

## **INDEX – CATALOGUE AND BIBLIOGRAPHY OF CESTODE PARASITES FROM FRESHWATER FISHES OF INDIA**

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### **INTRODUCTION**

Southwell (1930) published under the "*Fauna of British India*" series a comprehensive account of cestode parasites of India including Burma and Ceylon. Since then there have been a number of publications on fish cestodes. In recent years there has been an avalanche of new species and genera emanating from Indian region but these are mostly in such journals which are not easily accessible to workers in this field. It was, therefore, felt that a catalogue of these publications will be useful for the information needed by the workers on systematics and taxonomy of the cestodes of fresh water fishes. With this end in view the present "Index Catalogue" has been prepared.

While compiling this catalogue it was felt that a lot of confusion has crept in with regard to the validity of many species and genera described since the publication of *Fauna of British India* Volume. It is hoped that this catalogue will induce workers to take up revisionary work in this group to clear the existing confusion.

To prepare this index catalogue and bibliography *Helminthological abstract*, *Index catalogue of Medical and Veterinary Zoology* and other related journals were consulted. Both species of parasites and hosts are arranged in systematic order. Current valid names of fish hosts with their synonyms and in some cases English names are included in parenthesis. The species are arranged in alphabetical order under each genus. The authorship and date of nominal subfamily has been changed according to Rules.

In spite of my efforts few reprints and journals could not be available to me. I hope the workers in this field would draw my attention to errors and omissions, if any, so that an improved taxonomic information could be prepared for future use.

### **SPECIES CATALOGUE**

Phylum	PLATYHELMINTHES
Class	CESTOIDAE Rudolphi, 1808
Subclass	CESTODA Carus, 1863
Order	AMPHILINIDEA Poche, 1922
Family	AMPHILINIDAE Claus, 1879
Subfamily	AMPHILININAE Poche, 1922
Genus	Gephyrolina Poche, 1926

1. **Gephyrolina paragonopora** (Woodland, 1923)

1923. *Amphilina paragonopora* Woodland, *Quart. J. Micr. Sc.*, 67 : 47-84.

*Host* : *Mystus aor* (= *Aorichthys aor*), *Mystus seenghala* (= *Aorichthys seenghala*),  
*Bagarius yarrelli* (= *Bagarius bagarius*).

*Distribution* : Uttar Pradesh : Allahabad (R. Ganga & Jamuna); Punjab.

Order CARYOPHYLLIDEA Van Beneden  
(in Carus, 1963)

Family LYTOCESTIDAE Hunter, 1927;  
Wardle and McLeod, 1952.

(= Subfamily Lytocestinae Hunter, 1927)

Genus *Bovienia* Fuhrmann, 1931

2. ***Bovienia nagpurensis*** Murhar, 1977

1977. *Bovienia nagpurensis* Murhar, *Proc. 65th Indian Sc. Congr.*, Part. III : 314-315.

*Host* : *Clarias batrachus*

*Distribution* : Maharashtra : Nagpur.

*Remarks* : The species is known only through abstract.

3. ***Bovienia serialis*** (Bovien, 1926) Fuhrmann, 1931

1926. *Caryophyllaeus serialis* Bovien, *Vidensk. Medd. Dansk natur. Forening.* : Kobenhavn  
82 : 157-181.

1972. *Bovienia serialis* : Mackiewicz and Murhar, *J. Helminth.* 46 ; 399-405.

*Host* : *Clarias batrachus*.

*Distribution* : Maharashtra Nagpur.

Genus *Crescentovitus* Murhar, 1963

4. ***Crescentovitus biloculus*** Murhar, 1963

1963. *Crescentovitus biloculus* Murhar. *Parasitology*, 53 : 413-418.

*Host* : *Heteropneustes fossilis*.

*Distribution* : Maharashtra : Nagpur

Genus *Djombangia* Bovien, 1926

5. ***Djombangia caballeroi*** Sahay and Sahay, 1977

1977. *Djombangia caballeroi* Sahay and Sahay, *Excreta Parasitologia Enmemoria Doctor  
Eduardo Caballero Y. Caballero* : 371-376.

1985. *Djombangia elariae* Kundu et al. *Bull. zool. Surv. India*, 7(2) : 151-154.

*Host* : *Heteropneustes fossilis*.

*Distribution* : Bihar : Ranchi.

**Remarks :** Mackiewicz (1981) suggested re-evaluation of this species as it was described from flattened material. Kundu and (1991) Hafeezullah (1986) considered it to be synonym of *D. penetrans* Bovien 1926.

6. **Djombangia indica** Satpute and Agarwal, 1974

1974. *Djombangia indica* Satpute & Agarwal, *Indian J. Exp. Biol.* 12(4) : 373-375.

**Remarks :** Mackiewicz (1981) suggested comparison of *D. indica* with *D. caballeri* before assessment of the status of both the species. Kundu (1991) and Hafeezullah (1986) considered conspecific with *D. penetrans* Bovien, 1926 in view of the variability of the characters taken for differentiating all the above three species of genus *Djombangia*.

Genus **Introvertus** Satpute and Agarwal, 1980

7. **Introvertus raipurensis** Satpute and Agarwal, 1980

1980. *Introvertus raipurensis* Satpute & Agarwal, *Proc. Indian Acad. Parasit.* 1(2) : 17-19.

**Host :** *Clarias batrachus*

**Distribution :** Madhya Pradesh : Raipur.

Genus **Lucknowia** Gupta, 1961

8. **Lucknowia fossilis** Gupta, 1961

1961. *Lucknowia fossilis* Gupta, *Proc. Helminth. Soc. Wash.*, 28 : 38-50.

