

## REVISION OF PARASITIC HELMINTHS REPORTED IN FRESHWATER FISH FROM TURKEY WITH NEW RECORDS

Ahmet ÖKTENER \*

\* Directorate of Agricultural Research and Policy, Livestock Research Station, Department of Fisheries, Çanakkale Street km 7, Bandırma, Balıkesir, Turkey, TR-10200, ahmetoktener@yahoo.com

DOI: 10.1515/trser-2015-0001

**KEYWORDS:** Turkey, freshwater, checklist, revision, helminths, fish.

### ABSTRACT

This new checklist is an update of helminths of freshwater fish from Turkey. The last publication of a checklist of helminth parasites of freshwater fish in Turkey was over 11 years ago (Öktener, 2003), and there have been a number of new records. This update includes additional records and allows for the correction of errors and omissions that were present in the preceding version. The revision literature indicated the occurrence of 123 parasite species which included 60 monogeneans, 20 digeneans, 20 cestodes, 11 nematodes, seven acanthocephalans, five annelids from 71 different wild fish (64 native, four transitional, three introduced fish) species from freshwater in Turkey. Parasites not identified to species level are listed separately, and not included in the resulting comments, because of reporting different host species. Cyprinidae, with 50 species, is the dominant family among the examined fish with regard to species diversity.

**RESUMEN:** Revisión de parásitos helmintos reportados en peces de aguadulce en Turquía, con nuevos registros.

Se realizó una actualización del elenco de especies de helmintos parásitos de peces de agua dulce de Turquía. Desde la publicación del último listado de parásitos helmintos de peces dulceacuícolas, hace 11 años (Öktener, 2003), han habido cantidad de nuevos registros. Esta actualización incluye a dichos registros, lo cual permitió la corrección de aquellos errores y omisiones que se cometieron en la versión anterior del listado. La literatura revisada indica la ocurrencia de 123 especies parásitas que incluyen 60 monogeneos, 20 digeneos, 20 céstodos, 11 nemátodos, siete acantocéfalos y cinco anélidos colectados en 71 especies de peces de agua dulce en Turquía (64 especies nativas, cuatro transicionales y tres introducidas). Los parásitos no identificados a nivel especie se enlistan separadamente y no se comentan en los resultados, debido a que son reportados en distintas especies de hospederos. Los ciprínidos, con 50 especies, es la familia dominante entre los peces examinados en cuanto a diversidad específica.

**REZUMAT:** Revizuire a viermilor paraziți raportăți la specii de pești de apă dulce din Turcia, cu noi înregistrări.

Această listă nouă de specii este rezultatul revizuirii parazitariei helmintice la speciile de pești de apă dulce din Turcia. De la publicarea primei versiuni în urmă cu peste 11 ani (Öktener, 2003), au mai fost semnalate și alte specii. Prezenta versiune include și semnalările ulterioare și permite corectarea erorilor și omisiunilor din prima versiune. Literatura utilizată a indicat prezența a 123 de specii parazite care au inclus 60 specii monogenee, 20 specii de digenee, 20 de cestode, 11 nematode, șapte acanthocephali, cinci anelide, iar speciile gazdă sunt în număr de 71 (specii sălbaticе dulcicole) din care 64 sunt pești autohtoni, patru de tranzit și trei specii introduse. Paraziții care nu au fost identificați la nivel de specie sunt indicați într-o listă separată fără a include comentarii, deoarece se raportează la specii gazdă diferite. Din punct de vedere al diversității speciilor studiate, familia de pești dominantă este cea a Cyprinidaelor cu 50 de specii investigate parazitologic.

## INTRODUCTION

The fish-parasite checklist studies are important taxonomic documents in order to obtain the fish-parasite relationships, host selectivity and geographic distribution of fish parasites. They may contribute as a baseline of data in the disciplines of parasitology, zoology, medicine, environmental science in terms of determining biological diversity, treatment and control of parasites, identification of parasite, determining host selectivity and geographic distribution of fish zoonoses, compare of fish parasite fauna of local, regional and worldwide. Research about the helminth parasites of freshwater fish in the world has increased in recent years (Holland and Kennedy, 1997; Arthur and Lumanlan-Mayo, 1997; Palm et al., 1999; Arthur and Ahmet, 2002; Kohn et al., 2006; Salgado-Maldanado, 2006; Luque and Tavares, 2007; Violante-González et al., 2007; Pazooki and Masoumian, 2012).

Turkey is geographically divided into seven regions: the Marmara Region, the Mediterranean Region, the Black Sea Region, the Aegean Region, the Central Anatolia Region, the Eastern Anatolian Region, and the South-Eastern Anatolian Region. These regions have 200 lakes, 206 dam lakes, 953 pond lakes and 33 rivers (Kılıç, 1999). The examination of literature on Turkish freshwater has revealed the report of 248 species (plus 13 introduced) valid freshwater fish species (Frick et al., 2007).

The parasites of Turkey's freshwater fish were poorly known until Paperna (1964) reported the cestode *Caryophyllaeus brachycollis* Janiszewska, in 1951 *Cyprinus carpio*. Articles in different journals, MSc and PhD thesis, symposium, conference proceedings and other reports have been published mentioning parasites of wild, farmed and imported fish by Turkish researchers between 1964 and 2014.

All information about parasites of freshwater fish-parasite have been compiled by Öktener (2003), based on a parasite-host list and host-parasite list, respectively. The author compiled a critical checklist of the metazoan parasites (99 helminths, 12 parasitic crustaceans, one mollusca larvae) of freshwater fish from Turkey. After this checklist, several studies and theses were published by Turkish and foreign scientists. These studies yielded some new distributional records and added new species.

This new checklist was done to update the helminths of freshwater fishes from Turkey. Finally, it was also planned to show and update the parasite richness of fishes of Turkey. It was felt that a critical summary of the freshwater fish parasites known from Turkey to date would help to solve contradictions among researchers, and benefit veterinarians, parasitologists, etc.

## MATERIALS AND METHODS

Information from all available references on helminths of freshwater fishes in Turkey (journal publications, reports of research projects, thesis, proceedings of congress, symposium proceedings) from 1964 to 2014 were gathered to provide host-parasite and parasite-host lists.

In the literature dealing with the parasites of freshwater fishes in Turkey, appear many incorrect spellings of parasite names, host names and species author's names, and incorrect attributions of dates of species authorship. The scientific names of all parasites and their synonyms were checked with main electronic sites concerning with the classification (ITIS, 2013; WoRMS Editorial Board, 2014; Gibson et al., 2005). Erroneous spellings of parasite names have been consistently applied, these were noted (Tab. 1).

The scientific names of fishes were checked according to Frick et al. (2007) and the electronic sites Froese and Pauly (2013); WoRMS Editorial Board (2014); Eschmeyer (2014). Similarly, misspellings of host species names, with few exceptions where these have been widely applied, have been corrected without comment using information obtained from Froese and Pauly (2013) (Tab. 2).

Table 1: Change of current valid names and synonymies of helminth species.

Synonyms and incorrect spellings	Valid Name
<i>Diplozoon megan</i> (Nordmann, 1832)	<i>Paradiplozoon megan</i> Bykhovskii and Nagibi, 1959
<i>Silurodiscoides vistulensis</i> Gussev, 1985	<i>Ancylodiscoides vistulensis</i> Sivak, 1932
<i>Silurodiscoides siluri</i> Gussev, 1976	<i>Ancylodiscoides siluri</i> Zandt, 1924
<i>Philometra abdominalis</i> Nybelin, 1928	<i>Philometra ovata</i> (Zeder, 1803)
<i>Bothriocephalus gowkonensis</i> (Korting, 1976)	<i>Bothriocephalusacheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus mutabilis</i> Rudolphi, 1802	<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Helobdella stagnates</i> Linnaeus, 1758	<i>Helobdella stagnalis</i> (Linnaeus, 1758)

Table 2: Change of current valid names and synonymies of fish species.

Synonyms and incorrect spellings	Valid Names
<i>Carassius auratus auratus</i>	<i>Carassius auratus</i>
<i>Gobius fluviatilis</i>	<i>Neogobius fluviatilis</i>
<i>Cobitis simplicispinna</i>	<i>Cobitis simplicispina</i>
<i>Chondrostoma regium</i>	<i>Chondrostoma regium</i>
<i>Leuciscus cephalus</i>	<i>Squalius cephalus</i>
<i>Leuciscus cephalus orientalis</i>	<i>Squalius cephalus</i>
<i>Vimba vimba tenella</i>	<i>Vimba vimba</i>
<i>Chalcalburnus chalcoides</i>	<i>Alburnus chalcoides</i>
<i>Rhodeus sericeus amarus</i>	<i>Rhodeus amarus</i>
<i>Rhodeus sericeus</i>	<i>Rhodeus amarus</i>
<i>Clarias lazera</i>	<i>Clarias gariepinus</i>
<i>Stizostedion lucioperca</i>	<i>Sander lucioperca</i>
<i>Nemachilus</i> sp.	<i>Nemacheilus</i> sp.
<i>Cyprinion macrostomus</i>	<i>Cyprinion macrostomum</i>
<i>Leuciscus lepidus</i>	<i>Squalius lepidus</i>
<i>Garra rufa obtusa</i>	<i>Garra rufa</i>
<i>Capoeta capoeta bergamae</i>	<i>Capoeta bergamae</i>
<i>Barbus plebejus escherichii</i>	<i>Luciobarbus escherichii</i>
<i>Barbus rajanorum mystaceus</i>	<i>Luciobarbus mystaceus</i>
<i>Barbus rajanorum</i>	<i>Luciobarbus pectoralis</i>
<i>Capoeta capoeta umbla</i>	<i>Capoeta umbla</i>
<i>Barbus capito pectoralis</i>	<i>Luciobarbus pectoralis</i>
<i>Barbus esocinus</i>	<i>Luciobarbus esocinus</i>
<i>Pseudophoxinus battalgil</i>	<i>Pseudophoxinus battalgilae</i>

## RESULTS AND DISCUSSION

This helminth checklist of freshwater fish from Turkey includes only Monogenea, Digenea, Cestoda, Nematoda, Acanthocephala, Annelida and it was compiled with the parasite species arranged by phylum, class and alphabetical, as appropriate. The host-parasite list/parasite-host list are arranged: (1) a list of collected parasite groups and their parasitized fish, the collection site, and author (Tab. 3); (2) a list of parasitized fish with the corresponding species of parasites (Tab. 4).

Table 3: Helminth - Host List.

<b>Phylum Platyhelminthes</b>		
<b>Class Monogenea</b>		
<i>Ancylodiscoides siluri</i> Zandt, 1924		
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)
<i>Silurus glanis</i>	İznik Lake	Aydoğdu et al. (1996b)
<i>Silurus glanis</i>	Terkos Lake	Soylu (2005)
<i>Silurus glanis</i>	Almus Dam Lake	Turgut (2005)
<i>Silurus glanis</i>	Siğirci Lake	Çolak (2013)
<i>Ancylodiscoides vistulensis</i> Sivak, 1932		
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)
<i>Silurus glanis</i>	Terkos Lake	Soylu (2005)
<i>Silurus glanis</i>	Almus Dam Lake	Turgut (2005)
<i>Silurus glanis</i>	Siğirci Lake	Çolak (2013)
<i>Ancyrocephalus paradoxus</i> Creplin, 1839		
<i>Sander lucioperca</i>	Siğirci Lake	Çolak (2013)
<i>Dactylogyrus affinis</i> Bychowsky, 1933		
<i>Capoeta umbla</i>	Hazar Lake	Aksoy et al. (2006)
<i>Dactylogyrus alatus</i> Linstow, 1878		
<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Chondrostoma regium</i>	Almus Dam Lake	Turgut (2005)
<i>Alburnus alburnus</i>	Mustafakemalpaşa Stream	Aydoğdu and Selver (2006)
<i>Chondrostoma regium</i>	Almus Dam Lake	Özgül (2008)
<i>Alburnus heckeli</i>	Murat River	Koyun (2011)

Table 3 (continuing): Helminth - Host List.

<i>Dactylogyurus anchoratus</i> (Dujardin, 1845)		
<i>Cyprinus carpio</i>	Bekteşaga Pond	Özer (1995)
<i>Carassius carassius</i>	Enne Dam Lake	Koyun (2001)
<i>Carassius auratus</i>	Enne Dam Lake	Koyun (2001)
<i>Carassius carassius</i>	Kovada Lake	Özan and Kir (2005)
<i>Carassius gibelio</i>	Seyitler Dam Lake	Öztürk (2010)
<i>Cyprinus carpio</i>	Karacaören II Dam Lake	Samancı (2011)
<i>Carassius carassius</i>	Karacaören II Dam Lake	Samancı (2011)
<i>Carassius auratus</i>	Emre Dam Lake	Öztürk (2011)
<i>Carassius gibelio</i>	Emre Dam Lake	Öztürk (2011)
<i>Carassius gibelio</i>	Siğirci Lake	Çolak (2013)
<i>Dactylogyurus ancylostylus</i> Linstow, 1878		
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Sağlam (1992)
<i>Luciobarbus esocinus</i>	Keban Dam Lake	Sağlam (1992)
<i>Cyprinus carpio</i>	Keban Dam Lake	Sağlam (1992)
<i>Dactylogyurus asper</i> Linstow, 1878		
<i>Luciobarbus esocinus</i>	Keban Dam Lake	Sağlam (1992)
<i>Luciobarbus mystaceus</i>	Keban Dam Lake	Sağlam (1992)
<i>Dactylogyurus auriculatus</i> (Nordmann, 1832)		
<i>Capoeta umbla</i>	Hazar Lake	Aksoy et al. (2006)
<i>Dactylogyurus baueri</i> Gussev, 1955		
<i>Carassius gibelio</i>	Siğirci Lake	Çolak (2013)
<i>Dactylogyurus bicornis</i> Malevitskaya, 1941		
<i>Rhodeus amarus</i>	Sapanca, Terkos Lakes	Soylu (2009)
<i>Dactylogyurus carpathicus</i> Zakhvatkin, 1951		
<i>Luciobarbus escherichii</i>	Dogancı Dam Lake	Aydöğdu (2001)

Table 3 (continuing): Helminth - Host List.

<i>Dactylogyrus chalcalburni</i> Dogiel et Bychow., 1833		
<i>Alburnus chalcoides</i>	Manyas Lake	Öztürk (2000)
<i>Alburnus chalcoides</i>	Terkos Lake	Soylu (2009)
<i>Dactylogyrus cornu</i> Linstow, 1878		
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Vimba vimba</i>	Manyas Lake	Öztürk (2000)
<i>Vimba vimba</i>	Sirakaraağaçlar Stream	Özer and Öztürk (2005)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Dactylogyrus cornoides</i> (Gläser and Gussev, 1971)		
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Dactylogyrus crucifer</i> Wagener, 1857		
<i>Rutilus rutilus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Rutilus frisii</i>	İznik Lake	Aydoğdu et al. (1997b)
<i>Rutilus rutilus</i>	Manyas Lake	Öztürk (2000)
<i>Capoeta tinca</i>	Almus Dam Lake	Turgut (2005)
<i>Rutilus rutilus</i>	Kocadere Stream	Selver (2008)
<i>Capoeta tinca</i>	Almus Dam Lake	Özgül (2008)
<i>Rutilus rutilus</i>	Siğirci Lake	Çolak (2013)
<i>Dactylogyrus difformis</i> Wagener, 1857		
<i>Scardinus erythrophthalmus</i>	Sapanca Lake	Soylu (1990)
<i>Scardinus erythrophthalmus</i>	Manyas Lake	Öztürk (2000)
<i>Scardinus erythrophthalmus</i>	Karacabey Lagoon Lake	Öztürk et al. (2002)
<i>Scardinus erythrophthalmus</i>	Kocadere Stream	Selver (2008)
<i>Scardinus erythrophthalmus</i>	Terkos Lake	Soylu (2009)
<i>Scardinus erythrophthalmus</i>	Siğirci Lake	Çolak (2013)

Table 3 (continuing): Helminth - Host List.

<i>Dactylogyrus difformoides</i> Glaser and Gusev, 1967		
<i>Scardinus erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Scardinus erythrophthalmus</i>	Sapanca Lake	Soylu (2009)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Scardinus erythrophthalmus</i>	Şigirci Lake	Çolak (2013)
<i>Dactylogyrus distinguendus</i> (Linstow, 1878)		
<i>Abramis brama</i>	Terkos Lake	Karatoy (2004)
<i>Blicca bjoerkna</i>	Kocadere Stream	Selver (2008)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Dactylogyrus elegantis</i> Gusev, 1966		
<i>Chondrostoma regium</i>	Murat River	Koyun (2011)
<i>Squalius cephalus</i>	Murat River	Koyun (2011)
<i>Dactylogyrus ergensi</i> Molnar, 1964		
<i>Pseudophoxinus antalyae</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2007)
<i>Dactylogyrus extensus</i> Mueller and Cleave, 1932		
<i>Luciobarbus mystaceus</i>	Keban Dam Lake	Sağlam (1992)
<i>Chondrostoma regium</i>	Keban Dam Lake	Sağlam (1992)
<i>Cyprinus carpio</i>	Bekteşaga Pond	Özer (1995)
<i>Cyprinus carpio</i>	Uluabat Lake	Oğuz et al. (1996a)
<i>Cyprinus carpio</i>	İznik Lake	Aydoğdu (1997)
<i>Cyprinus carpio</i>	Manyas Lake	Öztürk (2000)
<i>Cyprinus carpio</i>	Doğancı Dam Lake	Aydoğdu (2001)
<i>Cyprinus carpio</i>	Karacabey Lagoon Lake	Aydoğdu et al. (2001a)
<i>Cyprinus carpio</i>	Karamik Lake	Kutlu (2005)
<i>Cyprinus carpio</i>	Eber Lake	Öztürk (2005)
<i>Cyprinus carpio</i>	Almus Dam Lake	Turgut (2005)
<i>Capoeta umbla</i>	Hazar Lake	Aksoy et al. (2006)
<i>Cyprinus carpio</i>	Hazar Lake	Aksoy et al. (2006)
<i>Squalius cephalus</i>	Hazar Lake	Aksoy et al. (2006)
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Barbus grypus</i>	Atatürk Dam Lake	Dal (2006)

Table 3 (continuing): Helminth - Host List.

