foreign publications with their types conserved in collections not surveyed herein. Nevertheless, potential candidates for Swiss endemics should be looked for within those 22 species, especially amongst the micromammal parasites.

### Host coverage

In comparison with Fuhrmann (1926) a significantly higher proportion of the Swiss fauna is currently known to host cestodes. The increase is particularly important for mammals (+130%) and to some extent for birds (+73%), while it is minor for other groups of vertebrates. Despite these figures, it should be noted that cestodes remain known from less than one third of the potential Swiss vertebrate hosts (see Table 2). Metacestodes have been found in 40 invertebrate taxa, an increase from 24 in Fuhrmann (1926), but still an extremely low number that is likely due to the paucity of recent life-cycles studies. *Actinopterygii*: There is a long tradition of fish parasitological studies in Switzerland and thus it is logical that the number of host species has only marginally increased since Fuhrmann (from 31 to 36). The tapeworm fauna from most common fishes is generally well known, although the problem of *Proteocephalus* spp. in whitefish remains unresolved

(see above) and will necessitate detailed molecular studies to untangle. Nevertheless, despite the abundant literature and over a century of studies, the helminthes of the smaller or less common species remain poorly explored as tapeworms have been found in only 36% of the fish present in Switzerland (Table 2). An additional difficulty with fish is that introduced or invasive taxa are a problem in some waterbodies. A few of them have acclimated together with their parasite fauna, like the catfish *Ameiurus melas* (Rafinesque, 1820) and its proteocephalid *Corallobothrium parafimbriatum* Befus & Freeman, 1973.

*Amphibia/Reptilia*: Tapeworms are poorly diversified in herptiles, and the Swiss amphibian and reptile fauna is limited. Since Fuhrmann (1926) no new amphibian host has been found, but 2 snake and 1 lizard species have been discovered with cestodes. Tapeworms are probably present in a few more reptiles, but parasitological investigations of these hosts are particularly scarce.

*Aves*: With cestodes described in a mere 20% of the 431 bird species recorded in Switzerland, this group of hosts is proportionally the most understudied, and consequently the largest reservoir of potential new species of parasites for the country's fauna. A large-scale study in many different countries worldwide showed that at least 40% of examined bird species hosted cestodes (Mariaux *et al.*, 2017). In Switzerland, gaps are numerous as tapeworms have been found in only 35 out of 82 families of birds. Among the many families with no or very few recorded cestodes are small passerines [e.g., Acrocephalidae 0 species with cestodes out of 11 present, Hirundinidae (0/5), Phylloscopidae (1/11), Motacillidae (0/13) or Muscicapidae (2/23)]; however, some larger and very common birds, e.g., in Ardeidae (3/9) or Charadriidae (1/11) are also surprisingly understudied. It is for example highly unexpected that no tapeworm has been identified from the ubiquitous *Ardea cinerea* Linnaeus, 1758 in the country. Any basic parasitological survey of these often common and unthreatened birds would quickly add many species and dozens of host/parasites records to this checklist.

*Mammalia*: Most larger mammals, especially domestic ones, have been regularly studied and their parasitofauna can be considered as known. Starting in the 1960s regular surveys of micromammals have been undertaken and these hosts are now globally well covered too, resulting in cestodes described in 56% of the Swiss mammal fauna. Major gaps remain in Chiroptera with cestodes found in only 4 out of 26 species in the country.

### Taxonomic problems

Confidence in cestode identifications reported herein may vary greatly among groups and depends obviously in part on whether recent revisions were made, or failing this, on the quality of initial determination. For many of the cyclophyllidean taxa, no recent taxonomic reassessment was performed, although a

number of subgroups have been reviewed (at least in part) in the last two decades including several genera of Hymenolepididae (e.g., Vasileva *et al.*, 1999, 2002; Makarikov & Georgiev, 2020) or of Dilepididae and Paruterinidae (e.g., Georgiev *et al.*, 2004; Komisarovas *et al.*, 2007; Dimitrova *et al.*, 2017). Conversely, Bothriocephallidea and Oncoprotocephalidea have been more extensively reviewed e.g., by Scholz *et al.* (2007) or Kuchta *et al.* (2008). It remains that some of the older identifications may need confirmation. Part of the ancient material deposited in museums is, however, now over 100 years old and starting to deteriorate, making their study difficult. The development of molecular tools will certainly also bring new information on the composition and diversity of some taxonomically difficult groups, as recently exemplified by Brabec *et al.* (2023) but their use for identifying new taxa remain elusive for the time being as a comparative database is lacking.

### Comparison with other European faunas

With 251 tapeworm species, the Swiss fauna is proportionally richer than that of other European countries, some of them much larger and with a marine fauna, like Finland (170 spp.), Iberian Peninsula (257 spp.), Slovakia (225 spp.), Poland (279 spp.) (Haukisalmi, 2015) or Italy (323 spp.) (Stoch, 2003). This observation stands even when considering only vertebrate hosts, as some of the above-mentioned reports did not consider invertebrates and metacestodes. For non-landlocked countries, the marine component of the specific diversity is obviously significant (e.g., Cyclophyllidea only count for 63% of the Italian specific diversity), but even lacking it, the Swiss fauna is remarkably diverse (61 spp./10<sup>7</sup>000 sq. km in Switzerland vs. 10.7 in Italy or 8.6 in Poland). By this metrics, Slovakia has the closest diversity (45.9) to Switzerland. Both countries share a landlocked situation at similar latitude, a mountainous landscape, as well as a strong helminthological tradition and therefore a higher number of species examined than in other countries. This last factor is likely the most significant, as also noted by Haukisalmi (2015).

More detailed comparisons of parasites faunas are hazardous as each country has a typical host diversity. However, Haukisalmi (2015, table 1, P6) provided a comparison of unique cestode species numbers per order of birds in various European countries to which we can compare figures for Switzerland. The latter are very similar to those in almost all countries considered, with the highest number of cestodes in Anseriformes, Passeriformes, Gruiformes, Galliformes and Podicipediformes.

### CONCLUSION

Despite lacking a marine fauna, Switzerland hosts a very rich cestode diversity that has been quite extensively studied, especially in the first half of the 20th century.



Since the seminal synthesis of Fuhrmann (1926), our knowledge of tapeworms' diversity in the country expanded significantly, most notably in mammals.

This positive trend should, however, be put in perspective, as most of this progress was due to a very limited and quickly waning number of scientists. Presently, not only reports of new taxa are excessively rare and have all but stopped, but regular reports of known species in the wild fauna also became scarce. Among the factors leading to this situation, the vanishing training of taxonomists in this (and many other) group is certainly crucial. Furthermore, the taxonomy of animals like cestodes cannot rely on a population of amateur scientists to complement institutional research and the implementation of alternative (molecular?) systems of identification remain hypothetical at best given the poor comparative database available yet. This is worrying in a context of the threat to global biodiversity, and unfortunate because local taxonomic research would not require heavy investment. As demonstrated many times, including in Switzerland (e.g., Gigon & Beuret, 1991), a parasitological assessment of even the most common hosts would easily enrich the Swiss fauna and discover new indigenous taxa. This type of survey is, however, unlikely to flourish in the future as administrative agreements for collecting hosts, especially birds and some mammals, become increasingly arduous to obtain (Mariaux, 2021). As a result, today, and despite the number of prominent cestodologists who worked in Switzerland, less than one third of vertebrates in the country are known to harbor cestodes. The true extent of this parasitic fauna hence remains to be described.

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#### BIBLIOGRAPHY

- Aellen V. 1949. Les chauves-souris du Jura neuchâtelois et leurs migrations. *Bulletin de la Société neuchâteloise des Sciences naturelles* 72: 23-90.
- André E. 1912. Recherches parasitologiques sur les Amphibiens de la Suisse. *Revue suisse de Zoologie* 10: 471-485.
- André E. 1917. Contribution à l'étude de la faune helminthologique de la Suisse. *Revue suisse de Zoologie* 25: 169-177. doi.org/10.5962/bhl.part.75232
- Aulagnier S., Haffner P., Mitchell-Jones A.J., Moutou F., Zima J. 2008. Guide des mammifères d'Europe, d'Afrique du Nord et du Moyen-Orient. *Delachaux et Niestlé, Paris*, 271 pp.
- Baer J.G. 1925a. Une nouvelle phase dans le cycle évolutif de *Diphyllobothrium latum*. *Revue suisse de Zoologie* 31: 555-561.
- Baer J.G. 1925b. Cestodes de Mammifères. *Bulletin de la Société neuchâteloise des Sciences naturelles* 50: 77-81.
- Baer J.G. 1928. Contribution à la faune helminthologique de la Suisse. *Revue suisse de Zoologie* 35: 27-41. doi.org/10.5962/bhl.part.117617
- Baer J.G. 1931. Helminthes nouveaux parasites de la musaraigne d'eau *Neomys fodiens* Pall. (Note préliminaire). *Actes de la Société helvétique des Sciences naturelles* 112: 338-340.
- Baer J.G. 1932. Contribution à la faune helminthologique de Suisse. Deuxième partie. *Revue suisse de Zoologie* 39: 1-58.
- Baer J.G., Joyeux C. 1943. Les larves cysticercoïdes de quelques ténias de la musaraigne d'eau *Neomys fodiens* (Schreb.) (Note préliminaire). *Schweizerische Zeitschrift für allgemeine Pathologie und Bakteriologie* 6: 395-399.
- Baer J.G., Tenora F. 1970. Some species of *Hymenolepis* (Cestodea) from rodents and from primates. *Acta Scientiarum Naturalium Academiae Scientiarum Bohemoslovaca-Brno* 4: 1-32.
- Beuret J. 1988. Contribution à la connaissance des helminthes d'oiseaux dans le nord-ouest de la Suisse. *MSc Thesis, University of Neuchâtel*, 166 pp.
- Blanc H. 1887. Notice sur une mortalité exceptionnelle des brochets du Lac Léman en 1887. *Bulletin de la Société vaudoise des Sciences naturelles* 23: 33-37.
- Bouvier G. 1947. Observations sur les maladies du gibier en 1946. *Schweizer Archiv für Tierheilkunde* 89: 240-254.
- Bouvier G. 1963. Observations sur les maladies du gibier et des animaux sauvages faites en 1961 et 1962. *Schweizer Archiv für Tierheilkunde* 105: 337-345.
- Bouvier G., Hörning B. 1963. Parasitologische Untersuchungen am Steinwild der Schweiz, unter besonderer Berücksichtigung der Kolonien am Mont Pleureur und am Piz Albris. *Revue suisse de Zoologie* 70: 611-676. doi.org/10.5962/bhl.part.75080
- Bouvier G., Burgisser H., Schweizer R. 1951. Observations sur les maladies du gibier et des poissons en 1949 et 1950. *Schweizer Archiv für Tierheilkunde* 93: 275-281.
- Bouvier G., Burgisser H., Schneider P.A. 1953. Observations



- sur les maladies du gibier, des oiseaux et des poissons en 1952. *Schweizer Archiv für Tierheilkunde* 95: 626-630.
- Bouvier G., Burgisser H., Schneider P.A. 1957. Observations sur les maladies du gibier, des oiseaux et des poissons faites en 1955 et 1956. *Schweizer Archiv für Tierheilkunde* 99: 461-477.
- Bouvier G., Burgisser H., Schneider P.A. 1958. Les maladies des ruminants sauvages de la Suisse. *Service Vétérinaire Cantonal et Institut Galli-Valerio, Lausanne*: 5-132.
- Bouvier G., Hörning B., Matthey G. 1963. La Diphyllobothriose (Bothriocéphalose) en Suisse, plus spécialement en Suisse romande. *Bulletin de l'Académie suisse des Sciences médicales* 19: 364-374.
- Brabec J., Rochat E.C., Knudsen R., Scholz T., Blasco-Costa I. 2023. Mining various genomic resources to resolve old alpha-taxonomy questions: A test of the species hypothesis of the *Proteocephalus longicollis* species complex (Cestoda: Platyhelminthes) from salmonid fishes. *International Journal for Parasitology* 53: 197-205. doi.org/10.1016/j.ijpara.2022.12.005
- Brossard M., Andreutti C., Siegenthaler M. 2007. Infection of red foxes with *Echinococcus multilocularis* in Western Switzerland. *Journal of Helminthology* 81(04): 369-376. doi.org/10.1017/S0022149X07868775
- Burlet P., Deplazes P., Hegglin D. 2011. Age, season and spatio-temporal factors affecting the prevalence of *Echinococcus multilocularis* and *Taenia taeniaeformis* in *Arvicola terrestris*. *Parasites and Vectors* 4: 6. doi.org/10.1186/1756-3305-4-6
- Caira J.N., Jensen K. 2017. Planetary Biodiversity Inventory (2008-2017): Tapeworms from the vertebrate bowels of the earth. Special Publication. *University of Kansas, Natural History Museum, Lawrence, KS, USA*, 463 pp.
- Caira J.N., Jensen K., Barbeau E. 2022. "Global Cestode Database. World Wide Web electronic publication". www.tapewormdb.uconn.edu.
- Chaignat V., Boujon P., Frey C.F., Hentrich B., Müller N., Gottstein B. 2015. The brown hare (*Lepus europaeus*) as a novel intermediate host for *Echinococcus multilocularis* in Europe. *Parasitology Research* 114(8): 3167-3169. doi.org/10.1007/s00436-015-4555-3
- Cordero del Campillo M., Castanon Ordonez L., Reguera Feo A. 1994. Indice-catalogo de zooparasitos Ibericos. *Universidad de Leon, Leon*, 650 pp.
- De Chambrier A., Scholz T. 2016. An emendation of the generic diagnosis of the monotypic *Glanitaenia* (Cestoda: Proteocephalidae), with notes on the geographical distribution of *G. osculata*, a parasite of invasive wels catfish. *Revue suisse de Zoologie* 123(1): 1-9.
- Deplazes P., Alther P., Tanner I., Thompson R.C.A., Eckert J. 1999. *Echinococcus multilocularis* coproantigen detection by enzyme-linked immunosorbent assay in fox, dog, and cat populations. *The Journal of Parasitology* 85(1): 115-121. doi.org/10.2307/3285713
- Dimitrova Y.D., Mariaux J., Georgiev B.B. 2017. Redescriptions of four Palaeotropical species of the cestode genus *Notopentorchis* Burt, 1938 (Cyclophyllidea: Paruterinidae). *Zootaxa* 4290: 61-82. doi.org/10.11646/zootaxa.4290.1.3
- Dunus T. 1592. *Miscellanea de re medica*, cap XV. Tiguri [Zurich].
- Eckert J., Deplazes P. 2004. Biological, epidemiological, and clinical aspects of echinococcosis, a zoonosis of increasing concern. *Clinical Microbiology Reviews* 17: 107-135. doi.org/10.1128/CMR.17.1.107-135.2004
- Ewald D., Eckert J. 1993. Verbreitung und Häufigkeit von *Echinococcus multilocularis* bei Rotföhsen in der Nord-, Süd- und Ostschweiz sowie im Fürstentum Liechtenstein. *Zeitschrift für Jagdwissenschaft* 39: 171-180.
- Faivre J.-P., Vaucher C. 1978. Redescription de *Hymenolepis sulcata* (Von Linstow, 1879) parasite du loir *Glis glis* (L.). *Bulletin de la Société neuchâteloise des Sciences naturelles* 101: 53-58.
- Forel F.A. 1868. Notes sur une maladie épizootique qui a sévi chez les perches du Lac Léman en 1867. *Bulletin de la Société vaudoise des Sciences naturelles* 9: 599-608.
- Froese R., Pauly D. "FishBase. World Wide Web electronic publication. Version (08/2021)." www.fishbase.org.
- Frost D.R. "Amphibian Species of the World: an Online Reference. Version 6.1." https://amphibiansoftheworld.amnh.org/index.php.
- Fuhrmann O. 1897. Sur un nouveau ténia d'oiseau *Cittotaenia avicola*. *Revue suisse de Zoologie* 5: 107-117. doi.org/10.5962/bhl.part.49549
- Fuhrmann O. 1899. Deux singuliers ténias d'oiseaux (*Gyrocoelia perversus* n. g. n. sp., *Acoelus armatus* n. g. n. sp.). *Revue suisse de Zoologie* 7: 341-351. doi.org/10.5962/bhl.part.32950
- Fuhrmann O. 1909. *Triaenophorus robustus* Olsson dans les lacs de Neuchâtel et de Bienne. *Bulletin de la Société neuchâteloise des Sciences naturelles* 36: 86-89.
- Fuhrmann O. 1919. Notes helminthologiques suisses II. *Revue suisse de Zoologie* 27: 353-376. doi.org/10.5962/bhl.part.36329
- Fuhrmann O. 1926. Catalogue des invertébrés de la Suisse: Cestodes. *C. Georg, Genève*, 149 pp.
- Fuhrmann O. 1932. Les ténias des oiseaux. *Mémoires de l'Université de Neuchâtel* 8: 1-382.
- Fuhrmann O. 1933. Cestodes nouveaux. *Revue suisse de Zoologie* 40: 169-178. doi.org/10.5962/bhl.part.117944
- Galli-Valerio B. 1898. Communications scientifiques. 2. Expériences sur le *Cysticercus pisiformis*. *Bulletin de la Société vaudoise des Sciences naturelles* 34: XXVIII-XXIX.
- Galli-Valerio B. 1901. La collection des parasites du Laboratoire d'hygiène et de parasitologie à l'Université de Lausanne. *Bulletin de la Société vaudoise des Sciences naturelles* 37: 343-381.
- Galli-Valerio B. 1902. *Bothriocephalus latus* Brems chez le chat. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 32: 285-287.
- Galli-Valerio B. 1904. Notes de parasitologie. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 35: 81-91.
- Galli-Valerio B. 1909. Notes de parasitologie et de technique parasitologique. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 51: 538-545.
- Galli-Valerio B. 1910. Notes de parasitologie et de technique parasitologique. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 56: 43-47.
- Galli-Valerio B. 1911. Notes de parasitologie et de technique parasitologique. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 60: 358-363.
- Galli-Valerio B. 1912. Notes de parasitologie. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 65: 304-311.