**Host :** *Heteropneustes fossilis*.

**Distribution :** Uttar Pradesh : Lucknow (R. Gomti).

**Remarks :** Mackiewicz (1981) pointed out that some of the specimens are partially decomposed. He also did not confirm the existence of post ovarian viteline follicles and polar filament of the egg.

Agarwal (1985) remarks that post ovarian vitelline follicles are characteristic of species of genus *lucknowia*.

9. **Lucknowia indica** Niyogi, Gupta and Agarwal, 1982

1982. *Lucknowia indica* Niyogi et al. *Proc. Indian Acad. parasit.* 3(1/2) : 17-22.

**Host :** *Clarias batrachus*

**Distribution :** Madhya Pradesh : Raipur.

**Remarks :** Polar filament is absent in the egg of *L. indica*.

Genus **Lytocestoides** Baylis, 1928

10. **Lytocestoides aurangabadensis** Shinde, 1970

1970. *Lytocestoides aurangabadensis* Shinde, *Marathwada Univ. J. Sci.*, 9 : 173-178.

1970. *Lytocestoides aurangabadensis minor* Shinde, *Marathwada Univ. J. Sc.*, 9 : 173-179.

1970. *Lytocestoides aurangabadensis minuta* Shinde, *Marathwada Univ. J. Sc.*, 9 : 173-178.

**Host** *Barbus collus* (= *Puntius kolus*), *Labeo calbasu*.

**Distribution** Maharashtra Aurangabad.

*Remarks* : *L. aurangabadensis* may be considered as species inquerendo. The material was examined by Mackiewicz (1981) but correct placing could not be made due to bad condition of specimen.

11. ***Lytocestoides fossilis* Kanth, Sinha & Srivastava, 1984.**

1984. *Lytocestoides fossilis* Kanth et al. *Indian J. Helminth.* (N.S.), 1(1/2) : 26-29.

*Host* : *Heteropneustes fossilis*.

*Distribution* : Bihar : Darbhanga.

12. ***Lytocestoides leptocephali* Kundu, 1985**

1985. *Lytocestoides leptocephali* Kundu, *Bull. zool. Surv. India*, 7(2-3) : 285-290.

*Host* : *Lepidocephalichthys guntea*

*Distribution* : West Bengal Garapota, 24-Parganas (North) dist.

**Genus *Lytocestus* Cohn, 1908**

13. ***Lytocestus birmanicus* Lynsdale, 1956**

1956. *Lytocestus birmanicus* Lynsdale. *J. Helminth.*; 30 : 87-96.

1988. *Lytocestus birmanicus* : Chakravarty and Tandon, *Indian J. Helminth* (N.S.) 5(1) : 37-54.

*Host* *Clarias batrachus*.

*Distribution* : Northwestern region of India.

*Remarks* Originally described by Lynsdale (1956) from Rangoon, Burma.

14. ***Lytocestus filiformis* (Woodland, 1923) Fuhrmann and Baer, 1925**

1923. *Caryophyllaeus filiformis* Woodland, *Quart. J. Micr. Sc.* 67 : 435-472.

1925. *Lytocestus filiformis* : Fuhrmann and Baer *Proc. zool. Soc. London* : 79-100.

1988. *Lytocestus filiformis* : Chakravarty and Tandon, *Indian J. Helminth* (N.S.) 5(1) : 37-59.

*Host* *Clarias batrachus*.

*Distribution* Northeastern region of India.

*Remark* Woodland (1923) described this species as *Caryophyllaeus filiformis* from a marmyrid fish host, *Mormyrus cashive* of river Nile at Khartoum. Fuhrmann and Baer (1925) transferred it to the genus *Lytocestus*.

15. ***Lytocestus indicus* Moghe, 1925**

1925. *Caryophyllaeus indicus* Moghe, *Parasitology* 17 : 232-235.

*Host* : *Clarias batrachus*.

*Distribution* : Maharashtra : Nagpur.

16. ***Lytocestus longicollis* Ramadevi, 1973**

1973. *Lytocestus longicollis* Ramadevi, *J. Helminth.* 47(4) : 415-420.

*Host* : *Clarias batrachus*.

*Distribution* Andhra Pradesh Visakapatnam.

17. ***Lytocestus marathwadensis* Shinde and Phad, 1986**

1986. *Lytocestus marathwadensis* Shinde and Phad, *Riv. Parasitol* 47(3) : 297-298.

*Host* : *Clarias batrachus*.

*Distribution* : Maharashtra : Marathwada.

Genus ***Moravekia* Sahay & Sahay, 1976**18. ***Moravekia chotanagpurensis* Sahay and Sahay, 1976**

1976. *Moravekia chotanagpurensis* Sahay, and Sahay, *First National convention of Indian Helminthologist*, Bhubaneswar. Abstract : 54-55.

*Host* : *Clarias batrachus*.

*Distribution* : Bihar : Chotanagpur.

*Remarks* : The genus and species are known from the abstract only.

Genus ***Neolytocestus* Sahay and Sahay, 1976**19. ***Neolytocestus vitellodiscontinutus* Sahay and Sahay, 1976**

1976. *Neolytocestus vitellodiscontinutus* Sahay and Sahay, *First national convention of Indian Helminthologist*, Bhubaneswar, Abstract : 53-54.

*Host* : *Clarias batrachus*.

*Distribution* : Bihar : Chotanagpur.

*Remark* : The genus and species are known from the abstract only.

Family **CAPINGENTIDAE** Wardle and Mcleod, 1952Genus ***Adenoscolex* Fotedar, 1958**20. ***Adenoscolex kashmirensis* (Mehra, 1930)**

1930. *Caryophyllaeus kashmirensis* Mehra, *Proc. 17th Indian Sci. Congr. Pt. 3* : 447.