<i>Cyprinus carpio</i>	Akşehir Lake	Kartal (2006)
<i>Cyprinus carpio</i>	Selevir Dam Lake	Öztürk and Bulut (2006)
<i>Cyprinus carpio</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2007)
<i>Cyprinus carpio</i>	Terkos Lake	Soylu (2009)
<i>Cyprinus carpio</i>	Emre Dam Lake	Öztürk (2011)
<i>Cyprinus carpio</i>	Tahtali Dam Lake	Karakış and Demir (2012)
<i>Carassius gibelio</i>	Sığirci Lake	Çolak (2013)
<i>Dactylogyrus falcatus</i> (Wedl, 1857)		
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Dactylogyrus folkmanovae</i> Ergens, 1956		
<i>Squalius cephalus</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Squalius cephalus</i>	Susurluk River	Gürkan and Özcan (2012)
<i>Dactylogyrus fraternus</i> Wagener, 1909		
<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Alburnus alburnus</i>	Mustafakemalpaşa Stream	Aydoğdu and Selver (2006)
<i>Dactylogyrus frisii</i> Bychowsky, 1933		
<i>Rutilus frisii</i>	Terkos Lake	Soylu (2009)
<i>Dactylogyrus inexpectatus</i> Izjumova, 1955		
<i>Carassius gibelio</i>	Sığirci Lake	Çolak (2013)
<i>Dactylogyrus izjumovae</i> Gusev, 1966		
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Dactylogyrus malleus</i> Linstow, 1877		
<i>Barbus plebejus</i>	Almus Dam Lake	Turgut (2005)
<i>Capoeta umbra</i>	Hazar Lake	Aksoy et al. (2006)
<i>Dactylogyrus macrocanthus</i> Wagener, 1857		
<i>Tinca tinca</i>	Sapanca Lake	Soylu (1990)
<i>Tinca tinca</i>	Uluabat Lake	Öztürk (2002)
<i>Tinca tinca</i>	Terkos Lake	Soylu (2003)

Table 3 (continuing): Helminth - Host List.

<i>Dactylogyrus minutus</i> Kulwiec, 1927		
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Sağlam (1992)
<i>Cyprinus carpio</i>	Keban Dam Lake	Sağlam (1992)
<i>Cyprinus carpio</i>	Karacaören I Dam Lake	Kir (1998)
<i>Cyprinus carpio</i>	Beyşehir Lake	Özan (2005)
<i>Carassius carassius</i>	Kovada Lake	Özan and Kir (2005)
<i>Capoeta umbla</i>	Hazar Lake	Aksoy et al. (2006)
<i>Cyprinus carpio</i>	Kovada Lake	Kir and Özan (2007)
<i>Dactylogyrus naviculoides</i> Ergens, 1960		
<i>Squalius cephalus</i>	Almus Dam Lake	Turgut (2005)
<i>Dactylogyrus nybelini</i> Markewitsch, 1933		
<i>Rutilus frisii</i>	Terkos Lake	Soylu (2009)
<i>Dactylogyrus phoxini</i> (Malevitskaya, 1949)		
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Dactylogyrus prostae</i> Molnar, 1964		
<i>Squalius cephalus</i>	Murat River	Koyun (2011)
<i>Dactylogyrus pulcher</i> Bychowsky, 1957		
<i>Capoeta capoeta</i>	Almus Dam Lake	Turgut (2005)
<i>Dactylogyrus rectotrabus</i> Gussev, Jalal and Molnar, 1993		
<i>Garra rufa</i>	Murat River	Koyun (2011)
<i>Dactylogyrus sphyrna</i> Linstow, 1828		
<i>Rutilus rutilus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Capoeta trutta</i>	Keban Dam Lake	Sağlam (1992)
<i>Chondrostoma regium</i>	Keban Dam Lake	Sağlam (1992)
<i>Blicca bjoerkna</i>	Uluabat Lake	Akinci (1999)
<i>Blicca bjoerkna</i>	Manyas Lake	Öztürk (2000)
<i>Rutilus rubilio</i>	İznik Lake	Aydoğdu et al. (2000)

Table 3 (continuing): Helminth - Host List.

<i>Abramis brama</i>	Terkos Lake	Karatoy (2004)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Pseudophoxinus antalyae</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2007)
<i>Blicca bjoerkna</i>	Kocadere Stream	Selver (2008)
<i>Vimba vimba</i>	Gölbaşı Dam Lake	Aydoğdu et al. (2008)
<i>Scardinius erythrophthalmus</i>	Sapanca Lake	Soylu (2009)
<i>Rutilus rutilus</i>	Siğirci Lake	Çolak (2013)
<i>Dactylogyrus vastator</i> (Nybelin, 1924)		
<i>Cyprinus carpio</i>	Bafa Lake	Geldiay and Balik (1974)
<i>Aphanius</i> sp.	Cigli Stream	Geldiay and Balik (1974)
<i>Capoeta capoeta</i>	Balikliag Stream	Cengizler and Göksu (1994)
<i>Alburnus orontis</i>	Balikliag Stream	Cengizler and Göksu (1994)
<i>Cyprinus carpio</i>	Bekteşaga Pond	Özer (1995)
<i>Cyprinus carpio</i>	Seyhan River	Cengizler et al. (2001)
<i>Carassius carassius</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2005)
<i>Silurus glanis</i>	Yamula Dam Lake	Kılınçaslan (2007)
<i>Cyprinus carpio</i>	Adana DSİ	Güleç and Şahan (2010)
<i>Carassius gibelio</i>	Siğirci Lake	Çolak (2013)
<i>Dactylogyrus vistulae</i> Prost, 1957		
<i>Squalius cephalus</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Squalius cephalus</i>	Almus Dam Lake	Turgut (2005)
<i>Chondrostoma regium</i>	Almus Dam Lake	Turgut (2005)
<i>Rutilus rutilus</i>	Sapanca Lake	Karabiber (2006)
<i>Squalius cephalus</i>	Örenler Dam Lake	Kurupinar (2009)
<i>Squalius cephalus</i>	Susurluk River	Gürkan and Özcan (2012)
<i>Chondrostoma regium</i>	Murat River	Koyun (2011)
<i>Squalius cephalus</i>	Murat River	Koyun (2011)
<i>Dactylogyrus wunderi</i> Bykhovskii, 1931		
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Diplozoon homoiion</i> Bykhovskii and Nagibi, 1959		
<i>Rutilus rutilus</i>	Manyas Lake	Öztürk (2000)

Table 3 (continuing): Helminth - Host List.

<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Alburnus alburnus</i>	Mustafakemalpaşa Stream	Aydoğdu and Selver (2006)
<i>Cyprinus carpio</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2007)
<i>Pseudophoxinus antalyae</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2007)
<i>Diplozoon paradoxum</i> Nordman, 1832		
<i>Rhodeus amarus</i>	Simav, Nif Brooks	Geldiay and Balik (1974)
<i>Rutilus rutilus</i>	Uluabat Lake	Geldiay and Balik (1974)
<i>Acantobrama marmid</i>	Tigem Reservoirs	Zeren (2008)
<i>Alburnus chalcoides</i>	Tödürge Lake	Yıldırım and Ünver (2006)
<i>Diplozoon barbi</i> Nordman, 1832		
<i>Capoeta trutta</i>	Keban Dam Lake	Sağlam (1992)
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Sağlam (1992)
<i>Dogielius forceps</i> Bychowsky, 1936		
<i>Capoeta damascina</i>	Murat River	Koyun (2011)
<i>Gyrodactylus arcuatus</i> Bychowsky, 1933		
<i>Gasterosteus aculeatus</i>	Sirakaraağaçlar Stream	Özer et al. (2004)
<i>Gyrodactylus cobitis</i> Bychowsky, 1933		
<i>Cobitis simplicispina</i>	Akşehir Lake	Kartal (2006)
<i>Gyrodactylus elegans</i> Nordmann, 1832		
<i>Cyprinus carpio</i>	Eski Gediz Stream	Geldiay and Balik (1974)
<i>Cyprinus carpio</i>	Seyhan River	Cengizler et al. (2001)
<i>Luciobarbus pectoralis</i>	Seyhan River	Şahan and Cengizler (2003)
<i>Barbus plebejus</i>	Almus Dam Lake	Turgut (2005)
<i>Chondrostoma regium</i>	Almus Dam Lake	Turgut (2005)
<i>Cyprinus carpio</i>	Karamik Lake	Kutlu (2005)
<i>Cyprinus carpio</i>	Eber Lake	Öztürk (2005)
<i>Cyprinus carpio</i>	Akşehir Lake	Kartal (2006)
<i>Cyprinus carpio</i>	Selevir Dam Lake	Öztürk and Bulut (2006)

Table 3 (continuing): Helminth - Host List.

<i>Gyrodactylus gobii</i> Shul'man, 1953		
<i>Neogobius fluviatilis</i>	Uluabat Lake	Öztürk et al. (2002)
<i>Gyrodactylus hemibarbi</i> (Ergens, 1980)		
<i>Barbus plebejus</i>	Almus Dam Lake	Turgut (2005)
<i>Gyrodactylus katharineri</i> Malmberg, 1964		
<i>Carassius carassius</i>	Enne Dam Lake	Koyun (2001)
<i>Carassius auratus</i>	Enne Dam Lake	Koyun (2001)
<i>Gyrodactylus macrocornis</i> Ergens, 1963		
<i>Chondrostoma regium</i>	Almus Dam Lake	Turgut (2005)
<i>Chondrostoma regium</i>	Almus Dam Lake	Özgül (2008)
<i>Gyrodactylus medius</i> Kathariner, 1894		
<i>Tinca tinca</i>	Kovada Lake	Kir and Özcan (2005)
<i>Gyrodactylus narzikulovi</i> Ergens and Dzhalilov 1979		
<i>Capoeta tinca</i>	Almus Dam Lake	Turgut (2005)
<i>Capoeta tinca</i>	Almus Dam Lake	Özgül (2008)
<i>Gyrodactylus proterorhini</i> Ergens, 1967		
<i>Neogobius melanostomus</i>	Sirakaraağaçlar Stream	Özer (2007)
<i>Gyrodactylus scardinii</i> Malmberg, 1956		
<i>Cyprinus carpio</i>	Manyas Lake	Öztürk (2000)
<i>Carassius gibelio</i>	Seyitler Dam Lake	Öztürk (2010)
<i>Onchocleidus similis</i> Mueller, 1936		
<i>Lepomis gibbosus</i>	Siğirci Lake	Çolak (2013)

Table 3 (continuing): Helminth - Host List.

<i>Quadriacanthus clariadis</i> (Paperna, 1961)		
<i>Clarias gariepinus</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2005)
<i>Paradiplozoon megan</i> Bykhovskii and Nagibi, 1959		
<i>Squalius cephalus</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Squalius cephalus</i>	Susurluk River	Gürkan and Özcan (2012)
<i>Alburnus chalcoides</i>	Tödürge Lake	Yıldırım and Ünver (2006)
<i>Tetraonchus monenteron</i> Diesing, 1858		
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Esox lucius</i>	Uluabat Lake	Öztürk (1995)
<i>Esox lucius</i>	Dogancı Dam Lake	Aydoğdu 2001
<i>Esox lucius</i>	Gölbaşı Dam Lake	Aydoğdu et al. (2008)
<i>Esox lucius</i>	Sığircı Lake	Çolak (2013)
<b>Phylum Platyhelminthes</b>		
<b>Class Digenea</b>		
<i>Allocreadium isoporum</i> Looss, 1894		
<i>Luciobarbus escherichii</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Barbus plebejus</i>	Enne Dam Lake	Koyun (2001)
<i>Squalius cephalus</i>	Enne Dam Lake	Koyun (2001)
<i>Barbus plebejus</i>	Murat River, Aras River	Aslan (2009)
<i>Aspidogaster limacoides</i> Diesing, 1835		
<i>Rutilus rutilus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Asymphylodora imitans</i> (Mühling, 1898)		
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2006)

Table 3 (continuing): Helminth - Host List.

<i>Asymphylodora markewitschi</i> Kulakovskaya, 1947		
<i>Scardinus erythrophthalmus</i>	Uluabat Lake	Oğuz and Öztürk (1993)
<i>Scardinus erythrophthalmus</i>	Kocadere Stream	Selver (2008)
<i>Asymphylodora tincae</i> (Moorder, 1790)		
<i>Alburnus</i> sp.	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook	Burgu et al. (1988)
<i>Barbus</i> sp.	Çifteler-Sakaryabaşı Fish Production Station, Sariyar Dam Lake	Burgu et al. (1988)
<i>Esox lucius</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station	Burgu et al. (1988)
<i>Tinca tinca</i>	Sapanca Lake	Soylu (1990)
<i>Tinca tinca</i>	Uluabat Lake	Aksakal (1992)
<i>Tinca tinca</i>	İznik Lake	Aydoğdu et al. (1996a)
<i>Tinca tinca</i>	Terkos Lake	Soylu (2003)
<i>Tinca tinca</i>	Kapulukaya Dam Lake	Yıldız (2003)
<i>Tinca tinca</i>	Beyşehir Lake	Özan (2005)
<i>Tinca tinca</i>	Kovada Lake	Kir and Özcan (2005)
<i>Bucephalus polymorphus</i> Baer, 1827		
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)
<i>Sander lucioperca</i>	Egirdir Lake	Yıldırım et al. (1996)
<i>Sander lucioperca</i>	Beyşehir Lake, Kovada Lake	Kara (1997)
<i>Knipowitschia caucasica</i>	Eğirdir Lake	Diler et al. (2001)
<i>Clinostomum complanatum</i> Rudolphi, 1819		

Table 3 (continuing): Helminth - Host List.

<i>Cyprinus carpio</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook, Hirfanlı Dam Lake, Çankırı-Günerdiğin Pond	Burgu et al. (1988)
<i>Alburnus</i> sp.	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook	Burgu et al. (1988)
<i>Chondrostoma</i> sp.	Kızılıcahamam Brook, Nallıhan Brook	Burgu et al. (1988)
<i>Varicorhinus</i> sp.	Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Çankırı-Günerdiğin Pond, Kızılıcahamam Brook, Nallıhan Brook	Burgu et al. (1988)
<i>Luciobarbus escherichii</i>	Kirmir Stream	Öge and Sarımehtemoğlu (1996)
<i>Capoeta tinca</i>	Kirmir Stream	Öge and Sarımehtemoğlu (1996)
<i>Perca fluviatilis</i>	Sığircı Lake	Soylu (2013)
<i>Scardinius erythrophthalmus</i>	Sığircı Lake	Çolak (2013)
<i>Cyprinus carpio</i>	Sığircı Lake	Çolak (2013)
<i>Sander lucioperca</i>	Sığircı Lake	Çolak (2013)
<i>Lepomis gibbosus</i>	Sığircı Lake	Çolak (2013)
<i>Crepidostomum farionis</i> (O. F. Müller, 1780)		
<i>Salmo trutta abanticus</i>	Abant Lake	Caira (1989)
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)		
<i>Rutilus rutilus</i>	Sapanca Lake	Soylu (1990)
<i>Scardinius erythrophthalmus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)

Table 3 (continuing): Helminth - Host List.

<i>Tinca tinca</i>	Sapanca Lake	Soylu (1990)
<i>Tinca tinca</i>	Terkos Lake	Soylu (2003)
<i>Abramis brama</i>	Terkos Lake	Karatoy (2004)
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Esox lucius</i>	Gölbaşı Dam Lake	Aydoğdu et al. (2008)
<i>Blicca bjoerkna</i>	Kocadere Stream	Selver (2008)
<i>Rutilus rutilus</i>	Kocadere Stream	Selver (2008)
<i>Scardinius erythrophthalmus</i>	Kocadere Stream	Selver (2008)
<i>Diplodiscus subclavatus</i> Diesing, 1836		
<i>Esox lucius</i>	Uluabat Lake	Öztürk et al. (2000)
<i>Opisthorchis felineus</i> (Rivolta, 1884)		
<i>Rutilus rutilus</i>	Uluabat, Manyas Lakes	Geldiay and Balik (1974)
<i>Orientocreadium siluri</i> Bykhovski and Dubi., 1954		
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)
<i>Orientocreadium batrachoides</i> Tubangui, 1931		
<i>Clarias gariepinus</i>	Asi River	Tepe et al. (2013)
<i>Phyllodistomum elongatum</i> Nybelin, 1926		
<i>Luciobarbus pectoralis</i>	Karacaören I Dam Lake	Kir (1998)
<i>Posthodiplostomum cuticola</i> Nordmann, 1832		
<i>Scardinius erythrophthalmus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Uluabat Lake	Akinci (1999)
<i>Cyprinus carpio</i>	Eber Lake	Öztürk (2005)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Alburnus chalcooides</i>	Tödürge Lake	Yıldırım and Ünver (2006)
<i>Scardinius erythrophthalmus</i>	Siğirci Lake	Çolak (2013)
<i>Posthodiplostomum minimum</i> Maccallum, 1921		
<i>Salmo trutta fario</i>	Munzur Stream	Ekingen (1976)

Table 3 (continuing): Helminth - Host List.

