

Article

Freshwater fish fauna of Tamil Nadu, India

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Abstract

A systematic, updated checklist of freshwater fish species of Tamil Nadu consist of 226 species representing 13 orders, 34 families and 93 genera. The top order with diverse species composition was cypriniformes with 125 species, 39 genera and four families. Cyprinidae contributed 48.89 % to total freshwater fishes of Tamil Nadu. Tamil Nadu constitutes about 43.11 % to the endemic freshwater fishes of India and 40.09 % to the total endemic fish diversity of Western Ghats of India. The trophic level of freshwater fishes of Tamil Nadu ranged from 2.0 to 4.5 containing 45.37 % of mid-level to high level carnivores. Assessment of the fishery status of freshwater fishes of Tamil Nadu revealed existence of 132 species worth for capture fishery, 132 species worth for ornamental fishery, 50 species worth for culture fishery and 28 species worth for gamefish fishery. Selective breeding and ranching of native fish species may help to overcome the difficulties of species endangerment. Collection of fishes from wild to develop the brood stock for captive breeding, seed production, experimental aquaculture of fast growing fishes and colourful fishes for aquarium purposes could be potential source of income in the rural areas of Tamil Nadu.

Keywords freshwater fish fauna;, endemism; trophic level; fishery status; Tamil Nadu; India.

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1 Introduction

Tamil Nadu is rich in the variety of freshwater resources (3.08 lakh ha) in the form of streams, rivers, canals (7400 kilometers), major reservoirs (52000 ha), Big or small Irrigation tanks (98000 ha), small lakes and rural fishery demonstration tanks (158000 ha) and cold water lakes and reservoirs. The east side of Western Ghats in Tamil Nadu starts from Gudalur taluk in the Nilgiris District and ends at Agatheeswaram taluk in Kanyakumari district with three important rivers Cauvery, Vaigai and Tambiraparani traveling through this region (Government of Tamilnadu, 2015). Rivulets and rivers originating from Western Ghats has been conferred with diverse fish fauna (Indra and Devi, 1990; Arunachalam, 2000; Devi and Indra, 2000; Devi et al.,

2009; Johnson and Arunachalam, 2009), has become the geographic focus of attention for ichthyologists and conservation biologists. The fish diversity of rivers and reservoirs in Western Ghats region of Tamil Nadu were studied by Indra and Devi (1990), Arunachalam (2000), and Johnson and Arunachalam (2009).

Jerdon (1849) was the first to describe fishes of Tamil Nadu. The studies on the River systems of Tamil Nadu were made by Raj (1916), Misra (1938), Rajan (1955), Jayaram et al. (1982), Indra and Devi (1990), Indra (1991), Devi (1992), Devi (1992a), Devi (1992b), Indra (1992), Bai (1993), Indra (1994), Arunachalam and Johnson (1999), Arunachalam and Sankaranarayanan (1999), Arunachalam et al. (1999), Balasundaram et al. (1999), Devi and Indra (1999), Devi and Raghunathan (1999), Indra and Bai (1999), Arunachalam (2000), Balasundaram et al. (2001), Devi et al. (2007), Johnson and Arunachalam (2009), Knight et al. (2012), Ng (2013) and Ramanujam (2015). Studies on specific ecosystems of Tamil Nadu were made by Devi (1992a), Devi (1992b), Arunachalam and Sankaranarayanan (1999), Arunachalam and Manimekalan (2000), Devi et al. (2007), and Dhinakaran et al. (2011). The major studies on the reservoirs, tanks or lakes of Tamil Nadu were made by Raj (1916), Sreenivasan (1976), Indra and Devi (1990), Indra (1991), Indra (1992), Indra (1992a), Sreenivasan (1998), Balasundaram et al. (1999), Devi and Raghunathan (1999), Devi and Raghunathan (1999a), Daniels and Rajagopal (2004), Raghunathan et al. (2005), Knight (2010), Knight and Devi (2010) and Ramanujam et al. (2014).

The available information on freshwater fishes of Tamil Nadu is scattered in published literature and so far attempt to document the freshwater fish fauna of Tamil Nadu at one place were Devi and Indra (2000), Devi et al. (2009) and Mogalekar and Jawahar (2015). Since the publications by Devi and Indra (2000), Devi et al. (2009) and Mogalekar and Jawahar (2015) on freshwater ichthyofauna of Tamil Nadu, numerous changes in taxonomy and / or systematic placement of species took place and several species of freshwater fishes in Tamil Nadu has been recorded. Considering the urgent need of an elaborate account on this subject, an attempt was made to document freshwater fish species found in Tamil Nadu based on the published literature as described in Table 1. The present contribution is intended to fill the information gap on freshwater fish species by providing restructured information on species composition of freshwater fishes from various localities of Tamil Nadu at one place for conservation, management and sustainable utilization of fishery resources.

2 Methodology

The list of the freshwater fishes from different localities of Tamil Nadu was compiled based on extensive surveys and examination of the old publications (Table 1). The Classification of the freshwater fishes of Tamil Nadu along with their endemic or exotic status, common names, habitat, trophic level, maximum size, fishery information and references for reported locality has been illustrated in present communication (Table 2). Classification of all taxa follows the Catalogue of Fishes of the California Academy of Sciences (Eschmeyer et al. 2017) and published recent taxonomic reviews (Harant and Bohlen, 2010; Pethiyagoda et al., 2012; Kottelat, 2013; Knight et al., 2013; Ali et al., 2014; Singer and Page, 2015). Details on the endemic status of fishes was collected from Karmakar and Das (2005) and Dahanukar and Raghavan (2013). Orders are treated in an alphabetical sequence and within families, genera and species are treated in an alphabetical sequence. The information on trophic level and maximum size of the species was retrieved from the fishbase (Froese and Pauly 2013). The list of cultivable fishes is prepared based on growth rate and maximum size of the species, acceptance by local people and discussion with fishermen's from southern Tamil Nadu. The list of ornamental fishes is prepared based on coloration pattern, shape and maximum size.

3 Results and Discussion

The present communication discusses on the systematic position, endemic or exotic status, common names, habitat, trophic level, maximum size, fishery information of the freshwater fishes of Tamil Nadu and references for reported locality (Table 2). Streams, tributaries and rivers explored for fish biodiversity assessment in Tamil Nadu were Cooum and Adyar rivers, Bhavani and Moyar rivers, Periyar River, Amaravathi river, Cauvery river basin, Vaigai river basin, Palar river and its tributaries, Pachaiyar, Netterikal, Nambiyar and Kodumudiar rivers, Keelmanimuthar river and its tributaries, Arjuna river, a small tributary of river Vaippar, Gadana river and its tributaries, Chittar river and its tributaries, Tamiraparani river basin, Pennaiyar river systems, Aliyar, Kallar, Sholayar, Italiar, Chinnar, Periyar, Varagalaiyar, Palar, Nirar, Kurumalayar and Vandaiyar streams from Indira Gandhi Wildlife Sanctuary. Reservoirs, tanks or lakes explored for fish biodiversity assessment in Tamil Nadu were Sembarambakkam and Red Hills tanks, Grand Anicut, Stanley / Mettur, Bhavanisagar, Sathanur, Amaravathy, Tirumoorthy, Aliyar, Krishnagiri, Amaravathi, Sholayar, Nirar, Sandynulla reservoirs, Vaigai and Sathiar Dams, Chinnar, Krishnagiri and Pambar dams, Kodaikanal Lake and Berijam Lake and Chembarampakkam Lake (Table 1).

Table 1 Some of the important reports on Freshwater fishes of Tamil Nadu.

Collectors of Freshwater Fishes	Reported Locality of Fishes	Species (No.)
Raj (1916)	Cooum and Adyar rivers and ponds within the municipal limits of the Madras (Chennai) city; Sembarambakkam and Red Hills tanks	44
Misra (1938)	Shevaroy Hills, Chitteri Range Hills, Javadi Hills, Yelagiri Hills and Den Kani Kota Range from the Eastern Ghats	36
Rajan (1955)	Bhavani and Moyar rivers and some of their tributaries in Nilgiri Hills	48
Sreenivasan (1976)	Stanley / Mettur, Bhavanisagar, Sathanur, Amaravathy, Tirumoorthy, Krishnagiri, Sandynulla reservoirs	28
Jayaram et al. (1982)	Stretch of the Cauvery in Tamil Nadu from Kaveripattinam to Hogenaikal	76
Indra and Devi (1990)	Molayar River, Vazhathopu, Valliyathuruthy, Manakavala, Nellikkamparai, Dam site, Anguruli, Cheriakaniyam, East of Boat landing, East and West Edapalayam, Periyar house and Periyar River lower camp from Thekkady Wildlife Reserve, Western Ghats	18
Indra (1991)	Vaigai and its tributaries such as Theni, Surali and Moolar in Madurai district; Kodaikanal Lake and Berijam Lak in Anna District; Vaigai and Sathiar Dams in Madurai	32
Devi (1992)	Cheyar rive tributaries of Palar river from Javadi Hills in North Arcot district	14
Devi (1992a)	Pachaiyar, Netterikal, Nambiyar and Kodumudiar rivers; Keelmanimuthar river and its tributaries, Kulirattiar and Kusanguliar from Kalakad Wildlife Sanctuary, Tirunelveli district	18
Devi (1992b)	Pachaiyar, Netterikal, Nambiyar and Kodumudiar rivers; Keelmanimuthar river and its tributaries, Kulirattiar and Kusanguliar from Kalakad Wildlife Sanctuary, Tirunelveli district	1
Indra (1992)	Ponds, streams, rivers and reservoirs of Kanyakumari district	41
Indra (1992a)	Waterfalls and Lakes on the Western Ghat border (eastern facing), dams and reservoirs built across Arjuna river, a small tributary of river Vaippar in Kamarajar District and river Vaigai in Pasumpon district	19
Bai (1993)	Cooum river	13
Devi and Ilango (1993)	Semi-barren wastelands form Pudukkottai district	19
Indra (1994)	River Cauvery at Tanjavur, Mayanur, Trichy, Musiri, Kulithalai, Papanasam and Ammaiappan	48
Sreenivasan (1998)	Mettur dam, Salem district	25
Arunachalam and Johnson (1999)	Cauvery, Bhavani and Moyar Rivers	1
Arunachalam and Sankaranarayanan (1999)	Gadana river, with its tributaries, Pampar, Kallar and Iluppaiyar rivers in Kalakad Mundanthurai Tiger Reserve, sub-basin in the Tamiraparani river basin	30
Arunachalam et al. (1999)	Riverine wetland of Tamiraparani river at Thimarajapuram, Tirunelveli district	1

Balasundaram et al. (1999)	Grand Anicut, Cauvery River in Tiruchirapalli district	24
Devi and Indra (1999)	Anamalai Hills, Western Ghats	1
Devi and Raghunathan (1999)	Chinnar and Cauvery rivers; Chinnar, Krishnagiri and Pambar dams in Dharmapuri district	47
Devi and Raghunathan (1999a)	Javadi and Yelagiri Hills and the Sathanur Dam in North Arcot District	30
Devi and Raghunathan (1999b)	Anamalai Hills in the Western Ghats	1
Devi et al. (1999)	29 collection localities from Chennai, Chengleput and Thiruvallur districts	51
Indra and Bai (1999)	Pennaiyar river systems in South Arcot district	31
Arunachalam (2000)	Thalaianai, Gadana, Hanuman Nathi and Gundar river sub-basins, Tamiraparani river basin, Western Ghats	30
Arunachalam and Manimekalan (2000)	Nilgiri biosphere reserve	1
Devi and Indra (2000)	From the literature known from the inland water bodies of Tamil Nadu	80
Jeyaraj (2000)	Lotic habitats of Kanyakumari district	1
Balasundaram et al. (2001)	Perinial rivers from Kolli Hills, Western Ghats, Salem district	19
Daniels and Rajagopal (2004)	Chembarampakkam Lake in the outskirts of Chennai	31
Raghunathan et al. (2005)	Tank inside Tiruvidanthai and Maraimalainagar sacred groves in Kancidpuram district	26
Devi et al. (2007)	Aliyar, Kallar, Sholayar, Italiar, Chinnar, Periyar, Varagalaiyar, Palar, Nirar, Kurumalayar and Vandaiyar streams; and Thirumurthy, Aliyar, Amaravathi, Sholayar and Nirar Dams from Indira Gandhi Wildlife Sanctuary	60
Raghunathan et al. (2008)	Paddy field near Chennai in Singaperumalkoil	35
Devi et al. (2009)	From the literature known from the inland water bodies of Tamil Nadu	152
Johnson and Arunachalam (2009)	Manimuthar, Tamiraparani, Chittar, Cauveri rivers of southern Western Ghats	21
Knight (2010)	Chembarampakkam tank in the outskirts of Chennai	1
Knight and Devi (2010)	Freshwater habitats around Chennai such as the Rettai Eri (near Red Hills), Madipakkam Lake, wetlands of Velacherry, Kovillampakkam Lake, Adyar River and the Chembarampakkam Lake	80
Dhinakaran et al. (2011)	Kalakkad Mundandhurai Tiger Reserve, upstream of Hanumannadhi, one of the sub-basins of river Tamiraparani, Bhavani River near Mettupalayam, Western Ghats	3
Knight et al. (2012)	Kakkan Halla, Moyar River drainage in the Nilgiris	1
Ng (2013)	Amaravathi river, a righthand tributary of the Cauvery river	1
Rajagopal and Davidar (2013)	10 wetlands associated to River Palar and its tributaries such as Cheyyar and Vegavathy in Kancheepuram district; 15 wetlands associated to Tamiraparani, Pazhayar, Valliar, Ponnivaikal, Paralayar rivers and their tributaries in Kanyakumari district	10
Knight and Devi (2014)	Vicinities of Chennai	1
Ramanujam et al. (2014)	Chembarampakkam Tank and Adyar River near Chennai	52
Mogalekar and Jawahar (2015)	From the literature known from the inland water bodies of Tamil Nadu	126
Ramanujam (2015)	Yercaud, Shevroy Hills, Eastern Ghats in Salem District	21

The Freshwater Fish Fauna of Tamil Nadu comprises 226 species represents 13 orders, 34 families and 93 genera (Table 3). A list of freshwater fishes of Tamil Nadu contains 136 species of primary freshwater fishes, 71 fishes were common to freshwater and brackish water and remaining 28 fishes were common to freshwater, brackish water and marine water (Table 2). The top three orders with diverse species composition were cypriniformes (125 species, 39 genera and four families), siluriformes (36 species, 13 genera and eight families) and perciformes (31 species, 21 genera and nine families) (Figure 1). The most diverse family was the cyprinidae with 111 species and 33 genera, followed by bagridae with 13 species and three genera and nemacheilidae with 11 species and four genera (Table 3).

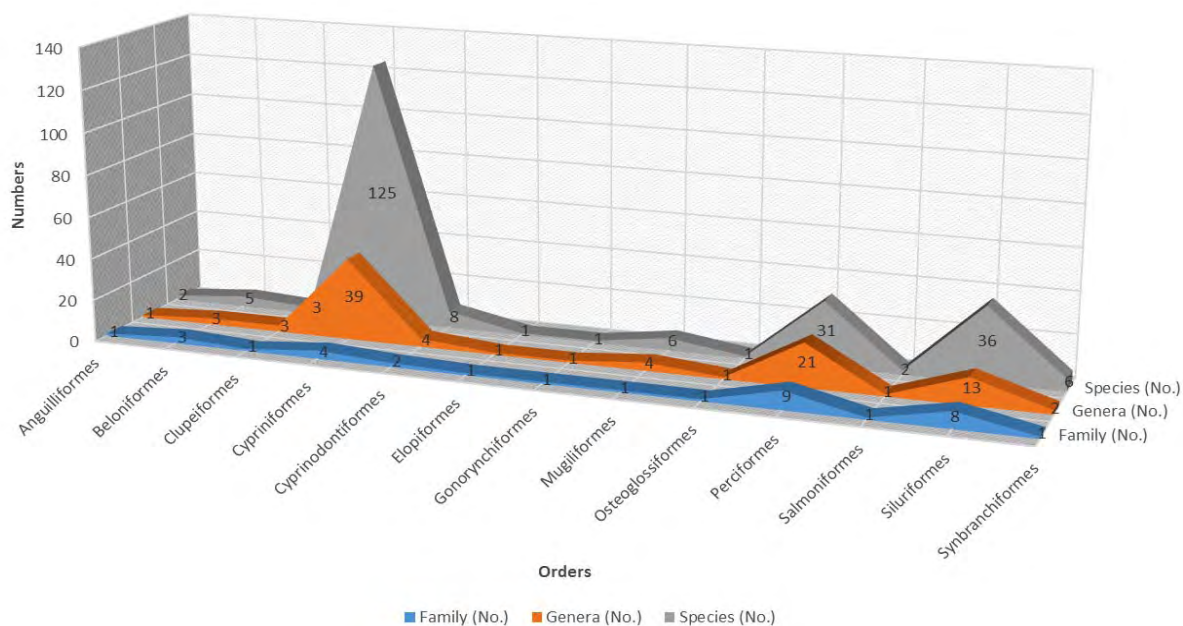


Fig. 1 Diversity of freshwater fishes of Tamil Nadu.

India has rich freshwater fish genetic resources constituting 930 species belonging to 326 genera and 99 families (Talwar and Jhingran, 1991) and Tamil Nadu constitute about 24.30 % to the freshwater fish diversity of India. Devi and Indra (2000) described 144 species of freshwater fishes belonging to 63 genera, 27 families and 11 orders from Tamil Nadu. Devi et al. (2009) documented 160 species under 27 families and 12 orders from inland water bodies of Tamil Nadu. Mogalekar and Jawahar (2015) listed 156 species of freshwater ornamental fishes belonging to 68 genera, 27 families and eight orders from Tamil Nadu. The list of freshwater fishes compiled in the present communication was greater than all the reports on freshwater fish fauna of Tamil Nadu since 1849 to 2015. Almost all the reports on freshwater fish fauna of Tamil Nadu agreed with dominance of cyprinids over other freshwater fish families.

We recognized 97 endemic or native species of fishes from Tamil Nadu and 19 exotic or non-native species to India. Out of 97 native species of fishes from Tamil Nadu 85 species are endemic or native to Western Ghats of India. Karmakar and Das (2005) listed 225 endemic freshwater fishes of India comprising 74 genera under 21 families and 9 orders. Tamil Nadu constitute about 43.11 % to the endemic freshwater fishes of India (Karmakar and Das, 2005). Western Ghats of India endowed with 212 species of endemic freshwater fishes (Dahanukar and Raghavan, 2013) and Tamil Nadu region of Western Ghats constitute about 40.09 % to the total endemic fish diversity of Western Ghats of India.

Fisheries should be viewed from an ecosystem perspective, as carnivore fish population are embedded in ecosystems where they perform their role as predator of other organisms. The consolidation of available data on the trophic level of freshwater fishes of Tamil Nadu ranged from 2.0 for Cyprinids to 4.5 for *Channa marulius* (Hamilton, 1822). Nearly 45.37 % of the freshwater fishes of Tamil Nadu are mid-level to high level carnivores with trophic level from 3.01 to 4.00. *Channa marulius* (Hamilton, 1822), *Pseudogobius javanicus* (Bleeker, 1856), *Oncorhynchus mykiss* (Walbaum, 1792), *Silonia childreni* (Sykes, 1839) and *Ompok malabaricus* (Valenciennes, 1840) are top predators with trophic level >4.00 (Table 2).

Table 2 Systematic list of Freshwater Fishes of Tamil Nadu with note on Endemic or exotic status, habitat, trophic level, maximum size, fishery and conservation status and references for reported locality.

Taxa	Common name	Habitat	Trophic Level (SE)	Maximum size (TL)	Fishery Information	References for Reported Locality
Kingdom: Animalia						
Phylum: Chordata						
Class: Actinopterygii						
Order: Anguilliformes						
Family: Anguillidae						
<i>Anguilla bengalensis</i> (Gray, 1831)	Indian mottled eel	M, F, B	3.8±0.7	200 cm	Capture, Gamefish	1, 3, 5, 16, 18, 26, 36, 39
<i>Anguilla bicolor</i> McClelland, 1844	Indonesian shortfin eel	M, F, B	3.6±0.50	123 cm	Capture	29, 36, 39, 45
Order: Beloniformes						
Family: Adrianichthyidae						
<i>Oryzias carnaticus</i> (Jerdon, 1849)	-	F, B	3.3±0.4	3.0 cm SL	Ornamental	33, 35, 36, 45, 46
<i>Oryzias dancena</i> (Hamilton, 1822)	Ricefish	F, B	3.3±0.4	3.1 cm SL	Ornamental	32, 39, 45, 46
<i>Oryzias melastigma</i> (McClelland, 1839)	-	F, B	3.3±0.4	4.0 cm	Ornamental	5, 8, 14, 15, 22, 23, 25, 29, 46
Family: Belonidae						
<i>Xenentodon cancila</i> (Hamilton, 1822)	Freshwater garfish	M, F, B	3.9±0.62	40.0 cm	Capture, Ornamental	1, 5, 15, 20, 32, 34, 36, 39, 45, 46
Family: Hemiramphidae						
<i>Hyporhamphus limbatus</i> (Valenciennes, 1847)	Congaturi halfbeak	M, F, B	3.1±0.1	35.0 cm	Capture	45, 46
Order: Clupeiformes						
Family: Clupeidae						
<i>Hilsa kelee</i> (Cuvier, 1829)	Kelee shad	M, F, B	2.9±0.33	35.0 cm	Capture	4
<i>Tenulosa ilisha</i> (Hamilton, 1822)	Hilsa shad	M, F, B	2.9±0.29	60.0 cm SL	Capture, Cultivable	5, 16
Order: Cypriniformes						
Family: Balitoridae						
<i>Bhavana australis</i> (Jerdon, 1849)	Western Ghat loach	F	2.9±0.3	9.0 cm SL	Ornamental	9, 18, 27, 29, 34, 36, 37, 46
Family: Cobitidae						
<i>Lepidocephalichthys guntea</i> (Hamilton, 1822)	Guntea loach	F, B	2.7±0.2	15.0 cm	Ornamental	2, 32, 39, 45, 46
<i>Lepidocephalichthys thermalis</i> (Valenciennes, 1846)	Common spiny loach	F	2.9±0.4	38.0 cm SL	Ornamental	1, 3, 5, 7, 8, 9, 11, 12, 14, 15, 18, 20, 22, 23, 25, 26, 27, 29, 31, 33, 34, 35, 36, 39, 45, 46, 47
Family: Cyprinidae						
<i>Amblypharyngodon melettinus</i> (Valenciennes, 1844)	Attentive carplet	F	2.1±0.0	8.0 cm	Capture, Ornamental	3, 5, 15, 29, 36, 46
<i>Amblypharyngodon microlepis</i> (Bleeker, 1853) ^{ENI}	Indian carplet	F	3.2±0.4	10.0 cm	Ornamental	1, 2, 5, 8, 11, 12, 14, 18, 22, 23, 25, 26, 29, 32, 33, 34, 35, 36, 39, 45, 46
<i>Amblypharyngodon mola</i> (Hamilton, 1822)	Mola carplet	F	3.3±0.4	20.0 cm	Ornamental	1, 13, 39, 46
<i>Bangana ariza</i> (Hamilton, 1807) ^{ENI}	Reba	F	2.7±0.25	30.0 cm SL	Capture	5, 29, 36
<i>Bangana dero</i> (Hamilton, 1822)	Kalabans	F	2.0±0.00	75.0 cm	Capture	15, 22, 29, 36, 45
<i>Barbodes carnaticus</i> (Jerdon, 1849) ^{ENWGI}	Carnatic carp	F	2.0±0.00	60.0 cm	Capture, Cultivable	3, 4, 5, 16, 17, 22, 29, 34, 36
<i>Barilius bakeri</i> Day, 1865 ^{ENWGI}	Malabar baril	F	3.2±0.4	15.0 cm	Ornamental	30, 46
<i>Barilius bendelisis</i> (Hamilton, 1807)	Bagra bahri	F	3.3±0.4	22.7 cm	Capture	3, 5, 8, 15, 20, 26, 29, 31, 34, 36, 46

<i>Barilius gatensis</i> (Valenciennes, 1844) ^{ENWGI}	-	F	3.2±0.4	15.0 cm	Ornamental	3, 5, 6, 29, 34, 36, 46
<i>Carassius carassius</i> (Linnaeus, 1758) ^{EXI}	Crucian carp	F, B	3.1±0.24	64.0 cm	Capture, Cultivable, Ornamental	5
<i>Catla catla</i> (Hamilton, 1822)	Catla	F, B	2.8±0.22	182 cm	Capture, Cultivable, Gamefish	1, 4, 5, 7, 12, 16, 22, 23, 25, 34, 36, 39, 45, 47
<i>Chela cachius</i> (Hamilton, 1822)	Silver hatchet chela	F, B	3.1±0.4	6.0 cm	Ornamental	1, 3, 25, 35, 36, 39, 46
<i>Chela macrolepis</i> Knight and Rema Devi, 2014	-	F	3.1±0.4	3.8 cm SL	Ornamental	44, 46
<i>Cirrhinus cirrhosus</i> (Bloch, 1795) ^{ENWGI}	Mrigal carp	F, B	2.4±0.17	100.0 cm SL	Capture, Cultivable, Gamefish	5, 4, 16, 34, 36, 39, 47
<i>Cirrhinus fulungee</i> (Sykes, 1839) ^{ENWGI}	Deccan white carp	F	2.4±0.2	30.0 cm SL	Capture	2
<i>Cirrhinus macrops</i> Steindachner, 1870 ^{ENI}	Hora white carp	F	2.4±0.2	35.0 cm	Capture	36
<i>Cirrhinus mrigala</i> (Hamilton, 1822)	Mrigal	F	2.2±0.2	99.0 cm	Capture, Cultivable, Gamefish	4, 5, 7, 12, 16, 22, 23, 25, 36
<i>Cirrhinus reba</i> (Hamilton, 1822)	Reba carp	F	2.4±0.2	30.0 cm	Capture, Cultivable	1, 2, 3, 4, 5, 15, 22, 31, 36, 39
<i>Ctenopharyngodon idella</i> (Valenciennes, 1844) ^{EXI}	Grass carp	F	2.0±0.00	150 cm	Capture, Cultivable, Gamefish	36, 39
<i>Cyprinus carpio</i> Linnaeus, 1758 ^{EXI}	Common carp	F, B	3.1±0.0	120 cm	Capture, Cultivable, Ornamental, Gamefish	4, 5, 7, 12, 16, 29, 34, 36
<i>Danio rerio</i> (Hamilton, 1822)	Zebra danio	F	3.1±0.1	3.8 cm SL	Ornamental	25, 26, 29, 36, 46
<i>Dawkinsia arulius</i> (Jerdon, 1849) ^{ENWGI}	Arulius barb	F	2.7±0.1	12.0 cm	Ornamental	29, 36, 46
<i>Dawkinsia filamentosa</i> (Valenciennes, 1844) ^{ENWGI}	Blackspot barb	F, B	2.6±0.0	18.0 cm	Capture, Ornamental	1, 2, 3, 5, 7, 11, 15, 18, 20, 22, 25, 27, 32, 34, 36, 37, 39, 45, 46, 47
<i>Dawkinsia tambraparniei</i> (Silas, 1954) ^{ENWGI}	Tambraparniei barb	F	2.0±0.00	12.8 cm SL	Ornamental	18, 27, 29, 36, 37, 46
<i>Devario aequipinnatus</i> (McClelland, 1839)	Giant danio	F	2.9±0.33	15.0 cm	Ornamental	2, 3, 5, 6, 9, 11, 15, 18, 20, 22, 23, 27, 36, 37, 46, 47
<i>Devario malabaricus</i> (Jerdon, 1849)	Malabar danio	F	3.2±0.2	12.0 cm	Ornamental	34, 36
<i>Devario neilgherriensis</i> (Day, 1867) ^{ENWGI}	-	F	3.0±0.4	10.0 cm	Ornamental	29, 36, 46
<i>Esomus barbatus</i> (Jerdon, 1849) ^{ENWGI}	South Indian flying barb	F	2.7±0.3	12.0 cm	Ornamental	2, 3, 5, 6, 8, 11, 12, 14, 15, 26, 39, 46
<i>Esomus danrica</i> (Hamilton, 1822)	Flying barb	F, B	2.4±0.1	13.0 cm	Capture, Ornamental	1, 5, 13, 25, 26, 32, 33, 35, 36, 39, 45, 46
<i>Esomus thermoicos</i> (Valenciennes, 1842)	-	F	2.3±0.14	12.7 cm	Ornamental	6, 9, 15, 22, 18, 23, 25, 27, 33, 34, 35, 36, 39, 45, 46
<i>Garra gotyla</i> (Gray, 1830)	Sucker head	F	2.0±0.00	18.0 cm	Capture	29, 40, 46
<i>Garra hughi</i> Silas, 1955 ^{ENWGI}	Cardamon garra	F	-	15.5 cm SL	Ornamental	21, 29, 34, 36, 46
<i>Garra jerdoni</i> Day, 1867	-	F	-	16.1 cm SL	Ornamental	3
<i>Garra kalakadensis</i> Rema Devi, 1993 ^{ENWGI}	-	F	-	7.4 cm SL	Ornamental	9, 10, 29, 36, 40, 46
<i>Garra maclellandi</i> (Jerdon, 1849) ^{ENWGI}	Cauvery garra	F	-	17.4 cm	Ornamental	5, 29, 34, 36, 46
<i>Garra mullya</i> (Sykes, 1839) ^{ENI}	Sucker fish	F	2.0±0.00	17.0 cm	Ornamental	2, 3, 5, 6, 7, 8, 9, 11, 12, 15, 18, 20, 22, 23, 26, 27, 34, 36, 37, 40, 46, 47
<i>Garra stenorhynchus</i> (Jerdon, 1849) ^{ENWGI}	Nilgiris garra	F	-	15.5 cm SL	Ornamental	3, 20, 26, 36
<i>Haludaria afasciata</i> (Jayaram, 1990) ^{ENWGI}	-	F	2.9±0.3	-	Ornamental	36, 46
<i>Haludaria fasciata</i> (Jerdon, 1849) ^{ENWGI}	Melon barb	F	3.0±0.4	7.0 cm	Ornamental	34, 36, 46

<i>Haludaria kannikattiensis</i> (Arunachalam and Johnson, 2003) ^{ENWGI}	-	F	2.9±0.3	-	Ornamental	37, 46
<i>Haludaria melanampyx</i> (Day, 1865) ^{ENWGI}	-	F	2.9±0.3	7.5 cm	Ornamental	2, 3, 6, 7, 11, 29, 37, 46
<i>Horadandia atukorali</i> Deraniyagala, 1943	-	F	3.2±0.40	3.0 cm	Ornamental	25, 29, 36, 39, 46
<i>Horalabiosa joshuai</i> Silas, 1954 ^{ENWGI}	-	F	2.8±0.3	9.0 cm SL	Ornamental	9, 27, 29, 36, 37, 46
<i>Horalabiosa palaniensis</i> Rema Devi and Menon, 1994 ^{ENWGI}	-	F	2.8±0.3	7.7 cm SL	Ornamental	29, 36, 46
<i>Hypophthalmichthys molitrix</i> (Valenciennes, 1844) ^{EXI}	Silver carp	F	2.0±0.00	105 cm	Capture, Cultivable	23, 29, 36, 39
<i>Hypselobarbus curmuca</i> (Hamilton, 1807) ^{ENWGI}	Curmuca barb	F	2.6±0.26	120 cm	Capture, Cultivable	3, 6, 27, 34, 36, 37
<i>Hypselobarbus dobsoni</i> (Day, 1876) ^{ENWGI}	Krishna carp	F	2.0±0.00	120.0 cm	Cultivable	18, 27, 29, 34, 36, 37
<i>Hypselobarbus dubius</i> (Day, 1867) ^{ENWGI}	Nilgiris barb	F	2.7±0.30	25.0 cm	Capture	3, 4, 6, 16, 22, 34, 36, 37
<i>Hypselobarbus jerdoni</i> (Day, 1870) ^{ENWGI}	Jerdon's carp	F	2.0±0.00	46.0 cm	Capture	3, 5, 29, 34, 36
<i>Hypselobarbus kurali</i> Menon and Rema Devi, 1995 ^{ENWGI}	-	F	-	35.0 cm	Capture	29, 36
<i>Hypselobarbus lithopidos</i> (Day, 1874) ^{ENWGI}	Canara barb	F	-	60.0 cm	Capture	6
<i>Hypselobarbus micropogon</i> (Valenciennes, 1842) ^{ENWGI}	Korhi barb	F	2.0±0.00	90.0 cm	Capture, Gamefish	3, 5
<i>Hypselobarbus mussullah</i> (Sykes, 1839) ^{ENWGI}	Humpback mahseer	F	-	150 cm	Capture, Gamefish	36
<i>Hypselobarbus pulchellus</i> (Day, 1870) ^{ENWGI}	-	F	2.0±0.00	44.0 cm	Capture	3
<i>Labeo altivelis</i> Peters, 1852	Rednose labeo	F	2.0±0.00	49.0 cm	Capture, Gamefish	16
<i>Labeo bata</i> (Hamilton, 1822)	Bata	F	-	61.0 cm	Capture, Cultivable	2, 29, 36
<i>Labeo boga</i> (Hamilton, 1822)	Boga labeo	F	-	30.0 cm	Capture	5, 15, 29, 36
<i>Labeo boggut</i> (Sykes, 1839)	Boggut labeo	F	-	29.0 cm	Capture, Cultivable	29, 36
<i>Labeo calbasu</i> (Hamilton, 1822)	Orangefin labeo	F, B	2.0±0.00	90.0 cm	Capture, Cultivable	1, 4, 5, 18, 20, 22, 23, 27, 31, 36, 39
<i>Labeo fimbriatus</i> (Bloch, 1795)	Fringed-lipped peninsula carp	F	2.0±0.00	91.0 cm	Capture, Cultivable	2, 4, 5, 16, 36
<i>Labeo kontius</i> (Jerdon, 1849) ^{ENWGI}	Pigmouth carp	F	-	61.0 cm	Capture, Cultivable	3, 4, 5, 16, 36
<i>Labeo pangusia</i> (Hamilton, 1822)	Pangusia labeo	F	2.0±0.00	90.0 cm	Capture	15, 22, 29, 36
<i>Labeo potail</i> (Sykes, 1839) ^{ENWGI}	Deccan labeo	F	-	30.0 cm	Capture	29, 46
<i>Labeo rohita</i> (Hamilton, 1822)	Roho labeo, Rohu	F, B	2.2±0.12	200 cm	Capture, Cultivable, Gamefish	4, 5, 7, 12, 16, 22, 23, 25, 34, 36, 39
<i>Laubuka dadiburjori</i> Menon, 1952 ^{ENWGI}	Dadio	F	3.2±0.3	2.5 cm SL	Ornamental	46
<i>Laubuka fasciata</i> (Silas, 1958) ^{ENWGI}	Malabar hatchet chela	F	3.1±0.3	6.0 cm	Ornamental	36, 46
<i>Laubuka laubuca</i> (Hamilton, 1822)	Indian glass barb	F, B	3.2±0.2	7.0 cm	Ornamental	3, 15, 25, 32, 33, 35, 36, 39, 45, 46
<i>Neolissochilus bovanicus</i> (Day, 1877) ^{ENWGI}	Bowany barb	F	-	36.0 cm	Capture	29
<i>Neolissochilus hexagonolepis</i> (McClelland, 1839)	Copper mahseer	F	3.0±0.37	120 cm	Capture, Cultivable, Gamefish	4, 16
<i>Neolissochilus wynaadensis</i> (Day, 1873) ^{ENWGI}	Wayanad Mahseer, Copper Mahseer	F	2.8±0.3	25.0 cm	Capture	29, 36, 46
<i>Osteobrama cotio</i> (Hamilton, 1822) ^{ENI}	Cotio	F	2.8±0.3	15.0 cm	Ornamental	5, 29, 46
<i>Osteobrama neilli</i> (Day, 1873) ^{ENWGI}	Nilgiri osteobrama	F	2.8±0.3	12.0 cm	Ornamental	29, 36, 46
<i>Osteobrama peninsularis</i> Silas, 1952 ^{ENWGI}	Peninsular Osteobrama	F	2.8±0.3	15.0 cm	Capture	36, 39, 46
<i>Osteobrama vigorsii</i> (Sykes,	Bheema	F, B	2.7±0.3	30.0 cm	Capture	2

1839) ^{ENI}	osteobrama					
<i>Osteochilichthys brevidorsalis</i> (Day, 1873) ^{ENWGI}	Kantaka barb	F	-	15.0 cm	Ornamental	3, 5, 22, 29, 36
<i>Osteochilus nashii</i> (Day, 1869) ^{ENWGI}	Nash's barb	F	-	18.0 cm	Capture	3, 29, 36, 46
<i>Pethia conchoni</i> (Hamilton, 1822)	Rosy barb	F	2.9±0.33	14.0 cm	Ornamental	25, 22, 26, 29, 31, 32, 33, 34, 35, 36, 39, 45, 46, 47
<i>Pethia gelius</i> (Hamilton, 1822)	Golden barb	F	3.3±0.41	5.1 cm	Ornamental	36, 38, 46
<i>Pethia nigripinna</i> (Knight, Rema Devi, Indra and Arunachalam, 2012)		F	2.6±0.1	4.5 cm SL	Ornamental	41, 46
<i>Pethia nigrofasciata</i> (Günther, 1868)	Black ruby barb	F	2.0±0.00	6.0 cm	Ornamental	5
<i>Pethia punctata</i> (Day, 1865) ^{ENWGI}	-	F	2.5±0.1	7.5 cm	Ornamental	29, 34, 36, 46
<i>Pethia sharmai</i> (Menon and Rema Devi, 1993) ^{ENWGI}	-	F	2.8±0.2	2.7 cm SL	Ornamental	25, 29, 35, 36, 39, 45, 46
<i>Pethia ticto</i> (Hamilton, 1822)	Ticto barb	F, B	2.2±0.0	10.0 cm	Ornamental	2, 3, 5, 7, 9, 15, 18, 20, 22, 23, 25, 26, 27, 32, 33, 35, 36, 37, 39, 45, 46
<i>Puntius amphibius</i> (Valenciennes, 1842) ^{ENWGI}	Scarlet-banded barb	F, B	2.0±0.00	20.0 cm	Capture	1, 3, 11, 12, 13, 15, 18, 22, 23, 25, 26, 27, 29, 32, 34, 35, 36, 37, 39, 45, 46
<i>Puntius arenatus</i> (Day, 1878) ^{ENWGI}	Aranatus barb	F	2.6±0.1	10.0 cm	Capture	7, 29, 36, 46
<i>Puntius bimaculatus</i> (Bleeker, 1863)	Redside barb	F	2.4±0.2	7.0 cm	Ornamental	8, 9, 18, 22, 23, 27, 29, 34, 36, 37, 46, 47
<i>Puntius cauveriensis</i> (Hora, 1937) ^{ENWGI}	Cauvery barb	F	2.6±0.1	7.4 cm	Ornamental	34, 36, 46
<i>Puntius chola</i> (Hamilton, 1822)	Swamp barb	F	2.5±0.1	15.0 cm	Capture, Ornamental	2, 3, 5, 7, 9, 11, 12, 14, 15, 22, 25, 26, 29, 32, 33, 34, 35, 36, 39, 45, 46, 47
<i>Puntius dorsalis</i> (Jerdon, 1849) ^{ENWGI}	Long snouted barb	F	2.8±0.1	25.0 cm	Capture, Ornamental	1, 3, 5, 7, 9, 11, 12, 14, 15, 18, 22, 25, 26, 27, 29, 32, 33, 34, 35, 36, 37, 39, 45, 46
<i>Puntius fraseri</i> (Hora and Misra, 1938) ^{ENWGI}	Dharna barb	F	2.8±0.1	4.6 cm	Ornamental	26
<i>Puntius mahecola</i> (Valenciennes, 1844) ^{ENWGI}	-	F	2.6±0.1	8.9 cm	Ornamental	1, 7, 39, 45, 46
<i>Puntius melanostigma</i> (Day, 1878) ^{ENWGI}	-	F	2.6±0.1	10.0 cm	Ornamental	1, 7, 29, 34, 35, 36, 46
<i>Puntius mudumalaiensis</i> Menon and Rema Devi, 1992 ^{ENWGI}	-	F	2.9±0.1	2.3 cm SL	Ornamental	22, 29, 36, 46
<i>Puntius parrah</i> Day, 1865 ^{ENWGI}	Parrah barb	F	2.5±0.1	15.0 cm	Ornamental	5, 29, 36, 46
<i>Puntius sophore</i> (Hamilton, 1822)	Pool barb	F, B	2.6±0.1	20.0 cm	Ornamental	1, 2, 3, 5, 7, 8, 11, 13, 14, 15, 20, 22, 23, 25, 26, 27, 31, 32, 33, 34, 35, 36, 39, 45, 46
<i>Puntius vittatus</i> Day, 1865	Greenstripe barb	F, B	2.0±0.00	5.0 cm	Ornamental	1, 5, 11, 14, 15, 18, 20, 22, 23, 25, 26, 27, 29, 32, 33, 35, 36, 39, 45, 46
<i>Rasbora caverii</i> (Jerdon, 1849) ^{ENWGI}	Cauvery rasbora	F, B	3.2±0.4	10.0 cm	Capture, Ornamental	7, 8, 9, 12, 15, 23, 25, 26, 32, 33, 34, 35, 36, 39, 45, 46
<i>Rasbora daniconius</i> (Hamilton, 1822)	Slender rasbora	F, B	3.1±0.1	15.0 cm	Capture, Ornamental	1, 2, 3, 5, 6, 7, 9, 11, 12, 13, 14, 15, 18, 20, 22, 23, 25, 26, 27, 31, 32, 33, 34, 35, 36, 37, 39, 45, 46
<i>Salmostoma</i>	Silver razorbelly	F	3.2±0.4	15.0 cm	Ornamental	3, 5, 34, 36, 39, 46

<i>acinaces</i> (Valenciennes 1844) ENWGI	minnow					
<i>Salmostoma bacaila</i> (Hamilton, 1822)	Large razorbelly minnow	F, B	3.2±0.40	18.0 cm	Ornamental	11, 13, 39, 46
<i>Salmostoma balookee</i> (Sykes, 1839) ENI	Bloch razorbelly minnow	F	3.2±0.4	15.0 cm	Capture	1, 2, 3, 5, 7, 11, 12, 15, 18, 22, 25, 29, 32, 34, 35, 36, 39, 45
<i>Salmostoma boopis</i> (Day, 1874) ENWGI	Boopis razorbelly minnow	F	2.9±0.3	12.0 cm	Capture	15
<i>Salmostoma novacula</i> (Valenciennes, 1840) ENWGI	Novacula razorbelly minnow	F	2.9±0.3	12.5 cm	Capture	29, 36, 46
<i>Salmostoma untrahi</i> (Day, 1869) ENI	Mahanadi razorbelly minnow	F	2.3±0.10	20.0 cm	Capture	36
<i>Systemus rubripinnis</i> (Valenciennes, 1842)	Javaen barb	F	2.9±0.34	25.0 cm SL	Capture	18, 27, 39
<i>Systemus sarana</i> (Hamilton, 1822)	Olive barb	F, B	2.9±0.2	42.0 cm	Capture, Ornamental, Gamefish	1, 2, 3, 4, 5, 7, 9, 11, 12, 15, 18, 20, 22, 23, 25, 27, 29, 31, 32, 34, 36, 39, 45, 46
<i>Tinca tinca</i> (Linnaeus, 1758) EXI	Tench	F, B	3.7±0.0	70.0 cm SL	Capture, Cultivable, Ornamental, Gamefish	4, 16, 46
<i>Tor khudree</i> (Sykes, 1839)	Deccan mahseer	F	3.1±0.43	50.0 cm	Capture, Cultivable, Gamefish	3, 5, 6, 16, 22, 27, 34, 36, 37
<i>Tor malabaricus</i> (Jerdon, 1849) ENWGI	Malabar mahseer	F	2.9±0.4	40.0 cm	Capture	11, 27, 36
<i>Tor putitora</i> (Hamilton, 1822)	Putitor mahseer	F	2.9±0.3	275 cm	Capture, Cultivable, Ornamental, Gamefish	4, 16
<i>Tor tor</i> (Hamilton, 1822)	Tor barb	F	2.6±0.1	200 cm	Capture, Cultivable, Gamefish	16
Family: Nemacheilidae						
<i>Mesonoemacheilus herrei</i> Nalbant and Banarescu, 1982 ENWGI	-	F	2.8±0.3		Ornamental	34, 36
<i>Nemacheilus denisoni</i> Day, 1867 ENWGI	-	F	2.8±0.3	5.0 cm SL	Ornamental	3, 6, 7, 8, 22, 29, 34, 36, 46, 47
<i>Nemacheilus guentheri</i> Day, 1867 ENWGI	-	F	2.8±0.3	5.6 cm SL	Ornamental	3
<i>Nemacheilus longistriatus</i> Kottelat, 1990	-	F	2.8±0.27	12.5 cm SL	Ornamental	2
<i>Nemacheilus monilis</i> Hora, 1921 ENWGI	-	F	2.8±0.3	4.8 cm SL	Ornamental	3, 34, 36
<i>Nemacheilus nilgiriensis</i> Menon, 1987 ENWGI	-	F	2.8±0.3	5.1 cm SL	Ornamental	36, 46
<i>Nemacheilus pulchellus</i> Day, 1873 ENWGI	-	F	2.8±0.3	4.6 cm SL	Ornamental	15, 36, 46
<i>Nemacheilus semiarmatus</i> Day, 1867 ENWGI	-	F	2.0±0.00	5.6 cm SL	Ornamental	7, 36, 46
<i>Nemacheilus triangularis</i> Day, 1865 ENWGI	-	F	2.3±0.34	5.8 cm SL	Ornamental	6, 9, 11, 18, 27, 36, 37, 46
<i>Paracanthocobitis mooreh</i> (Sykes, 1839) ENWGI	Mooree	F	2.9±0.3	4.4 cm	Ornamental	29, 46
<i>Schistura beavani</i> (Günther, 1868) ENI	Creek loach	F	3.2±0.4	8.0 cm	Ornamental	3
Order: Cyprinodontiformes						
Family: Aplocheilidae						
<i>Aplocheilus blockii</i> Arnold, 1911	Green panchax	F, B	3.8±0.60	6.0 cm	Ornamental	11, 14, 25, 36, 46
<i>Aplocheilus lineatus</i> (Valenciennes, 1846) ENI	Malabar killie	F, B	3.8±0.5	10.0 cm	Ornamental	2, 5, 6, 9, 11, 15, 18, 27, 34, 36, 46
<i>Aplocheilus panchax</i> (Hamilton, 1822)	Blue panchax	F, B	3.2±0.40	9.0 cm	Ornamental	2
<i>Aplocheilus parvus</i> (Sundara Raj,	Dwarf panchax	F, B	3.5±0.45	6.3 cm	Ornamental	1, 36, 39, 45, 46

1916)						
Family: Poeciliidae						
<i>Gambusia affinis</i> (Baird and Girard, 1853) ^{EXI}	Mosquitofish	F, B	3.1±0.2	5.1 cm	Ornamental	7, 11, 12, 14, 15, 22, 23, 25, 26, 29, 33, 34, 35, 36, 39, 45, 46
<i>Poecilia reticulata</i> Peters, 1859 ^{EXI}	Guppy	F, B	3.2±0.4	5.0 cm SL	Ornamental	23, 25, 29, 36, 45, 46, 47
<i>Xiphophorus hellerii</i> Heckel, 1848 ^{EXI}	Green swordtail	F, B	3.2±0.43	14.0 cm	Ornamental	25
<i>Xiphophorus maculatus</i> (Günther, 1866) ^{EXI}	Southern platyfish	F	3.2±0.40	4.0 cm	Ornamental	25
Order: Elopiformes						
Family: Megalopidae						
<i>Megalops cyprinoides</i> (Broussonet, 1782)	Indo-Pacific tarpon	M, F, B	3.5±0.1	150 cm	Capture, Cultivable, Gamefish	1, 5, 11, 29, 36, 45
Order: Gonorynchiformes						
Family: Chanidae						
<i>Chanos chanos</i> (Forsskål, 1775)	Milkfish	M, F, B	2.4±0.20	180 cm SL	Capture, Cultivable, Gamefish	5, 16
Order: Mugiliformes						
Family: Mugilidae						
<i>Chelon parsia</i> (Hamilton, 1822)	Goldspot mullet	M, F, B	2.0±0.00	16.0 cm	Capture, Cultivable	5, 11, 15, 29
<i>Chelon planiceps</i> (Valenciennes, 1836)	Tade gray mullet	M, F, B	2.0±0.00	70.0 cm	Capture, Cultivable	29
<i>Chelon subviridis</i> (Valenciennes, 1836)	Greenback mullet	M, F, B	2.7±0.30	40.0 cm SL	Capture, Cultivable	29
<i>Mugil cephalus</i> Linnaeus, 1758	Flathead grey mullet	M, F, B	2.5±0.17	100.0 cm SL	Capture, Cultivable	11, 26, 29
<i>Rhinomugil corsula</i> (Hamilton, 1822)	Corsula	F, B	2.4±0.2	45.0 cm	Capture, Cultivable	4, 5, 7, 15, 16, 22, 34, 36
<i>Sicamugil cascasia</i> (Hamilton, 1822)	Yellowtail mullet	F	2.7±0.2	10.0 cm	Capture	36
Order: Osteoglossiformes						
Family: Notopteridae						
<i>Notopterus notopterus</i> (Pallas, 1769)	Bronze featherback	F, B	3.5±0.0	60.0 cm SL	Capture, Cultivable, Ornamental	1, 2, 4, 5, 20, 22, 23, 25, 26, 32, 34, 35, 36, 39, 45, 46, 47
Order: Perciformes						
Family: Ambassidae						
<i>Ambassis ambassis</i> (Lacepède, 1802)	Commerson's glassy	F, B	3.7±0.56	15.0 cm	Capture	1, 11, 29, 46
<i>Chanda nama</i> Hamilton, 1822	Elongate glass-perchlet	F, B	3.6±0.54	11.0 cm	Capture, Ornamental	5, 15, 22, 25, 26, 34, 35, 36, 39, 45, 46, 47
<i>Parambassis lala</i> (Hamilton, 1822) ^{ENI}	Highfin glassy perchlet	F, B	3.2±0.5	3.8 cm SL	Ornamental	39, 46
<i>Parambassis ranga</i> (Hamilton, 1822)	Indian glassy fish	F, B	3.3±0.39	8.0 cm	Capture, Ornamental	1, 2, 5, 18, 25, 27, 32, 35, 36, 39, 45, 46
Family: Anabantidae						
<i>Anabas testudineus</i> (Bloch, 1792)	Climbing perch	F, B	3.0±0.4	25.0 cm	Capture, Cultivable, Ornamental	5, 15, 20, 25, 33, 36, 39, 45, 46
Family: Badidae						
<i>Badis badis</i> (Hamilton, 1822)	Badis	F	3.3±0.39	5.0 cm	Ornamental	46
Family: Channidae						
<i>Channa gachua</i> (Hamilton, 1822)	-	F	3.8±0.62	20.0 cm SL	Ornamental	1, 2, 3, 23, 34, 39, 46, 47
<i>Channa marulius</i> (Hamilton, 1822)	Great snakehead	F	4.5±0.80	183 cm	Capture, Cultivable, Ornamental, Gamefish	5, 22, 36
<i>Channa punctata</i> (Bloch, 1793)	Spotted snakehead	F, B	3.8±0.70	1.0 cm	Capture, Cultivable, Ornamental	1, 2, 5, 8, 11, 12, 13, 14, 15, 20, 22, 23, 25, 26, 32, 33, 35, 36, 39, 45, 46
<i>Channa striata</i> (Bloch, 1793)	Striped snakehead	F, B	3.4±0.45	100.0 cm SL	Capture, Cultivable, Ornamental	1, 2, 5, 6, 7, 15, 23, 25, 36, 39, 45, 46