*Host* : *Oriinus sinuatus* (= *Schizothorax sinuatus*)

*Remarks* : Mehra (1930) described *Caryophyllaeus kashmirensis* from *Schizothorax micropogon* in abstract form. Mackiewicz (1981) put it as sp. inq. Agarwal (1985) considered it conspecific with *Adenoscolex oreini* Fotedar, 1958 but wrongly gave priority to Fotedar's specimens. The synonymy is accepted here and *Adenoscolex kashmirensis* (Mehra, 1930) is considered the type of the genus according to rules.

Genus ***Capingentoides* Gupta, 1961**

Syn. *Pseudocapingentoides* Verma, 1971

21. ***Capingentoides batrachii* Gupta, 1961**

1961. *Capingentoides batrachii* Gupta, *Proc. Helminth. Soc. wash.*, 28 : 38-50.

*Host* : *Clarias batrachus*.

*Distribution* : Assam : Guwahati (R. Brahmaputra).

**22. Capingentoides fotedari Gupta and Parmar, 1985.**

1985. *Capingentoides fotedari* Gupta and Parmar, *Indian J. Helminth.*, 37(1) : 31-35.

*Host* : *Clarias batrachus* (Bloch).

*Distribution* : Uttar Pradesh : Lucknow.

**23. Capingentoides gorakhnathai Agarwal and Singh, 1985**

1985. *Capingentoides gorakhnathai* Agarwal and Singh, *Indian J. Helminth.*, (N.S.) 2(1-2) : 81-84.

*Host* : *Clarias batrachus*.

*Distribution* : Uttar Pradesh : Gorakhpur.

**24. Capingentoides singhi Verma, 1971**

1971. *Capingentoides singhi* Verma, *Indian J. Helminth.*, 23(1) : 71-80.

1971. *Pseudocapingentoides indica* Verma, *Indian J. Helminth.*, 23(1) : 71-80.

1980. *Capingentoides heteroneusti* Gupta and Sinha, *Indian J. Helminth.* 31(1) : 65-68.

1985. *Capingentoides singhi* : Agarwal, *Indian Rev. Life Sci.* 5 : 139-161.

*Host* : *Heteropneustes fossilis*.

*Distribution* : Uttar Pradesh Lucknow.

*Remarks* Agarwal (1985) considered *Pseudocapingentoides* as synonym of *Capingentoides*, *Pseudocapingentoides indica* and *Capingentoides heteropneusti* as synonym of *Capingentoides singhi*.

**25. Capingentoides moghei Pandey, 1973**

1973. *Capingentoides moghei* Pandey, *Indian J. zool.*, 14(3) : 221-226.

*Host* : *Channa striatus*.

*Distribution* : Uttar Pradesh : Ballia Dist.

*Remarks* : According to Agarwal (1985) report of the occurrence of *Capingentoides moghei* in *Channa striatus* is perplexing.

**Genus Pseudocaryophyllaeus Gupta, 1961.**

**26. Pseudocaryophyllaeus indica Gupta, 1961.**

1961. *Pseudocaryophyllaeus indica* Gupta, *Proc. Helminth., Soc. Wash.*, 28 : 38-50.

*Host* : *Clarias batrachus*.

*Distribution* : Assam Guwahati (R. Brahmaputra).

**27. Pseudocaryophyllaeus mackiewiczzi Gupta and Parmar, 1984**

1984. *Pseudocaryophyllaeus mackiewiczzi* Gupta and Parmar, *Indian J. Helminth.*, 34(2) : 136-138.

*Host* : *Heteropneustes fossilis*.

*Distribution* : Uttar Pradesh Gorakhpur.

**Genus Pseudolytocestus Hunter, 1929.**

**28. Pseudolytocestus clariae Gupta, 1961**

1961. *Pseudolytocestus clariae* Gupta, *Proc. Helminth., Soc. Wash.*, **28** : 38-50.

*Host* : *Clarias batrachus*

*Distribution* Assam Guwahati (R. Brahmaputra).

**29. Pseudocaryophyllaeus ritai Gupta and Singh, 1983.**

1983. *Pseudocaryophyllaeus ritai* Gupta and Singh, *Indian J. Helminth.*, **34**(1) : 11-14.

*Host* *Rita rita*.

*Distribution* Uttar Pradesh : Lucknow.

**Order PSEUDOPHYLLIDEA Carus, 1863**

**Family BOTHRIOCEPHALIDAE Blanchard, 1849**

**Genus Bothriocephalus Rudolphi, 1808**

**Emended Luhe, 1899**

**30. Bothriocephalus teleostei Malhotra, 1984**

1984. *Bothriocephalus teleostei* Malhotra, *Bol. Chile. Parasit.*, **37** : 6-9

*Host* *Barilius bendelisis*, *Barilius bola*, *Garra gotyla gotyla*, *Labeo dero*, *Labeo rohita* and *Schizothorax plagiostomus* (= *Schizothorax richardsoni*).

*Distribution* : Uttar Pradesh : Garhwal Himalayas.

**Family PTYCHOBOTHRIDAE Luhe, 1902**

**Genus Ptychobothrium Loennberg, 1889**

**31. Ptychobothrium chelai Shinde and Deshmukh, 1976**

1976. *Ptychobothrium chelai* Shinde and Deshmukh, *J. Indian Bios. Asso.*, **1**(7-9) : 124-129.

*Host* : *Chela clupeoides* (= *Salmostoma Clupeoides*).

*Distribution* Maharashtra : Aurangabad.

**32. Ptychobothrium clupeodesii Chincholikar, Shinde,  
Deshmukh and Jadav, 1976**

1976. *Ptychobothrium clupeodesii* Chincholikar et al., *Marathwada Univ. J. Sci.*, **8** : 277-280.