<i>Pygidiopsis genata</i> Looss, 1907		
<i>Neogobius melanostomus</i>	Sirakaraağaçlar Stream	Özer (2007)
<i>Rhipidocotyle fennica</i> Taskinen, 1991		
<i>Esox lucius</i>	Uluabat Lake	Öztürk et al. (2000)
<i>Tylodelphys clavata</i> Nordmann, 1832		
<i>Rutilus rutilus</i>	Sapanca Lake	Soylu (1990)
<i>Scardinius erythrophthalmus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)
<i>Tinca tinca</i>	Sapanca Lake	Soylu (1990)
<i>Tinca tinca</i>	Terkos Lake	Soylu (2003)
<i>Aramis brama</i>	Terkos Lake	Karatay (2004)
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Perca fluviatilis</i>	Siğirci Lake	Soylu (2013)
<i>Atherina boyeri</i>	İznik Lake	Çolak (2013)
<i>Scardinius erythrophthalmus</i>	Siğirci Lake	Çolak (2013)
<i>Sander lucioperca</i>	Siğirci Lake	Çolak (2013)
<i>Cyprinus carpio</i>	Siğirci Lake	Çolak (2013)
<i>Lepomis gibbosus</i>	Siğirci Lake	Çolak (2013)
<i>Rutilus rutilus</i>	Siğirci Lake	Çolak (2013)
<i>Esox lucius</i>	Siğirci Lake	Çolak (2013)
<i>Silurus glanis</i>	Siğirci Lake	Çolak (2013)
<i>Tetracotyle percae-</i> <i>fluviatilis</i> (Linstow, 1856)		
<i>Aramis brama</i>	Terkos Lake	Karatay (2004)
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)

Table 3 (continuing): Helminth - Host List.

<b>Phylum Platyhelminthes</b>		
<b>Class Cestoda</b>		
<i>Bathybothrium rectangulum</i> (Bloch, 1782)		
<i>Esox lucius</i>	Işıkli Dam Lake	Dişçi (2002)
<i>Biacetabulum appendiculatum</i> Szidat, 1937		
<i>Luciobarbus escherichii</i>	Enne Dam Lake	Koyun (2001)
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955		
<i>Cyprinus carpio</i>	İznik Lake	Türkmen (1990)
<i>Rutilus frisii</i>	İznik Lake	Türkmen (1990)
<i>Cyprinus carpio</i>	Karasu Brook, Bendimahi Brook, Engil Brook, Zernek Dam Lake	Topçu (1993)
<i>Capoeta umbla</i>	Hazar Lake	Aksøy (1996)
<i>Tinca tinca</i>	Mogan Lake	Erkul (1997)
<i>Cyprinus carpio</i>	Mogan Lake, Hirfanlı Dam Lake, Kirmir Brook	Erkul (1997)
<i>Cyprinus carpio</i>	Karacaören I Dam Lake	Kir (1998)
<i>Cyprinus carpio</i>	Manyas Lake	Öztürk (2000)
<i>Alburnus mossulensis</i>	Manyas Lake	Öztürk (2000)
<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Luciobarbus escherichii</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Squalius cephalus</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Neogobius fluviatilis</i>	Uluabat Lake	Öztürk et al. (2002)
<i>Silurus glanis</i>	Hirfanlı Dam Lake	Aydın (2003)
<i>Capoeta umbla</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Chondrostoma regium</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Cyprinus carpio</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Acanthobrama marmid</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Alburnus mossulensis</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Squalius cephalus</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Cyprinus carpio</i>	Karamık Lake	Kutlu (2005)
<i>Tinca tinca</i>	Beyşehir Lake	Özan (2005)
<i>Cyprinus carpio</i>	Beyşehir Lake	Özan (2005)
<i>Cyprinus carpio</i>	Eber Lake	Öztürk (2005)
<i>Tinca tinca</i>	Kovada Lake	Kir and Özcan (2005)

Table 3 (continuing): Helminth - Host List.

<i>Capoeta trutta</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Capoeta umbla</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Chondrostoma regium</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Cyprinus carpio</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Tinca tinca</i>	Sapanca Lake	Akbeniz (2006)
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2006)
<i>Alburnus alburnus</i>	Mustafakemalpaşa Stream	Aydoğdu and Selver (2006)
<i>Cyprinus carpio</i>	Selevir Dam Lake	Öztürk and Bulut (2006)
<i>Cyprinus carpio</i>	Kovada Lake	Kir and Özcan (2007)
<i>Rutilus rutilus</i>	Kocadere Stream	Selver (2008)
<i>Cyprinus carpio</i>	Murat River, Aras River	Aslan (2009)
<i>Squalius cephalus</i>	Örenler Dam Lake	Kurupinar (2009)
<i>Cyprinus carpio</i>	Karacaören II Dam Lake	Samancı (2011)
<i>Alburnus chalcoides</i>	Tödürge Lake	Yıldırım and Ünver (2006)
<i>Atherina boyeri</i>	İznik Lake	Çolak (2013)
<i>Cyprinus carpio</i>	Sığirci Lake	Çolak (2013)
<i>Caryophyllaeides fennica</i> (Schneider, 1902)		
<i>Rutilus rutilus</i>	Manyas Lake	Öztürk (2000)
<i>Scardinius erythrophthalmus</i>	Manyas Lake	Öztürk (2000)
<i>Caryophyllaeus brachycollis</i> Janiszewska, 1951		
<i>Cyprinus carpio</i>	Antakya Lake	Paperna (1964)
<i>Caryophyllaeus fimbriiceps</i> Annenkova-Khlopina, 1919		
<i>Cyprinus carpio</i>	Sığirci Lake	Çolak (2013)
<i>Caryophyllaeus laticeps</i> (Müller, 1781)		
<i>Cyprinus carpio</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook, Hirfanlı Dam Lake, Çankırı- Günerdiğin Pond	Burgu et al. (1988)

Table 3 (continuing): Helminth - Host List.

<i>Cyprinus carpio</i>	İznik Lake	Türkmen (1990)
<i>Cyprinus carpio</i>	Karasu Brook, Bendimahi Brook, Engil Brook, Zernek Dam Lake	Topçu (1993)
<i>Rutilus frisii</i>	İznik Lake	Aydoğdu et al. (1997b)
<i>Capoeta umbra</i>	Hazar Lake	Aksoy (1996)
<i>Cyprinus carpio</i>	Karacaören I Dam Lake	Kir (1998)
<i>Cyprinus carpio</i>	Kovada Lake	Becer and Kara (1998)
<i>Blicca bjoerkna</i>	Manyas Lake	Öztürk (2000)
<i>Vimba vimba</i>	Manyas Lake	Öztürk (2000)
<i>Cyprinus carpio</i>	Manyas Lake	Öztürk (2000)
<i>Cyprinus carpio</i>	Karacabey Lagoon Lake	Aydoğdu et al. (2001a)
<i>Luciobarbus escherichii</i>	Doğancı Dam Lake	Aydoğdu (2001)
<i>Cyprinus carpio</i>	Seyhan River	Şahan and Cengizler (2003)
<i>Luciobarbus pectoralis</i>	Seyhan River	Şahan and Cengizler (2003)
<i>Abramis brama</i>	Terkos Lake	Karatoy (2004)
<i>Cyprinus carpio</i>	Beyşehir Lake	Özan (2005)
<i>Tinca tinca</i>	Beyşehir Lake	Özan (2005)
<i>Tinca tinca</i>	Kovada Lake	Kir and Özcan (2005)
<i>Tinca tinca</i>	Sapanca Lake	Akbeniz (2006)
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Blicca bjoerkna</i>	Sapanca Lake	Söyülü (2006)
<i>Cyprinus carpio</i>	Selevir Dam Lake	Öztürk and Bulut (2006)
<i>Cyprinus carpio</i>	Kepez I Hydro Electric Power Plant Loading Pond	Söyülü and Emre (2007)
<i>Vimba vimba</i>	Gölbaşı Dam Lake	Aydoğdu et al. (2008)
<i>Blicca bjoerkna</i>	Kocadere Stream	Selver (2008)
<i>Capoeta capoeta</i>	Murat River, Aras River	Aslan (2009)
<i>Acanthobrama marmid</i>	Murat River, Aras River	Aslan (2009)
<i>Cyprinus carpio</i>	Karacaören II Dam Lake	Samancı (2011)
<i>Khawia armeniaca</i> Cholodkovskii, 1878		
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Özdemir and Sarieyyüboğlu (1993)
<i>Capoeta umbra</i>	Hazar Lake	Aksoy (1996)
<i>Acanthobrama marmid</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Squalius cephalus</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Capoeta trutta</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Cyprinus carpio</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Capoeta umbra</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Capoeta umbra</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Cyprinus carpio</i>	Keban Dam Lake	Dörücü and İspir (2005)

Table 3 (continuing): Helminth - Host List.

<i>Ligula intestinalis</i> Lin., 1758		
<i>Capoeta umbla</i>	Cip Lake	Cantoray and Özcan (1975)
<i>Squalius cephalus</i>	Cip Lake	Cantoray and Özcan (1975)
<i>Luciobarbus escherichii</i>	Cip Lake	Cantoray and Özcan (1975)
<i>Acanthobrama marmid</i>	Devegecidi Dam Lake	Başaran and Kelle (1976)
<i>Alburnus mossulensis</i>	Devegecidi Dam Lake	Başaran and Kelle (1976)
<i>Acanthobrama marmid</i>	Devegecidi Dam Lake	Kelle (1978)
<i>Alburnus mossulensis</i>	Devegecidi Dam Lake	Kelle (1978)
<i>Silurus glanis</i>	Sariyar Dam Lake	Keskin and Erakan (1987)
<i>Chondrostoma regium</i>	Keban Dam Lake	Keskin and Erakan (1987)
<i>Vimba vimba</i>	Kumkaya Dam Lake	Keskin and Erakan (1987)
<i>Capoeta capoeta</i>	Demirkopru Dam Lake	Keskin and Erakan (1987)
<i>Alburnus orontis</i>	Kızılırmak Brook, Yeniköy Stream, Çayırhan Stream, Kumkaya Dam Lake, Enne Dam Lake	Keskin and Erakan (1987)
<i>Garra rufa</i>	Cag-cag Stream	Keskin and Erakan (1987)
<i>Squalius cephalus</i>	Hamidiye, Pazarkavşağı Bridge	Keskin and Erakan (1987)
<i>Alburnus</i> sp.	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılcahamam Brook	Burgu et al. (1988)
<i>Esox lucius</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station	Burgu et al. (1988)
<i>Tinca tinca</i>	Mogan Lake	Burgu et al. (1988)
<i>Vimba vimba</i>	Sariyar Dam Lake	Ekmekçi (1989)
<i>Alburnus orontis</i>	Almus Dam Lake	Cengizler et al. (1991)
<i>Squalius cephalus</i>	Almus Dam Lake	Cengizler et al. (1991)
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Özdemir and Sarieyyüboğlu (1993)
<i>Alburnus alburnus</i>	Upper Porsuk Basin	Yılmaz et al. (1996)
<i>Cyprinus carpio</i>	Kovada Lake	Becer and Kara (1998)
<i>Cyprinus carpio</i>	Karacaören I Dam Lake	Kir (1998)
<i>Luciobarbus pectoralis</i>	Karacaören I Dam Lake	Kir (1998)
<i>Alburnus alburnus</i>	Kutahya Region Lakes	Koyun et al. (1999)
<i>Squalius cephalus</i>	Yeşilköy Pond	Bulgen (1999)
<i>Alburnus mossulensis</i>	Manyas Lake	Öztürk (2000)
<i>Rutilus rutilus</i>	Manyas Lake	Öztürk (2000)

Table 3 (continuing): Helminth - Host List.

<i>Acanthobrama marmid</i>	Keban Dam Lake	Türk (2000)
<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Tinca tinca</i>	Beyşehir Lake	Yıldız et al. (2003)
<i>Rutilus rutilus</i>	Yenice Pond	Öğuz et al. (2004)
<i>Alburnus orontis</i>	Camkoru Pond	İnnal (2004)
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Squalius cephalus</i>	Gelingüllü Dam Lake	Ekmekçi and Kirankaya (2004)
<i>Tinca tinca</i>	Kovada Lake	Kir and Özcan (2005)
<i>Capoeta bergamae</i>	Topcam Dam Lake	Şaşı (2005)
<i>Squalius cephalus</i>	Caparlipatlık Dam Lake	Torcu-Koç et al. (2006)
<i>Chondrostoma regium</i>	Almus Dam Lake	Özgül and Turgut (2006)
<i>Rhodeus amarus</i>	Sapanca Lake	Akmirza (2007)
<i>Alburnus orontis</i>	Camlidere Dam Lake	İnnal et al. (2007)
<i>Alburnus orontis</i>	Kirmir Creek	İnnal et al. (2007)
<i>Alburnus orontis</i>	Bulak Stream	İnnal et al. (2007)
<i>Alburnus orontis</i>	Mogan Lake	İnnal et al. (2007)
<i>Alburnoides bipunctatus</i>	Kirmir Creek	İnnal et al. (2007)
<i>Cyprinus carpio</i>	Camlidere Dam Lake	İnnal et al. (2007)
<i>Cyprinus carpio</i>	Aksu River	İnnal et al. (2007)
<i>Tinca tinca</i>	Abant Lake	İnnal et al. (2007)
<i>Tinca tinca</i>	Yeniçağa Lake	İnnal et al. (2007)
<i>Vimba vimba</i>	Yamansaz Lake	İnnal et al. (2007)
<i>Barbus plebejus</i>	Çıldır Lake	İnnal et al. (2007)
<i>Barbus plebejus</i>	Barhal Creek	İnnal et al. (2007)
<i>Barbus plebejus</i>	Almus Dam Lake	Develi (2008)
<i>Chondrostoma nasus</i>	Kunduzlar Dam Lake	Özbek (2009)
<i>Squalius cephalus</i>	Kunduzlar Dam Lake	Özbek (2009)
<i>Alburnus escherichii</i>	Kunduzlar Dam Lake	Özbek (2009)
<i>Squalius cephalus</i>	Örenler Dam Lake	Kurupinar (2009)
<i>Alburnus escherichii</i>	Çamkoru Pond	İnnal et al. (2010)
<i>Gobio gobio</i>	Çamkoru Pond	İnnal et al. (2010)
<i>Squalius cephalus</i>	Çamkoru Pond	İnnal et al. (2010)
<i>Alburnus orontis</i>	Almus Dam Lake	Turgut et al. (2011)
<i>Squalius cephalus</i>	Almus Dam Lake	Turgut et al. (2011)
<i>Cyprinus carpio</i>	Almus Dam Lake	Turgut et al. (2011)
<i>Capoeta tinca</i>	Almus Dam Lake	Turgut et al. (2011)
<i>Capoeta capoeta</i>	Almus Dam Lake	Turgut et al. (2011)
<i>Ligula pavlovskii</i> Dubinina, 1959		
<i>Neogobius fluviatilis</i>	Manyas Lake	Öztürk (2000)
<i>Neogobius fluviatilis</i>	Uluabat Lake	Öztürk et al. (2002)

Table 3 (continuing): Helminth - Host List.

<i>Monobothrium auriculatum</i> Kulakovskaya, 1961		
<i>Capoeta damascina</i>	Hazar Lake	Aksoy (1996)
<i>Paradilepis scolecina</i> Rudolphi, 1935		
<i>Cyrprinus carpio</i>	Akşehir Lake	Buhurcu (2006)
<i>Proteocephalus osculatus</i> (Goeze, 1782)		
<i>Silurus glanis</i>	Gölbaşı Lake, Eymir Lake, Sariyar Dam Lake	Burgu et al. (1988)
<i>Silurus glanis</i>	Hirfanlı Dam Lake	Aydin (2003)
<i>Proteocephalus percae</i> (Müller, 1780)		
<i>Perca fluviatilis</i>	Sığircı Lake	Soylu (2013)
<i>Sander lucioperca</i>	Sığircı Lake	Soylu (2013)
<i>Proteocephalus torulosus</i> (Batsch, 1786)		
<i>Tinca tinca</i>	Kovada Lake	Kir and Özcan (2005)
<i>Tinca tinca</i>	Beyşehir Lake	Özcan (2005)
<i>Polyonchobothrium</i> <i>magnum</i> (Zme'ev, 1936)		
<i>Clarias gariepinus</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2005)
<i>Postgangesia inarmata</i> de Chambrier, Al-Kallak and Mariaux, 2003		
<i>Silurus triostegus</i>	Atatürk Dam Lake	Öktener and Alaş (2009)
<i>Senga mastacembeli</i> Rahemo, 1996		
<i>Mastacembelus</i> <i>mastacembelus</i>	Atatürk Dam Lake	Öktener and Alaş (2009)
<i>Silurotaenia siluri</i> (Batsch, 1786)		
<i>Silurus glanis</i>	Sapanca Lake	Soylu (1990)

Table 3 (continuing): Helminth - Host List.

<i>Triaenophorus crassus</i> Forel, 1880		
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<b>Phylum Nematoda</b>		
<i>Camallanus truncatus</i> (Rudolphi, 1814)		
<i>Esox lucius</i>	Işıkli Dam Lake	Dişçi (2002)
<i>Eustrongylides excisus</i> Jagerskiold, 1909		
<i>Neogobius fluviatilis</i>	Manyas Lake	Öztürk (2000)
<i>Neogobius fluviatilis</i>	Uluabat Lake	Öztürk et al. (2002)
<i>Abramis brama</i>	Terkos Lake	Karatoy (2004)
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Silurus glanis</i>	Terkos Lake	Soylu (2005)
<i>Aphanius mento</i>	Kirkgöz Stream	Aydoğdu et al. (2011)
<i>Pseudophoxinus battalgilae</i>	Manavgat River	Aydoğdu et al. (2011)
<i>Perca fluviatilis</i>	Siğirci Lake	Soylu (2013)
<i>Atherina boyeri</i>	İznik Lake	Çolak (2013)
<i>Sander lucioperca</i>	Siğirci Lake	Çolak (2013)
<i>Molnaria intestinalis</i> Dogiel and Bychowsky, 1934		
<i>Squalius lepidus</i>	Atatürk Dam Lake	Dal (2006)
<i>Philometra intestinalis</i> Dogiel and Bykhovs., 1934		
<i>Chondrostoma</i> sp.	Kızılıcahamam Brook, Nallıhan Brook	Burgu et al. (1988)
<i>Philometra ovata</i> (Zeder, 1803)		
<i>Squalius cephalus</i>	Seydisuyu Stream	Keskin (1988)
<i>Capoeta umbla</i>	Hazar Lake	Aksoy (1996)
<i>Squalius cephalus</i>	Enne Dam Lake	Koyun (2001)
<i>Squalius cephalus</i>	Çamkoru Lake	İnnal and Keskin (2005)
<i>Philometra rischta</i> Skrjabin, 1923		
<i>Capoeta umbla</i>	Hazar Lake	Aksoy et al. (2006)

Table 3 (continuing): Helminth - Host List.