- Galli-Valerio B. 1917. Parasitologische Untersuchungen und Beiträge zur parasitologischen Technik. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 79: 41-47.
- Galli-Valerio B. 1918. Ist *Aphodius obscurus* Fabr. der Zwischenwirt von *Citotona marmotae* Braun? *Schweizer Archiv für Tierheilkunde* 60: 551-553.
- Galli-Valerio B. 1921. Parasitologische Untersuchungen und Beiträge zur parasitologischen Technik. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 86: 346-347.
- Galli-Valerio B. 1924. Parasitologische Untersuchungen und Beiträge zur parasitologischen Technik. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 91: 120-125.
- Galli-Valerio B. 1925. Parasitologische Untersuchungen und Beiträge zur parasitologischen Technik. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 94: 60-64.
- Galli-Valerio B. 1926. Parasitologische Untersuchungen und Beiträge zur parasitologischen Technik. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 99: 319-325.
- Galli-Valerio B. 1930. Notes de parasitologie. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abt. Originale* 115: 212-219.
- Galli-Valerio B. 1938. Über die Parasiten des *Gyps fulvus* Habl. (Weisskopfgeier, Gänsegeier). *Schweizer Archiv für Tierheilkunde* 80: 490-492.
- Galli-Valerio B. 1939. Observations sur quelques maladies parasitaires et quelques intoxications des animaux domestiques et sauvages. *Schweizer Archiv für Tierheilkunde* 81: 91-107.
- Galli-Valerio B. 1940. Notes de parasitologie et de technique parasitologique. *Schweizer Archiv für Tierheilkunde* 82: 279-285, 352-358, 387-392.
- Gaschen H. 1950. Memento des travaux du Professeur Bruno Galli-Valerio. *Schweizer Archiv für Tierheilkunde* 92 (suppl): 1-157.
- Georgiev B.B., Vasileva G.P., Bray R.A., Gibson D.I. 2004. The genus *Biuterina* Fuhrmann, 1902 (Cestoda, Paruterinidae) in the Old World: redescription of three species from Palaearctic Passeriformes. *Systematic Parasitology* 57: 67-85. doi.org/10.1023/B:SYPA.0000010687.73759.80
- Gigon P. 1988. Contribution à la connaissance des helminthes d'oiseaux dans le nord-ouest de la Suisse. *MSc Thesis, University of Neuchâtel*, 155 pp.
- Gigon P., Beuret J. 1991. Contribution à la connaissance des helminthes d'oiseaux dans le nord-ouest de la Suisse. *Revue suisse de Zoologie* 98 (2): 279-302. doi.org/10.5962/bhl.part.79792
- Golay M., Mariaux J. 1995. Situation de *Diphyllobothrium latum* L., 1758 (Cestoda: Pseudophyllidea) dans quatre lacs du plateau suisse. *Bulletin de la Société neuchâteloise des Sciences naturelles* 118: 79-86.
- Gottstein B., Saucy F., Deplazes P., Reichen J., Demierre G., Busato A., Zuercher C., Pugin P. 2001. Is high prevalence of *Echinococcus multilocularis* in wild and domestic animals associated with disease incidence in humans? *Emerging Infectious Diseases* 7(3): 408-412.
- Guénat F. 1964. Contribution à l'étude de la faune parasite chez *Turdus merula*. *MSc Thesis, University of Neuchâtel*, 30 pp.
- Hanzelova V., Ryšavý B. 1996. Synopsis of cestodes in Slovakia IV. Hymenolepididae (Continued). *Helminthologia* 33(4): 213-222.
- Hanzelova V., Ryšavý B. 1999. Synopsis of cestodes in Slovakia V. Dilepididae, Dipylidiidae and Paruterinidae. *Helminthologia* 36(2): 111-117.
- Hanzelová V., Scholz T. 1992. Redescription of *Proteocephalus neglectus* La Rue, 1911 (Cestoda: Proteocephalidae), a trout parasite, including designation of its lectotype. *Folia Parasitologica* 39: 317-323.
- Hanzelova V., Ryšavý B., Snabel V. 1995. Synopsis of cestodes in Slovakia. III. Cyclophyllidea: Amabiliidae, Acoleidae, Catenotaeniidae, Davaineidae and Hymenolepididae (in part). *Helminthologia* 32 (1-2): 67-73.
- Hanzelova V., Snabel V., Kralova I., Scholz T., Damelio S. 1999. Genetic and morphological variability in cestodes of the genus *Proteocephalus*: geographical variation in *Proteocephalus percae* populations. *Canadian Journal of Zoology* 77 (9): 1450-1458. doi.org/10.1139/z99-098
- Haukisalml V. 2015. Checklist of tapeworms (Platyhelminthes, Cestoda) of vertebrates in Finland. *Zookeys* (533): 1-61. doi.org/10.3897/zookeys.533.6538
- Hofer S., Gloor S., Müller U., Mathis A., Hegglin D., Deplazes P. 2000. High prevalence of *Echinococcus multilocularis* in urban red foxes (*Vulpes vulpes*) and voles (*Arvicola terrestris*) in the city of Zürich, Switzerland. *Parasitology* 120 (Pt 2): 135-142. doi.org/10.1017/S0031182099005351
- Hörning B. 1963. Bericht über Helminthenfunde bei Wildtieren in der Schweiz (Fische, Vögel, Säugetiere) 1960 - 1963. *Institut Galli-Valerio, Lausanne*, 86 pp.
- Hörning B. 1966. Parasitologische Untersuchungen an Alpenmurmeltieren (*Marmota marmota*) der Schweiz. *Jahrbuch des Naturhistorischen Museums der Stadt Bern* 3: 137-200.
- Huber C. 1988. Recherche sur les parasites de quelques cyprinides du lac Léman. *MSc Thesis, Université de Genève*, 70 pp.
- Janicki C., Rosen F. 1917. Le cycle évolutif du *Dibothriocephalus latus* L. Recherches expérimentales et observations. *Bulletin de la Société neuchâteloise des Sciences naturelles* 42: 19-53. <https://www.biodiversitylibrary.org/page/12641825>
- Janovsky M., Bacciarini L., Sager H., Gröne A., Gottstein B. 2002. *Echinococcus multilocularis* in a European beaver from Switzerland. *Journal of Wildlife Diseases* 38: 618-620. doi.org/10.7589/0090-3558-38.3.618
- Jarecka L., Doby J.M. 1965. Contribution à l'étude du cycle évolutif d'un cestode du genre *Proteocephalus* parasite de *Coregonus fera* en provenance du Lac Léman. *Annales de Parasitologie humaine et comparée* 40: 29-443. doi.org/10.1051/parasite/1965404433
- Joyeux C., Baer J.G. 1936. Faune de France. 30. Cestodes. *Paul Lechevalier et fils, Paris*, 614 pp.
- Joyeux C., Baer J.G. 1941. Un cestode nouveau parasite du plongeon. *Bulletin de la Société neuchâteloise des Sciences naturelles* 65: 21-24.
- Joyeux C., Baer J.G. 1950. Sur quelques espèces nouvelles ou peu connues du genre *Hymenolepis* Weinland, 1858. *Bulletin de la Société neuchâteloise des Sciences naturelles* 73: 51-70.
- Joyeux C., Baer J.G. 1955. Cestodes d'oiseaux récoltés dans le centre de la France. *Bulletin de la Société zoologique de France* 80: 174-196.
- Karvonen A., Lundsgaard-Hansen B., Jokela J., Seehausen O.

2013. Differentiation in parasitism among ecotypes of whitefish segregating along depth gradients. *Oikos* 122: 122-128. doi.org/10.1111/j.1600-0706.2012.20555.x
- Kern P., Bardonnnet K., Renner E., Auer H., Pawlowski Z., Ammann R.W., Vuitton D.A., Kern P. and the European Echinococcosis Registry. 2003. European echinococcosis registry: human alveolar echinococcosis, Europe, 1982-2000. *Emerging Infectious Diseases* 9: 343-349. doi.org/10.3201/eid0903.020341
- Komisarovas J., Georgiev B.B., Mariaux J. 2007. Redescriptions of *Monopylidium exiguum* (Dujardin, 1845) and *M. albani* (Mettrick, 1958) n. comb. (Cestoda: Dilepididae) from European passerine birds. *Systematic Parasitology* 68(2): 87-96. doi.org/10.1007/s11230-007-9103-9
- Kottelat M., Freyhof J. 2007. Handbook of European Freshwater Fishes. *Private publishing, Cornol & Berlin*, 646 pp.
- Králová-Hromadová I., Radačovská A., Čisovská Bazsalovicsová E., Kuchta R. 2021. Ups and downs of infections with the broad fish tapeworm *Dibothriocephalus latus* in Europe from 1900 to 2020: Part I. *Advances in Parasitology* 114: 75-166. doi.org/10.1016/bs.apar.2021.08.008
- Kreis H.A. 1962. Neue helminthologische Untersuchungen in schweizerischen Tierpärken, bei Haustieren und bei Tieren des Schweizerischen Nationalparks. *Schweizer Archiv für Tierheilkunde* 104(2-3): 94-194.
- Kuchta R., Scholz T. 2007. Diversity and distribution of fish tapeworms of the "Bothriocephalidea" (Eucestoda). *Parasitologia* 49(3): 129-146.
- Kuchta R., Scholz T., Bray R.A. 2008. Revision of the order Bothriocephalidea Kuchta, Scholz, Brabec & Bray, 2008 (Eucestoda) with amended generic diagnoses and keys to families and genera. *Systematic Parasitology* 71: 81-136. doi.org/10.1007/s11230-008-9153-7
- Lepage D. 2023. Avibase - the world bird database. <http://avibase.bsc-eoc.org>.
- Lunel G. 1879. Parasites et vers intestinaux des poissons du Léman. *Bulletin de la Société vaudoise des Sciences naturelles* 16: 168-169.
- Macko J.K., Ryšavý B., Hanzelova V., Kralova I. 1993. Synopsis of cestodes in Slovakia I. Cestodaria, Spathebothriidae, Pseudophyllidea, Proteocephalidea. *Helminthologia* 30: 85-91.
- Macko J.K., Ryšavý B., Hanzelova V., Kralova I. 1994. Synopsis of cestodes in Slovakia II. Cyclophyllidea: Mesocostoididae, Tetrabothriidae, Nematotaeniidae, Taeniidae. *Helminthologia* 31: 95-103.
- Makarikov A. 2017. A taxonomic review of hymenolepidids (Eucestoda, Hymenolepididae) from dormice (Rodentia, Gliridae), with descriptions of two new species. *Acta Parasitologica* 62: 1-21. doi.org/10.1515/ap-2017-0001
- Makarikov A., Georgiev B.B. 2020. Review of records of hymenolepidids (Eucestoda: Hymenolepididae) from dormice (Rodentia: Gliridae) in Europe, with a redescription of *Armadolepis spasskyi* Tenora & Baruš, 1958 and the description of *A. genovi* n. sp. *Systematic Parasitology* 97: 83-98. doi.org/10.1007/s11230-019-09891-7
- Makarikov A.A., Kontrimavichus V.L. 2011. A redescription of *Arostrilepis beringiensis* (Kontrimavichus et Smirnova, 1991) and descriptions of two new species from Palaearctic microtine rodents, *Arostrilepis intermedia* sp. n. and *A. janickii* sp. n. (Cestoda: Hymenolepididae). *Folia Parasitologica* 58: 289-301. doi.org/10.14411/fp.2011.029
- Mariaux J. 1986. Helminthes des poissons de l'Areuse. *Bulletin de la Société neuchâtoise des Sciences naturelles* 109: 57-64.
- Mariaux J. 2021. Two new species of Cestoda (Cyclophyllidea: Dilepididae) from Ploceidae and Passeridae (Aves: Passeriformes) in Côte d'Ivoire. *Revue suisse de Zoologie* 128(2): 469-475. doi.org/10.35929/RSZ.0057
- Mariaux J., Tkach V.V., Vasileva G.P., Waeschenbach A., Beveridge I., Dimitrova Y.D., Haukisalmi V., Greiman S.E., Littlewood D.T.J., Makarikov A.A., Philips A.J., Razafiarisolo T., Widmer V., Georgiev B.B. 2017. Cyclophyllidea van Beneden in Braun, 1900. *University of Kansas, Natural History Museum, Special Publication* 25: 77-148.
- Merkusheva I.V., Bobkova A.F. 1981. Gel'minty domashnih i dikih zhivotnyh Belarussi [Helminths of domesticated and wild animals in Belarus]. *Nauka i Tehnica, Minsk*, 120 pp.
- Murai E. 1976. Cestodes of bats in Hungary. *Parasitologia Hungarica* 9: 41-62.
- Nkouawa A., Haukisalmi V., Li T., Nakao M., Lavikainen A., Chen X., Henttonen H., Ito A. 2016. Cryptic diversity in hymenolepidid tapeworms infecting humans. *Parasitology International* 65: 83-86. doi.org/10.1016/j.parint.2015.10.009
- Nufer W. 1905. Die Fische des Vierwalstättersees und ihre Parasiten. *PhD Thesis, University of Basel*, 232 pp.
- Pecorini M.G. 1959. Larve di cestodi nei copepodi del Lago Maggiore. *Memorie dell'Istituto Italiano di Idrobiologia* 11: 213-238.
- Pojmanska T., Niewiadomska K., Okulewicz A. 2007. Pasożytnice helminty Polski. Gatunki zywiciele biale plamy. *Polskie Towarzystwo Parazytologiczne, Warszawa*, 360 pp.
- Radačovská A., Bazsalovicsová E., B, Blasco Costa I., Orosová I M., Gustinelli A., Králová-Hromadová I. 2019. Occurrence of *Dibothriocephalus latus* in European perch from Alpine lakes, an important focus of diphyllobothriosis in Europe. *Revue suisse de Zoologie* 126: 219-225. doi.org/10.5281/zenodo.3463453
- Radačovská A., Čisovská Bazsalovicsová E., Šoltys K., Štefka J., Minárik G., Gustinelli A., Chugunova J.K., Králová-Hromadová I. 2022. Unique genetic structure of the human tapeworm *Dibothriocephalus latus* from the Alpine lakes region - a successful adaptation. *Parasitology* 149: 1106-1118. doi.org/10.1017/S0031182022000634
- Salzmann H.C., Hörning B. 1974. Der parasitologische Zustand von Gemspopulationen des schweizerischen Juras im Vergleich zu Alpengemsen. *Zeitschrift für Jagdwissenschaft* 20: 105-115.
- Schmidt-Posthaus H., Breitenmoser-Würsten C., Posthaus H., Bacciarini L., Breitenmoser U. 2002. Causes of mortality in reintroduced Eurasian lynx in Switzerland. *Journal of Wildlife Diseases* 38(1): 84-92. doi.org/10.7589/0090-3558-38.1.84
- Scholz T., Hanzelová V. 1999. Species of *Proteocephalus* Weinland, 1858 (Cestoda: Proteocephalidae) from cyprinid fishes in North America. *Journal of Parasitology* 85(1): 150-154. doi.org/10.2307/3285724
- Scholz T., Hanzelová V., Skeriková A., Shimazu T., Rolbiecki L. 2007. An annotated list of species of the *Proteocephalus* Weinland, 1858 aggregate *sensu de Chambrier et al.* (2004) (Cestoda: Proteocephalidea), parasites of fishes in the Palaearctic Region, their phylogenetic relationships and a key to their identification. *Systematic Parasitology* 67: 139-156. doi.org/10.1007/s11230-006-9089-8
- Schor M. 1902. Contribution à l'étude du *Bothriocephalus latus*



- Brems. Sa distribution dans le canton de Vaud. *MD Thesis, Université de Lausanne*, 29 pp.
- Schweiger A., Ammann R.W., Candinas D., Clavien P.A., Eckert J., Gottstein B., Halkic N., Muellhaupt B., Prinz B.M., Reichen J., Tarr P.E., Torgerson P.R., Deplazes P. 2007. Human alveolar echinococcosis after fox population increase, Switzerland. *Emerging Infectious Diseases* 13: 878-882. doi.org/10.3201/eid1306.061074
- Selz O.M., Dönz C.J., Vonlanthen P., Seehausen O. 2020. A taxonomic revision of the whitefish of lakes Brienz and Thun, Switzerland, with descriptions of four new species (Teleostei, Coregonidae). *Zookeys* 989: 79-162. doi.org/10.3897/zookeys.989.32822
- Steinmann P. 1950. Monographie der schweizerischen Koregonen. Beitrag zum Problem der Entstehung neuer Arten. Spezieller Teil. *Schweizerische Zeitung für Hydrologie* 12: 340-391.
- Stoch F. 2003. Checklist of the species of the Italian Fauna [http://www.faanaitalia.it/checklist/index.html].
- Sublet A. 1987. Recherche sur les parasites helminthiques des poissons du Léman. *MSc Thesis, Université de Genève*, 83 pp.
- Szelenbaum-Cielecka D., Aeschlimann A., Czaplinski B. 1988. Contribution à l'étude de la faune helminthologique de Suisse. Part I, Cestodes des oiseaux aquatiques. *Bulletin de la Société neuchâteloise des Sciences naturelles* 111: 5-19.
- Tenora F., Murai E. 1980. The genera *Anoplocephaloides* and *Paranoplocephala* (Cestoda) parasites of Rodentia in Europe. *Acta Zoologica Academiae Scientiarum Hungaricae* 26: 263-284.
- Uetz P., Etzold T. 1996. The EMBL/EBI Reptile Database. *Herpetological Review* 27: 174-175.
- Vasileva G.P., Georgiev B.B., Genov T. 1998. Redescription of *Hymenolepis hoploporus* Dollfus, 1951, with the erection of the new genus *Dollfusilepis* (Cestoda, Hymenolepididae). *Revue suisse de Zoologie* 105(2): 319-329. doi.org/10.5962/bhl.part.80038
- Vasileva G.P., Georgiev B.B., Genov T. 1999. Palaearctic species of the genus *Confluaria* Ablasov (Cestoda, Hymenolepididae): redescription of *C. multistriata* (Rudolphi, 1810) and *C. japonica* (Yamaguti, 1935), and a description of *Confluaria* sp. *Systematic Parasitology* 44: 87-103. doi.org/10.1023/A:1006157504152
- Vasileva G.P., Georgiev B.B., Genov T. 2000. Palaearctic species of the genus *Confluaria* Ablasov (Cestoda, Hymenolepididae): redescription of *C. podicipina* (Szymanski, 1905) and *C. furcifera* (Krabbe, 1869), description of *C. pseudofurcifera* n. sp., a key and final comments. *Systematic Parasitology* 45: 109-130. doi.org/10.1023/A:1006237509781
- Vasileva G.P., Marinova M.H., Georgiev B.B. 2022. Revision of the species of the genus *Diorchis* Clerc, 1903 (Cestoda, Hymenolepididae) from rallid birds: a redescription of *Diorchis acuminata* (Clerc, 1902). *Systematic Parasitology* 99: 347-365. doi.org/10.1007/s11230-022-10032-w
- Vaucher C. 1971. Les cestodes parasites des Soricidae d'Europe. Etude anatomique, révision taxonomique et biologie. *Revue suisse de Zoologie* 7: 1-113. doi.org/10.5962/bhl.part.97061
- Vaucher C., Hunkeler P. 1967. Contribution à l'étude des cestodes et des trématodes parasites des micromammifères de Suisse. I. *Bulletin de la Société neuchâteloise des Sciences naturelles* 90: 161-184.
- Vonlanthen P., Bittner D., Hudson A.G., Young K.A., Müller R., Lundsgaard-Hansen B., Roy D., Di Piazza S., Largiader C.R., Seehausen O. 2012. Eutrophication causes speciation reversal in whitefish adaptive radiations. *Nature* 482(7385): 357-362. doi.org/10.1038/nature10824
- Wahl E. 1967. Etude parasito-écologique des petits mammifères (Insectivores et Rongeurs) du val de l'Allondon (Genève). *Revue suisse de Zoologie* 74: 129-188. doi.org/10.5962/bhl.part.75850
- Wicht B. 2008. Ecology, epidemiology and molecular identification of the genus "*Diphyllobothrium*" Cobbold, 1858 in the sub-alpine lakes region. *PhD Thesis, Université de Genève*, 235 pp. doi.org/10.13097/archive-ouverte/unige:1699
- Wicht B., De Marval F., Peduzzi R. 2007. *Diphyllobothrium nihonkaiense* (Yamane *et al.*, 1986) in Switzerland: first molecular evidence and case reports. *Parasitology International* 56(3): 195-199. doi.org/10.1016/j.parint.2007.02.002
- Wicht B., Limoni C., Peduzzi R., Petrini O. 2009. *Diphyllobothrium latum* (Cestoda: Diphyllbothriidea) in perch (*Perca fluviatilis*) in three sub-alpine lakes: influence of biotic and abiotic factors on prevalence. *Journal of Limnology* 68(2): 167-173. doi.org/10.4081/jlimnol.2009.167
- Wicht B., Ruggeri-Bernardi N., Yanagida T., Nakao M., Peduzzi R., Ito A. 2010. Inter- and intra-specific characterization of tapeworms of the genus *Diphyllobothrium* (Cestoda: Diphyllbothriidea) from Switzerland, using nuclear and mitochondrial DNA targets. *Parasitology International* 59: 35-39. doi.org/10.1016/j.parint.2009.09.002
- Wolffhügel K. 1900. Beitrag zur Kenntnis der Vogelhelminthen. *PhD Thesis, University of Basel*, 204 pp.
- Zandt F. 1924. Fischparasiten des Bodensees. *Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten Originale* 92: 225-271.
- Zottler E.M., Bieri M., Basso W., Schnyder M. 2019. Intestinal parasites and lungworms in stray, shelter and privately owned cats of Switzerland. *Parasitology International* 69: 75-81. doi.org/10.1016/j.parint.2018.12.005
- Zschokke F. 1884. Recherches sur l'organisation et la distribution zoologique des vers parasites des poissons d'eau douce. *PhD Thesis, Université de Genève*, 89 pp. doi.org/10.13097/archive-ouverte/unige:21726
- Zschokke F. 1887. Der *Bothriocephalus latus* in Genf. *Centralblatt für Bakteriologie und Parasitenkunde* 1: 377-380, 409-415.
- Zschokke F. 1889. Erster Beitrag zur Parasitenfauna von *Trutta salar*. *Verhandlungen der Naturforschenden Gesellschaft Basel* 8: 761-795.
- Zschokke F. 1891. Die Parasitenfauna von *Trutta salar*. *Centralblatt für Bakteriologie und Parasitenkunde* 10: 694-699, 738-745, 792-801, 829-838.
- Zschokke F. 1896. Zur faunistik der parasitischen Würmer von Süßwasserfischen. *Zentralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. I. Abteilung Originale* 19: 772-778, 815-825.
- Zschokke F. 1903. Marine Schmarotzer in Süßwasserfischen. *Verhandlungen der Naturforschenden Gesellschaft Basel* 16: 118-157.
- Zschokke F. 1933. Die Parasitenfauna der Gattung *Coregonus*. Eine parasitologische und tiergeographische Studie. *Revue suisse de Zoologie* 40: 118-157.