*Host* : *Chela clupeoides* (= *Salmostoma Clupeoides*)

*Distribution* : Maharashtra : Aurangabad.

**33. Ptychobothrium cypseluri Rao, 1959.**

1959. *Ptychobothrium cypseluri* Rao, *J. Helminth.*, **33** : 267-272.

1976. *Ptychobothrium cypseluri* : Gupta and Arora, *Riv. Parasit.*, **36**(2/3) : 225-226.

*Host* *Barilius bola*.

*Distribution* Chandigarh : Panchkulas (R. Ghagher).

34. **Ptychobothrium khami** Shinde and Deshmukh, 1975

1975. *Ptychobothrium khami* Shinde and Deshmukh *J. Indian Bios. Asso.*, 1(7-9) : 124-129.

*Host* : *Nemacheilus botia*.

*Distribution* : Maharashtra.

35. **Ptychobothrium nayarensis** Malotra, 1983

1983. *Ptychobothrium nayarensis* Malotra, *Korean, J. Parasit.*, 21(2) : 205-208.

*Host* : *Barilius bola*.

*Distribution* : Uttar Pradesh : Pauri Garhwal, Nayar Dist. (R. East and West).

36. **Ptychobothrium puloi** Shinde and Deshmukh, 1975.

1975. *Ptychobothrium puloi* Shinde and Deshmukh, *Jour. Indian Bio. Assn.*, 1(7-9) : 124-129.

*Host* : *Chela phulo* (= *Salmostoma phulo pulo*)

*Distribution* : Maharashtra : Aurangabad.

Genus *Senga* Dollfus, 193437. **Senga besnardi** Dollfus, 1934.

1934. *Senga besnardi dollfus*, *Bull. Soc. Zool. France.* 60 : 476.

1973. *Senga besnardi* : Ramadevi and Rao, *Rivista Parasit.* 34(4) : 281-286.

1973. *Senga besnardi* : Shinde, *Marathwada Univ. J. Sc. B. Biol. Sci.*, 11(4) : 39-40.

*Host* : *Channa gachua* (= *Channa orientalis*).

*Distribution* : Maharashtra : Aurangabad.

38. **Senga khami** Shinde and Deshmukh, 1980

1980. *Senga khami* Shinde and Deshmukh, *Indian J. Zool.*, 8(1) : 30-33.

*Host* : *Channa marulius*.

*Distribution* : Maharashtra : Aurangabad.

39. **Senga pycnomerus** (Woodland, 1924)

1924. *Bothriocephalus pycnomerus* Woodland, *Parasitology*, 16 : 441.

*Host* : *Channa manulius*.

*Distribution* : Uttar Pradesh : Allahabad.

*Remarks* : Dollfus (1934) placed *Pycnomerus* with the genus *Senga*.

40. **Senga punctati** Gupta and Sina, 1980

1980. *Senga punctati* Gupta and Sina, *Indian J. Helminth.*, 32(2) : 124-128.

*Host* : *Channa punctatus*.

*Distribution* : Uttar Pradesh : Lucknow.



**41. Senga ophiocephalina (Tseng, 1933)**

1913. *Bothriocephalus (Ancistrocephalus) polyptera* Southwell *Rec. Indian Mus.*, 9 : 79-103.

*Host* : *Channa striatus*, *Labeo roita*.

*Distribution* : West Bengal.

**42. Senga lucknowensis Jori, 1956**

1956. *Senga lucknowensis* Johhri, *Curr. Sci.* 25 : 193-195.

*Host* : *Mastacembelus armatus*, *Channa punctatus*, *Bagarius yarelli* (= *Bagarius bagarius*).

*Distribution* : Uttar Pradesh : Lucknow.

**43. Senga visakhapatnamensis Ramadevi and Rao, 1973.**

1973. *Senga visakhapatnamensis* Ramadevi and Rao, *Rev. Parasit.* 34(4) : 281-286.

*Host* : *Optlocephalus punctatus* (= *Canna punctatus*).

*Distribution* : Andhra Prades : Visakapatnam.

**44. Senga gangesii Gairola and Malhotra, 1986**

1986. *Senga gangesii* Gairola and Malhotra, *Japh. J. Parasitol.*, 35(6) : 471-474.

*Host* : *Mystus vittatus*.

*Distribution* : Uttar Pradesh : R. Ganges.

**45. Senga vittati Gairola and Malhotra, 1986.**

1986. *Senga vittati* Gairola and Malotra, *Acta Parasitol. Litu.* 22 : 92-96.

*Host* : *Mystus vittatus*.

*Distribution* : Uttar Pradesh : R. Ganges.

**46. Senga raoi Majid and Shinde, 1984.**

1984. *Senga raoi* Majid and Shinde, *Indian J. Parasitol* 8(1) : 169-172.

*Host* : *Channa punctatus*.

*Distribution* : Orissa : Puri.

**47. Senga jagannathae Majid and Shinde, 1984**

1984. *Senga jagannathae*, *Indian J. Parasitol*, 8(1) : 169-172.

*Host* : *Channa punctata*.

*Distribution* : Orissa : Puri.

**48. Senga indica Gupta and Parmar, 1985**

1985. *Senga indica*, *Indian J. Helminth*, 37(2) : 96-99.

*Host* : *Mastacembalus armatus* (Lacep).

*Distribution* Uttar Pradesh Lucknow (River Gomati).

Genus *Circumonchobothrium* Shinde, 196849. *Circumonchobothrium ophiocephali*, Schinde, 1968

1968. *Circumonchobothrium ophiocephali*, *Riv. Parasit.* 29 : 111-114.

*Host* : *Ophiocephalus leucopunctatus* (= *Channa punctatus*).

*Distribution* : Maharashtra Aurangabad.