<i>Pseudocapillaria tomentosa</i> (Dujardin, 1843)		
<i>Cyprinus carpio</i>	Manyas Lake	Öztürk (2000)
<i>Raphidascaris acus</i> (Bloch, 1779)		
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Esox lucius</i>	Uluabat Lake	Öztürk (1995)
<i>Esox lucius</i>	Karacabey Lagoon Lake	Öztürk et al. (2002)
<i>Esox lucius</i>	Işıkli Dam Lake	Dişçi (2002)
<i>Esox lucius</i>	Gölbaşı Dam Lake	Aydoğdu et al. (2008)
<i>Rhabdochona denudata</i> (Dujardin, 1845)		
<i>Cyprinus carpio</i>	Karasu Brook, Bendimahi Brook, Engil Brook, Zernek Dam Lake	Topçu (1993)
<i>Luciobarbus pectoralis</i>	Karacaören I Dam Lake	Kir (1998)
<i>Squalius cephalus</i>	Dogancı Dam Lake	Aydoğdu (2001)
<i>Alburnus alburnus</i>	Mustafakemalpaşa Stream	Aydoğdu and Selver (2006)
<i>Capoeta capoeta</i>	Murat River, Aras River	Aslan (2009)
<i>Barbus plebejus</i>	Murat River, Aras River	Aslan (2009)
<i>Barbus musra</i>	Murat River, Aras River	Aslan (2009)
<i>Capoeta antalyensis</i>	Köprüçay River	Aydoğdu et al. (2011)
<i>Skrjabillanus scardinii</i> Molnár, 1966		
<i>Scardinius erythrophthalmus</i>	Kocadere Stream	Selver (2008)
<i>Spiroxys contortus</i> Rudolphi, 1819		
<i>Aphanius chantrei</i>	Sarıkum Lagoon Lake	Öztürk (2005)
<i>Aphanius danfordii</i>	Sarıkum Lagoon Lake	Öztürk and Özer (2008a)
<b>Phylum Acanthocephala</b>		
<i>Acanthocephalus anguillae</i> Müller, 1780		
<i>Esox lucius</i>	Uluabat Lake	Öztürk (1995)
<i>Tinca tinca</i>	Beyşehir Lake	Özan (2005)

Table 3 (continuing): Helminth - Host List.

<i>Neoechinorhynchus rutili</i> (Müller, 1780)		
<i>Alburnus</i> sp.	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook	Burgu et al. (1988)
<i>Barbus</i> sp.	Çifteler-Sakaryabaşı Fish Production Station, Sariyar Dam Lake	Burgu et al. (1988)
<i>Cyprinus carpio</i>	İznik Lake	Türkmen (1990)
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Cyprinus carpio</i>	Karasu Brook, Bendimahi Brook, Engil Brook, Zernek Dam Lake	Topçu (1993)
<i>Cyprinus carpio</i>	İznik Lake	Aydoğdu et al. (1997a)
<i>Rutilus frisii</i>	İznik Lake	Aydoğdu et al. (1997b)
<i>Rutilus rubilio</i>	İznik Lake	Aydoğdu et al. (2000)
<i>Esox lucius</i>	Işıkli Dam Lake	Dişçi (2002)
<i>Capoeta trutta</i>	Keban Dam Lake	Sarieyyüboğlu and Sağlam (2002)
<i>Capoeta trutta</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Capoeta umbla</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Chondrostoma regium</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Cyprinus carpio</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Luciobarbus esocinus</i>	Karakaya Dam Lake	Örün et al. (2003)
<i>Luciobarbus esocinus</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Capoeta umbla</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Chondrostoma regium</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Cyprinus carpio</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Aphanius chantrei</i>	Sarıkum Lagoon Lake	Öztürk (2005)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Capoeta trutta</i>	Atatürk Dam Lake	Dal (2006)
<i>Neogobius melanostomus</i>	Sırankaraağaçlar Stream	Özer (2007)
<i>Aphanius danfordii</i>	Sarıkum Lagoon Lake	Öztürk and Özer (2008a)
<i>Neoechinorhynchus zabensis</i> Amin, Abdullah, and Mhaisen, 2003		
<i>Capoeta barroisi</i>	Murat River	Oğuz et al. (2012)
<i>Pomphorhynchus laevis</i> (Müller, 1776)		

Table 3 (continuing): Helminth - Host List.

<i>Cyprinus carpio</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook, Hirfanlı Dam Lake, Çankırı-Günerdiğin Pond	Burgu et al. (1988)
<i>Alburnus</i> sp.	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook	Burgu et al. (1988)
<i>Silurus glanis</i>	Gölbaşı Lake, Eymir Lake, Sariyar Dam Lake	Burgu et al. (1988)
<i>Esox lucius</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station	Burgu et al. (1988)
<i>Luciobarbus escherichii</i>	Karasu (Sakarya) Büyükoz Lake	Soylu (1991)
<i>Alburnus alburnus</i>	Enne Dam Lake	Koyun (2001)
<i>Carassius carassius</i>	Enne Dam Lake	Koyun (2001)
<i>Carassius auratus</i>	Enne Dam Lake	Koyun (2001)
<i>Squalius cephalus</i>	Enne Dam Lake	Koyun (2001)
<i>Nemacheilus</i> sp.	Enne Dam Lake	Koyun (2001)
<i>Tinca tinca</i>	Kapulukaya Dam Lake	Yıldız (2003)
<i>Alburnus nasreddini</i>	Akşehir Lake	Buhurcu (2006)
<i>Squalius cephalus</i>	Örenler Dam Lake	Kurupinar (2009)
<i>Pomphorhynchus tereticollis</i> (Rudolphi, 1809)		
<i>Cobitis bilseli</i>	Beyşehir Lake	Smales et al. (2012)
<i>Pseudoechinorhynchus clavula</i> Dujardin, 1845		
<i>Cyprinus carpio</i>	Karasu Brook, Bendimahi Brook, Engil Brook, Zernek Dam Lake	Topçu (1993)
<i>Triaspiron aphanii</i> Smales, Aydoğdu, Emre, 2012		
<i>Aphanius mento</i>	Kirköz Springs	Smales et al. (2012)

Table 3 (continuing): Helminth - Host List.

<b>Phylum Annelida</b>		
<i>Cystobranchus respirans</i> (Troschel, 1850)		
<i>Salmo trutta fario</i>	Kaz Dağı Brook	Geldiay and Balik (1974)
<i>Hemiclepsis marginata</i> Müller, 1774		
<i>Cyprinus carpio</i>	Marmara Lake, Bafa Lake	Geldiay and Balik (1974)
<i>Cyprinus carpio</i>	Çapalı Lake	Ceylan (2002)
<i>Esox lucius</i>	Çapalı Lake	Ceylan (2002)
<i>Hirudo medicinalis</i> Linnaeus, 1758		
<i>Esox lucius</i>	Çapalı Lake	Ceylan (2002)
<i>Cyprinus carpio</i>	Çapalı Lake	Ceylan (2002)
<i>Piscicola geometra</i> Linnaeus, 1761		
<i>Rutilus rutilus</i>	Sapanca Lake	Soylu (1990)
<i>Scardinius erythrophthalmus</i>	Sapanca Lake	Soylu (1990)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (1990)
<i>Tinca tinca</i>	Sapanca Lake	Soylu (1990)
<i>Esox lucius</i>	Sapanca Lake	Soylu (1990)
<i>Luciobarbus mystaceus</i>	Keban Dam Lake	Sağlam (1992)
<i>Tinca tinca</i>	Uluabat Lake	Öztürk (2002)
<i>Aramis brama</i>	Terkos Lake	Karatoy (2004)
<i>Scardinius erythrophthalmus</i>	Terkos Lake	Kahveci (2004)
<i>Cyprinus carpio</i>	Çavuşlu Lake	Öktener et al. (2007)
<i>Carassius gibelio</i>	Uluabat Lake	Emiroğlu and Arslan (2009)
<i>Rutilus rutilus</i>	Uluabat Lake	Ceylan et al. (2011)
<i>Trachelobdella torquata</i> (Grube, 1871)		
<i>Carassius carassius</i>	Kovada Lake	Özan and Kir (2005)

Table 4: Host - Helminth List.

<b><i>Silurus glanis Linnaeus, 1758</i></b>
<i>Ancylodiscoides siluri</i> Zandt, 1924
<i>Ancylodiscoides vistulensis</i> Sivak, 1932
<i>Dactylogyrus vastator</i> (Nybelin, 1924)
<i>Bucephalus polymorphus</i> Baer, 1827
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)
<i>Orientocreadium siluri</i> Bykhovski and Dubi., 1954
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Proteocephalus osculatus</i> (Goeze, 1782)
<i>Silurotaenia siluri</i> (Batsch, 1786)
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Sander lucioperca</i> (Linnaeus, 1758)</b>
<i>Ancyrocephalus paradoxus</i> Creplin, 1839
<i>Bucephalus polymorphus</i> Baer, 1827
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Proteocephalus percae</i> (Müller, 1780)
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<b><i>Capoeta umbla</i> (Heckel, 1843)</b>
<i>Dactylogyrus affinis</i> Bychowsky, 1933
<i>Dactylogyrus auriculatus</i> (Nordmann, 1832)
<i>Dactylogyrus extensus</i> Mueller and Cleave, 1932
<i>Dactylogyrus malleus</i> Linstow, 1877
<i>Dactylogyrus minutus</i> Kulwiec, 1927
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Khawia armeniaca</i> Cholodkovskii, 1878
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Philometra intestinalis</i> Dogiel and Bykhovs., 1934
<i>Philometra ovata</i> (Zeder, 1803)
<i>Philometra riscita</i> Skrjabin, 1923
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Alburnus alburnus</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus alatus</i> Linstow, 1878
<i>Dactylogyrus fraternus</i> Wagener, 1909

Table 4 (continuing): Host - Helminth List.

<i>Diplozoon homoion</i> Bykhovskii and Nagibi, 1959
<i>Allocreadium isoporum</i> Looss, 1894
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Chondrostoma regium</i> (Heckel, 1843)</b>
<i>Dactylogyrus alatus</i> Linstow, 1878
<i>Dactylogyrus elegantis</i> Gusev, 1966
<i>Dactylogyrus extensus</i> Mueller and Cleave, 1932
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Dactylogyrus vistulae</i> Prost, 1957
<i>Gyrodactylus elegans</i> Nordmann, 1832
<i>Gyrodactylus macrocornis</i> Ergens, 1963
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Alburnus heckeli</i> Battalgil, 1943</b>
<i>Dactylogyrus alatus</i> Linstow, 1878
<b><i>Cyprinus carpio</i> Linnaeus, 1758</b>
<i>Dactylogyrus anchoratus</i> (Dujardin, 1845)
<i>Dactylogyrus ancylostylus</i> Linstow, 1878
<i>Dactylogyrus extensus</i> Mueller and Cleave, 1932
<i>Dactylogyrus minutus</i> Kulwiec, 1927
<i>Dactylogyrus phoxini</i> (Malevitetskaya, 1949)
<i>Dactylogyrus vastator</i> (Nybelin, 1924)
<i>Diplozoon homoion</i> Bykhovskii and Nagibi, 1959
<i>Gyrodactylus elegans</i> Nordmann, 1832
<i>Gyrodactylus scardinii</i> Malmberg, 1956
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Posthodiplostomum cuticola</i> Nordmann, 1832
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus brachycollis</i> Janiszewska, 1951
<i>Caryophyllaeus fimbriiceps</i> Annenkova-Khlopina, 1919
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Khawia armeniaca</i> Cholodkovskii, 1878
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Paradilepis scolecina</i> Rudolphi, 1935
<i>Pseudocapillaria tomentosa</i> (Dujardin, 1843)
<i>Rhabdochona denudata</i> (Dujardin, 1845)

Table 4 (continuing): Host - Helminth List.

<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<i>Pseudoechinorhynchus clavula</i> Dujardin, 1845
<i>Hemiclepsis marginata</i> Müller, 1774
<i>Hirudo medicinalis</i> Linnaeus, 1758
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Carassius carassius</i> (Linnaeus, 1758)</b>
<i>Dactylogyurus anchoratus</i> (Dujardin, 1845)
<i>Dactylogyurus minutus</i> Kulwiec, 1927
<i>Dactylogyurus vastator</i> (Nybelin, 1924)
<i>Gyrodactylus katharinieri</i> Malmberg, 1964
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Carassius auratus</i> (Linnaeus, 1758)*</b>
<i>Dactylogyurus anchoratus</i> (Dujardin, 1845)
<i>Gyrodactylus katharinieri</i> Malmberg, 1964
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Carassius gibelio</i> (Bloch, 1782)*</b>
<i>Dactylogyurus anchoratus</i> (Dujardin, 1845)
<i>Dactylogyurus baueri</i> Gussev, 1955
<i>Dactylogyurus extensus</i> Mueller and Cleave, 1932
<i>Dactylogyurus inexpectatus</i> Izjumova, 1955
<i>Dactylogyurus vastator</i> (Nybelin, 1924)
<i>Gyrodactylus scardinii</i> Malmberg, 1956
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Luciobarbus pectoralis</i> (Heckel, 1843)</b>
<i>Dactylogyurus aencylostylus</i> Linstow, 1878
<i>Dactylogyurus minutus</i> Kulwiec, 1927
<i>Diplozoon barbi</i> Nordman, 1832
<i>Gyrodactylus elegans</i> Nordmann, 1832
<i>Phyllodistomum elongatum</i> Nybelin, 1926
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Khawia armeniaca</i> Cholodkovskii, 1878
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<b><i>Luciobarbus esocinus</i> Heckel, 1843</b>
<i>Dactylogyurus aencylostylus</i> Linstow, 1878
<i>Dactylogyurus asper</i> Linstow, 1878
<i>Neoechinorhynchus rutili</i> (Müller, 1780)

Table 4 (continuing): Host - Helminth List.

<b><i>Luciobarbus mystaceus</i> (Pallas, 1814)</b>
<i>Dactylogyrus asper</i> Linstow, 1878
<i>Dactylogyrus extensus</i> Mueller and Cleave, 1932
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Rhodeus amarus</i> (Bloch, 1782)</b>
<i>Dactylogyrus bicornis</i> Malevitskaya, 1941
<i>Diplozoon paradoxum</i> Nordman, 1832
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Luciobarbus escherichii</i> (Steindachner, 1897)</b>
<i>Dactylogyrus carpathicus</i> Zakhvatkin, 1951
<i>Allocreadium isoporum</i> Looss, 1894
<i>Biacetabulum appendiculatum</i> Szidat, 1937
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Alburnus chalcoides</i> (Güldenstädt, 1772)</b>
<i>Dactylogyrus chalcalburni</i> Dogiel and Bychowsky 1833
<i>Diplozoon paradoxum</i> Nordman, 1832
<i>Paradiplozoon megan</i> Bykhovskii and Nagibi, 1959
<i>Posthodiplostomum cuticola</i> Nordmann, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<b><i>Blicca bjoerkna</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus cornu</i> Linstow, 1878
<i>Dactylogyrus cornoides</i> (Gläser and Gussev, 1971)
<i>Dactylogyrus crucifer</i> Wagener, 1857
<i>Dactylogyrus difformoides</i> Glaser and Gusev, 1967
<i>Dactylogyrus distinguendus</i> (Linstow, 1878)
<i>Dactylogyrus falcatus</i> (Wedl, 1857)
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Dactylogyrus wunderi</i> Bykhovskii, 1931
<i>Aspidogaster limacoides</i> Diesing, 1835
<i>Asymphylodora imitans</i> (Mühling, 1898)
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)
<i>Posthodiplostomum cuticola</i> Nordmann, 1832
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Piscicola geometra</i> Linnaeus, 1761

Table 4 (continuing): Host - Helminth List.

<b><i>Vimba vimba</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus cornu</i> Linstow, 1878
<i>Dactylogyrus cornoides</i> (Gläser and Gussev, 1971)
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Aspidogaster limacoides</i> Diesing, 1835
<i>Posthodiplostomum cuticola</i> Nordmann, 1832
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Rutilus frisii</i> (Nordmann, 1840)</b>
<i>Dactylogyrus crucifer</i> Wagener, 1857
<i>Dactylogyrus frisii</i> Bychowsky, 1933
<i>Dactylogyrus nybelini</i> Markewitsch, 1933
<i>Bothricephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Rutilus rutilus</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus crucifer</i> Wagener, 1857
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Dactylogyrus vistulae</i> Prost, 1957
<i>Diplozoon homoion</i> Bykhovskii and Nagibi, 1959
<i>Diplozoon paradoxum</i> Nordman, 1832
<i>Aspidogaster limacoides</i> Diesing, 1835
<i>Diplostomum spathaecum</i> (Rudolphi, 1819)
<i>Opisthorchis felineus</i> (Rivolta, 1884)
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothricephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeides fennica</i> (Schneider, 1902)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Capoeta tinca</i> (Heckel, 1843)</b>
<i>Dactylogyrus crucifer</i> Wagener, 1857
<i>Gyrodactylus narzikulovi</i> Ergens and Dzhalilov, 1979
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Scardinius erythrophthalmus</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus difformis</i> Wagener, 1857
<i>Dactylogyrus difformoides</i> Glaser and Gusev, 1967

Table 4 (continuing): Host - Helminth List.

<i>Dactylogyrus izjumovae</i> Gusev, 1966
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Asymphylodora markewitschi</i> Kulakovskaya, 1947
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)
<i>Posthodiplostomum cuticola</i> Nordmann, 1832
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Tetracotyle percae-fluviatilis</i> (Linstow, 1856)
<i>Caryophyllaeides fennica</i> (Schneider, 1902)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<i>Skrjabillanus scardinii</i> Molnár, 1966
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Abramis brama</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus distinguendus</i> (Linstow, 1878)
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Tetracotyle percae-fluviatilis</i> (Linstow, 1856)
<b><i>Squalius cephalus</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus elegantis</i> Gusev, 1966
<i>Dactylogyrus extensus</i> Mueller and Cleave, 1932
<i>Dactylogyrus folkmanovae</i> Ergens, 1956
<i>Dactylogyrus naviculoides</i> Ergens, 1960
<i>Dactylogyrus prostae</i> Molnar, 1964
<i>Dactylogyrus vistulae</i> Prost, 1957
<i>Paradiplozoon megan</i> Bykhovskii and Nagibi, 1959
<i>Allocreadium isoporum</i> Looss, 1894
<i>Bothrioccephalus acheilognathi</i> Yamaguti, 1955
<i>Khawia armeniaca</i> Cholodkovskii, 1878
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Philometra ovata</i> (Zeder, 1803)
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Tinca tinca</i> (Linnaeus, 1758)</b>
<i>Dactylogyrus macrocanthus</i> Wagener, 1857
<i>Gyrodactylus medius</i> Kathariner, 1894
<i>Asymphylodora tincae</i> (Moorder, 1790)
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothrioccephalus acheilognathi</i> Yamaguti, 1955

Table 4 (continuing): Host - Helminth List.

<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Proteocephalus torulosus</i> (Batsch, 1786)
<i>Acanthocephalus anguillae</i> Müller, 1780
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Barbus plebejus</i> Bonaparte, 1839</b>
<i>Dactylogyurus malleus</i> Linstow, 1877
<i>Gyrodactylus elegans</i> Nordmann, 1832
<i>Gyrodactylus hemibarbi</i> (Ergens, 1980)
<i>Allocreadium isoporum</i> Looss, 1894
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<b><i>Pseudophoxinus antalyae</i> Bogutskaya, 1992</b>
<i>Dactylogyurus ergensi</i> Molnar, 1964
<i>Dactylogyurus sphyrna</i> Linstow, 1828
<i>Diplozoon homoiion</i> Bykhovskii and Nagibi, 1959
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<b><i>Barbus grypus</i> Heckel, 1843</b>
<i>Dactylogyurus extensus</i> Mueller and Cleave, 1932
<b><i>Capoeta capoeta</i> (Güldenstädt, 1773)</b>
<i>Dactylogyurus pulcher</i> Bychowsky, 1957
<i>Dactylogyurus vastator</i> (Nybelin, 1924)
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<b><i>Esox lucius</i> Linnaeus, 1758</b>
<i>Tetraonchus monenteron</i> Diesing, 1858
<i>Asymphylodora tincae</i> (Moeder, 1790)
<i>Bucephalus polymorphus</i> Baer, 1827
<i>Diplostomum spathaicum</i> (Rudolphi, 1819)
<i>Diplodiscus subclavatus</i> Diesing, 1836
<i>Rhipidocotyle fennica</i> Taskinen, 1991
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bathybothrium rectangulum</i> (Bloch, 1782)
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Triaenophorus crassus</i> Forel, 1880
<i>Camallanus truncatus</i> (Rudolphi, 1814)

Table 4 (continuing): Host - Helminth List.

<i>Raphidascaris acus</i> (Bloch, 1779)
<i>Acanthocephalus anguillae</i> Müller, 1780
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<i>Hemiclepsis marginata</i> Müller, 1774
<i>Hirudo medicinalis</i> Linnaeus, 1758
<i>Piscicola geometra</i> Linnaeus, 1761
<b><i>Garra rufa</i> (Heckel, 1843)</b>
<i>Dactylogyrus rectotrabus</i> Gussev, Jalali and Molnar, 1993
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Capoeta trutta</i> (Heckel, 1843)</b>
<i>Diplozoon barbi</i> Nordman, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Khawia armeniaca</i> Cholodkovskii, 1878
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Rutilus rubilio</i> (Bonaparte, 1837)</b>
<i>Dactylogyrus sphyrna</i> Linstow, 1828
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Aphanius</i> sp.</b>
<i>Dactylogyrus vastator</i> (Nybelin, 1924)
<b><i>Alburnus orontis</i> Sauvage, 1882</b>
<i>Dactylogyrus vastator</i> (Nybelin, 1924)
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Acantobrama marmid</i> Heckel, 1843</b>
<i>Diplozoon paradoxum</i> Nordman, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Caryophyllaeus laticeps</i> (Müller, 1781)
<i>Khawia armeniaca</i> Cholodkovskii, 1878
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Capoeta damascina</i> (Valenciennes, 1842)</b>
<i>Dogielius forceps</i> Bychowsky, 1936
<i>Monobothrium auriculatum</i> Kulakovskaya, 1961
<b><i>Gasterosteus aculeatus</i> Linnaeus, 1758*</b>
<i>Gyrodactylus arcuatus</i> Bychowsky, 1933

Table 4 (continuing): Host - Helminth List.

<b><i>Cobitis simplicispina</i> Hankó, 1925</b>
<i>Gyrodactylus cobitis</i> Bychowsky, 1933
<b><i>Neogobius fluviatilis</i> (Pallas, 1814)*</b>
<i>Gyrodactylus gobii</i> Shul'man, 1953
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Ligula pavlovskii</i> Dubinina, 1959
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<b><i>Neogobius melanostomus</i> (Pallas, 1814)*</b>
<i>Gyrodactylus proterorhini</i> Ergens, 1967
<i>Pygidiopsis genata</i> Looss, 1907
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Lepomis gibbosus</i> (Linnaeus, 1758)*</b>
<i>Onchocoleidus similis</i> Mueller, 1936
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Tylodelphys clavata</i> Nordmann, 1832
<b><i>Clarias gariepinus</i> (Burchell, 1822)</b>
<i>Quadriacanthus clariadis</i> (Paperna, 1961)
<i>Orientocreadium batrachoides</i> Tubangui, 1931
<i>Polyonchobothrium magnum</i> (Zme'ev, 1936)
<b><i>Alburnus</i> sp.</b>
<i>Asymphylodora tincae</i> (Mooder, 1790)
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Ligula intestinalis</i> Linnaeus, 1758
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Barbus</i> sp.</b>
<i>Asymphylodora tincae</i> (Mooder, 1790)
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Knipowitschia caucasica</i> (Berg, 1916)</b>
<i>Bucephalus polymorphus</i> Baer, 1827
<b><i>Chondrostoma</i> sp.</b>
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Philometra intestinalis</i> Dogiel and Bykhowsky, 1934

Table 4 (continuing): Host - Helminth List.

<b><i>Varcorhinus</i> sp.</b>
<i>Clinostomum complanatum</i> Rudolphi, 1819
<b><i>Perca fluviatilis</i> Linnaeus, 1758</b>
<i>Clinostomum complanatum</i> Rudolphi, 1819
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Proteocephalus percae</i> (Müller, 1780)
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<b><i>Salmo trutta abanticus</i> Tortonese, 1954</b>
<i>Crepidostomum farionis</i> (Muller, 1780)
<b><i>Salmo trutta fario</i> Linnaeus, 1758</b>
<i>Posthodiplostomum minimum</i> MacCallum, 1921
<i>Cystobranchus respirans</i> (Troschel, 1850)
<b><i>Atherina boyeri</i> Risso, 1810*</b>
<i>Tylodelphys clavata</i> Nordmann, 1832
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<b><i>Alburnus mossulensis</i> Heckel, 1843</b>
<i>Bothriocephalus acheilognathi</i> Yamaguti, 1955
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Capoeta bergamae</i> Karaman, 1969</b>
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Alburnoides bipunctatus</i> (Bloch, 1782)</b>
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Chondrostoma nasus</i> (Linnaeus, 1758)</b>
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Alburnus escherichii</i> Steindachner, 1897</b>
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Gobio gobio</i> (Linnaeus, 1758)</b>
<i>Ligula intestinalis</i> Linnaeus, 1758
<b><i>Aphanius mento</i> (Heckel, 1843)</b>
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<i>Triaspiron aphanii</i> Smales, Aydoğdu and Emre, 2012

Table 4 (continuing): Host - Helminth List.

<b><i>Pseudophoxinus battalgilae</i> Bogutskaya, 1997</b>
<i>Eustrongylides excisus</i> Jagerskiold, 1909
<b><i>Squalius lepidus</i> Heckel, 1843</b>
<i>Molnaria intestinalis</i> Dogiel and Bychowsky, 1934
<b><i>Capoeta antalyensis</i> (Battalgil, 1943)</b>
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<b><i>Luciobarbus mursa</i> (Güldenstädt, 1773)</b>
<i>Rhabdochona denudata</i> (Dujardin, 1845)
<b><i>Aphanius chantrei</i> (Gaillard, 1895)</b>
<i>Spiroxys contortus</i> Rudolphi, 1819
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Aphanius danfordii</i> (Boulenger, 1890)</b>
<i>Spiroxys contortus</i> Rudolphi, 1819
<i>Neoechinorhynchus rutili</i> (Müller, 1780)
<b><i>Capoeta barroisi</i> Lortet, 1894</b>
<i>Neoechinorhynchus zabensis</i> Amin, Abdullah and Mhaisen, 2003
<b><i>Nemacheilus</i> sp.</b>
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Alburnus nasreddini</i> Battalgil, 1943</b>
<i>Pomphorhynchus laevis</i> (Müller, 1776)
<b><i>Cobitis bilseli</i> Battalgil, 1942</b>
<i>Pomphorhynchus tereticollis</i> (Rudolphi, 1809)
<b><i>Silurus triostegus</i> Heckel, 1843</b>
<i>Senga mastacembeli</i> Rahemo, 1996

*Atherina boyeri* introduced into several western lakes and Beyşehir Lake - *Lepomis gibbosus*, *Carassius gibelio*, *Carassius auratus* are not native to Turkey, they were introduced into the lakes and rivers.

*Gasterosteus aculeatus* is distributed in the Black Sea, Marmara Sea, Aegean Sea and Mediterranean Sea and adjacent watersheds; *Neogobius fluviatilis* in the Black Sea watersheds; *Neogobius melanostomus* in the Black Sea, Marmara Sea, Aegean Sea and the Caspian Sea watersheds.

Table 5: Unnamed helminth species (at genera level) on freshwater fishes of Turkey.

<b>Phylum Platyhelminthes</b>		
<b>Class Monogenea</b>		
<b>Ancyrocephalus sp.</b>		
<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<b>Paradiplozoon sp.</b>		
<i>Abramis brama</i>	Terkos Lake	Soylu (2009)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Cyprinus carpio</i>	Şigirci Lake	Çolak (2013)
<b>Cleidodiscus sp.</b>		
<i>Silurus glanis</i>	Gölbasi Lake	Ekingen (1976)
<b>Diplozoon sp.</b>		
<i>Scardinius erythrophthalmus</i>	Karacabey Lagoon Lake	Öztürk et al. (2002)
<b>Dactylogyrus sp.</b>		
<i>Tinca tinca</i>	Gölbasi Lake, Eymir Lake	Burgu et al. (1988)
<i>Cyprinus carpio</i>	Gölbasi Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook, Hirfanlı Dam Lake, Çankırı-Günerdiğin Pond	Burgu et al. (1988)
<i>Alburnus</i> sp.	Gölbasi Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook	Burgu et al. (1988)
<i>Silurus glanis</i>	Gölbasi Lake, Eymir Lake, Sariyar Dam Lake	Burgu et al. (1988)
<i>Barbus</i> sp.	Çifteler-Sakaryabaşı Fish Production Station, Sariyar Dam Lake	Burgu et al. (1988)
<i>Chondrostoma</i> sp.	Kızılıcahamam Brook, Nallıhan Brook	Burgu et al. (1988)
<i>Varicorhinus</i> sp.	Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Çankırı-Günerdiğin Pond, Nallıhan Brook, Kızılıcahamam Brook	Burgu et al. (1988)

Table 5 (continuing): Unnamed helminth species on freshwater fishes of Turkey.

<i>Cyprinus carpio</i>	Kocadere Lake, Uluabat Lake, Ekinli Lagoon Lake	Altin (1989)
<i>Cyprinus carpio</i>	Kocadere Lake, Uluabat Lake, Ekinli Lagoon Lake	Oğuz (1991)
<i>Tinca tinca</i>	İznik Lake	Aydoğdu et al. (1996a)
<i>Tinca tinca</i>	Mogan Lake	Sönmez (1996)
<i>Cyprinus carpio</i>	Mogan Lake	Sönmez (1996)
<i>Alburnus escherichii</i>	Mogan Lake	Sönmez (1996)
<i>Cyprinus carpio</i>	Çifteler-Sakaryabaşı Fish Production Sitation	Atay et al. (1999)
<i>Vimba vimba</i>	Sirakaraağaçlar Stream	Ünsal (2008)
<i>Cyprinus carpio</i>	Halil-ür Rahman Lake	Pişkin and Ütük (2008)
<i>Capoeta capoeta</i>	Almus Dam Lake	Özgül (2008)
<i>Gyrodactylus sp.</i>		
<i>Salmo trutta fario</i>	İstanbul Brook	Soylu (1985)
<i>Cyprinus carpio</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook, Hirfanlı Dam Lake, Çankırı-Günerdiğin Pond	Burgu et al. (1988)
<i>Alburnus sp.</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook	Burgu et al. (1988)
<i>Chondrostoma sp.</i>	Kızılıcahamam Brook, Nallıhan Brook	Burgu et al. (1988)
<i>Varicorhinus sp.</i>	Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Çankırı-Günerdiğin Pond, Kızılıcahamam Brook, Nallıhan Brook	Burgu et al. (1988)
<i>Barbus sp.</i>	Gölbaşı Lake, Eymir Lake, Sariyar Dam Lake	Burgu et al. (1988)
<i>Cyprinus carpio</i>	Bekteşaga Pond	Özer (1995)
<i>Aphanius chantrei</i>	Sarıkum Lagoon Lake	Öztürk (2005)
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Chondrostoma regium</i>	Almus Dam Lake	Özgül and Turgut (2006)

Table 5 (continuing): Unnamed helminth species on freshwater fishes of Turkey.

<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<i>Aphanius danfordii</i>	Sarikum Lagoon Lake	Öztürk and Özer (2008a)
<i>Aphanius danfordii</i>	Sirakaraağaçlar Stream	Ünsal (2008)
<i>Neogobius melanostomus</i>	Sirakaraağaçlar Stream	Ünsal (2008)
<i>Capoeta capoeta</i>	Almus Dam Lake	Özgül (2008)
<i>Capoeta tinca</i>	Almus Dam Lake	Özgül (2008)
<i>Cyprinus carpio</i>	Emre Dam Lake	Öztürk (2011)
<i>Carassius auratus</i>	Emre Dam Lake	Öztürk (2011)
<i>Carassius carassius</i>	Emre Dam Lake	Öztürk (2011)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2012)
<i>Perca fluviatilis</i>	Sığirci Lake	Soylu (2013)
<i>Cyprinus carpio</i>	Sığirci Lake	Çolak (2013)
<i>Carassius gibelio</i>	Sığirci Lake	Çolak (2013)
<i>Sander lucioperca</i>	Sığirci Lake	Çolak (2013)
<i>Lepomis gibbosus</i>	Sığirci Lake	Çolak (2013)
<b><i>Salsuginus</i> sp.</b>		
<i>Aphanius chantrei</i>	Sarikum Lagoon Lake	Öztürk (2005)
<i>Aphanius danfordii</i>	Sarikum Lagoon Lake	Öztürk and Özer (2008a)
<i>Aphanius danfordii</i>	Sirakaraağaçlar Stream	Ünsal (2008)
<b><i>Tetraonchus</i> sp.</b>		
<i>Esox lucius</i>	Mogan Lake	Sönmez (1996)
<i>Acantobrama marmid</i>	Tigem Reservoirs	Zeren (2008)
<b>Phylum Platyhelminthes</b>		
<b>Class Digenea</b>		
<b><i>Ascocotyle</i> sp.</b>		
<i>Aphanius chantrei</i>	Sarikum Lagoon Lake	Öztürk (2005)
<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<i>Neogobius melanostomus</i>	Sirakaraağaçlar Stream	Özer (2007)
<i>Aphanius danfordii</i>	Sarikum Lagoon Lake	Öztürk and Özer (2008a)
<b><i>Digenea</i> sp.</b>		
<i>Tinca tinca</i>	Mogan Lake, Hirfanlı Dam Lake, Kızılıcahamam Brook	Erkul (1997)
<i>Tinca tinca</i>	Kapulukaya Dam Lake	Yıldız (2003)
<i>Neogobius melanostomus</i>	Sirakaraağaçlar Stream	Özer (2007)
<b><i>Diplostomum</i> sp.</b>		
<i>Blicca bjoerkna</i>	Uluabat Lake	Akıncı (1999)
<i>Acanthobrama marmid</i>	Keban Dam Lake	Dörücü and İspir (2001)
<i>Silurus glanis</i>	Terkos Lake	Soylu (2005)

Table 5 (continuing): Unnamed helminth species on freshwater fishes of Turkey.