**CARYOPHYLLIDEA**

**Caryophyllaeidae Leuckart, 1878**

*Caryophyllaeus* Gmelin, 1790

*C. fimbriiceps* Annenkova-Chlopina, 1919

*Cyprinus carpio*

*Cottus gobio*<sup>o</sup>

*Cyprinus carpio*<sup>o</sup>

*Abramis brama*<sup>o</sup>

*Alburnus alburnus*<sup>o</sup>

*Blicca bjoerkna*<sup>o</sup>

*Chondrostoma nasus*<sup>o</sup>

*Rutilus rutilus*<sup>o</sup>

*Squalius cephalus*<sup>o</sup>

*Tinca tinca*<sup>o</sup>

*Limnodrilus clapedianus*<sup>o</sup>

*Tubifex barbatus*<sup>o</sup>

*Tubifex tubifex*<sup>o</sup>

1919, 1925

V

BE, N

NE, O, L, N, V/1914, 1960, 1964, 1968, 1976

O

O, V

BA, V

VD, L, N, O, V/1960

NE, L, O, V

L

NE, A, Z

VD

VD, A, N

**Lytocestidae Hunter, 1927**

*Caryophyllaeides* Nybelin, 1922

*C. fennica*<sup>o</sup> (Schneider, 1902) - (*Caryophyllaeus fennicus*, *Caryophyllaeides fennicus*, *Cyrophyllaeus mutabilis*)

Leuciscidae

Leuciscidae

Leuciscidae

Leuciscidae

Leuciscidae

Leuciscidae

Leuciscidae

Leuciscidae

*Khanvia* Hsü, 1935

*K. baltica* Szidat, 1942

Tincidae

**CYCLOPHYLLEIDA**

**Anabiidae Braun, 1900**

*Joyeuxilepis* Spasskii, 1947

*J. acanthorhyncha*<sup>o</sup> (Wedl, 1855) - (*Tanria acanthorhyncha*)

Podicipedidae

Podicipedidae

*Tachybaptus ruficollis*

**Anoplocephalidae Blanchard, 1891**

*Anoplocephala* Blanchard, 1848

*A. magna*<sup>o</sup> (Abildgaard, 1789) - (*Anomotaenia plicata*)

*A. perfoliata*<sup>o</sup> (Goeze, 1782)

Equidae

Equidae

Equidae

*Anoplocephaloides* Baer, 1923

*A. dentata* (Galli-Valerio, 1905) - (*Anoplocephala dentata*, *Paranoplocephala brevis*)

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

Cricetidae

*Arriotaenia* Sandground, 1926

*A. incisa* (Railliet, 1899) - (*Oochoristica incisa*)

*Vulpes vulpes*

*Meles meles*

*Meles meles*

*Meles meles*

*Meles meles*

Nufer 1905

Fuhrmann 1926

Nufer 1905, Huber 1988

Fuhrmann 1926

Nufer 1905

Nufer 1905

Huber 1988

Zschokke 1884, Nufer 1905

Fuhrmann 1926, Huber 1988

Fuhrmann 1926

Fuhrmann 1926

Fuhrmann 1926

Fuhrmann 1926

Fuhrmann 1926

Zschokke 1884, Fuhrmann 1926

1933, 1934

N

NE

BE, GE, NE, VD, ZH

NE, VD, ZH

GR, VS/1996

VS/2000

VS/1968

GR, VD/1973, 1996

GE/1963

VD/1962

BL, NE, VD/1956, 1961-3

BE, VD/1910

Hörning 1963

Galli-Valerio 1910

Anatidae	<i>Anas</i> sp.	Fuhrmann 1897	GE (?) [1]
Scarabaeidae	<i>Amidorus obscurus</i> <sup>o</sup>	Galli-Valerio 1918, 1925	VS
Scuridae	<i>Marmota marmota</i> <sup>o</sup>	Galli-Valerio 1918, 1940, Bouvier 1963, Hörming 1966	FR, GR, UR, VD, VS/1917, 1961-4
<i>Equinia</i> Haukisalmi, 2009			
Equidae	<i>E. mamillana</i> * (Mehlis in Gütli, 1831) - ( <i>Anoplocephala mamillana</i> , <i>Anoplocephalus mamillana</i> , <i>Paranoplocephala mamillana</i> ) <i>Equus caballus</i> <sup>o</sup>		BE, NE, ZH/1920
<i>Eurotaenia</i> Haukisalmi, Hardman, Hoberg & Henttonen, 2014			
Equidae	<i>E. gracilis</i> (Tenora & Murai, 1980)	Tenora & Murai 1980	VD/1994 VD, VS/1968, 1993 VD/1993
Cricetidae	<i>Chionomys nivalis</i>		UR, VS/1966, 1971 VD/1993
Cricetidae	<i>Microtus agrestis</i>		VS
Cricetidae	<i>Microtus arvalis</i>		GR
Cricetidae	<i>Microtus subterraneus</i>		VD/1993
Cricetidae	<i>Myodes glareolus</i>		
<i>Genovia</i> Haukisalmi, 2009			
Equidae	<i>G. wimerosa</i> (Moniez, 1880) - ( <i>Anoplocephaloides wimerosa</i> , <i>Paranoplocephala wimerosa</i> )		
Leporidae	<i>Lepus timidus</i>		
<i>Marmotocephala</i> Gvozdev, Zhigileva & Gulyaev, 2004			
Scuridae	<i>M. transversaria</i> * (Krabbe, 1879) - ( <i>Paranoplocephala transversaria</i> ) <i>Marmota marmota</i>	Kreis 1962, Hörming 1966	
<i>Microtocola</i> Haukisalmi, Hardman, Hoberg & Henttonen, 2014			
Cricetidae	<i>M. blanchardi</i> (Moniez, 1891) - ( <i>Anoplocephala blanchardi</i> , <i>Paranoplocephala blanchardi</i> ) <i>Arvicola amphibius</i>	Gaschen 1950	
Cricetidae	<i>Microtus agrestis</i>		VD/1993
Cricetidae	<i>Microtus arvalis</i>		VD/1974
<i>Moniezia</i> Blanchard, 1891			
Bovidae	<i>M. benedenti</i> * (Moniez, 1879) - ( <i>Moniezia denticulata</i> , <i>Moniezia planissima</i> , <i>Moniezia rupicaprae</i> ) <i>Bos taurus</i> <sup>o</sup>	Fuhrmann 1926 Bouvier & Hörming 1963	BA, BE, NE, TG, ZH/1916 GR/1961-3
Bovidae	<i>Capra ibex</i>		
Bovidae	<i>Bos taurus</i> <sup>o</sup>		BE, GE, ZH/1930
Bovidae	<i>Capra ibex</i>		GE, VD, VS/1961-3
Bovidae	<i>Ovis artes</i> <sup>o</sup>		BE, NE, VD, ZH/1987
Bovidae	<i>Rupicapra rupicapra</i>		VS/1961-3
Cervidae	<i>Capreolus capreolus</i>		BE, GR, NE, OW, VD/1961-3, 1970-1
<i>Mosgovioya</i> Spasskii, 1951			
Leporidae	<i>M. pectinata</i> * (Goetze, 1892) - ( <i>Citotaenia pectinata</i> , <i>Citotaenia pectinata</i> ) <i>Lepus europaeus</i>	Hörming 1963 Galli-Valerio 1940, Hörming 1963	NE, OW, TI, VD, VS/1961-3 BE, VS, VD/1961-3, 1967 VS/1964
Leporidae	<i>Lepus timidus</i> <sup>o</sup>		
Scuridae	<i>Marmota marmota</i>		BE/1976
<i>Neocetaenia</i> Tenora, 1976			
Leporidae	<i>N. ctenoides</i> (Ralliet, 1890) - ( <i>Citotaenia ctenoides</i> ) <i>Oryctolagus cuniculus</i>		
<i>Oochoristica</i> Lühe, 1898			
Lacertidae	<i>O. rotundata</i> (Molin, 1859)		TI
<i>Paranoplocephala</i> Lühe, 1910			
Cricetidae	<i>Lacerta viridis</i>		FR, GE, JU, NE/1962-4, 1969, 1976
Cricetidae	<i>P. omphalodes</i> (Hermann, 1783) - ( <i>Andrya caucasica</i> ) <i>Arvicola amphibius</i>	Baer 1932, Wahl 1967	VS/1994
Cricetidae	<i>Chionomys nivalis</i>		VD, VS/1961-3
Cricetidae	<i>Microtus agrestis</i>		GE, VD/1961-3, 1994
Cricetidae	<i>Microtus arvalis</i>		TI/1971
Cricetidae	<i>Microtus multiplex</i>		BE, GE, NE, VS/1951, 1961-4, 1968, 1972, 1985
Cricetidae	<i>Myodes glareolus</i>		GE
Muridae	<i>Apodemus</i> sp.		
<i>Thysanitezia</i> Skjabin, 1926			
Bovidae	<i>T. giardi</i> (Moniez, 1879) - ( <i>Helicometra giardi</i> ) <i>Ovis artes</i>		GE







Soricidae	<i>Neomys fodiens</i>	Vaucher & Hunkeler 1967	VD/1966
Soricidae	<i>Sorex alpinus</i>		GR, VS, VD/1966, 1971, 1972
Soricidae	<i>Sorex araneus</i>	Baer 1932, Vaucher & Hunkeler 1967, Wahl 1967	CH/1931, 1964-1974, 1984, 1994, 1996
Soricidae	<i>Sorex minimus</i>	Vaucher & Hunkeler 1967, Vaucher 1971	VD, VS/1984
<i>Monopylidium</i> Fuhrmann, 1899			
<i>M. albani</i> (Mettrick, 1958) - ( <i>Polycercus albani</i> )			
Sturmiidae	<i>Sturnus vulgaris</i>	Gigon & Beuret 1991, Komisarovas <i>et al.</i> 2007	JU/1986
<i>M. crateriformis</i> * (Goeze, 1782) - ( <i>Choanotaenia crateriformis</i> )			
Picidae	<i>Dendrocopos major</i> <sup>o</sup>	Fuhrmann 1926	BA, FR, NE/1954
Picidae	<i>Jynx torquilla</i>	Galli-Valerio 1940	GE, NE
Picidae	<i>Picus viridis</i> <sup>o</sup>	Fuhrmann 1926	NE/1944
Orioliidae	<i>Oriolus oriolus</i>		
<i>M. musculosus</i> * (Fuhrmann, 1896) - ( <i>Monopylidium musculosum</i> )			
Passeridae	<i>Passer domesticus</i>	Fuhrmann 1926	BA/1947
Sturmiidae	<i>Sturnus vulgaris</i> <sup>o</sup>	Gigon 1988	BA, JU/1986
Sylviidae	<i>Sylvia borin</i>		JU/1986
<i>Multitesticulata</i> Meggitt, 1927			
<i>M. filamentosa</i> * (Goeze, 1782) - ( <i>Choanotaenia filamentosa</i> , <i>Monopylidium filamentosum</i> , <i>Taenia blanchardi</i> ) [4]		Baer 1932, Hörning 1963, Vaucher & Hunkeler 1967	BE, GE, GR, JU, NE, VD, VS/1961-7, 1971, 1976
Talpidae	<i>Talpa europaea</i> <sup>o</sup>		
<i>Neoliga</i> Singh, 1952			
<i>N. depressa</i> * (von Siebold, 1836) - ( <i>Anomotaenia depressa</i> )			
Apodidae	<i>Apus apus</i> <sup>o</sup>		
Apodidae	<i>Tachymarptis melba</i>		
<i>Parietaraenia</i> Fuhrmann, 1932			
<i>P. parva</i> (Rudolphi, 1802)			
Paridae	<i>Parus major</i>	Hörning 1963	NE, VD/1961-3, 1984
<i>P. megarantha</i> (Rudolphi, 1810) - ( <i>Choanotaenia megarantha</i> )			
Caprimulgidae	<i>Caprimulgus europaeus</i>	Galli-Valerio 1940	VS
<i>P. porosa</i> * (Rudolphi, 1810) - ( <i>Choanotaenia porosa</i> , <i>Icteroaenia porosa</i> )			
Laridae	<i>Chroicocephalus ridibundus</i> <sup>o</sup>	Hörning 1963	BE, FR, GE, NE, VD, VS/1961-3, 1984
<i>Platycolex</i> Spasskaya, 1962			
<i>P. ciliata</i> (Fuhrmann, 1913) - ( <i>Anomotaenia ciliata</i> , <i>Uncinia ciliata</i> )			
Anatidae	<i>Anas platyrhynchos</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	N/1981-5
<i>Pseudoangularia</i> Burt, 1938			
<i>Pseudoangularia</i> . sp.			
Apodidae	<i>Apus apus</i>		
<i>Sacciterina</i> Matevosyan, 1963			
<i>S. paradoxa</i> * (Rudolphi, 1802) - ( <i>Icteroaenia paradoxa</i> )			
Charadriidae	<i>Vanellus vanellus</i> <sup>o</sup>	Fuhrmann 1926	NE
Scolopacidae	<i>Scolopax rusticicola</i> <sup>o</sup>	Fuhrmann 1926	NE
<i>Sobolevitaenia</i> Spasskaya & Makarenko, 1965			
<i>S. spinoscapitae</i> (Joyeux & Baer, 1955) - ( <i>Choanotaenia spinoscapitae</i> )			
Sturmiidae	<i>Sturnus vulgaris</i>		
Turdidae	<i>Turdus merula</i>	Beuret 1988	JU, NE/1959, 1986
Turdidae	<i>Turdus philomelos</i>		JU/1985
<i>S. verulamii</i> (Mettrick, 1958) - ( <i>Spiniglanis constricta</i> , <i>Anomotaenia constricta</i> )			NE/1965
Glomeridae	<i>Glomeris</i> sp.		
Turdidae	<i>Turdus merula</i>		NE
<i>Spasspasskaya</i> Bona, 1994			NE/1973
<i>S. passerum</i> (Joyeux & Timon-David, 1934) - ( <i>Anomotaenia passerum</i> )			
Turdidae	<i>Turdus merula</i>		NE/1966, 1974
Turdidae	<i>Turdus sp.</i>		GE/1959
<i>Spiniglanis</i> Yamaguti, 1959			
<i>S. affinis</i> (Krabbe, 1869) - ( <i>Spiniglanis constricta</i> )			
Corvidae	<i>Corvus frugileus</i>		
<i>S. constricta</i> * (Molin, 1858) - ( <i>Anomotaenia constricta</i> )			

L

Corvidae	<i>Corvus corone</i> <sup>o</sup>	Fuhrmann 1926	BA
Corvidae	<i>Corvus frugileus</i> <sup>o</sup>	Fuhrmann 1926, Beuret 1988	BA, JU
Turdidae	<i>Turdus merula</i>	Guenat 1964	BE
Turdidae	<i>Turdus philomelos</i>		BA
<b>Dioecestidae Southwell, 1930</b>			
<i>Dioecestus</i> Fuhrmann, 1900			
<i>D. asper</i> * (Mehlis, 1831) - ( <i>Dioecestus aspera</i> )			
Podicipedidae	<i>Podiceps auritus</i>	Fuhrmann 1926	NE
Podicipedidae	<i>Tachybaptus ruficollis</i> <sup>o</sup>		N
<b>Dipylidiidae Railliet, 1896</b>			
<i>Dipylidium</i> Leuckart, 1863			
<i>D. caninum</i> * (Linnaeus, 1758)			
Canidae	<i>Canis familiaris</i> <sup>o</sup>	Galli-Valerio 1939	NE, VD, BA, VS/1975
Canidae	<i>Vulpes vulpes</i>	Hörning 1963	NE/1961-3
Felidae	<i>Felis silvestris</i> <sup>o</sup>	Galli-Valerio 1901, 1921, 1939	BA, GE, NE, VD, VS/1925, 974, 1990
Hominidae	<i>Homo sapiens</i> <sup>o</sup>	Fuhrmann 1926	BA, ZH
<b>Gryporhynchidae Spasskii &amp; Spasskaja, 1973</b>			
<i>Paradilepis</i> Hsü, 1935			
<i>P. scolecina</i> * (Rudolphi, 1819) - ( <i>Dilepis scolecina</i> )			
Phalaecoracidae	<i>Phalacrocorax carbo</i> <sup>o</sup>		GE, NE
<b>Hymenolepididae Perrier, 1897</b>			
<i>Anatinella</i> Spasskii & Spasskaja, 1954			
<i>A. kazachstanica</i> (Maksimova, 1963) - ( <i>Monosacchantes kazachstanica</i> )			
Anatidae	<i>Cygnus olor</i>		NE/1981
<i>Aploparaksis</i> Clerc, 1903 - (Haploparaxis)			
<i>A. cirrosa</i> * (Krabbe, 1869) - ( <i>Drepanidotaenia cirrosa</i> )			N
Laridae	<i>Chroicocephalus ridibundus</i> <sup>o</sup>		
<i>A. crassirostris</i> (Krabbe, 1869)			
Scolopacidae	<i>Scolopax rusticola</i>		
<i>A. filum</i> * (Goeze, 1782) - ( <i>Haploparaxis filum</i> , <i>Taenia filum</i> )			
Scolopacidae	<i>Gallinago gallinago</i>		
Scolopacidae	<i>Scolopax rusticola</i>		
Scolopacidae	<i>Tringa totanus</i> <sup>o</sup>	Galli-Valerio 1901	NE, N BA, NE VD
<i>A. furcigera</i> * (Nitsch in Rudolphi, 1819) - ( <i>Hymenolepis furcigera</i> )			
Anatidae	<i>Anas platyrhynchos</i>		N/1981-5
Anatidae	<i>Aythya fuligula</i> <sup>o</sup>		NE
Podicipedidae	<i>Podiceps cristatus</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	1919
<b>Armadolepis</b> Spasskii, 1954			
<i>A. (Armadolepis) jeanbaeri</i> Makarikov, 2017 - ( <i>Hymenolepis myoxi</i> , <i>Rodentolepis myoxi</i> )		Baer 1932, Makarikov 2017, Makarikov & Georgiev 2020	GR, VS [5]/1931, 1971-2
Gliridae	<i>Eliomys quercinus</i>	Faivre & Vaucher 1978, Makarikov & Georgiev 2020	JU/1976
Gliridae	<i>Glis glis</i>		
<b>Arostrilepis</b> Mas-Coma & Tenora, 1997			
<i>A. horrida</i> (von Linstow, 1901) - ( <i>Hymenolepis horrida</i> )			
Cricetidae	<i>Arvicola amphibius</i>	Baer 1932, Hörning 1963	FR, GE, JU, VD, VS, ZH/1961-3, 1976, 1994-6
Cricetidae	<i>Microtus (Pitymys) sp.</i>		GR/1971
<i>A. janickii</i> Makarikov & Kontrimavichus, 2011 - ( <i>Arostrilepis horrida</i> )			
Cricetidae	<i>Arvicola amphibius</i>	Makarikov & Kontrimavichus 2011	JU, VD, GE/1976, 1994
<b>Cladogynia</b> Baer 1938			
<i>C. guberiana</i> (Czaplinski, 1965) - ( <i>Retinometra guberiana</i> )			
Anatidae	<i>Cygnus olor</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	NE/1981, 1985
<i>C. macracanthos</i> * (von Linstow, 1877) - ( <i>Hymenolepis macracanthos</i> )			
Anatidae	<i>Mergus merganser</i>		NE
Anatidae	<i>Mergus serrator</i> <sup>o</sup>		NE
<i>C. serrata</i> * (Fuhrmann, 1906) - ( <i>Hymenolepis serrata</i> )			
Columbidae	<i>Columba palumbus</i>		VD/1961-3
Columbidae	<i>Columba livia</i> <sup>o</sup>	Hörning 1963	GE