50. *Circumonchobothrium aurangabadensis* Jadav & Shinde, 1976

1976. *Circumonchobothrium aurangabadensis* Jadav and shinde, *J. Indian Bios. Assn.*, 2 : 163-166.

*Host* : *Mastacembelus armatus*.

*Distribution* : Maharashtra Aurangabad.

51. *Circumonchobothrium khami* Shinde, 1976

1976. *Circumonchobothrium khami* Shinde, *Marathwada Univ. J. Sc.*, 16(9) : 129-132.

*Host* : *Ophiocephalus striatus* (= *Channa striatus*).

*Distribution* Maharashtra Aurangabad.

52. *Circumonchobothrium raoii* Shinde and Jadav, 1976

1976. *Circumonchobothrium raoii* Shinde and Jadav, *Marathwada Univ. J. Sc. (Nat. Sc.)* 15(8) : 269-272.

*Host* : *Mastacembelus armatus*.

*Distribution* Maharashtra : Aurangabad.

Genus *Polygonchobothrium* Diesing, 185453. *Polygonchobothrium armati* Malhotra, 1984

1984. *Polygonchobothrium armati* Malhotra, *Korean J. Parasitol*, 22(2) : 238-241.

*Host* : *Mastacembelus armatus*.

*Distribution* Uttar Pradesh : Garhwal Hmalayas.

54. *Polygonchobotrium allabadense* Malotra, 1987

1987. *Polygonchobothrium allabadense* Gairola and Malotra, *Japn. J. Parasitol.*, 36() : 49-5.

*Host* : *Mystus vittatus*.

*Distribution* Uttar Pradesh Allahabad (R. Ganges).

55. *Polygonchobotrium faizabadensis* Singh and Capoor, 1986.

1986. *Polygonchobotrium faizabadensis* Singh and Capoor, *Proc. nat. Symp. New Dimen. parasitol* Allahabad, 134-135.

*Host* : *Channa punctatus*.

*Distribution* Uttar Pradeshh : Faizabad.

*Remarks* Published in abstract only.

Order **DIPHYLLIDEA** Ben. in Carus, 1863.

Family **LIGULIDAE** Claus, 1868 emend. Dubinina, 1959

Subfamily **LIGULINAE** Claus, 1868

Genus **Ligula** Bloch, 1782

**56. Ligula intestinalis (L., 1758)**

1913. *Ligula simplicissima* Southwell, *Rec. Indian Mus.*, 9 : 79-103.

1928. *Ligula intestinalis* : Southwell, *Ann. Trop. Med and Parasitol.*, 22(4) : 419.

1936. *Ligula intestinalis* : Datta, *Rec. Indian Mus.*, 38 : 226.

*Host* : *Labeo calbasu*, *Labeo rohita*, *Catla catla*, *Danio sp.*, *Puntius sp.*, *Amblypharyngodon mola*, *Nemacheilus nupicola*.

*Distribution* : West Bengal : Berhampur.

*Remarks* : *Ligula simplicissima* Rudolphi, 1802 is synonymised with *Ligula intestinalis* by Dubinina (1980).

Order **LECANICEPHALIDEA**

Family **TETRAGONOCEPHALIDAE**

Genus **Guptaia** Malhotra, 1985

**57. Guptaia garhwalensis Malhotra, 1985.**

1985. *Guptaia garhwalensis* Malhotra, *Helminthologia* 20 : 45-49.

*Host* : *Schizothorax richardsonii*.

*Distribution* : Uttar Pradesh : Nayar of the District Pauri Garhwal (R. East and West).

Order **TRYPANORHYNCHA** Diesing, 1863

Family **GYMNORYNCHIDAE** Dollfus, 1935

Genus **Gymnorhynchus** Rudolphi, 1819

**58. Gymnorhynchus gigas (Cuvier, 1817)**

1819. *Gymnorhynchus reptans* Rudolphi, Entozoorum synopsis cui accedunt duplex et indices locupletissimi X-1811 pp. Berolini.

1930. *Gymnorhynchus gigas* : Southwell, *Fauna Brit. India, Cestoda* 1 : 152.

*Host* : *Arius gagora* (= *Tachysurus gagora*), *Clupea ilisha* (= *Hilsa ilisha*).

*Distribution* : West Bengal, Delta of Ganges.

Family **OTOBOTHRIIDAE** Dollfus, 1942

Genus **Poecilancistrum** Dollfus, 1930

**59. Poecilancistrum ilisha (Southwell and Prasad, 1919)**

*Host* : *Chupea ilisha* (= *Hilsa ilisha*).

*Remarks* : Larval form.

Family PTEROBOTHRIDAE Printer, 1931

Genus Pterobothrium Diesing, 1850

60. **Pterobothrium filicolle** (Linton, 1889)

1889 *Pterobothrium filicolle* Southwell, *Rec. Indian Mus.*, 9 : 79-103.

*Host* : *Chupea ilisha* (= *Hilsa ilisha*).

*Distribution* : Bihar Monghyr, Buxar. West Bengal : Diamond Harbour.

Family TENTACULARIIDAE Roche, 1926

Genus Tentacularia Bosc, 1819

61. **Tentacularia ilisha** (Southwell and Prasad, 1918)

1918. *Rhynchobothrius ilisha* Southwell and Prasad, *Rec. Indian Mus.*, 15 : 77-88.

*Host* : *Clupea ilisha* (= *Hilsa ilisha*).

*Distribution* West Bengal.

*Remarks* Larval form.

Order PROTEOCEPHALIDEA Mola, 1928

Family PROTEOCEPHALIDAE La Rue, 1911

Genus Proteocephalus Weinland, 1858

62. **Proteocephalus ritae** Verma, 1926

1926. *Proteocephalus ritae* Verma, *Allahabad Univ. Stud.*, 2 : 353-359.

