

OCCASIONAL PAPER No. 230

Endemic Freshwater Fishes of India

A. K. KARMAKAR
A. DAS



ZOOLOGICAL SURVEY OF INDIA

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A. K. KARMAKAR

A. DAS

Zoological Survey of India, F.P.S. Building, Kolkata-700 016

Edited by the Director, Zoological Survey of India, Kolkata



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INTRODUCTION

India is enriched with a vast expanse of inland waters in the form of ponds, streams, rivers, canals, estuaries, natural and man-made lakes, backwaters, brackish water impoundments and mangrove wetlands. The major rivers of India and their tributaries traverse through varied geoclimatic conditions, displaying high diversity in their biotic and abiotic characteristics throughout their 28,000 km stretch. These rivers display varying biotopes like the lentic flood plains, oxbow lakes, deep pools and the lotic estuaries. The 0.72 million ha. of coldwater upland lakes, 3.0 million ha. of reservoirs, 2.0 million ha. of oxbow lakes and 2.6 million ha. of estuaries are distinct habitats harbouring animals and plants exhibiting different tolerance limits to the physical and chemical features characterising these environments. The Indian fish fauna is constituted of about 2,500 species depicting diverse characteristics, of which 930 belonging to 326 genera and 99 families, inhabit the inland waters. (Talwar and Jhingran, 1991).

Hamilton-Buchanan (1822) was the first to describe 271 species of fishes found in the River Ganges and its branches accompanied with an atlas of 39 plates.

Francis Day took interest in fishes and other animals found in this country. He finally published the inimitable masterpiece of a treatise, the famous 'Fishes of India' (1875-1878). Day included in this work 1418 species of fishes found in the territories of the present day Republic of India, Pakistan, Bangladesh, Burma and Sri Lanka. Day's monograph is the first publication to contain a comprehensive account of all the fishes, both freshwater and marine, found in the entire Indian subcontinent.

Subsequent to Day, considerable advancement has been made in the study of fishes of the Indian subcontinent. Many more new taxa from areas not covered by Day and range of distribution of a large number of species have been published. A large number of families of Day have been split up on the basis of further revisionary studies. Finally total number of known genera and species has also greatly increased.

Hora (1921-1952) published a number of valuable revisionary studies under various serial heading such as 'Siluroid Fishes of India, Burma and Ceylon', 'Notes on Fishes of Indian Museum', 'Game Fishes of India', etc.

Shaw and Shebbeare (1937) published a comprehensive account of 131 species of fish from North Bengal.

Misra (1962) published 'An aid to the identification of the common commercial fishes of India and Pakistan' dealing with 402 marine, brackish and freshwater species belonging

to 205 genera and 100 families, which constituted the most common commercial fishes of this region. Further Misra contributed under the 'Fauna of India' series a second edition on Pisces in three volumes : Elosmobranchi and Holocephali (1969) Vol. I; Clupeiformes, Bathyclupeiformes, Galaxiformes, Scopeliformes and Atelopiformes (1976a) Vol. II; and Cypriniformes : Siluri (1976b) Vol. 111.

Jhingran (1981) published a Handbook on Freshwater Fishes of India which deals with 233 genera with 742 species falling under 64 families and 16 orders. It includes all the known fresh and brackish water fishes both indigenous and exotic found within the political boundaries of India, Pakistan, Bangladesh, Burma, Sri Lanka, Nepal and Bhutan.

Vishwanath and Tombi Singh (1985) while elaborating on a collection of fishes from Tengnoupal district of Manipur, enlisted 4 endemic species viz. *Barilius dogarsinghi*, *Noemacheilus manipurensis*, *N. prashadi* and *N. sikmaiensis* from this region.

Vishwanath and Tombi Singh (1987) collected and described 17 endemic species, viz. *Danio acuticephala*, *D. naganensis*, *Barilius dogarsinghi*, *B. guttatus*, *Osteobrama belangeri*, *O. cotio cunma*, *Crossocheilus burmanicus*, *Garra naganensis*, *Noemacheilus manipurensis*, *N. prashadi*, *N. sikmaiensis*, *N. kangjupkhulensis*, *N. zonalternans*, *Botia hymenophysa*, *Lepidocephalus berdmorei*, *L. irrorata* and *Glyptothorax sinense manipurensis* from Manipur. Out of these seven are exclusively found in the political boundary of Manipur. These are mostly found in the Chindwin Drainage System and absent in Brahmaputra Drainage System of Manipur. Menon (1987 & 1992) in his contribution under "The Fauna of India and adjacent countries, Pisces-Vol. IV" elaborated the families Homalopteridae and Cobitidae in two parts.

Talwar and Jhingran (1991) have given taxonomic descriptions, identification keys and biological information for 930 species of inland fishes of India and adjacent countries.

National Bureau of Fish Genetic Resources, Lucknow (1997) compiled a list of 271 Indian Freshwater Fishes with Indian distribution only. After critical examination of the list it is found that the list contains 39 marine/estuarine species; 12 species already merged with other species, 4 species are distributed elsewhere also and 5 species are enlisted under two generic names, old and new (*Brabus/Puntius kolús*, *Barbus/Puntius lithopidos*, *Barbus/Puntius spinulosus*, *Cyprinus/Puntius curmuca*, *Monopterus/Moringua hodgarti*). Apart from these in the same list the species inquirande are *Noemacheilus guttatus* (McClelland), *N. monoceros* (Valenciennes) and *N. spilopterus* (Valenciennes).

Menon (1999) in his publication of "Checklist-Freshwater Fishes of India" has taken into consideration all the available knowledge of the taxonomy and distribution of freshwater fishes of India numbering 446 primary freshwater fishes occurring within the political boundaries of continental India.

Thomas, George and Biju (2002) enlisted 11 endemic species, viz. *Puntius denisonii* (Day), *Osteobrama bakeri* Day, *Garra surendranathanii* Shaji et. al., *Osteochilus longidorsalis* Pethiyagoda and Kottelat, *Chela fasciatus*, Silas, *Travancoria jonesi*, Hora, *Noemacheilus pambarensis* Rama Devi and Indra, *N. keralensis* Rita and Nalbant, *Harabagrus brachysoma* (Gunther), *H. nigricollaris* Pethiyagoda and Kottelat and *Batasio travancoria* Hora and Law, from rivers of Southern Kerala.

No comprehensive work was so far been done on Endemic Freshwater fishes of India as a whole. Considering the urgent need of an elaborate account on this subject, this project has been undertaken.

The present contribution 'Endemic Freshwater Fishes of India' deals with 225 species comprising 74 genera under 21 families and 9 orders. It includes systematic position, synonyms, distinguishing characters and geographical distribution of all the species.

In connection with present study, examination of the century old fish collections specially types of distinguished ichthyologists like Day, Annandale, Chaudhuri, Prashad, Mukherjee, Hora, Misra, Silas, Menon, Talwar, Jhingran, Hussain, Yazdani, Tilak, etal. in the repository of the Zoological Survey of India, was conducted.

The sequence of families is phylogenetic, following the scheme proposed by Nelson (1995), but with a few deviations based on recent studies. Within families, genera and species are treated in an alphabetical sequence.

SYSTEMATIC LIST OF ENDEMIC FRESHWATER FISH FAUNA OF INDIA

- Class OSTEICHTHYS
Subclass ACTINOPTERYGII
Subdivision TELEOSTEI
Order ANGUILLIFORMES
Family MORINGUIDAE
1. *Moringua hodgarti* Chaudhuri
Order CLUPEIFORMES
Family ENGRAULIDAE
 2. *Setipinna brevifilis* (Valenciennes)
 3. *S. phasa* (Hamilton-Buchanan)
Order CYPRINIFORMES
Family CYPRINIDAE
Subfamily Cyprininae
 4. *Chagunius chagunio* (Hamilton-Buchanan)

5. *Cirrhinus cirrhosus* (Bloch)
6. *C. fulungee* (Sykes)
7. *C. macrops* Steindachner
8. *Gonoproktopterus curmuca* (Hamilton-Buchanan)
9. *G. dubius* (Day)
10. *G. Kolus* (Sykes)
11. *G. lithopidos* (Day)
12. *G. micropogon* (Valenciennes)
13. *G. thomassi* (Day)
14. *Labeo ariza* (Hamilton-Buchanan)
15. *L. kawrus* (Sykes)
16. *L. kontius* (Jerdon)
17. *L. nigrescens* Day
18. *L. potail* (Sykes)
19. *L. rajasthanicus* Datta & Majumdar
20. *L. udaipurensis* Tilak
21. *Neolissochilus spinulosus* (McClelland)
22. *N. wynaadensis* (Day)
23. *Osteobrama bakeri* (Day)
24. *O. cotio peninsularis* Silas
25. *O. dayi* (Hora & Misra)
26. *O. neilli* (Day)
27. *O. vigorsii* (Sykes)
28. *Osteochilus (Kantaka) brevidorsalis* (Day)
29. *O. (Osteochilichthys) godavariensis* (Rao)
30. *O. (O) nashii* (Day)
31. *O. (O) thomassi* (Day)
32. *Puntius arenatus* (Day)
33. *P. arulius* (Jerdon)
34. *P. bovanicus* (Day)
35. *P. carnaticus* (Jerdon)
36. *P. cauveriensis* (Hora)
37. *P. deccanensis* Yazdani & Rao
38. *P. denisonii* (Day)
39. *P. fasciatus* (Jerdon)

40. *P. fraseri* (Hora & Misra)
41. *P. jerdoni* (Day)
42. *P. melanostigma* (Day)
43. *P. mudumalaiensis* Menon and Rema Devi
44. *P. nangalensis* Jayaram
45. *P. narayani* (Hora)
46. *P. ophicephalus* (Raj)
47. *P. parrah* (Day)
48. *P. roseipinnis* (Valenciennes)
49. *P. sahyadriensis* Silas
50. *P. sarana subnasutus* (Valenciennes)
51. *P. setnai* Chhapgar and Sane
52. *P. shalynius* Yazdani & Talukdar
53. *P. sharmai* Menon and Rema Devi
54. *Rohtee ogilbii* Sykes
55. *Schismatorhynchus (Nukta) nukta* (Sykes)
56. *Thynnichthys sandkhol* (Sykes)
57. *Tor kulkarnii* Menon
58. *T. mussullah* (Sykes)
59. *T. progeneius* (McClelland)

Subfamily CULTRINAE

60. *Chela dadidurjori* (Menon)
61. *C. fasciata* Silas
62. *Salmostoma acinaces* (Valenciennes)
63. *S. boopis* (Day)
64. *S. horai* (Silas)
65. *S. kardahiensis* Reddiah
66. *S. novacula* (Valenciennes)
67. *S. orissaensis* Banarescu
68. *S. untrahi* (Day)

Subfamily RASBORINAE

69. *Amblypharyngodon chakaiensis* Babu & Nair
70. *A. microlepis* (Bleeker)
71. *Barilius bakeri* Day

72. *B. canarensis* (Jerdon)
73. *B. dogarsinghi* Hora
74. *B. evezardi* Day
75. *B. gatensis* (Valenciennes)
76. *B. nelsoni* Barman
77. *B. radiolatus* Gunther
78. *Brachydanio acuticephala* (Hora)
79. *Danio fraseri* Hora
80. *D. naganensis* Chaudhuri
81. *Danio neilgherriensis* (Day)
82. *Esomus barbatus* (Jerdon)
83. *E. manipurensis* Tilak & Jain
84. *Parluciosoma labiosa* (Mukherji)

Subfamily SCHIZOTHORACINAE

85. *Gymnocypris biswasi* Talwar
86. *Lepidopygopsis typus* Raj
87. *Schizothoraichthys curvifrons* (Heckel)
88. *S. hugelii* (Heckel)
89. *S. niger* (Heckel)
90. *S. planifrons* (Heckel)
91. *S. progastus* (McClelland)
92. *Schizotharax kumaonensis* Menon

Subfamily GARRINAE

93. *Crossocheilus latius latius* (Hamilton-Buchanan)
94. *C. pariyarensis* Menon and Jacob
95. *Garra bicornuta* Rao
96. *G. gotyla stenorhynchus* (Jerdon)
97. *G. hughi* Silas
98. *G. kempi* Hora
99. *G. litanensis* Viswanath
100. *G. lissorhynchus* (McClelland)
101. *G. mcClellandi* (Jerdon)
102. *G. mullya* (Sykes)
103. *G. naganensis* Hora

104. *G. rupecula* (McClelland)

Family PARAPSIORHYNCHIDAE

105. *Parapsilorhynchus discophorus* Hora

106. *P. prateri* Hora & Misra

107. *P. tentaculatus* (Annandale)

Family HOMALOPTERIDAE

Subfamily Homalopterinae

108. *Balitora mysorensis* Hora

109. *Bhavana australis* (Jerdon)

110. *Homaloptera montana* Herre

111. *Travancoria jonesi* Hora

Subfamily NOEMACHEILINAE

112. *Aborichthys elongatus* Hora

113. *A. garoensis* Hora

114. *A. tikaderi* Barman

115. *Nemacheilus anguilla* Annandale

116. *N. assamensis* (Menon)

117. *N. carletoni* Fowler

118. *N. dattai* Menon

119. *N. denisoni denisoni* Day

120. *N. devdevi* Hora

121. *N. doonensis* (Tilak & Hussain)

122. *N. elongatus* (Sen & Nalbant)

123. *N. evezardi* Day

124. *N. gangeticus* (Menon)

125. *N. guentheri* Day

126. *N. himachalensis* (Menon)

127. *N. keralensis* (Rita & Nalbant)

128. *N. kodaguensis* (Menon)

129. *N. manipurensis* Chaudhuri

130. *N. monilis* Hora

131. *N. montanus* (McClelland)

132. *N. moreh* (Sykes)

133. *N. naganensis* Menon

134. *N. nilgiriensis* (Menon)
135. *N. pavonaceus* (McClelland)
136. *N. petrubanarescui* (Menon)
137. *N. prashadi* Hora
138. *N. pulchellus* Day
139. *N. reticulofasciatus* (Singh & Banarescu)
140. *N. ruppelli* (Sykes)
141. *N. rupecola* (McClelland)
142. *N. scaturigina* (McClelland)
143. *N. semiarmatus* Day
144. *N. sijuensis* (Menon)
145. *N. singhi* (Menon)
146. *N. striatus* Day
147. *N. triangularis* Day
148. *Triplophysa ladacensis* (Gunther)
149. *T. marmorata* (Heckel)
150. *T. microps* (Steindachner)
151. *T. shahensis* Tilak

Family COBITIDAE

152. *Botia dario* (Hamilton-Buchanan)
153. *B. macrolineata* Teugels, Vas & Snocks
154. *B. striata* Rao
155. *Enobarbichthys maculatus* (Day)
156. *Lepidocephalus annandalei* (Chaudhuri)
157. *L. coromandelensis* Menon
158. *L. irrorata* (Hora)
159. *L. menoni* Pillai & Yazdani
160. *Neoeucirrhichthys maydelli* Banarescu & Nalbant
161. *Pangio goaensis* (Tilak)
162. *P. longipinnis* (Menon)

Order SILURIFORMES

Family BAGRIDAE

163. *Batasio travancoria* Hora & Law

164. *Horabagrus brachysoma* (Gunther)
165. *H. nigricollaris* Pethiyagoda & Kottelat
166. *Mystus krishnensis* Ramakrishnaiah
167. *M. malabaricus* (Jerdon)
168. *M. montanus* (Jerdon)
169. *M. oculatus* (Valenciennes)
170. *M. punctatus* (Jerdon)
171. *Rita chrysea* Day
172. *R. kuturnee* (Sykes)
173. *R. pavimentatus* (Valenciennes)

Family SILURIDAE

174. *Ompok malabaricus* (Valenciennes)
175. *Pinnwallago kanpurensis* Gupta, Jayaram & Hajela
176. *Silurus indicus* (Datta, Barman & Jayaram)
177. *S. wynaadensis* Day

Family SCHILBEIDAE

178. *Clupisoma bastari* Datta & Karmakar
179. *Eutropiichthys goongwaree* (Sykes)
180. *Neotropius khavalchar* Kulkarni
181. *Pseudeutropius mitchellii* Gunther
182. *Proeutropiichthys taakree taakree* (Sykes)
183. *Silonia childreni* (Sykes)

Family SISORIDAE

184. *Conta conta* (Hamilton-Buchanan)
185. *Erethistoides montana montana* Hora
186. *E. montana pipri* Hora
187. *Exostoma labiatus* (McClelland)
188. *Gagata sexualis* Tilak
189. *Glyptothorax alaknandi* Tilak
190. *G. anamalaiensis* Silas
191. *G. brevipinnis* Hora
192. *G. coheni* Ganguly, Datta & Sen

193. *G. dakpathari* Tilak & Hussain
 194. *G. garhwali* Tilak
 195. *G. housei* Herre
 196. *G. lonah* (Sykes)
 197. *G. madraspatanum* (Day)
 198. *G. nelsoni* Ganguly, Datta & Sen
 199. *G. poonaensis* Hora
 200. *G. saisii* (Jenkins)
 201. *G. stoliczkae* (Steindachner)
 202. *G. striatus* (McClelland)
 203. *G. trewavasae* Hora
 204. *Hara horai* Misra
 205. *Laguvia kapuri* Tilak & Hussain
 206. *L. shawi* Hora
 207. *Myersglanis jayarami* Viswanath & Kosygin

Family CLARIIDAE

208. *Clarias dayi* Hora
 209. *C. dussumieri* Valenciennes
 210. *Horaglanis krishnai* Menon

Order CYPRINODONTIFORMES

Family HORAICHTHYIDAE

211. *Horaichthys setnai* Kulkarni

Family APLOCHEILIDAE

212. *Aplocheilus lineatus* (Valenciennes)

Order SYNGNATHIFORMES

Family SYNGNATHIDAE

213. *Microphis insularis* (Hora)

Order SYNBRANCHIFORMES

Family SYNBRANCHIDAE

214. *Monopterus eapeni* Talwar
 215. *M. fossorius* (Nair)
 216. *M. indicus* (Silas & Dawson)

Order PERCIFORMES

Family AMBASSIDAE

217. *Parambassis dayi* (Bleeker)218. *P. thomassi* (Day)219. *Pseudambassis lala* (Hamilton-Buchanan)

Family NANDIDAE

220. *Pristolepis marginata* Jerdon

Family CICHLIDAE

221. *Etroplus canarensis* Day

Order MASTACEMBELIFORMES

Family MASTACEMBELIDAE

222. *Macrogathus guentheri* (Day)

Family CHAUDHURIIDAE

223. *Chaudhuria indica* (Yazdani)224. *C. khajuriai* (Talwar, Yazdani & Kundu)

Order TETRAODONTIFORMES

Family TETRAODONTIDAE

225. *Tetraodon travancoricus* Hora & Nair**SYSTEMATIC ACCOUNT**

Class OSTEICHTHYS

Subclass ACTINOPTERYGII

Subdivision TELEOSTEI

Order ANGUILLIFORMES

Family MORINGUIDAE

1. *Moringua hodgarti* Chaudhuri

1913. *Moringua hodgarti* Chaudhuri, *Rec. Indian Mus.* 8(3) : 255, pl. 9. figs. 3a, 3b (type-locality : Upper Rotung, Abor hills, Assam).

1991. *Moringua hodgarti* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 77.

Distinguishing Characters : Body extremely elongate, its depth is 24 to 26 times in total length. Head conspicuous from other portion of body, its length 14 to 15 times in total length. Occipital crest elevated and prominent.

Geographical Distribution : Abor hills, Assam.

Order CLUPEIFORMES
Family ENGRAULIDAE

2. *Setipinna brevifilis* (Valenciennes)
(Fig. 1)

1848. *Engraulis brevifilis* Valenciennes, *Hist. nat. Poiss.*, 21 : 54 (Type-locality : Bengal).

1983. *Setipinna brevifilis* : Wongratana, *Jap. J. Ichthyol.*, 29(4) : 405 (Status recognised).

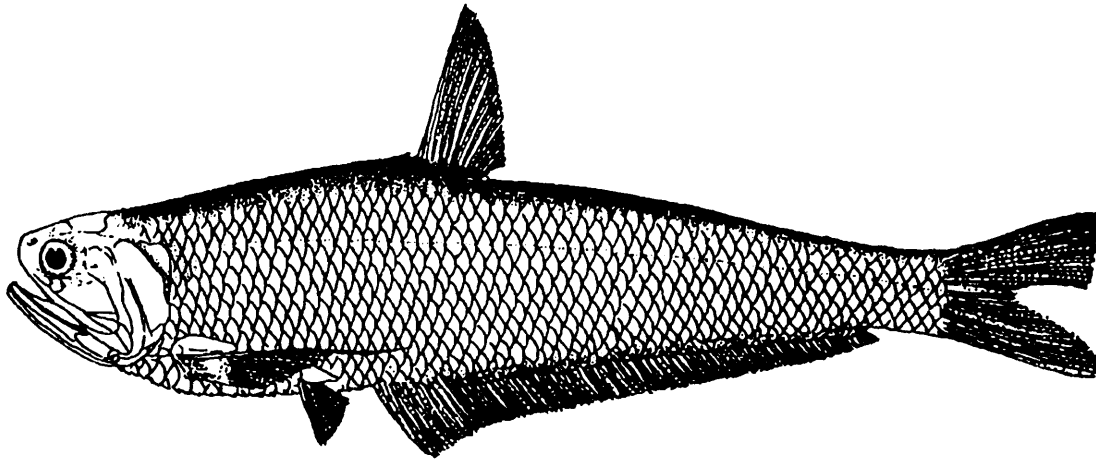


Fig. 1 : *Setipinna brevifilis* (Valenciennes)

Distinguishing Characters : Body fusiform, strongly compressed; belly sharply keeled. Head length 5 to 5.5 in standard length. Mouth oblique; maxilla reaching slightly beyond articulation of lower jaw. Pectoral filament short, reaching to base of anterior anal finrays. Upper lobe of caudal fin truncated, shorter than lower.

Geographical Distribution : Ganga river system and Jamuna river at Delhi.

3. *Setipinna phasa* (Hamilton-Buchanan)
(Fig. 2)

1822. *Clupea phasa* Hamilton-Buchanan, *Fishes of Ganges* 240, 382 (type-locality : brackish rivers of Bengal).

1973. *Setipinna phasa* Whitehead, *J. mar. biol. Ass. India*, 14(1) : 238, fig. 62.

Distinguishing Characters : Body fusiform and strongly compressed, belly sharply keeled. Head length 5.5 to 6.5 in standard length. Mouth oblique; maxilla short, just reaching gill opening. Pectoral filament long, reaching middle of anal finray. Upper lobe of caudal fin truncated, shorter than lower.

Geographical Distribution : Ganga river system and Orissa.

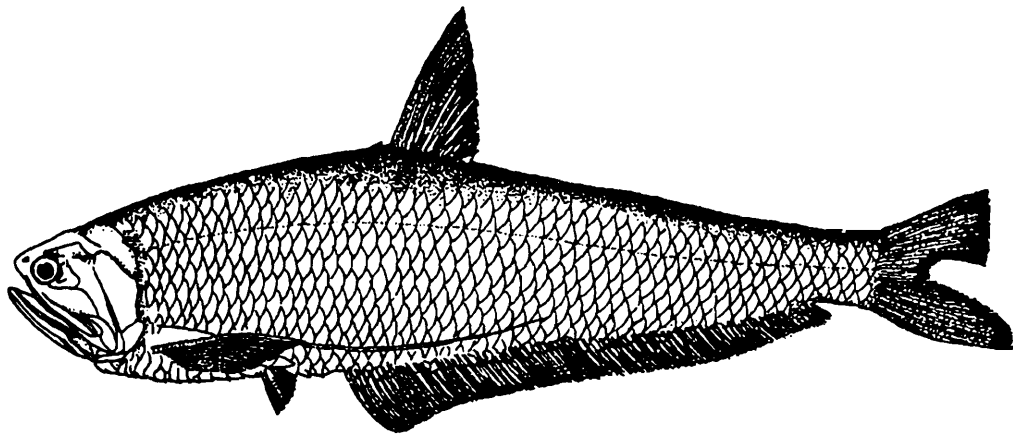


Fig. 2 : *Setipinna phasa* (Hamilton-Buchanan)

Order CYPRINIFORMES
Family CYPRINIDAE
Subfamily CYPRININAE

4. *Chagunius chagunio* (Hamilton-Buchanan)
(Fig. 3)

1822. *Cyprinus chagunio* Hamilton-Buchanan, *Fishes of Ganges* 295, 387 (type-locality : Jamuna river and northern rivers of Bihar and Bengal).

1999. *Chagunius chaguio* Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 73.

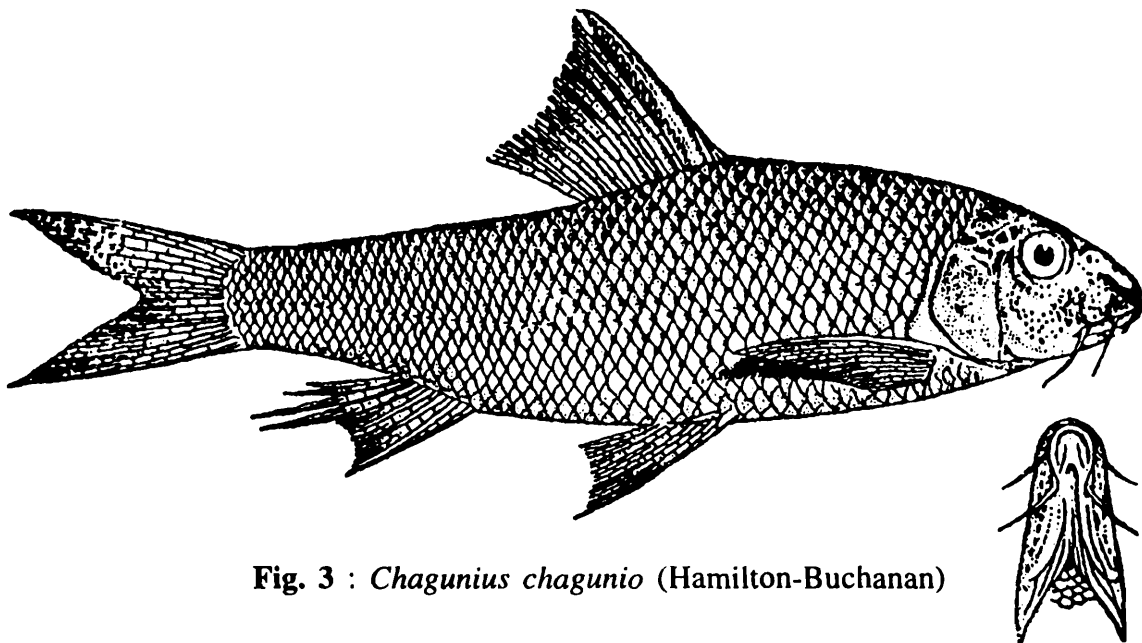


Fig. 3 : *Chagunius chagunio* (Hamilton-Buchanan)

Distinguishing Characters : Body elongate, its depth little more than head length. Mouth subterminal; barbels two pairs, longer than orbit. Eye-diameter 5 to 6.5 times in head length. Dorsal spine strong and serrated. Lateral line scales 44-47, scales between lateral line and pelvic 6. Tubercles on snout and cheeks.

Geographical Distribution : Brahmaputra and Ganga river system along Himalayan foothills, Damodar drainage.

5. *Cirrhinus cirrhosus* (Bloch)
(Fig. 4)

1795. *Cyprinus cirrhosus* Bloch, *Naturges, ausland, Fische*, 9 : 52, fig. 411 (type-locality : Cauvery river, Tamil Nadu).

1991. *Cirrhinus cirrhosus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 170.

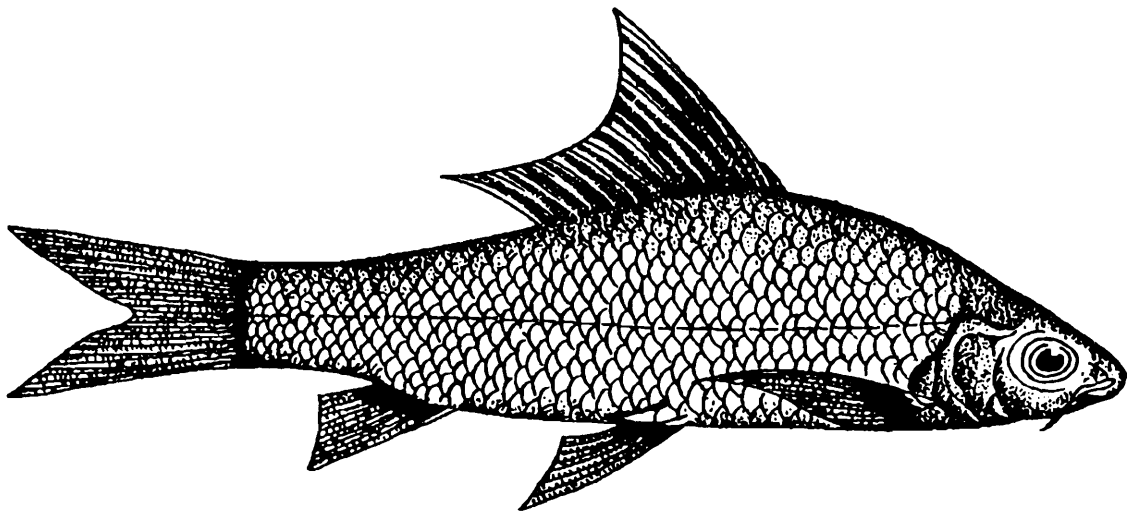


Fig. 4 : *Cirrhinus cirrhosus* (Bloch)

Distinguishing Characters : Body elongate, its depth more than head length. Mouth broad; lower lip slightly thick, upper lip entire. Two pairs of well developed barbels, rostral one longer than maxillary. Dorsal fin as high as body. Lateral line scales 42-46; lateral transverse $4\frac{1}{2} - 5\frac{1}{2}/4\frac{1}{2}$.

Geographical Distribution : Basins of rivers of peninsular India flowing into Bay of Bengal, from Godavari to Cauvery.

6. *Cirrhinus fulungee* (Sykes)
(Fig. 5)

1841. *Chondrostoma fulunges* Sykes, 1841, *Trans, zool. Soc. Lond.*, 2 : 358 (type-locality : Deccan).

1991. *Cirrhinus fulungee* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 171.

Distinguishing Characters : Body slightly elongate, its depth more than head length, snout projects slightly beyond mouth; upper lip poorly fimbriated, lower jaw devoid of horny covering. A very short rostral barbel only present. Pectoral fins as long as head. Lateral line scales 44-48; lateral transverse $8/6\frac{1}{2}$.

Geographical Distribution : Maharashtra and Karnataka.

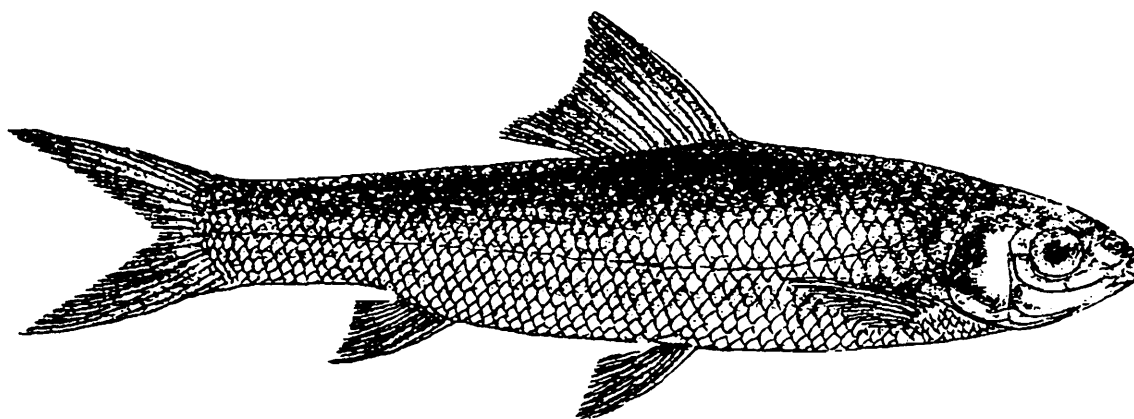


Fig. 5 : *Cirrhinus fulungee* (Sykes)

7. *Cirrhinus macrops* Steindachner

1870. *Cirrhina macrops* Steindachner, *Sitzb. Akad. Wiss. Wien.*, 61 : 636 (type-locality : Madras).

1991. *Cirrhinus macrops* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 171.

Distinguishing Characters : Body slightly elongate, its depth considerably more than length of head. Upper lip entire, lower lip absent. Barbels, one small rostral pair. Dorsal fin as high as body. Lateral line with 44 to 46 scales; lateral transverse 9/6.

Geographical Distribution : Godavari river system and Madras.

8. *Gonoproktopterus curmuca* (Hamilton-Buchanan)

(Fig. 6)

1807. *Cyprinus curmuca* Hamilton-Buchanan, *Journey in Mysore*, 3 : 344, pl. 30 (type-locality : Mysore, Western Ghats of India).

1991. *Gonoproktopterus curmuca* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 187.

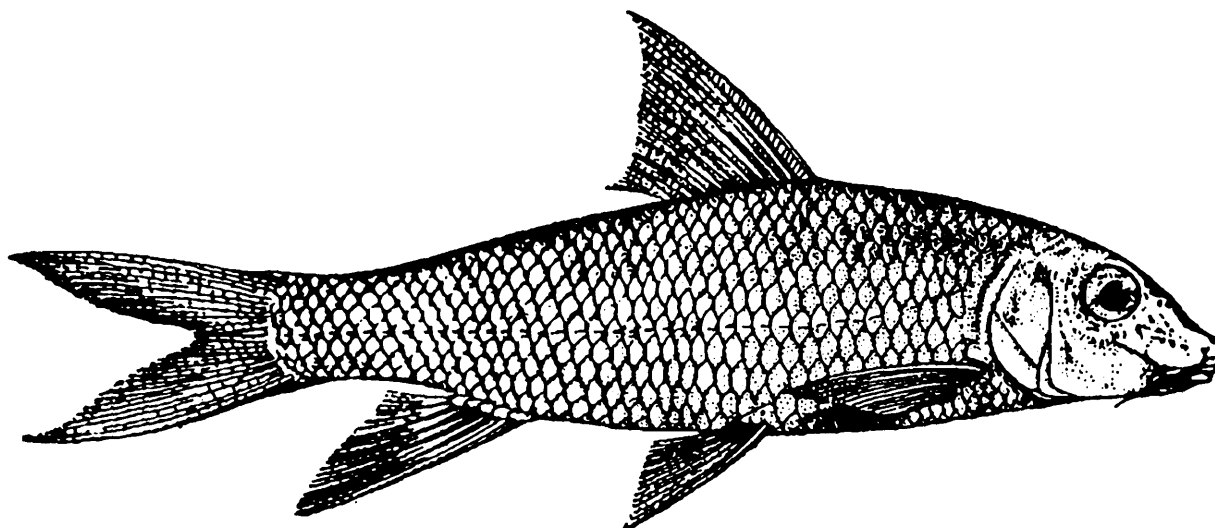


Fig. 6 : *Gonoproktopterus curmuca* (Hamilton-Buchanan)

Distinguishing Characters : Dorsal fairly deep, the dorsal profile convex and ventral profile nearly horizontal. Depth of body four times in standard length. Snout conical, a band of pores on cheeks. Eye diameter 4.3 times in head. Mouth subterminal, two pairs of maxillary barbels. Dorsal fin inserted anterior to origin of pelvic fin, its last unbranched ray weak. Lateral line scales 38 to 42; predorsals 9.

Geographical Distribution : Western Ghats.

9. *Gonoproktopterus dubius* (Day)

(Fig. 7)

1867. *Puntius (Barbodes) dubius* Day, *Proc. Zool. Soc. Lond.* : 291 (type-locality : Bhavani river at base of Nilgiri hills, Tamil Nadu).

1991. *Gonoproktopterus dubius* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 188.

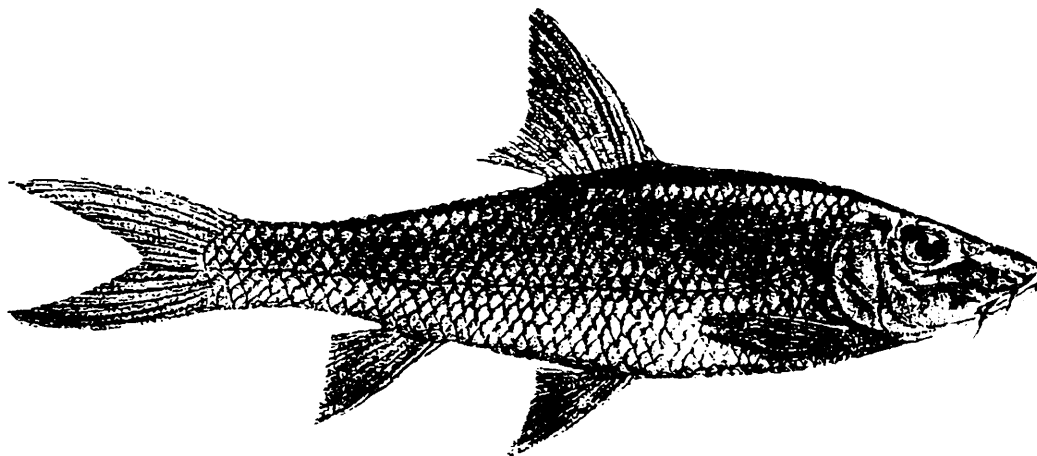


Fig. 7 : *Gonoproktopterus dubius* (Day)

Distinguishing Characters : Body robust, its depth four times in standard length. Snout devoid of pores. Eye diameter 4.5 in head. Mouth subinferior; two pairs of short barbels. Dorsal fin inserted slightly nearer to snout tip than to base of caudal fin. Lateral line with 42 to 45 scales; lateral transverse 8-9/4½-5.