<i>Cloacotaenia</i> Wolfhügel, 1938			
<i>C. megalops</i> * (Nitzsch in Creplin, 1829) - ( <i>Hymenolepis megalops</i> )			N/1981-5
<i>Anas platyrhynchos</i>			GE
<i>Tadorna tadorna</i> <sup>o</sup>	Fuhrmann 1926		
Anatidae			
<i>Confluaria</i> Blasov in Spasskaya, 1966			
<i>C. fureifera</i> * (Krabbe, 1869) - ( <i>Hymenolepis fureifera</i> )			N
Podicipedidae	Fuhrmann 1926		L
<i>Podiceps cristatus</i> <sup>o</sup>			M
<i>Podiceps nigricollis</i> <sup>o</sup>			BA
<i>C. multistriata</i> * (Rudolphi, 1810) - ( <i>Hymenolepis multistriata</i> , <i>Taenia multistriata</i> )			GE, NE/1947, 1969
Podicipedidae	Fuhrmann 1926		
<i>Podiceps cristatus</i> <sup>o</sup>			
<i>Tachybaptus ruficollis</i> <sup>o</sup>			
<i>C. pseudofurcifera</i> Vasileva, Georgiev & Genov, 2000 - ( <i>Confluaria fureifera</i> , <i>Hymenolepis podicipedina</i> )	Vasileva <i>et al.</i> 2000		
Podicipedidae			
<i>Coronacanthus</i> Spasskii, 1954			
<i>C. integrus</i> * (Hamann, 1891) - ( <i>Hymenolepis integra</i> , <i>H. polyacantha</i> )			
Gammaridae	L Fuhrmann 1926, Vaucher & Hunkeler 1967		
<i>Gammarus pulex</i> <sup>o</sup>	Vaucher 1971		
Soricidae	Baer 1931, 1932, Wahl 1967, Vaucher 1971		
<i>Neomys anomalus</i>			
<i>Neomys fodiens</i>			
<i>C. omisus</i> (Baer & Joyeux, 1943) - ( <i>Hymenolepis omisus</i> )			
Gammaridae	L Baer & Joyeux 1943		
<i>Gammarus pulex</i>	Vaucher 1971		
Soricidae	Baer & Joyeux 1943		
<i>Neomys anomalus</i>			
<i>Neomys fodiens</i>			
<i>Cryptocotylepis</i> Skrjabin & Mathevossian, 1948			
<i>C. globosoides</i> (Soltys, 1954) - ( <i>Hymenolepis fodientis</i> , <i>H. globosoides</i> , <i>Pseudobotrialepis globosoides</i> )			
Soricidae	Vaucher & Hunkeler 1967, Wahl 1967, Vaucher 1971		
<i>Neomys fodiens</i>			
<i>Sorex araneus</i>			
<i>Dicranotaenia</i> Railliet, 1892			
<i>D. coronata</i> * (Dujardin, 1845) - ( <i>Hymenolepis coronata</i> )			
Anatidae			
<i>Anas platyrhynchos</i> <sup>o</sup>			
<i>Aythya marila</i> <sup>o</sup>	Fuhrmann 1926		
<i>Mergus merganser</i>			
<i>Cyclocypris laevis</i>	L Szelenbaum-Cielecka <i>et al.</i> 1988		
Cyprididae			
<i>Diorechis</i> Clerc, 1903			
<i>D. acuminata</i> * (Clerc, 1902)			
Anatidae			
<i>Mergus serrator</i>			
<i>Fulca atra</i> <sup>o</sup>	Fuhrmann 1926		
Rallidae			
<i>D. brevis</i> Rybicka, 1957			
Cyprididae	L Szelenbaum-Cielecka <i>et al.</i> 1988		
Rallidae	Szelenbaum-Cielecka <i>et al.</i> 1988		
<i>D. elisae</i> (Skrjabin, 1914)			
Anatidae			
<i>Anas platyrhynchos</i>			
<i>D. inflata</i> (Rudolphi, 1819) - ( <i>Taenia inflata</i> )			
Anatidae	L Szelenbaum-Cielecka <i>et al.</i> 1988		
Cyprididae			
<i>Cypridopsis vidua</i>	L Szelenbaum-Cielecka <i>et al.</i> 1988		
Rallidae	Szelenbaum-Cielecka <i>et al.</i> 1988		
<i>D. ransomi</i> Schultz, 1940			
Rallidae			
Candonidae	L Szelenbaum-Cielecka <i>et al.</i> 1988		
<i>Cypridopsis vidua</i>	L Szelenbaum-Cielecka <i>et al.</i> 1988		
Rallidae	Szelenbaum-Cielecka <i>et al.</i> 1988		
<i>Fulca atra</i>			
<i>Diploposthe</i> Jacobi, 1896			
<i>D. laevis</i> * (Bloch, 1782)			
Anatidae	Fuhrmann 1926		
<i>Aythya ferina</i> <sup>o</sup>			
<i>Netta rufina</i> <sup>o</sup>			
Anatidae			
<i>Ditestolepis</i> Soltys, 1952			
<i>D. diaphana</i> (Cholodkovsky, 1906) - ( <i>Hymenolepis diaphana</i> )			
Soricidae	Vaucher & Hunkeler 1967, Vaucher 1971		
<i>Sorex alpinus</i>			
<i>Sorex araneus</i>	Vaucher & Hunkeler 1967, Vaucher 1971		
<i>Sorex minutus</i>	Vaucher & Hunkeler 1967, Vaucher 1971		





<i>H. microps</i> * (Dresing, 1850) - ( <i>Hymenolepis tetraonis</i> ) Phasianidae <i>Tetrao urogallus</i> <sup>o</sup>	Hörning 1963	VD/1961-3
<i>H. murissylvatici</i> (Rudolphi, 1819) - ( <i>Hymenolepis muris-sylvatici</i> , <i>Rodentolepis fraternna</i> , <i>Rodentolepis muris-sylvatici</i> ) Muridae <i>Apodemus flavicollis</i>	Vaucher & Hunkeler 1967	BE, NE, VD/1965-6, 1968 BE, GE, NE, VD/1930, 1965-6, 2001
<i>H. procer</i> Janicki, 1904 ( <i>sp. inquirenda</i> ) Muridae <i>Apodemus sylvaticus</i>	Baer 1931, 1932, Vaucher & Hunkeler 1967	
<i>H. simulans</i> Joyeux & Baer, 1941 Circetidae <i>Arvicola amphibius</i>	Gaschen 1950	VD
<i>Hymenolepis</i> sp. [9] Gaviidae <i>Gavia arctica</i>	Joyeux & Baer 1941	NE
Canidae <i>Vulpes vulpes</i>		NE/1948
Scolopacidae <i>H. sphaerophora</i> * (Rudolphi, 1810) - ( <i>Taenia sphaerophora</i> ) <i>Numenius arquata</i> <sup>o</sup>	Galli-Valerio 1901	VD
Gliridae <i>H. sulcata</i> (von Linstow, 1879)		JU/1976
Anatidae <i>H. teresoides</i> * Fuhrmann, 1906		GE, L
Anatidae <i>H. tichodroma</i> * Fuhrmann, 1908		BA
Sittidae <i>H. uliginosa</i> (Krabbe, 1882)	Fuhrmann 1926	FR
Scolopacidae <i>Numenius arquata</i>		
<i>Lineolepis</i> Spasskii, 1959		
<i>L. scutigera</i> (Dujardin, 1845) - ( <i>Hymenolepis scutigera</i> , <i>Hymenolepis toxometra</i> , <i>Staphylocystis toxometra</i> ) Circetidae <i>Myodes glareolus</i> [10]	Baer 1928	GR/1971
Soricidae <i>Crocodyura russula</i>		GE, VS
Soricidae <i>Sorex araneus</i>	Baer 1928, 1932, Vaucher & Hunkeler 1967	CH/1931, 1965-1974, 1984
Soricidae <i>Sorex minutus</i>		GR/1971
<i>Microsomacanthus</i> Lopez-Neyra, 1942		
<i>M. abortiva</i> (von Linstow, 1904) - ( <i>Hymenolepis abortiva</i> ) Anatidae <i>Anas platyrhynchos</i> <sup>o</sup>		NE/1926
<i>M. arcuata</i> * (Kowalewski, 1904) [11] - ( <i>Hispaniolepis arcuata</i> , <i>Hispaniolepis villosoides</i> , <i>Hymenolepis arcuata</i> , <i>Hymenolepis villosoides</i> ) Anatidae <i>Aythya fuligula</i> <sup>o</sup>	Fuhrmann 1926	NE, L
Anatidae <i>Aythya marila</i> <sup>o</sup>	Fuhrmann 1926	NE
Anatidae <i>Aythya</i> sp.		GE
<i>M. collaris</i> * (Batsch, 1786) - ( <i>Hymenolepis collaris</i> ) Anatidae <i>Anas platyrhynchos</i>		NE
Anatidae <i>Aythya fuligula</i> <sup>o</sup>		N
Anatidae <i>Aythya fuligula</i> <sup>o</sup>		NE
Anatidae <i>Netta rufina</i>		NE
Anatidae <i>Anas platyrhynchos compressa</i>	Fuhrmann 1926	N/1981-5
Anatidae <i>Aythya fuligula</i> <sup>o</sup>	Szelenbaum-Cielecka <i>et al.</i> 1988	GE, N
Anatidae <i>Aythya</i> sp.	Fuhrmann 1926	NE
Cylopidae <i>Eucyclops serratulus</i>	L	M, N/1985
Cylopidae <i>Macrocylops abidus</i>	L	M, N/1985
<i>M. microcephalus</i> * (Rudolphi, 1819) - ( <i>Hymenolepis microcephala</i> , <i>Taenia multififormis</i> ) Ciconiidae <i>Ciconia ciconia</i> <sup>o</sup>	Fuhrmann 1926	BA
<i>M. microsoma</i> (Creplin, 1829) - ( <i>Hymenolepis microsoma</i> ) Anatidae <i>Somateria mollissima</i>		
Anatidae <i>Anas platyrhynchos</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	GE/1914
Anatidae <i>M. parvula</i> (Kowalewski, 1904)		N/1981-5
Anatidae <i>M. pseudorostellatus</i> (Joyeux & Baer, 1950) - ( <i>Hymenolepis pseudorostellata</i> ) Gaviidae <i>Gavia immer</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	N/1981-5
<i>M. setigera</i> (Froelich, 1789) - ( <i>Hymenolepis setigera</i> ) Anatidae <i>Anser fabalis</i> [12]	Joyeux & Baer 1950	N
Anatidae <i>Aythya fuligula</i> <sup>o</sup>	Hörning 1963	VD/1961-3
Anatidae <i>Aythya marila</i> <sup>o</sup>	Fuhrmann 1926	NE, N
	Fuhrmann 1926	BA

<i>M. spirallibursata</i> (Czaplinski, 1956)	<i>Anas platyrhynchos</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	N/1981-5
Anatidae	<i>Macrocyclops albidus</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	M, N/1985
Cyclopidae			
<i>Milvina</i> van Beneden, 1873 - ( <i>Hymenolepis grisea</i> )	<i>Myotis myotis</i>	Vaucher & Hunkeler 1967	NE/1966
Vespertilionidae			
<i>Monorcholepis</i> Oshmann, 1961	<i>Sturnus vulgaris</i> <sup>o</sup>	Fuhrmann 1926	BA
<i>M. diiardini</i> * (Krabbe, 1869) - ( <i>Aploparaksis diiardini</i> , <i>Taenia diiardini</i> )	<i>Turdus merula</i>		NE/1968
Sturidae			
Turdidae			
<i>Neomylepis</i> Tkach, 1998			
Soricidae	<i>N. magnirostellata</i> (Baer, 1931) - ( <i>Hymenolepis magnirostellata</i> , <i>Staphylocystis magnirostellata</i> )	Baer 1931, Vaucher & Hunkeler 1967	VD, NE, VS/1931, 1968, 1973
<i>Neoskrjabinolepis</i> Spasskii, 1947	<i>Neomys fodiens</i>		
<i>N. merkushevae</i> Kornienko & Binknen, 2008 - ( <i>Hymenolepis schaldybini</i> , <i>Neoskrjabinolepis schaldybini</i> )	<i>Sox alpinus</i>	Vaucher 1971	VD, VS/1966, 1972
Soricidae	<i>Sox araneus</i>	Vaucher 1971	GR, NE, TI, VD, VS/1964-8, 1971, 1984, 1993
Soricidae	<i>Sox minutus</i>	Vaucher 1971	GR, VD, VS/1966, 1968, 1971
<i>N. schaldybini</i> Spasskii, 1947 - ( <i>Hymenolepis schaldybini</i> , <i>Neoskrjabinolepis singularis</i> )	<i>Sox alpinus</i>	Vaucher 1971	
Soricidae	<i>Sox araneus</i>	Vaucher 1971	
Soricidae	<i>Sox minutus</i>	Vaucher 1971	
<i>N. singularis</i> (Cholodkovsky, 1912) - ( <i>Hymenolepis singularis</i> )	<i>Myodes glareolus</i> [10]		
Cricetidae	<i>Sox araneus</i>	Baer 1932, Vaucher 1971	CH/1930, 1959, 1964-1972-4, 1993, 1996
Soricidae			GR, NE, VD/1960, 1965, 1968, 1971-2, 1984, 2001
<i>Parabissacanthus</i> Maksimova, 1963			GR/1971
Anatidae	<i>Cygnus olor</i>	Joyeux & Baer 1950	BE, GR, NE, VD, VS/1965-9, 1971-2
<i>P. bisaculina</i> (Szpotanska, 1931) - ( <i>Hymenolepis bisaculina</i> )	<i>Cygnus olor</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	N
Anatidae	<i>Acanthocyclops viridis</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	N/1981-5
Cyclopidae			M, N/1985
<i>P. philactes</i> (Schiller, 1951)	<i>Cygnus olor</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	NE, N/1981, 1985
Anatidae	<i>Eucyclops serratulus</i>	Szelenbaum-Cielecka <i>et al.</i> 1988	M, N/1985
<i>Pararodentolepis</i> Makarikov & Gulyaev, 2009	<i>Apodemus flavicollis</i>	Baer & Tenora 1970	NE, VS
<i>P. fraternus</i> * (Stiles, 1906) - ( <i>Hymenolepis murina</i> , <i>Rodentolepis fraternus</i> )	<i>Mus musculus</i>	Galli-Valerio 1940	NE, VD
Muridae	<i>Rattus rattus</i> <sup>o</sup>	L Baer 1928	BE, VD, VS
Muridae			
<i>Passerilepis</i> Spasskii & Spasskaya, 1954	<i>Sylvia atricapilla</i>	Gigon & Beuret 1991	JU/1986
<i>P. brevis</i> (Fuhrmann, 1906) - ( <i>Microsomacanthus brevis</i> )	<i>Corvus corone</i> <sup>o</sup>	Galli-Valerio 1940, Hörmig 1963	BA, FR, NE, TG, VD, VS/1961-3
Sylviidae	<i>Garrulus glandarius</i>	Galli-Valerio 1924, Hörmig 1963	NE, VD, VS/1961-3, 1972
<i>P. arenata</i> * (Goeze, 1782) - ( <i>Hymenolepis serpentulus</i> , <i>Microsomacanthus arenata</i> , <i>Taenia serpentulus</i> )	<i>Nucifraga caryocatactes</i>	Galli-Valerio 1940, Hörmig 1963	GE, VD, VS/1961-3
Corvidae	<i>Pica pica</i>	Hörmig 1963	VD, VS/1961-3
Corvidae	<i>Dendrocopos major</i>	Gigon 1988	GE, JU, NE/1973, 1986, 2001
Corvidae	<i>Sturnus vulgaris</i>		JU, NE/1986-7
Picidae	<i>Turdus merula</i>		BA, JU, NE/1966, 1985-6
Sturidae	<i>Turdus philomelos</i>		JU, NE/1965, 1986
Turdidae	<i>Turdus pilaris</i>		JU/1986
Turdidae	<i>Turdus viscivorus</i>		VD, VS
<i>P. passeris</i> * (Gmelin, 1790) - ( <i>Hymenolepis fringillarum</i> , <i>Microsomacanthus passeris</i> )	<i>Fringilla coelebs</i>		VS
Fringillidae	<i>Phoenicurus ochruros</i>		NE/1987
Muscicapidae			

Passeridae	<i>Passer domesticus</i> <sup>o</sup>	Galli-Valerio 1940	BA, GE, NE, VD/1970, 1985
Sylviidae	<i>Sylvia atricapilla</i>	Beuret 1988	JU, NE/1986-7
Sylviidae	<i>Sylvia borin</i>	Gigon 1988	JU/1986
<i>P. stylosa</i> * (Rudolphi, 1809) - ( <i>Hymenolepis</i> <i>stylosa</i> , <i>Microsomacanthus stylosa</i> , <i>Taenia stylosa</i> )			
Corvidae	<i>Corvus glandarius</i> <sup>o</sup>		
Corvidae	<i>Pica pica</i>		
<i>Pseudhymenolepis</i> Joyeux & Baer, 1935			
<i>P. redonica</i> Joyeux & Baer, 1935			
Sorticidae	<i>Crocidiura russula</i>	Vaucher & Hunkeler 1967	GE, NE, VD/1964-6, 1968, 1983
<i>Rodentolepis</i> Spasskii, 1954 (s. lato)			
<i>R. asymmetrica</i> (Janicki, 1904) - ( <i>Hymenolepis</i> <i>arvicola</i> , <i>Hymenolepis asymmetrica</i> , <i>Hymenolepis asymmetrica</i> , <i>Arostirilepis horrida</i> )			
Cricetidae	<i>Chionomys nivalis</i>	Baer 1932	TI, VD, VS/1968, 1994, 1997
Cricetidae	<i>Microtus agrestis</i>	Vaucher & Hunkeler 1967	NE, VD/1966-7, 1993-4
Cricetidae	<i>Microtus arvalis</i>	Baer 1932, Hörning 1963	VD, VS/1933, 1961-3, 1968, 1993
Cricetidae	<i>Microtus subterraneus</i>		TI, UR, VD, VS/1968, 1971, 1973, 1994
Cricetidae	<i>Myodes glareolus</i>	Baer & Tenora 1970	GE, GR, JU, NE/19765, 1967, 1971
Cricetidae	<i>Microtus (Pitymys)</i> sp.		GR, VD/1971, 1973
<i>R. erinacei</i> (Gmelin, 1790) - ( <i>Hymenolepis</i> <i>erinacei</i> )			
Ermaceidae	<i>Ermaceus europaeus</i>	Hörning 1963	GE, VD/1961-3
<i>R. microstoma</i> (Dujardin, 1845) - ( <i>Hymenolepis</i> <i>microstoma</i> )			
Carabidae	<i>Anchomenus dorsalis</i>	L	NE/1965 [13]
Leptopsyllidae	<i>Leptopsylla segnis</i>	L	NE
Muridae	<i>Apodemus</i> sp.		NE/1966
Muridae	<i>Apodemus flavicollis</i>	Vaucher & Hunkeler 1967, Wahl 1967	BE, GE, NE, VD/1962
Muridae	<i>Apodemus sylvaticus</i>	Vaucher & Hunkeler 1967, Wahl 1967	BE, GE, NE, VD/1962-4, 1966
Muridae	<i>Mus musculus</i>	Hörning 1963	VD/1961-3
<i>R. straminea</i> (Goeze, 1782) - ( <i>Hymenolepis</i> <i>straminea</i> )			
Cricetidae	<i>Myodes glareolus</i>		VD/1966
Muridae	<i>Apodemus flavicollis</i>		JU, NE/1965-8
Muridae	<i>Apodemus sylvaticus</i>		NE, VD/1965, 1994, 2001
<i>Skirjabinacanthus</i> Spasskii & Morozov, 1959			
<i>S. jacutus</i> Spasskii & Morozov, 1958			
Sorticidae	<i>Soxex minutus</i>	Vaucher 1971	VS/1966
<i>Sobolevicanthus</i> Spasskii & Spasskaja, 1954			
<i>S. fragilis</i> (Krabbe, 1869) - ( <i>Hymenolepis</i> <i>fragilis</i> )			
Anatidae	<i>Anas crecca</i>		
<i>S. gracilis</i> * (Zeder, 1803) - ( <i>Hymenolepis</i> <i>gracilis</i> )			
Anatidae	<i>Anas platyrhynchos</i> <sup>o</sup>	Szelenbaum-Cielecka <i>et al.</i> 1988	BA, NE, M, N/1981-5
Anatidae	<i>Aythya fuligula</i> <sup>o</sup>	Fuhrmann 1926	NE, L, N
Candoniidae	<i>Candona</i> sp.	L	M, N/1985
Cycolopidae	<i>Paracyclops fimbriatus</i>	L	M, N/1985
Cyprididae	<i>Cypridopsis vidua</i>	L	M, N/1985
<i>S. gracilissimus</i> Czaplinski & Czaplinska, 1990			
Anatidae	<i>Anas platyrhynchos</i>		NE/1985
<i>S. krabbella</i> (Hughes, 1940)			
Anatidae	<i>Anas platyrhynchos</i>		N/1981-5
<i>Sorticinia</i> Spasskii & Spasskaja, 1954			
<i>S. globosa</i> (Baer, 1931) - ( <i>Hymenolepis</i> <i>globosa</i> )			
Sorticidae	<i>Neomys fodiens</i>	Baer 1931	VS/1931, 1994
Sorticidae	<i>Neomys infirma</i>		
Sorticidae	<i>Soxex alpinus</i>	Vaucher 1971	VD
Sorticidae	<i>Soxex araneus</i>	Vaucher & Hunkeler 1967, Vaucher 1971	GR, NE, TI, VD, VS/1965-6, 1968-74, 1996
Sorticidae	<i>Soxex minutus</i>	Vaucher 1971	VS/1966
<i>Staphylocystis</i> Spasskii & Oshmarin 1954			
<i>S. acuta</i> (Rudolphi, 1819) - ( <i>Taenia obtusata</i> )			
Vespertilionidae	<i>Nyctalus noctula</i>	Galli-Valerio 1926	VD



<i>S. alpestris</i> Baer, 1931- ( <i>Hymenolepis alpestris</i> )	Baer 1931	VS/1932
Soricidae		
<i>S. bacillaris</i> * (Goetze, 1882) - ( <i>Hymenolepis bacillaris</i> )	Fuhrmann 1926, Gaschen 1950	FR, VD, VS
Talpidae		
<i>S. brusatae</i> (Vaucher, 1971)	Vaucher 1971	TI/1970, 1975
Soricidae		
<i>S. furcata</i> (Stieda, 1862) - ( <i>Hymenolepis furcata</i> )	Wahl 1967	GE/1963
Soricidae		
<i>S. pispillium</i> * (Dujardin, 1845) - ( <i>Hymenolepis pispillium</i> )	Baer 1932, Vaucher 1971 Vaucher & Hunkeler 1967, Vaucher 1971	CH/1931, 1965-72, 1984, 1993-4 NE, VD/1966
Soricidae		
<i>S. scalaris</i> (Dujardin, 1845) - ( <i>Hymenolepis dodecacantha</i> , <i>H. scalaris</i> , <i>Taenia scalaris</i> )	Wahl 1967, Vaucher 1971 Galli Valerio 1924 Galli Valerio 1912, Wahl 1967	GE BE, GE, NE, VD, VS/1943, 1962, 1964-9 VD, VS GE, VD, VS/1912, 1963
Soricidae		
<i>S. tiara</i> (Dujardin, 1845) - ( <i>Hymenolepis tiara</i> )	Vaucher & Hunkeler 1967, Vaucher 1971 Baer 1932 Wahl 1967	BE, GE, JU, NE, VD/1964-6, 1968-9 GE/1963
Soricidae		
<i>S. uncinata</i> (Stieda, 1862) - ( <i>Hymenolepis uncinata</i> )	Vaucher & Hunkeler 1967 Vaucher & Hunkeler 1967	BE, NE, VD/1943, 1964, 1966-9 TI/1969
Soricidae		
<i>S. taxometra</i> Baer, 1932 - ( <i>Hymenolepis taxometra</i> )	Baer 1928	TI/1965, 1970 VS
Soricidae		
<i>S. stiefanski</i> (Zarnowski, 1954) - ( <i>Hymenolepis stiefanski</i> )	Baer 1932	VS/1931
Soricidae		
<i>Staphylocystoides</i> Yamaguti, 1952	Vaucher & Hunkeler 1967, Vaucher 1971	VS/1964 TI/1970
Soricidae		
<i>T. bifurca</i> (Hamann, 1891) - ( <i>Hymenolepis bifurca</i> )	Vaucher & Hunkeler 1967, Vaucher 1971 Wahl 1967, Vaucher 1971	BE, GR, JU, NE, TI, VD, VS/1965-72 GE, GR, NE, VS/1960, 1963, 1971 1984
Soricidae		
<i>T. hamanni</i> (Mrázek, 1891) - ( <i>Cysticercus hamanni</i> , <i>Hymenolepis hamanni</i> , <i>H. neomidis</i> , <i>Vampirolepis neomidis</i> )	Vaucher & Hunkeler 1967 Hörning 1963 Baer 1931, Baer & Joyeux 1943, Hörning 1963, Vaucher 1971	NE/1966 GE, NE/1968 VS/1961-3
Soricidae		
<i>T. tenuirostris</i> * (Rudolphi, 1819) - ( <i>Anatinella tenuirostris</i> , <i>Hymenolepis tenuirostris</i> , <i>Taenia tenuirostris</i> )	Muray 1976 Fuhrmann 1926	GE, NE, VS/1931, 1961-4, 1968
Anatidae		
<i>Urocystis</i> Villot, 1880		BA
Cricetidae		
<i>U. proflifer</i> Villot, 1880 - ( <i>Hymenolepis proflifer</i> , <i>Neoskrabynolepis singularis</i> )	Vaucher & Hunkeler 1967, Vaucher 1971 Vaucher & Hunkeler 1967, Vaucher 1971	GR/1971 GR, VD/1971-2 CH/1965-6, 1968-74, 1994 NE, VD, VS/1965-6, 1968
Soricidae		
<i>V. baeri</i> Murai, 1976	Murai 1976	BE, VD/1967, 1986
Soricidae		
<i>V. balsaci</i> (Joyeux & Baer, 1934) - ( <i>Hymenolepis balsaci</i> )	Aellen 1949, Vaucher & Hunkeler 1967	BE, VD, VS/1950, 1959 VD, VS/1967
Vespertilionidae		
<i>Vespertilionidae</i>		





<i>Taenia</i> Linnaeus, 1758					
<i>T. angustata</i> Rudolphi, 1819 ( <i>sp. inquirenda</i> )	<i>Meles meles</i>	Bouvier <i>et al.</i> 1951			VD/1949-50
Mustelidae	<i>Canis familiaris</i>	Gaschen 1950			AG, BA, GE, NE, SG, VD, VS/1947, 1955, 1960-3, 1975-9
Canidae	<i>Vulpes vulpes</i> <sup>o</sup>	Baer 1925a, Hörning 1963			FR, SG, VD, VS, ZH/1968-9, 2007-8
Cricetidae	<i>Arvicola amphibius</i>	L			VD/1961-3
Cricetidae	<i>Microtus agrestis</i>	L			BE, VD, VS/1961-4, 1993
Cricetidae	<i>Microtus arvalis</i> <sup>o</sup>	L			VS
Cricetidae	<i>Microtus subtypicus</i>	L			VD
Muridae	<i>Mus musculus</i>	L			VD
Muridae	<i>Rattus rattus</i>	L			OW, UR/1961-3
Sciuridae	<i>Marmota marmota</i>	L			
<i>T. intermediaria</i> * Rudolphi 1810 ( <i>sp. inquirenda</i> )	<i>Martes foina</i> <sup>o</sup>	Fuhrmann 1926			VD
Mustelidae	<i>Martes martes</i>	Galli-Valerio 1940			VD
Mustelidae	<i>Mustela erminea</i>	Gaschen 1950			VD
<i>T. hydatigena</i> * Pallas, 1766 - ( <i>Cysticercus tenuicollis</i> , <i>Cysticercus longicollis</i> , <i>Taenia marginata</i> )	<i>Bos taurus</i> <sup>o</sup>	L			NE, VD, ZH
Bovidae	<i>Capra ibex</i>	L			GR, VD, VS/1961-3
Bovidae	<i>Ovis aries</i> <sup>o</sup>	L			VD, ZH
Bovidae	<i>Rupicapra rupicapra</i>	L			CH/1961-3, 1970-2
Canidae	<i>Canis familiaris</i> <sup>o</sup>	L			BE, NE, VD, ZH
Canidae	<i>Vulpes vulpes</i>	L			VD, VS/1961-3
Cervidae	<i>Capreolus capreolus</i>	L			BE, GR, OW, SG, VD, VS/1961-3
Cervidae	<i>Cervus elaphus</i>	L			GR/1961-3
Muridae	<i>Apodemus sylvaticus</i> <sup>o</sup>	L			VS
Suidae	<i>Sus scrofa</i> <sup>o</sup>	L			VD, ZH
<i>T. krabbei</i> Montez, 1879 - ( <i>Cysticercus cervi</i> , <i>Taenia cervi</i> )	<i>Capreolus capreolus</i>	L			SG/1961-3
Cervidae					
<i>T. martis</i> (Zeder, 1803)	<i>Myodes glareolus</i>	L			FR, GE, JU, NE, VD/1961-9, 1984, 1994, 1998
Cricetidae	<i>Homo sapiens</i>	L			
Homnidae	<i>Apodemus flavicollis</i>	L			FR, GE, NE/1962, 1966, 1969
Muridae	<i>Apodemus sylvaticus</i>	L			GE, NE/1962-4, 1966
Muridae	<i>Martes foina</i>	L			GE, VD, VS/1960-1, 1980-2, 1986
Mustelidae	<i>Meles meles</i>	L			VD/1972
<i>T. multiceps</i> * (Leske, 1780) - ( <i>Coenurus cerebralis</i> , <i>Multiceps cerebralis</i> , <i>Multiceps multiceps</i> , <i>Taenia coenurus</i> )	<i>Bos taurus</i> <sup>o</sup>	L			BE, GR, SG, ZH
Bovidae	<i>Ovis aries</i> <sup>o</sup>	L			BE, GE, ZH/1959
Bovidae	<i>Canis familiaris</i> <sup>o</sup>	L			ZH
Canidae	<i>Vulpes vulpes</i>	L			VD/1961-3
Cervidae	<i>Capreolus capreolus</i>	L			VD, VS/1954, 1961-3
Leporidae	<i>Oryctolagus cuniculus</i>	L			VD
<i>T. pisiformis</i> * (Bloch, 1780) - ( <i>Cysticercus pisiformis</i> , <i>Taenia serrata</i> )	<i>Oryctolagus cuniculus</i>	L			BE, GE, VD, ZH
Canidae	<i>Canis familiaris</i> <sup>o</sup>	L			NE, SG, VD, VS/1961-3
Canidae	<i>Vulpes vulpes</i>	L			GE
Cricetidae	<i>Arvicola amphibius</i>	L			GE
Felidae	<i>Felis silvestris</i> <sup>o</sup>	L			TI, VD/1961-3
Leporidae	<i>Lepus europaeus</i> [18]	L			BE, GE, NE, VD, VS
Leporidae	<i>Oryctolagus cuniculus</i> <sup>o</sup>	L			VD
Muridae	<i>Rattus rattus</i> <sup>o</sup>	L			GE, JU, NE, VD, VS, ZH/1955, 1961-3, 1967, 1970
<i>T. polyacantha</i> Leuckart, 1856 - ( <i>Cysticercus taeniae-polyacanthae</i> , <i>Hoplothyridium</i> )	<i>Vulpes vulpes</i>	L			VD/1967, 1999
Canidae	<i>Microtus arvalis</i>	L			
Cricetidae					



Cricetidae	<i>Microtus multiplex</i>	L	Baer 1932, Hörning 1963	VD/1973
Cricetidae	<i>Myodes glareolus</i>	L	Hörning 1963	GR, VS/1931, 1961-3, 1971
Muridae	<i>Apodemus sylvaticus</i>	L	Hörning 1963	VD, VS/1961-3
Muridae	<i>Mus musculus</i>	L	Hörning 1963	VD/1961-3
Sciuridae	<i>Sciurus vulgaris</i>	L	Hörning 1963	NE, VD, VS/1961-3
<i>T. saginata</i> * Goeze, 1782 - ( <i>Cysticercus bovis</i> , <i>Taenia mediocanellata</i> )				
Bovidae	<i>Bos taurus</i> <sup>o</sup>	L	Fuhrmann 1926	BA, BE, VD ZH
Hominiidae	<i>Homo sapiens</i> <sup>o</sup>		Galli-Valerio 1901, 1921	CH/1924, 1929, 1931
<i>T. secunda</i> Olsson, 1893 ( <i>sp. inquirenda</i> , <i>sp. incerta sedis</i> )				
Bovidae	<i>Rupicapra rupicapra</i>	L	Gaschen 1950	VS/1961-3
Mustelidae	<i>Meles meles</i>		Bouvier <i>et al.</i> 1953	BA, VD/1952
Canidae	<i>Canis familiaris</i>	L	Gaschen 1950	VD
Leporidae	<i>Oryctolagus cuniculus</i> <sup>o</sup> [19]		Galli-Valerio 1909, André 1917	GE, VD/1908
<i>T. solium</i> * Linnaeus, 1758 - ( <i>Cysticercus cellulosae</i> )				
Hominiidae	<i>Homo sapiens</i> <sup>o</sup> [20]	L	Galli-Valerio 1901, Fuhrmann 1926	CH
Suidae	<i>Sus scrofa</i> <sup>o</sup>	L	Fuhrmann 1926	CH
<i>Taenia</i> sp.			Schmidt-Posthaus <i>et al.</i> 2002	
Felidae	<i>Lynx lynx</i>			
<i>Herteria</i> Nakao <i>et al.</i> , 2013				
<i>V. mustelae</i> (Gmelin, 1790) - ( <i>Cysticercus hypudaei</i> , <i>Cysticercus tenuicollis</i> , <i>Taenia mustelae</i> , <i>Taenia tenuicollis</i> )				
Bovidae	<i>Capra ibex</i> [21]	L	Galli-Valerio 1939	VD
Bovidae	<i>Ovis aries</i> [21]	L		GE
Cricetidae	<i>Microtus arvalis</i>	L	Hörning 1963	GE, VD, VS/1961-3
Cricetidae	<i>Myodes glareolus</i>	L	Vaucher & Hunkeler 1967	GE, NE, VD/1961, 1966, 1998
Muridae	<i>Apodemus sylvaticus</i>	L	Galli-Valerio 1917	VS/1915
Mustelidae	<i>Mustela erminea</i>		Wahl 1967	BE, VD, VS/1956
Mustelidae	<i>Mustela nivalis</i>			GE
Mustelidae	<i>Mustela putorius</i>		Wahl 1967	SH, VS/1960
Suidae	<i>Sus scrofa</i> [21]	L	Gaschen 1950	
Talpidae	<i>Talpa europaea</i>	L	Hörning 1963	VD/1961-3
<b>DIPHYLLOBOTHRIDEA</b>				
<b>Diphyllobothriidae Lühe, 1910</b>				
<i>Diphyllobothrium</i> Cobbold, 1858				
<i>D. dendriticum</i> (Nitzsch, 1824)				
Hominiidae	<i>Homo sapiens</i>		Wicht <i>et al.</i> 2010	BE/2006
<i>D. latum</i> * (Linnaeus, 1758) - ( <i>Bothriocephalus latus</i> , <i>Dibothriocephalus latus</i> )				
Canidae	<i>Canis familiaris</i> <sup>o</sup>		Galli-Valerio 1904, 1940	GE, VD
Canidae	<i>Vulpes vulpes</i> <sup>o</sup>		Bouvier <i>et al.</i> 1963, Radacovska <i>et al.</i> 2022	GR, NE/2017-2018
Cyclopidae	<i>Cyclops strenuus</i> <sup>o</sup>	L	Jamicki & Rosen 1917	NE
Cyclopidae	<i>Eucyclops serranulus</i>	L	Szelenbaum-Cielecka <i>et al.</i> 1988 [22]	M, N/1985
Diaptomidae	<i>Diaptomus gracilis</i> <sup>o</sup>	L	Jamicki & Rosen 1917	NE
Felidae	<i>Felis silvestris</i> <sup>o</sup>		Galli-Valerio 1902, Bouvier <i>et al.</i> 1963, Zottler <i>et al.</i> 2019	VD, ZH
Esocidae	<i>Esox lucius</i> <sup>o</sup>	L	Baer 1925b, Bouvier <i>et al.</i> 1963, Golley & Mariaux 1995, Radacovska <i>et al.</i> 2019	BA, GE, NE, VD, A, B, L, M, N, V/1923-4, 1932
Hominiidae	<i>Homo sapiens</i> <sup>o</sup>		Galli-Valerio 1901, Fuhrmann 1926, Bouvier <i>et al.</i> 1963, Wicht <i>et al.</i> 2010	CH/1962, 2002, 2004-8
Lotidae	<i>Lota lota</i> <sup>o</sup>	L	Galli-Valerio 1901, André 1917, Hörning 1963	NE, TI, VD, A, L, M, N, O/1961-3
Percidae	<i>Perca fluviatilis</i> <sup>o</sup>	L	Galli-Valerio 1901, Bouvier <i>et al.</i> 1963, Golley & Mariaux 1995, Wicht <i>et al.</i> 2009, Radacovska <i>et al.</i> 2019	BE, VD, A, B, L, M, N/1994-1995, 2017-2018
Salmonidae [23]	<i>Coregonus fera</i> <sup>o</sup>	L	Schor 1902, Zschokke 1933	L
Salmonidae [23]	<i>Salmo trutta</i> <sup>o</sup>	L	Baer 1925b, Bouvier <i>et al.</i> 1963, Králová-Hromadová <i>et al.</i> 2021	BA, NE, VS, N, O, T, V
Salmonidae [23]	<i>Salvelinus umbla</i> <sup>o</sup>	L	Galli-Valerio 1901, Bouvier <i>et al.</i> 1963	L
Salmonidae [23]	<i>Thymallus thymallus</i> <sup>o</sup>	L	Zschokke 1887, Bouvier <i>et al.</i> 1963	L, O
Ramidae	<i>Pelophylax lessonae</i>	L		NE