*Host* : *Rita rita*.

*Distribution* Uttar Pradesh Allahabad.

63. **Proteocephalus torulosus** (Batsch), 1786

1786. *Proteocephalus torulosus* Batsch, *Syst. Ausz.* : 298.

1979. *Proteocephalus torulosus* : Dhar and Fotedar, *Indian J. Helminth.*, 31 (2) : 111-127.

*Host* : *Nemacheilus kashmirensis*.

*Distribution* Kashhmir : Harwan.

64. **Proteocephalus vitellaris** (Verma, 1928)

1928. *Ichthyotaenia vitellaris* Verma, *Allahabad Univ. Stud.*, 4 : 119-176.

*Host* : *Bagarius yarellii* (= *Bagarius bagarius*) *Mastacembelus armatus*.

*Distribution* : Uttar Pradesh : Allahabad.

Genus Gangesia Woodland, 1924

Syn. *Vermania* Wardle and McLeod, 1952

65. **Gangesia bengalensis** (Southwell, 1913)

1913. *Opryocotyle bengalensis* Southwell, *Rec. Indian Mus.*, 9 : 87.

1924. *Gangesia wallago* Woodland, *Parasitology*, 16 : 441-451.

1928. *Gangesia agragensis* Verma, *Allahabad Univ. Stud.*, 4 : 119-176.

*Host* : *Opiocephalus striatus* (= *Canna striatus*) *Labeo rohita*, *Wallago attu*, *Bagarius yarellii* (= *Bagarius bagarius*).

**Distribution** : West Bengal, Uttar Pradesh : Allahabad.

**66. Gangesia (G) indica** Gupta and Parmar, 1984

1984. *Gangesia indica* Gupta and Parmar, *Indian J. Helminth.*, 34(1) : 44-49.

**Host** : *Wallago attu*.

**Distribution** : Uttar Pradesh : Lucknow.

**67. Gangesia aurangabadensis** Deshmukhh and Shinde, 1986

1986. *Gangesia aurangabadensis* Deshmukh and Shinde, Second Asian Congress of Parasitology, Lucknow, (Abstract) : 173.

**Host** : *Barbus ticto* (= *Puntius ticto*).

**Distribution** : Maharashtra : Aurangabad.

**68. Gangesia (Vermaia) jammuensis** Fotedar and Dhar, 1974

1980. *Gangesia (Vermaia) jammuensis* Fotedar and Dar, *Indian J. Helminth.*, 31(2) : 111-127.

**Host** : *Wallago attu*.

**Distribution** : Jammu.

**69. Gangesia (Gangesia) kashmirensis** Dhar and Fotedar, 1980

1980. *Gangesia (Gangesia) kashmirensis* Dhar and Fotedar, *Indian J. Helminth.*, 31(2) : 111-127.

**Host** : *Glyptosternum* sp.

**Distribution** : Jammu and Kashmir : Baramullah.

**70. Gangesia (Gangesia) lucknowi** Singh, 1948

1948. *Gangesia (Gangesia) lucknowi* Singh, *Indian J. Helminth.*, 1 : 41-46.

**Host** : *Eutropiichthys vacha*.

**Distribution** : Uttar Pradesh : Lucknow.

**71. Gangesia macrones** Woodland, 1924

1924. *Gangesia macrones* Woodland, *Parasitology*, 16 : 441-450.

**Host** : *Macrones seenghala* (= *Aorichthys seenghala*).

**Distribution** : Uttar Pradesh Allahabad.

**72. Gangesia mehamdabadensis** Malhotra, Dixit and Capoor, 1981

1981. *Gangesia mehamdabadensis* Malhotra et al., *Sci Env.*, 3(1) : 7-20.

**Host** : *Mystus tengana*.

**Distribution** Gujarat : Mehamdabad.

**73. Gangesia pseudotropii** Verma, 1928

1928. *Gangesia pseudotropii* Verma, *Allahabad Univ. Stud.*, 4 : 119-176.

**Host** : *Clupisoma garua* (= *Silurus garua*).

**Distribution** : Uttar Pradesh : Allahabad (R. Ganges and R. Jamuna).

74. **Gangesia sanehensis** Malhotra, Capoor and Shinde, 19811981. *Gangesia sanehensis* Malhotra et al., *Mahathhwada Univ. J. Sci.*, 19(12) : 43-52.*Host* : *Cirrhina mrigala*, *Wallago attu*.*Distribution* : Uttar Pradesh : Garhwal.Genus **Silurotaenia** Nybelin, 194275. **Silurotaenia nibelini** Shinde, Deshmukh and Chincholikar, 19751975. *Silurotaenia nibelini* Shinde, Deshmukh and Chincholikar, *Marathwada Univ. J. Sc.*, 14(7) : 355-358.

Order ANTEROPORIDEA Subhpradha, 1955

Family MONOPOROPHYLLAEIDAE Subhpradha

Genus **Mastacembellophyllaeus** Shinde and Chincholikar, 197776. **Mastacembellophyllaeus nandedensis** Shinde and Chincholikar, 19771977. *Mastacembellophyllaeus nandedensis* Shinde and Chincholikar, *Riv. Parasitol.*, roma, 38(2-3) : 171-175.*Host* : *Mastacembellus armatus*.*Distribution* : Maharashtra : Nanded.77. **Mastacembellophyllaeus psudeutropiusii** Jadav and Shinde, 19821982. *Mastacembellophyllaeus psudeutropiusii* Jadav and Shinde, *Riv. Parasitol.*, 43(1) : 117-119.*Host* : *Psudeutropius taakree*.*Distribution* : Maharashtra : Paithon.78. **Mastacembellophyllaeus taakree** Jadav and Shinde, 19771977. *Mastacembellophyllaeus taakree* Jadav and Shinde, *First Nat. Congr. Parasitol.*, Baroda (Abstract) : 9.*Host* : *Pseudeutropius taakree*.*Distribution* : Maharashtra : Aurangabad.*Remarks* : Published in abstract only.

## HOST CATALOGUE

Class	PISCES
Sub Class	TELEOSTOMI
Superorder	CLUPEOMORPHA
Order	CLUPEIFORMES
Family	CLUPEIDAE

<i>Ilisha ilisha</i> (Hamilton) (River shad)	<i>Gymnorhynchus gigas</i> (Cuvier, 1817) (Larval form) <i>Poecilancistrum ilisha</i> Southwell and Prashad, 1919 (Larval form) <i>Pterobothrium filicolle</i> (Linton, 1889) Plerocercoid larva.
Superorder	OSTARIOPHYSI
Order	CYPRINIFORMES
Family	CYPRINIDAE
<i>Amblypharyngodon mola</i> (Hamilton) (Indian carpet mola)	<i>Ligula intestinalis</i> (Linnaeus, 1758) (Cestocercoid larva)
<i>Barilius bendelisis</i> (Hamilton)	<i>Bothriocephalius teleostei</i> Malhotra, 1984
<i>Barilius bola</i> (Hamilton) (Hill-trout)	<i>Bothriocephalus teleostei</i> Malhotra, 1984 <i>Ptychobothrium cypseluri</i> Rao, 1959 <i>Ptychobothrium nayarensis</i> Malhotra, 1983
<i>Catla catla</i> (Hamilton) (Catla)	<i>Ligula intestinalis</i> (Linnaeus, 1758) (Larval form)
<i>Chela clupeoides</i> = <i>Salmostoma clupeoides</i> (Bloch)	<i>Ptychobothrium chelai</i> Shinde and Deshmukh, 1976
<i>Chela phulo</i> = <i>Salmostoma phulo phulo</i> (Hamilton)	<i>Ptychobothrium phuloi</i> Shinde and Deshmukh, 1976
<i>Cirrhina mrigala</i> (Hamilton)	<i>Gangesia sanehensis</i> Malhotra, Capoor and Shinde, 1980
<i>Danio aequipinnatus</i> McClelland (Danio)	<i>Ligula intestinalis</i> (Linnaeus, 1758) (Larval form)
<i>Garra gotyla gotyla</i> (Gray)	<i>Bothriocephalus teleostei</i> Malhotra, 1984
<i>Labeo calbasu</i> (Hamilton) (Kalbasu)	<i>Ligula intestinalis</i> (Linnaeus, 1758) (Larval form) <i>Lytocestoides aurangabadensis</i> Shinde, 1970
<i>Labeo dero</i> (Heckel)	<i>Bothriocephalus teleostei</i> Malhotra, 1984
<i>Labeo rohita</i> (Hamilton)	<i>Bothriocephalus teleostei</i> Malhotra, 1984

	<i>Gangesia bengalensis</i> (Southwell, 1913)
	<i>Gangesia</i> n. sp. Dixit and Capoor, 1979.
	<i>Ligula intestinalis</i> (Linnaeus, 1758)
	<i>Senga ophiocephalina</i> TSeng, 1933
<i>Oreinus sinuatus</i> = <i>Schizothorax sinuatus</i> (Heckel)	<i>Adenoscolex oreini</i> Fotedar, 1958. = <i>Adenoscolex kashmirensis</i> (Mehra, 1930)
<i>Barbus collus</i> = <i>Puntius kolus</i> (Sykes)	<i>Lytocestoides aurangabadensis</i> Shinde, 1970.
<i>Puntius sophore</i> (Hamilton)	<i>Tetrarhynchus</i> sp. (Moghe, 1926) (Larval form)
<i>Puntius ticto</i> (Hamilton)	<i>Gangesia aurangabadensis</i> Deshmukh and Shinde, 1986
<i>Rasbora daniconius</i> (Hamilton)	<i>Ligula intestinalis</i> (Linnaeus, 1758) (Larval form)
<i>Schizothorax micropogon</i> Heckel	<i>Caryophyllaeus kashmirensis</i> Mehra, 1930
<i>Schizothorax richardsonii</i> (Gray)	<i>Ptychobothrium nayarensis</i> Malhotra, 1983  <i>Guptaia garhwalensis</i> Malhotra, 1985 <i>Bothriocephalus teleostei</i> Malhotra, 1984
<i>Schizothorax plagiostomus</i> Heckel	<i>Bothriocephalus teleostei</i> Malhotra, 1984

## Order CYPRINIFORMES

## Family COBITIDAE

<i>Lepidocephalichthys guntea</i> (Hamilton)	<i>Lytocestoides leptocephali</i> Kundu, 1985
<i>Noemacheilus rupecola</i> (McClelland)	<i>Ligula intestinalis</i> (Linnaeus, 1758) (Larval form)
<i>Noemacheilus botia</i> (Hamilton)	<i>Ptychobothrium khami</i> Shinde and Deshmukh, 1976
<i>Noemacheilus kashmirensis</i> Hora	<i>Proteocephalus torulosus</i> (Batsch, 1786)

## Order SILURIFORMES

## Family CLARIIDAE

<i>Clarias batrachus</i> (Linnaeus)	<i>Bovienia serialis</i> (Bovien, 1926) Fuhrmann, 1931
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*Capingentoides batrachii* Gupta, 1961

*Capingentoides gorakhnathai* Agarwal and Singh, 1985.

*Djombangia clariae* Kundu, Bhattacharya and Datta, 1985.

*Djombangia indica* Satpute and Agarwal, 1974.

*Djombangia penetrans* Bovien, 1926

*Introvetrus raipurensis* Satpute and Agarwal, 1980.

*Lucknowia indica* Niyogi, Gupta and Agarwal, 1982.

*Lytocestus indicus* (Moghe, 1925)

*Lytocestus longicollis* Ramadevi, 1973

*Pseudocaryophyllaeus indica* Gupta, 1961

*Pseudolytocestus clariae*, Gupta, 1961.

Order SILURIFORMES

Family HETEROPNEUSTIDAE

*Heteropneustes fossilis* (Bloch)

*Crescentovitus biloculus* Murher, 1963.

*Capingentoides heteropneusti* Gupta and Sinha, 1979.

*Capingentoides singhi* Verma, 1971.

*Djombangia caballeri* Sahay and Sahay, 1978.

*Lucknowia fossilis* Gupta, 1961

*Lytocestoides fossilis* Kant, Sinha and Srivastava, 1984.

*Pseudocapingentoides indica* Verma, 1971.

Order SILURIFORMES

Family SILURIDAE

*Wallago attu* (Schneider)

*Gangesia bengalensis* (Southwell, 1913).

*Gangesia jammuensis* Fotedar and Dhar, 1974.

*Gangesia lucknowia* Sinhg, 1948.

*Gangesia sanehensis* Malhotra, Capoor and Shinde, 1980.

Order SILURIFORMES

Family SCHILBEIDAE

*Clupisoma garua* (Hamilton) *Vermaia pseudotropii* Verma, 1928.

*Eutropiichthys vacha* (Hamilton) *Gangesia lucknowia* Singh, 1948.

*Proeutropiichthys taakree* (Sykes) *Silurotaenia nybelini* Shinde, Deshmukh and Chincholikar, 1975.

*Mastacembellophyllaeus pseudeutropiusii* Jadav and Shinde, 1982.

Order SILURIFORMES

Family BAGRIDAE

*Arius gagora* = *Tachysurus gagora* (Hamilton) (Catfish) *Gymnorhynchus gigas* (Cuvier, 1817)

*Mystus aor* (Hamilton) = *Aorichthys aor* (Hamilton) (Aor) *Gephyrolina paragonopora* Woodland, 1923.

*Mystus seenghala* (Sykes) = *Aorichthys seenghala* (Sykes) (Giant River Catfish) *Gephyrolina paragonopora* Woodland, 1923

*Gangesia macrones* Woodland, 1924

*Mystus tengara* (Hamilton) *Gangesia mehamdabadensis* Malhotra, Dixit and Capoor, 1981.

*Mystus vittatus* (Bloch) *Polygonchobothrium allahabadense* Gairola and Malhotra, 1981.

*Senga gangesii* Malhotra, 1986

*Senga vittati* Gairola and Malhotra, 1986.

*Rita rita* (Hamilton) (Rita) *Proteocephalus ritae* Verma, 1926

Order SILURIFORMES

Family SISORIDAE

*Bagarius bagarius* (Hamilton) (Bagarius) *Proteocephalus vitellaris* Verma, 1928

Order SILURIFORMES

Family SISORIDAE

*Bagarius yarrelli* = *Bagarius bagarius* (Hamilton) *Gephyrolina paragonopora* Woodland, 1923.

*Gangesia bengalensis* (Southwell, 1913)

- Proteocephalus vitellaris* (Verma, 1928)  
*Senga lucknowensis* Johri, 1956.
- Glyptothorax* sp.** *Gangesia (gangesia) lucknowia* Singh, 1948.
- Glyptosternum* sp.** *Gangesia (gangesia) kashmirensis* Dhar and Fotedar, 1979.
- Order   ATHERINIFORMES  
 Family   CYPRINODONTIDAE
- Panchax panchax* = *Aplocheilus panchax* (Hamilton)** *Senga* sp. Ramadevi and Rao, 1966.
- Order   PERCIFORMES  
 Family   SCIAENIDAE
- Pama pama* (Hamilton)** *Gymnorhynchus* sp. (Larvae)
- Order   CHANNIFORMES  
 Family   CHANNIDAE
- Channa striatus* (Bloch)** *Senga ophiocephalina* (Tseng, 1933)
- Channa gachua* (Hamilton)** *Senga besnardi* Dollfus, 1934.
- Channa marulius* (Hamilton) (Giant snake head)** *Circumonchobothrium ophiocephali* Shinde, 1968.
- Senga pycnomera* (Woodland, 1924)  
*Polygonchobothrium pycnomerus* Tadros, 1968.
- Senga khami* Shinde and Deshmukh, 1980.
- Channa punctatus* (Bloch) (Snake head)** *Senga punctati* Gupta and Sinha, 1980.  
*Senga visakhapatnamensis* Ramadevi 1976.
- Channa striatus* (Bloch) (Striped snake head)** *Senga ophiocephalina* (TSeng, 1933)
- \* *Capingentoides moghei* Pandey, 1975.  
*Circumonchobothrium khami* Shinde, 1976  
*Gangesia bengalensis* (Southwell, 1913)  
*Ophryocotyloides monocantis* Monghe

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\* Occurrence in *C. striatus* is perplexing.

Order MASTACEMBELIFORMES

Family MASTACEMBELIDAE

- Mastacembelus armatus* (Lacepede)  
(Spiny eel)
- Circumonchobothrium aurangabadensis*  
Jadav and Shinde, 1976.
- Circumonchobothrium shindei*,  
Chincholikar, 1978.
- Circumonchobothrium raoii* Shinde and  
Jadav, 1976.
- Mastacembellophyllaeus nandensis*  
Shinde and Chincholikar, 1977.
- Polygonchobothrium armati* Malhotra  
*Senga nayari* Malhotra, 1984.
- Mastacembelus pancalus* (Hamilton) *Senga nayari* Malhotra, 1984.

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