<i>Carassius carassius</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2005)
<i>Luciobarbus esocinus</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Capoeta umbla</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Chondrostoma regium</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Squalius cephalus</i>	Keban Dam Lake	Dörücü and İspir (2005)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2006)
<i>Rutilus rutilus</i>	Sapanca Lake	Karabiber (2006)
<i>Tinca tinca</i>	Sapanca Lake	Akbeniz (2006)
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Cyprinus carpio</i>	Sapanca Lake	Uzunay (2006)
<i>Chondrostoma regium</i>	Almus Dam Lake	Özgül and Turgut (2006)
<i>Alburnus alburnus</i>	Mustafakemalpaşa Stream	Aydoğdu and Selver (2006)
<i>Vimba vimba</i>	Gölbaşı Dam Lake	Aydoğdu et al. (2008)
<i>Capoeta trutta</i>	Keban Dam Lake	Dörücü et al. (2008)
<i>Cyprinus carpio</i>	Almus Dam Lake	Özgül (2008)
<i>Capoeta capoeta</i>	Almus Dam Lake	Özgül (2008)
<i>Capoeta tinca</i>	Almus Dam Lake	Özgül (2008)
<i>Squalius cephalus</i>	Örenler Dam Lake	Kurupinar (2009)
<i>Cyprinus carpio</i>	Keban Dam Lake	Karabulut (2009)
<i>Perca fluviatilis</i>	Şığirci Lake	Soylu (2013)
<i>Atherina boyeri</i>	İznik Lake	Çolak (2013)
<i>Cyprinus carpio</i>	Şığirci Lake	Çolak (2013)
<i>Carassius gibelio</i>	Şığirci Lake	Çolak (2013)
<i>Sander lucioperca</i>	Şığirci Lake	Çolak (2013)
<i>Lepomis gibbosus</i>	Şığirci Lake	Çolak (2013)
<i>Scardinius erythrophthalmus</i>	Şığirci Lake	Çolak (2013)
<i>Rutilus rutilus</i>	Şığirci Lake	Çolak (2013)
<i>Esox lucius</i>	Şığirci Lake	Çolak (2013)
<i>Silurus glanis</i>	Şığirci Lake	Çolak (2013)
 <b>Diplodiscus sp.</b>		
<i>Esox lucius</i>	Uluabat Lake	Öztürk (1995)
 <b>Neascus sp.</b>		
<i>Salmo trutta fario</i>	Munzur Stream	Ekingen (1975)
 <b>Orientocreadium sp.</b>		
<i>Clarias gariepinus</i>	Kepez I Hydro Electric Power Plant Loading Pond	Soylu and Emre (2005)
 <b>Posthodiplostomum sp.</b>		
<i>Aphanius chantrei</i>	Sarıkum Lagoon Lake	Öztürk (2005)

Table 5 (continuing): Unnamed helminth species on freshwater fishes of Turkey.

<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<i>Aphanius danfordii</i>	Sarikum Lagoon Lake	Öztürk and Özer (2008a)
<b><i>Rhipidocotyle</i> sp.</b>		
<i>Esox lucius</i>	Uluabat Lake	Öztürk (1995)
<b><i>Sanguinicola</i> sp.</b>		
<i>Cyprinus carpio</i>	Gölbaşı Lake, Eymir Lake, Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Dam Lake, Sariyar Dam Lake, Kızılıcahamam Brook, Hirfanlı Dam Lake, Çankırı-Günerdigin Pond	Burgu et al. (1988)
<b><i>Tetracotyle</i> sp.</b>		
<i>Vimba vimba</i>	Sapanca Lake	Uzunay (2006)
<i>Blicca bjoerkna</i>	Sapanca Lake	Soylu (2006)
<i>Perca fluviatilis</i>	Şığirci Lake	Soylu (2013)
<i>Sander lucioperca</i>	Şığirci Lake	Çolak (2013)
<i>Lepomis gibbosus</i>	Şığirci Lake	Çolak (2013)
<b><i>Creptotrema</i> sp.</b>		
<i>Salmo trutta fario</i>	Munzur Stream	Ekingen (1975)
<b>Phylum Platyhelminthes</b>		
<b>Class Cestoda</b>		
<b><i>Bothriocephalus</i> sp.</b>		
<i>Cyprinus carpio</i>	Uluabat Lake	Oğuz et al. (1996a)
<i>Esox lucius</i>	Mogan Lake	Sönmez (1996)
<i>Cyprinus carpio</i>	Mogan Lake	Sönmez (1996)
<i>Alburnus escherichii</i>	Mogan Lake	Sönmez (1996)
<i>Cyprinus carpio</i>	İznik Lake	Aydoğdu (1997)
<b><i>Caryophyllaeus</i> sp.</b>		
<i>Cyprinus carpio</i>	Porsuk Stream	Yetim (1985)
<i>Cyprinus carpio</i>	Seyhan River	Cengizler et al. (2001)
<b><i>Caryophyllaeides</i> sp.</b>		
<i>Blicca bjoerkna</i>	Uluabat Lake	Akinci (1999)

Table 5 (continuing): Unnamed helminth species on freshwater fishes of Turkey.

<b><i>Cyclophyllidea</i> sp.</b>		
	Çifteler-Sakaryabaşı Fish Production Station, Kurtboğazi Lake, Çankırı-Günerdiğin Pond, Nallihan and Kızılıcahamam brooks	Burgu et al. (1988)
<b><i>Diphyllobothrium</i> sp.</b>		
<i>Capoeta umbla</i>	Hazar Lake	Aksoy (1996)
<b><i>Ligula</i> sp.</b>		
<i>Vimba vimba</i>	Porsuk River	Yetim (1985)
<i>Tinca tinca</i>	Mogan Lake	Öge and Aydin (1995)
<i>Esox lucius</i>	Mogan Lake	Sönmez (1996)
<i>Cyprinus carpio</i>	Mogan Lake	Sönmez (1996)
<i>Alburnus escherichii</i>	Mogan Lake	Sönmez (1996)
<i>Silurus glanis</i>	İznik Lake	Aydoğdu et al. (1996b)
<i>Tinca tinca</i>	Kapulukaya Dam Lake	Yıldız (2003)
<b><i>Proteocephalus</i> sp.</b>		
<i>Cyprinus carpio</i>	Porsuk Stream	Yetim (1985)
<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<b><i>Schistocephalus</i> sp.</b>		
<i>Cyprinus carpio</i>	Seyhan River	Cengizler et al. (2001)
<i>Luciobarbus pectoralis</i>	Seyhan River	Şahan and Cengizler (2003)
<i>Tinca tinca</i>	Gölbaşı Lake, Eymir Lake	Burgu et al. (1988)
<i>Tinca tinca</i>	Mogan Lake, Hirfanlı Dam Lake, Kızılırmak Brook	Erkul (1997)
<i>Cyprinus carpio</i>	Mogan Lake	Erkul (1997)
<i>Alburnus escherichii</i>	Mogan Lake	Erkul (1997)
<i>Esox lucius</i>	Mogan Lake	Erkul (1997)
<i>Tinca tinca</i>	Kapulukaya Dam Lake	Yıldız (2003)
<i>Esox lucius</i>	Sığircı Lake	Çolak (2013)
<i>Silurus glanis</i>	Sığircı Lake	Çolak (2013)
<b><i>Philonema</i> sp.</b>		
<i>Salmo trutta fario</i>	Munzur Stream	Ekingen (1975)
<b><i>Raphidascaris</i> sp.</b>		
<i>Esox lucius</i>	Çapalı Lake	Ceylan (2002)

Table 5 (continuing): Unnamed helminth species on freshwater fishes of Turkey.

<b>Rhabdochona sp.</b>		
<i>Cyprinion macrostomum</i>	Balıklı Thermal	Saygi and Bardakçı (1990)
<i>Gara rufa</i>	Topardic Stream	Saygi and Bardakçı (1990)
<i>Scardinius erythrophthalmus</i>	Uluabat Lake	Oğuz and Öztürk (1993)
<i>Alburnus chalcoides</i>	Tödürge Lake	Yıldırım and Ünver (2006)
<b>Spiroxys sp.</b>		
<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<i>Neogobius melanostomus</i>	Sirakaraağaçlar Stream	Özer (2007)
<b>Phylum Acanthocephala</b>		
<b>Acanthocephalus sp.</b>		
<i>Salmo trutta fario</i>	Munzur Stream	Ekingen (1975)
<b>Neoechinorhynchus sp.</b>		
<i>Salmo trutta fario</i>	Munzur Stream	Ekingen (1976)
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Özdemir and Sarieyyüpoğlu (1993)
<i>Capoeta capoeta</i>	Murat River, Aras River	Aslan (2009)
<i>Capoeta barroisi</i>	Murat River, Aras River	Aslan (2009)
<i>Barbus plebejus</i>	Murat River, Aras River	Aslan (2009)
<i>Cyprinus carpio</i>	Şığirci Lake	Çolak (2013)
<i>Esox lucius</i>	Şığirci Lake	Çolak (2013)
<b>Paulisentis sp.</b>		
<i>Aphanius chantrei</i>	Sirakaraağaçlar Stream	Özer (2006)
<b>Pomphorhynchus sp.</b>		
<i>Chondrostoma nasus</i>	Porsuk Stream	Yetim (1985)
<i>Luciobarbus escherichii</i>	Porsuk Stream	Yetim (1985)
<i>Capoeta capoeta</i>	Murat River, Aras River	Aslan (2009)
<i>Barbus plebejus</i>	Murat River, Aras River	Aslan (2009)
<i>Squalius cephalus</i>	Murat River, Aras River	Aslan (2009)
<b>Phylum Annelida</b>		
<b>Actinobdella sp.</b>		
<i>Luciobarbus mystaceus</i>	Keban Dam Lake	Sağlam (1992)
<b>Piscicola sp.</b>		
<i>Luciobarbus pectoralis</i>	Keban Dam Lake	Özdemir and Sarieyyüboğlu (1993)

Although parasite at species and genera level were reported from freshwater fish, only the species level will be considered here (Tab. 3). Other parasites at genera level (unnamed species) will be omitted in here.

Because they are reported from different hosts, the fish that will be shown (Tab. 5) may be a new species or the same species.

This revision presents an occurrence of 60 monogenean at species level and eight genera level (unnamed), after eleven years (Tab. 3). Other eight unnamed monogenea (genera level) reported from different host fish (*Ancyrocephalus* sp., *Paradiplozoon* sp., *Cleidodiscus* sp., *Diplozoon* sp., *Dactylogyrus* sp., *Gyrodactylus* sp., *Salsuginus* sp., *Tetraonchus* sp.) (Tab. 5). *Dactylogyrus* and *Gyrodactylus* genus are the most abundant among the monogenea. *Dactylogyrus* genus is represented with 38 species, while *Gyrodactylus* with 11 species. *Dactylogyrus* is the dominant genus among the Monogenea with regard to species diversity, host distribution and location. 33 host fish species (32 species of Cyprinidae, one species of Siluridae) were infested with *Dactylogyrus*; 13 host fish species (nine species of Cyprinidae, three species of Gobiidae, one species of Gasterosteidae) with *Gyrodactylus*; 10 different fish species with *Paradiplozon* and *Diplozoon*. *Dactylogyrus chalcalburni*, *Ancylodiscoides siluri*, *Ancylodiscoides vistulensis* and *Tetraonchus monenteron* may be considered specific to their hosts. Dominants of some monogeneans selected the following infection sites: *Dactylogyrus* from gill filaments; *Gyrodactylus* from fins, gills, body surface.

This revision presents occurrence of 20 digenean at species level and 11 digenean at genera level (unnamed), after eleven years (Tab. 3). Also, 11 unnamed species (genera level) were reported from different host fish (*Ascocotyle* sp., *Digenea* sp., *Diplostomum* sp., *Diplodiscus* sp., *Neascus* sp., *Orientocreadium* sp., *Posthodiplostomum* sp., *Rhipidocotyle* sp., *Sanguinicola* sp., *Tetracotyle* sp., *Creptotrema* sp.). *Digenea* is next-largest group with 20 species. In terms of host distribution, *Digenea* may be ranked as follows: *Diplostomum* (seven hosts), *Tylodelphys* (13 hosts), *Clinostomum* (10 hosts), *Asymphylodora* (four hosts), *Posthodiplostomum* (six hosts), *Bucephalus* (four hosts), *Allocreadium* (four hosts), *Aspidogaster* (five hosts). *Bucephalus polymorphus* may be considered specific to carnivorous fish. Adults digeneans were reported from intestine, pyloric caeca, stomach, body cavity, eye lens, liver, spleen, pericard, gall bladder, heart of hosts. Larvae of some digeneans such as *Centrocestus* sp., *Clinostomum* sp., *Posthodiplostomum* sp., were reported from fins, body surface, operculum, muscle, gills of hosts.

The checklist contains 20 species and eight unnamed species (genera level) of Cestoda. In terms of host distribution, the 10 genera of Cestoda may be ranked as follows: *Ligula* (28 hosts), *Bothriocephalus* (17 hosts), *Caryophyllaeus* (11 hosts), *Proteocephalus* (four hosts) *Khawia* (six hosts). *Ligula pavlovskii*, *Triaenophorus crassus*, *Silurotaenia siluri*, *Khawia armeniaca* and *Proteocephalus osculatus* may be considered specific to their hosts. *Ligula intestinalis* is the dominant cestode species in terms of host range and location. Cestodes were reported from intestine, body cavity, surfaces of visceral organs, pharynx, external mesenteries of internal organ, pyloric caeca, duodenum, urogenital ducts, liver, gonad of hosts.

The checklist contains 11 species and nine unnamed species (genera level) of Nematoda. In terms of host distribution, the genera of Nematoda may be ranked as follows: *Rhabdochona* (eight hosts), *Eustrongylides* (nine hosts), *Philometra* (three hosts). Adults nematodes were reported from body cavity, pyloric caeca, liver, intestine, mesentery, body surface, gills, coelom, stomach, swimbladder, surfaces of visceral organs, muscle, ovary, testis of hosts. *Nematoda* sp. larvae were reported from body surface, gills.

The checklist contains seven species and four unnamed species (genera level) of acanthocephala. The genera of Acanthocephala are distributed as follows: *Neoechinorhynchus* (15 hosts), *Pomphorhynchus* (14 hosts), *Acanthocephalus* (two hosts). Acanthocephalans were only reported on intestines of hosts.

The checklist contains five species and two unnamed species (genera level) of hirudinids. Hirudinids were reported on body surface, fins, gills, mouth.

After the checklist of helminths of freshwater fish from Turkey published by Öktener (2003), parasites species number increased significantly to nowadays. Especially, platyhelminth species number reached from 57 to 100 (Tab. 6).

Table 6: Change of number of named and unnamed helminth species reported from fish species occurring after Öktener (2003).

	Öktener (2003)		Present Study	
	Named species	Unnamed species	Named species	Unnamed species
Monogenea	28	5	60	8
Digenea	16	5	20	11
Cestoda	13	6	20	8
Nematoda	8	5	11	9
Acanthocephala	5	3	7	4
Hirudinea	3	2	5	2
Total	73	26	123	42
	99		165	

## CONCLUSIONS

This new updated checklist is done to update the helminths of freshwater fish from Turkey.

Finally, it was also planned to show and update the parasite richness of fish of Turkey according to actual literature.

The present publication describes the published literature and thus provides a summary of the currently known freshwater fish parasites in Turkey. It was felt that a critical checklist of the freshwater fish parasites known from Turkey to date would help to solve contradictions among researchers, and benefit veterinarians, parasitologists and zoologists, ecologists.

It is hoped that this compilation will stimulate further parasitological investigations of fish in Turkey.