Diaptomidae	<i>Eudiaptomus vulgaris</i>	L	Pecorini 1959	A/1957-8
Diaptomidae	<i>Mixodiaptomus laciniatus</i>	L	Pecorini 1959	A/1957-8
Esocidae	<i>Esox lucius</i> <sup>o</sup>	L	Nufer 1905	L, V/1994
Leuciscidae	<i>Alburnus alburnus</i> <sup>o</sup>		Nufer 1905	O, V
Leuciscidae	<i>Squalius cephalus</i>		Nufer 1905	V
Percidae	<i>Perca fluviatilis</i> <sup>o</sup>		Nufer 1905	NE, L, O, V
Salmonidae	<i>Coregonus fera</i> <sup>o</sup>		Nufer 1905, André 1917, Zschokke 1933	L, O, V, GE/1909, 1995
Salmonidae	<i>Coregonus gutturosus</i>		Zschokke 1933	L, O, V
Salmonidae	<i>Coregonus hiemalis</i>		André 1917, Zschokke 1933	L
Salmonidae	<i>Coregonus lavaretus</i>		Pecorini 1959, Hanzelova <i>et al.</i> 1999	BE, GE, A, B, L/1957-8, 1990, 1994-7
Salmonidae	<i>Coregonus macrophthalmus</i> <sup>o</sup>		André 1917, Zschokke 1933, Nufer 1905	N, O, V
Salmonidae	<i>Coregonus wartmanni</i> <sup>o</sup>		Zschokke 1933, Nufer 1905	BE, O, V
Salmonidae	<i>Coregonus</i> sp.			NE, N
Salmonidae	<i>Oncorhynchus mykiss</i>			GR/1944
Salmonidae	<i>Salmo trutta</i> <sup>o</sup>		Lune 1879, Hanzelova & Scholz 1992	BA, NE, L/1909, 1985
Salmonidae	<i>Salvelinus umbla</i> <sup>o</sup>		Lune 1879, Zschokke 1884, Nufer 1905	L, V
Salmonidae	<i>Thymallus thymallus</i> <sup>o</sup>			BA, O
<i>P. macrophthalmus</i> * (Creplin, 1825) - ( <i>Ichthyotaenia macrocephala</i> )			Nufer 1905	O, V
Anguillidae	<i>Anguilla anguilla</i> <sup>o</sup>			L, M/1994
<i>P. percae</i> * (Müller, 1780) - ( <i>Ichthyotaenia longicollis</i> , I. ocellata, I. percae, <i>Proteocephalus percae</i> , <i>P. dubius</i> , <i>P. ocellatus</i> , <i>Taenia percae</i> ) [29]			Zschokke 1884	BA
Esocidae	<i>Esox lucius</i>			BE, GE, VD, L, O/1986, 1994
Gasterosteidae	<i>Gasterosteus aculeatus</i>			CH/<1911, 1961-3, 1986, 1990, 1994-6, 2007-9
Lotidae	<i>Lota lota</i> <sup>o</sup>		Zschokke 1884	L, N, O, V
Percidae	<i>Perca fluviatilis</i> <sup>o</sup>		Zschokke 1884, Hörmig 1963, Hanzelova <i>et al.</i> 1999	L
Salmonidae	<i>Coregonus fera</i> <sup>o</sup>		Zschokke 1884, Nufer 1905, Zschokke 1933	
Salmonidae	<i>Coregonus hiemalis</i> <sup>o</sup>		Sublet 1987	
Salmonidae	<i>Coregonus lavaretus</i>		Nufer 1905, Zschokke 1933	N, V
Salmonidae	<i>Coregonus macrophthalmus</i>			NE/1916
Salmonidae	<i>Coregonus oxyrinchus</i>			NE
Salmonidae	<i>Coregonus palaea</i>			O, V
Salmonidae	<i>Coregonus wartmanni</i> <sup>o</sup>		Nufer 1905, Zschokke 1933	VD/1986-7
Salmonidae	<i>Salmo trutta</i>		Zschokke 1884	V
Salmonidae	<i>Salvelinus umbla</i>		Nufer 1905	V
<i>P. torulosus</i> * (Batsch, 1786) [30] - ( <i>Ichthyotaenia torulosus</i> , <i>Ichthyotaenia torulosa</i> )				V
Gobiionidae	<i>Gobio gobio</i> <sup>o</sup>		Nufer 1905	O
Leuciscidae	<i>Abramis brama</i> <sup>o</sup>		Fuhrmann 1926	GE, NE, VD, L, O, V/1961-3, 1995
Leuciscidae	<i>Alburnus alburnus</i> <sup>o</sup>		Nufer 1905, Hörmig 1963	V
Leuciscidae	<i>Blicca bjoerkna</i> <sup>o</sup>		Nufer 1905	BA, O, N, V
Leuciscidae	<i>Leuciscus leuciscus</i> <sup>o</sup>		Nufer 1905	O
Lotidae	<i>Lota lota</i> <sup>o</sup>		Zandt 1924	O, V
Percidae	<i>Perca fluviatilis</i> <sup>o</sup>		Nufer 1905, Zandt 1924	L, V
Salmonidae	<i>Coregonus fera</i> <sup>o</sup>		Nufer 1905, Zschokke 1933	V
Salmonidae	<i>Coregonus macrophthalmus</i> <sup>o</sup>		Nufer 1905	O
Salmonidae	<i>Coregonus wartmanni</i> <sup>o</sup>		Zandt 1924	V
Salmonidae	<i>Salvelinus umbla</i> <sup>o</sup>		Nufer 1905	V
<b>SPATHEBOTHRIDEA</b>				
<b>Acrobothridae</b> Olsson, 1872				
Cyathocephalidae Kessler, 1868				
<i>C. truncatus</i> * (Pallas, 1781)				
Cottidae	<i>Cottus gobio</i>			GE
Esocidae	<i>Esox lucius</i>		Gaschen 1950	VD
Gammaridae	<i>Gammarus pulex</i> <sup>o</sup>	L		NE/1917
Leuciscidae	<i>Rutilus rutilus</i>		Gaschen 1950	L
Lotidae	<i>Lota lota</i> <sup>o</sup>		Zschokke 1884, Nufer 1905, Hörmig 1963	GE, NE, TI, O, L, V/1917, 1961-3, 1986
Percidae	<i>Perca fluviatilis</i> <sup>o</sup>		Nufer 1905	BA, O, V
Phoxinidae	<i>Phoxinus phoxinus</i>		Mariaux 1986	NE/1983-4
Salmonidae	<i>Coregonus fera</i> <sup>o</sup>		Zschokke 1884, 1933	NE, L, O/1917

O  
N  
GE, VD/1961-3  
BA, NE, B/1983, 1985  
L, V  
NE/1983

Zschokke 1933  
Zschokke 1933  
Fuhrmann 1926, Hörmig 1963  
Mariaux 1986  
Zschokke 1884  
Mariaux 1986

*Coregonus gutturosus*  
*Coregonus macrophthalmus*  
*Oncorhynchus mykiss*<sup>o</sup>  
*Salmo trutta*<sup>o</sup>  
*Salvelinus umbla*<sup>o</sup>  
*Thymallus thymallus*

NE  
N  
N  
NE

Fuhrmann 1926  
Fuhrmann 1926  
Fuhrmann 1926

*T. (Culmenamniculus) cylindraceus*\* (Rudolphi, 1810)  
*Chirocephalus ridibundus*<sup>o</sup>  
*T. (Tetraobolus) macrocephalus*\* (Rudolphi, 1810) - (*Tetraobolus perfidum*)  
*Podiceps auritus*<sup>o</sup>  
*Podiceps cristatus*<sup>o</sup>  
*Podiceps* sp.

**TRYPANORHYNCHA**

**Trypanorhyncha Diesing, 1863**  
*Gilquinta* Guiart, 1927

*G. squail*\* (Fabricius, 1794) - (*Tetraorhynchus paleaceus*)  
Salmonidae

L Zschokke 1891, Fuhrmann 1926

*Grillota* Guiart, 1927

*G. (Grillota) erinaceus*\* (van Beneden, 1858) - (*Tetraorhynchus erinaceus*, *Tetraorhynchus lotae*)  
Salmonidae

L Zschokke 1903, Fuhrmann 1926

*Hepatoxylon* Bose, 1811

*H. trichiuri*\* (Hollen, 1802) - (*Coenomorphus grossus*)  
Salmonidae

L Zschokke 1891, Fuhrmann 1926

*Tentacularia* Bose, 1797

*T. coryphaena*\* Bosc, 1802 - (*Tetraorhynchus quadristris*)  
Salmonidae

L Fuhrmann 1926

**Undetermined cestodes**

Anatidae

*Anas acuta*

Hörmig 1963

Anatidae

*Bucephala clangula*

Hörmig 1963

Ardeidae

*Ardea cinerea*

Hörmig 1963

Ardeidae

*Egretta garzetta*

Hörmig 1963

Corvidae

*Corvus corax*

Hörmig 1963

Corvidae

*Corvus monedula*

Hörmig 1963

Corvidae

*Pyrrhocorax graculus*

Hörmig 1963

Cuculidae

*Cuculus canorus*

Hörmig 1963

Picidae

*Dryocopus martius*

Hörmig 1963

Phylloscopidae

*Phylloscopus collybita*

Hörmig 1963

Strigidae

*Sirix aluco*

Hörmig 1963



Table 2. Hosts of cestodes in Switzerland

	# Host species	% of Swiss species	H-P pairs
INVERTEBRATES	24	---	40
VERTEBRATES	190	29% (of 665)	649
<i>ACTINOPTERYGII</i>	36	36% (of 100)	138
<i>AMPHIBIA</i>	3	16% (of 19)	4
<i>REPTILIA</i>	3	19% (of 16)	3
<i>AVES</i>	94	22% (of 431)	225
<i>MAMMALIA</i>	54	56% (of 99)	279
<b>TOTAL</b>	<b>214</b>		<b>689</b>

Table 3. Host – Parasite Checklist

**“Invertebrates” (24)****Gastropoda (1)****Arionidae***Arion* sp.*Molluscotaenia crassiscolex***Hexanauplia (10)****Cyclopidae***Acanthocyclops viridis**Parabissacanthus kazachstanica**Cyclops abyssorum**Proteocephalus longicollis**Cyclops strenuus**Diphyllobothrium latum**Proteocephalus longicollis**Eucyclops serratulus**Diphyllobothrium latum**Echinocotyle ryjikovi**Microsomacanthus compressa**Parabissacanthus philactes**Macrocyclus albidus**Microsomacanthus compressa**Fimbriaria fasciolaris**Microsomacanthus spirallibursata**Echinocotyle ryjikovi**Mesocyclops leuckarti**Proteocephalus longicollis**Paracyclops fimbriatus**Sobolevicanthus gracilis***Diaptomidae***Diaptomus gracilis**Diphyllobothrium latum**Eudiaptomus vulgaris**Proteocephalus longicollis**Mixodiaptomus laciniatus**Proteocephalus longicollis***Ostracoda (4)****Candonidae***Candona* sp.*Sobolevicanthus gracilis**Diorchis ransomi***Cyprididae***Cyclopypris laevis**Dicranotaenia coronula**Cypris* sp.*Echinocotyle anatina**Cypridopsis vidua**Sobolevicanthus gracilis**Fimbriaria fasciolaris**Echinocotyle rosseteri**Diorchis inflata**Diorchis brevis**Diorchis ransomi***Malacostraca (1)****Gammaridae***Gammarus pulex**Coronacanthus integrus**Coronacanthus omissus**Cyathocephalus truncatus**Triodontolepis bifurca***Diplopoda (2)****Glomeridae***Glomeris marginata**Staphylocystis pistillum**Glomeris* sp.*Sobolevitaenia verulamii***Hexapoda (3)****Carabidae***Anchomenus dorsalis**Rodentolepis microstoma***Leptopsyllidae***Leptopsylla segnis**Rodentolepis microstoma*

- Scrabaecidae**  
*Amidorus obscurus*  
*Ctenotaenia marmotae*
- Clitellata (3)**
- Tubificidae**  
*Limnodrilus claparedianus*  
*Caryophyllaeus laticeps*  
*Tubifex barbatus*  
*Caryophyllaeus laticeps*  
*Tubifex tubifex*  
*Caryophyllaeus laticeps*
- Vertebrates (178)**
- Actinopterygii (36)**
- Anguillidae**  
*Anguilla anguilla*  
*Proteocephalus macrocephalus*
- Clupeidae**  
*Alosa agone*  
*Proteocephalus longicollis*
- Cottidae**  
*Cottus gobio*  
*Caryophyllaeus laticeps*  
*Cyathocephalus truncatus*  
*Eubothrium salvelini*  
*Triaenophorus nodulosus*
- Cyprinidae**  
*Barbus barbus*  
*Bathybothrium rectangulum*  
*Eubothrium salvelini*  
*Cyprinus carpio*  
*Caryophyllaeus fimbriceps*  
*Caryophyllaeus laticeps*  
*Ligula intestinalis*
- Esocidae**  
*Esox lucius*  
*Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium salvelini*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Triaenophorus crassus*  
*Triaenophorus nodulosus*
- Gasterosteidae**  
*Gasterosteus aculeatus*  
*Proteocephalus filicollis*  
*Proteocephalus percae*  
*Schistocephalus solidus*
- Gobionidae**  
*Gobio gobio*  
*Ligula intestinalis*  
*Proteocephalus torulosus*
- Ictaluridae**  
*Ameiurus melas*  
*Corallobothrium parafimbriatum*
- Leuciscidae**  
*Abramis brama*  
*Caryophyllaeus laticeps*  
*Ligula intestinalis*  
*Proteocephalus torulosus*  
*Alburnus alburnus*  
*Caryophyllaeus laticeps*  
*Ligula intestinalis*
- Proteocephalus longicollis*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Blicca bjoerkna**  
*Caryophyllaeides fennica*  
*Caryophyllaeus laticeps*  
*Ligula intestinalis*  
*Proteocephalus torulosus*
- Chondrostoma nasus**  
*Caryophyllaeus laticeps*  
*Caryophyllaeides fennica*  
*Ligula intestinalis*
- Leuciscus leuciscus**  
*Ligula digramma*  
*Proteocephalus torulosus*
- Rutilus rutilus**  
*Caryophyllaeides fennica*  
*Caryophyllaeus laticeps*  
*Cyathocephalus truncatus*  
*Ligula intestinalis*
- Scardinius erythrophthalmus**  
*Caryophyllaeides fennica*  
*Ligula intestinalis*
- Squalius cephalus**  
*Caryophyllaeides fennica*  
*Caryophyllaeus laticeps*  
*Eubothrium salvelini*  
*Ligula intestinalis*  
*Proteocephalus longicollis*
- Lotidae**  
***Lota lota***  
*Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium rugosum*  
*Eubothrium salvelini*  
*Proteocephalus percae*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Nemacheilidae**  
***Barbatula barbatula***  
*Ligula intestinalis*
- Percidae**  
***Perca fluviatilis***  
*Bathybothrium rectangulum*  
*Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium salvelini*  
*Ligula intestinalis*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Phoxinidae**  
***Phoxinus phoxinus***  
*Cyathocephalus truncatus*  
*Ligula intestinalis*  
*Triaenophorus nodulosus*
- Salmonidae**  
***Coregonus fera***  
*Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium crassum*  
*Eubothrium salvelini*

- Ligula intestinalis*  
*Proteocephalus filicollis*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Coregonus gutturosus**  
*Cyathocephalus truncatus*  
*Proteocephalus longicollis*
- Coregonus hiemalis**  
*Proteocephalus longicollis*  
*Proteocephalus percae*
- Coregonus lavaretus**  
*Proteocephalus longicollis*  
*Proteocephalus perca*  
*Triaenophorus crassus*
- Coregonus macrophthalmus**  
*Cyathocephalus truncatus*  
*Eubothrium crassum*  
*Eubothrium salvelini*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Coregonus oxyrinchus**  
*Proteocephalus percae*
- Coregonus palaea**  
*Proteocephalus percae*
- Coregonus wartmanni**  
*Eubothrium crassum*  
*Eubothrium salvelini*  
*Ligula intestinalis*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Oncorhynchus mykiss**  
*Cyathocephalus truncatus*  
*Proteocephalus longicollis*
- Salmo salar**  
*Eubothrium crassum*  
*Eubothrium salvelini*  
*Gilquinia squali*  
*Grillotia erinaceus*  
*Hepatoxylon trichiuri*  
*Tentacularia coryphanae*
- Salmo trutta**  
*Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium crassum*  
*Eubothrium salvelini*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Triaenophorus nodulosus*
- Salvelinus umbla**  
*Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium salvelini*  
*Proteocephalus longicollis*  
*Proteocephalus percae*  
*Proteocephalus torulosus*  
*Triaenophorus nodulosus*
- Thymallus thymallus**
- Cyathocephalus truncatus*  
*Diphyllobothrium latum*  
*Eubothrium salvelini*  
*Proteocephalus longicollis*  
*Triaenophorus nodulosus*
- Siluridae**  
**Silurus glanis**  
*Eubothrium salvelini*  
*Glanitaenia osculata*
- Tincidae**  
**Tinca tinca**  
*Caryophyllaeus laticeps*  
*Khawia baltica*  
*Ligula intestinalis*  
*Triaenophorus nodulosus*
- Amphibia (3)**  
**Bufonidae**  
**Bufo bufo**  
*Nematotaenia dispar*
- Ranidae**  
**Pelophylax lessonae**  
*Diphyllobothrium latum*  
*Nematotaenia dispar*
- Salamandridae**  
**Salamandra atra**  
*Nematotaenia dispar*
- Reptilia (3)**  
**Colubridae**  
**Natrix natrix**  
*Proteocephalus longicollis*  
**Natrix tessellata**  
*Ophiotaenia europaea*
- Lacertidae**  
**Lacerta viridis**  
*Oochoristica rotundata*
- Aves (94)**  
**Accipitridae**  
**Accipiter gentilis**  
*Cladotaenia cylindracea*  
*Cladotaenia globifera*  
**Buteo buteo**  
*Cladotaenia cylindracea*  
*Cladotaenia globifera*  
**Circus gallicus**  
*Mesocostoides perlatus*  
**Gyps fulvus**  
*Ligula intestinalis*  
**Milvus migrans**  
*Cladotaenia cylindracea*  
*Idiogenes flagellum*
- Alaudidae**  
**Alauda arvensis**  
*Dilepis undula*
- Anatidae**  
**Anas acuta**  
 Gen. sp.  
**Anas crecca**  
*Sobolevicanthus fragilis*  
**Anas platyrhynchos**  
*Aploparaksis furcigera*  
*Cloacotaenia megalops*  
*Dicranotaenia coronula*  
*Diorchis elisae*

- Echinocotyle anatina*  
*Fimbriaria fasciolaris*  
*Microsomacanthus abortiva*  
*Microsomacanthus collaris*  
*Microsomacanthus compressa*  
*Microsomacanthus paracompressa*  
*Microsomacanthus parvula*  
*Microsomacanthus spiralibursata*  
*Platyscolex ciliata*  
*Raillietina anatina*  
*Sobolevicanthus gracilis*  
*Sobolevicanthus gracilissimus*  
*Sobolevicanthus krabella*
- Anser fabalis**  
*Microsomacanthus setigera*
- Aythya ferina**  
*Diploposthe laevis*
- Aythya fuligula**  
*Aploparaksis furcigera*  
*Fimbriaria fasciolaris*  
*Hymenolepis armata*  
*Microsomacanthus arcuata*  
*Microsomacanthus collaris*  
*Microsomacanthus compressa*  
*Microsomacanthus setigera*  
*Sobolevicanthus gracilis*
- Aythya marila**  
*Dicranotaenia coronula*  
*Fimbriaria fasciolaris*  
*Hymenolepis setigera*  
*Microsomacanthus arcuata*
- Bucephala clangula**  
 Gen. sp.
- Cygnus olor**  
*Anatinella kazachstanica*  
*Cladogynia guberiana*  
*Echinocotyle anatina*  
*Fimbriaria fasciolaris*  
*Parabisaccanthes bisacculina*  
*Parabisaccanthes kazachstanica*  
*Parabisaccanthes philactes*  
*Wardoides nyrocae cygni*
- Mergus merganser**  
*Cladogynia macracanthos*  
*Dicranotaenia coronula*  
*Fimbriaria fasciolaris*  
*Ligula intestinalis*  
*Tschertkovilepis tenuirostris*
- Mergus serrator**  
*Cladogynia macracanthos*  
*Diorchis acuminata*
- Netta rufina**  
*Diploposthe laevis*  
*Fimbriaria fasciolaris*  
*Hymenolepis teresoides*  
*Microsomacanthus collaris*
- Somateria mollissima**  
*Microsomacanthus microsoma*
- Tadorna tadorna**  
*Cloacotaenia megalops*
- Apodidae**  
**Apus apus**  
*Anomotaenia cyathiformis*
- Dilepis cypselina*  
*Neoliga depressa*  
*Notopentorchis* sp.  
*Paruterina vesiculigera*  
*Pseudangularia* sp.
- Tachymarptis melba**  
*Neoliga depressa*
- Ardeidae**  
**Ardea cinerea**  
 Gen. sp.
- Botaurus stellaris**  
*Schistocephalus solidus*
- Egretta garzetta**  
 Gen. sp.
- Burhinidae**  
**Burhinus oedicephalus**  
*Burhinotaenia coronata*
- Caprimulgidae**  
**Caprimulgus europaeus**  
*Paricterotaenia megacantha*
- Charadriidae**  
**Vanellus vanellus**  
*Anomotaenia microphallos*  
*Anomotaenia stentorea*  
*Sacciuterina paradoxa*
- Ciconiidae**  
**Ciconia ciconia**  
*Microsomacanthus microcephalus*
- Cinclidae**  
**Cinclus cinclus**  
*Anomotaenia dehiscens*
- Columbidae**  
**Columba livia**  
*Cladogynia serrata*  
*Skrjabinia bonini*
- Columba palumbus**  
*Cladogynia serrata*  
*Skrjabinia bonini*
- Corvidae**  
**Corvus corone**  
*Dilepis undula*  
*Passerilepis crenata*  
*Spiniglans constricta*
- Corvus frugileus**  
*Dilepis undula*  
*Spiniglans affinis*  
*Spiniglans constricta*
- Corvus corax**  
 Gen. sp.
- Corvus monedula**  
 Gen. sp.
- Garrulus glandarius**  
*Passerilepis crenata*  
*Passerilepis stylosa*  
*Wardium farciminoso*
- Nucifraga caryocatactes**  
*Passerilepis crenata*
- Pica pica**  
*Dilepis undula*  
*Passerilepis crenata*  
*Passerilepis stylosa*
- Pyrrhocorax graculus**  
 Gen. sp.



- Pyrrhonorax pyrrhonorax*  
*Dilepis undula*
- Cuculidae**  
*Cuculus canorus*  
Gen. sp.
- Falconidae**  
*Falco tinnunculus*  
*Cladotaenia cylindracea*
- Fringillidae**  
*Fringilla coelebs*  
*Orthoskrjabinia bobica*  
*Passerilepis passeris*  
*Fringilla montifringilla*  
*Orthoskrjabinia conica*  
*Pyrrhula pyrrhula*  
*Orthoskrjabinia bobica*
- Gaviidae**  
*Gavia arctica*  
*Armadoskrjabinia rostellata*  
*Hymenolepis simulans*  
*Gavia immer*  
*Armadoskrjabinia rostellata*  
*Ligula colymbi*  
*Ligula intestinalis*  
*Microsomacanthus pseudorostellatus*  
*Gavia stellata*  
*Armadoskrjabinia rostellata*
- Laridae**  
*Chroicocephalus ridibundus*  
*Aploparaksis cirrosa*  
*Ligula intestinalis*  
*Paricterotaenia porosa*  
*Tetrabothisrius cylindraceus*  
*Rissa tridactyla*  
*Ligula intestinalis*
- Muscicapidae**  
*Erithacus rubecula*  
*Spasskyterina trianguloides*  
*Phoenicurus ochruros*  
*Passerilepis passeris*
- Oriolidae**  
*Oriolus oriolus*  
*Choanotaenia orioli*  
*Monopylidium galbulae*
- Otididae**  
*Otis tarda*  
*Hispaniolepis villosa*
- Paridae**  
*Parus major*  
*Anonchotaenia globata*  
*Paricterotaenia parina*
- Passerellidae**  
*Zonotrichia* sp.  
*Anonchotaenia globata*
- Passeridae**  
*Passer domesticus*  
*Choanotaenia passerina*  
*Monopylidium musculosa*  
*Passerilepis passeris*
- Phalacrocoracidae**  
*Phalacrocorax carbo*  
*Paradilepis scolecina*
- Phasianidae**  
*Alectoris graeca*  
*Hymenolepis linea*  
**Gallus gallus**  
*Choanotaenia infundibulum*  
*Davainea proglottina*  
*Echinolepis carioca*  
*Hymenolepis exilis*  
*Raillietina echinobothrida*  
*Raillietina tetragona*  
*Skrjabinia cesticillus*  
**Lyrurus tetrrix**  
*Paroniella urogalli*  
**Perdix perdix**  
*Davainea andrei*  
*Hymenolepis linea*  
**Phasianus colchicus**  
*Choanotaenia infundibulum*  
**Tetrao urogallus**  
*Davainea tetraoensis*  
*Hymenolepis microps*  
*Paroniella urogalli*
- Phylloscopidae**  
*Phylloscopus collybita*  
Gen. sp.
- Picidae**  
**Dendrocopos major**  
*Anomotaenia brevis*  
*Dictymetra* sp.  
*Liga* sp.  
*Monopylidium crateriformis*  
*Orthoskrjabinia conica*  
*Passerilepis crenata*  
**Dryocopus martius**  
Gen. sp.  
**Jynx torquilla**  
*Monopylidium crateriformis*  
**Picus viridis**  
*Monopylidium crateriformis*  
*Raillietina frontina*
- Podicipedidae**  
**Podiceps auritus**  
*Dioicocestus asper*  
*Ligula intestinalis*  
*Tetrabothisrius macrocephalus*  
**Podiceps cristatus**  
*Aploparaksis furcigera*  
*Confluaria furcifera*  
*Confluaria multistriata*  
*Confluaria pseudofurcifera*  
*Dollfusilepis hoploporus*  
*Hymenolepis capillaroides*  
*Joyeuxilepis acanthorhyncha*  
*Ligula colymbi*  
*Ligula intestinalis*  
*Tetrabothisrius macrocephalus*  
**Podiceps nigricollis**  
*Confluaria furcifera*  
**Podiceps** sp.  
*Dubinolepis rostellata*  
**Tachybaptus ruficollis**  
*Confluaria multistriata*  
*Dioicocestus asper*  
*Joyeuxilepis acanthorhyncha*

**Rallidae*****Fulica atra***

- Diorchis acuminata*
- Diorchis brevis*
- Diorchis inflata*
- Diorchis ransomi*

***Gallinula chloropus***

- Liga gallinulae*

***Rallus aquaticus***

- Bothriocephalus maretani* (sp. inq.)

**Recurvirostridae*****Recurvirostra avosetta***

- Wardium recurvirostrae*

**Scolopacidae*****Calidris pugnax***

- Anomotaenia microrhyncha*

***Gallinago gallinago***

- Aploparaksis filum*

***Numenius arquata***

- Anomotaenia nymphaea*
- Hymenolepis spaerophora*
- Hymenolepis uliginosa*

***Scolopax rusticola***

- Aploparaksis crassirostris*
- Aploparaksis filum*
- Sacciuterina paradoxa*

***Tringa totanus***

- Aploparaksis filum*

**Sittidae*****Tichodroma muraria***

- Hymenolepis tichodroma*

**Strigidae*****Bubo bubo***

- Hydatigera taeniaeformis*

***Strix aluco***

- Gen. sp.

**Sturnidae*****Sturnus vulgaris***

- Dilepis undula*
- Monopylidium albani*
- Monopylidium musculosa*
- Monorcholepis dujardini*
- Passerilepis crenata*
- Sobolevitaenia spinosocapite*

**Sylviidae*****Sylvia atricapilla***

- Anonchotaenia globata*
- Passerilepis brevis*
- Passerilepis passeris*

***Sylvia borin***

- Monopylidium musculosa*
- Passerilepis passeris*

**Turdidae*****Turdus merula***

- Dilepis undula*
- Fernandezia spinosissima*
- Monorcholepis dujardini*
- Passerilepis crenata*
- Sobolevitaenia spinosocapite*
- Sobolevitaenia verulamii*
- Spaspaskya passerum*
- Spiniglans constricta*

***Turdus philomelos***

- Dilepis undula*
- Passerilepis crenata*
- Sobolevitaenia spinosocapite*
- Spiniglans constricta*
- Emberizotaenia raymondi*

***Turdus pilaris***

- Dilepis undula*
- Passerilepis crenata*

***Turdus viscivorus***

- Dilepis undula*
- Passerilepis crenata*

**Upupidae*****Upupa epops***

- Neyraia intricata*

**Mammalia (53)****Bovidae*****Bos taurus***

- Echinococcus granulosus*
- Echinococcus multilocularis*
- Moniezia benedeni*
- Moniezia expansa*
- Taenia hydatigena*
- Taenia multiceps*
- Taenia saginata*
- Thysanosoma actinioides*

***Capra ibex***

- Moniezia benedeni*
- Moniezia expansa*
- Taenia hydatigena*
- Versteria mustelae*

***Ovis aries*\***

- Echinococcus granulosus*
- Moniezia expansa*
- Taenia hydatigena*
- Taenia multiceps*
- Thysaniezia giardi*
- Versteria mustelae*

***Rupicapra rupicapra***

- Echinococcus granulosus*
- Moniezia expansa*
- Taenia hydatigena*
- Taenia secunda*

**Canidae*****Canis familiaris***

- Diphyllobothrium latum*
- Dipylidium caninum*
- Echinococcus granulosus*
- Echinococcus multilocularis*
- Mesocostoides lineatus*
- Taenia crassiceps*
- Taenia hydatigena*
- Taenia multiceps*
- Taenia pisiformis*
- Taenia serialis*

***Vulpes vulpes***

- Atriotenia incisa*
- Diphyllobothrium latum*
- Dipylidium caninum*
- Echinococcus granulosus*
- Echinococcus multilocularis*
- Hymenolepis* sp.
- Mesocostoides lineatus*

- Mesocestoides litteratus*  
*Taenia crassiceps*  
*Taenia hydatigena*  
*Taenia multiceps*  
*Taenia pisiformis*  
*Taenia polyacantha*
- Castoridae**
- Castor fiber***  
*Echinococcus multilocularis*
- Cervidae**
- Capreolus capreolus***  
*Moniezia expansa*  
*Taenia hydatigena*  
*Taenia krabbei*  
*Taenia multiceps*
- Cervus elaphus***  
*Taenia hydatigena*
- Cricetidae**
- Arvicola amphibius***  
*Arostrilepis horrida*  
*Arostrilepis janickii*  
*Cladotaenia cylindracea*  
*Echinococcus multilocularis*  
*Hydatigera taeniaeformis*  
*Hymenolepis procera*  
*Microticola blanchardi*  
*Paranoplocephala omphalodes*  
*Taenia crassiceps*  
*Taenia pisiformis*
- Chionomys nivalis***  
*Anoplocephaloides dentata*  
*Eurotaenia gracilis*  
*Hydatigera taeniaeformis*  
*Paranoplocephala omphalodes*  
*Rodentolepis asymmetrica*
- Microtus agrestis***  
*Anoplocephaloides dentata*  
*Cladotaenia cylindracea*  
*Eurotaenia gracilis*  
*Hydatigera taeniaeformis*  
*Microticola blanchardi*  
*Paranoplocephala omphalodes*  
*Rodentolepis asymmetrica*  
*Taenia crassiceps*
- Microtus arvalis***  
*Anoplocephaloides dentata*  
*Cladotaenia cylindracea*  
*Echinococcus multilocularis*  
*Eurotaenia gracilis*  
*Hydatigera taeniaeformis*  
*Microticola blanchardi*  
*Paranoplocephala omphalodes*  
*Rodentolepis asymmetrica*  
*Skrjabinotaenia lobata*  
*Taenia crassiceps*  
*Taenia polyacantha*  
*Versteria mustelae*
- Microtus multiplex***  
*Paranoplocephala omphalodes*  
*Taenia crassiceps*  
*Taenia polyacantha*
- Microtus (Pitymys) sp.***  
*Arostrilepis horrida*
- Rodentolepis asymmetrica*  
*Taenia crassiceps*
- Microtus sp.***  
*Echinococcus granulosus*
- Microtus subterraneus***  
*Anoplocephaloides dentata*  
*Eurotaenia gracilis*  
*Rodentolepis asymmetrica*  
*Taenia crassiceps*
- Myodes glareolus***  
*Anoplocephaloides dentata*  
*Catenotaenia henttoneni*  
*Catenotaenia pusilla*  
*Cladotaenia cylindracea*  
*Eurotaenia gracilis*  
*Lineolepis scutigera*  
*Mesocestoides lineatus*  
*Neoskrjabinolepis singularis*  
*Paranoplocephala omphalodes*  
*Rodentolepis asymmetrica*  
*Rodentolepis straminea*  
*Skrjabinotaenia lobata*  
*Taenia martis*  
*Taenia polyacantha*  
*Urocystis prolifer*  
*Versteria mustelae*  
*Vigisolepis spinulosa*
- Equidae**
- Equus caballus***  
*Anoplocephala magna*  
*Anoplocephala perfoliata*  
*Equinia mamillana*
- Erinaceidae**
- Erinaceus europaeus***  
*Rodentolepis erinacei*
- Felidae**
- Felis silvestris***  
*Diphyllobothrium latum*  
*Dipylidium caninum*  
*Echinococcus multilocularis*  
*Hydatigera taeniaeformis*  
*Taenia pisiformis*
- Lynx lynx***  
*Taenia sp.*
- Gliridae**
- Eliomys quercinus***  
*Armadolepis (A.) jeanbaeri*
- Glis glis***  
*Armadolepis (B.) myoxi*  
*Hymenolepis sulcata*
- Hominidae**
- Homo sapiens***  
*Diphyllobothrium dendriticum*  
*Diphyllobothrium latum*  
*Diphyllobothrium nihonkaiensis*  
*Dipylidium caninum*  
*Echinococcus granulosus*  
*Echinococcus multilocularis*  
*Taenia martis*  
*Taenia saginata*  
*Taenia solium*
- Leporidae**
- Lepus europaeus***  
*Echinococcus granulosus*

- Mosgovoyia pectinata*  
*Taenia pisiformis*
- Lepus timidus**  
*Genovia wimerosa*  
*Mosgovoyia pectinata*
- Oryctolagus cuniculus**  
*Cittotaenia denticulata*  
*Neoctenotaenia ctenoides*  
*Taenia multiceps*  
*Taenia pisiformis*  
*Taenia serialis*
- Muridae**
- Apodemus flavicollis**  
*Hydatigera taeniaeformis*  
*Hymenolepis diminuta*  
*Hymenolepis murissylvatici*  
*Mesocestoides* sp.  
*Rodentolepis fraterna*  
*Rodentolepis microstoma*  
*Rodentolepis straminea*  
*Skrjabinotaenia lobata*  
*Taenia martis*
- Apodemus sylvaticus**  
*Catenotaenia pusilla*  
*Cladotaenia cylindracea*  
*Dilepis undula*  
*Hydatigera taeniaeformis*  
*Hymenolepis diminuta*  
*Hymenolepis hibernia*  
*Hymenolepis murissylvatici*  
*Rodentolepis fraterna*  
*Rodentolepis microstoma*  
*Rodentolepis straminea*  
*Skrjabinotaenia lobata*  
*Taenia hydatigena*  
*Taenia martis*  
*Taenia polyacantha*  
*Versteria mustelae*
- Mus musculus**  
*Catenotaenia pusilla*  
*Echinococcus multilocularis*  
*Hydatigera taeniaeformis*  
*Hymenolepis diminuta*  
*Rodentolepis fraterna*  
*Rodentolepis microstoma*  
*Taenia crassiceps*  
*Taenia polyacantha*
- Rattus norvegicus**  
*Hydatigera taeniaeformis*  
*Hymenolepis diminuta*
- Rattus rattus**  
*Catenotaenia pusilla*  
*Hymenolepis diminuta*  
*Rodentolepis fraterna*  
*Taenia crassiceps*  
*Taenia pisiformis*
- Mustelidae**
- Martes foina**  
*Hydatigera taeniaeformis*  
*Taenia intermedia* (sp. inq.)  
*Taenia martis*
- Martes martes**  
*Taenia intermedia* (sp. inq.)
- Meles meles**  
*Atriotaeenia incisa*  
*Taenia angustata* (sp. inq.)  
*Taenia martis*  
*Taenia secunda*
- Mustela erminea**  
*Hydatigera taeniaeformis*  
*Taenia intermedia* (sp. inq.)  
*Versteria mustelae*
- Mustela nivalis**  
*Versteria mustelae*
- Mustela putorius**  
*Versteria mustelae*
- Sciuridae**
- Marmota marmota**  
*Ctenotaenia marmotae*  
*Marmotocephala transversaria*  
*Mosgovoyia pectinata*  
*Taenia crassiceps*
- Sciurus vulgaris**  
*Catenotaenia dendritica*  
*Taenia polyacantha*
- Suidae**
- Sus scrofa**  
*Echinococcus granulosus*  
*Taenia hydatigena*  
*Taenia solium*  
*Versteria mustelae*
- Soricidae**
- Crocidura leucodon**  
*Hymenolepis uncinata*
- Crocidura russula**  
*Dilepis undula*  
*Lineolepis scutigera*  
*Pseudhymenolepis redonica*  
*Staphylocystis furcata*  
*Staphylocystis pistillum*  
*Staphylocystis scalaris*  
*Staphylocystis tiara*
- Crocidura suaveolens**  
*Hymenolepis uncinata*  
*Staphylocystis brusatae*  
*Staphylocystis tiara*
- Neomys anomalus**  
*Coronacanthus integrus*  
*Coronacanthus omissus*  
*Triodontolepis hamanni*
- Neomys fodiens**  
*Coronacanthus integrus*  
*Coronacanthus omissus*  
*Cryptocotylepis globosoides*  
*Molluscotaenia crassiscolex*  
*Neomylepis magnirostellata*  
*Soricinia globosa*  
*Staphylocystis alpestris*  
*Taenia polyacantha*  
*Triodontolepis bifurca*  
*Triodontolepis hamanni*
- Sorex alpinus**  
*Ditestolepis diaphana*  
*Gulyaevilepis tripartita*  
*Molluscotaenia crassiscolex*  
*Neoskrjabinolepis merkushevae*

*Neoskrjabinolepis schaldybini*  
*Soricina infirma*  
*Staphylocystis pistillum*  
*Urocystis prolifer*  
*Vigisolepis spinulosa*

**Sorex araneus**  
*Cryptocotylepis globosoides*  
*Dilepis undula*  
*Ditestolepis diaphana*  
*Gulyaevilepis tripartita*  
*Hepatocestus hepaticus*  
*Lineolepis scutigera*  
*Molluscotaenia crassiscolex*  
*Neoskrjabinolepis merkushevae*  
*Neoskrjabinolepis schaldybini*  
*Neoskrjabinolepis singularis*  
*Soricina infirma*  
*Staphylocystis furcata*  
*Staphylocystis pistillum*  
*Staphylocystis scalaris*  
*Staphylocystis tiara*  
*Staphylocystoides stefanskii*  
*Urocystis prolifer*  
*Vigisolepis spinulosa*

**Sorex minutus**  
*Ditestolepis diaphana*  
*Lineolepis scutigera*

*Molluscotaenia crassiscolex*  
*Neoskrjabinolepis merkushevae*  
*Neoskrjabinolepis schaldybini*  
*Skrjabinacanthus jacutensis*  
*Soricina infirma*  
*Staphylocystis furcata*  
*Staphylocystis scalaris*  
*Staphylocystoides stefanskii*  
*Urocystis prolifer*  
*Vigisolepis spinulosa*

**Talpidae*****Talpa europaea***

*Hydatigera taeniaeformis*  
*Multitesticulata filamentosa*  
*Staphylocystis bacillaris*  
*Versteria mustelae*

**Vespertilionidae*****Myotis myotis***

*Milina grisea*

***Myotis mystacinus***

*Vampirolepis balsaci*

***Nyctalus noctula***

*Staphylocystis acuta*  
*Vampirolepis baeri*

***Plecotus auritus***

*Vampirolepis balsaci*

**Annex 1:** List of specimens in collections. Catalogue numbers without collection reference are from the Muséum d'histoire naturelle de Genève (MHNG-PLAT-). Type status is indicated with HOLO (Holotype), LECTO (Lectotype), PARA (Paratype), SYNT (Syntype) or TYPE (Type of unknown status).

**BOTHRIOCEPHALOIDEA,** TRIAENOPHORIDAE, *Bathybothrium rectangulum* 27276, 40291, 55791, 55798, *Eubothrium crassum* 17858-9, 19002, 19327, 23873, 28077-8, 28080-1, 38317, 40808-9, 88297-302, *Eubothrium salvelini* IPCAS H02/1, IPCAS C126/12, 27278, 29413, 38313, 38364, 33625, 36722-6, 36728-9, 55807, 82342-4, 82660, ZMZ-122912, *Triaenophorus crassus* 42479-81, 55808, 57528, 57532, NHM 1928.1.9.130-134, *Triaenophorus nodulosus* 11607, 18170, 18498, 27937, 36003-7, 38257, 38262, 42482-6, 54161, 54426, 57662, 57667-8, 63396-8

**CARYOPHYLLIDEA,** CARYOPHYLLIDAE, *Caryophyllaeus fimbriceps* 78801-3, LYTOCESTIDAE, *Caryophyllaeus laticeps* 18338, 27277, 38331, 39225, 40289, 70965, 71127, 78800, 78837, 78840-4, USNM 1355422-3, *Caryophyllaeus fennica* 78797, NHM 1928.1.9.202-203, USNM 1355424-5, *Khawia baltica* 78804-5

**CYCLOPHYLLIDEA,** AMABILIIDAE, *Joyeuxilepis acanthoryncha* 42356, ANOPLOCEPHALIDAE, *Anoplocephala magna* 38376, 56118, *Anoplocephala perfoliata* 40241, 56079, *Anoplocephaloides dentata* 17608, 18408, 30635, 41787, 82353, 82370, 82372, 82396-7, *Atriotaeonia incisa* 14620, 57153, 57180, *Ctenotaenia marmotae* 130473, 27280, 38616

(HOLO of *Cittotaenia avicola*), 38617, 37276, 38332, 40497-8, 40500-1, *Equinia mamillana* 41792-4, 56113, *Eurotaenia gracilis* 11430-2 **PARA** (of *Paranoplocephala gracilis*), 11583, 19182, 38187, 82345, 82349, 82351, 82374-5, *Genovia wimerosa* 41803-4, *Microticola blanchardi* 13482, 82346, *Moniezia benedeni* 38304, 41600-1, 56047, 56059, *Moniezia expansa* 41588-9, 57237, *Mosgovovia pectinata* 40503, 40508, 57115, 57171, *Neoctenotaenia ctenoides* 40489, 56164, 56167, *Oochoristica rotundata* 41696, *Paranoplocephala omphalodes* 12153, 12166, 12217, 13857, 17742, 17771, 20000, 38186, 40078-9, 41795-6, 41799-800, 82378, 82383, *Thysaniezia giardi* 40898-900, *Thysanosoma actinioides* 42471, CATENOTAENIIDAE, *Catenotaenia dendritica* 40369-70, *Catenotaenia henttoneni* 17637-8, 18361, 18368, 39305 39378 39446, *Catenotaenia pusilla* 37655, 40379-81, *Skrjabinotaenia lobata* 12162, 17625-8, DAVAINIIDAE, *Davainea andrei* 40620 **SYNT**, *Davainea proglottina* 27994, 28053, *Davainea tetraoensis* 55227, *Fernandezia spinosissima* 18326, 32733-5, 77626, *Idiogenes flagellum* 27997, *Paroniella urogalli* 27997, *Raillietina frontina* 42078, *Raillietina tetragona* 27315, 27984, *Skrjabinia bonini* 42034, 55973, NHM 1928.1.6.107-116, USNM 1318063, USNM 1348473 **SYNT** of *R. columbae*, *Skrjabinia cesticillus* 27986, 28076, DILEPIDIDAE, *Anomotaenia brevis* 13476, *Anomotaenia cyathiformis* 40119, *Anomotaenia dehiscens* 27910, 40121-2, NHM 1928.1.9.43-48, *Anomotaenia microphallos* 40154, 40157, 56925, *Anomotaenia microrhyncha* 39308, *Anomotaenia stentorea* 39307, *Burhinotaenia coronata* 41822, *Choanotaenia orioli* 40455 **SYNT**, 40459, *Choanotaenia passerina* 15350, 39309, *Dictymetra* sp. 50022, *Dilepis cypselina* 40638, *Dilepis undula*



- 11435, 11494, 11608, 12161, 13400, 13475, 15348, 17736, 17614, 17824, 18434, 18553, 27940, 27970, 32725-32, 32767-72, 38279, 38888, 38904, 38942, 38963, 39386, 39394, 40666-7, 40670, 77627-30, *Hepatocestus hepaticus* 11483, *Liga* sp. 50023, *Molluscoetaenia crassiscolex* 11380, 11394, 11399, 11413, 11420, 11480-1, 11485, 11489-90, 11578, 11581, 11613, 14289, 17743, 17749-51, 17765, 18174, 18178, 18219, 18229, 18232, 18234, 18245, 18378, 18429, 18478, 18481, 18483, 18485, 18552, 30630, 30640, 30661, 30687, 30808, 30899, 38884, 38887, 38892, 38896, 38899, 38903, 38922, 38930, 38932, 38935, 38941, 38943, 38948, 38952, 38962, 38967, 38970, 38972, 38978, 38981, 38988, 38992, 38996, 39001, 39005, 39011, 39017, 39026, 39031-2, 39322, 39331, 39365-6, 39368, 39373, 39376, 39379, 39384-5, 39390, 39392-3, 39397, 39400, 39402-3, 39406, 39408, 39410, 39417, 39419-20, 39438, 39440, 40440, 41623, 48316, 82357, 82379, *Monopylidium albanii* 32776, *Monopylidium crateriformis* 27295, 40443-4, 40441-2, *Monopylidium galbulae* 40130, *Monopylidium muscosa* 32775, 40452, *Multitesticulata filamentosa* 13776, 17823, 18367, 39303, 39480, 41613-4, *Neoliga depressa* 27908-9, 39313, 40123-4, *Paricterotaenia porosa* 18377, 27929, 27945, 40821, 41854, 41856, NHM 1928.1.9.170-175, *Platyscolex ciliata* MUW-114097, *Pseudangularia* sp. 40123, *Sobolevitaenia spinosocapite* 32724, 32773-4, 38278, 57134, *Sobolevitaenia verulamii* 13401, 40117, *Spasspasskya passerum* 11434, 13474, 40178, *Spiniglans affinis* 32745, *Spiniglans constricta* 27964, 28086, *Emberizotaenia raymondi* 32503 **HOLO**, 32504 **PARA**, 82652 **PARA** (of *Unciunia raymondi*), DIOICOCESTIDAE, *Dioicocestus asper* 40680, DIPYLIDIIDAE, *Dipylidium caninum* 17864, 18343, 28082, 28084, 40747-8, 40751, 40753, 40755, 56123, GRYPORHYNCHIDAE, *Paradilepis scolecina* 41776-8, HYMENOLEPIDIDAE, *Anatinella kazachstanica* 57479-80, MUW-114104, MUW-114107, *Aploparaksis cirrosa* 27930, *Aploparaksis crassirostris* 27941, *Aploparaksis filum* 27312, 38294, 40878-9, *Aploparaksis furcigera* 40887-8, 56550, *Armadolepis (A.) jeanbaeri* 17611, 39226-9 **PARA**, 41189 **HOLO**, 41190 **PARA**, *Armadolepis (B.) myoxi* 13858-5, *Arostrilepis horrida* 13867-8, 18514, 19293, 19309, 19664, 30491, 30553, 41097, *Arostrilepis janickii* 13866 **PARA**, 18499 **PARA**, 18513 **PARA**, 19291 **PARA**, 19300 **PARA**, 19308 **PARA**, 19662 **PARA**, 41096 **HOLO**, *Cladogynia guberiana* 15589, 57464, 57467, MUW-70736, MUW-70750-6, *Cladogynia macracanthos* 41125-9, 55608 **SYNT** (of *Hymenolepis macracanthos*), NHM 1928.1.9.33-42, *Cladogynia serrata* 41270, *Cloacotaenia megalops* 41144, MUW-114116, *Confluaria furcifera* 49190, *Confluaria multistriata* 27934, NHM 1928.1.9.66-73, *Confluaria pseudofurcifera* 18328, 40964, 40971 **PARA**, 41076 **PARA**, 41077 **HOLO**, 41236 **PARA**, 41289, 124885, *Coronacanthus integrus* 15351, 17755-6, 30675, 39029-30, 39033-4, 39041, 39043, 39289, 39292, 41090, 41100-2, 41210, *Coronacanthus omissus* 39027, 39288, 39290-1, 41210-11 **SYNT**, 49031, *Coronacanthus integrus* 41237 **SYNT** (of *Hymenolepis polyacantha*), *Cryptocotylepis globosoides* 10736, 19290, 39317, 41084, *Dicranotaenia coronula* 27975, 28089, 41001-3, *Diorchis acuminata* 40683, 40694, 55782, MUW-114109, *Diorchis ransomi* MUW-71581-8, MUW-114111, *Diploposthe laevis* 55640, *Ditestolepis diaphana* 11389, 11408, 11415, 11418, 11476, 11488, 11587, 17778, 18231, 18233, 18382, 18535-8, 18851, 26382, 26384, 30663, 30666, 30678, 30805-6, 36339, 38881, 38894, 38907, 38913, 38920-1, 38926, 38940, 38945-6, 38955, 38966, 38976-7, 38985, 38990, 38995, 38999, 39009, 39015-6, 39020, 39022-3, 39267, 39320, 39362, 39381, 39388, 39399, 39412, 39414, 39435, 39694, 41015, 82356, *Dollfusilepis hoploporus* 40964, *Dubininolepis rostellata* 41251-4, 41256, 56554, *Echinocotyle anatina* 27983, NMB-CEST-00039a, *Echinolepis carioca* 40974, *Fimbriaria fasciolaris* 39310-11, 40820, 55624, MUW-50053, *Gulyaevilepis tripartita* 18226, 18382, 26382, 38891, 38921, 38977, 39009, 39016, 39022, *Hispaniolepis villosa* 27303, 55742 NMB-CEST-00033a, *Hymenolepis armata* 55765, *Hymenolepis capillaroides* 40968, *Hymenolepis diminuta* 17735, 30801, 41018, 41021, *Hymenolepis hibernia* 27286, 27927, 27938, 41168, *Hymenolepis murissylvatici* 17633-6, 18524-6, 39279, 39281, 39284, 39286, 41187-8, *Hymenolepis simulans* 44405, *Hymenolepis* sp. 41228, *Hymenolepis sulcata* 13723-32, 13777 13854, *Hymenolepis teresoides* 41319, *Hymenolepis uliginosa* 27926, *Hymenolepis uncinata* 17808-11, 39364, *Lineolepis scutigera* 11378, 11382, 11386, 11410, 11412, 11416, 11475, 11492, 11501, 11579-80, 11600, 17761-3, 18546, 30667, 38890, 38895, 38898, 38914, 38917, 38925, 38929, 38934, 38938, 38956, 38997, 39002, 39007, 39013, 39021, 39264, 39268, 39326, 39330, 39353, 39374, 39377, 39380, 39396, 39411, 39431, 39441, 38910, 41326 **SYNT** (of *Hymenolepis toxometra*), *Microsomacanthus abortiva* 40916, 40918, 55634, *Microsomacanthus arcuata* 40933, 41344, 55621, 55771, *Microsomacanthus collaris* 27943, 40984-6, *Microsomacanthus compressa* 40999, *Microsomacanthus microcephalus* 27953, *Microsomacanthus microsoma* 37989, *Microsomacanthus paracompressa* MUW-114092-4, MUW-114101, MUW-114112-3, MUW-114117-9, MUW-114123, *Microsomacanthus setigera* 41273, 41278, *Microsomacanthus spirallibursata* MUW-114090-1, MUW-114096, MUW-114099, MUW-114114, MUW-114120, MUW-114122, *Milina grisea* 14781, 18534, *Monorcholepis dujardini* 11585, *Neomylepis magnirostellata* 18390, 30676, 39036, 41134 **SYNT**, *Neoskrjabinolepis merkushevae* 11417, 11421, 11504-5, 11601, 11779, 17974, 18227, 18235, 38905, 38911, 39369, 39418, *Neoskrjabinolepis schaldybini* 11383, 11387, 11391, 11396-7, 11403, 11482, 11484, 11493, 11497-8, 11571, 11576, 11590, 11592, 11596-7, 11599, 11602, 11605-6, 17746, 17760, 18173, 18176, 18230, 18380, 18431, 18433, 18480, 18506, 18547-8, 30602, 30604, 30639, 30662, 30665, 30802, 30807, 36338, 36732, 38882, 38897, 38902, 38908-9, 38919, 38924, 38928, 38937, 38944, 38954, 38958, 38960, 38969, 38975, 38980, 38984, 39025, 39266, 39316, 39327, 39329, 39349, 39354, 39367, 39383, 39401, 39437, 39442, 41261-2, *Neoskrjabinolepis singularis* 11379, 11385, 11392, 11395, 11401, 11404, 11406, 11499, 11574, 11577, 11588, 11594, 11598, 11610, 39018, 39351, 39356, 39426, 39439, *Parabissacanthus bisacculina* 40952, *Parabissacanthus philactes* 15588, 57471, 57478, MUW-114103, MUW-114105-6, MUW-114121, *Passerilepis brevis* 32750-1, *Passerilepis crenata* 11433, 12160, 13399, 27965, 27978, 32736-7, 32742-3, 32779-83, 32843, 35742-4, 41013, 41264, *Passerilepis passeris* 15603, 32748-9, 32784-6, 41069-70, *Passerilepis stylosa* 27291, 27985, 41313, 41315, 41317, 55927, *Pseudhymenolepis redonica* 15471, 17754, 17819, 18387, 18554-5, 42014 **SYNT**, *Rodentolepis asymmetrica* 11779-81, 11785-6, 17613, 18156, 18165, 18362-4, 18365, 18399, 18502-3, 18509, 18511, 19075, 19078, 19162-4, 19181, 19183-5, 19203, 19205-6, 19321, 19328, 19663, 30533, 30549, 30668-9, 30672-3, 39304, 39413, 40938, 40940, 41308, 82387, 129733, *Rodentolepis erinacei* 41032, *Rodentolepis fraterna* 41063-7, *Rodentolepis microstoma* 15346, 37496-503, 37507, 37509, 37511, 37644-51,



41164, 41167, 41172, *Rodentolepis straminea* 11565, 17612, 18508, 18517-22, 18532, 35297, 39294-5, 82473, *Skrjabinacanthus jacutensis* 11496, *Sobolevicanthus fragilis* 41059, *Sobolevicanthus gracilis* 27911, 27981-2, 41087, MUW-70552-4, MUW-114100, MUW-114102, *Sobolevicanthus gracilissimus* MUW-70631, *Sobolevicanthus krabbella* MUW-114095, *Soricinia globosa* 19292, 41083 **SYNT** (of *Hymenolepis globosa*), *Soricinia infirma* 11384, 11414, 11419, 11503, 11591, 24135, 26360, 30804, 38947, 38961, 38987, 38991, 39000, 39010, 39328, 39361, 39371, 39415, 39429, 39433, 39436, 82355, *Staphylocystis alpestris* 40924 **SYNT** (of *Hymenolepis alpestris*), *Staphylocystis brusatae* 17816-8, 39407, *Staphylocystis furcata* 11400, 11423, 11486, 11495, 11500, 11573, 11595, 11612, 18175, 18217, 18258, 18430, 18504, 18510, 18540, 30555, 38900, 38973, 39398, 39409, 39427, 41073-5, *Staphylocystis pistillum* 17739, 17753, 17759, 17785, 17787-8, 17790, 18542-3, 29656, 36340, 41075, 41231-3, 41235, 42506, 49191, 49248, 49250, *Staphylocystis scalaris* 17740, 17780-4, 17786, 18253, 41260, *Staphylocystis tiara* 17741, 17801-7, 18435, 18544-5, 39280, 39375, 39421, 41322, *Staphylocystoides stefanskii* 11388, 11390, 11398, 11407, 11422, 11481, 11572, 11593, 18479, 18539, 18549, 38906, 38912, 39004, 39265, 39430, 41303-4, *Triodontolepis bifurca* 18257, 39028, 39283, 39293, 40945, *Triodontolepis hamanni* 10737, 17748, 39282, 41089, *Urocystis prolifer* 11479, 11487, 11502, 11604, 17745, 17764, 17777, 18177, 18220, 18259, 18379, 18550-1, 18553 18842, 30637, 30664, 30674, 30677, 30803, 38893, 38918, 38939, 38951, 38965, 38986, 38989, 38994, 38998, 39003, 39014, 39019, 39318-9, 39325, 39350, 39370, 39382, 39389, 39395, 39416, 39432, 39434, 39443, 41196 **SYNT** (of *Vampirolepis neomidis*), 48042, 48315, *Vampirolepis baeri* 18329 **HOLO**, 27230, *Vampirolepis balsaci* 14780, 14782, 39341-3, 39345, 40943, *Vigisolepis spinulosa* 11381, 11393, 11402, 11405, 11409, 11411, 11575, 11589, 11603, 11611, 18218, 18228, 18381, 18432, 30554, 38883, 38885, 38889, 38901, 38916, 38923, 38927, 38931, 38933, 38936, 38950, 38953, 38957, 38959, 38968, 38974, 38979, 38983, 39006, 39012, 39024, 39315, 39321, 39323-4, 39352, 39391, 39404, 41301-2, *Wardium arciminosa* 18533, 27282, 27285, 27974, 39306, *Wardium recurvirostrae* 27287, 27939, 27972, *Wardoides nyrocae cygni* MUW-114108, MUW-114110, **MESOCESTOIDIDAE**, *Mesocestoides lineatus* 14550, 14562, 14580, 14582-94, 14601-2, 14604-5, 14607-11, 39339, 41539, 41541, 45076, *Mesocestoides litteratus* 27912-3, *Mesocestoides perlatus* 27310-1, *Mesocestoides* sp. USNM1397704, *Nematotaenia dispar* 27931, 38025, 38285, 40599, 41638, **PARUTERINIDAE**, *Anonchotaenia globata* 32747, 40218, 41869, *Cladotaenia cylindracea* 39312, 40524, 40528, *Cladotaenia globifera* 27936, 27948, 32744, *Neyraia intricata* 41647, *Notopentorchis* sp. 137308, *Orthoskrjabinia bobica* 18327, 32778, *Orthoskrjabinia conica* 32746, 32777, *Spasskyterina trianguloides* 17596, **TAENIIDAE**, *Echinococcus granulosis* 38321, 40789-90, 43510-1, *Echinococcus*

*multilocularis* 14544, 14581, 40789-90, 42312, 42316, 43510-1, *Hydatigera taeniaeformis* 13765-75, 13856, 14230, 14276, 14628, 17606-7, 17772-3, 18210, 18512, 27254, 31071, 32752, 37387, 37389-91, 37401, 38216, 39285, 39287, 42350, 48040,, *Taenia crassiceps* 14272, 14279, 14534, 14536, 14538-42, 14546-9, 14551, 14554-6, 14558, 14561, 14563, 14565-71, 14574-5, 14577-9, 14599, 17605, 18180, 18336, 18351, 24478, 27900, 27942, 27966, 37388, 38214-5, 38219, 38222, 38318, 42255-61, *Taenia martis* 14637-66, 14716-9, 14726, 15355, 15414-6, 15428-9, 17601-2, 17737-8, 17868-70, 18507, 18528-9, 24334, 30580, 41234, 42290-2, 42294, *Taenia multiceps* ZMZ-G224, *Taenia pisiformis* 14552-3, 38263, 38265, 40605, 42312-3, 42315-6, *Taenia polyacantha* 14535, 14537, 14543, 14557, 14564, 14572-3, 14576, 15545, 14600, 17603, 17861-2, 28162, 28166-7, 30506-7, 39230-1, 41237 **SYNT**, 42317, 42319, 48333, 56818, *Taenia saginata* MHNF-5849, 42328-9, 38268, 38270-2, 57166, NWSW-13092, ZMZ-122915, ZMZ-122796, ZMZ-122761, *Taenia serialis* 41016, *Taenia solium* 42252, 42338, 57273, ZMZ-120573, *Versteria mustelae* 17600, 24333, 28085, 38337, 42300-2, 423614, 58867

**DIPHYLLOBOTHRIDAE**, **DIPHYLLOBOTHRIDAE**, *Diphyllobothrium latum* 18383, 18385, 27273, 27995, 38371-2, 40708-11, 43073-5, 43079-80, 56260, 57124, 82431, USNM 1348495-6, *Ligula digramma* 38380, *Ligula intestinalis* 17865, 38302, 38305, 38309, 38312, 38315, 41508, GBIFCH00596771, NMB-CEST-00009b, ZMZ-120412, ZMZ-120577, *Schistocephalus solidus* GBIFCH00596744

**ONCOPROTEOCEPHALIDAE**, **PROTEOCEPHALIDAE**, *Corallobothrium parafimbriatum* 32994, *Glanitaenia osculata* IPCAS C49/1, 67699-700, 68395-7, 84707-10, 84712, 91260, 91839-42, *Ophiotaenia europaea* 49149, *Proteocephalus flicicollis* 27302, 41985, *Proteocephalus longicollis* 15601, 16920-3, 16925, 19239, 19278, 19280-4, 19667-8, 21681, 27301, 38353, 41529, 41353-4, 41356, 41358, 41367 **SYNT** (*P. salmonisumblae*), 86982, NHM 1998.2.178.42, NHM 1998.2.20.1-2, NHM 1998.5.14.4, USNM 1348661 **TYPE**, USNM 1348668 **LECTO**, USNM 1382490, USNM 1382832, USNM 1382933, USNM 1395121, *Proteocephalus percae* IPCAS C29/1, 16924, 19238-45, 19268-77, 19279, 19285-8, 27300, 28749-50, 36744-5, 39479, 41357, 41363-5, 54160, 57357, 61489, 63221, 63395, 63399-400, NHM 2000.1.25.19, NHM 2000.6.1.1-2, USNM 1348656 (**TYPE** of *P. dubius*), USNM 1382102, USNM 1382827, USNM 1385360-1, *Proteocephalus torulosus* IPCAS C32/1, 19666, 27916, 41368

**SPATHEBOTHRIDAE**, **ACROBOTHRIDAE**, *Cyathocephalus truncatus* 15600, 32823, 38330, 40579-80, 55813, 70959, 70960-1, 70963, 88303

**TETRABOTHRIDAE**, **TETRABOTHRIDAE**, *Tetrabothrius (T.) macrocephalus* 42432, 55979