Geographical Distribution : Cauvery river system.

10. *Gonoproktopterus kolus* (Sykes)

(Fig. 8)

1841. *Barbus kolus* Sykes, *Trans. Zool. Soc. Lond.*, 2 : 357. pl. 62, fig. 1 (type-locality : Mota Mola river nr. Poona).

1991. *Gonoproktopterus kolus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 189.

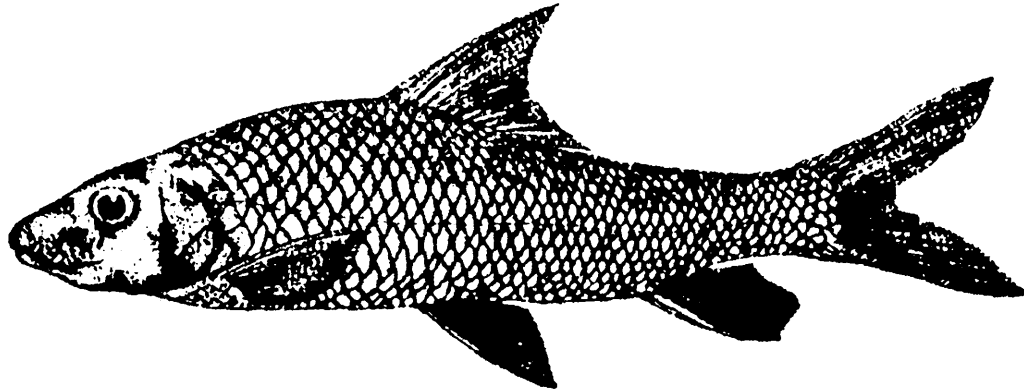


Fig. 8 : *Gonoproktopterus kolus* (Sykes)

Distinguishing Characters : Body deep and compressed; considerable rise of profile from occiput to dorsal fin. Depth 3.5 to 4 in standard length. Eye diameter 4.2 to 5.5 in head length. Mouth slightly subterminal; one pair of barbels. Dorsal fin inserted anterior to pelvic fin, its height three-fourths of depth of body. Lateral line scales 40 to 43.

Geographical Distribution : Krishna, Godavari and Cauvery river systems, Madhya Pradesh.

11. *Gonoproktopterus lithopidos* (Day)
(Fig. 9)

1873. *Barbus (Barbus) lithopidos* Day, *Proc. Zool. Soc. Lond.* : 708 (type-locality : South-Canara).

1991. *Gonoproktopterus lithopidos* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 190.

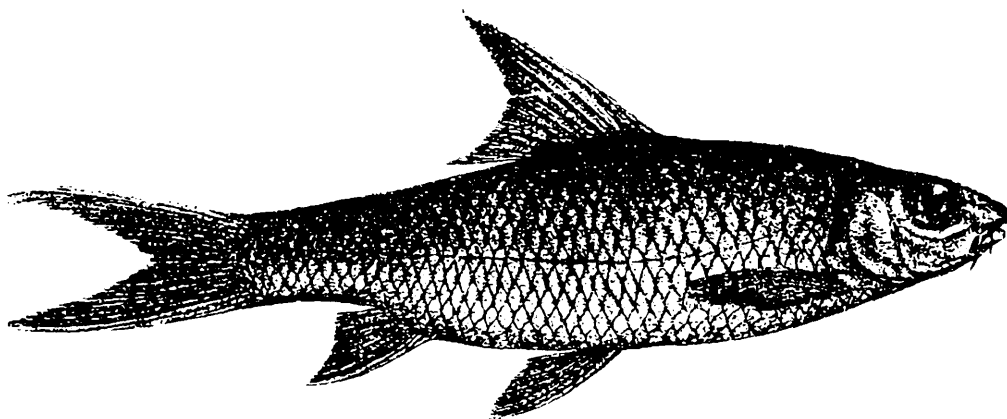


Fig. 9 : *Gonoproktopterus lithopidos* (Day)

Distinguishing Characters : Body fairly robust, its dorsal and ventral profile equally and moderately convex. Body depth 3.3 to 3.7 in standard length. In large adults pores on preorbital present. Eye diameter 3.7 to 4.5 in head length. Mouth subterminal; barbels two pairs, as long as orbit. Dorsal fin inserted anterior to origin of pelvic; anterior rays distinctly prolonged. Lateral line scales 38-39; predorsal 11 to 14.

Geographical Distribution : Western Ghats from South Canara to Kerala.

12. *Gonoproktopterus micropogon* (Valenciennes)
(Fig. 10)

1842. *Barbus micropogon* Valenciennes, *Hist. nat. Poiss*; 16 : 188 (type-locality : Mysore).

1991. *Gonoproktopterus micropogon* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 190.

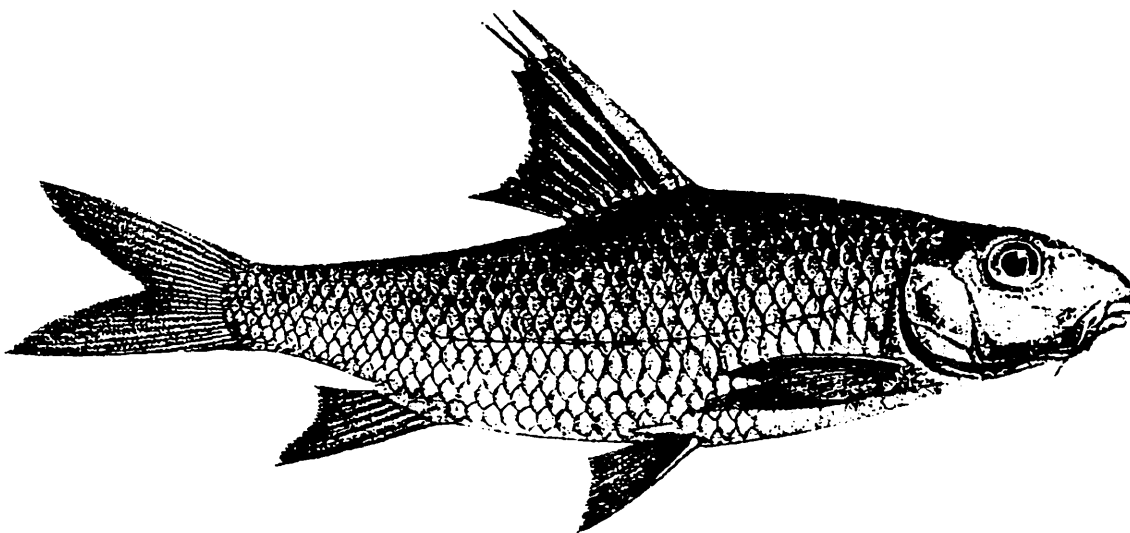


Fig. 10 : *Gonoproktopterus micropogon* (Valenciennes)

Distinguishing Characters : Body elongate, its depth 3.5 to 4.0 times in standard length. Snout conically pointed with pores. Eye diameter 3.5 to 4.5 in head length. Mouth moderate; barbels two pairs, rostral pair extends to anterior third of orbit, maxillary pair reaching its posterior edge. Dorsal fin inserted nearer to tip of snout than to caudal fin base. Lateral line scales 38-43; predorsal scales 12 to 15.

Geographical Distribution : Bhavani river and other head-waters of Cauvery river.

13. *Gonoproktopterus thomassi* (Day)
(Fig. 11)

1873. *Barbus (Barbodes) thomassi* Day *Proc. Zool. Soc. Lond.* : 707 (type-locality : South Canara).

1991. *Gonoproktopterus thomassi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 191.

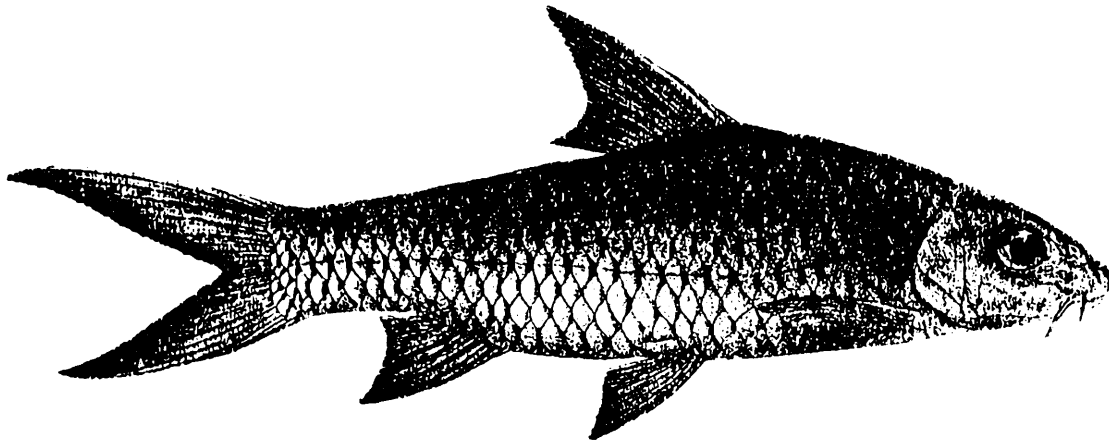


Fig. 11 : *Gonoproktopterus thomassi* (Day)

Distinguishing Characters : Body elongate, its dorsal and ventral profile equally convex, its depth of body 3.5 to 4.0 in standard length. Eye diameter 3.0 to 3.2 in head. Mouth subinferior; barbels two pairs, maxillary pair slightly shorter than orbit, rostral still shorter. Dorsal fin inserted equidistant between tip of snout and base of caudal fin. Lateral line with 31 to 34 scales.

Geographical Distribution : South Canara and Cardomon Hills (Western Ghats).

14. *Labeo ariza* (Hamilton-Buchanan)

(Fig. 12)

1807. *Cyprinus ariza* Hamilton-Buchanan, *Journey in Mysore*, 3 : 344, pl. 31 (type-locality : rivers of Peninsular India).

1991. *Labeo ariza* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 198.

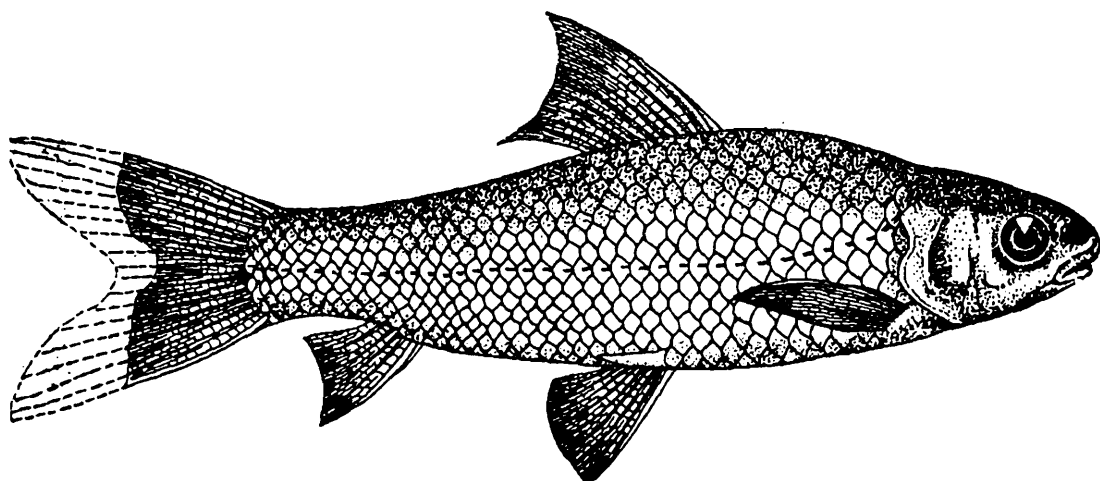


Fig. 12 : *Labeo ariza* (Hamilton-Buchanan)

Distinguishing Characters : Body elongate, its dorsal profile slightly more convex than ventral. Snout projects beyond mouth, with few pores. Eyes not visible from underside of head, its diameter 5.5 times in head. Mouth subinferior; lips smooth with cartilaginous covering inside of lower jaw; one pair of very short maxillary barbels. Dorsal fin inserted slightly posterior to tip of pectoral fin, nearer to snout tip than caudal base. Lateral line with 38 scales; lateral transverse $5\frac{1}{2}$.

Geographical Distribution : Peninsular India : Nilgiri Hills, Wynaad and Cauvery river system.

15. *Labeo kawrus* (Sykes)

(Fig. 13)

1841. *Chondrostoma kawrus* Sykes, *Trans. Zool. Soc. Lond.*, 2 : 358, pl. 67 fig. 2 (type-locality : Poona, Maharashtra).

1991. *Labeo kawrus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 211.

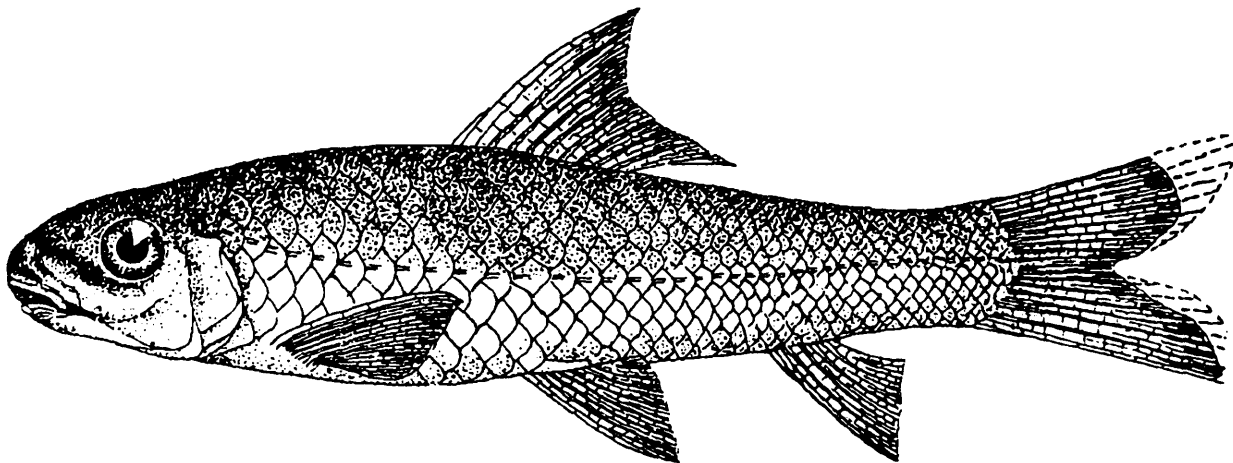


Fig. 13 : *Labeo Kawrus* (Sykes)

Distinguishing Characters : Body elongate, its dorsal and ventral profiles equally convex, snout not overhanging the mouth. Eyes not visible from underside of head, its diameter 3.5 to 3.8 times in head. Mouth subinferior, lips thin and smooth; a minute maxillary pair of barbels. Dorsal inserted nearer to tip of snout than caudal base. Lateral line scales 38; transverse rows $4\frac{1}{2}$.

Geographical Distribution : Western Ghats up to the Deccan.

16. *Labeo kontius* (Jerdon)

(Fig. 14)

1849. *Cyprinus kontius* Jerdon, *Medras J. Litt & Sci.* 15 : 302 (type-locality : Cauvery and its tributaries).

1991. *Labeo kontius* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 212.

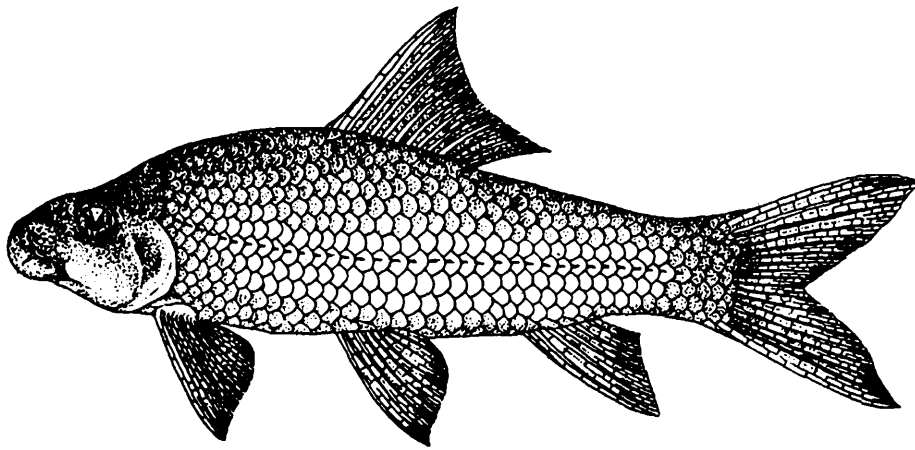


Fig. 14 : *Labeo kontius* (Jerdon)

Distinguishing Characters : Body elongate, its dorsal profile more convex than ventral, with a distinct hump at base of dorsal fin. Head fairly small; snout very conspicuous and thick, overhangs mouth with short, fleshy lateral prolongation, studded with pores. Eyes not visible from underside of head, its diameter 4.7 to 5.0 times in head. Mouth subterminal, lips thick with distinct inner fold below, lower lip finely fringed at margin. Two short pairs of barbels. Dorsal fin inserted nearer to snout tip than caudal fin base. Lateral line scales 38-41; lateral transverse 5.

Geographical Distribution : Tamil Nadu and Cauvery river system in South Karnataka.

17. *Labeo nigrescens* Day
(Fig. 15)

1870. *Labeo nigrescens* Day, *Proc. Zool. Soc. Lond.* : 371 (type-locality : Mangalore).

1991. *Labeo nirgescens* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 215.

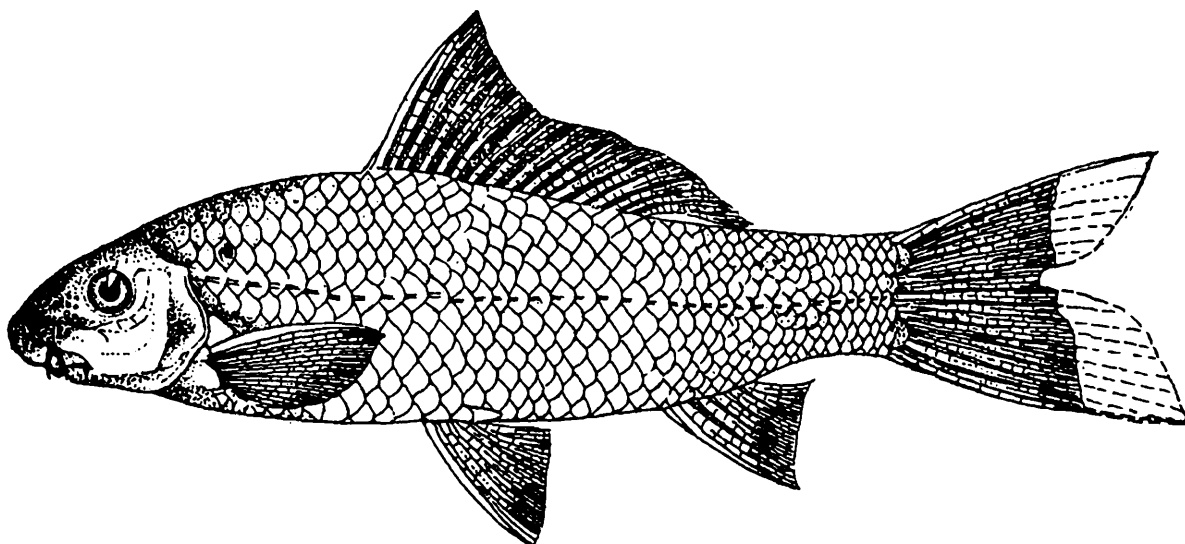


Fig. 15 : *Labeo nigrescens* Day

Distinguishing Characters : Body elongate, its dorsal and ventral profiles equally convex. snout swollen, slightly projecting over mouth, with a small lateral lobe. Eyes not visible from underside of head, its diameter 4 to 5 times in head. Mouth subinferior; lower lip deeply fringed. Two pairs of barbel, maxillary as long as orbit, rostral rather short. Dorsal fin nearer to snout than caudal fin base. Lateral line with 36 scales; lateral transverse $4\frac{1}{2}$.

Geographical Distribution : Karnataka State.

18. *Labeo potail* (Sykes)
(Fig. 16)

1841. *Cyprinus potail* Sykes, *Trans. Zool. Soc. Lond.*, 2 : 354 (type-locality : Beema river, Maharashtra).

1991. *Labeo potail* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 218.

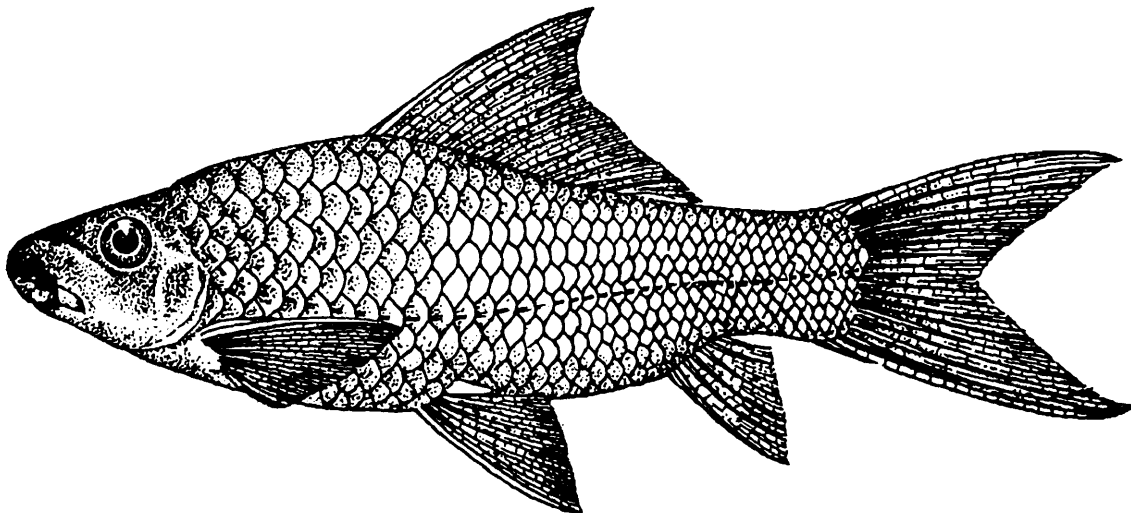


Fig. 16 : *Labeo potail* (Sykes)

Distinguishing Characters : Body elongate, its dorsal profile slightly more convex than ventral. Head length 5 times in standard length. Snout overhanging mouth, often with fine pores. Eyes not visible from underside of head, its diameter 4-6 in head. Mouth small and inferior; one pair of maxillary barbels. Dorsal fin inserted slightly nearer to tip of snout than caudal fin base. Lateral line scales 39-40; lateral transverse $5\frac{1}{2}$.

Geographical Distribution : Maharashtra, Deccan and Cauvery river system.

19. *Labeo rajasthanicus* Datta & Majumdar
(Fig. 17)

1970. *Labeo rajasthanicus* Datta and Majumdar, *Rec. zool. Surv. India*, 62(1/2) : 83, fig. 2 and pl. 8, fig. 3 (type-locality : Jaisamand lake, Udaipur dist., Rajasthan).

1991. *Labeo rajasthanicus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 218.

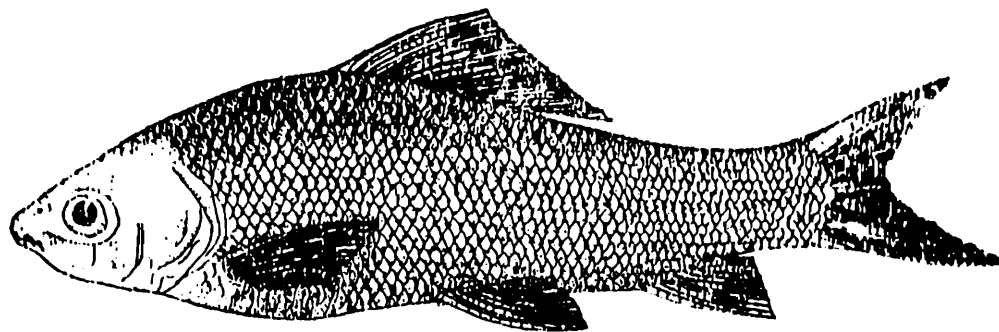


Fig. 17 : *Labeo rajasthanicus* Datta & Majumdar

Distinguishing Characters : Body elongate, its dorsal profile more convex than ventral. Head 4.0 in standard length. Snout overhanging mouth. Eyes not visible from underside of head, its diameter 5.2 in head. Mouth sub-inferior; two pairs of barbels. Dorsal fin inserted nearer to tip of snout than caudal fin base. Lateral line with 60 scales; lateral transverse $9\frac{1}{2}$.

Geographical Distribution : Jaisamand lake, Dist. Udaipur, Rajasthan.

20. *Labeo udaipurensis* Tilak

1968. *Labeo udaipurensis* Tilak, *Ann. Zool.*, 26(15) : 351, fig. 1 (type-locality : Udaipur, Rajasthan).

1991. *Labeo udaipurensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 222.

Distinguishing Characters : Body elongate, its dorsal and ventral profile equally convex. Head 4.0 in standard length. Snout slightly projected beyond mouth. Eyes visible from underside of head, its diameter 4 times in head. Mouth inferior; lips thick, lower lip more fimbriated than upper; a small maxillary pair of barbels concealed under groove. Dorsal fin inserted nearer to tip of snout than caudal fin base. Lateral line with 50 scales; lateral transverse $7\frac{1}{2}$.

Geographical Distribution : Udaipur, Rajasthan.

21. *Neolissocheilus spinulosus* (McClelland)

1845. *Barbus spinulosus* McClelland, *Calcutta J. nat. Hist.*, 5 : 280, pl. 21, fig. 3 (type-locality : Sikkim).

1985. *Neolissochilus spinulosus* : Rainboth, *Beaufortia*, 35(3) : 29 (Status recognised).

Distinguishing Characters : Body elongate, its depth 4 in standard length. Head broad, its length 4.3 in standard length. Mouth rounded. Two pairs of long barbels. Dorsal fin inserted equidistant between tip of snout and base of caudal fin. Lateral line with 32 scales; lateral transverse 6 between back and lateral line.

Geographical Distribution : Sikkim.

22. *Neolissocheilus wynaadensis* (Day)

(Fig. 18)

1873. *Barbus (Barbodes) wynaadensis* Day, *J. Linn. Soc. Lond. Zool.*, **11** : 528 (type-locality : Vithryl, Wynaad, Kerala).

1991. *Neolissocheilus wynaadensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, **1** : 234.

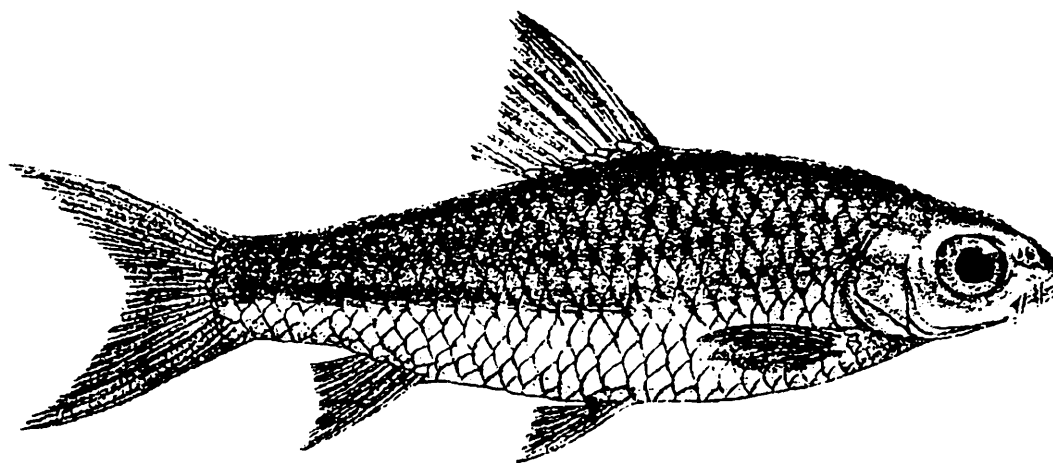


Fig. 18 : *Neolissochilus wynaadensis* (Day)

Distinguishing Characters : Body elongate, its depth 3.7 to 4.4 in standard length. Head broad, its length 4.2 to 4.5 in standard length. Mouth rounded; lower labial fold interrupted. Two pairs of barbels. Dorsal fin inserted slightly nearer to tip of snout than to caudal fin base. Lateral line with 26 to 28 scales; lateral transverse 4 to 6.

Geographical Distribution : Wynnad (Kerala) and headwaters of Cauvery river.

23. *Osteobrama bakeri* (Day)

(Fig. 19)

1873. *Rohtee bakeri* Day, *Proc. Zool. Soc. Lond.* : 240 (type-locality : Kottayam, Kerala).

1999. *Osteobrama bakeri* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 63.

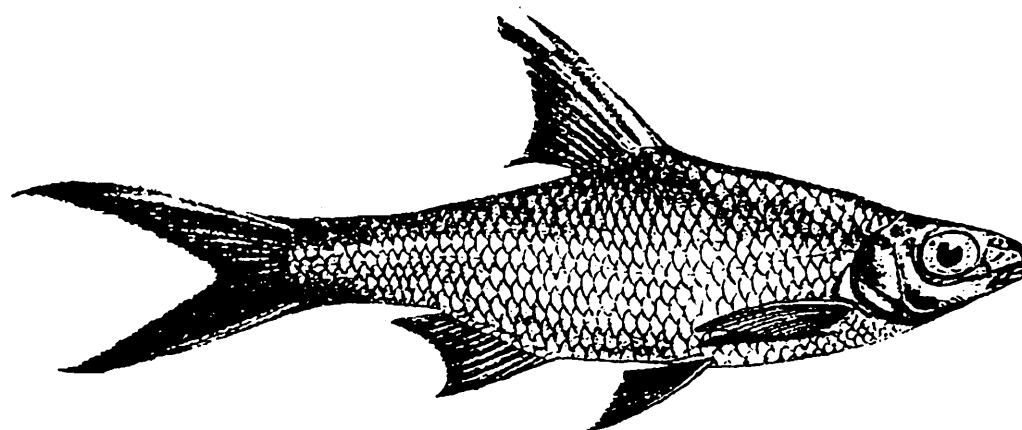


Fig. 19 : *Osteobrama bakeri* (Day)

Distinguishing Characters : Body considerably compressed, its depth 3.0 times in standard length. Abdominal edge sharp and trenchant between pelvic and anal fin base. Mouth small. Two small but well-defined pairs of barbels. Dorsal spine weak and serrated. Scales small; lateral line scales 44, lateral transverse $5\frac{1}{2}$, predorsal scales 15.

Geographical Distribution : Kerala.

24. *Osteobrama cotio peninsularis* Silas

1940. *Rohtee cotio* var. *cunma* Hora and Misra (partim), 1940, *Rec. Indian Mus.* 42(1) : 168 (Peninsular India).

1952. *Osteobrama cotio* var. *peninsularis* Silas, *Proc. nat. Inst. Sci. India.* 18(5) : 433 (type-locality : Poona).

1999. *Osteobrama cotio peninsularis* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* 175 : 65.

Distinguishing Characters : Body considerably compressed, its depth 2.2 to 2.8 in standard length. Abdominal edge trenchant between pelvic and anal fin base. Mouth small; barbels absent. Dorsal spine weak and serrated. Scales small; lateral scales 55 to 60, lateral transverse $7\frac{1}{2}$, to $9\frac{1}{2}$ pre-dorsal scales 21 to 24.

Geographical Distribution : Peninsular India : Maharashtra, Orissa and Andhra Pradesh.

25. *Osteobrama dayi* (Hora & Misra)

1878. *Rohtee belangeri* (nec Valenciennes) Day (partim), *Fishes of India* : 587 (Godavari river).

1940. *Rohtee dayi* Hora and Misra, *Rec. Indian Mus.*, 42(1) : 162 (type-locality : Godavari river, Andhra Pradesh).

1991. *Osteobrama dayi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 240.

Distinguishing Characters : Body considerably compressed, its depth 2.1 to 2.3 in standard length. Abdominal edge sharp and trenchant between pelvic and anal fin base. Mouth small; a minute maxillary pair of barbels. Dorsal spine moderately strong and denticulated. Scales small; lateral line scales 68 to 70, lateral transverse $13\frac{1}{2}$ to $14\frac{1}{2}$, pre-dorsals 28 to 30.

Geographical Distribution : Godavari river.

26. *Osteobrama neilli* (Day)

(Fig. 20)

1873. *Rohtee neilli* Day. *Proc. Zool. Soc. Lond.* : 239 (type-locality : Bhavani river at base of Nilgiri Hills).

1999. *Osteobrama neilli* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 65.

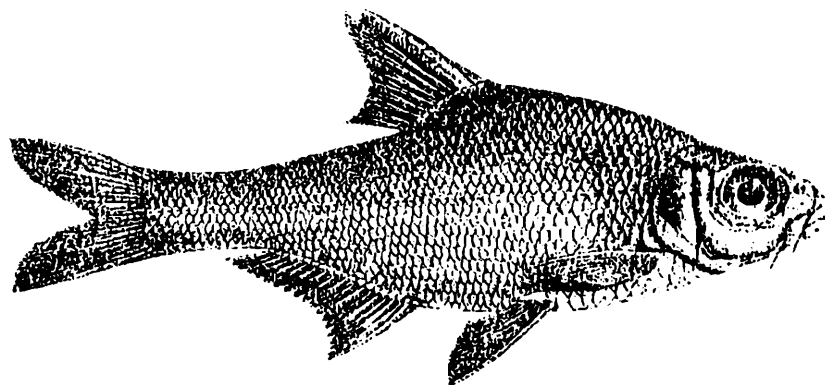


Fig. 20 : *Osteobrama neilli* (Day)

Distinguishing Characters : Body considerably compressed, its depth 2.7 to 3.0 in standard length. Abdominal edge sharp between pelvic and anal fin base. Mouth small; two well defined pairs of barbels. Dorsal spine very strong and serrated. Lateral line scales 55-60, lateral transverse $7\frac{1}{2}$ to 8, predorsal scales 20 to 22.

Geographical Distribution : Maharashtra, Karnataka and Tamil Nadu.

27. *Osteobrama vigorsii* (Sykes)
(Fig. 21)

1841. *Rohtee vigorsii* Skyes, *Trans. Zool. Soc. Lond.*, 2 : 364, Pl. 63, fig. 3 (type-locality : Beema river at Pairgaon, Maharashtra).

1999. *Osteobrama vigorsii* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 66.

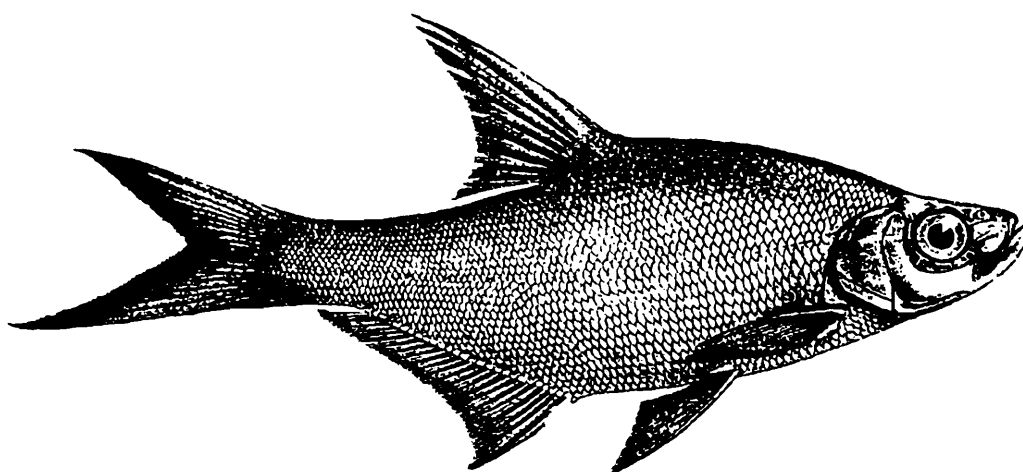


Fig. 21 : *Osteobrama vigorsii* (Sykes)

Distinguishing Characters : Body considerably compressed, its depth 2.8 to 3 in standard length. Abdominal edge sharp between pelvic and anal fin base. Mouth small; a pair of rudimentary maxillary barbels present. Dorsal spine very strong and denticulated. Scales very small; 73-85 in lateral line, lateral transverse 11 to $11\frac{1}{2}$. Predorsal scales 33 to 37.