## REFERENCES

1. Akbeniz E., 2006 – Metazoon parasites of tench (*Tinca tinca* Linnaeus, 1758) in Sapanca Lake, Marmara University, Institute of Science, MSc Thesis, 47.
2. Akinci A. G., 1999 – Studies On Determine The Plat�helminths of *Blicca bjoerkna* L., 1758 in Uluabat Lake, Uludağ University, Institute of Science, MSc Thesis, 34.
3. Akmirza A., 2007 – The effect of *Ligula intestinalis* L. plerocercoid on the growth of bitterling (*Rhodeus amarus* Bloch, 1782), *Journal of the Black Sea/Mediterranean Environment*, 13, 155-160.
4. Aksakal H. N., 1992 – The Parasitological Studies On the Identification of Plat�helminthes Living As A Endoparasites in Tenchs (*Tinca tinca*) of Uluabat Lake, Uludağ University, Institute of Science, MSc Thesis, 24.
5. Aksoy Ş., 1996 – Endohelminths research in *Capoeta capoeta umbra* from Hazar Lake, Firat University, Institute of Science, MSc Thesis, 39.
6. Aksoy Ş., Saǵlam N. and Dörücü M., 2006 – External Parasites of Three Cyprinid Fish Species from Lake Hazar in Turkey, *Indian Veterinary Journal*, 83, 100-101.
7. Altin H., 1989 – Some Parasites On Carp (*Cyprinus carpio* L.), Uludağ University, Science Faculty, BSc Thesis, 33.
8. Arthur J. R. and Ahmet A. T. A., 2002 – Checklist of the parasites of fishes of Bangladesh, *FAO Fisheries Technical Paper*, 369, 1, Rome, 77.
9. Arthur J. R. and Lumanlan-Mayo S., 1997 – Checklist of the parasites of fishes of the Philippines, *FAO Fisheries Technical Paper*, 369, Rome, 102.
10. Aslan B., 2009 – Investigations of the endohelminths of some fish from Murat River (Ağrı) and Aras River (Erzurum), Atatürk University, Science Institution, Institute of Science, 58.
11. Atay D., Köksal G., Seçer S., Aydin F., Polatsü S. and Yıldız H., 1999 – Impact on the Health Status and some Hematologic Characteristics of Carp Fertilization, *Turkish Journal of Zoology*, 20, 67-72.
12. Aydin Y., 2003 – The Helminths of the Digestive Tract of Catfish (*Silurus glanis* L., 1758) in Hirfanlı Dam Lake, Nigde University, Institute of Science, MSc Thesis, 50.
13. Aydoğdu A., 1997 – Studies on determine the plat�helminth parasites of common carp (*Cyprinus carpio* L., 1758) in İznik Lake, Uludağ University, Institute of Science, MSc Thesis, 35.
14. Aydoğdu A., 2001 – The Helminthofauna of Some Fishes Living in Dogancı Dam Lake, Uludag University, Institute of Science, PhD Thesis, 82.
15. Aydoğdu A., Emence H. and Altunel A., 2008a – Helminth parasites of pike (*Esox lucius* L.) in Gölbaşı (Bursa) Dam Lake, Turkey, *Pakistan Journal of Zoology*, 40, 3, 221-224.
16. Aydoğdu A., Emence H. and İnnal D., 2008b – The Occurrence of Helminth Parasites in Vimba (*Vimba vimba* L., 1758) of Golbasi (Bursa) Dam Lake, Turkey, *The Turkish Journal of Parasitology*, 32, 1, 86-90.
17. Aydoğdu A., Emre Y., Emre N. and Altunel F. N., 2011 – The occurrence of helminth parasites (Nemathelminthes) in some freshwater fish from streams discharging into Antalya Bay in Antalya, Turkey: two new host records from Antalya, *Turkish Journal of Zoology*, 35, 6, 859-864.
18. Aydoğdu A., Oğuz M. C., Öztürk M. O. and Altunel F. N., 2001 – Investigations on metazoon parasites of common carp (*Cyprinus carpio* L., 1758) in Dalyan Lagoon, Karacabey, *Acta Veterinaria*, 51, 5-6, 351-358.
19. Aydoğdu A. and Selver M., 2006 – An Investigation of Helminth Fauna of the Bleak (*Alburnus alburnus* L.) from the Mustafakemalpaşa Stream, Bursa, Turkey, *The Turkish Journal of Parasitology*, 30, 1, 69-72.
20. Aydoğdu A., Yıldırımhan H. S. and Altunel F. N., 1996 – An Investigation On Parasites of Catfish (*Silurus glanis* L., 1758), in Iznik Lake, XIII, National Biology Congress (17-20 September, 1996), Istanbul, 63-70.

21. Aydoğdu A., Yıldırımhan H. S. and Altunel F. N., 1996a – An investigation on parasites of tench (*Tinca tinca* L., 1758) in the İznik Lake, *The Turkish Journal of Parasitology*, 20, 261-270.
22. Aydoğdu A., Yıldırımhan H. S. and Altunel F. N., 1997b – An investigation on ecto and endo helminth of roach (*Rutilus frisii* L.), IX National Aquatic Products Symposium (17-19 September 1997), Isparta, 431-443.
23. Aydoğdu A., Yıldırımhan H. S. and Altunel F. N., 1997 – An investigation on some metazoan parasites of common carp (*Cyprinus carpio* L.) in İznik Lake, *The Turkish Journal of Parasitology*, 21, 4, 442-445.
24. Aydoğdu A., Yıldırımhan H. S. and Altunel F. N., 2000 – The Helminth Fauna of Adriatic Roach (*Rutilus rubilio*) in Iznik Lake, *Bulletin of European Fish Pathology*, 20, 3, 170-172.
25. Başaran A. and Kelle A., 1976 – Distribution of *Ligula intestinalis* in Some Freshwater Fish Living On the Devegecidi Dam Lake, *Journal of Hacettepe University*, 26, 45-56.
26. Becer Z. A. and Kara D., 1998 – An investigation on population structure and parasites of common carp (*Cyprinus carpio* L., 1758) which were caught in Kovada Lake, *The Turkish Journal of Parasitology*, 22, 2, 199-203.
27. Buhurcu H. İ., 2006 – An investigation on endoparasite fauna of some fish species (*Cyprinus carpio* and *Alburnus nasreddini*) from Lake Akşehir, Afyon Kocatepe University, Institute of Science, MSc Thesis, 42.
28. Bulgen K., 1999 – An investigation of the taxonomic status and biological aspects of the chub (*Leuciscus cephalus* Linnaeus, 1758), Balıkesir University, Institute of Science, MSc Thesis, 48.
29. Burgu A., Oğuz T., Körting W. and Güralp N., 1988 – Parasites of freshwater fishes in some areas of central Anatolia, *Journal of Etlık Veterinary and Microbiology*, 3, 6, 143-165.
30. Caira J. N., 1989 – A revision of the North American papillose Allocreadiidae (Digenea) with independent cladistic analyses of larval and adult forms, *Bulletin of the University of Nebraska State Museum*, Lincoln, 11, 3, 1-58.
31. Cantoray R. and Özcan A., 1975 – La ligulose chez des poissons d'eau douce aux alentours d'Elazığ, Firat University, *Journal of Veterinary Faculty*, 2, 298-301. (in French)
32. Cengizler İ., Saruhan E. and Çevik C., 1991 – Investigation of Ligulosis on cyprinids in Almus Lake, Symposium of National Aquatic Products, 12-14 Kasım 1991, İzmir, 371-375.
33. Cengizler İ. and Göksu L., 1994 – Some Metazoon Parasites Seen in Two Cyprinid Species Lived In Balıkliag Stream, XII National Biology Congress (6-8 July 1994, Edirne), Edirne, 362-365.
34. Cengizler İ., Aytaç N., Şahan A., Özak A. A. and Genç E., 2001 – Ecto-Endo Parasite Investigation on Mirror Carp (*Cyprinus carpio* L., 1758) Captured From the River Seyhan, Turkey, Ege University, *Journal of Fisheries and Aquatic Sciences*, 18, 1-2, 87-90.
35. Ceylan Y., 2002 – Parasitological Research of fishes in Çapalı Lake (Dinar-Afyon), Süleyman Demirel University, Institute of Science, MSc Thesis, 54.
36. Ceylan M., Boyaci Y. E., Meke T., İnceoğlu H. and Kara A., 2011 – A Report of Ectoparasite *Piscicola geometra* (Linnaeus, 1761) (Hirudinea: Rhynchobdellida) on Roach (*Rutilus rutilus* (Linnaeus, 1758)) from Uluabat Lake, *The Turkish Journal of Parasitology*, 35, 207-209.
37. Çolak H. S., 2013 – Metazoan parasites of fish species from Lake Sığirci (Edirne, Turkey), *Turkish Journal Veterinary Animal Science*, 37, 200-205.
38. Çolak S. Ö., 2013 –The helminth community of the sand smelt (*Atherina boyeri* Risso, 1810) from Lake İznik, Turkey, *Journal of Helminthology*, 87, 129-134.
39. Dal A., 2006 – Parasitological research on rainbow trout (*Oncorhynchus mykiss*) farming in Atatürk Dam Lake, Çukurova University, Institute of Science, MSc Thesis, 52.
40. Develi N., 2008 – Seasonal Distribution of metazoan parasites in fish species found in Almus Dam Lake, Gaziosmanpaşa University, Institute of Science, MSc Thesis, 65.

41. Diler Ö., Yıldırım U. G., Küçük F. and Işıkli B., 2001 – Parasitological research on cobitid (*Knipowitschia caucasica*) living in Eğirdir Lake, 11 Symposium of National Aquatic Products, Hatay 04-06 Eylül, 2001.
42. Dörücü M., Kan N. İ. and Öztekin Z., 2008 – Investigation of internal parasites of some fish species caught in Keban Dam Lake (Turkey), *Journal of Fisheries Sciences*, 2, 3, 484-488.
43. Dörücü M. and İspir Ü., 2001 – Seasonal Variation of *Diplostomum* sp. Infection in Eyes of *Acanthobrama marmid* Heckel, 1843 in Keban Dam Lake, Elazığ, Turkey, Ege University, *Journal of Fisheries and Aquatic Sciences*, 18, 3-4, 301-305.
44. Dörücü M. and İspir Ü., 2005 – A Study on Endo-Parasites of Some Fish Species Caught in Keban Dam Lake, *Journal of Firat University Science and Engineering*, 17, 2, 400-404.
45. Ekingen G., 1975 – Some parasites found on brown trout (*Salmo trutta* L.) in Munzur Stream, *Journal of Firat University Veterinary Faculty*, 2, 283-301.
46. Ekingen G., 1976 – Some parasites found european catfish (*Silurus glanis* L.) and brown trout (*Salmo trutta* L.) in Turkey, *Journal of Firat University Veterinary Faculty*, 3, 112-115.
47. Ekmekçi F. G., 1989 – Examination of fish stocks have economic importance in Sarıyar Dam Lake, Hacettepe University, Institute of Science, PhD Thesis, 114.
48. Ekmekçi F. G. and Kirankaya Ş. G., 2004 – Determination of Variations in Fish Growth during Reservoir Ontogeny: a Case Study of the Mirror Carp Population in Geling, ll, Dam Lake (Yozgat, Turkey), *Turkish Journal of Veterinary Animal Science*, 28, 1129-1135.
49. Emiroğlu Ö. and Arslan N., 2009 – First Record of Parasitic Annelida-Hirudinea (*Piscicola geometra* Linnaeus, 1761) on *Carassius gibelio* from Lake Uluabat, 11th International Symposium on Aquatic Oligochaeta 2009, Alanya, Türkiye, 62.
50. Erkul S., 1997 – Infection of helminths in freshwater fish seen in the region of Ankara, Ankara University, Institute of Health Science, MSc Thesis, 48.
51. Eschmeyer W. N. (ed.), 2014 – Catalog of fishes: genera, species, references, (<http://research.calacademy.org/research/ichthyology/catalog/fishcatmain.asp>), Electronic version (Accessed 13.02.2014).
52. Froese R. and Pauly D. (eds), 2013 – FishBase, World Wide Web electronic publication, [www.fishbase.org](http://www.fishbase.org), Electronic version (Accessed 06.03.2014).
53. Geldiay R. and Balık S., 1974 – Ecto and Endoparasites Found the Freshwater Fish of Turkey, Ege University, *The Science Faculty Monographies*, 14, Ege University Press, Bornova.
54. Gibson D. I., Bray R. A. and Harris E. A., 2005 – Host-Parasite Database of the Natural History Museum, London, available from: <http://www.nhm.ac.uk/research-curation/scientific-resources/taxonomy-systematics/host-parasites> (Accessed 06.03.2014).
55. Güleç A. K. and Şahan A., 2010 – Effects to Plasma Glucose, Cortisol and Haemoglobin Levels of Parasite Enfestations in Carp (*Cyprinus carpio* Linnaeus, 1758), Kafkas University, *Journal of Science*, 3, 1, 1-8.
56. Gürkan Ü. and Özcan S. T., 2012 – Helminth fauna of chub (*Squalis cephalus* L.) in Susurluk Creek (Bursa-Balikesir), Süleyman Demirel University, *Journal of Science*, 7, 2, 77-85.
57. Holland C. V. and Kennedy C. R., 1997 – A checklist of parasitic helminth and crustacean species recorded in freshwater fish from Ireland, *Biology and Environment: Proceedings of the Royal Irish Academy*, 97B, 3, 225-243.
58. ITIS, 2013 – The Integrated Taxonomic Information System, <http://www.itis.gov>., University, Institute of Science, MSc Thesis, 103.
59. İnnal D., 2004 – Stock assesment of some fish species living in Çamkoru Pond (Çamlıdere-Ankara), Hacettepe.
60. İnnal D. and Keskin N., 2005 – *Philometra ovata* (Zeder, 1803) (Philometridae) in European Chub (*Leuciscus cephalus* L., 1758) living in Çamkoru Lake (Çamlıdere), *Journal of Animal and Veterinary Advances*, 4, 12, 959-961.
61. İnnal D., Keskin N. and Erk'akan F., 2007 – Distribution of *Ligula intestinalis* (L.) in Turkey, *Turkish Journal of Fisheries and Aquatic Sciences*, 7, 19-22.

62. İnnal D., Erk'akan F. and Keskin N., 2010 – The Dynamics of the *Ligula intestinalis* (Cestoda: Pseudophyllidea) in Three Cyprinid Species (*Alburnus escherichii* Steindachner, 1897; *Gobio gobio* (Linnaeus, 1758) and *Squalius cephalus* (Linnaeus, 1758)) in Çamkoru Pond (Ankara, Turkey), *Hacettepe, Journal of Biology and Chemistry*, 38, 4, 319-324.
63. Kahveci S., 2004 – The metazoon parasites of rudd (*Scardinius erythrophthalmus* Linnaeus, 1758) caught in Lake Durusu (Terkos), Marmara University, Institute of Science, MSc Thesis, 51.
64. Kara D., 1997 – Investigation On Trematodes of Perch (*Stizostedion lucioperca* L., 1758) in Egirdir, Beysehir Lakes, Suleyman Demirel University, Institute of Science, MSc Thesis, 54.
65. Karabiber F. T., 2006 – Parasite fauna of roach (*Rutilus rutilus* Linnaeus, 1758) in the Lake Sapanca, Marmara University, Institute of Science, MSc Thesis, 53.
66. Karabulut C., 2009 – Study of endohelminths on carp (*Cyprinus carpio* L., 1758) caught from four different regions of Keban Dam Lake (Koçkale, Pertek, Çemişgezek, Keban), Fırat University, Institute of Science, MSc Thesis, 29.
67. Karaklış H. and Demir S., 2012 – Metazoan Parasites of the Common Carp (*Cyprinus carpio* L., 1758) from Tahtali Dam Lake (İzmir), *The Turkish Journal of Parasitology*, 36, 174-177.
68. Karatoy E., 2004 – Metazoon parasites of bream (*Abramis brama* Linnaeus, 1758) in Durusu (Terkos) Lake, Marmara University, Institute of Science, MSc Thesis, 55.
69. Kartal K., 2006 – An investigation on ectoparasite fauna of some fish (*Cyprinus carpio* and *Cobitis simPLICISPINNA*) from Lake Akşehir, Afyon Kocatepe University, Institute of Science, MSc Thesis, 5.
70. Kelle A., 1978 – Les Effects de *Ligula Intestinalis* Sur Les Currelations de Taille Poids et Ces Character Biometriaues des Certain Poissons de Eaux Douces *Acanthobrama marmid* Heckel, 1843 and *Chalcalburnus mossulensis* Heckel, 1843, *Journal Ege University Science Faculty*, 7, 1, 95-108.
71. Keskin N., 1988 – *Philometra abdominalis* Nybelin, 1928 in *Leuciscus cephalus* in Turkey, *Turkish Journal of Zoology*, 12, 1, 70.
72. Keskin N. and Erakan F., 1987 – Ligulose in the Freshwater Fish in Turkey, *Journal of Hacettepe University Science and Engineer Faculty*, 8, 57-70.
73. Kılıç H., 1999 – Site selection, The case of Turkey, *CIHEAM-Options Mediterraneennes*, 43, 25-33.
74. Kılıncaslan M. O., 2007 – Parasitological Research on economic fishes in Yamula Dam Lake in Kayseri City, Çukurova University, Institute of Science, MSc Thesis, 42.
75. Kir I., 1998 – Investigation of Parasites of Carp (*Cyprinus carpio* L., 1758) and Barbus (*Barbus capito pectoralis* L., 1758) and goldfish (*Carassius carassius* L., 1758) Living in Karacaoren Dam Lake, Suleyman Demirel University, Institute of Science, PhD Thesis, 78.
76. Kir İ. and Özcan S. T., 2004 – Occurrence of helminths in tench (*Tinca tinca* L., 1758) of Kovada (Isparta) Lake, Turkey, *Bulletin of European Fish Pathology*, 25, 2, 75-81.
77. Kohn A., Cohen S. C. and Salgado-Maldanado G., 2006 – Checklist of Monogenea parasites of freshwater and marine fishes, amphibians and reptiles from Mexico, Central America and Caribbean, *Zootaxa*, 1289, 1-114.
78. Koyun M., 2001 –The Helminthofauna of Some Fishes in Enne Dam Lake, Uludağ University, Institute of Science, PhD Thesis, 119.
79. Koyun M., 2011 – First record of *Dogielius forceps* (Monogenea) on *Capoeta umbla* (Pisces, Cyprinidae) to Turkey, from Murat River, *International Journal of the Bioflux Society*, 4, 4, 469-473.
80. Koyun M., Yilmaz F. and Alas A., 1999 – Effects On *Alburnus alburnus* of Pleuroceroids of *Ligula intestinalis*, X National Aquatic Products Symposium (22-24 September 1999, Adana), Adana, 156-163.
81. Kurupinar E., 2009 – An investigation on parasite fauna of chub (*Leuciscus cephalus* L., 1758) from Dam Lake Örenler (Afyonkarahisar), Afyon Kocatepe University, Institute of Science, MSc Thesis, 63.

82. Kutlu H. L., 2005 – An investigation on anatomy, morphology and ecology of metazoan parasites of *Cyprinus carpio* Linnaeus, 1758 (common carp) from Lake Karamik (Afyonkarahisar), Afyon Kocatepe University, Institute of Science, MSc Thesis, 64.
83. Luque J. L. and Tavares L. E. R., 2007 – Checklist of Copepoda associated with fishes from Brazil, *Zootaxa*, 1579, 1-39.
84. Öge H. and Sarimehmetoglu H. O., 1996 – The Metacercaria of *Clinostomum complanatum* (Rudolphi, 1819) in *Barbus plebejus escherichii* (Steindachner, 1897) and *Capoeta tinca* (Heckel, 1843), *The Turkish Journal of Parasitology*, 20, 3-4, 429-437.
85. Oğuz M. C., 1991 – An investigation On the Carps (*Cyprinus carpio* L.) which were caught from some freshwaters of Bursa, *The Turkish Journal of Parasitology*, 15, 2, 103-110.
86. Oğuz M. C. and Öztürk M. O., 1993 – A Parasitological Investigation On the Searching of the Endohelminth of the Rudd (*Scardinius erythrophthalmus* L., 1758), *The Turkish Journal of Parasitology*, 17, 3-4, 130-137.
87. Oğuz M. C., Öztürk M. O., Altunel F. N. and Ay A. D., 1996 – A parasitological investigation on common carp (*Cyprinus carpio* L., 1758) caught in Uluabat Lake, *The Turkish Journal of Parasitology*, 20, 1, 97-103.
88. Oğuz M. C., Amin O. M., Heckmann R. A., Tepe Y., Johargholizadeh G., Aslan B. and Malek M., 2012 – The discovery of *Neoechinorhynchus zabensis* (Acanthocephala: Neoechinorhynchidae) from cyprinid fishes in Turkey and Iran, with special reference to new morphological features revealed by scanning electron microscopy, *Turkish Journal of Zoology* 36, 6, 759.
89. Oğuz M. C., Öztürk M. O. and Güre H., 2004 – Seasonal Variation of the Plerocercoid Ligula intestinalis (L.) Observed in Roach (*Rutilus rutilus*, L) from the Yenice Irrigation Pond, Canakkale, Turkey, *Veterinarski glasnik*, 58, 1-2, 127-130.
90. Öktener A., 2003 – Checklist of Metazoon Parasites Recorded in Freshwater Fish From Turkey, *Zootaxa*, 394, 1-28.
91. Öktener A. and Alaş A., 2009 – A parasitological study of fish from the Ataturk Dam Lake, Turkey, *Bulletin of the European Association Fish Pathologists*, 29, 6, 193-197.
92. Öktener A., Trilles J. P. and Leonards I., 2007 – Five Ectoparasites from Turkish fishes, *The Turkish Journal of Parasitology*, 31, 2, 154.
93. Örün İ., Dörücü M., Yazlak H. and Öztürk E., 2003 – Research on effects and helminths of fish species from Karakaya Dam Lake, İnönü University, Department of Research Projects, 15.
94. Özcan S. T., 2005 – The Investigation of Heavy Metals and Parasites in Carp (*Cyprinus carpio* L., 1758) and Tench (*Tinca tinca* L., 1758) Inhabiting Beysehir Lake, Süleyman Demirel University, Institute of Science, PhD Thesis, 93.
95. Özcan S. T. and Kir İ., 2005 – An Investigation of Parasites of Goldfish (*Carassius carassius* L., 1758) in Kovada Lake, *The Turkish Journal of Parasitology*, 29, 3, 200-203.
96. Özbek M., 2009 – Investigations on Ligula sp. infection of fishes from Dam Lake Kunduzlar (Kirka, Eskişehir), Afyon Kocatepe University, Institute of Science, MSc Thesis, 47.
97. Özdemir Y. and Sarieyyupoglu M., 1993 – Some parasites of *Barbus capito pectoralis* caught in Keban Dam Lake, *Journal of Firat University Sceince and Engineering*, 5, 2, 114-126.
98. Özer A., 1995 – A research on ectoparasites of carp (*Cyprinus carpio* L., 1758) breeding in Sinop Region, Ondokuz Mayıs University, Institute of Science, MSc Thesis, 75.
99. Özer A., 2006 – Parasite Fauna of An Endemic Toothcarp, *Aphanian chantrei* Gaillard, 1895 in Sinop, Turkey, 11eme Congress International de Parasitologie Glasgow-ecosse du 6 AU 11 Juillet 2006, (a 1544).
100. Özer A., 2007 –Metazoan parasite fauna of the round goby *Neogobius melanostomus* Pallas, 1811 (Perciformes: Gobiidae) collected from the Black Sea coast at Sinop, Turkey, *Journal of Natural History*, 41, 9-12, 483-492.

101. Özer A. and Öztürk T., 2005 – Dactylogyrus cornu Linstow, 1878 (Monogenea) Infestations on vimba (Vimba vimba tenella (Nordmann, 1840)) Caught in the inop Region of Turkey in Relation to the Host Factors, *Turkish Journal of Veterinary Animal Science*, 29, 1119-1123.
102. Özer A., Öztürk T. and Öztürk M. O., 2005 – Prevalence and intensity of Gyrodactilus arcuatus Bychowsky, 1933 (Monogenea) infestations on the three-spined stickleback, Gasterosteus aculeatus L., 1758, *Turkish Journal of Veterinary Animal Science*, 28, 807-812.
103. Özgül G., 2008 – Seasonal Distribution of parasites on cyprinid fishes in Almus Dam Lake, Gaziösmanspaşa University, Institute of Science, MSc Thesis, 84.
104. Özgül G. and Turgut E., 2006 – Metazoan parasites on Chondrostoma regium caught from Almus Dam Lake, Symposium of Aquaculture Students, Mayis, Muğla, 23-25.
105. Öztürk M. O., 1995 – Studies on determine the endohelminths of Pike (Esox lucius) living in Uluabat Lake, Uludağ University, Institute of Science, MSc Thesis, 53.
106. Öztürk M. O., 2000 – The Helminthofauna of Fishes of Manyas Lake, Uludağ University, Institute of Science, PhD thesis, 134.
107. Öztürk M. O., 2002 – Metazoan parasites of the tench (Tinca tinca L.) from lake Uluabat, Turkey, *Israel Journal of Zoology*, 48, 4, 285-293.
108. Öztürk M. O., 2005 – An Investigation of Metazoan Parasites of Common Carp (Cyprinus carpio L.) in Lake Eber, Afyon, Turkey, *The Turkish Journal of Parasitology*, 29, 3, 204-210.
109. Öztürk T., 2005 – Determination of parasite fauna of flounder, Platichthys flesus L., 1758 and toothcarp Aphanianus chantrei Gaillard 1895 present in Sarkum Lagoon Lake, Sinop, Turkey, Ondokuz Mayis University, Institute of Science, PhD Thesis, 327.
110. Öztürk M. O., 2010 – A Research on Plathelminth Parasites of Carassius gibelio (Bloch, 1782) in Lake Dam Seyitler, *Journal of Sciences, AKÜ*, 02, 91-97.
111. Öztürk M. O., 2011 – A research on helminth fauna of three cyprinid fish species in Emre Dam Lake, Afyonkarahisar, AKÜ, *Journal of Sciences*, 11, 23-29.
112. Öztürk T. and Özer A., 2008 – Parasitic fauna of the toothcarp Aphanianus danfordii (Boulenger, 1890) (Osteichthyes: Cyprinodontidae), an endemic fish from Sarikum Lagoon Lake in Sinop (Turkey), *Journal of Fisheries Sciences.com*, 2, 3, 388-402.
113. Öztürk M. O. and Bulut S., 2006 – An Investigation on the Metazoan Parasite Fauna of Cyprinus carpio L. (Common Carp) from Lake Selevir Dam (Afyonkarahisar), *Science and Engineering Journal of Firat University*, 18, 2, 143-149.
114. Öztürk M. O., Oğuz M. C. and Altunel F. N., 2000 – Metazoon Parasites of Pike (Esox lucius L.) From Uluabat Lake, *Israel Journal of Zoology*, 46, 119-130.
115. Öztürk M. O., Oğuz M. C. and Aydogdu A., 2002 – An investigation of metazoon parasitic fauna of pike (Esox lucius L.) and rudd (Scardinius erytrophthalmus L.) from the Karacabey Lagoon, *The Turkish Journal of Parasitology*, 26, 3, 325-328.
116. Palm H. W., Klimpel S. and Bucher C., 1999 – Checklist of metazoan fish parasite of German coastal waters, Institut für Meereskunde und Christian-Albrechts-Universität Kiel, 307, 148.
117. Paperna I., 1964 – The Metazoon Parasite Fauna of Israel Inland Water Fishes, *Bamidgeh*, 16, 1-2, 3-66.
118. Pazooki J. and Masoumian M., 2012 – Synopsis of the Parasites in Iranian Freshwater Fishes, *Iranian Journal of Fisheries Sciences*, 11, 3, 570-589.
119. Pişkin F. Ç. and Ütük A. E., 2008 – Dactylogyrus sp. and Trichodina sp. cases in carps of Sanliurfa Balıkligol, *Elik Veteriner Mikrobiyoloji Derg*, 19, 9-12.
120. Sağlam N., 1992 – Investigation of external parasites on fish caught in Lake Keban, Firat University, Institute of Science, MSc Thesis, 50.
121. Sağlam N. and Sarieyyupoglu M., 2002 – Study of Neoechinorhynchus rutili (Acanthocephala) Found in Fish (Capoeta trutta), *The Turkish Journal of Parasitology*, 26, 3, 328-330.
122. Salgado-Maldanado G., 2006 – Checklist of helminth parasites of freshwater fishes from Mexico, *Zootaxa*, 1324, 1-357.

123. Samancı İ., 2011 – The investigation of parasites in carp (*Cyprinus carpio* L., 1758) and crucian carp (*Carassius carassius* L., 1758) inhabiting Karacaören II, Dam Lake, Suleyman Demirel University, Institute of Science, MSc Thesis, 46.
124. Saygi G. and Bardakci F., 1990 – Rhabdochona (Nematod) found in Cyprinion macrostomus and Garra rufa in Thermal Baths Called “Balıklı Cermik”, *The Turkish Journal of Parasitology*, 14, 1, 95-105.
125. Selver M. M., 2008 – Helminth Fauna Of Some Fish Species Caught From Kocadere Stream, Uludag University, Institute of Health Sciences, PhD thesis, 151.
126. Smales L. R., Aydoğdu A. and Emre Y., 2012 – Pomphorhynchidae and Quadrigyridae (Acanthocephala), including a new genus and species (Pallisentinae), from freshwater fishes, Cobitidae and Cyprinodontidae, in Turkey, *Folia Parasitologica*, 59, 3, 162.
127. Soylu E., 1985 – Studies of Fish diseases in Sapanca Fish Production Station, İstanbul University, College of Aquatic Products, 7, 22.
128. Soylu E., 1990 – Surveys On the Parasite Fauna of the Some Fishes In Sapanca Lake, İstanbul University, Institute of Marine Science, PhD thesis, 85.
129. Soylu E., 1991 – *Pomphorhynchus laevis* (Müller, 1776) (Acanthocephala) in *Barbus plebejus escherichi* Steindachner 1897 of (Sakarya) Büyükoz Lake, Anadolu University, *Journal of Science and Literature*, 3, 2, 3.1
130. Soylu E., 2003 – A study on Metazoon parasites of tench (*Tinca tinca*) in the Lake Durusu (Terkos), XII Symposium of National Aquatic Products, 2-5 Eylül 2003, Elazığ, 37.
131. Soylu E., 2005 – Metazoan Parasites of catfish (*Silurus glanis*, Linnaeus, 1758) from Durusu (Terkos) Lake, *Journal of the Black Sea/Mediterranean Environment*, 11, 225-237.
132. Soylu E., 2006 – Some metazoan parasites (Cestoda, trematoda and mollusca) of *Blicca bjoerkna* Linnaeus, 1758 from Sapanca Lake, *Istanbul University Journal of Fisheries and Aquatic Sciences*, 20, 51-62.
133. Soylu E., 2009 – Monogenean Parasites on the Gills of Some Fish Species from Lakes Sapanca and Durusu, Turkey, Ege University, *Journal of Fisheries and Aquatic Sciences*, 26, 4, 247-251.
134. Soylu E., 2012 – Monogenean Parasites of White Bream (*Blicca bjoerkna* Linnaeus, 1758) in Lake Sapanca, Turkey, Kafkas University, *Journal of the Faculty of Veterinary Medicine*, 18, A, 23-28.
135. Soylu E., 2013 – Metazoan Parasites of Perch *Perca fluviatilis* L. From Lake Sığirci, İpsala, Turkey, *Pakistan Journal of Zoology*, 45, 1, 47-52.
136. Soylu E. and Emre Y., 2005 – Metazoan Parasites of *Clarias lazera* Valenciennes, 1840 and *Carassius carassius* (Linnaeus, 1758) from Kepez I Hydro Electric Power Plant Loading Pond, Antalya, Turkey, *Turkish Journal of Fisheries and Aquatic Sciences*, 5, 113-117.
137. Soylu E. and Emre Y., 2007 – Monogenean and cestode parasites of *Pseudophoxinus antalyae* Bogutskaya, 1992 and *Cyprinus carpio* Linnaeus 1758 from Kepez Antalya, Turkey, *Bulletin of European Fish Pathology*, 27, 1, 23-28.
138. Sönmez Ş. N., 1996 – Investigation of parasitic fauna of fishes in Mogan Lake, Ankara University Institute of Science, MSc Thesis, 73.
139. Şahan A. and Cengizler İ., 2003 – Seyhan Nehri (Adana Kent İçi Bölgesi)'nde Yaşayan Adi Sazan (*Cyprinus carpio*) ve Biyikli Balık (*Barbus rajanorum*)'ta Bazi Hematolojik Parametrelerin Belirlenmesi, XII Ulusal Su Ürünleri Sempozyumu, 2-5 Eylül 2003, Elazığ, 193. (in Turkish)
140. Tepe Y., Oğuz M. C., Belk M. and Özgen R., 2013 – Orientocreadium batrachoides Tubangui, 1931 (Orientocreadiidae): The only Trematode Parasite of *Clarias gariepinus* (Burchell, 1822) (Clariidae) from the Asi River (Turkey), *The Turkish Journal of Parasitology*, 37, 203-7.
141. Topcu A., 1993 – The Helminths of the Digestive Tract of the Carps (*Cyprinus carpio*) in Van Region, Yuzuncu Yıl University, Institute of Science, PhD Thesis, 55.

142. Torcu-Koç H., Erdoğan Z. and Coz Rakovac R., 2006 – The occurrence of *Ligula intestinalis* (L.) observed in chub (*Leuciscus cephalus* L.) from Caparlipatnak Dam lake, İvrindi-Balikesir, Turkey, *Periodicum Biologorum*, 108, 2, 183-187.
143. Turgut E., 2005 – Niksar ve Almus Civarındaki Balık Çiftlikleri ile Doğal Ortamdaki Balık Parazitlerinin Su Kalitesi ve Mevsimlere Bağlı Olarak Değişimi, Araştırma Projesi, Gaziosmanpaşa Üniversitesi, Almus Meslek Yüksekokulu, Tokat.
144. Turgut E., Develi N., Yeşilayer N. and Buhan E., 2011 – Seasonal Occurrence of *Ligula intestinalis* Infection in Cyprinids from Almus Dam Lake, Turkey, Kahramanmaraş Sutcu Imam University, *Journal Of Natural Sciences*, 14, 3, 9-11.
145. Türk C., 2000 – Ecology of *Ligula intestinalis* found in *Acanthobrama marmid* (Heckel, 1843) from Keban Dam Lake and research its in vitro, Fırat University, Institute of Science, MSc Thesis, Elazığ, 45.
146. Türkmen H., 1990 – Prevalence of Digestive Track Helminth Infections in Carps and Roachs in İznik Lake, İstanbul University, Institute of Heath Sciences, PhD Thesis, 58.
147. Uzunay E., 2006 – Metazoan Parasites of carp (*Cyprinus carpio* Linnaeus, 1758) and vimba (*Vimba vimba* Linnaeus, 1758) in the Lake Sapancı, Marmara University, Institute of Science, MSc Thesis, 49.
148. Ünsal G., 2008 – Ectoparasites on some bony fishes. Sinop University, Institute of Science, MSc Thesis, 61.
149. Violante-González J., Aguirre-Macedo L. and Mendoza-Franco E. F., 2007 – A checklist of metazoan parasites of fish from Tres Palos Lagoon, Guerrero, Mexico, *Parasitology Research*, 102, 151-161.
150. WoRMS Editorial Board, 2014 – World Register of Marine Species, Available from <http://www.marinespecies.org> at VLIZ, Accessed 2014-01-26.
151. Yetim M., 1985 – The Parasites Found the Fish Consuming In Eskişehir, Anadolu University, Institute of Science, MS Thesis, 42.
152. Yıldırım M. Z., Kara D. and Becer Z. A., 1996 – Studies on the *Bucephalus polymorphus* Baer, 1827 which were identified in the pike-perch of Eğirdir Lake, *The Turkish Journal of Parasitology*, 20, 1, 105-112.
153. Yıldırım M. and Ünver B., 2006 – Metazoan parasites of *Alburnus chalcooides* in Tödürge Lake (ZaraSivas, Turkey), *Journal of Applied Ichthyology*, 28, 245-248.
154. Yıldız K., 2003 – Helminth Infections in Tench (*Tinca tinca*) from Kapulkaya Dam Lake, *Turkish Journal of Veterinary and Animal Science*, 27, 671-675.
155. Yıldız H. Y., Korkmaz A. Ş. and Zencir O., 2003 – The Infection of Tench (*Tinca tinca*) with *Ligula intestinalis* Plerocercoids in Lake Beyşehir (Turkey), *Bulletin of European Fish Pathology*, 23, 5, 223-227.
156. Yılmaz F., Solak K. and Alaş A., 1996 – A research on *Ligula intestinalis* L. from Yukarı Porsuk, 17-20, Eylül, XIII Congress of National Biology, İstanbul, 71-79.
157. Zeren A., 2008 – Parasitological investigation on some aquatic species collected from the Tigem Reservoirs (Yeniyurt, Dörtyol, Hatay), Mustafa Kemal University, Institute of Science, MSc Thesis, 66.