Family: Cichlidae							
<i>Cichlasoma trimaculatum</i> (Günther, 1867)	Three spot cichlid	F	3.4±0.56	36.5 cm SL	Ornamental	39, 46	
<i>Etroplus maculatus</i> (Bloch, 1795)	Orange chromide	F, B	2.7±0.1	8.0 cm	Capture, Ornamental	1, 2, 5, 7, 11, 13, 14, 15, 18, 20, 22, 25, 26, 31, 32, 33, 34, 35, 36, 39, 45, 46, 47	
<i>Etroplus suratensis</i> (Bloch, 1790)	Pearlspot	F, B	2.9±0.26	40.0 cm	Capture, Cultivable, Ornamental	1, 4, 5, 11, 14, 16, 20, 31, 39, 46	
<i>Hemichromis bimaculatus</i> Gill, 1862	Jewelfish	F, B	3.9±0.64	13.6 cm SL	Ornamental	39, 46	
<i>Oreochromis aureus</i> (Steindachner, 1864) ^{EXI}	Blue tilapia	F, B	2.1±0.0	45.7 cm	Capture, Cultivable, Ornamental	39, 46	
<i>Oreochromis mossambicus</i> (Peters, 1852) ^{EXI}	Mozambique tilapia	F, B	2.2±0.0	39.0 cm SL	Capture, Cultivable	5, 4, 6, 7, 8, 11, 12, 13, 14, 15, 16, 18, 22, 23, 25, 26, 31, 32, 33, 34, 35, 36, 39, 45, 46, 47	
<i>Oreochromis niloticus</i> (Linnaeus, 1758) ^{EXI}	Nile tilapia	F, B	2.0±0.0	60.0 cm SL	Capture, Cultivable	4, 23, 36, 39	
Family: Gobiidae							
<i>Awaous grammepomus</i> (Bleeker, 1849)	Scribbled goby	F, B	3.3±0.48	15.0 cm SL	Capture	11, 29, 36, 46	
<i>Drombus globiceps</i> (Hora, 1923)	Kranji drombus	M, F, B	3.2±0.3	4.3 cm	Capture	36	
<i>Favonigobius reichei</i> (Bleeker, 1854)	Indo-Pacific tropical sand goby	M, F, B	3.4±0.4	8.3 cm	Capture	25	
<i>Glossogobius giuris</i> (Hamilton, 1822)	Tank goby	M, F, B	3.7±0.2	50.0 cm SL	Capture, Cultivable, Ornamental	1, 2, 3, 5, 7, 8, 11, 13, 14, 15, 20, 22, 23, 25, 26, 27, 31, 32, 33, 34, 35, 36, 39, 45, 46, 47	
<i>Oligolepis acutipennis</i> (Valenciennes, 1837)	Sharptail goby	F, B	4.0±0.65	15.0 cm	Capture	11	
<i>Psammogobius biocellatus</i> (Valenciennes, 1837)	Sleepy goby	M, F, B	3.4±0.3	12.0 cm	Capture	11	
<i>Pseudogobius javanicus</i> (Bleeker, 1856)	Goby of streams	M, F, B	4.2±0.73	6.0 cm	Capture	11, 36	
Family: Nandidae							
<i>Nandus nandus</i> (Hamilton, 1822)	Gangetic leaffish	F, B	3.9±0.63	20.0 cm	Capture, Ornamental	1, 2, 39, 46	
Family: Osphronemidae							
<i>Osphronemus goramy</i> Lacepède, 1801 ^{EXI}	Giant gourami	F, B	2.8±0.32	70.0 cm SL	Ornamental	1, 5, 39, 45, 46	
<i>Pseudosphromenus cupanus</i> (Cuvier, 1831)	Spiketail paradise fish	F, B	3.3±0.42	7.5 cm	Ornamental	1, 5, 11, 15, 18, 20, 25, 33, 35, 36, 39, 46, 47	
<i>Trichogaster fasciata</i> Bloch and Schneider, 1801	Banded gourami	F	3.1±0.3	12.5 cm	Ornamental	13, 15, 25, 35, 36	
<i>Trichogaster lalius</i> (Hamilton, 1822)	Dwarf gourami	F	3.1±0.3	8.8 cm	Ornamental	32, 33, 36, 39, 45, 46	
<i>Trichopodus trichopterus</i> (Pallas, 1770) ^{EXI}	Three spot gourami	F	2.7±0.23	15.0 cm SL	Ornamental	32, 39, 45, 46	
Family: Pristolepididae							
<i>Pristolepis marginata</i> Jerdon, 1849 ^{ENWGI}	Malabar leaffish	F	3.4±0.5	15.0 cm	Capture, Ornamental	34, 36, 46	
Order: Salmoniformes							
Family: Salmonidae							
<i>Oncorhynchus mykiss</i> (Walbaum, 1792) ^{EXI}	Rainbow trout	M, F, B	4.1±0.3	122.0 cm	Capture, Cultivable, Gamefish	4, 16, 36	
<i>Oncorhynchus nerka</i> (Walbaum, 1792) ^{EXI}	Sockeye salmon	M, F, B	3.5±0.2	84.0 cm	Capture, Cultivable, Gamefish	36	
Order: Siluriformes							
Family: Bagridae							
<i>Hemibagrus punctatus</i> (Jerdon, 1849) ^{ENWGI}	Nilgiri mystus	F	3.5±0.6	45.0 cm	Capture	3, 5, 29, 36, 46	

<i>Mystus armatus</i> (Day, 1865) ENWGI	Kerala mystus	F, B	3.3±0.4	14.5 cm SL	Capture, Ornamental	11, 14, 18, 27, 29, 43, 46
<i>Mystus bleekeri</i> (Day, 1877)	Day's mystus	F	3.3±0.4	15.5 cm	Capture, Ornamental	14, 15, 20, 22, 25, 27, 29, 31, 33, 35, 36, 39, 45, 46
<i>Mystus cavasius</i> (Hamilton, 1822)	Gangetic mystus	F, B	3.4±0.5	40.0 cm SL	Capture	1, 2, 3, 5, 7, 15, 22, 25, 32, 34, 29, 31, 36, 39, 45
<i>Mystus gulio</i> (Hamilton, 1822)	Long whiskers catfish	F, B	4.0±0.50	46.0 cm	Capture	5, 15, 25, 29, 35, 36, 39, 43, 45
<i>Mystus keletius</i> (Valenciennes, 1840) ENWGI	Keletius mystus	F	3.4±0.2	18.0 cm	Capture, Ornamental	1, 26, 29, 32, 36, 39, 43, 46
<i>Mystus malabaricus</i> (Jerdon, 1849) ENWGI	Jerdon's mystus	F, B	3.3±0.4	15.0 cm	Capture	3, 29, 34, 36, 46
<i>Mystus montanus</i> (Jerdon, 1849) ENWGI	Wynaad mystus	F, B	3.2±0.34	15.0 cm	Capture	7, 8, 9, 11, 15, 29, 34, 36, 43, 46
<i>Mystus oculus</i> (Valenciennes, 1840) ENWGI	Malabar mystus	F, B	3.3±0.4	15.0 cm	Capture	11, 29, 36
<i>Mystus seengtee</i> (Sykes, 1839) ENWGI	-	F	3.3±0.4	15.6 cm	Capture	43
<i>Mystus vittatus</i> (Bloch, 1794) ENI	Striped dwarf catfish	F, B	3.1±0.1	21.0 cm SL	Capture, Ornamental	1, 2, 3, 4, 5, 7, 9, 11, 12, 13, 14, 15, 25, 29, 31, 32, 33, 35, 36, 39, 43, 45, 46, 47
<i>Sperata aor</i> (Hamilton, 1822)	Long-whiskered catfish	F	3.6±0.53	180 cm	Capture, Gamefish	4, 5, 16, 36, 29, 39
<i>Sperata seenghala</i> (Sykes, 1839)	Giant river-catfis	F, B	3.8±0.4	150 cm	Capture, Cultivable, Gamefish	5, 23, 29, 36
Family: Clariidae						
<i>Clarias batrachus</i> (Linnaeus, 1758)	Philippine catfish	F, B	3.4±0.50	47.0 cm	Capture, Cultivable, Ornamental	1, 5, 31, 36
<i>Clarias dayi</i> Hora, 1936 ENWGI	Malabar clariid	F	3.3±0.5	17.5 cm	Capture	28
<i>Clarias dussumieri</i> Valenciennes, 1840 ENWGI	Valenciennes clariid	F	3.7±0.59	25.0 cm	Capture	29, 36
<i>Clarias magur</i> (Hamilton, 1822)	Maguro	F	3.4±0.5	21.3 cm SL	Capture, Cultivable, Gamefish	39
<i>Clarias gariepinus</i> (Burchell, 1822) EXI	North African catfish	F	3.8±0.4	170 cm	Capture, Cultivable, Gamefish	36, 39
Family: Heteropneustidae						
<i>Heteropneustes fossilis</i> (Bloch, 1794)	Stinging catfish	F, B	3.6±0.3	31.0 cm	Capture, Cultivable, Ornamental	1, 2, 5, 6, 11, 20, 23, 25, 33, 34, 35, 36, 39, 43, 45
<i>Heteropneustes longipectoralis</i> Rema Devi and Raghunathan, 1999 ENWGI	-	F	3.4±0.5	15.0 cm SL	Ornamental	24, 34, 36, 46
<i>Heteropneustes microps</i> (Günther, 1864) ENWGI	-	F, B	3.3±0.5	15.0 cm	Ornamental	19, 29, 46
Family: Loricariidae						
<i>Pterygoplichthys disjunctivus</i> (Weber, 1991) EXI	Vermiculated sailfin catfish	F	-	70.0 cm	Ornamental	39, 46
<i>Pterygoplichthys pardalis</i> (Castelnau, 1855) EXI	Amazon sailfin catfish	F	2.0±0.00	42.3 cm SL	Ornamental	39, 46
Family: Pangasiidae						
<i>Pangasius pangasius</i> (Hamilton, 1822)	Pangas catfish	F, B	3.4±0.51	300 cm SL	Capture, Cultivable, Gamefish	4, 5, 39
Family: Schilbeidae						
<i>Neotropius atherinoides</i> (Bloch, 1794)	Indian potasi	F, B	3.3±0.4	15.0 cm	Capture, Ornamental	1, 15, 25, 26, 31, 32, 35, 36, 39, 43, 45, 46
<i>Silonia childreni</i> (Sykes, 1839) ENWGI	White catfish	F	4.2±0.73	48.0 cm	Capture	5, 36
<i>Silonia silondia</i> (Hamilton, 1822)	Silond catfish	F, B	3.5±0.37	183 cm	Capture, Gamefish	4
Family: Siluridae						
<i>Ompok bimaculatus</i> (Bloch, 1794)	Butter catfish	F, B	3.9±0.4	45.0 cm SL	Capture, Cultivable, Ornamental	2, 3, 4, 6, 7, 18, 22, 31, 34, 36, 39, 43, 46,

						47
<i>Ompok karunkodu</i> Ng, 2013 ENWGI	-	F	3.8±0.6	22.9 cm SL	Ornamental	42
<i>Ompok malabaricus</i> (Valenciennes, 1840) ENWGI	Goan catfish	F	4.2±0.73	51.0 cm SL	Cultivable	34, 36, 43
<i>Pterocryptis wynaadensis</i> (Day, 1873) ENWGI	Malabar silurus	F	3.8±0.61	30.0 cm	Capture	3, 22, 27, 36, 37
<i>Wallago attu</i> (Bloch and Schneider, 1801)	Wallago	F, B	3.7±0.56	240 cm	Capture, Gamefish	1, 4, 5, 7, 16, 20, 22, 36, 39, 45
Family: Sisoridae						
<i>Glyptothorax anamalaiensis</i> Silas, 1952 ENWGI	-	F	3.2±0.4	-	Capture	34, 36
<i>Glyptothorax annandalei</i> Hora, 1923 ENWGI	-	F	3.2±0.4	11.5 cm	Capture, Ornamental	36, 46
<i>Glyptothorax housei</i> Herre, 1942 ENWGI	-	F	3.2±0.4	10.0 cm	Ornamental	36, 46
<i>Glyptothorax madraspatanus</i> (Day, 1873) ENWGI	-	F	3.2±0.4	11.5 cm	Capture, Ornamental	3, 5, 18, 27, 36, 37, 46
Order: Synbranchiformes						
Family: Mastacembelidae						
<i>Macrogathus aculeatus</i> (Bloch, 1786)	Lesser spiny eel	F, B	3.3±0.4	38.0 cm	Capture, Ornamental	1, 2, 13, 15
<i>Macrogathus aral</i> (Bloch and Schneider, 1801)	One-stripe spinyeel	F, B	3.1±0.33	63.5 cm	Capture	25, 22, 26, 36, 39, 45, 46
<i>Macrogathus guentheri</i> (Day, 1865) ENWGI	Malabar spiny eel	F	3.3±0.4	29.9 cm	Capture, Ornamental	11, 29, 36, 46
<i>Macrogathus malabaricus</i> (Jerdon, 1849)	Malabar spiny eel	F	3.3±0.4	26.0 cm	Capture, Ornamental	34
<i>Macrogathus pancalus</i> Hamilton, 1822	Barred spiny eel	F, B	3.5±0.51	18.0 cm	Capture	1, 2, 5, 25, 32, 33, 35, 36, 39, 45, 46
<i>Mastacembelus armatus</i> (Lacepede, 1800)	Zig-zag eel	F, B	2.8±0.27	90.0 cm	Capture, Ornamental	1, 2, 3, 5, 15, 16, 18, 20, 22, 25, 26, 31, 34, 36, 37, 39, 46, 47

ABBREVIATIONS: ENWGI = Species endemic or native to Western Ghats of India; ENI = Species endemic or native to India; EXI = Species exotic or non-native to India; **Habitat:** F = Freshwater; B = Brackish; M = Marine; **Trophic Level:** S.E. = Standard Error; **Maximum size:** TL = total length, SL = standard length; **References for reported locality:** 1 = Raj (1916), 2 = Misra (1938), 3 = Rajan (1955), 4 = Sreenivasan (1976), 5 = Jayaram et al. (1982), 6 = Indra and Devi (1990), 7 = Indra (1991), 8 = Devi (1992), 9 = Devi (1992a), 10 = Devi (1992b), 11 = Indra (1992), 12 = Indra (1992a), 13 = Bai (1993), 14 = Devi and Ilango (1993), 15 = Indra (1994), 16 = Sreenivasan (1998), 17 = Arunachalam and Johnson (1999), 18 = Arunachalam and Sankaranarayanan (1999), 19 = Arunachalam et al. (1999), 20 = Balasundaram et al. (1999), 21 = Devi and Indra (1999), 22 = Devi and Raghunathan (1999), 23 = Devi and Raghunathan (1999a), 24 = Devi and Raghunathan (1999b), 25 = Devi et al. (1999), 26 = Indra and Bai (1999), 27 = Arunachalam (2000), 28 = Arunachalam and Manimekalan (2000), 29 = Devi and Indra (2000), 30 = Jeyaraj (2000), 31 = Balasundaram et al. (2001), 32 = Daniels and Rajagopal (2004), 33 = Raghunathan et al. (2005), 34 = Devi et al. (2007), 35 = Raghunathan et al. (2008), 36 = Devi et al. (2009), 37 = Johnson and Arunachalam (2009), 38 = Knight (2010), 39 = Knight and Devi (2010), 40 = Dhinakaran et al. (2011), 41 = Knight et al. (2012), 2 = Ng (2013), 43 = Rajagopal and Davidar (2013), 44 = Knight and Devi (2014), 45 = Ramanujam et al. (2014), 46 = Mogalekar and Jawahar (2015), 47 = Ramanujam (2015).

Assessment of the fishery status of freshwater fishes of Tamil Nadu revealed existence of 132 species worth for capture fishery, 132 species worth for ornamental fishery, 50 species worth for culture fishery and 28 species worth for gamefish fishery (Table 2). Collection of fishes from wild to develop the brood stock for captive breeding, seed production, experimental aquaculture of fast growing fishes and colourful fishes for aquarium purposes could be potential source of income in the rural areas of Tamil Nadu.

Table 3 Diversity of freshwater fishes of Tamil Nadu.

Order	Family	Number of Genera	Number of Species
Anguilliformes	Anguillidae	1	2
Beloniformes	Adrianichthyidae	1	3
	Belonidae	1	1
	Hemiramphidae	1	1
Clupeiformes	Clupeidae	2	2
Cypriniformes	Balitoridae	1	1
	Cobitidae	1	2
	Cyprinidae	33	111
	Nemacheilidae	4	11
Cyprinodontiformes	Aplocheilidae	1	4
	Poeciliidae	3	4
Elopiformes	Megalopidae	1	1
Gonorynchiformes	Chanidae	1	1
Mugiliformes	Mugilidae	4	6
Osteoglossiformes	Notopteridae	1	1
Perciformes	Ambassidae	3	4
	Anabantidae	1	1
	Badidae	1	1
	Channidae	1	4
	Cichlidae	4	7
	Gobiidae	6	7
	Nandidae	1	1
	Osphronemidae	3	5
	Pristolepididae	1	1
	Salmoniformes	Salmonidae	1
Siluriformes	Bagridae	3	13
	Clariidae	1	5
	Heteropneustidae	1	3
	Loricariidae	1	2
	Pangasiidae	1	1
	Schilbeidae	2	3
	Siluridae	3	5
	Sisoridae	1	4
Synbranchiformes	Mastacembelidae	2	6
Total = 13	Total = 34	Total = 93	Total = 226

4 Conclusions

Tamil Nadu has rich freshwater fish genetic resources constitute about 24.30 % to the total freshwater fish diversity of India, about 43.11 % to the endemic freshwater fishes of India and 40.09 % to the total endemic fish diversity of Western Ghats of India. Proper conservation strategies need to be proposed, as 15.41 % of species facing the threat of endangerment.

References

- Ali A, Dahanukar N, Philip S, Krishnakumar K, Raghavan R. 2014. Distribution, threats and conservation status of the Wayanad Mahseer, *Neolissochilus wynaadensis* (Day, 1873) (Teleostei: Cyprinidae): an endemic large barb of the Western Ghats, India. *Journal of Threatened Taxa*, 6(5): 5686-5699
- Arunachalam M, Manimekalan A. 2000. Economically important and cultivable fishes of the Nilgiri biosphere reserve. In: *Endemic fish diversity of Western Ghats* (Ponniah AG, Gopalakrishnan A, eds). 237-239, NBFGR-NATP Publication, India
- Arunachalam M, Sankaranarayanan A. 1999. Fishes of Gadana River in Kalakkad Mundanthurai Tiger Reserve. *Journal of the Bombay Natural History Society*, 96(2): 232-238
- Arunachalam M, Johnson JA. 1999. Record of the Barb *Barbodus carnaticus* (Cyprinidae: Cypriniformes) from the Streams of Eastern Ghats, of Tamil Nadu. *The Journal of the Bombay Natural History Society*, 96(3): 480-481
- Arunachalam M. 2000. Assemblage structure of stream fishes in the Western Ghats (India). *Hydrobiologia*, 430: 1-31
- Arunachalam M, Johnson JA, Manimekalan A. 1999. New record of *Heteropneustes microps* (Gunther) (Clariidae: Heteropneustidae) from Western Ghats Rivers, India. *Journal of the Bombay Natural History Society*, 96(2): 330-332
- Bai MM. 1993. Ecological studies on the river Cooum with special reference to pollution. *Records of the Zoological Survey of India*, 93 (3-4): 393-416
- Balasundaram C, Dheepa A, Marippan P. 1999. Fish diversity in Grand Anicut, Cauvery River (Tiruchirapalli District, Tamil Nadu). *Zoos' Print Journal*, 14 (8): 87-88
- Balasundaram C, Arumugam R, Murugan PB. 2001. Fish diversity of Kolli Hills, Western Ghats, Salem District, Tamil Nadu. *Zoos' Print Journal*, 16(1): 403-406
- Dahanukar N, Raghavan R. 2013. Freshwater fishes of the Western Ghats: Checklist v1.0 August 2013. *Min Newsletter of the IUCN-SSC/WI Freshwater Fish Specialist Group - South Asia and the Freshwater Fish Conservation Network of South Asia* | #01: August 2013, 6-16 (www.zoosprint.org/Newsletters/Min.htm).
- Daniels RJR, Rajagopal B. 2004. Fishes of Chembarampakkam Lake - a wetland in the outskirts of Chennai. *Zoos' Print Journal*, 19: 1481-1483
- Devi KR. 1992a. Fishes of Kalakad Wildlife Sanctuary, Tirunelveli district, Tamil Nadu, India, with a redescription of *Horallabiosa joshu* Al Silas. *Records of the Zoological Survey of India*, 92(1-4): 193-209
- Devi KR, Raghunathan MB. 1999a. Report on the ichthyofauna of North Arcot District, Tamilnadu. *Records of the Zoological Survey of India*, 97(I): 163-177
- Devi KR, Raghunathan MB. 1999b. *Heteropneustes longipectoralis* (Siluriformes: Heteropneustidae) a new species from the Anamalai Hills, in the Western Ghats. *Records of the Zoological Survey of India*, 97(3): 109-115
- Devi KR, Indra TJ. 1999. Some observations on *Garra hughii* Silas from Anamalai Hills, Western Ghats, Tamil Nadu, India. *Records of the Zoological Survey of India*, 97(4): 53-59
- Devi KR, Indra TJ. 2000. Freshwater ichthyofaunal resources of Tamil Nadu. 77-97. In: *Endemic Fish Diversity of Western Ghats* (Ponniah AG, Gopalakrishnan A, eds). 77-97, NBFGR – NATP Publication – 1, India
- Devi KR. 1992. On a small collection of fish from Javadi Hills, North Arcot district, Tamil Nadu. *Records of the Zoological Survey of India*, 91(3-4): 353-360
- Devi KR. 1992b. *Garra kalakadensis*, a new Cyprinid fish from Kalakad Wildlife Sanctuary, Tirunelveli District, Tamil Nadu. *Records of the Zoological Survey of India*, 91(2): 239-245

- Devi KR, Ilango K. 1993. On a collection of fish from Pudukkottai District, Tamil Nadu. Records of the Zoological Survey of India, 93(1-2): 241-251
- Devi KR, Raghunathan MB. 1999. The Ichthyofauna of Dharmapuri District, Tamilnadu. Records of the Zoological Survey of India, 97(Part-I): 145-162
- Devi KR, Indra TJ, Raghunathan MB. 2007. Ichthyofauna of Indira Gandhi Wildlife Sanctuary, Tamil Nadu. Records of the Zoological Survey of India. Miscellaneous Publication Occasional Paper No. 277, 1-42
- Devi KR, Indra TJ, Raghunathan MB. 2009. Pisces (Freshwater). In: Editor-Director (Eds). Fauna of Tamil Nadu, Zoological Survey of India: State Fauna Series, 17(1): 155-163
- Devi KR, Indra TJ, Raghunathan MB, Bai MM. 1999. On a collection of fish fauna from Chennai, Chengleput and Thiruvallur districts of Tamil Nadu. Records of the Zoological Survey of India, 97(4): 151-166
- Dhinakaran A, Alikunhi NM, Chinnathambi S, Sornam R, Kalaiselvam M, Rajasekaran R, Manivannan S. 2011. Assessment of Morphometric and Genetic Variation in Three Freshwater Fish Species of the Genus *Garra* (Osteichthyes: Cyprinidae). Notulae Scientia Biologicae, 3(1):12-16
- Eschmeyer WN, Fricke R, van der Laan R. (eds.) 2016. Catalog of fishes: genera, species, references. Electronic version. <http://researcharchive.calacademy.org/research/ichthyology/catalog/fishcatmain.asp> (Accessed on 06-08 May 2017)
- Froese R, Pauly D. (Eds.) 2013. FishBase. World Wide Web electronic publication. Version (02/2013). www.fishbase.org (Accessed on 06-08 May 2017)
- Government of Tamilnadu. 2015. Fisheries Department, Inland Fisheries. <http://www.fisheries.tn.gov.in/Inland-main.html> (Accessed on 25 October 2015)
- Harant R, Bohlen J. 2010. *Enobarbus* is a synonym of *Lepidocephalichthys* (Osteichthyes, Cobitidae). Journal of Fish Biology, 77: 2443–2453
- Indra TJ, Devi KR. 1990. On a small collection of fish from Thekkady Wildlife Reserve, Western Ghats. Records of the Zoological Survey of India, 87(3): 249-257
- Indra TJ, Bai MM. 1999. A note on a small collection of fishes from Pennaiyar River, Tamil Nadu. Records of the Zoological Survey of India, 97(3): 231-233
- Indra TJ. 1991. Report on the ichthyo fauna of Anna and Madurai districts Tamil Nadu. Records of the Zoological Survey of India, 89(1-4): 233-243
- Indra TJ. 1992. Report on the Ichthyofauna of Kanyakumari district, Tamilnadu. Records of the Zoological Survey of India, 92(1-4): 177-192
- Indra TJ. 1992a. Report on the Ichthyofauna from the mapping survey of Kamarajar and Pasumpon Ramalingam Districts (Tamil Nadu). Records of the Zoological Survey of India, 90(1-4): 61-67
- Indra TJ. 1994. On a collection of fishes from Tanjavur and Trichy districts, Tamilnadu. Records of the Zoological Survey of India, 94(2-4): 403-433
- Jayaram KC, Venkateswarlu T, Raghunathan MB. 1982. A survey of the Cauvery River system with a major account of its fish fauna. Records of the Zoological Survey of India. Miscellaneous Publication Occasional Paper No. 36,115
- Jerdon TC. 1849. On the freshwater fishes of southern India. Madras Journal of Literature and Science, 15(1849): 302-346
- Jeyaraj CT. 2000. Biodiversity of fish species in the lotic habitats of Kanyakumari district. In: Endemic Fish Diversity of Western Ghats (Ponniiah AG, Gopalakrishnan A, eds). 177-179, NBFGR-NATP Publication-1, India
- Johnson JA, Arunachalam M. 2009. Diversity, distribution and assemblage structure of fishes in streams of southern Western Ghats, India. Journal of Threatened Taxa, 1(10): 507-513

- Karmakar AK, Das A. 2005. Endemic Freshwater Fishes of India. The Records of the Zoological Survey of India, Occ. Paper No. 230, 1-125
- Knight JDM, Devi KR. 2010. Species persistence: a re-look at the freshwater fish fauna of Chennai, India. *Journal of Threatened Taxa*, 2(12): 1334-1337
- Knight JDM, Devi KR. 2014. *Chela macrolepis*, a new species of cyprinid fish from southern India (Teleostei: Cyprinidae). *Ichthyological Exploration of Freshwaters*, 25(2): 159-166
- Knight JDM. 2010. On a record of *Puntius gelius* (Hamilton, 1822) (Teleostei: Cypriniformes: Cyprinidae) from Tamil Nadu. *Journal of Threatened Taxa*, 2(3): 786-787
- Knight JDM, Rai A, d'Souza RKP. 2013. On the identities of *Barbus mussullah* Sykes and *Cyprinus curmuca* Hamilton with notes on the status of *Gobio canarensis* Jerdon (Teleostei: Cyprinidae). *Zootaxa*, 3750(3): 201-215
- Knight JDM, Devi KR, Indra TJ, Arunachalam M. 2012. A new species of barb *Puntius nigripinnis* (Teleostei: Cyprinidae) from southern Western Ghats, India. *Journal of Threatened Taxa*, 4(3): 2409-2416
- Kottelat M. 2013. The fishes of the inland waters of Southeast Asia: a catalogue and core bibliography of the fishes known to occur in freshwaters, mangroves and estuaries. *Raffles Bulletin of Zoology, Supplement 27*: 1-663
- Misra KS. 1938. On a collection of fish from the Eastern Ghats. *Records of the Indian Museum*, 40: 255-264
- Mogalekar HS, Jawahar P. 2015. Freshwater ornamental fish diversity of Tamil Nadu. *Journal of the Inland Fisheries Society of India*, 47(2): 27-37
- Ng HH. 2013. *Ompok karunkodu*, a new catfish (Teleostei: Siluridae) from southern India. *Zootaxa*, 3694(2): 161-166
- Pethiyagoda R, Meegaskumbura M, Maduwage K. 2012. A synopsis of the South Asian fishes referred to *Puntius* (Pisces: Cyprinidae). *Ichthyological Exploration of Freshwaters*, 23(1): 69-95
- Raghunathan MB, Devi KR, Indra TJ. 2005. Studies on the ichthyofauna of sacred groves in Kancidpuram district, Tamil Nadu. *Records of the Zoological Survey of India*, 104(1-2): 59-69
- Raghunathan MB, Devi KR, Indra TJ. 2008. Fish faunal diversity in a paddy field from Tamilnadu. *Records of the Zoological Survey of India*, 108(2): 51-65
- Raj SB. 1916. Notes on the freshwater fish of Madras. *Records of the Indian Museum XII, Part VI*: 249-294
- Rajagopal B, Davidar P. 2013. Distribution of catfishes in wetlands of two flood plain districts in Tamil Nadu, India. *Journal of Threatened Taxa*, 5(17): 5277-5282
- Rajan S. 1955. Notes on a collection of fish from the headwaters of the Bhavani River, south India. *Journal of the Bombay Natural History Society*, 53(1): 44-48
- Ramanujam ME. 2015. A preliminary checklist of the fishes of Yercaud, Shevroy Hills, Eastern Ghats, Tamil Nadu, southern India. *Journal of Threatened Taxa*, 7(9): 7595-7601
- Ramanujam ME, Devi KR, Indra TJ. 2014. Ichthyofaunal diversity of the Adyar Wetland complex, Chennai, Tamil Nadu, southern India. *Journal of Threatened Taxa*, 6(4): 5613-5635
- Singer RA, Page LM. 2015. Revision of the Zipper Loaches, *Acanthocobitis* and *Paracanthocobitis* (Teleostei: Nemacheilidae), with Descriptions of Five New Species. *Copeia*, 103(2): 378-401
- Sreenivasan A. 1976. Fish production and fish population changes in some south indian reservoirs. *Indian Journal of Fisheries*, 23(1 and 2): 134-152
- Sreenivasan A. 1998. Fifty years of reservoir fisheries in Mettur dam, India: Some lessons. *NAGA*, 21(4): 4-7
- Talwar PK, Jhingran AG. 1991. *Inland Fishes of India and Adjacent Countries (Vol 1 and 2)*. Oxford and IBH Publishing Co., New Delhi, India