Geographical Distribution : Orissa, Maharashtra, Krishna and Godavari river systems.

28. *Osteochilus (Kantaka) brevidorsalis* (Day)
(Fig. 22)

1873. *Semiplotus bravidorsalis* Day, *Proc. Zool. Soc. Lond.* : 239 (type-locality : River below Neilgherry Hills, Western Ghats).

1991. *Osteochilus (Kantaka) brevidorsalis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 245.

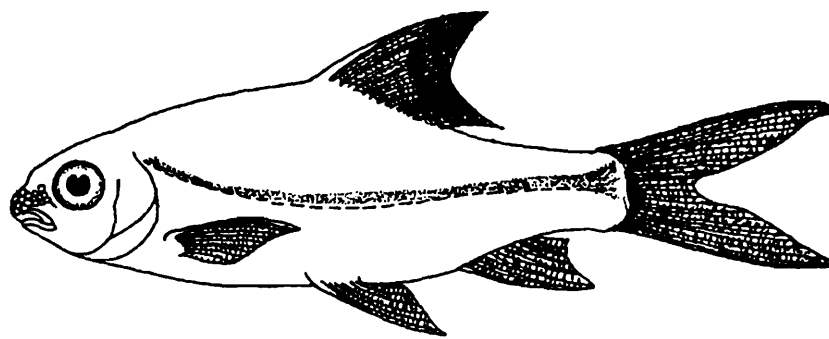


Fig. 22 : *Osteochilus (Kantaka) brevidorsalis* (Day)

Distinguishing Characters : Body oblong and slightly compressed, its depth 3 in standard length, snout swollen, jaws overhanging; three rows of large pores on snout. Mouth inferior, a thin cartilaginous covering on both jaws. Barbels absent. Dorsal spine very strong, but non serrated. Lateral line scales 39-40.

Geographical Distribution : Western Ghat of Kerala.

29. *Osteochilus (Osteochilichthys) godavariensis* (Rao)

1977. *Osteochilichthys godavariensis* Rao, *Sci & Cult.*, 43(II) : 492, figs. 1, 2 (type-locality : Chandkas, tributary of Godavari river, Maharashtra).

1991. *Osteochilus (Osteochilichthys) godavariensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 246.

Distinguishing Characters : Body oblong, laterally compressed, its depth 3.0 to 3.5 in standard length. Snout overhanging, covered with papillae. Mouth inferior; lower jaw with cartilaginous covering internally, lips fringed. Lower lip with three rows of well-developed papillae. Two pairs of barbels; rostral short, maxillary pair slightly longer. Last unbranched dorsal fin ray non-osseus. Lateral line complete with 39 scales.

Geographical Distribution : Godavari river basin, Western Ghat of Maharashtra.

30. *Osteochilus (Osteochilichthys) nashii* (Day)
(Fig. 23)

1868. *Barbus nashii* Day, *Proc. Zool. Soc. Lond.* : 584 (type-locality : Fraserpett river, Coorg dist., Karnataka).

1991. *Osteochilus (Osteochilichthys) nashii* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 247.

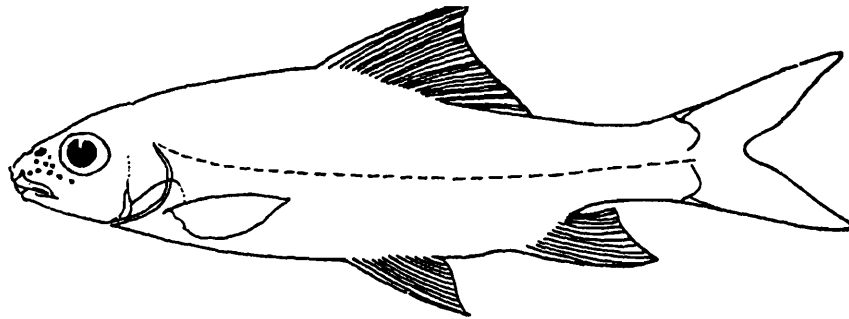


Fig. 23 : *Osteochilus (Osteochilichthys) nashii* (Day)

Distinguishing Characters : Body oblong and compressed, its depth 3.2 to 3.6 in standard length. Snout overhanging. Mouth broad and inferior, each jaw with cartilaginous covering, with growth cartilaginous covering becomes more horny. Barbels absent. Dorsal fin without any osseous ray. Lateral line with 40 to 43 scales.

Geographical Distribution : Western Ghats of Karnataka and Kerala.

31. *Osteochilus (Osteochilichthys) thomassi* (Day)
(Fig. 24)

1877. *Scaphiodon thomassi* Day. *Fishes of India* : 551. pl. 134. fig. 1 (type-locality : South Canara).

1991. *Osteochilus (Osteochilichthys) thomassi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 248.



Fig. 24 : *Osteochilus (Osteochilichthys) thomassi* (Day)

Distinguishing Characters : Body moderately deep and slightly compressed its depth 2.8 to 3.0 times in standard length. Snout obtuse, mouth overhanging. Large pores present on

snout and upper lip. Mouth inferior, lower jaw with horny covering at anterior side. Lower lip papillated along its anterior border, followed by a transverse series of small pores. Barbels absent. Last unbranched dorsal finray weak and articulated. Lateral line scales 39.

Geographical Distribution : Western Ghats of Karnataka.

32. *Puntius arenatus* (Day)

(Fig. 25)

1878. *Barbus arenatus* Day, *Fishes of India* : 574, pl. 142, fig. 7 (type-locality : Madras).

1991. *Puntius arenatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 258.

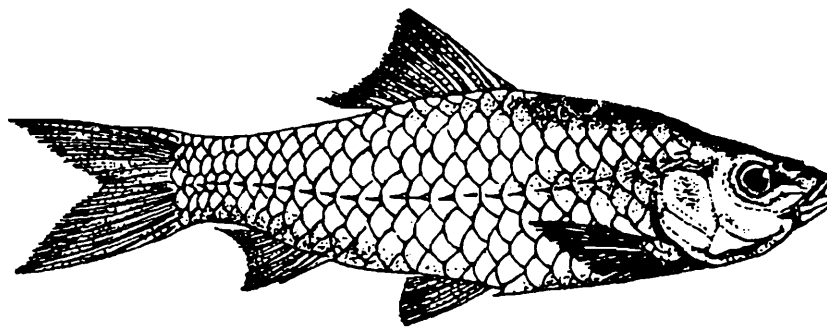


Fig. 25 : *Puntius arenatus* (Day)

Distinguishing Characters : Body moderately deep and robust, its depth 3.3 in standard length. Head 3.7 in standard length. Mouth moderate. One pair of maxillary barbels. Dorsal fin inserted equidistant between tip of snout and caudal fin base. Last unbranched dorsal ray smooth and poorly osseous. Lateral line complete with 26 scales; predorsal scales 11.

Geographical Distribution : Madras, Tamil Nadu.

33. *Puntius arulius* (Jerdon)

(Fig. 26)

1849. *Systomus arulius* Jerdon *Madras J. Lit. & Sci.* 15 : 317 (type-locality : Cauvery river at Srirangapatnam).

1991. *Puntius arulius* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 258.

Distinguishing Characters : Body elongate and moderately compressed, its depth 3.2 to 3.5 in standard length. Head 3.5 to 3.7 in standard length. Mouth moderate. One pair of very thin maxillary barbels. Dorsal fin inserted nearer to tip of snout than to caudal fin base. Last unbranched dorsal ray weak and non-osseous. Lateral line complete with 21 to 24 scales; predorsal scales 8.

Geographical Distribution : Tamil Nadu, Kerala and Cauvery River system.

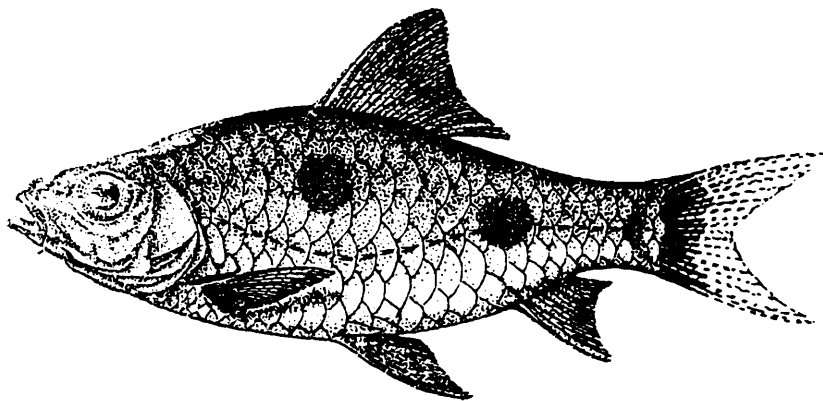


Fig. 26 : *Puntius arulius* (Jerdon)

34. *Puntius bovanicus* (Day)
(Fig. 27)

1878. *Barbus bovanicus* Day, *Fishes of India* : 566, pl. 138, fig. 1 (type-locality : Bowani river at base of Nilgiri Hills).

1982. *Puntius bovanicus* : Jayaram *et al.* *Rec. zool. Surv. India, Occ. Paper No. 36* : 51.

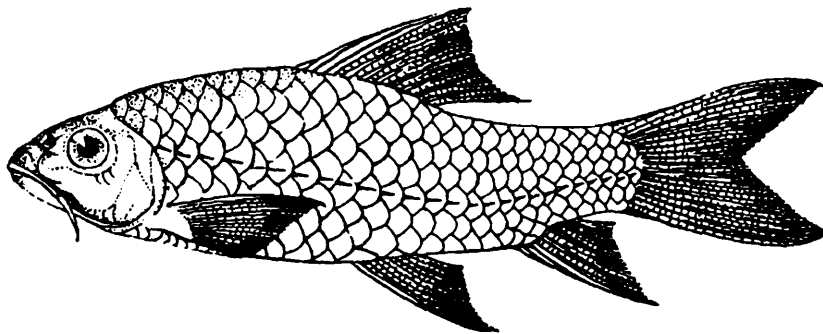


Fig. 27 : *Puntius bovanicus* (Day)

Distinguishing Characters : Body elongate, its depth 2.8 in standard length. Head moderate, its length 4 in standard length. Mouth subterminal; two pairs of barbels. Dorsal fin inserted equidistant between tip of snout and caudal fin base. Last unbranched dorsal ray osseous, fairly strong and smooth. Lateral line complete with 24 to 26 scales; pre-dorsal scales 10.

Geographical Distribution : Bhavani river at base of Nilgiri Hills.

35. *Puntius carnaticus* (Jerdon)
(Fig. 28)

1849. *Barbus carnaticus* Jerdon, *Madras J. Lit & Sci.*, 15 : 311 (type-locality : Cauvery river).

1991. *Puntius carnaticus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 262, fig. 89.

Distinguishing Characters : Body elongate, its depth 2.5 to 3.5 in standard length. Head length 4.2 to 4.7 in standard length. Eye diameter 3.0 to 3.5 in head. Mouth moderately subterminal; lips fleshy. Barbels two pairs. Dorsal fin inserted nearer to tip of snout than caudal fin base. Last undivided dorsal ray strong, osseus and smooth. Lateral line scales 28 to 32, lateral transverse $5\frac{1}{2}/3\frac{1}{2}$.

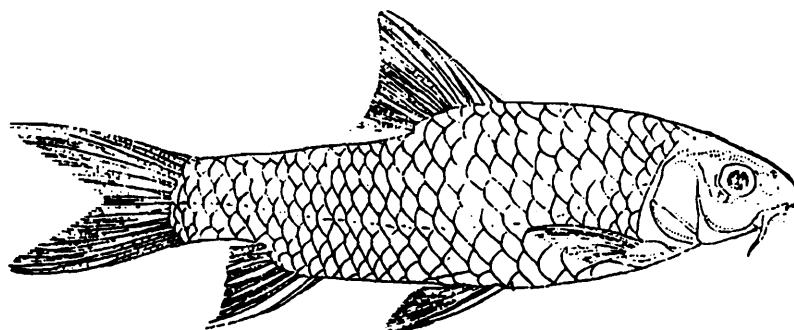


Fig. 28 : *Puntius carnaticus* (Jerdon)

Geographical Distribution : Cauvery and Krishna river system, Nilgiri, Wynaad and Canara Hills.

36. *Puntius cauveriensis* (Hora)
(Fig. 29)

1937. *Barbus cauveriensis* Hora, *Rec. Indian Mus.*, 39(1) : 20, fig. 7 (type-locality : Cauvery river, Coorg, Karnataka State).

1991. *Puntius cauveriensis* : Jayaram *Rec. zool. Surv. India, Occ. Paper No. 135* : 68.

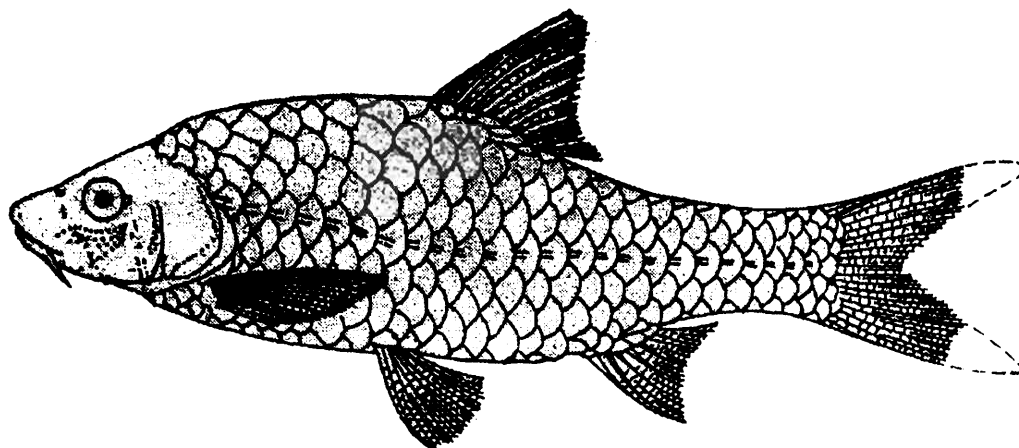


Fig. 29 : *Puntius cauveriensis* (Hora)

Distinguishing Characters : Body moderately deep, its depth 2.5 to 2.75 in standard length. Head 3.5 in standard length. Mouth small and subinferior. One pair of small maxillary barbels. Sides of head with numerous, fine, sensory folds. Dorsal fin inserted equidistant between tip of snout and caudal fin base; last unbranched dorsal ray osseus and smooth. Lateral line scales 23 to 27; lateral line transverse $5\frac{1}{2}/3\frac{1}{2}$.

Geographical Distribution : Cauvery river.

37. *Puntius deccanensis* Yazdani & Rao
(Fig. 30)

1978. *Puntius deccanensis* Yazdani & Rao. *J. Bombay nat. Hist. Soc.*, 73(1) : 171, fig. 1 (type-locality : nr. Poona, Maharashtra).

1991. *Puntius deccanensis* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 44.

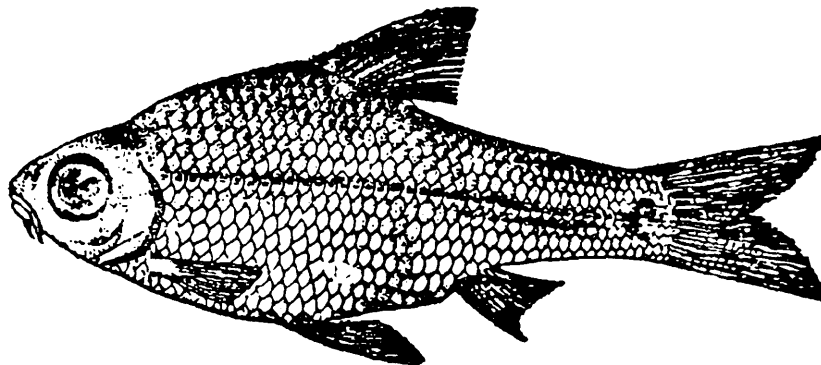


Fig. 30 : *Puntius deccanensis* Yazdani & Rao

Distinguishing Characters : Body moderately deep, its depth 3.0 to 3.3 in standard length. Head 3.7 to 4.0 times in standard length. Mouth small; a pair of maxillary barbels present. Dorsal fin inserted equidistant between tip of snout and caudal fin base. Last unbranched dorsal ray osseous, strong and serrated. Lateral line scales 42 to 44; lateral transverse $6/6\frac{1}{2}$.

Geographical Distribution : nr. Poona, Maharashtra.

38. *Puntius denisonii* (Day)
(Fig. 31)

1865. *Labeo denisonii* Day, *Proc. Zool. Soc. Lond.* : 299 (type-locality : Mundikyum, Travancore, Kerala state).

1991. *Puntius denisonii* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 71-73.

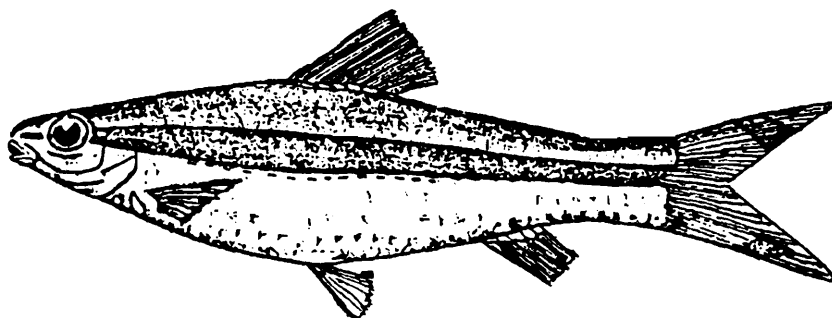


Fig. 31 : *Puntius denisonii* (Day)

Distinguishing Characters : Body moderately elongated, its depth 3.75 in standard length.

Head 4.5 in standard length. Mouth small; a pair of maxillary barbels present. Dorsal fin inserted nearer to tip of snout than caudal fin base. Last unbranched dorsal ray non-osseous, weak and articulated. Lateral line scales 28; lateral transverse $4\frac{1}{2}/2\frac{1}{2}$.

Geographical Distribution : Travancore Hill Ranges, Kerala.

39. *Puntius fasciatus* (Jerdon)
(Fig. 32)

1849. *Cirrhinus fasciatus* Jerdon, *Madras J. Lit. & Sci.*, 15 : 305 (type-locality : Malabar).

1991. *Puntius fasciatus fasciatus* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 135.

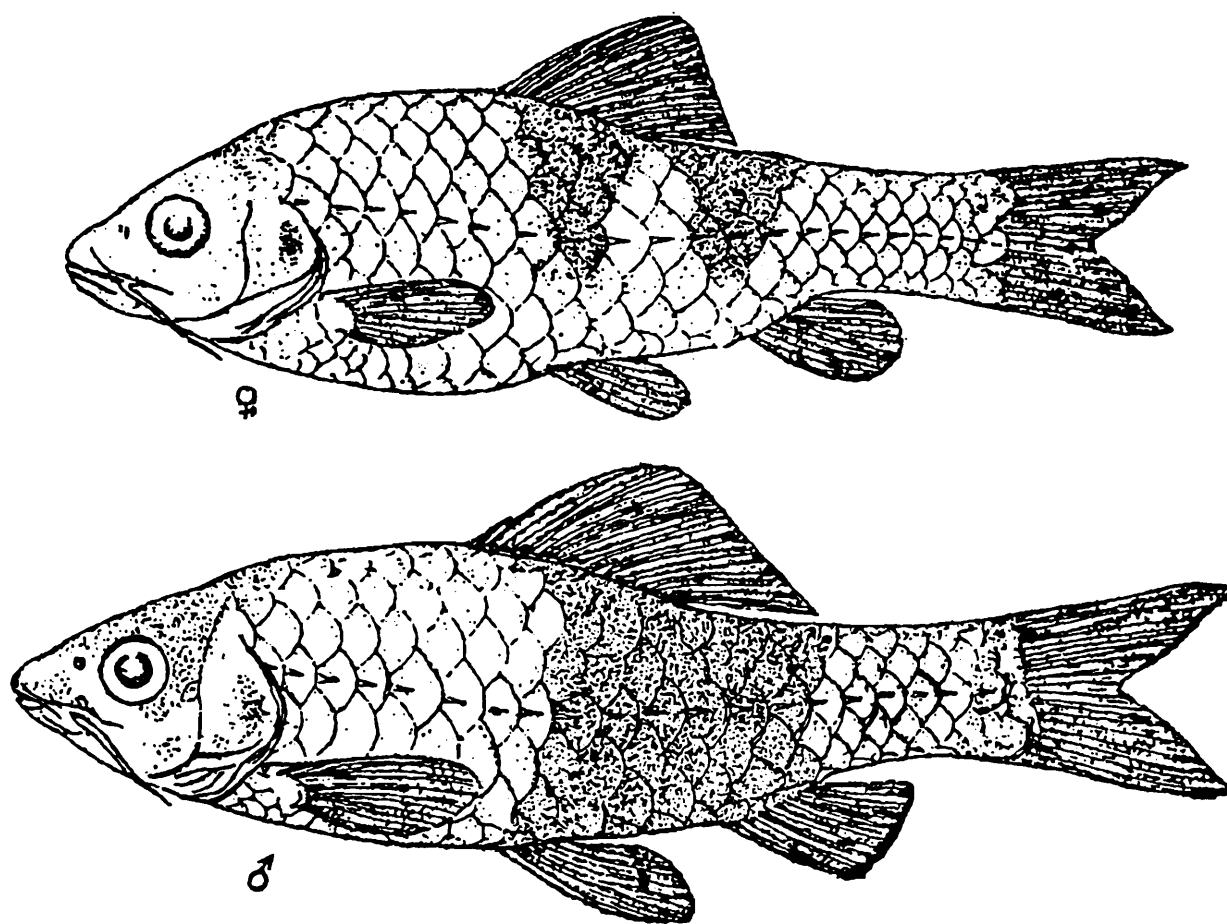


Fig. 32 : *Puntius fasciatus* (Jerdon)

Distinguishing Characters : Body moderately elongate, its depth 2.5 to 2.8 in standard length. Length of head 3.7 to 3.9 in standard length. Mouth moderate; two pairs of barbels. Dorsal fin inserted equidistant between tip of snout and caudal fin base. Last unbrached dorsal ray non-osseous, weak and articulated. Lateral line scales 18-20; lateral line transverse 3 to $3\frac{1}{2}/2\frac{1}{2}$ to 3.

Geographical Distribution : Wynaad, Nilgiri hill ranges in Kerala and Karnataka. Also in the Cauvery river at upper reaches and Nallamalai hills in the Eastern Ghats.

40. *Puntius fraseri* (Hora & Misra)
(Fig. 33)

1938. *Barbus fraseri* Hora and Misra, *J. Bombay, nat. Hist. Soc.*, 40(1) : 29, pl. 3, fig. 2 and text-fig. 4 (type-locality : Darna river at Deolali, Maharashtra).

1991. *Puntius fraseri* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 41-44.

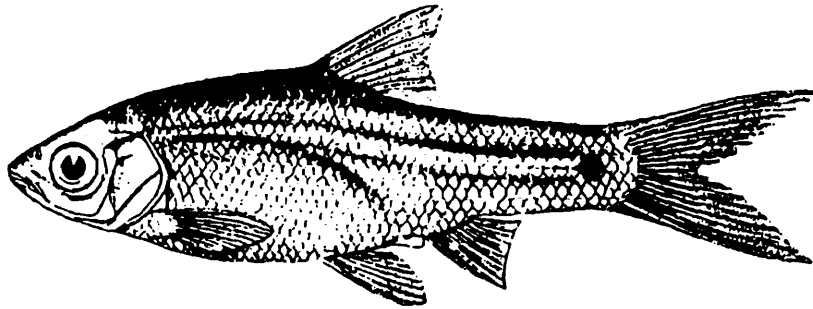


Fig. 33 : *Puntius fraseri* (Hora & Mukherjee)

Distinguishing Characters : Body fairly deep, its depth 2.8 in standard length. Head small, its length 3.9 in standard length. Mouth small; one pair of barbels (maxillary) present. Dorsal fin inserted equidistant between snout tip and caudal fin base. Last unbranched dorsal ray osseus, strong and serrated. Lateral line scales 42 to 47; lateral transverse $6\frac{1}{2}$.

Geographical Distribution : Darna river, Deolali, Maharashtra.

41. *Puntius jerdoni* (Day)
(Fig. 34)

1870. *Barbus (Barbodes) jerdoni* Day, *Proc. Zool. Soc. Lond.* : 372 (type-locality : Mangalore, Karnataka).

1991. *Puntius jerdoni* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 46.

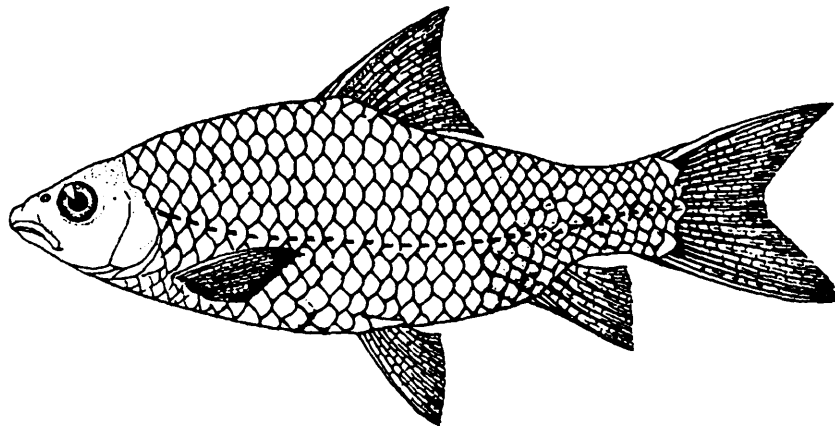


Fig. 34 : *Puntius jerdoni* (Day)

Distinguishing Characters : Body moderately deep, its depth 2.7 to 3.0 in standard length. Head 4.25 to 5.0 in standard length. Mouth narrow; barbels two pairs. Dorsal fin

inserted equidistant between snout tip and caudal fin base. Last unbranched dorsal ray non-osseous, weak and articulated. Lateral line scales 26 to 32; lateral transverse $5\frac{1}{2}$ to $6\frac{1}{2}$ / $2\frac{1}{2}$ to $3\frac{1}{2}$.

Geographical Distribution : Deccan along the Western Ghats from Wai to Anaimalai Hills.

42. *Puntius melanostigma* (Day)

(Fig. 35)

1878. *Barbus melanostigma* Day, *Fishes of India* : 573, pl. 143. fig. 1 (type-locality : Wynaad : Kerala).

1991. *Puntius melanostigma* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 73.

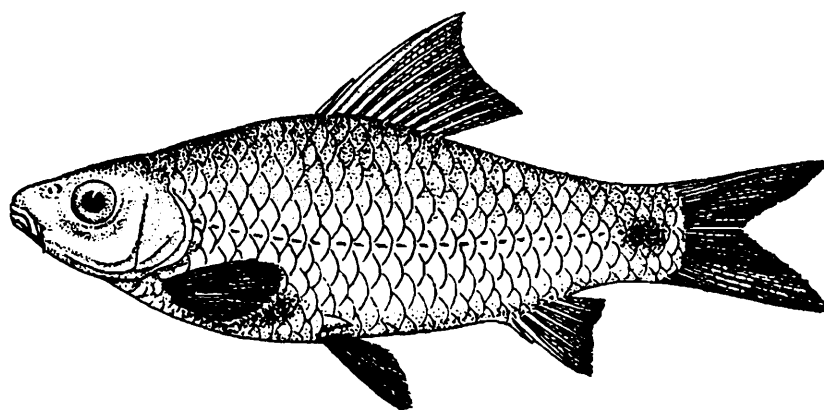


Fig. 35 : *Puntius melanostigma* (Day)

Distinguishing Characters : Body rather elongate, its depth 2.8 to 3 in standard length. Head length 3.75 in standard length. Mouth small and fairly subterminal; one pair of maxillary barbels only present. Dorsal fin inserted equidistant between snout tip and caudal fin base. Last unbranched dorsal ray feebly osseous and smooth. Lateral line scales 26 to 28; lateral transverse $4\frac{1}{2}$ to 5 / $2\frac{1}{2}$ to $3\frac{1}{2}$.

Geographical Distribution : Wynaad, Kerala, Bhavani and Cauvery rivers; Maharashtra.

43. *Puntius mudumalaiensis* Menon and Rema Devi

1992. *Puntius mudumalaiensis* Menon and Rema Devi, *J. Bombay nat. Hist. Soc.*, **89**(2) : 229 (Type-locality : Kakkanhalla Road, Mudumalai, Tamil Nadu).

1992. *Puntius mudumalaiensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 97.

Distinguishing Characters : Body deep anteriorly, tapering posteriorly. Head large, its length 2.69 to 2.88 in standard length. Eye diameter 3.47 to 4.50, inter orbital 2.78 to 3.55 in head length. Mouth small, lips fleshy and folded back enclosing a deep groove. Gape of mouth 2.54 to 3.84 in head length. 1 pair of small maxillary barbels present. Dorsal fin originates midway between tip of snout and caudal base. Lateral line incomplete. pre-dorsal scales 9-10.

Geographical Distribution : Mudumalai, Tamil Nadu.

44. *Puntius nangelensis* Jayaram
(Fig. 36)

1990. *Puntius nangelensis* Jayaram. *J. Bombay nat. Hist. Soc.* 86 (3 & 4) (type-locality : Nangal lake, Punjab).

1999. *Puntius nangelensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* 175 : 97.

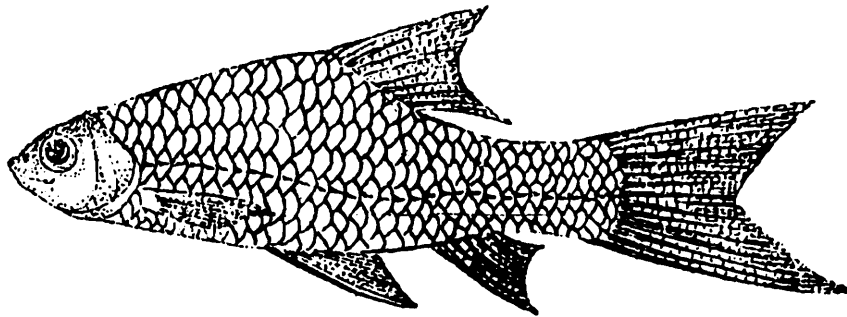


Fig. 36 : *Puntius nangelensis* Jayaram

Distinguishing Characters : Dorsal profile convex, a good elevation upto dorsal fin. Head almost conical, its length 23.8 to 31.8, body depth 27.1 to 32.1 in percent of standard length. Eye large, superior, 25 to 50 in percent of head length. Mouth subterminal, lips thin. Barbel absent Dorsal fin inserted nearer to tip of snout than caudal fin base. Pectoral fin extending to pelvic fin. Lateral line in complete, ceasing after 7 or 8 scales.

Geographical Distribution : Nangal lake, East Punjab.

45. *Puntius narayani* (Hora)
(Fig. 37)

1937. *Barbus narayani* Hora, *Rec. Indian Mus.*, 39(1) : 24, fig. 10 (type-locality : Cauvery-river, Coorg, Karnataka).

1991. *Puntius narayani* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No.* 135 : 159.

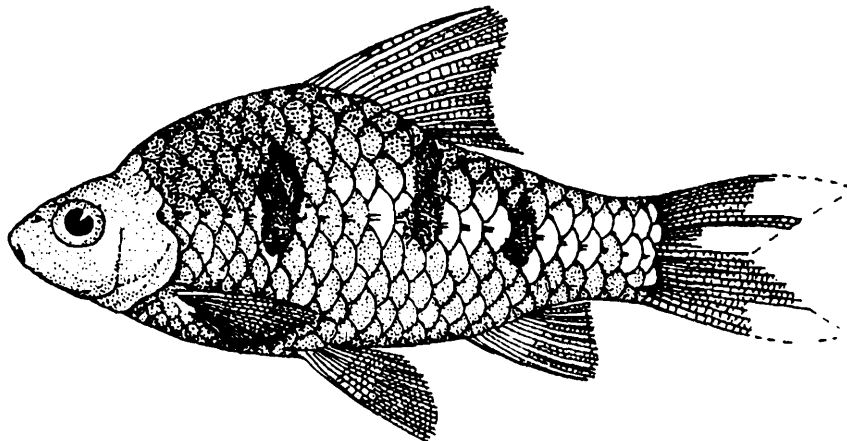


Fig. 37 : *Puntius narayani* (Hora)

Distinguishing Characters : Dorsal and ventral profiles strongly arched. Body deep. its depth 2.5 in standard length. Head short and blunt, its length 4 in standard length. Eyes large, its diameter 2.9 in head length. Mouth small; lips fleshy, studded with minute tubercles. Barbels absent. Dorsal fin inserted nearer to snout tip than caudal fin base. Last undivided dorsal ray non-osseous, weak and articulated. Lateral line scales 22-23; lateral transverse $3\frac{1}{2}$ - $4\frac{1}{2}$ / $2\frac{1}{2}$ - 4.

Geographical Distribution : Cauvery and Krishna rivers in the Karnataka and Maharashtra stretch of Western Ghats.

46. *Puntius ophicephalus* (Raj)
(Fig. 38)

1941. *Barbus (Puntius) ophicephalus* Raj, *Rec. Indian Mus.*, 43(3) : 375, fig. 1 & 2 (type-locality : Kallar nr. Pariyar lake, Kerala).

1991. *Puntius ophicephalus* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 103.

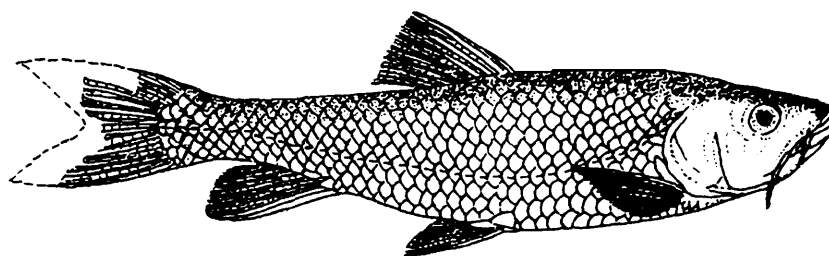


Fig. 38 : *Puntius ophicephalus* (Raj)

Distinguishing Characters : Body elongate, its depth 3.8 to 4.1 in standard length. Head broad, its length 3.2 to 4.0 in standard length. Mouth subinferior; two pairs of barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Last undivided dorsal ray weak, smooth and articulated. Lateral line scale 40 to 42; lateral transverse $7-7\frac{1}{2}$ / $3\frac{1}{2}$ - 4.

Geographical Distribution : Pambiyar river and its tributary, Kerala.

47. *Puntius parrah* (Day)
(Fig. 39)

1865. *Puntius parrah* Day, *Proc. Zool. Soc. Lond.* : 301 (type-locality : Kuriavanoor nr. Trichur, Kerala).

1991. *Puntius parrah* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 56.

Distinguishing Characters : Body moderately deep, its depth 2.8 to 3.2 in standard length. Head 4.2 in standard length. Only a maxillary pair of barbels present. Dorsal fin inserted equidistant between snout tip and caudal fin base. The last undivided dorsal ray osseous and smooth. Lateral line scales 25 to 26; lateral transverse $4\frac{1}{2}$ / $5\frac{1}{2}$ / $2\frac{1}{2}$ - $3\frac{1}{2}$.

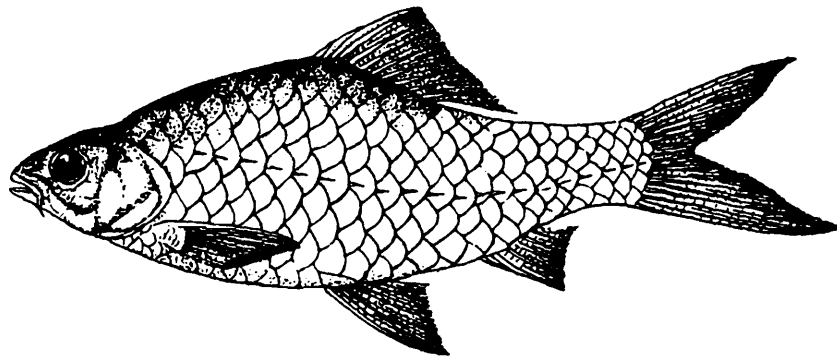


Fig. 39 : *Puntius parrah* (Day)

Geographical Distribution : Kerala, Tamil Nadu, Karnataka, extending upto South Maharashtra.

48. *Puntius roseipinnis* (Valenciennes)
(Fig. 40)

1842. *Barbus roseipinnis* Valenciennes, *Hist. nat. Poiss.* 16 : 169 (type-locality : Pondicherry).

1991. *Puntius roseipinnis* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No.* 135 : 128.

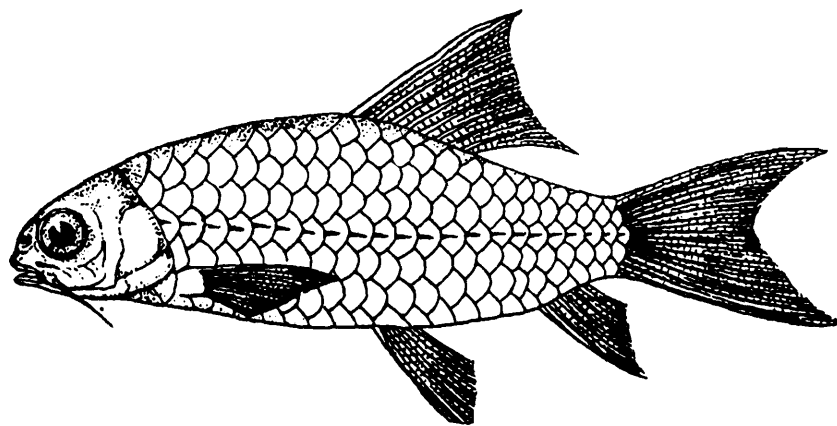


Fig. 40 : *Puntius roseipinnis* (Valenciennes)

Distinguishing Characters : Body elongate, dorsal profile arched. Body depth 2.8 to 3.2 and head length 3.0 to 3.5 in standard length. Eyes large. Two pairs of barbels. Last undivided dorsal ray osseous, fairly strong and serrated. Dorsal fin inserted nearer to snout tip than to caudal fin base. Lateral line scales 22; lateral transverse $4\frac{1}{2}/2\frac{1}{2}$.

Geographical Distribution : Pondicherry.

49. *Puntius sahyadriensis* Silas
(Fig. 41)

1953. *Puntius Sahyadriensis* Silas, *J. Bombay nat. Hist. Soc.* 51(3) : 582, pl. 1. fig. 1-6 (type-locality : Yenna river, Maharashtra).

1991. *Puntius sahyadriensis* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. 135* : 161.

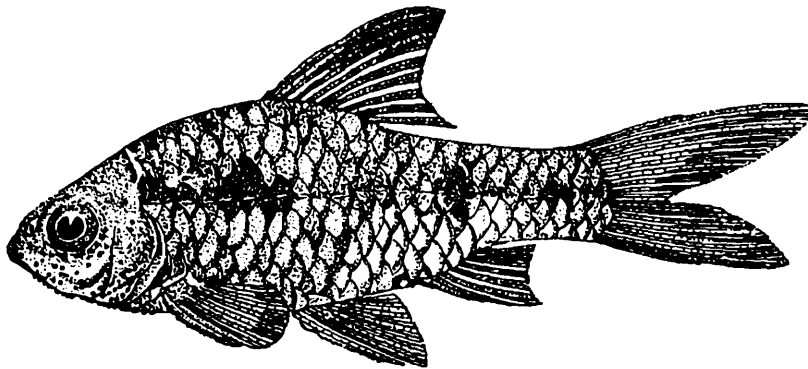


Fig. 41 : *Puntius sahyadriensis* Silas

Distinguishing Characters : A deep bodied fish, depth being 2.6 to 3.0 in standard length. Head rather blunt, its length 3.0 to 4.0 in standard length. Eyes large, its diameter 2.8 to 3.5 in head length. Dorsal fin inserted nearer to snout tip than to Caudal fin base. Last undivided dorsal ray non-osseous, weak and articulated. Lateral line scales 23-24; lateral transverse $4\frac{1}{2}$ / $4\frac{1}{2}$.

Geographical Distribution : Yenna river, Mahabaleswar, Satara district Maharashtra.

50. *Puntius sarana subnasutus* (Valenciennes)
(Fig. 42)

1842. *Barbus subnasutus* Valenciennes, *Hist. nat. Poiss.*, 16 : 154 (type-locality : Pondicherry).

1991. *Puntius sarana subnasutus* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No. (135)* : 120.

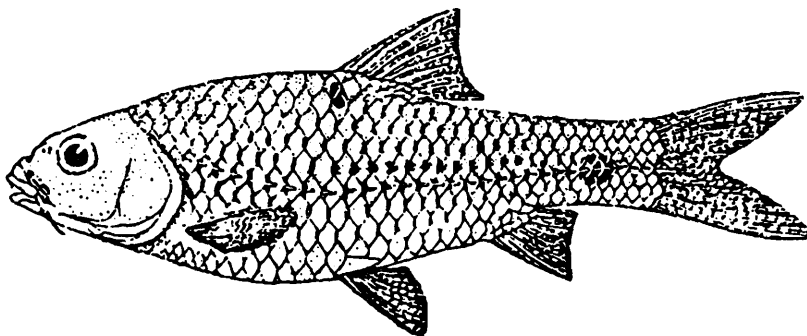


Fig. 42 : *Puntius sarana subnasutus* (Valenciennes)

Distinguishing Characters : Body oblong, moderately deep, its depth 2.7 to 2.9 in standard length. Head length 4.4 to 4.8 in standard length. Two pairs of barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Last undivided dorsal ray osseous, fairly strong and posteriorly serrated. Lateral line scales 28-31. Lateral transverse $5\frac{1}{2}$ - $6\frac{1}{2}$ / $3\frac{1}{2}$.

Geographical Distribution : Krishna River Systems; and South of it in Peninsular India.

51. *Puntius setnai* Chhapgar and Sane

1992. *Puntius setnai* Chhapgar and Sane, *J. Bombay nat. Hist. Soc.* **89**(3) : 357-359 (Type-locality : clear streams in Sangem, Goa).

1999. *Puntius setnai* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* **175** : 100.

Distinguishing Characters : Head and body compressed. Belly rounded. Dorsal and ventral profiles greatly arched. Head short and conical, its length 3.67 in standard length. Eye diameter 2.47 in head length. Body depth 2.32 in standard length. Barbels absent. Dorsal fin inserted slightly nearer to tip of snout than caudal base. Last undivided dorsal ray osseous and serrated. Lateral line with 20 scales. Pre-dorsal scales 7. Two vertical dark bands present on the body.

Geographical Distribution : Goa : Sangem and Ponda.

52. *Puntius shalynius* Yazdani & Talukdar

(Fig. 43)

1975. *Puntius shalynius* Yazdani and Talukdar, *J. Bombay nat. Hist. Soc.*, **72**(1) : 218, fig (type-locality : Barapani lake nr. Shillong, Meghalaya).

1991. *Puntius shalynius* : Jayaram, *Rec. zool. Surv. India, Occ. Paper No.* **135** : 30.

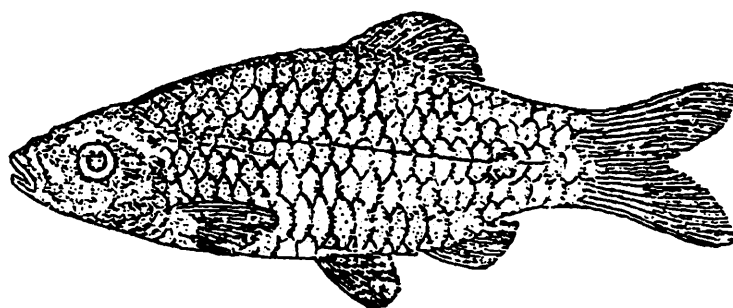


Fig. 43 : *Puntius shalynius* Yazdani & Talukdar

Distinguishing Characters : Body moderately deep, its depth 2.7 to 3.6 in standard length. Head length 3.0 to 3.9 in standard length. Barbel absent. Dorsal fin inserted nearer to caudal fin base than to tip of snout. Last undivided dorsal ray osseous, strong and serrated. Lateral line scales 20 to 23. Lateral transverse $3-4\frac{1}{2}$ - $3\frac{1}{2}$.

Geographical Distribution : Khasi and Jaintia Hills, Meghalaya; Assam.

53. *Puntius sharmai* Menon and Rema Devi

1992. *Puntius sharmai* Menon and Rema Devi, *J. Bombay nat. Hist. Soc.* **89**(3) : 353-354. (Type-locality : Mogappair, West Anna Nagar and Tennari Tank, Kunrathur, Madras).

1999. *Puntius sharmai* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 100.

Distinguishing Characters : Body elongate. Head small, 4.78 to 5.04 in total length. Eye diameter 3.06 to 3.45 and interorbital width 2.95 to 3.48 in head length. Maxillary barbels very small. Caudal peduncle long and narrow, its least height 1.11 to 1.55 in its length. Dorsal fin situated midway between tip of snout and caudal base. The first two branched rays of anal fin are greatly prolonged. Caudal deeply forked considerably longer than head. Lateral line incomplete, pores extend upto seventh scale. Lateral scales 42, predorsal scales 15.

Geographical Distribution : Tamil Nadu : Outskrits of Madras city.

54. *Rohtee ogilbii* Sykes

(Fig. 44)

1841. *Rohtee ogilbii*. Sykes, *Trans Zool. Soc. Lond.*, 2 : 364, pl. 63, fig. 2 (type-locality : Bheema river at pairgaon, Maharashtra).

1999. *Rohtee ogilbii* : Menon, *Rec. zool. Surv. India, Occ. Paper* No. 175 : 67.

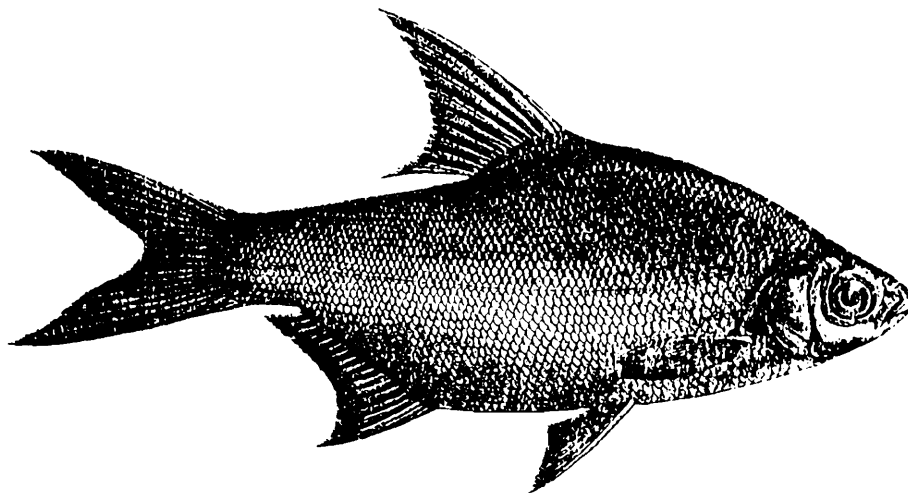


Fig. 44 : *Rohtee ogilbii* Sykes

Distinguishing Characters : Body deep and strongly compressed, its dorsal profile more convex than ventral. Mouth small, lower jaw shorter than upper. Barbels absent. Eyes large, visible from underside. A predorsal spine present. Dorsal spine coarsely serrated and strong. Scales small; lateral line scales about 55.

Geographical Distribution : Western Ghats and Krishna–Godavari river systems.

55. *Schismatorhynchus (Nukta) nukta* (Sykes)

(Fig. 45)

1841. *Cyprinus nukta*. Sykes, *Trans Zool. Soc. Lond.*, 2 : 325 (type-locality : Inderanee river nr. Poona).

1991. *Schismatorhynchus (Nukta) nukta* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 297.

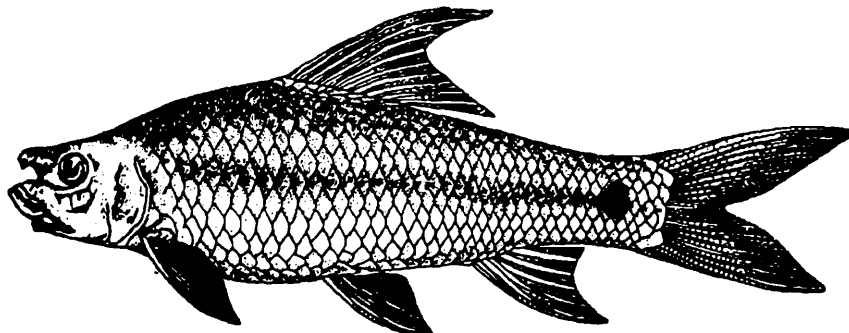


Fig. 45 : *Schismatorhynchus (Nukta) nukta* (Sykes)

Distinguishing Characters : Body elongate and compressed. Snout projecting over mouth, its lower part usually longer than upper. Mouth moderate, lower tip reflected, its inner surface studded with large papillae, continuous with upper lip, A pair of small, flap-like, crenulated maxillary barbels present, embedded in labial groove. Dorsal fin inserted nearer to snout tip than caudal fin base. Anterior three dorsal ray markedly elevated and higher than the body. Lateral line scales 37 to 38.

Geographical Distribution : Maharashtra and Karnataka.

56. *Thynnichthys sandkhol* (Sykes)

(Fig. 46)

1838. *Leuciscus sandkhol* Sykes, *Trans, Zool. Soc. Lond.* 2 : 363 (type-locality : Gorah river at Kullumb, Deccan).

1999. *Thynnichthys sandkhol* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* 175 : 54.

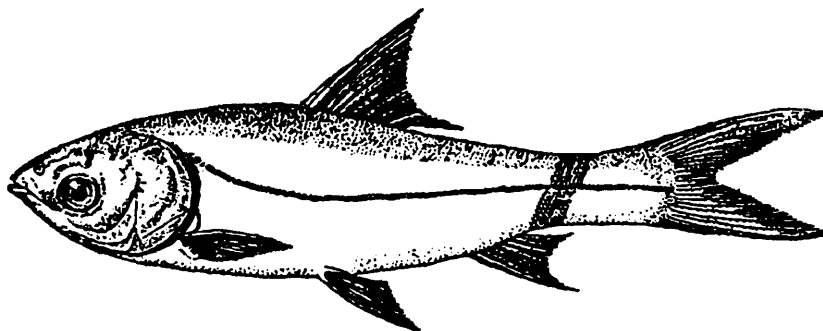


Fig. 46 : *Thynnichthys sandkhol* (Sykes)

Distinguishing Characters : Body moderately elongate, tail region compressed. Head broad, its width about half of its length. Mouth wide and terminal; lower jaw prominent than upper. Dorsal fin small, inserted nearer to snout tip than caudal fin base. Scales very small; lateral line with 120 scales.

Geographical Distribution : Mahanadi, Krishna and Godavari river systems.

57. *Tor kulkarnii* Menon

1992. *Tor kulkarnii* Menon, *J. Bombay nat. Hist. Soc.*, 89(2) : 210-228 pl. 1-3, figs. 1-5 (type-locality : Darna River, Deolali).

1999. *Tor kulkarnii* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 59.

Distinguishing Characters : Body elongate and compressed. Upper profile convex before dorsal fin, but slightly concave behind it. Head oval, flattish above, its length considerably shorter than depth of body. Mouth moderate, terminal, its gape not extending to below eye. Lips fleshy, continuous at the angles of mouth with uninterrupted fold along lower jaw. Nostrils nearer to eye than to tip of snout. Eyes in the anterior half of head, its diameter 20.75 to 22.86 percent of head. 2 pairs of barbels present. Dorsal fin almost in the middle of the body. Pectoral fin shorter than head. Caudal forked. Lateral line scales 24-26. Pre-dorsal scales 10-11.

Geographical Distribution : Maharashtra : Deolali.

58. *Tor mussulah* (Sykes)

(Fig. 47)

1838. *Barbus musullah* Sykes, *Proc. Zool. Soc. Lond.* : 159 (type-locality : Ghod river at Sirur nr. Poona).

1991. *Tor mussulah* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 306.

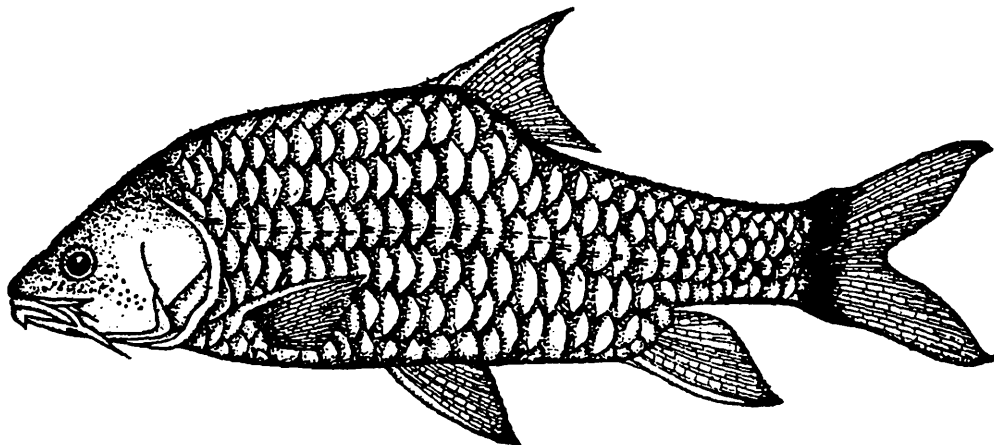


Fig. 47 : *Tor mussullah* (Sykes)

Distinguishing Characters : Body moderately deep, its depth 3.1 to 3.4 in standard length. Head length 4.0 in standard length. Eye small, not visible from underside of head. Lips fleshy. Two pairs of barbels. Scales large; lateral line scales 26-27. Lateral transverse $4\frac{1}{2}/3\frac{1}{2}$.

Geographical Distribution : Krishna and Godavari river systems.

59. *Tor progeneius* (McClelland)
(Fig. 48)

1839. *Barbus progeneius* McClelland *Asiat Res.*, 19(2) : 270, 334, pl. 56, fig. 3 (type-locality : Assam).

1991. *Tor progeneius* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 306.

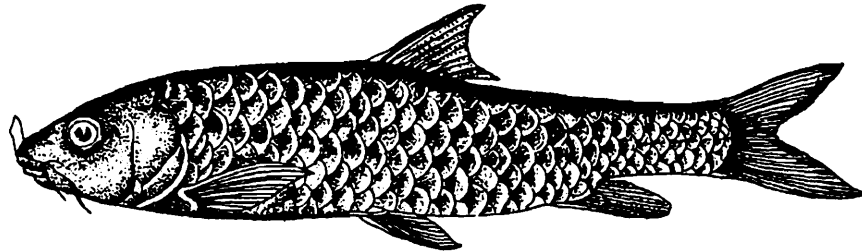


Fig. 48 : *Tor progeneius* (Mc Clelland)

Distinguishing Characters : Body slender, its depth 3.5 to 3.8 in standard length. Eyes small, not visible from under side. Mouth moderate, behind upper lip a fan-shaped flap present. Two pairs of barbels. Scales large; lateral line scales 24 to 27; lateral transverse $4\frac{1}{2} / 2\frac{1}{2}$.

Geographical Distribution : North-East Himalayas.

Subfamily CULTRINAE

60. *Chela dadidurjori* (Menon)
(Fig. 49)

1952. *Laubuca dadidurjori* Menon, *Rec. Indian Mus.*, 49 : 1 (type-locality : Cochin, Kerala).

1991. *Chela dadidurjori* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 314, fig. 112.

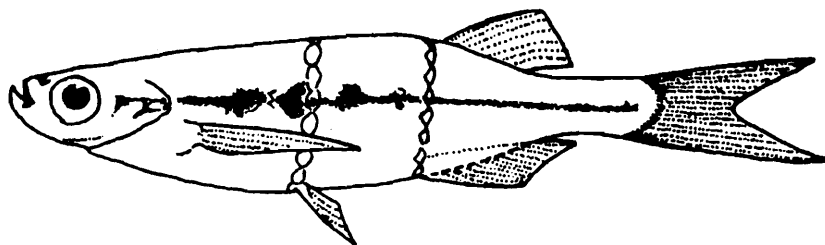


Fig. 49 : *Chela dadidurjori* (Menon)

Distinguishing Characters : Body elongate and greatly compressed, its depth 4.5 to 5.2 in standard length. Body keeled from posterior third of abdomen to vent. Mouth oblique, its cleft extending to below front margin of eye. Lateral line usually absent. Lateral transverse scales 7 or 8.

Geographical Distribution : Nagercoil, Tamil Nadu and Sanguen, Goa.

61. *Chela fasciatus* Silas
(Fig. 50)

1958. *Chela (Allochela) fasciatus* Silas, *J. Bombay nat. Hist. Soc.* **55**(1) : 87, pl. 2, figs 1-5 (type-locality : Annamalai river at Vannathurai, Kerala State).

1991. *Chela fasciatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, **1** : 315.

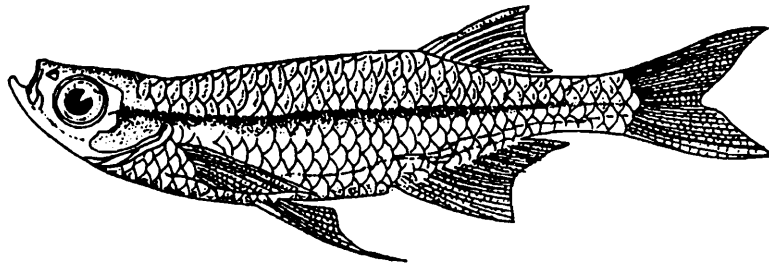


Fig. 50 : *Chela fasciatus* Silas

Distinguishing Characters : Body greatly compressed; elongated, its depth 3.8 to 4.3 in standard length. Head turned upwards. Mouth small, obliquely directed upwards, its cleft not extending to below front margin of eye. Outer ray of pelvic fin greatly elongated. Lateral line with 33 to 34 scales; lateral transverse $6\frac{1}{2}/1-1\frac{1}{2}$.

Geographical Distribution : Annamalai Hills, Kerala.

62. *Salmostoma acinaces* (Valenciennes)

1842. *Leuciscus acinaces* Valenciennes, *Hist. nat. Poiss.*, **17** : 509 (type-locality : Kaveri drainage, Mysore).

1999. *Salmostoma acinaces* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* **175** : 24.

Distinguishing Characters : Body elongate and compressed, its ventral profile more convex than dorsal. Mouth oblique, symphyseal process in the lower jaw rudimentary. Dorsal fin inserted above/slightly posterior to the origin of anal fin. Scales large, lateral line curved downwards, with 42 to 46 scales; lateral transverse scales $6-7\frac{1}{3}$.

Geographical Distribution : Poona, Maharashtra; Bhavani river near Madras and Cauvery river system.

63. *Salmostoma boopis* (Day)
(Fig. 51)

1873. *Chela boopis* Day, *Proc. Zool. Soc. Lond.* : 708 (type-locality : South Canara).

1999. *Salmostoma boopis* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* **175** : 26.

Distinguishing Characters : Body elongate and compressed, its ventral profile more convex than dorsal. Mouth oblique, symphyseal process in the lower jaw rudimentary.

Dorsal fin inserted well anterior to anal fin. Scales large, lateral line curved downwards, with 39 to 42 scales. Lateral transverse 6/3.

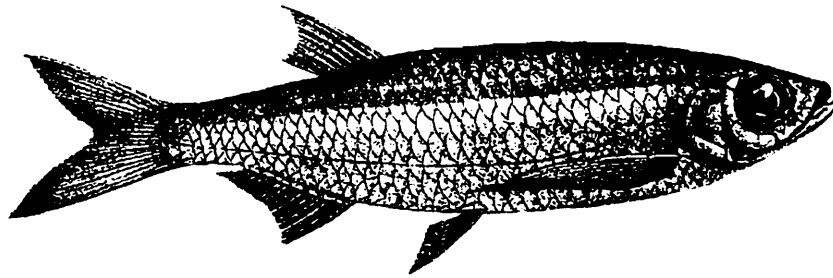


Fig. 51 : *Salmostoma boopis* (Day)

Geographical Distribution : Western Ghats, South Canara and Poona, Maharashtra.

64. *Salmostoma horai* (Silas)
(Fig. 52)

1951. *Chela horai* Silas J. Zool. Soc. India, 3(1) : 8, fig. 1 (type-locality : Cauvery river, Coorg, Karnataka).

1999. *Salmostoma horai* : Menon, Rec. zool. Surv. India, Occ. Paper No. 175 : 28.

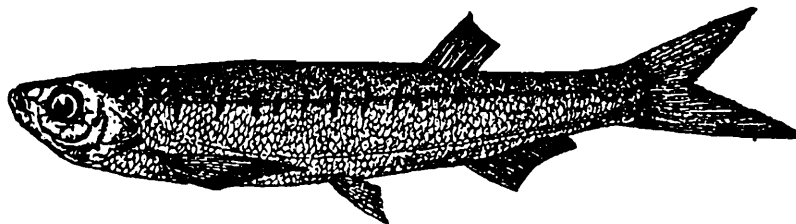


Fig. 52 : *Salmostoma horai* (Silas)

Distinguishing Characters : Body elongate and compressed, its ventral profile slightly arched. Eyes large, its diameter almost equal to interorbital width. Mouth directed upwards; a well developed symphyseal knob present on the lower jaw. Dorsal fin inserted in advance of the origin of anal fin. Scales small, lateral line with 76 to 85 scales. Lateral transverse 11-12/3.

Geographical Distribution : Karnataka and Andhra Pradesh.

65. *Salmostoma kardahiensis* Reddiah

1980. *Salmostoma kardahiensis* Reddiah, Bull. Zool. Surv. India. 3(1/2) 14, fig. 1 (type-locality : Kardahi River near Jabalpur, Madhya Pradesh).

1991. *Salmostoma kardahiensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 324.

Distinguishing Characters : Body elongate and compressed, its ventral profile more

convex than dorsal. Mouth oblique. A well developed symphyial process present on lower jaw. Dorsal fin inserted in advance of origin of anal fin. Lateral line strongly curved, with about 52 scales; Lateral transverse 3-4/2-3.

Geographical Distribution : Madhya Pradesh.

66. *Salmostoma novacula* (Valenciennes)

1842. *Leuciscus novacula* Valenciennes, *Hist. nat. Poiss.*, 17 : 347 (type-locality : Madras).

1999. *Salmostoma novacula* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 28.

Distinguishing Characters : Body elongate and compressed. Mouth oblique. A distinct symphyial process present on the lower jaw. Dorsal fin inserted opposite to anal fin. Scales small. Lateral line curved downwards with 80 to 95 scales. Lateral transverse 12-15/6.

Geographical Distribution : Madras, Godavari and Krishna Drainage, Poona and the Western Ghats.

67. *Salmostoma orissaensis* Banarescu

1968. *Salmostoma phulo orissaensis* Banarescu, *Revue roum. Biol. (Zool)*, 13(1) : 5. fig. 4 (type-locality : Orissa, India).

1999. *Salmostoma orissaensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 29.

Distinguishing Characters : Body elongate and compressed. Mouth oblique. A poorly developed symphyial process present on lower jaw. Eye large, its diameter more than interorbital width. Dorsal fin inserted opposite to origin of anal fin. Scales small, Lateral line curved downwards, with 76 to 90 scales. Lateral transverse 14/6.

Geographical Distribution : Orissa (Lower Mahanadi).

68. *Salmostoma untrahi* (Day)

(Fig. 53)

1869. *Chela untrahi* Day. *Proc. Zool. Soc. Lond.* : 361 (type-locality : Mahanadi river, Orissa).

1999. *Salmostoma untrahi* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 30.

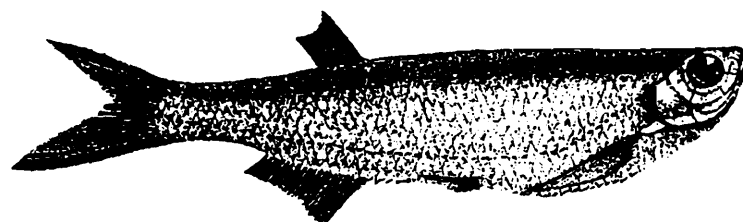


Fig. 53 : *Salmostoma untrahi* (Day)

Distinguishing Characters : Body elongate and compressed. Ventral profile more convex than dorsal profile. Mouth nearly vertical. A fairly strong symphyseal process present on the lower jaw. Dorsal fin inserted well in advance of anal fin. Scales small. Lateral line strongly curved downwards, with 60-64 scales. Lateral transverse 10/1-2.

Geographical Distribution : Mahanadi river drainage, Orissa.

Subfamily RASBORINAE

69. *Amblypharyngodon chakaiensis* Babu & Nair

1978. *Amblypharyngodon chakaiensis*, Babu & Nair, *Aquatic Biology*, 3 : 122, figs. 1, 2 (type-locality : Chakai, Trivandrum district, Kerala).

1991. *Amblypharyngodon chakaiensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 336.

Distinguishing Characters : Body elongate, its depth 4.2 to 4.5 in standard length. Eyes large, its diameter 3.8 to 4.1 in head length. Lateral line incomplete, ceases often 17 to 22 scales. Lateral line scales 54 to 57; 6 rows between lateral line and pelvic fin base.

Geographical Distribution : Veli lake, Trivandrum district, Kerala.

70. *Amblypharyngodon microlepis* (Bleeker)

(Fig. 54)

1853. *Leuciscus microlepis* Bleeker. *Verh. Batav. Genoot. Kunst. Wet.* 25 : 141 (type-locality : Bengal).

1999. *Amblypharyngodon microlepis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 32.

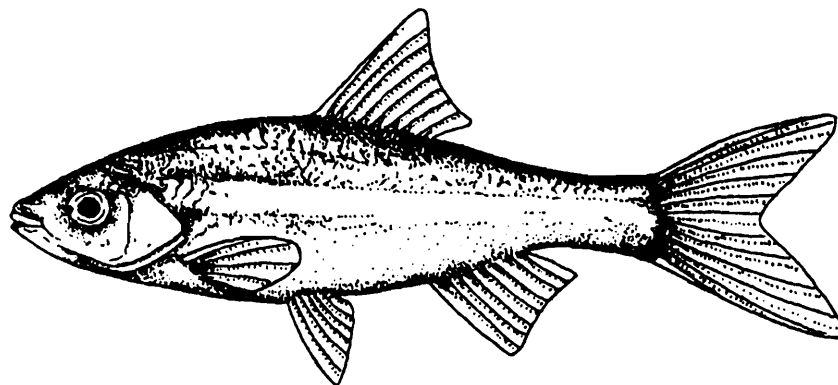


Fig. 54 : *Amblypharyngodon microlepis* (Bleeker)

Distinguishing Characters : Body elongate and fusiform, its depth 4.0 to 4.4 in standard length. Eyes large, its depth 3.5 to 4.0 in head length. Lateral line incomplete, ceases after few scales. Lateral line scales 55 to 60; 5 scales between it and pelvic fin base.

Geographical Distribution : West Bengal, Bihar, Orissa, Uttar Pradesh, Andhra Pradesh, Tamil Nadu and Kerala.

71. *Barilius bakeri* Day
(Fig. 55)

1865. *Barilius bakeri* Day, *Proc. Zool. Soc. Lond.* : 305 (type-locality : Mundakayam, Kerala).

1999. *Barilius bakeri* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 12.

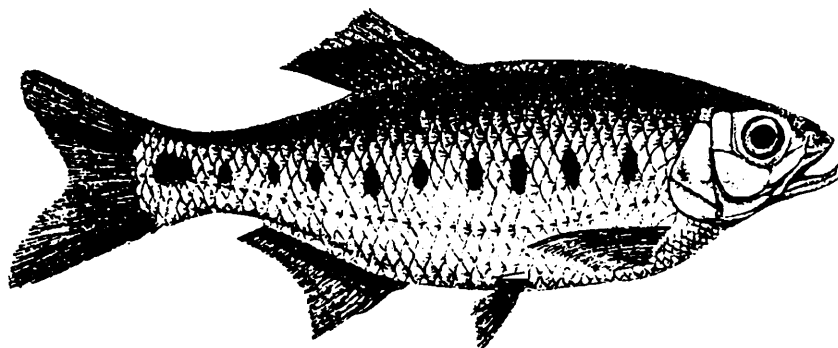


Fig. 55 : *Barilius bakeri* Day

Distinguishing Characters : Body deep, its depth 2.9 to 3.2 in standard length. Mouth moderate, maxilla extends below middle of orbit, well developed tubercles on snout and lower jaw. No barbel. Dorsal fin inserted in advance of anal. Scales moderate. Lateral line scales 37-38. Predorsal scales 16.

Geographical Distribution : Western Ghats, Kerala.

72. *Barilius canarensis* (Jerdon)
(Fig. 56)

1849. *Opsarius canarensis* Jerdon, *Madras J. Lit. & Sci.*, 15 : 329 (type-locality : Canara).

1999. *Barilius canarensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 16.

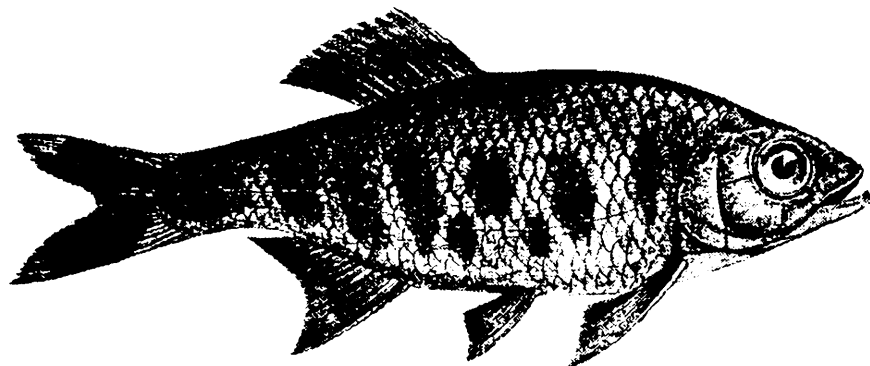


Fig. 56 : *Barilius canarensis* (Jerdon)

Distinguishing Characters : Body deep, its depth 2.9 to 3.1 in standard length. Jaws short. Large well developed tubercles present on head. Maxilla extends to below anterior third of the orbit. No barbel. Dorsal fin inserted midway between snout tip and caudal fin base; in advance of caudal fin. Scales with few radii. Lateral line scales 37 to 38. Predorsal scales 15.

Geographical Distribution : Western Ghats in Karnataka and Kerala.

73. *Barilius dogarsinghi* Hora

1921. *Barilius dogarsinghi* Hora, *Rec. Indian Mus.*, **22**(3) : 191, fig. 3 (type-locality : Near chanderkhong, Manipur).

1999. *Barilius dogarsinghi* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 17.

Distinguishing Characters : Body deep, its depth 3.4 to 3.6 in standard length. Jaws short, maxilla extends to below anterior third of orbit. Two pairs of very short rostral barbels present. Large, well developed tubercles present on snout, lower jaw and sides of head. Dorsal fin inserted far back, extending over half of anal fin. Scales with few radii. Later line scales 38 to 39. Predorsal scales 20.

Geographical Distribution : Manipur.

74. *Barilius everzardi* Day

(Fig. 57)

1872. *Barilius everzardi* Day, *J. Asit. Soc. Beng.*, **41**(2) : 326 (type-locality : Poona, Maharashtra).

1999. *Barilius everzardi* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 17.

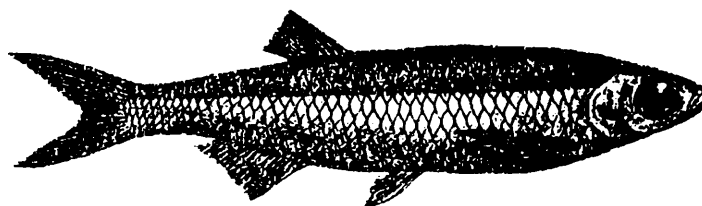


Fig. 57 : *Barilius everzardi* Day

Distinguishing Characters : Body elongate, its depth 4.6 in standard length. Jaws short, lower jaw with symphyseal process. Maxilla extends to below front edge of orbit. No barbel. Long and well developed tubercles on head. Dorsal fin inserted in advance of anal fin. Scales with few radii. Lateral line scales 40. Pre-dorsal scales 14.

Geographical Distribution : Maharashtra.

75. *Barilius gatensis* (Valenciennes)

(Fig. 58)

1844. *Leuciscus gatensis* Valenciennes, *Hist. nat. Poiss.* **17** : 309, pl. 503. (type-locality : Peninsular India).

1999. *Barilius gatensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 18.

Distinguishing Characters : Body deep, its depth 3.2 to 3.5 in standard length. Jaws short, maxilla extends to below middle of orbit. One minute rostral pair of barbel may be present.

Large and well developed tubercles on snout and lower jaw. Dorsal fin inserted in advance of anal fin. Scales with few radii. Lateral line scales 39 to 40. Predorsal scales 15.

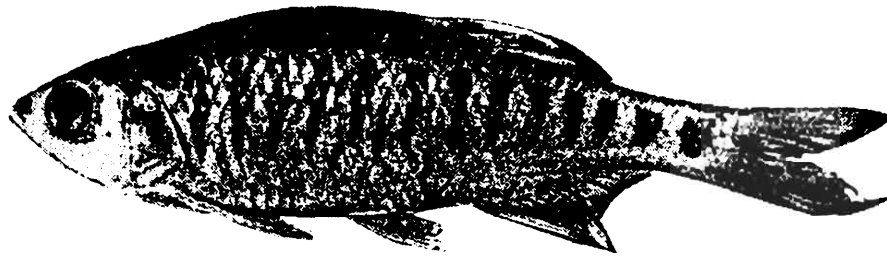


Fig. 58 : *Barilius gatensis* (Valenciennes)

Geographical Distribution : Western Ghats in Maharashtra, the Nilgiri Hills in Tamil Nadu, Southern Karnataka and Kerala.

76. *Barilius nelsoni* Barman
(Fig. 59)

1989. *Barilius nelsoni* Barman, *J. Bombay nat. Hist. Soc.*; 86(2) : 213, fig. 1 (type-locality : Gumti river, Udaipur sub division, South Tripura Dist).

1999. *Barilius nelsoni* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 19.

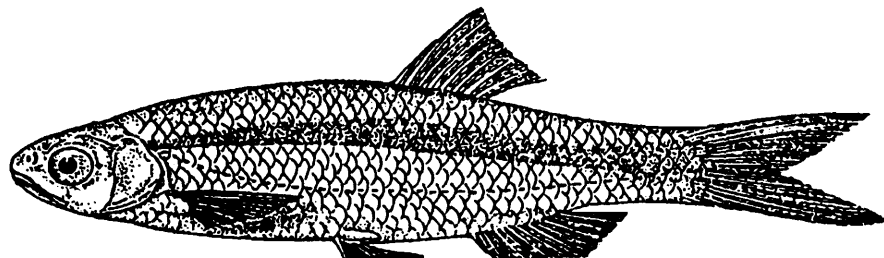


Fig. 59 : *Barilius nelsoni* (Barman)

Distinguishing Characters : Body elongate. Head length 4.45 to 4.76 and body depth 4.33 to 4.58 in standard length. Eye diameter 3.25 to 3.66 in head length. Dorsal fin originates midway between hind edge of orbit and caudal base. Least depth of caudal peduncle 1.66 to 1.85 in its length, 2 pairs of barbels present. Lateral line scales 38-39. Pre-dorsal scales 14-16. Body with a dark longitudinal band on its lateral sides.

Geographical Distribution : Gumti river, South Tripura district.

77. *Barilius radiolatus* Gunther

1868. *Barilius radiolatus* Gunther, *Cat. Fishes Br. Mus.* 7 : 287 (type-locality : Malva, Madhya Pradesh).

1999. *Barilius radiolatus* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : '19.

Distinguishing Characters : Body elongated, its depth 4.5 in standard length. Jaw long, maxilla reaches to anterior margin of orbit. One pair each of rostral and maxillary barbel present. Small and poorly developed tubercles on lower jaw and snout. Dorsal fin inserted anterior to anal fin, its last ray not extending to above anal fin. Scales with many radii. Lateral line scales 56 to 62. Predorsal scales 24.

Geographical Distribution : Madhya Pradesh.

78. *Brachydanio acuticephala* (Hora)

(Fig. 60)

1921. *Danio (Brachydanio) acuticephala* Hora, *Rec. Indian Mus.*, 22 : 193, fig. 4 (type-locality : Small streams and ponds of yaribuk, Manipur Valley).

1991. *Brachydanio acuticephala* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 356.

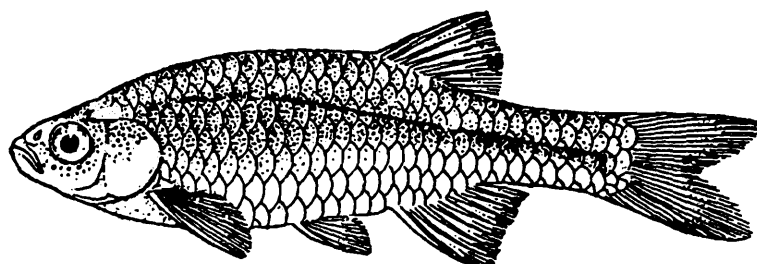


Fig. 60 : *Brachydanio acuticephala* (Hora)

Distinguishing Characters : Body elongate and laterally compressed, its depth 3.2 to 4.0 in standard length. Head length 3.7 to 4.0 in standard length. Eye diameter 3.0 to 3.5 in head length. Mouth small, obliquely directed upwards. No barbel. Lateral line absent. Scales along normal course of lateral line 30 to 32. Lateral transverse 7 to 8. Predorsal scales 16 to 17.

Geographical Distribution : Brahmaputra Drainage from Manipur, Naga Hills to Arunachal Pradesh.

79. *Danio fraseri* Hora

(Fig. 61)

1935. *Danio (Danio) fraseri* Hora, *Rec. Indian Mus.*, 37(3) : 378, fig. 3 (type-locality : Deolali, Nasik Dist., Maharashtra).

1991. *Danio fraseri* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 368.

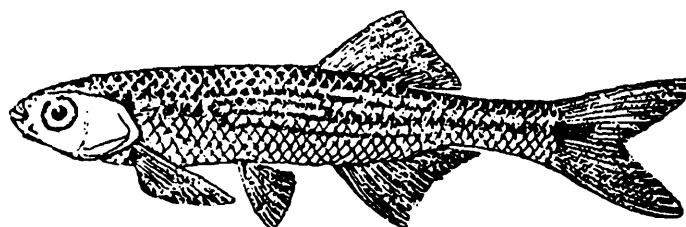


Fig. 61 : *Danio fraseri* (Hora)

Distinguishing Characters : Body elongate and compressed, its depth 3.8 to 5.1. in standard length. Head length 3.5 to 4.3 in standard length. Eyes large, its diameter 2.8 to 3.3 in head length. Mouth small, obliquely directed upwards. Two pairs of barbels. Pectoral fin long, extending beyond base of pelvic fin. Lateral line complete, curved downwards, with 38 to 40 scales. Predorsal scales 16 to 17.

Geographical Distribution : Nasik dist., Maharashtra.

80. *Danio naganensis* Chaudhuri
(Fig. 62)

1912. *Danio naganensis* Chaudhuri, *Rec. Indian Mus.* 7 : 441, pl. 40, fig. 1. 1a, 1b (type-locality : Lungting river, Naga Hills, Nagaland).

1991. *Danio naganensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 371.

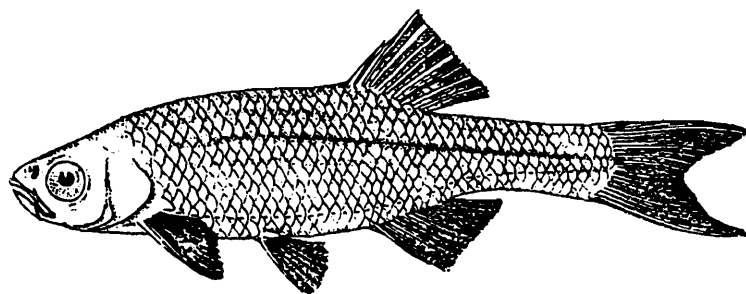


Fig. 62 : *Danio naganensis* Choudhury

Distinguishing Characters : Body elongate and compressed, its depth 3.6 to 4.2 in standard length. Head length 3.5 to 4.0 in standard length. Eyes moderate, its diameter 3.3 to 4.0 in head length. Mouth small and obliquely directed upwards. Two pairs of barbels present. Dorsal fin inserted anterior to anal fin, nearer to caudal fin base than to snout tip. Lateral line complete curved downwards with 40-42 scales. Predorsal scales 18 to 20.

Geographical Distribution : Manipur and Nagaland.

81. *Danio neilgherriensis* (Day)
(Fig. 63)

1867. *Paradanio neilgherriensis* Day, *Proc. Zool. Soc. Lond.* : 296 (type-locality : Nilgiri Hills, Tamil Nadu).

1991. *Danio neilgherriensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 371.

Distinguishing Characters : Body elongate and compressed, its depth 4.0 to 4.6 in standard length. Head length 4.0 to 4.3 in standard length. Eyes moderate, its diameter 3.3 to 4.0 in head length. Mouth small, obliquely directed upwards. Two pairs of short barbels present. Dorsal fin inserted anterior to anal fin, about midway between snout tip and caudal fin base. Lateral line complete, curved downwards with 37 to 38 scales. Predorsal scales 16 to 18.

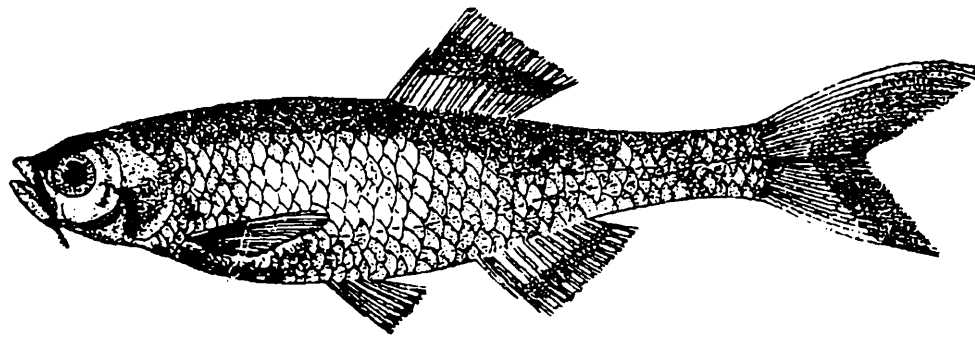


Fig. 63 : *Danio neilgherriensis* (Day)

Geographical Distribution : Nilgiri Hills, Tamil Nadu.

82. *Esomus barbatus* (Jerdon)

1849. *Leuciscus barbatus* Jerdon, *Madras J. Lit. Sci.*, **5** : 322 (type-locality : Bowany river, South India).

1991. *Esomus barbatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, **1** : 376.

Distinguishing Characters : Body elongate and strongly compressed, its depth 4.0 to 4.4 in standard length. Head length 4.1 to 4.5 in standard length. Mouth small. Two pairs of barbels present; maxillary barbel usually extend upto mid-pectoral fin. Pectoral fins long. Lateral line complete with 30 to 32 scales. Predorsal scales 17.

Geographical Distribution : Tamil Nadu and Karnataka.

83. *Esomus manipurensis* Tilak and Jain
(Fig. 64)

1989. *Esomus manipurensis* Tilak and Jain, *J. Bombay nat. Hist. Soc.* **86**(NO. 3) : 408-411 (type-locality : Stream near Imphal, Manipur).

1999. *Esomus manipurensis* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. **175** : 48.

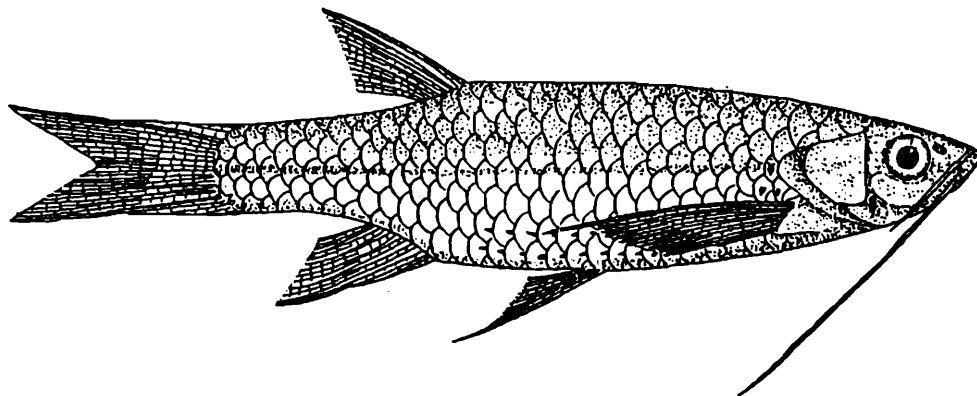


Fig. 64 : *Esomus manipurensis* Tilak & Jain

Distinguishing Characters : Body oblong, slightly compressed, its depth 3.7 to 4.0, head length 4.3 to 4.5 in standard length. Mouth small and directed upwards. Diameter of eye 3.0 to 3.6 in head length. Barbels two pairs, rostral pair extending upto posterior margin of eye, maxillary ones extending beyond ventral origin. Lateral line double, incomplete, extending to anal origin.

Geographical Distribution : Imphal, Manipur.

84. *Parluciosoma labiosa* (Mukherji)

1935. *Rasbora labiosa* Mukherjee, *Rec. Indian Mus.*, 37(3) : 376, figs. 1, 2 (type-locality : Deolali, Nasik district, Maharashtra).

1991. *Parluciosoma labiosa* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 383.

Distinguishing Characters : Body elongate and moderately compressed. Mouth small; lower lip more fleshy and flabby than upper lip and projects in advance of jaw, with three distinct lobe-like structures. Pectoral fin shorter than head length. Lateral line incomplete, extends upto posterior end of anal fin : 30-32 scales in longitudinal series. Lateral transverse 4/1-1½.

Geographical Distribution : Nasik district, Maharashtra.

Subfamily SCHIZOTHORACINAE

85. *Gymnocypris biswasi* Talwar (Fig. 65)

1978. *Gymnocypris biswasi* Talwar, *J. Bombay nat. Hist. Soc.*, 74(3) : 501, fig. 1 (type-locality : Ladakh).

1987. *Gymnocypris biswasi* : Tiak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 98, figs. 43-47.

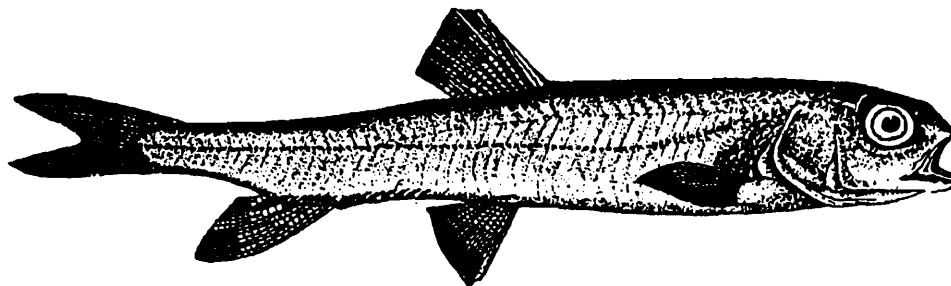


Fig. 65 : *Gymnocypris biswasi* Talwar

Distinguishing Characters : Body elongate and slightly compressed. Head length 4.2 to 4.4 in standard length. Eyes large, its diameter 3.8 in head length. Mouth terminal and transverse. Dorsal fin inserted in advance of pelvic fins, dorsal spine moderately strong and serrated on posterior side. Lateral line complete; 13-14 scales along lateral line and thereafter scales are absent.

Geographical Distribution : Ladakh, Jammu & Kashmir.

86. *Lepidopygopsis typus* Raj
(Fig. 66)

1941. *Lepidopygopsis typus* Raj, *Rec. Indian Mus.*, 43(2) : 210, pl. 7, figs. 1-4 (type-locality : Periyar Lake, Kerala).

1987. *Lepidopygopsis typus* : Tilak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 116, figs. 48-53.

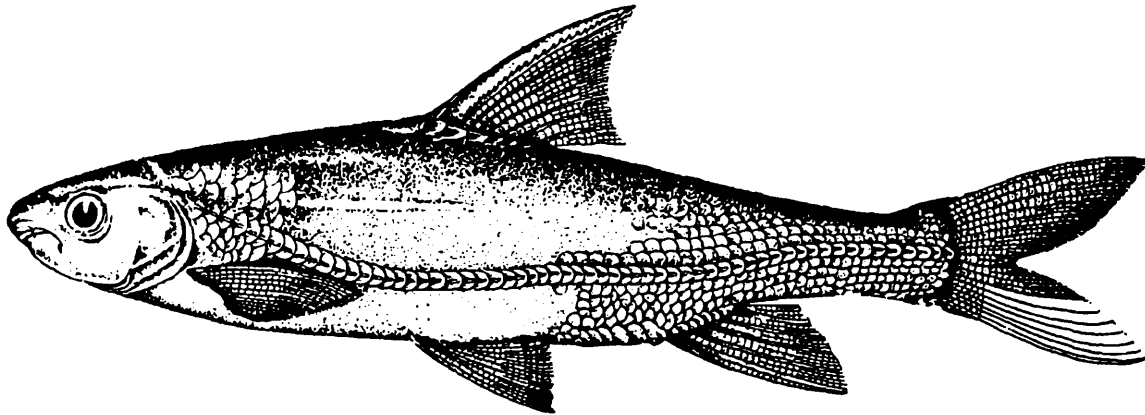


Fig. 66 : *Lepidopygopsis typus* (Raj)

Distinguishing Characters : Body elongate and compressed. Head somewhat compressed, snout conical. Head length 4.3 to 4.9 in standard length. Eye diameter 2.8 to 4.4 in head length. Dorsal fin short, its last undivided ray osseous and strongly denticulated along the two sides of posterior margin. Elongated tile-like scales form a sheath to vent and anal fin base. Lateral line complete with 54 to 60 scales.

Geographical Distribution : Periyar river and lake, Kerala.

87. *Schizothoraichthys curvifrons* (Heckel)
(Fig. 67)

1838. *Schizothorax curvifrons* Heckel, *Fische, aus Cashmir* : 25, pl. 3. (type-locality : Kashmir).

1987. *Schizothoraichthys curvifrons* : Tilak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 120, figs. 54-59.

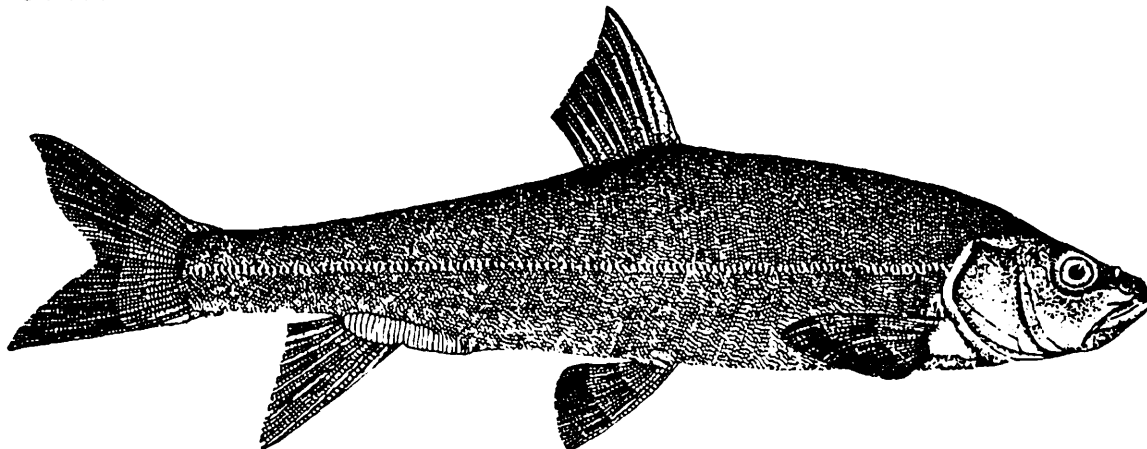


Fig. 67 : *Schizothoraichthys curvifrons* (Heckel)

Distinguishing Characters : Body elongate and streamlined, its depth 5.1 to 5.8 in standard length. Head length 4.3 to 4.7 in standard length. Eye diameter 4.2 in head length. Mouth horse-shoe shaped, lower jaw with horny layer, lips fleshy and smooth. Two pairs of barbels. Dorsal fin inserted almost opposite to pelvic fin. Anal fin does not reach base of caudal fin. Scales very small; lateral line scales 115-125. Scales on anal sheath slightly larger than body scales.

Geographical Distribution : Kashmir Valley.

88. *Schizothoraichthys hugelii* (Heckel)
(Fig. 68)

1838. *Schizothorax hugelii* Heckel, *Fische, aus Cashmir* : 36, pl. 7 (type-locality : Kashmir).

1987. *Schizothoraichthys hugelii* : Tilak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 147.

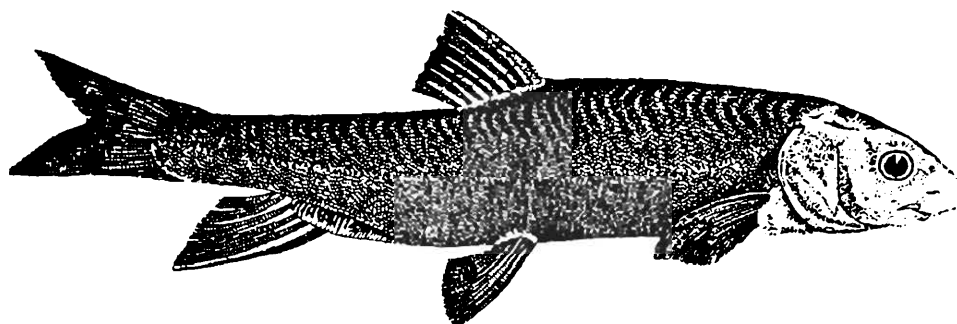


Fig. 68 : *Schizothoraichthys hugelii* (Heckel)

Distinguishing Characters : Body elongate and compressed, its depth about 4.7 in standard length. Head length about 4.2 in standard length. Eye small, its diameter about 6 in head length. Mouth horse-shoe shaped : lips thick and fleshy. Two pairs of barbels. Dorsal fin inserted nearer to caudal fin base than to snout tip. Dorsal spine strong, its posterior upper half serrated. Scales very small; lateral line scales about 120. Tiled row of scales on anal sheath much bigger than body scales.

Geographical Distribution : Kashmir Valley.

89. *Schizothoraichthys niger* (Heckel)
(Fig. 69)

1838. *Schizothorax niger* Heckel, *Fische, aus Cashmir* : 29, pl. 5 (type-locality : Kashmir).

1987. *Schizothoraichthys niger* : Tilak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 136, figs 59, 65-69.

Distinguishing Characters : Body elongate and laterally compressed, its depth about 5.6 in standard length. Head length about 4.8 in standard length. Eye diameter 4.5 in head. Mouth horse-shoe shaped, lips sharp and thin. Two pairs of barbels. Dorsal fin inserted

nearer to caudal fin base than to snout tip. Dorsal spine strong and serrated behind. Scales vary small; lateral line scales 97-99. Scales on anal sheath moderately larger than other body scales.

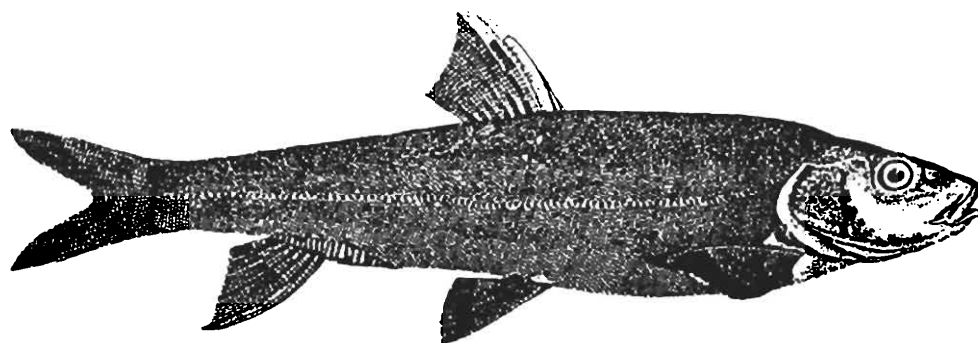


Fig. 69 : *Schizothorichthys niger* (Heckel)

Geographical Distribution : Kashmir Valley.

90. *Schizothorichthys planifrons* (Heckel)
(Fig. 70)

1838. *Schizothorax planifrons* Heckel, *Fische, aus Cashmir* : 44, pl. 8, fig. 2 (type-locality : Kashmir).

1987. *Schizothorichthys planifrons* : Tilak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 161, figs 59, 80-83.

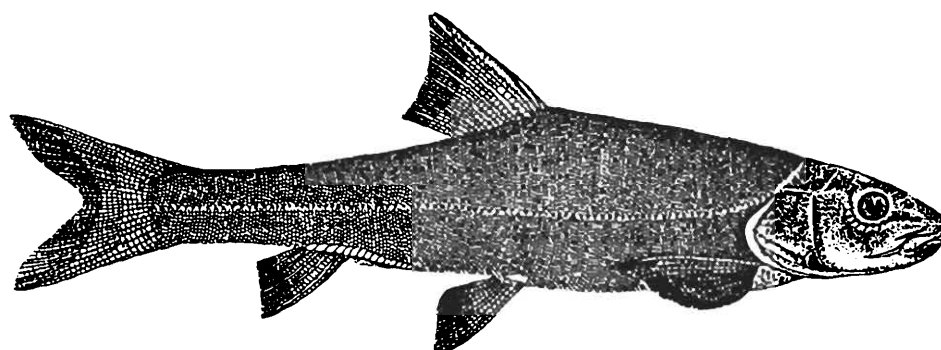


Fig. 70 : *Schizothorichthys planifrons* (Heckel)

Distinguishing Characters : Body narrow and elongate, its depth 4.0 to 6.2 in standard length. Head length 3.6 to 4.1 in standard length. Eye diameter 3.8 to 5.5 in head. Mouth terminal and horse-shoe shaped. Lips thick and smooth. Two pairs of barbels. Dorsal fin inserted nearer to caudal fin base than to snout tip. Dorsal spine strong and serrated behind. Scales very small. Lateral line scales 100 to 102. Scales on anal sheath much larger than other body scales.

Geographical Distribution : Kashmir Valley.

91. *Schizothorichthys progastus* (McClelland)
(Fig. 71)

1839. *Oreinus progastus* McClelland, *Asiat. Res.*, 19 : 274, 343, pl. 40, fig. 4. (type-locality : Upper Assam).

1991. *Schizothoracichthys progastus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 409.

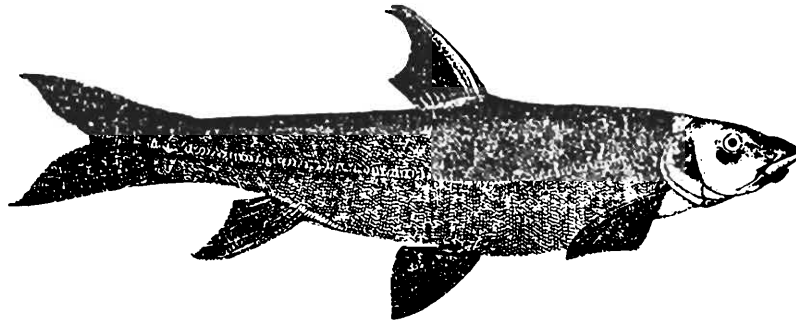


Fig. 71 : *Schizothoracichthys progastus* (McClelland)

Distinguishing Characters : Body elongate and somewhat deeper than that of other species; its depth 3.8 to 4.9 in standard length. Head narrow anteriorly, its length 4.0 to 4.7 in standard length. Mouth sub-terminal and arch-shaped. Lips thick and fleshy. Lower labial fold trilobed. Two pairs of barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Dorsal spine strong and serrated behind. Scales very small. Lateral line scales 110 to 114. Scales on the anal sheath much larger than other body scales.

Geographical Distribution : Jammu & Kashmir Valley, Ganga river in Uttar Pradesh and Brahmaputra river in Assam.

92. *Schizothorax kumaonensis* Menon
(Fig. 72)

1971. *Schizothorax kumaonensis* Menon, *Rec. zool. Surv. India*, 63 : 205, pl. 1. fig. 3 (type-locality : Nainital, Uttar Pradesh).

1987. *Schizothorax kumaonensis* : Tilak, *Fauna of India* : Pisces (subfamily : Schizothoracinae) : 62, figs 25-28.

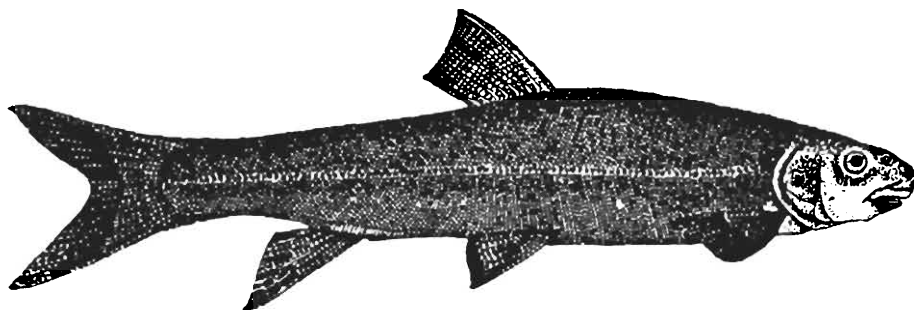


Fig. 72 : *Schizothorax kumaonensis* (Menon)

Distinguishing Characters : Body elongate and streamlined, its depth 4.6 to 5.8 in standard length. Head somewhat smaller, its length 5.1 to 5.6 in standard length. Mouth inferior and slightly arched. Lower lip covered with a set of papillae forming a sucker. Two pairs of barbels. Dorsal fin inserted almost midway between snout tip and caudal fin base. Dorsal spine strong and serrated posteriorly. Scales very small, lateral line scales 94 to 100. Scales on anal sheath much larger than other body scales.

Geographical Distribution : Kumaon Himalaya, Uttar Pradesh.

Subfamily GARRINAE

93. *Crossocheilus latius latius* (Hamilton-Buchanan)
(Fig. 73)

1822. *Cyprinus latius* Hamilton-Buchanan, *Fishes of Ganges* : 345, 393 (type-locality : Tista river at base of Darjeeling Himalaya).

1999. *Crossocheilus latius latius* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 140.

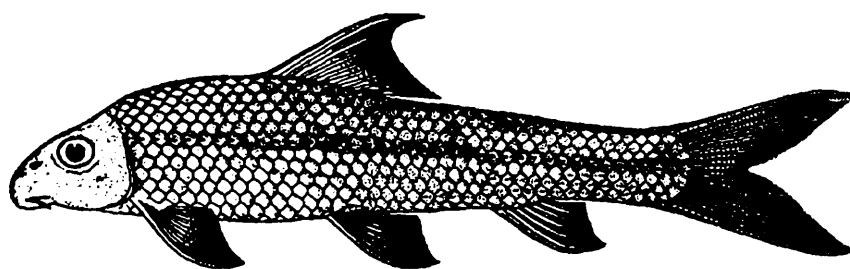


Fig. 73 : *Crossocheilus latius latius* (Hamilton-Buchanan)

Distinguishing Characters : Body elongate, its depth 4.5 to 5.9 in standard length. Head flat and compressed, rather small, its length 4.4 to 5.3 in standard length. Eye diameter 3.5 to 4.0 in head length. Mouth inferior. Two pairs of barbels. Rostral barbel may be rudimentary. Scales moderate in size, lateral line scales 39 to 41.

Geographical Distribution : Ganga and Brahmaputra drainages in northern India; Mahanadi drainage in Orissa, Western Ghats and headwaters of Krishna river.

94. *Crossocheilus periyarensis* Menon and Jacob

1996. *Crossocheilus periyarensis* Menon and Jacob, *J. Bombay nat. Hist. Soc.*, 93(1) : 62-64 (type-locality : Periyar river, Western Ghats, Kerala).

1999. *Crossocheilus periyarensis* : Menon, *Rec. zool. Surv. India, Occ. Paper, No. 175* : 142.

Distinguishing Characters : Body moderately elongate, somewhat compressed. Dorsal and ventral profiles convex. Depth of body 24.5 to 27.5, length of head 19.1 to 20.2 percent of standard length. Snout obtusely rounded with prominent nuptial tubercles in males. Eye diameter 20.3 to 27.5 percent of head and 45.8 to 68.7 percent of interorbital width. Paired rostral and maxillary barbels present. Mouth wide, covered by papillated upper lip, lower lip fleshy, not connected with upper lip at corners. Least height of caudal peduncle 50.0 to 55.0 percent of its length. Dorsal origin much nearer to tip of snout than to base of caudal. Lateral line scales 34-36.

Geographical Distribution : Kerala : Western Ghats : periyar river.

95. *Garra bicornuta* Rao

1920. *Garra bicornuta* Rao, *Ann. Mag. nat Hist.*, (9)6 : 57, pl. 1. figs 3. 3a, 3b (type-locality : Thunga river at Shimoga, Karnataka).

1999. *Garra bicornuta* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 143.

Distinguishing Characters : Body elongate and subcylindrical, its depth 3.7 to 4.5 in standard length. Head fairly depressed, its length 4.4 to 5.2 in standard length. Inter-orbital region convex. Snout with trilobed proboscis. Mouth small, inferior, mental disc well developed. One pair of rostral barbels. Dorsal fin inserted distinctly nearer to snout tip than to caudal fin base. Scales moderate in size, lateral line scales 31 to 32. Lateral transverse $3\frac{1}{2}/2\frac{1}{2}-3\frac{1}{2}$; predorsal scales 8 to 9.

Geographical Distribution : Thunga river, Karnataka and Maharashtra.

96. *Garra gotyla stenorhynchus* (Jerdon)

1849. *Gonorhynchus stenorhynchus* Jerdon, *Madras J. Lit. & Sci.*, 15 : 310 (type-locality : Bowany river, Nilgiris).

1999. *Garra gotyla stenorhynchus* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 144.

Distinguishing Characters : Body elongate and subcylindrical, its depth 5.0 to 5.3 in standard length. Head much depressed, its length 3.8 to 4.5 in standard length. Inter-orbital region convex. Snout with well developed proboscis and a transverse lobe at tip. Several large horny tubercles present on transverse lobe and lateral sides of head in front of nostrils. Mouth inferior, mental disc well developed. Two pairs of barbels, Dorsal fin inserted nearer to snout tip than to caudal fin base. Lateral line scales 32 to 35. Lateral transverse $3\frac{1}{2}-4\frac{1}{2}/3\frac{1}{2}$; predorsal scales 8 to 10.

Geographical Distribution : Cauvery and Krishna Drainages, Western Ghats.

97. *Garra hughi* Silas

(Fig. 74)

1955. *Garra hughi* Silas, *Rec. Indian Mus.*, 52(1) : 2, pl. 4, figs. 1-4 (type-locality : Lower Vauguvarrae Estate, Travancore, Kerala state).

1999. *Garra hughi* : Menon, *Rec. zool. Surv. India, Occ. Paper* No. 175 : 145.

Distinguishing Characters : Body elongate and slender, its depth 5.7 to 6.7 and Head length 3.7 to 4.7 in standard length. Snout rounded and smooth. Mouth broad and inferior, mental disc well developed. Two pairs of barbels. Dorsal fin inserted midway between

snout-tip and caudal fin base. Lateral line scales 36 to 38. Lateral transverse $5\frac{1}{2}/3\frac{1}{2}$. Breast and belly naked. Pre dorsal scales 11 to 12.

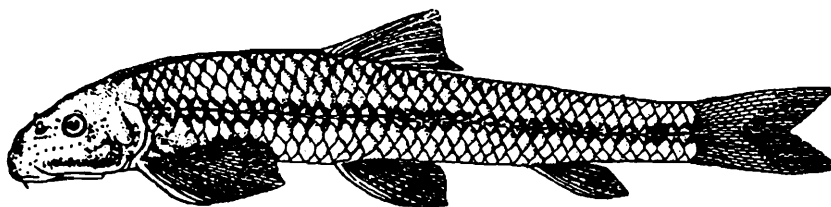


Fig. 74 : *Garra hughi* (Silas)

Geographical Distribution : Cardamam and Palni hills, Western Ghats.

98. *Garra Kempfi* Hora
(Fig. 75)

1921. *Garra kempfi* Hora, *Rec. Indian Mus.*, 22(5) : 665, pl. 26, figs. 3, 3a (type-locality : Siyom river below Demda, Abor Hills. Arunachal Pradesh).

1991. *Garra kempfi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 425.

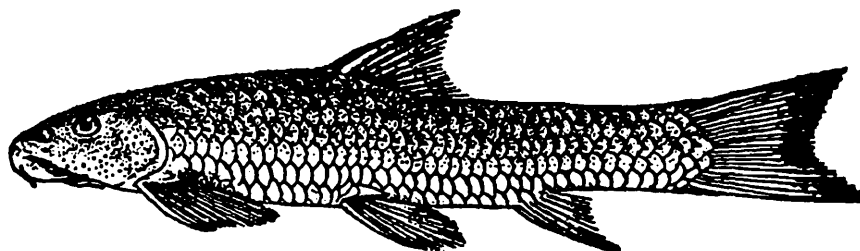


Fig. 75 : *Garra kempfi* Hora

Distinguishing Characters : Body depressed and flattened. Head strongly depressed, its length 3.9 to 5.0 in standard length. Snout semicircular with minute tubercles. Mouth wide. Mental disc well developed. Two pairs of barbels. Dorsal fin inserted midway between snout-tip and caudal fin base. Scales moderate in size; lateral line scales 38 to 40. Predorsal scales 12 to 14. Vent placed almost midway between pelvic fin origin and anal fin.

Geographical Distribution : Abor Hills, Arunachal Pradesh, Naga hills, Nagaland.

99. *Garra litanensis* Viswanath

1993. *Garra litanensis* Vishwanath, *J. Freshwater Biol.*, 5(1) : 59-68 (type-locality : Litan stream, Litan, Manipur).

Distinguishing Characters : Body elongated, snout with tuberculated proboscis marked off by a transverse groove. A large suctacular disc on the ventral side of head and black spots along the base of dorsal fin, present. Two pairs of barbels. Scales absent on chest, poorly developed on belly. Predorsal scales 10. Caudal fin forked.

Geographical Distribution : Litan, Manipur.

100. *Garra lissorhynchus* (McClelland)
(Fig. 76)

1843. *Platycaera lissorhynchus* McClelland, *Calcutta J. nat. Hist.*, 2 : 587, pl. 68, figs (type-locality : Khasi Hills, Meghalaya).

1991. *Garra lissorhynchus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 427.

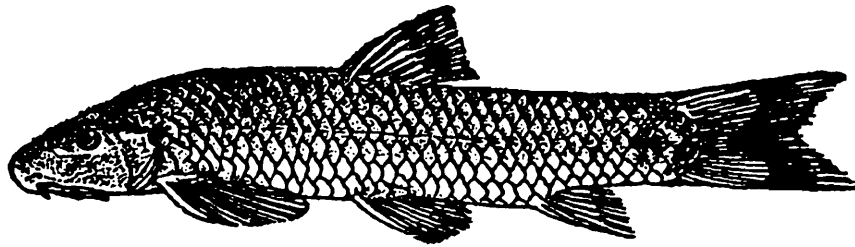


Fig. 76 : *Garra lissorhynchus* (Mc Clelland)

Distinguishing Characters : Body elongated and depressed; depth of body 4.4 to 6.6 in standard length. Head strongly depressed; its length 3.5 to 4.5 in standard length. Snout rounded and smooth. Mouth wide. Mental disc well developed. Two pairs of barbels. Dorsal fin inserted midway between snout tip and caudal fin base. Scales moderate in size; lateral line scales 32 to 34; predorsal scale 11 to 14; breast and belly naked.

Geographical Distribution : Brahmaputra river system in Assam and Meghalaya.

101. *Garra McClellandi* (Jerdon)

1849. *Gonorhynchus mcClellandi* Jerdon, *Madras J. Lit. & Sci.* 15 : 309 (type-locality : Bowany river and Manantoddy river at the base of Nilgiris).

1999. *Garra mcClellandi* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* 175 : 147.

Distinguishing Characters : Body elongate and sub-cylindrical, its depth 4.3 to 5.7 in standard length. Head more or less flat, its length 4.6 to 5.0 in standard length. Snout more or less conical and smooth; transverse groove present on its tip. Mouth wide. Mental disc well developed. Two pairs of barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Scales moderate in size; lateral line scales 35 to 38, predorsal scales 8 to 10.

Geographical Distribution : Cauvery drainage.

102. *Garra mullya* (sykes)

1841. *Chondrostoma mullya* Sykes, *Trans. Zool. Soc. Lond.* 2 : 359, pl. 62, fig. 3 (type-locality : Bheema river at Daunde, nr. Poona).

1999. *Garra mullya* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 148.

Distinguishing Characters : Body moderately flattened, its depth 3.8 to 4.3 in standard length. Head more or less flattened on under surface; snout rounded and smooth. Deep transverse groove present on the tip of snout. Mouth small, suctorial disc also small, its width 1.8 to 2.3 in head length. Two pairs of barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Scale of moderate size. Lateral line scales 32 to 34, predorsal scales 9 to 11, breast and belly often naked.

Geographical Distribution : Throughout Peminsular India.

103. *Garra naganensis* Hora

1921. *Garra naganensis* Hora, *Rec. Indian Mus.*, 22(5) : 667, pl. 25. figs. 2, 2a (type-locality : near Kairong, Naga Hills, Nagaland).

1991. *Garra naganensis* : Menon, *Rec. zool. Surv. India, Occ. Paper, No. 175* : 150.

Distinguishing Characters : Body somewhat depressed and flattened. Head length 4.2 to 5.0 in standard length. Mouth wide and mental disc well developed. Two pairs of barbels. Dorsal fin inserted between snout tip and caudal fin base. Scales of moderate size. Lateral line scales 38 to 40. Predorsal scales 12 to 14. Scales on the breast much reduced. Vent situated nearer to pelvic fin origin than to anal fin.

Geographical Distribution : Naga Hills, Nagaland.

104. *Garra rupecula* (McClelland) (Fig. 77)

1839. *Gonorhynchus rupeculus* McClelland. *Asiat. Res.*, 19 : 281, 343, pl. 43, figs. 4.5 (type-locality : Mishmi Hills, Arunachal Pradesh).

1999. *Garra rupecula* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 151.

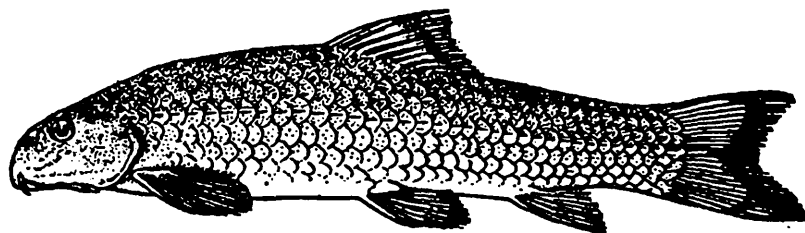


Fig. 77 : *Garra rupecula* (Mc Clelland)

Distinguishing Characters : Body somewhat fusiform in shape; its depth 4.2 to 6.2 in standard length. Head 3.7 to 4.9 in standard length. Snout broad, rounded and smooth. Mouth arched; suctorial disc well developed. Two pairs of barbels. Dorsal fin inserted midway between snout-tip and caudal fin base. Scales of moderate size; lateral line scales 32 to 34. Lateral transverse scales 4½-6½ / 3½-4½. Back, breast, belly and posterior pelvic region naked.

Geographical Distribution : Manipur and Mishmi Hills in Arunachal Pradesh.

Family PARAPSIORHYNCHIDAE

105. *Parapsilorhynchus discophorus* Hora

1921. *Parapsilorhynchus discophorus* Hora, *Rec. Indian Mus.* 22(1) 14, figs. (type-locality : Pophli, Ratnagiri district, Western Ghats).

1991. *Parapsilorhynchus discophorus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 435.

Distinguishing Characters : Body fairly cylindrical, dorsal profile rises prominently from tip of snout to origin of dorsal fin, beyond that it slopes gradually down. Body depth 4.0 to 5.0 in standard length. Mouth small, crescentic, upper labial fold fringed and covered with minute tubercles; lower lip studded with bigger tubercles. Behind lower lip, a distinct callous disc present. A single rostral pair of barbels. Eyes small, visible from underside of head. Dorsal fin inserted above pelvic fin, Lateral line scales 33 to 35.

Geographical Distribution : Western Ghats.

106. *Parapsilorhynchus prateri* Hora & Misra

(Fig. 78)

1938. *Parapsilorhynchus prateri* Hora & Misra, *J. Bombay nat. Hist. Soc.*, 40(1) : 32, pl. 2, fig. 1 and text figs 5. 6 (type-locality : Deolali, Maharashtra).

1991. *Parapsilorhynchus prateri* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 435.

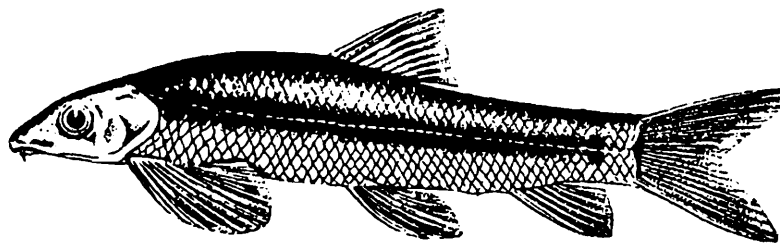


Fig. 78 : *Parapsilorhynchus prateri* Hora & Misra

Distinguishing Characters : Body as broad as deep, its depth 5.3 to 6.0 in standard length. Head and body moderately depressed, ventral side flattened, Mouth small and inferior, Upper lip with a prominent fold which is covered with minute tubercles. Lower lip finely papillated; behind it a callous pad present. A single rostral pair of barbels. Scales very small; lateral line scales 43 to 47.

Geographical Distribution : Nasik region of the Western Ghats.

107. *Parapsilorhynchus tentaculatus* (Annandale)

1919. *Psilorhynchus tentaculatus* Annandale, *Rec. Indian Mus.*, 16(1) : 128, pl. 1, figs. 4a & pl. 3, fig. 2 (type-locality : Khandalla, Poona district, Maharashtra).

1991. *Parapsilorhynchus tentaculatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 436.

Distinguishing Characters : Body fairly cylindrical, back moderately elevated. Body depth 4.0 to 5.0 in standard length. Mouth small and crescentic. Upper lip long and fringed. Lower lip bilobed, a small callous pad present behind it. A single rostral pair of barbels. Eyes large, not visible from underside of head. Dorsal fin inserted opposite to pelvic fin. Scales small. Lateral line scales 36 to 39.

Geographical Distribution : Poona and Satara districts of the Western Ghat, Pachmari in Satpura Hills; and Bailadila range in Bastar District, Madhya Pradesh.

Family HOMALOPTERIDAE

Subfamily HOMALOPTERINAE

108. *Balitora mysorensis* Hora

1941. *Balitora brucei* var. *mysorensis* Hora, *Rec. Indian Mus.*, 43(2) : 232, pl. 8, fig. 4 (type-locality : Shivasamudram, Cauvery river system, Karnataka).

1987. *Balitora mysorensis* : Menon, *Fauna of India* : Pisces : 4 (Part I) : 231.

Distinguishing Characters : Body slender and depressed; its depth 7.9 to 8.4 and head length 4.0 to 4.3 in standard length. Eyes small, its diameter 6.0 to 6.2 in head length. Length of caudal peduncle almost double to its depth. Scales very small; absent on chest and belly. Lateral line scales 64 to 65.

Geographical Distribution : Cauvery and Tungabhadra river systems, Western Ghats, Karnataka and Kolhapur, Maharashtra.

109. *Bhavana australis* (Jerdon)

(Fig. 79)

1849. *Platycara australis* Jerdon, *Madras J. Lit. & Sci.*, 15 : 333 (type-locality : Wallior, Nilgiris).

1987. *Bhavana australis* : Menon, *Fauna of India* : Pisces : 4 (Part I) : 234, figs. 5 & 6 pl. 9.

Distinguishing Characters : Anterior part of the body up to anal opening greatly depressed. Ventral surface flat and horizontal. Dorsal profile greatly arched. Head broad and rounded, covered with short, spine-like growths. Mouth small and inferior. Lips thick and fleshy. Three pairs of short, stumpy barbels. Gill opening small, restricted above base of pectoral fins. Paired fins broad, wing-like and horizontal. Scales small; lateral line scales 70 to 75.

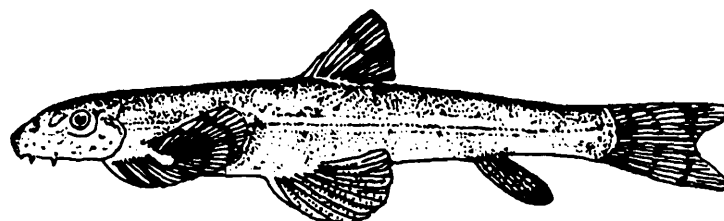


Fig. 79 : *Bhavania australis* (Jerdon)

Geographical Distribution : Western Ghats, Karnataka, Nilgiris, Tamil Nadu and Kerala.

110. *Homaloptera montana* Herre
(Fig. 80)

1945. *Homaloptera montana* Herre, *J. Wash. Acad. Sci.*, **35** : 399 (type-locality : Puthutum Estate, Anamalai Hills, South India).

1987. *Homaloptera montana* : Menon, *Fauna of India* : Pisces : **4** (Part I) : 226, fig. 1, pl. 9.

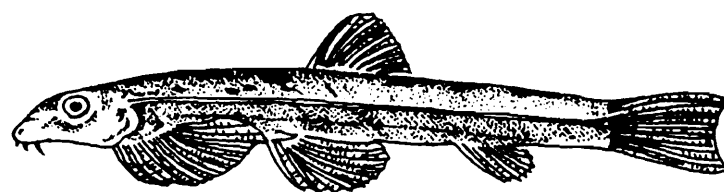


Fig. 80 : *Homaloptera montana* (Herre)

Distinguishing Characters : Body slender, dorsal profile slightly elevated, ventral horizontal. Body depth 6.4 to 8.2 in standard length. Head as broad as long, its length 3.8 to 5.0 in standard length. Eye 4.5 in head. Mouth small and inferior, lips fleshy, upper one overhanging the lower. Small three pairs of barbels. Dorsal fin inserted distinctly behind origin of pelvic fins. Pectoral fins extend to pelvic fin base. Scales small; head and ventral surface of body scaleless; lateral line scales 72.

Geographical Distribution : Western Ghats Anamalai Hills and Silent Valley.

111. *Travancoria jonesi* Hora
(Fig. 81)

1941. *Travancoria jonesi* Hora, *Rec. Indian Mus.*, **43**(2) : 230, pl. 8. figs. 5-9 (type-locality : Pampadampara, Kerala).

1987. *Travancoria jonesi* : Menon, *Fauna of India* : Pisces : **4** (Part I) : 238, figs. 7 & 8. pl. 9.

Distinguishing Characters : Head and body depressed; tail compressed side to side. Head broadly pointed anteriorly, covered with short, spine-like growths. Mouth small and inferior. Lips well developed. Barbels 4 rostral and 2 maxillary. Paired fins broad, wing-like and horizontal. Scales small; lateral line scales 75 to 77.

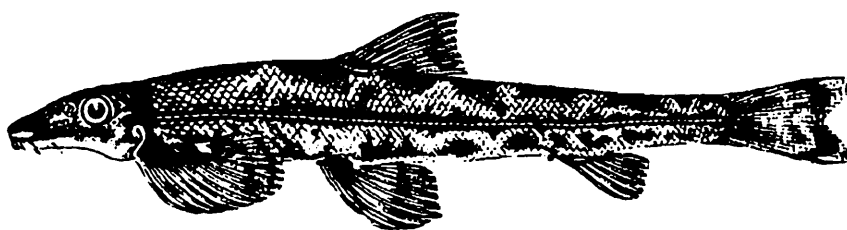


Fig. 81 : *Travancoria jonesi* Hora

Geographical Distribution : Western Ghats—High ranges of northern Travancore and Anamalai Hills.

Subfamily NEMACHEILINAE

112. *Aborichthys elongatus* Hora
(Fig. 82)

1921. *Aborichthys elongatus* Hora, *Rec. Indian Mus.*, 22(5) : 735, fig. (type-locality : Reang river, base of Darjeeling Himalaya).

1991. *Aborichthys elongatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 457.



Fig. 82 : *Aborichthys elongatus* Hora

Distinguishing Characters : Body elongate and compressed, dorsal and ventral profiles almost parallel. Body depth 6.8 to 7.8 in standard length. Eyes small, its diameter 4.7 to 6.8 in head length. Mouth semicircular. Lips fleshy, lower lip interrupted in the middle. Three pairs of barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Scales very small and embeded. Vent situated nearer to caudal fin base than to snout tip. Lateral line complete.

Geographical Distribution : Darjeeling Himalaya.

113. *Aborichthys garoensis* Hora
(Fig. 83)

1925. *Aborichthys garoensis* Hora, *Rec. Indian Mus.*, 27(3) : 233, figs. 1a, 1b (type-locality : Tura, Garo Hills, Meghalaya).

1991. *Aborichthys garoensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 458.

Distinguishing Characters : Body elongate and compressed, dorsal and ventral profiles

almost parallel. Body depth 6.4 to 7.1 in standard length. Eyes small, its diameter 6.1 to 7.2 in head length. Mouth semicircular. Lips fleshy, lower lip interrupted in the middle. Three pairs of well developed barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Scales small; absent on the breast. Lateral line incomplete. Vent situated almost equidistant between snout tip and caudal fin base.



Fig. 83 : *Aborichthys garoensis* Hora

Geographical Distribution : Garo Hills, Meghalaya.

114. *Aborichthys tikaderi* Barman
(Fig. 84)

1984. *Aborichthys tikaderi* Barman, *J. Bombay nat. Hist. Soc.*, 81(3) : 680, fig. 1 (type-locality : Namdapha wildlife Sanctuary, Arunachal Pradesh).

1991. *Aborichthys tikaderi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 459.

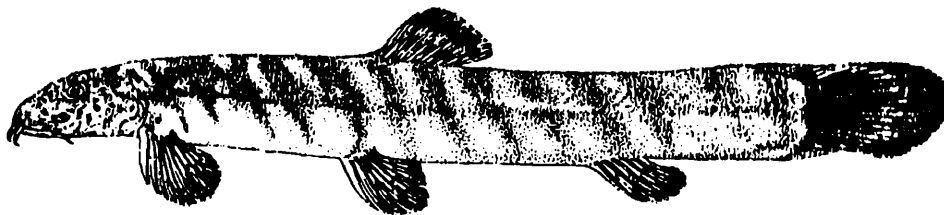


Fig. 84 : *Aborichthys tikaderi* Barman

Distinguishing Characters : Body elongate and compressed, dorsal and ventral profiles almost parallel. Body depth 7.7 to 8.0 in standard length. Eyes small, its diameter 8.5 to 9.0 in head length. Mouth semicircular. Lips thick, lower lip interrupted in the middle. Three pairs of well developed barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Scales small, inconspicuous on breast. Lateral line incomplete, vent situated nearer to snout tip than to caudal fin base.

Geographical Distribution : Namdapha wildlife Sanctuary, Arunachal Pradesh.

115. *Nemacheilus anguilla* Annandale
(Fig. 85)

1919. *Nemacheilus anguilla* Annandale, *Rec. Indian Mus.*, 16(1) : 127. pl. 1, fig. 3 and pl. 3, fig. 1 (type-locality : Yenna river at Medha, Satara dist., Maharashtra).

1987. *Noemacheilus anguilla* : Menon, *Fauna of India*, Pisces, 4 (Part 1) 154, pl. 6, fig. 3.



Fig. 85 : *Nemacheilus anguilla* Annandale

Distinguishing Characters : Body elongate, its depth 6.0 to 9.9 in standard length. Eyes moderately large. Nostrils close to each other. Mouth semicircular, lips more or less fleshy. Upper lip provided with a pair of barbellike processes. Both upper and lower lip interrupted in the middle. Barbels thread-like. Dorsal fin inserted equidistant between snouttip and caudal fin base. Pelvic fins extended to anal opening. Caudal fin deeply forked. Scales small and imbricate, absent on ventral surface. Lateral line almost complete.

Geographical Distribution : Western Ghats, Maharashtra and Krishna river basin, Karnataka.

116. *Nemacheilus assamensis* (Menon)

1987. *Noemacheilus assamensis*, Menon, *Fauna of India*, Pisces, 4 (Part 1) : 179.

1999. *Noemacheilus assamensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 187.

Distinguishing Characters : Body elongate, dorsal and ventral profiles slightly arched, depth of body 5.9 and head length 3.9 in standard length. Eyes small. situated in the middle of the head, not visible from ventral surface. Eye diameter 5.0 in head length. Nostrils close to each other, anterior one tubular. Mouth semicircular, situated in a cup-shaped structure formed by lips. Barbels thread-like. Scales minute, imbricate all over body, absent on ventral side. Lateral line complete.

Geographical Distribution : Brahmaputra Drainage, Assam.

117. *Nemacheilus carletoni* Fowler (Fig. 86)

1924. *Nemacheilus carletoni* Fowler, *Proc. Acad. Sci. philad.*, 76 : 68, fig. 2. (type-locality : Kulu Valley, Himachal Pradesh).

1987. *Noemacheilus carletoni* : Menon, *Fauna of India*. Pisces, 4 (Part 1) 55, pl. 1, fig. 4.

Distinguishing Characters : Body elongate, compressed, dorsal profile slightly convex. Body depth 5.8 to 6.6 in standard length. Mouth semicircular, lips fleshy, lower lip interrupted in the middle. Eyes small. Nostrils situated close to each other. Well developed barbels present. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal fin slightly emerginate. Scales minute but distinct; lateral line almost complete.

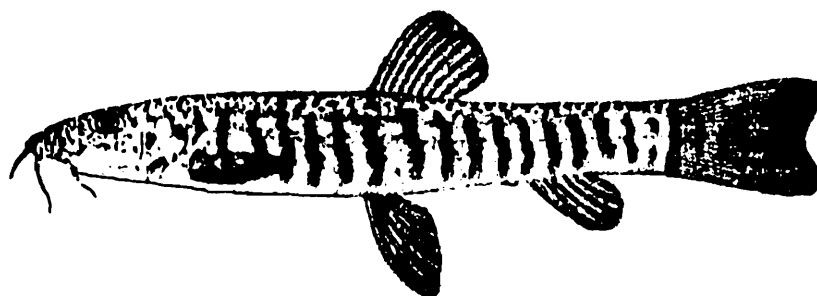


Fig. 86 : *Nemacheilus carletoni* Fowler

Geographical Distribution : Beas river basin, Himachal Pradesh.

118. *Nemacheilus dattai* Menon

1987. *Noemacheilus arunachalensis* Menon, *Fauna of India. Pisces*, 4 (Part 1) 129, pl. 16, fig. 10 (type-locality : Riwa river at Nampong, Tirap dist., Arunachal Pradesh).

1999. *Noemacheilus dattai* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 170.

Distinguishing Characters : Body elongate, dorsal profile slightly arched, ventral flat. Body depth uniform, its depth 6.2 to 6.4 in standard length. Eyes not visible from underside of head. Nostrils close to each other, anterior one tubular. Mouth semicircular, lips fleshy, lower lip interrupted in the middle. Thread-like barbel. Dorsal fin inserted slightly nearer to caudal fin base than to snout tip. Caudal fin forked. Scales small, non-imbricate, absent on ventral surface. Lateral line incomplete.

Geographical Distribution : Riwa river, Tirap district, Arunachal Pradesh.

119. *Nemacheilus denisoni denisoni* Day

(Fig. 87)

1867. *Nemacheilus denisonii* Day, *Proc. Zool. Soc. Lond.* : 287 (type-locality : Bowany river, base of Nilgiris).

1987. *Noemacheilus denisoni denisoni* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 93, pl. 10, figs. 3 & 4.

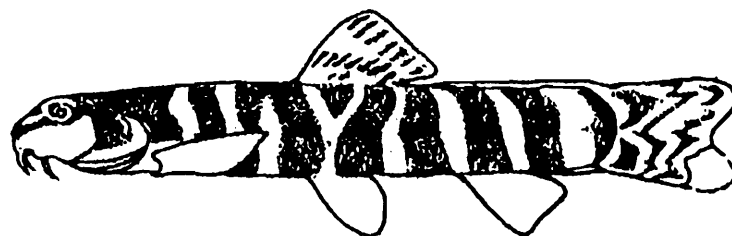


Fig. 87 : *Nemacheilus denisoni denisoni* Day

Distinguishing Characters : Body elongate, uniform in depth, its depth 4.7 to 6.9 in standard length. Mouth semicircular, lips fleshy, lower lip furrowed and interrupted in the middle. Eyes small. Nostrils situated close to each other anterior one tubular. Thread like,

well developed barbels. Dorsal fin inserted midway between snout-tip and caudal fin base. Caudal fin emerginate with rounded lobes. Scales small, often absent on under surface; lateral line incomplete.

Geographical Distribution : Peninsular India, Chota Nagpur plateu, Bihar and Bastar dist., Madhya Pradesh.

120. *Nemacheilus devdevi* Hora
(Fig. 88)

1935. *Nemachilus devdevi* Hora, *Rec. Indian Mus.*, 37(1) : 54, pl. 3 figs. 5 & 6 (type-locality : small streams below Darjeeling and in Sikkim, Eastern Himalayas).

1987. *Noemacheilus devdevi* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 59, pl. 1, figs. 7.



Fig. 88 : *Nemacheilus devdevi* Hora

Distinguishing Characters : Body slender, dorsal profile slightly arched, ventral almost straight. Body depth 5.4 to 7.3 in standard length. Mouth semicircular; lips fleshy. Lower lip interrupted in the middle. Eyes small, Nostrils close to each other, anterior tubular. Well developed barbels present. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal fin lunate. Scales small, absent on ventral side of body. Lateral line incomplete.

Geographical Distribution : Eastern Himalaya.

121. *Nemacheilus doonensis* (Tilak & Hussain)
(Fig. 89)

1977. *Noemacheilus doonensis* Tilak and Husain, *Sci. & Cult.* 43(3) : 133 (type-locality : Dehra Dun, Uttar Pradesh).

1987. *Noemacheilus doonensis* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 57, pl. 1, figs. 5.

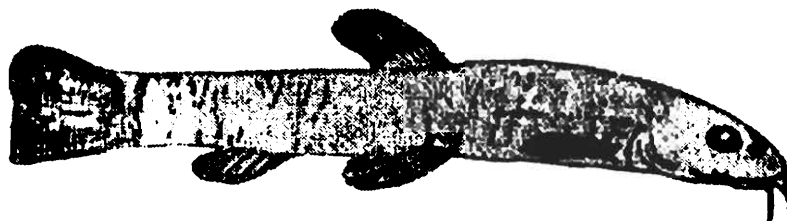


Fig. 89 : *Nemacheilus doonensis* (Tilak & Hussain)

Distinguishing Characters : Depth of body uniform, 6.0 to 7.5 in standard length. Mouth

semicircular, lip fleshy, lower lip interrupted. Eyes small. Nostrils close to each other, prolonged nasal flap. Barbels short. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin fairly emerginate, Scales minute and inconspicuous. Lateral line incomplete.

Geographical Distribution : Dehra Dun, Uttar Pradesh.

122. *Nemacheilus elongatus* (Sen & Nalbant)
(Fig. 90)

1981. *Physoschistura elongata* Sen & Nalbant, *Trav. Mus. Hist. nat. Grigore Antipa*, **23** : 201 (type-locality : Barapani nr. Shillong. Meghalaya).

1991. *Nemacheilus elongatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, **1** : 479.



Fig. 90 : *Nemacheilus elongatus* (Sen & Nalbant)

Distinguishing Characters : Body slender, elongated, both dorsal and ventral profiles straight. Depth of body 6.5 to 9.9 in standard length. Mouth semicircular, lips moderately fleshy, lower lip interrupted in the middle. Eyes small. Nostrils close to each other. Well developed barbels present. Dorsal fin inserted nearer to snout-tip than to caudal fin base. Caudal fin forked. Scales small, absent anteriorly and on ventral side. Lateral line incomplete.

Geographical Distribution : Near shillong, Meghalaya.

123. *Nemacheilus evezardi* Day
(Fig. 91)

1878. *Nemacheilus evezardi* Day, *Fishes of India* : 613, pl. 153. fig. 11 (type-locality : Poona).

1987. *Noemacheilus evezardi* : Menon, *Fauna of India*, Pisces, **4** (Part 1) : 191, pl. 4. figs 1 & 2, pl. 10, fig. 1.

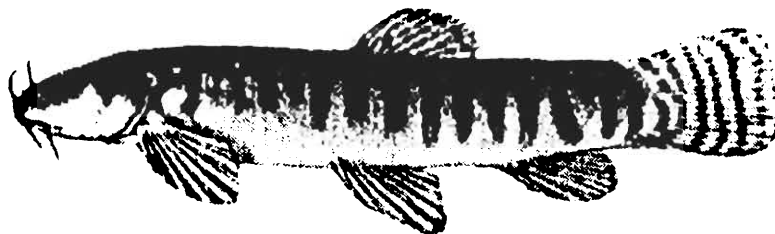


Fig. 91 : *Nemacheilus evezardi* Day

Distinguishing Characters : Body subcylindrical, of almost uniform depth, Depth of body 5.7 to 8.7 in standard length. Mouth semicircular, lips fleshy, both lips interrupted in the

middle. Eyes minute. Nostrils close to eye than to snout tip; anterior nostrils barbel-like. Barbels well developed. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal fin rounded. Scales small but well developed, covering entire body. Lateral line incomplete.

Geographical Distribution : Western Ghats : Krishna and Godavari basins; Satpura range : Pachmari Hills.

124. *Nemacheilus gangeticus* (Menon)

1987. *Noemacheilus gangeticus* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 82, pl. 12, fig. 6 (type-locality : Alakananda river at Srinagar, Uttar Pradesh).

1991. *Nemacheilus gangeticus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 481.

Distinguishing Characters : Body slender, its depth 5.6 to 10.5 in standard length. Eyes small, situated in the anterior half of head, not visible from underside. Nostrils distinct from each other. Mouth semicircular, lips fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin forked. Scales small, absent anteriorly in front of dorsal fin and on ventral side of body. Lateral line complete.

Geographical Distribution : Western Himalaya in Uttar Pradesh.

125. *Nemacheilus guentheri* Day

(Fig. 92)

1867. *Nemacheilus guentheri* Day, *Proc. Zool. Soc. Lond.* : 285 (type-locality : base of Neilgherry Hills).

1987. *Noemacheilus guentheri* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 161, pl. 11, fig. 9.

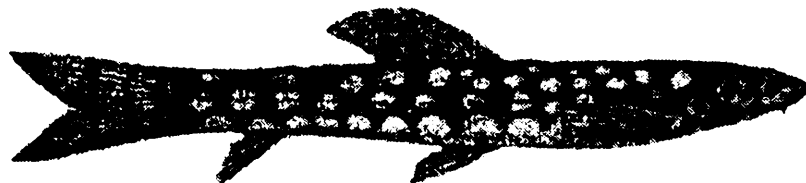


Fig. 92 : *Nemacheilus guentheri* Day

Distinguishing Characters : Body more or less subcylindrical; dorsal profile slightly arched, ventral almost straight. Body depth 5.0 to 7.7 in standard length. Eyes small, not visible from underside. Nostrils close to each other; anterior nostrils more or less tubular. Mouth semicircular; lips fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin forked. Scales small, absent on ventral side of body. Lateral line more or less complete.

Geographical Distribution : Peninsular India : Western Ghats.

126. *Nemacheilus himachalensis* (Menon)

1987. *Noemacheilus himachalensis* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 76, pl. 16, fig. 2 (type-locality : Nadaun, Kangra dist., Himachal Pradesh).

1991. *Nemacheilus himachalensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 483.

Distinguishing Characters : Body slender and elongated, its depth 7.2 to 8.0 in standard length. Eye small, not visible from underside. Nostrils separated from one another. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Barbel short. Dorsal fin inserted equidistant from snout tip and caudal fin base. Caudal fin deeply forked. Scales rudimentary and sparsely distributed. Lateral line incomplete, ends before dorsal fin.

Geographical Distribution : Kangra district (Beas drainage), Himachal Pradesh.

127. *Nemacheilus keralensis* (Rita & Nalbant)

1978. *Oreonectes (Indoreonectes) keralensis* Rita and Nalbant, *Trav. Mus. Hist. natn. Grigore Antipa*, 19 : 185 (type-locality : Pompadampara, Kerala).

1987. *Noemacheilus keralensis* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 193, pl. 10, fig. 2.

Distinguishing Characters : Body subcylindrical and is of uniform depth. Body depth 5.7 to 7.5 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior nostril barbel-like. Mouth semicircular, lips fleshy, lower lip partly interrupted in the middle. Well developed barbels present. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal fin rounded. Scales small, well developed, covering the entire body. Lateral line incomplete, ending above middle of pectoral fins.

Geographical Distribution : Western Ghats of Kerala.

128. *Nemacheilus kodaguensis* (Menon)

1987. *Noemacheilus kodaguensis* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 108-110, pl. 16, fig. 11 (type-locality : Kotu Hola, nr. Merkara, Karnataka).

1991. *Nemacheilus kodaguensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 486.

Distinguishing Characters : Subcylindrical body, its depth 4.9 to 6.8 in standard length. Eyes small, not visible from underside, Nostrils separated from each other, anterior one tubular. Mouth semicircular, lips moderately fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted almost equidistant between snout tip and caudal fin base. Caudal fin slightly emerginate. Scales minute and scattered, absent on ventral side of body. Lateral line incomplete, ending above middle of pectoral fin.

Geographical Distribution : Western Ghats–Cauvery basin and Nilgiris.

129. *Nemacheilus manipurensis* Chaudhuri

1912. *Nemacheilus manipurensis* Chaudhuri, *Rec. Indian Mus. Zool.*, 7 : 443, pl. 40, figs. 4 : 4a, 4b and pl. 31, figs. 1, 1a, 1b (type-locality : Manipur).

1987. *Noemacheilus manipurensis* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 121, pl. 12. fig. 4.

Distinguishing Characters : Body slender and of uniform depth, its depth 5.6 to 9.7 in standard length. Eyes small, not visible from underside. Nostrils more or less distinct from one another, anterior one tubular. Mouth semicircular, lips moderately fleshy, lower lip interrupted in the middle. Well developed barbels. Caudal fin truncate. Scales small, scattered, absent on ventral side. Lateral line incomplete, terminating above end of pelvic fins.

Geographical Distribution : Manipur and Nagaland.

130. *Nemacheilus monilis* Hora

(Fig. 93)

1921. *Nemacheilus monilis* Hora, *Rec. Indian Mus.*, 22(1) : 19 (type-locality : Bhavani river at Methupalayam, base of Nilgiris).

1987. *Noemacheilus monilis* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 156, pl. 6. fig. 4.

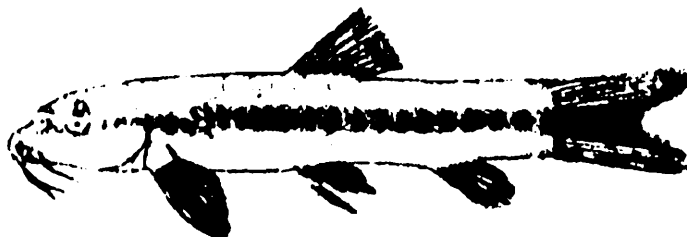


Fig. 93 : *Nemacheilus monilis* Hora

Distinguishing Characters : Body elongate and of uniform depth; its depth about 8.0 in standard length. Eye small, not visible from underside. Nostrills close to each other, anterior nostril more or less tubular. Mouth semicircular; lips moderately fleshy. Upper lip raised into a short proboscis in the centre, lower lip interrupted in the middle. Barbels long. Dorsal fin inserted slightly nearer to caudal fin base than to snout tip. Caudal fin deeply forked. Scales small and imbricate. absent on ventral surface. Lateral line complete.

Geographical Distribution : Western Ghat : Nilgiris.

131. *Nemacheilus montanus* (McClelland)

(Fig. 94)

1838. *Schistura montanus* McClelland, *J. Asiat. Soc. Beng.*, 7 : 947, pl. 1 (type-locality : Simla).

1987. *Noemacheilus montanus* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 78, pl. 11. figs. 6 & 7.

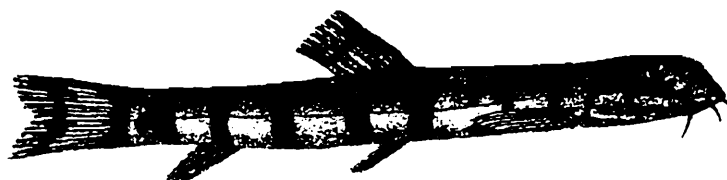


Fig. 94 : *Nemacheilus montanus* (Mc Clelland)

Distinguishing Characters : Body much elongated and of uniform depth, its depth 6 to 8.7 in standard length. Eyes small, not visible from underside. Nostrils close to each other. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted slightly nearer to caudal fin base than to snout tip. Caudal fin emarginate. Scales minute, non imbricate. Lateral line complete.

Geographical Distribution : Himachal Pradesh.

132. *Nemacheilus moreh* (Sykes)

1841. *Cobitis moreh* Sykes, *Trans, Zool. Soc. Lond.*, 2 : 266 (type-locality : Western Ghats).

1987. *Noemacheilus moreh* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 145.

Distinguishing Characters : Body stout-built and spindle shaped, its depth 4.0 to 4.1 in standard length. Eyes large, not visible from underside. Nostrils close to each other. Mouth semicircular. Lips fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted nearer to snout-tip than to caudal fin base. Caudal fin slightly emarginate. Scales conspicuous and imbricate, reduced on breast. Lateral line incomplete, terminating opposite to posterior end of dorsal fin.

Geographical Distribution : Peninsular region.

133. *Nemacheilus naganensis* (Menon)

1987. *Noemacheilus naganensis* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 117 (type-locality : Nagaland : Brahmaputra basin).

1991. *Nemacheilus naganensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 491.

Distinguishing Characters : Body elongate, dorsal profile slightly arched, ventral horizontal and flat. Depth of body 5.1 to 7.7 in standard length. Eyes small, not visible from underside. Nostrils distinct from one another. Mouth anterior, lips more or less fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted nearer to caudal fin

base than to snout tip. Caudal fin slightly emerginate. Scales minute and embedded. Lateral line incomplete, terminating before origin of dorsal fin.

Geographical Distribution : Nagaland (Brahmaputra basin).

134. *Nemacheilus nilgiriensis* (Menon)
(Fig. 95)

1987. *Noemacheilus nilgiriensis* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 106, pl. 10, figs. 8 & 9 and pl. 14, figs. 1 & 2 (type-locality : nr. Pykara Dam, Nilgiri district, Tamil Nadu).

1991. *Nemacheilus nilgiriensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 492.

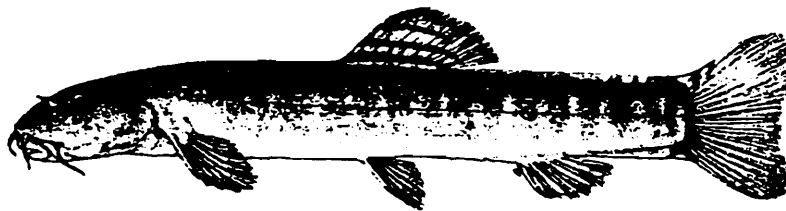


Fig. 95 : *Nemacheilus nilgiriensis* (Menon)

Distinguishing Characters : Body with uniform depth, dorsal profile slightly arched. Depth of body 5.5 to 8.7 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior are tubular. Mouth semicircular, lips more or less fleshy, lower one interrupted in the middle. Well developed, thread like barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin slightly emerginate. Scales minute, absent anteriorly in front of dorsal fin and on ventral side. Lateral line incomplete, terminating opposite to middle of pectoral fin.

Geographical Distribution : Pykara Dam, Nilgiri district, Tamil Nadu.

135. *Nemacheilus pavonaceus* (McClelland)
(Fig. 96)

1839. *Cobitis pavonacea* McClelland, *Asiat. Res.*, 19(2) : 305, 437, pl. 52, fig. 1 (type-locality : Assam).

1987. *Noemacheilus pavonaceus* : Menon, *Fauna of India*, Pisces, 4 (Part 1) : 493.

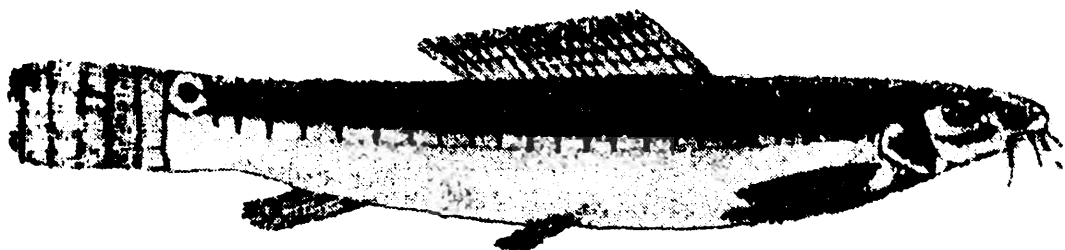


Fig. 96 : *Nemacheilus pavonaceus* (Mc Clelland)

Distinguishing Characters : Body elongate with uniform depth. Body depth 5.4 to 5.8 in standard length. Eyes moderate in size, not visible from underside. Nostrils close to each other. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Well developed barbels, nasal pair short. Dorsal fin inserted nearer to snout tip than to caudal fin base. Caudal fin slightly emerginate. Scales conspicuous and imbricate, absent on breast and head. Lateral line incomplete, terminating at the tip of pectoral fin.

Geographical Distribution : Brahmaputra basin, Assam.

136. *Nemacheilus petrubanarescui* (Menon)

1984. *Noemacheilus petrubanarescui* Menon, *Cybium*, 8(2) : 45 (type-locality : Netravati river, Karnataka).

1991. *Nemacheilus petrubanarescui* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 495.

Distinguishing Characters : Body with uniform depth, its depth 5.8 to 6.6 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one tubular. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Well developed barbels present. Dorsal fin inserted equidistant from snout-tip and caudal fin base. Caudal fin deeply forked. Scales small and imbricate, absent on ventral side of body. Lateral line almost complete.

Geographical Distribution : Karnataka : Netravati river, Dharmasthala.

137. *Nemacheilus prashadi* Hora

(Fig. 97)

1921. *Nemacheilus prashadi* Hora, *Rec. Indian Mus.*, 22 : 203, pl. 10, figs. 2, 2a (type-locality : Thonagpal Tank, near Yaribuk, Manipur).

1987. *Noemacheilus prashadi* : Menon, *Fauna of India*, Pisces 4 (Part 1) : 127, pl. 3, figs. 8 & 9.

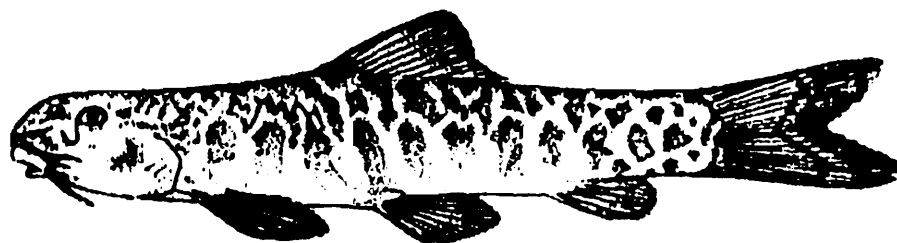


Fig. 97 : *Nemacheilus prashadi* Hora

Distinguishing Characters : Body with uniform depth, its depth 5.3 to 7.1 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one tubular. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Caudal fin deeply forked. Scales small and imbricate, absent on ventral side. Lateral line almost complete.

Geographical Distribution : Manipur Valley.

138. *Nemacheilus pulchellus* Day
(Fig. 98)

1873. *Nemacheilus pulchellus* Day, *J. Linn. Soc. Lond. (Zool.)*, 11 : 528 (type-locality : Bhavani river, Nilgiris).

1987. *Noemacheilus pulchellus* : Menon, *Fauna of India, Pisces 4 (Part 1)* : 164, pl. 4, figs. 11 and pl. 16, fig. 5.

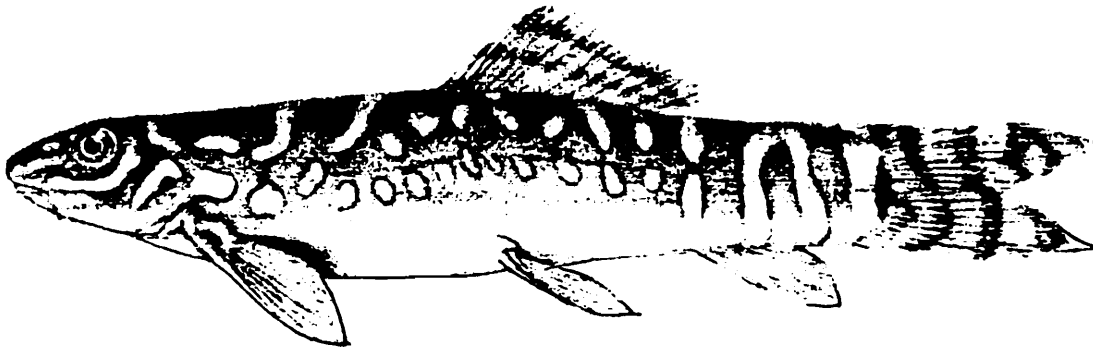


Fig. 98 : *Nemacheilus pulchellus* Day

Distinguishing Characters : Body subcylindrical, its depth 4.2 to 4.6 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one somewhat tubular. Mouth semicircular, lips more or less fleshy, both lips interrupted in the middle. Well developed barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin deeply forked. Scales small, imbricate, absent on ventral surface. Lateral line complete.

Geographical Distribution : Bhavani river at the base of Nilgiris, Western Ghats.

139. *Nemacheilus reticulofasciatus* (Singh & Banarescu)

1981. *MesoNoemacheilus reticulofasciatus* Singh & Banarescu, *Trav. Mus. Hist. nat. Grigore Antipa.*, 23 : 206 (type-locality : Barapani, 20 kms. from Shillong, Meghalaya).

1987. *Noemacheilus reticulofasciatus* : Menon, *Fauna of India, Pisces 4 (Part 1)* : 173, pl. 12, fig. 2.

Distinguishing Characters : Body more or less cylindrical, its depth 5.0 to 6.2 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one tubular. Mouth semicircular, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin forked. Scales small, isolated anteriorly. Lateral line incomplete and short, terminating below anterior part of dorsal fin.

Geographical Distribution : North Meghalaya, Jaintia Hills (Brahmaputra river basin).

140. *Nemacheilus ruppelli* (Sykes)

1841. *Cobitis ruppelli* Sykes, *Trans Zool. Soc. Lond.*, 2 : 366, pl. 64, fig. 1 (type-locality : Dekkan).

1987. *Noemacheilus ruppelli* : Menon, *Fauna of India, Pisces* 4 (Part 1) : 158 pl. 12, fig. 1.

Distinguishing Characters : Body more or less elongate, its depth 5.0 to 6.5 in standard length. Eyes prominent, not visible from underside. Nostrils close to each other, anterior one more or less tubular. Snout long and pointed. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle and papillated. Well developed barbels. Dorsal fin inserted equidistant from tip of snout and caudal fin base. Caudal fin deeply forked. Scales imbricate, absent on ventral surface. Lateral line complete.

Geographical Distribution : Western Ghats in Maharashtra and Karnataka (Krishna river basin).

141. *Nemacheilus rupecola* (McClelland)

(Fig. 99)

1838. *Schistura rupecola* McClelland, *J. Asiat. Soc. Beng.*, 7 : 948, pl. 55, fig. 3 (type-locality : Simla).

1987. *Noemacheilus rupecola* : Menon, *Fauna of India, Pisces* 4 (Part 1) : 49 pl. 13, fig. 6.

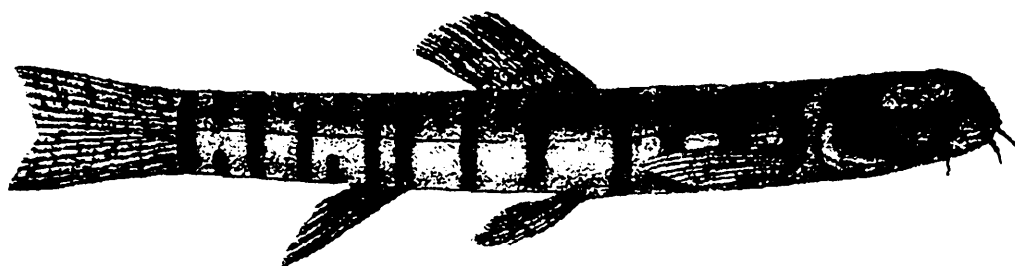


Fig. 99 : *Nemacheilus rupecola* (Mc Clelland)

Distinguishing Characters : Body slender, its depth 5.4 to 9.0 in standard length. Eyes small, not visible from underside. Nostrils close to each other. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted between snout tip and caudal fin base. Caudal fin truncate or slightly emarginate. Scales small and indistinct, absent on ventral side. Lateral line complete.

Geographical Distribution : Western Himalaya : Kumaon through Garhwal Himalaya to Yamuna, Sutlej and Beas drainages of Himachal Pradesh.

142. *Nemacheilus scaturigina* (McClelland)

(Fig. 100)

1839. *Cobitis (Schistura) scaturigina* McClelland, *Asiat. Res.*, 19 308, 443, pl. 53, fig. 6 (type-locality : Assam).

1987. *Noemacheilus scaturigina* : Menon, *Fauna of India, Pisces* 4 (Part 1) : 86, pl 3, figs. 2 & 3; pl. 13, figs. 8 & 9.



Fig. 100 : *Nemacheilus scatrigina* (Mc Clelland)

Distinguishing Characters : Body elongate, its depth 4.9 to 7.7 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one more or less tubular. Mouth semicircular, more or less fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted equidistant between snout tip and caudal fin base. Caudal fin forked. Scales small, imbricate, absent on ventral surface, Lateral line complete.

Geographical Distribution : Eastern Sub-Himalaya.

143. *Neemacheilus semiarmatus* Day
(Fig. 101)

1867. *Neemacheilus semiarmatus* Day, *Proc. Zool. Soc. Lond.*, : 286 (type-locality : Bowany and Secgoor river at base of Nilgiri).

1987. *Noemacheilus semiarmatus* : Menon, *Fauna of India, Pisces 4* (Part 1) : 110, pl. 11, fig. 1-3 and pl. 14, fig. 3.



Fig. 101 : *Nemacheilus semiarmatus* Day

Distinguishing Characters : Body more or less elongate, its depth 5.8 to 7.9 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one tubular. Mouth semicircular, lips thick and fleshy, lower lip interrupted in the middle. Well developed, thread-like barbels. Dorsal fin inserted nearer to snout-tip than to caudal fin base. Caudal fin more or less forked. Scales small and imbricate. Lateral line complete.

Geographical Distribution : Peninsular region : Cauvery basin in Wynaad, nilgiris and Mysore; and Silent Valley (Bharathapuzha basin).

144. *Nemacheilus sijuensis* (Menon)
(Fig. 102)

1987. *Noemacheilus sijuensis* : Menon, *Fauna of India, Pisces 4* (Part 1) : 175, pl. 6, fig. 2 (type-locality : Siju cave, Garo Hills, Meghalaya).

1991. *Nemacheilus sijuensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 503.

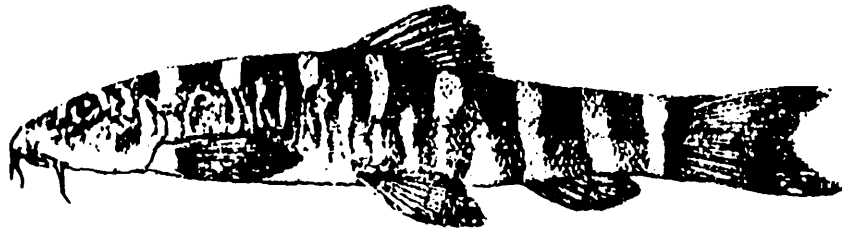


Fig. 102 : *Nemacheilus sijuensis* (Menon)

Distinguishing Characters : A stoutly-built species, dorsal profile arched. Depth of body 5.0 to 6.6 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one tubular. Mouth semicircular, lip fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal fin forked. Scales small and imbricate, absent on ventral surface. Lateral line complete.

Geographical Distribution : Siju cave, Garo Hills, Meghalaya.

145. *Nemacheilus singhi* (Menon)

1987. *Noemacheilus singhi* : Menon, *Fauna of India*, Pisces 4 (Part 1) : 119, pl. 16, fig. 1 (type-locality : Kiphire, Nagaland).

1991. *Nemacheilus singhi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 506.

Distinguishing Characters : Body elongate, its depth 5.5 to 6.9 in standard length. Eyes small, not visible from underside. Nostrils close to each other, anterior one in a flap. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. Well developed thread-like barbels. Dorsal fin inserted nearer to caudal fin base than to snout-tip. Caudal fin truncate or slightly emerginate. Scales small, imbricate; absent on head, in front of dorsal fin and ventral surface. Lateral line incomplete, terminating below origin of dorsal fin.

Geographical Distribution : Nagaland.

146. *Nemacheilus striatus* Day

(Fig. 103)

1867. *Nemacheilus striatus* Day, *Proc. Zool. Soc. Lond.* : 347 (type-locality : Wynaad, Kerala).

1987. *Noemacheilus striatus* : Menon, *Fauna of India*. Pisces, 4 (Part 1) : 113, pl. 5, fig. 1.



Fig. 103 : *Nemacheilus striatus* Day

Distinguishing Characters : Body narrow and elongated with both dorsal and ventral profiles almost straight and horizontal. Depth of body 5.0 to 8.1 in standard length. Eye small, not visible from underside of head. Nostrils close to each other, anterior one tubular. Mouth semicircular, lips more or less fleshy, lower lip interrupted in the middle. The area immediately behind the lower lip thickened and fairly grooved forming a sort of mental adhesive organ. Barbels long. Dorsal fin inserted nearer to snout tip than to caudal fin base. Caudal fin deeply forked. Scales small, absent underside. Lateral line complete.

Geographical Distribution : Western Ghats; Kerala; Wynaad and Karnataka : Shimoga.

147. *Nemacheilus triangularis* Day
(Fig. 104)

1865. *Nemacheilus triangularis* Day, *Proc. Zool. Soc. Lond.* : 295 (type-locality : Mundikyum, Travancore).

1991. *Neemacheilus triangularis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 506.

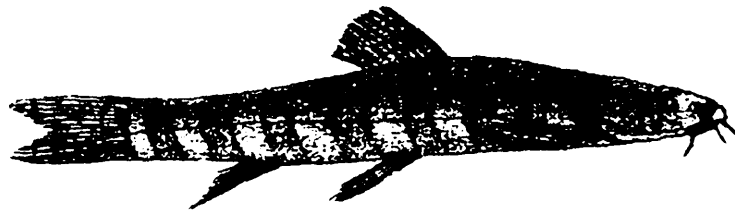


Fig. 104 : *Nemacheilus triangularis* Day

Distinguishing Characters : Body subcylindrical, its depth 5.0 to 8.5 in standard length. Eyes small, not visible from underside. Nostrils separated by a prominent flap. Mouth semicircular, lips fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted equidistant between snout-tip and caudal fin base. Caudal fin forked. Scales distinct, present all over body. Lateral line almost complete.

Geographical Distribution : Peninsular region. Western Ghats : Kerala and Tamil Nadu.

148. *Triplophysa ladacensis* (Gunther)

1868. *Noemacheilus ladacensis* Gunther, *Cat. Fishes Br. Mus.*, 7 : 356 (type-locality : Ladakh).

1987. *Triplophysa ladacensis* : Menon, *Fauna of India. Pisces*, 4 (Part 1) : 206.

Distinguishing Characters : Body long and narrow, head markedly pointed. Dorsal profile arched, ventral straight and horizontal. Depth of the body 6.3 to 8.7 in standard length. Eyes of moderate size. Mouth semicircular, lips fleshy, lower lip interrupted in the middle. Well developed barbels. Dorsal fin inserted nearer to snout tip than to caudal fin base. Caudal penduncle long and narrow; whip like. Caudal fin truncate. Lateral line complete.

Geographical Distribution : Ladakh.

149. *Triplophysa marmorata* (Heckel)
(Fig. 105)

1838. *Cobitis marmorata* Heckel, *Fische aus Caschmir* : 76, pl. 12, figs. 1 & 2 (type-locality : Kashmir lakes).
1987. *Triplophysa marmorata* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 208, pl. 7 fig. 7.

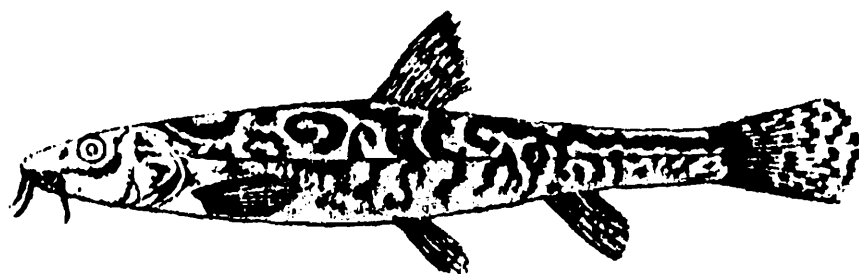


Fig. 105 : *Triplophysa marmorata* (Heckel)

Distinguishing Characters : Body elongate, dorsal and ventral profile slightly arched. Depth of body 5.4 to 11.0 in standard length, Eyes small. Mouth lunate, lips thick and continuous. Barbels short and stumpy. Dorsal fin inserted midway between snout-tip and caudal fin base. Caudal peduncle rather short. Caudal fin rounded. Lateral line incomplete, terminating before dorsal fin.

Geographical Distribution : Kashmir lakes.

150. *Triplophysa microps* (Steindachner)
(Fig. 106)

1866. *Cobitis microps* Steindachner, *Verh. Zool. bot. Ges. Wien*, 16 : 794, pl. 12, fig. 3 (type-locality : Leh, Ladakh).
1987. *Triplophysa microps* : Menon, *Fauna of India, Pisces*, 4 (Part 1) : 210, pl. 8, fig. 4.

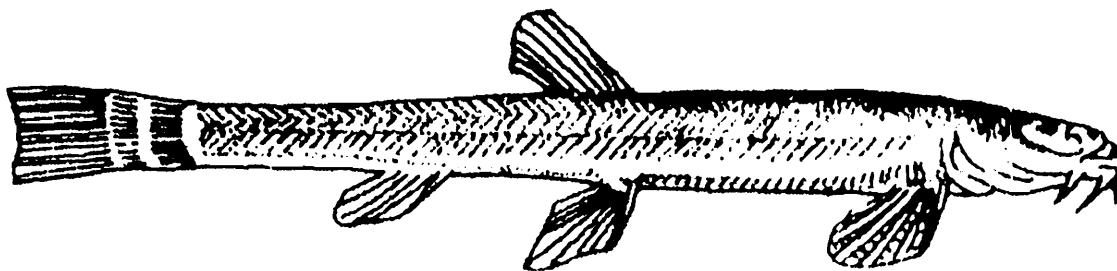


Fig. 106 : *Triplophysa microps* (Steindachner)

Distinguishing Characters : Body long and slender with head and anterior part depressed. Depth of body 6.8 to 9.1 in standard length. Eyes small. Mouth lunate and horizontal, lips thick and continuous. Short and stumpy barbels. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal peduncle long and narrow. Caudal fin truncate. Lateral line incomplete, terminating above tip of pectoral fin.

Geographical Distribution : Ladakh, Kashmir and Lahul-Spiti, Himachal Pradesh.

151. *Triplophysa shehensis* Tilak

1984. *Triplophysa shehensis* Tilak, *Bull. Zool. Surv. India* (type-locality : Ladakh).

1987. *Triplophysa shehensis* : Menon, *Fauna of India. Pisces*, 4 (Part 1) : 212, pl. 16, fig. 9.

Distinguishing Characters : Body elongate and somewhat deep. Head pointed anteriorly and body gradually tapering towards posterior end. Depth of body 4.3 in standard length. Mouth small and lunate, lips fleshy and continuous at angles. Thick and stumpy barbels. Dorsal fin inserted nearer to caudal fin base than to snout-tip. Caudal fin truncate. Caudal peduncle short and somewhat deep. Lateral line incomplete, terminating above tip of pectoral fin.

Geographical Distribution : Ladakh.

Family COBITIDAE
Subfamily BOTIINAE

152. *Botia dario* (Hamilton-Buchaman)
(Fig. 107)

1822. *Cobitis dario* Hamilton Buchaman, *Fish. Ganges* : 354, 394, pl. 29. fig. 95 (type-locality : Rivers of Bengal).

1999. *Botia dario* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 157.

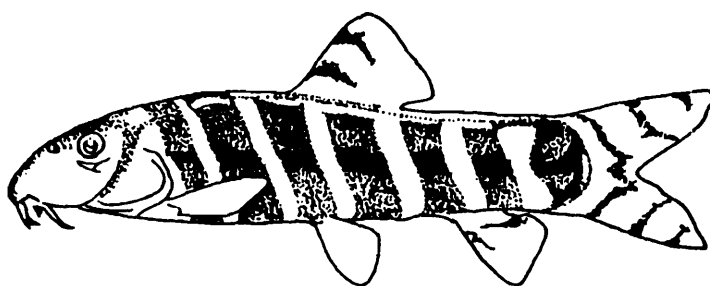


Fig. 107 : *Botia Dario* (Hamilton-Buchanan)

Distinguishing Characters : Body elongate and laterally compressed. Head length 3.25 in standard length. Eyes moderately large, situated in the posterior part of head, its diameter about 5.0 in head length. Mouth small. Four pairs of barbels. Dorsal fin inserted almost equidistant from tip of snout and base of caudal fin. Caudal peduncle tapers towards posterior. Scales not distinct.

Geographical Distribution : Assam, North Bengal, South Bihar (Rajmahal hills).

153. *Botia macrolineata* Teugels, Vas & Snoeks
(Fig. 108)

1986. *Botia macrolineata* Teugels, Vas & Snoeks, *Cybium* (type-locality : Off Bombay Territory).

1992. *Botia macrolineata* : Menon, *Fauna of India, Pisces*, 4 (Part 2) : 113, fig. (Addendum).

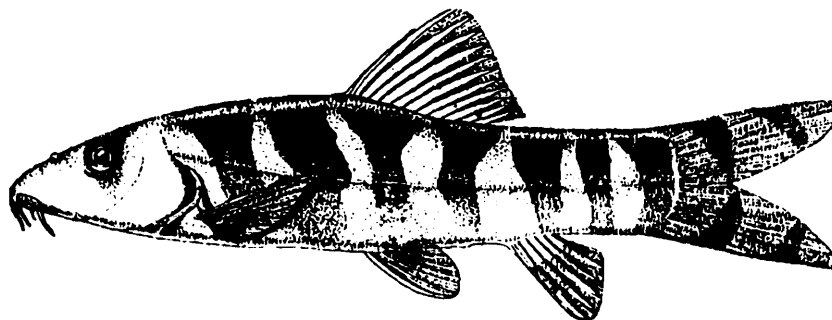


Fig. 108 : *Botia macrolineata* Teuges, Vas & Snoeks

Distinguishing Characters : This species differs from *B. dario* (Ham.) by greater number of dorsal branched rays. In this respect this fish is comparable with the group of *Botia hymenophysa*, *B. helodes* and somewhat with *B. reversa* (Menon, 1992).

Geographical Distribution : India : Off Bombay Territory.

154. *Botia striata* Rao

1920. *Botia striata* Rao, *Ann. Mag. nat. Hist.*, 9(6) : 60, pl. 2, figs. 4, 4a, 4b (type-locality : Tunga river at Shimoga, Karnataka).

1999. *Botia striata* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 158.

Distinguishing Characters : Body elongate, greatly compressed laterally and broad. Head moderate in size, its length about 3.5 in standard length. Snout length more or less equal to remaining part of head. Eyes situated almost in the posterior half of head, its diameter about 5.0 in head length. Mouth small. Four pairs of barbels. Dorsal fin inserted nearer to base of caudal fin than to tip of snout. Caudal peduncle almost square in shape. Caudal emerginate. Scales small.

Geographical Distribution : Tunga river system and Kolhapur and Satara districts, Western Ghats.

Subfamily COBITINAE

155. *Enobarbichthys maculatus* (Day)
(Fig. 109)

1867. *Enobarbichthys maculatus* Day. *Proc. Zool. Soc. Lond.* : 94 (type-locality : Madras).

1991. *Enobarbichthys maculatus* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 1 : 519.



Fig. 109 : *Enobarbichthys maculatus* (Day)

Distinguishing Characters : Body elongate and more or less compressed. Mouth small and subterminal, Barbels three pairs. Dorsal fin inserted over tip of pectoral fins, Scales minute and oblong. A dark lateral band on flank from eye to base of caudal fin present. At the base of caudal fin, a black blotch present.

Geographical Distribution : Madras.

156. *Lepidocephalus annandalei* (Chaudhuri)

1912. *Lepidocephalichthys annandalei* Chaudhuri, *Rec. Indian Mus.*, 7 : 442, pl. 40, figs 3, 3a, 3b (type-locality : Tista river Jalpaiguri and Mahananda river at siliguri).

1999. *Lepidocephalus annandalei* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 159.

Distinguishing Characters : Body elongate, slightly compressed anteriorly and strongly compressed posteriorly. Body depth 6.9 to 9.0 in total length. Mouth inferior, mental lobe formed into small, barbel-like projections. Barbels three pairs, dorsal fin inserted opposite to pelvic fin origin, is much nearer to caudal fin base than to snout-tip. Caudal fin concavely lunate. Scales very small. A small patch of scales present below eye and a few scales above operculum. 28 rows of scales present between back of body and anal fin base.

Geographical Distribution : Teesta river system, North Bengal and Garo Hills, Meghalaya. Also Uttar Pradesh : Saharanpur and Dehra Dun.

157. *Lepidocephalus coromandelensis* Menon (Fig. 110)

1992. *Lepidocephalus coromandelensis* Menon, *Fauna of India, Pisces 4* (Part 2) : 67, text fig. 4 (type-locality : Araku Valley, Andhra Pradesh).

1999. *Lepidocephalus coromandelensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 160.

Distinguishing Characters : Body elongate with compressed caudal peduncle. Dorsal profile slightly curved, ventral profile almost straight. Body depth 5.2 to 7.2 in standard length. Head moderately deep, its length 4.5 to 6.5 in standard length. Snout rounded. Eyes small, covered with skin, situated before middle of head. Mouth small, inferior, with thick lips. Three pairs of barbels, small, imbricate scales placed all over the body.

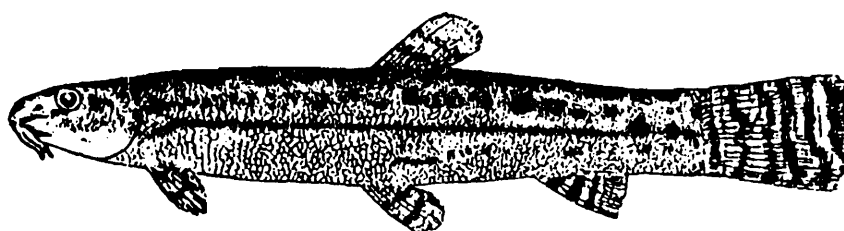


Fig. 110 : *Lepidocephalus coromondelensis* Menon

Geographical Distribution : Araku Valley, Andhra Pradesh.

158. *Lepidocephalus irrorata* (Hora)

1921. *Lepidocephalus irrorata* Hora, *Rec. Indian Mus.*, 22 : 196, pl. 9, figs. 5, 5a, 5b (type-locality : Loktak lake, Manipur).

1999. *Lepidocephalus irrorata* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 162.

Distinguishing Characters : Body elongate, its depth 6.3 to 7.3 in total length. Mouth inferior. Three pairs of barbels. Suborbital spine elongate and forked. Dorsal fin inserted considerably behind pelvic fin base, is much nearer to caudal fin base than to snout tip. Caudal fin slightly emarginate, Scales present on upper surface of the head. 21 rows of scales between back and anal fin.

Geographical Distribution : Manipur and Assam.

159. *Lepidocephalus menoni* Pillai & Yazdani
(Fig. 111)

1976. *Lepidocephalichthys menoni* Pillai and Yazdani, *J. Zool. Soc. India*, 26(1-2) : 13, text-fig. 1 (type-locality : Someswari river at Baghmara, Garo Hills, Meghalaya).

1999. *Lepidocephalus menoni* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 163.

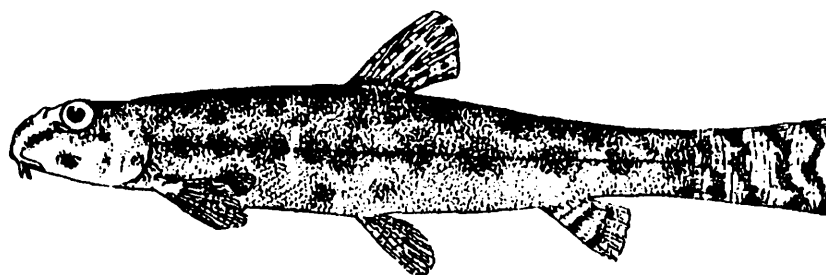


Fig. 111 : *Lepidocephalus menoni* Pillai & Yazdani

Distinguishing Characters : Body elongate and laterally compressed. Dorsal profile slightly curved. Body depth 4.9 to 5.7 in standard length. Head moderately deep, its length 4.0 to 4.5 in standard length. Eyes large, covered with skin, situated superiorly before middle of head. Mouth small, inferior, with thick lips. Three pairs of barbels. Scales small, imbricate, placed all over the body.

Geographical Distribution : Along base of Eastern Himalayas, U. P., Garo and Jaintia Hills, Meghalaya.

160. *Neoeucirrhichthys maydelli* Banarescu & Nalbant
(Fig. 112)

1968. *Neoeucirrhichthys maydelli* Banarescu and Nalbant, *Mitt. Hamburg Zool. Mus. Inst.*, **65** : 349, figs 14, 15 (type-locality : Janari river at Raimona, Goalpara dist., Assam).

1991. *Neoeucirrhichthys maydelli* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, **1** : 529.

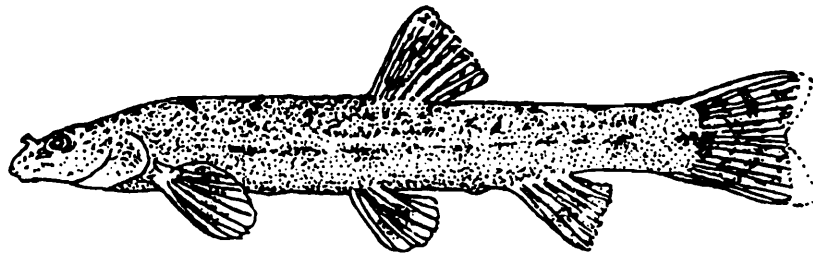


Fig. 112 : *Neoeucirrhichthys maydelli* Banarascu & Nalbant

Distinguishing Characters : Body elongate and of uniform depth. Head small and compressed, snout pointed. Eyes large, more than interorbital width. Mouth inferior, horse-shoe shaped. Barbels absent. Dorsal fin inserted nearer to caudal fin base than to snout tip. Caudal fin emarginate. Caudal peduncle moderately long, low and compressed. Dorsal, caudal and pectoral fins with a few rows of spots.

Geographical Distribution : Brahmaputra Drainage, Assam.

161. *Pangio goaensis* (Tilak)
(Fig. 113)

1972. *Acanthopthalmus goaensis* Tilak, *J. Inland Fish. Soc. India* **1** : 61 (type-locality : Colem River, Goa).

1999. *Pangio goaensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 165.

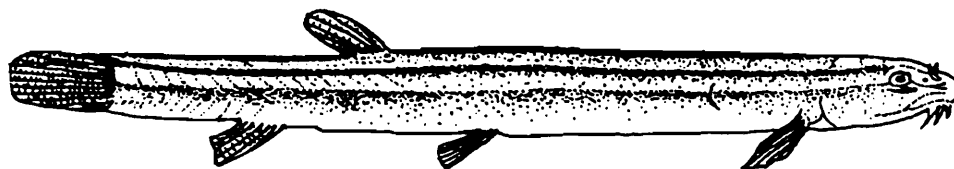


Fig. 113 : *Pangio goaensis* (Tilak)

Distinguishing Characters : Body very much elongate and moderately compressed. Head fairly compressed. Head length more than 6 times in standard length. Eyes very small. Mouth inferior and lips smooth. Three pairs of barbels present. Dorsal fin small with only six branched rays. Caudal fin truncate. Depth of caudal peduncle about two times in its length. Very minute scales, embedded in skin.

Geographical Distribution : Colem river, Goa and Chaliyar, Kerala.

162. *Pangio longipinnis* (Menon)
(Fig. 114)

1992. *Acanthopthalmus longipinnis* Menon, *Fauna of India, Pisces*, 4 (Part 2) : 93, text fig. 10A-C (type-locality : Kharungpat lake, 20 kms. south of Imphal, Manipur).

1999. *Pangio longipinnis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 166.

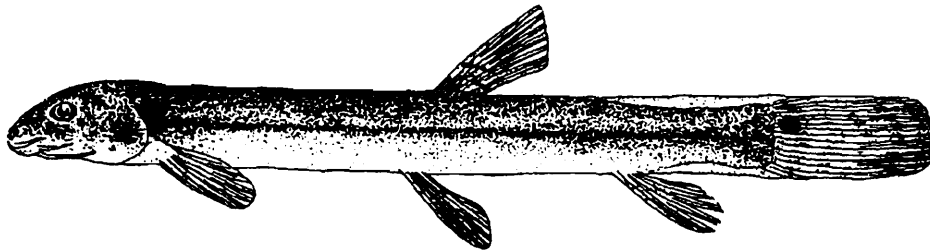


Fig. 114 : *Pangio longipinnis* (Menon)

Distinguishing Characters : Body much elongated and strongly compressed. Head moderately deep and compressed, its length about 5.0 in standard length. Eyes rather small, covered with skin. Mouth small, inferior, horse-shoe shaped with thick lips. Three pairs of barbels. Dorsal fin small but long with six branched rays. Caudal fin truncate. Depth of caudal peduncle 1.67 times in its length. Minute, imbricate scales, absent on head.

Geographical Distribution : Near Imphal, Manipur.

Order SILURIFORMES

Family BAGRIDAE

163. *Batasio travancoria* Hora & Law
(Fig. 115)

1941. *Batasio travancoria* Hora and Law, *Rec. Indian Mus.*, 43(1) : 40, pl. 2, figs. 7, 8 & 9 (type-locality : Peruntenuvi, tributary of Pamba river at Edakadathy, Kerala).

1999. *Batasio travncoria* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 212.

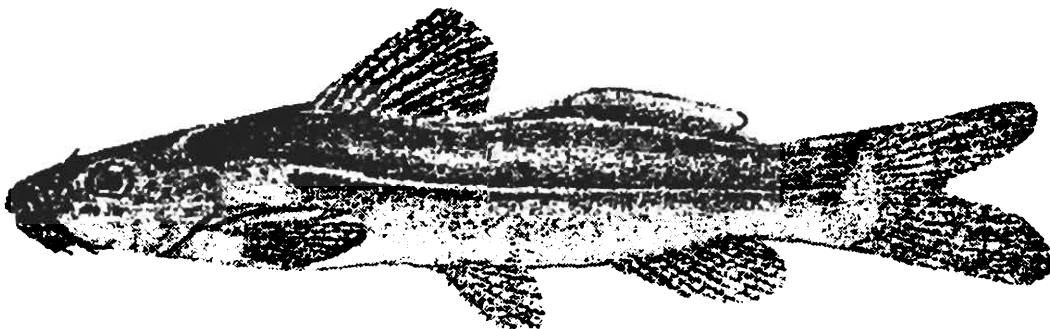


Fig. 115 : *Batasio Travancoria* Hora & Law

Distinguishing Characters : Body elongate and laterally compressed. Head conical and rounded anteriorly. Occipital process long, but separated from basal bone of dorsal fin. Medium longitudinal groove on head long and extends to base of occipital process. Four pairs of barbels. Mouth small and inferior. Several pores are present in the head region. Dorsal spine weak. Caudal fin deeply forked.

Geographical Distribution : Western Ghats of Kerala.

164. *Horabagrus brachysoma* (Gunther)

(Fig. 116)

1864. *Pseudobagrus brachysoma* Gunther, *Cat. Fishes Br. Mus.*, 5 : 86 (type-locality : Cochin).

1991. *Horabagrus brachysoma* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 553, fig. 181.

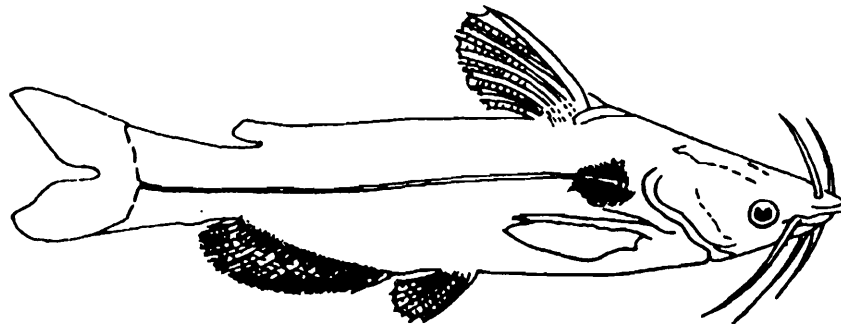


Fig. 116 : *Horabagrus brachysoma* (Gunther)

Distinguishing Characters : Body elongate, its depth 4.0 to 5.0 in standard length. Head conical. Occipital process exposed. Eyes lateral in position, visible from underside. Mouth sub-terminal. Four pairs of barbels. A strong; feebly serrated spine present in the rayed fin; adipose dorsal short and low. Caudal fin deeply forked.

Geographical Distribution : Kerala backwaters.

165. *Horabagrus nigricollaris* Pethiyagoda & Kottelat

1994. *Horabagrus nigricollaris* Pethiyagoda & Kottelat, *J. South. Asian nat. Hist.*, 1, No. 1 : 110 (type-locality : Chalakudy River, near Vellilappava).

Distinguishing Characters : Body moderately elongate and more or less compressed. Head broad and depressed anteriorly. Eyes lying near corner of mouth, visible from underside of head. Mouth subterminal, barbels four pairs. Anal fin long, with 23 to 28 soft rays. Dorsal fin short with 5 to 7 soft rays and a strong spine.

Geographical Distribution : Kerala : Western Ghats : Chalakudy river.

166. *Mystus krishnensis* Ramakrishnaiah

1988. *Mystus krishnensis* Ramakrishnaiah, *Matsya*, (12/13) : 139, figs. 1 & 2 (type-locality : Krishna river, Andhra Pradesh).

1999. *Mystus krishnensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 203.

Distinguishing Characters : Body elongate, its depth 4.6 to 6.3 in standard length. Head depressed. Occipital process narrow and long, not extending to basal bone of caudal fin. Medium longitudinal groove on head does not reach the base of occipital process. Eye diameter 8.5 to 10.0 in head length 2.5 to 3.0 in interorbital width. Mouth terminal. Four pairs of barbels. Dorsal spine weak, adipose dorsal long. Caudal fin forked, its upper lobe extends in a filament.

Geographical Distribution : Krishna river and its tributary.

167. *Mystus malabaricus* (Jerdon)

(Fig. 117)

1849. *Bagrus malabaricus* Jerdon, *Madras Jour. Lit. & Sci.* 15 : 338 (type-locality : Mountain streams of Malabar).

1999. *Mystus malabaricus* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 203.

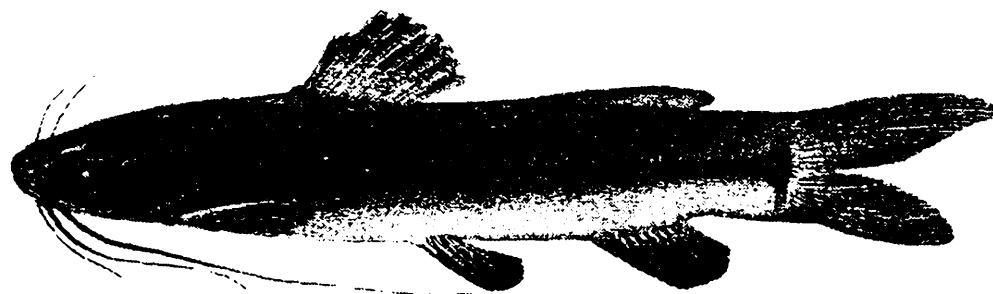


Fig. 117 : *Mystus malabaricus* (Jerdon)

Distinguishing Characters : Body elongate, its depth 5.2 in standard length. Head depressed. Occipital process not extending to basal bone of dorsal fin. Medium longitudinal groove not reaching to base of occipital process. Eye diameter 3.5 to 4.5 in head length, 1.7 in interorbital width. Mouth terminal. Four pairs of barbels. Dorsal spine weak, adipose dorsal 1.5 in interdorsal space. Caudal fin forked, upper lobe longer.

Geographical Distribution : Western Ghats.

168. *Mystus montanus* (Jerdon)

(Fig. 118)

1849. *Bagrus montanus* Jerdon, *Madras Jour. Lit. & Sci.* 15(2) : 337 (type-locality : Manantoddy, Wynaad, Kerala State).

1999. *Mystus montanus* : Menon, Rec. zool. Surv. India, Occ. Paper No. 175 : 204.

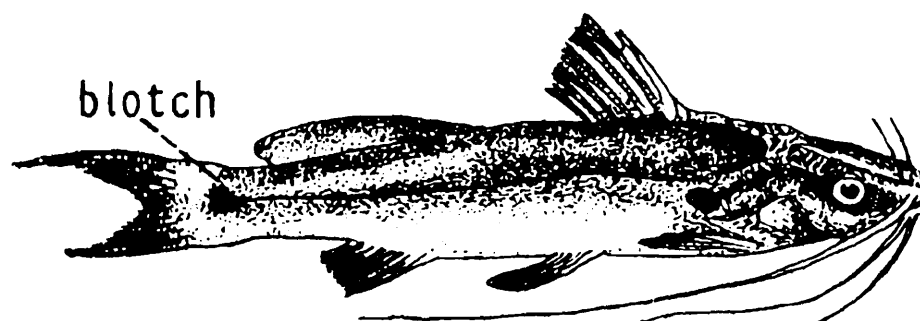


Fig. 118 : *Mystus montanus* (Jerdon)

Distinguishing Characters : Body elongate, its depth about 5.0 in standard length. Head depressed, occipital process reaching to basal bone of dorsal fin. Median longitudinal groove on head not extending to occipital process. Eye diameter 3.5 to 4.0 in head length and 1.5 in interorbital width. Mouth terminal. Four pairs of barbels. Dorsal spine weak, serrated on its inner edge. Interdorsal distance 1.2 in adipose fin base. Caudal fin forked.

Geographical Distribution : Kerala, Karnataka, Maharashtra, Madhya Pradesh and Assam.

169. *Mystus oculatus* (Valenciennes)
(Fig. 119)

1839. *Barbus oculatus* Valenciennes, Hist. nat. Pioss. 14 : 424 (type-locality : Malabar).

1999. *Mystus oculatus* : Menon, Rec. zool. Surv. India, Occ. Paper No. 175 : 205.

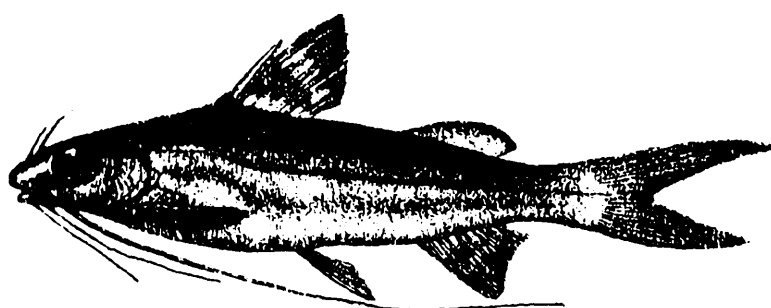


Fig. 119 : *Mystus oculatus* (Valenciennes)

Distinguishing Characters : Body elongate, its depth 4.0 to 4.1 in standard length. Head depressed. Occipital process reaches to basal bone of dorsal fin. Median longitudinal groove extends to base of occipital process. Eye diameter 3.75 to 4.0 in head length; 1.5 in interorbital width. Mouth terminal. Four pairs of barbels. Dorsal spine more or less strong; interdorsal distance 1.2 in adipose base. Caudal fin forked.

Geographical Distribution : Kerala and Tamil Nadu.

170. *Mystus punctatus* (Jerdon)
(Fig. 120)

1849. *Bagrus punctatus* Jerdon, *Madras Jour. Lit. & Sci.*, **15** : 339 (type-locality : Cauvery river, Western Ghats).

1999. *Mystus punctatus* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 206.

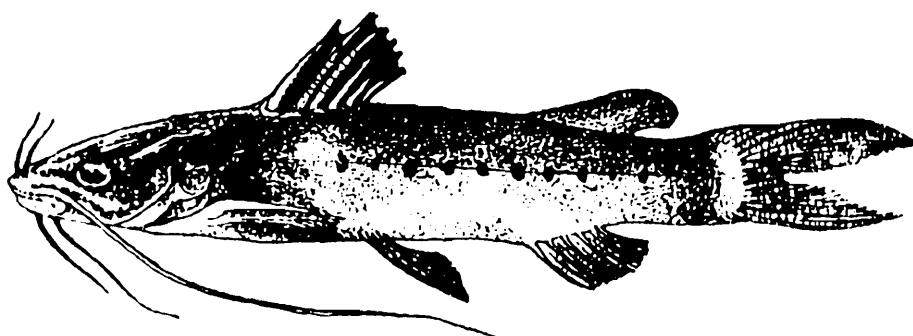


Fig. 120 : *Mystus punctatus* (Jerdon)

Distinguishing Characters : Body elongate, its depth 7.8 to 8.4 in standard length. Head depressed. Occipital process not extending to basal bone of dorsal fin. Median longitudinal groove reaches base of occipital process. Eye diameter 5.7 to 7.0 in head length, 2.5 in interorbital width. Mouth terminal. Four pairs of barbels. Dorsal spine moderately strong; its upper half serrated. Interdorsal space 1.5 in adipose base. Caudal fin forked.

Geographical Distribution : Nilgiri Hills and Western Ghats.

171. *Rita chrysea* Day
(Fig. 121)

1877. *Rita chrysea* Day, *Fishes of India* : 455, pl. 104, fig. 1 (type-locality : Cuttack, Anicut on Mahanadi river).

1999. *Rita chrysea* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 196.

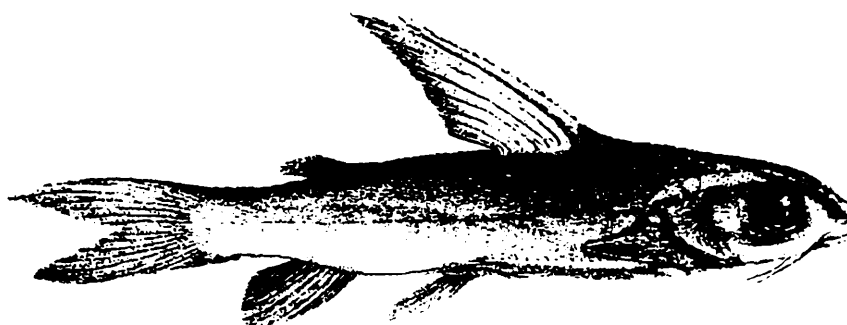


Fig. 121 : *Rita chrysea* Day

Distinguishing Characters : Body elongate. Head depressed. Occipital process subcutaneous, extending to predorsal plate. Mouth transverse. Teeth on prevomer in a

single, semioval patch. Three pairs of barbels. Dorsal spine strong, with feeble teeth on posterior margin, often over anterior margin. Lateral line slightly arched above pectoral fin.

Geographical Distribution : Mahanadi river and its tributaries in orissa and Madhya Pradesh.

172. *Rita kuturnee* (Sykes)
(Fig. 122)

1839. *Phractocephalus kuturnee* Sykes, *Trans. Zool. Soc. Lond.*, 2 : 372 pl. 14, fig. 3 (type-locality : Bhima river at Pairgaon, Maharashtra).

1999. *Rita kuturnee* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 196.

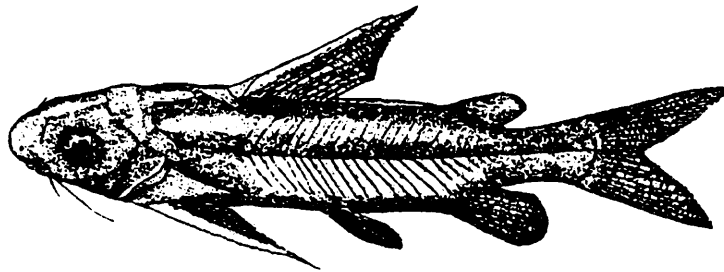


Fig. 122 : *Rita kuturnee* (Sykes)

Distinguishing Characters : Body elongate. Head depressed. Occipital process subcutaneous, extending to predorsal plate. Mouth transverse. Teeth on palate in two pear shaped, closely placed patches. Three pairs of barbels. Dorsal spine more or less strong minutely serrated on its posterior side. Lateral line more or less straight.

Geographical Distribution : Rivers in Andhra Pradesh, Karnataka & Maharashtra upto the Krishna river system.

173. *Rita pavementatus* (Valenciennes)
(Fig. 123)

1832. *Arius pavementatus* Valenciennes, in : *Jecquenmont, Voy. Ind. Orient. Atlas, Poiss 2* : pl. 17, fig. 2 (type-locality : India).

1999. *Rita pavementata* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 197.

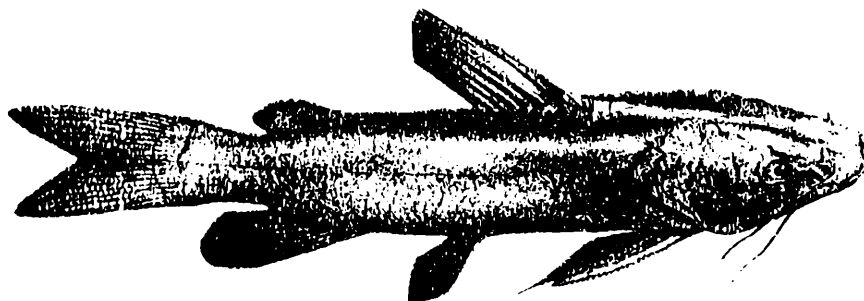


Fig. 123 : *Rita pavementatus* (Valenciennes)

Distinguishing Characters : Body elongate. Head depressed. Occipital process subcutaneous, extending to predorsal plate. Mouth transverse. Teeth on palate in a single semi-oval patch. Three pairs of barbels. Dorsal spine fairly strong, minutely serrated on posterior side. Lateral line straight.

Geographical Distribution : Rivers of Daccan up to the Krishna river system.

Family SILURIDAE

174. *Ompok malabaricus* (Valenciennes) (Fig. 124)

1839. *Silurus malabaricus* Valenciennes, *Hist. nat. Poiss.*, 14 : 353 (type-locality : Malabar).

1999. *Ompok malabaricus* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 217.

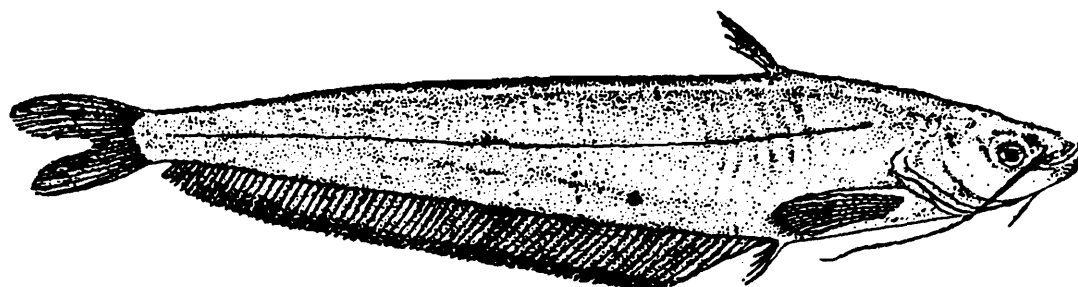


Fig. 124 : *Ompok malabaricus* (Valenciennes)

Distinguishing Characters : Body elongate and compressed. Mouth more or less oblique, its gape wide. Teeth on vomer in two large, crescent-shaped patches separated from each other. Two pairs of barbels. Maxillary barbels extend to slightly beyond pelvic fin origin. Pectoral spine short, serrated on its inner edge. Caudal fin forked with rounded tips.

Geographical Distribution : Goa and Kerala.

175. *Pinniwallago kanpurensis* Gupta, Jayaram & Hajela (Fig. 125)

1981. *Pinniwallago kanpurensis* Gupta, Jayaram and Hajela, *J. Bombay nat. Hist. Soc.*, 77(2) : 290 fig. 1 (type-locality : Kanpur, Uttar Pradesh).

1991. *Pinniwallago kanpurensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 586, fig. 197.

Distinguishing Characters : Body elongate and compressed. Head more or less broad and depressed. Mouth large. Cleft of mouth extends to well beyond eyes. Two pairs of well-defined barbels. Eyes small, not visible from underside. Dorsal fin two in number. Anal fin very long, with 58 to 74 rays. Caudal fin forked, Upper lobe larger.

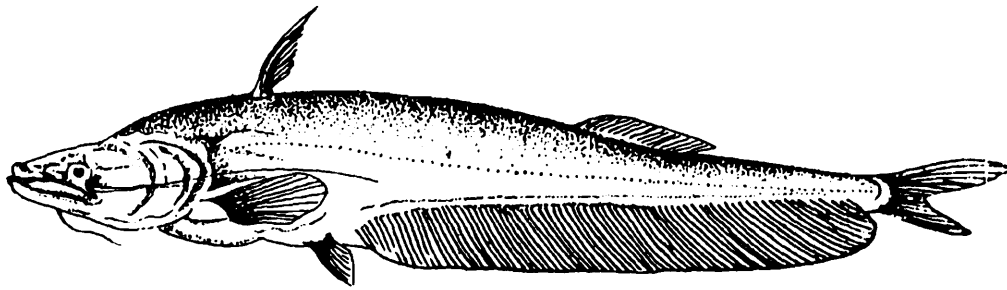


Fig. 125 : *Piniwallago kanpurensis* Gupta, Jayaram & Hazela

Geographical Distribution : Ganga river at Kanpur, Uttar Pradesh.

176. *Silurus indicus* (Datta, Barman & Jayaram)
(Fig. 126)

1987. *Kryptoterus indicus* Datta, Barman and Jayaram, *Bull. Zool. Surv. India*, 8 : 29, fig. 1 (type-locality : Namdapha river at Hornbill port, Arunachal Pradesh).

1999. *Silurus indicus* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 220.



Fig. 126 : *Silurus indicus* (Datta, Barman & Jayaram)

Distinguishing Characters : Body elongate and compressed, its depth 5.4 in standard length. Head depressed, its length 5.9 in standard length. Eyes very small its diameter 9.25 in head. Mouth subterminal. Two pairs of barbels. Dorsal fin rudimentary. Caudal fin rounded.

Geographical Distribution : Namdapha river, Namdapha Wildlife Sanctuary, Arunachal Pradesh.

177. *Silurus wynaadensis* Day
(Fig. 127)

1868. *Silurus punctatus* Day, *Proc. Zool. Soc. Lond.* : 155 (type-locality : Wynaad, Kerala).

1873. *Silurus wynaadensis* Day, *Proc. Zool. Soc. Lond.* : 237 (replacement name for *Silurus punctatus* Day).

1999. *Silurus wynaadensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 220.

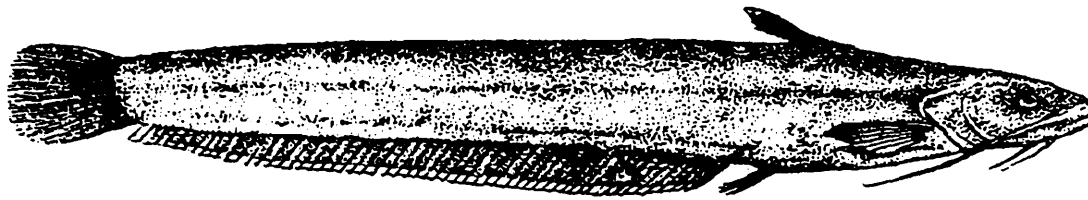


Fig. 127 : *Silurus wynaadensis* Day

Distinguishing Characters : Body elongate and compressed. Head length 5.5 in standard length. Upper jaw longer than lower one. Vomerine teeth in two close oval patches. Three pairs of barbels. Maxillary barbels extend over pectoral fins, but not reaching pelvic. Caudal fin rounded.

Geographical Distribution : Western Ghats of Kerala.

Family SCHILBEIDAE

178. *Clupisoma bastari* Datta & Karmakar (Fig. 128)

1980. *Clupisoma bastari* Datta & Karmakar, *Bull. Zool. Surv. India*, 2(2/3) : 193 figs. 1 & 2 (type-locality : Indravati river at Lohandiguda, Bastar dist. Madhya Pradesh).

1999. *Clupisoma bastari* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 222.

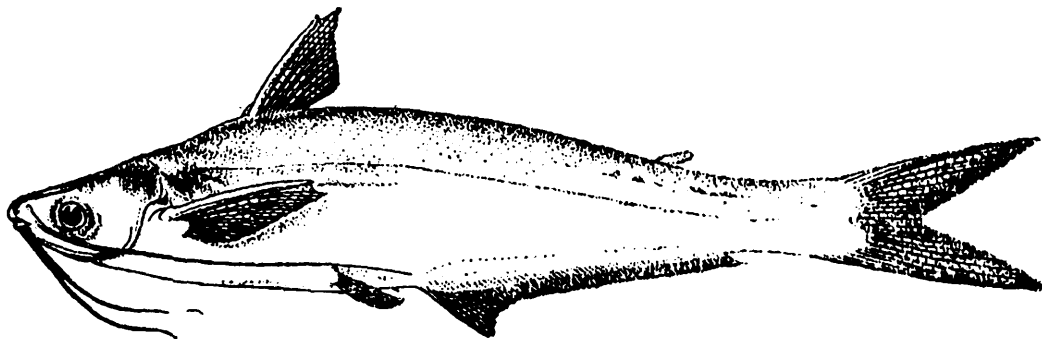


Fig. 128 : *Clupisoma bastari* Datta & Karmakar

Distinguishing Characters : Body elongate and compressed. Abdominal edge keeled between thorax and vent. Head length 4.4 to 4.7 in standard length. Mouth subterminal. Vomeropalatine tooth-band interrupted in the middle. Four pairs of barbels. Nasal barbels extend to middle of orbit. Maxillary barbels extend to anal fin. Dorsal spine fairly strong, adipose dorsal small. Pectoral fins do not extend to pelvic fin base.

Geographical Distribution : Indravati river, Bastar district, Madhya Pradesh.

179. *Eutropiichthys goongwaree* (Sykes) (Fig. 129)

1838. *Hypophthalmus goongwaree* Sykes, *Proc. Zool. Soc. Lond.*, (pt. 6) : 163 (type-locality : Mula Mutha river nr. Poona, Maharashtra).

1999. *Entropiichthys goongwaree* : Menon, Rec. zool. Surv. India, Occ. Paper, No. 175 : 224.

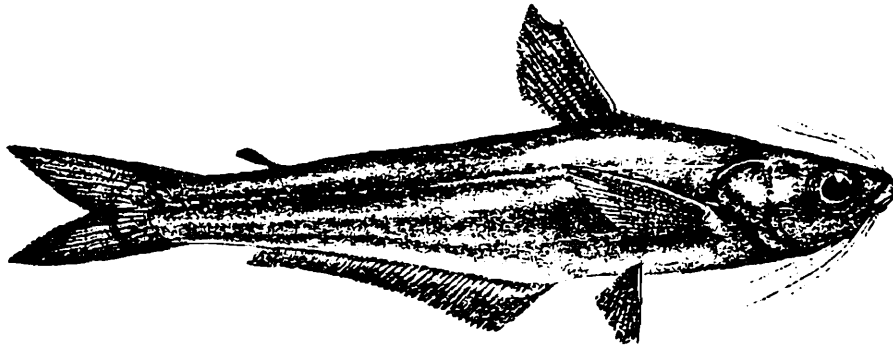


Fig. 129 : *Entropiichthys goongwaree* (Sykes)

Distinguishing Characters : Body elongate and compressed. Large mouth, its cleft extends to anterior third of orbit. Vomero-palatine band of teeth interrupted in the middle. Four pairs of barbels. Dorsal fin short, originated posterior to base of pelvic fins. Dorsal spine finely serrated on its posterior edge.

Geographical Distribution : Peninsular India upto Krishna river system.

180. *Neotropius khavalchor* Kulkarni

(Fig. 130)

1952. *Neotropius khavalchor* Kulkarni, Rec. Indian Mus., 49(3/4) : 232, fig. 1, 2 (type-locality : Krishna river nr. Islampur and Panchaganga river nr. Kolhapur).

1999. *Neotropius khavachor* : Menon, Rec. zool. Surv. India, Occ. Paper No. 175 : 228.

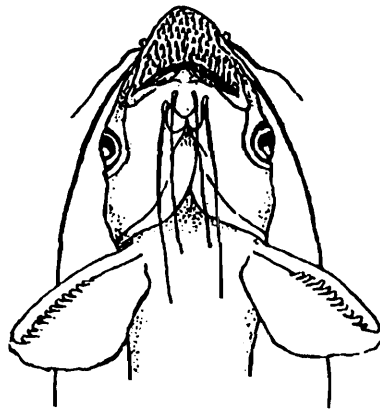


Fig. 130 : *Neotropius khavalchar* Kulkarni

Distinguishing Characters : Body elongate and fairly compressed. Head short and depressed. Head length 3.8 to 4.4 in standard length. Snout protruded. Mouth wide and inferior. Teeth exposed in upper jaw. Vomero-palatine teeth in separate patches. Four pairs of barbels. Dorsal fin short with a serrated spine. A small adipose dorsal present. Anal fin long with 24 to 26 rays. Caudal fin forked.

Geographical Distribution : Krishna river in its upper reaches (Maharashtra) and Andhra Pradesh.

181. *Pseudeutropius mitchelli* Gunther
(Fig. 131)

1864. *Pseudeutropius mitchelli* Gunther, *Cat. Fishes. Br. Mus.*, 5 : 59 (type-locality : Madras Presidency).

1999. *Pseudeutropius mitchelli* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 228.

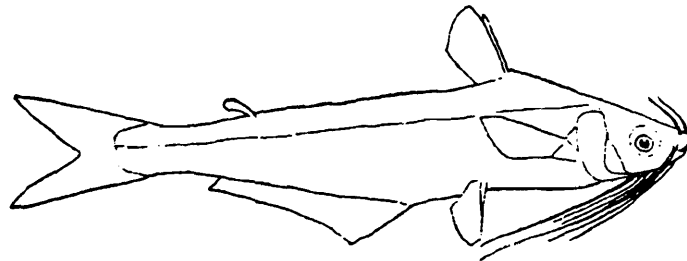


Fig. 131 : *Pseudeutropius mitchelii* Gunther

Distinguishing Characters : Body elongate and laterally compressed. Head small, 4.7 to 5.1 in standard length. Eyes large, its diameter 3.0 to 3.5 in head. Mouth terminal. Upper jaw slightly longer than lower one. Vomero-palatine teeth in two small oval patches, Four pairs of well developed barbels. Dorsal fin originated anterior to pelvic fins. pectoral spine extends beyond base of dorsal spine.

Geographical Distribution : Kerala.

182. *Proeutropiichthys taakree taakree* (Sykes)
(Fig. 132)

1838. *Hypophthalmus taakree*, Sykes, *Proc. Zool. Soc. Lond.*, (pt. 6), 163 (type-locality : Beema river nr. Pairgaon, Maharashtra).

1991. *Proeutropiichthys taakree taakree* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 609.

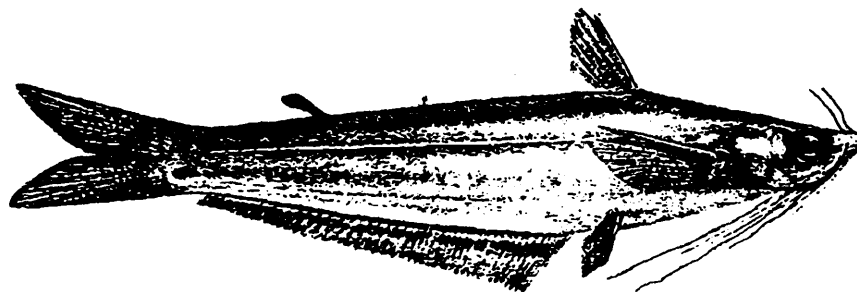


Fig. 132 : *Proeutropiichthys taakree taakree* (Sykes)

Distinguishing Characters : Body elongate and compressed. Eyes large, its diameter 2.7 to 3.0 in head length. Posterior edge of interoperculum having two prominent spurs separated by notch. Mouth terminal, villiform teeth in bands. Four pairs of barbels. Dorsal spine denticulated on its posterior edge and finely serrated on its anterior. Pectoral spine serrated interiorly.

Geographical Distribution : Peninsular India.

183. *Silonia childreni* (Sykes)
(Fig. 133)

1838. *Ageneiosus childreni* Sykes, *Proc. Zool. Soc. Lond.*, (pt. 6), 165 (type-locality : Mula Mutha river nr. Poona).

1999. *Silonia childreni* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 229.

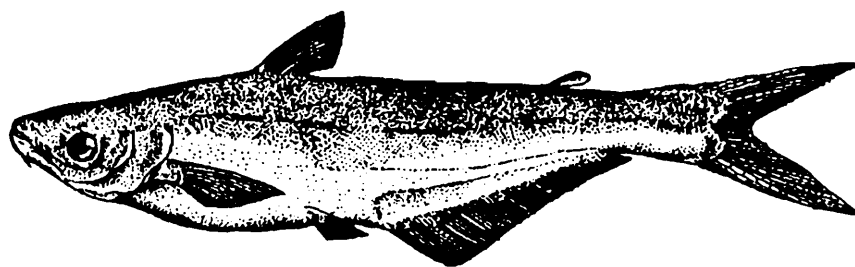


Fig. 133 : *Silonia childreni* (Sykes)

Distinguishing Characters : Body elongate and laterally compressed, its depth 4.5 to 5.0 in standard length. Mouth wide, obliquely directed upwards. Two pairs of barbels. Dorsal fin originated anterior to pelvic fins. Pectoral fins extend to pelvic fins. Adipose dorsal small.

Geographical Distribution : Western Ghats and the Godavari, Krishna and Cauvery river systems.

Family SISORIDAE

184. *Conta conta* (Hamilton-Buchanan)
(Fig. 134)

1822. *Pimelodus conta* Hamilton-Buchanan, *Fishes of Ganges* : 191, 378 (type-locality : Mahananda river, North-east Bengal).

1991. *Conta conta* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 624, fig. 203.

Distinguishing Characters : A small fish with elongate and sub-cylindrical body. Head small, its length 4.5 to 5.5 in standard length. Mouth small, lips thick and fleshy. Four pairs of barbels present. Dorsal fin inserted in advance of pelvic fins. Caudal fin forked, its upper lobe with prolongation.

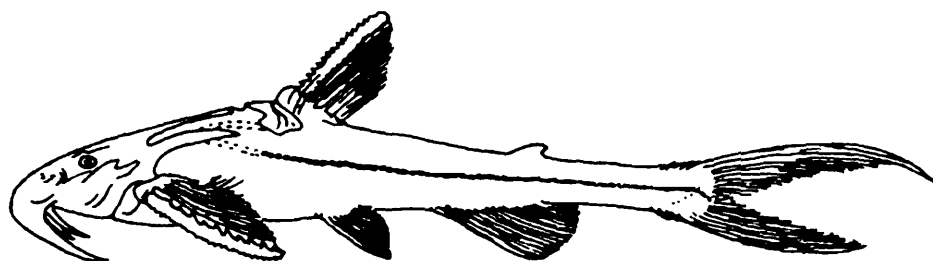


Fig. 134 : *Conta conta* (Hamilton-Buchanan)

Geographical Distribution : Base of Himalayas in North Bengal, Assam, Meghalaya, Manipur, Mizoram, Nagaland and Terai (Uttar Pradesh).

185. *Erethistoides montana montana* Hora

1950. *Erethistoides montana* Hora, *Rec. Indian Mus.*, 47(2) : 191, pl. 1, figs. 10-12 (type-locality : Tangla, Darrang dist., Assam).

1999. *Erethistoides montana montana* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 256.

Distinguishing Characters : Body elongate, its depth 6.1 to 6.3 in standard length. Mouth inferior. Teeth in band on jaws. Four pairs of barbels. Maxillary barbels with broad base. Dorsal fin with a strong spine, finely serrated anteriorly. Caudal fin forked, lower lobe longer. Body thoroughly tuberculated.

Geographical Distribution : Eastern Himalaya : Tripura, Assam and Darjeeling.

186. *Erethistoides montana pipri* Hora

(Fig. 135)

1950. *Erethistoides montana pipri* Hora, *Rec. Indian Mus.*, 47(2) : 193, pl. 1, figs. 7-9 (type-locality : Rihand river at Pipri, Mirzapur dist. Uttar Pradesh).

1999. *Erethistoides montana pipri* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 257.

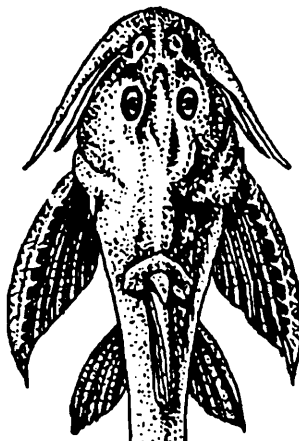


Fig. 135 : *Erethistoides Montana pipri* (Hora)

Distinguishing Characters : Body elongate, its depth 5.0 in standard length. Mouth inferior. Four pairs of barbels. Maxillary barbels with broad bases. Dorsal fin with a strong spine, serrated on its posterior edge. Caudal fin emarginate, lower lobe slightly longer than upper one. Body tuberculated except dorsal surface behind dorsal fin and ventral surface behind pelvic fin.

Geographical Distribution : Rihand river, Mirzapur district, Uttar Pradesh.

187. *Exostoma labiatus* (McClelland)

(Fig. 136)

1842. *Glyptosternon labiatus* McClelland, *Calcutta J. nat. Hist.*, 2 : 588 (type-locality : Mishmee Hills, Meghalaya).

1999. *Exostoma labiatus* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 255.

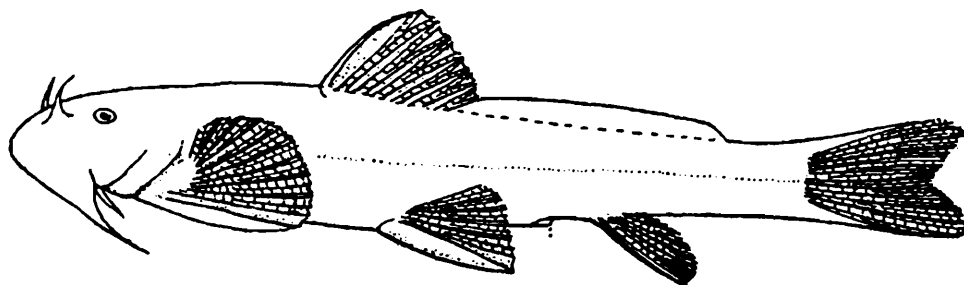


Fig. 136 : *Exostoma labiatus* (Mc Clelland)

Distinguishing Characters : