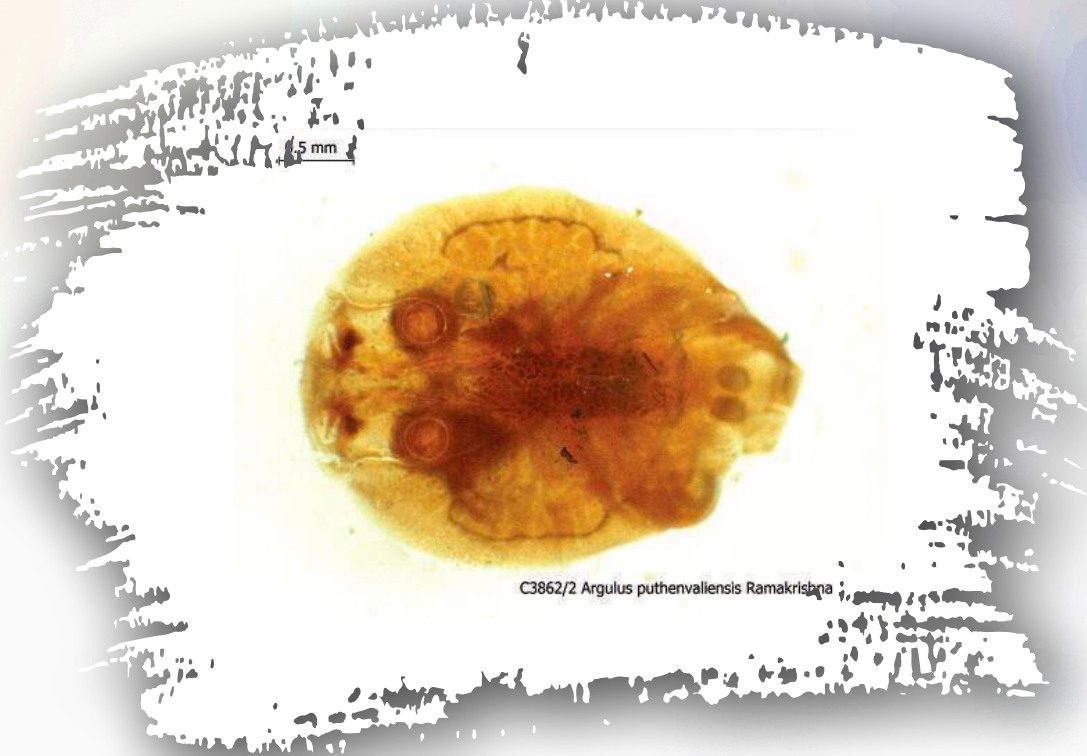


# FAUNA OF INDIA CHECKLIST

JULY, 2024

ONLINE VERSION 1.0



## ARTHROPODA: CRUSTACEA: OLIGOSTRACA: ICTHYOSTRACA: BRANCHIURA (Fish Lice)

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**Key words:** Crustacea: Oligostraca: Icthyostraca: Branchiura, Argulus, Fish Lice, India, checklist.

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**Comments on the checklist:**

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the checklist to**

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**ZOOLOGICAL SURVEY OF INDIA**  
Ministry of Environment, Forest & Climate Change

# ARTHROPODA: CRUSTACEA: OLIGOSTRACA: ICTHYOSTRACA: BRANCHIURA (Fish Lice)

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## Introduction

The Subclass Branchiura is a group of primarily freshwater parasitic crustaceans commonly known as 'carp-lice' or 'fish lice' and are primarily ectoparasites of fishes but occasionally live on amphibians or invertebrates, and they can move about freely on their hosts (Poly, 2008, Moller, 2015, Dev Roy, 2015). They are obligate parasites and utilize many different fish hosts from a wide range of families, e.g. carps, sticklebacks, perch, roach, and even predators such as pike (Moller, 2015). They occasionally increase in number and cause fish mortality in aquaculture operations, aquaria of ornamental fishes and rarely in wild populations (Nandi and Das, 1991, Dev Roy, 2015, Saha, 2016). The subclass Branchiura contains a single family, the Argulidae, and four valid genera namely *Argulus* Müller, *Chonopeltis* Thiele, *Dipteropeltis* Calman, and *Dolops*.

**Global diversity:** Globally the subclass Branchiura encompasses 156 species under four genera and a single family Argulidae of the Order Arguloida . The genus *Dipteropeltis* contains two valid species and occurs in South America; *Chonopeltis* has 12 valid species and is found only in Africa; and *Dolops*, with 14 valid species, has a Gondwanan distribution (South America, Africa, and Tasmania; Fryer 1969; Poly, 2009; Worms, 2023). The genus *Argulus* contains about 138 valid species and occurs on or around all continents, except Antarctica, in marine, estuarine, and freshwater habitats.

**Diversity in India:** In India the subclass Branchiura is represented by a single genus *Argulus* with 17 species and one subspecies.

## Diversity in States (Table)

Sl. No.	State/Union Territory	No. Species	No. Endemic Species
1	Andhra Pradesh	1	1
2	Arunachal Pradesh	0	0
3	Assam	0	0
4	Bihar	2	1
5	Chhattisgarh	0	0
6	Gujarat	0	0
7	Goa	0	0
8	Haryana	0	0
9	Himachal Pradesh	1	0

Sl. No.	State/Union Territory	No. Species	No. Endemic Species
10	Jharkhand	0	0
11	Karnataka	2	1
12	Kerala	1	1
13	Madhya Pradesh	2	1
14	Maharashtra	1	1
15	Manipur	0	0
16	Meghalaya	0	0
17	Mizoram	0	0
18	Nagaland	0	0
19	Odisha	0	0
20	Punjab	5	0
21	Rajasthan	0	0
22	Sikkim	0	0
23	Tamil Nadu	5	4
24	Telangana	0	0
25	Tripura	0	0
26	Uttarpradesh	0	0
27	Uttarakhand	0	0
28	West Bengal	7	2
29	Andaman & Nicobar	0	0
30	Chandigarh	0	0
31	Dadra Nagar Haveli, Daman & Diu	0	0
32	Delhi	0	0
33	Jammu & Kashmir	1	0
34	Ladakh	0	0
35	Lakshadweep	0	0
36	Puducherry	0	0

**Endemism:** Among the 17 species and one sub species of Indian Argulids 10 species and one subspecies are exclusively available only in India (Dev Roy, 2015).

**Habitat:** Primarily they are ectoparasites of fishes but occasionally live on amphibians or invertebrates.

**Ecological Significance:** They mostly infect fishes of culture pond and aquarium species.

**Human Significance:** They damage the commercially important edible and aquarium fishes. They are known to affect both wild and cultured fishes and cause fish mortality which leads to the economic loss in fishery industries.

**Protected Species as per WPA (2022):** Nil

**Threatened species:** Species from India are not assessed for IUCN threat categories.

**Protected Species as per WPA (2022):** Branchiurans are not listed under any schedules of Wildlife Protection Act (2022).

**Species under CITES:** Branchiurans are not listed under any appendices of CITES.

**Invasive alien species:** No Argulid species were reported as invasive in Indian waters.

**Gap areas:** The Branchiurans are not explored from many states. Out 36 states and Union Territories it is reported only from 10 states.

### Systematic list:

**Phylum ARTHROPODA**

**Subphylum CRUSTACEA**

**Superclass ICTHYOSTRACA**

**Subclass BRANCHIURA**

**Order ARGULOIDA**

**Superfamily ARGULOIDEA**

**Family ARGULIDAE**

Genus *Argulus* Muller O.F., 1785

1. *Argulus bengalensis* Ramakrishna, 1951\*
2. *Argulus boli* Tripathi, 1975\*
3. *Argulus cauveriensis* Thomas and Devaraj, 1975\*
4. *Argulus coregoni* Thorell, 1865 -WB
5. *Argulus fluviatilis* Thomas & Devaraj, 1975\*
6. *Argulus foliaceus* (Linnaeus, 1758)
7. *Argulus indicus* Weber, 1892
8. *Argulus japonicas* Thiele, 1900
9. *Argulus krishnagiriensis* Omprakasam and Manohar, 1992\*
10. *Argulus mangalorensis* Natarajan, 1982 (Back Water)\*
11. *Argulus monodi* Fryer, 1959 – HP, Punjab
12. *Argulus parsi* Tripathi, 1975\*
13. *Argulus puthenveliensis* Ramakrishna, 1959\*
14. *Argulus quadristriatus* Devaraj & Ameer Hamsa, 1977 (Marine)\*
15. *Argulus schoutedeni* Monod, 1928 - Punjab
16. *Argulus siamensis* Wilson C.B., 1926
17. *Argulus siamensis peninsularis* Ramakrishna, 1951\*
18. *Argulus vittatus* (Rafinesque-Schmaltz, 1814) (Marine)\*

(\*species available only in India)



*Argulus puthenveli* Ramakrishna, 1959

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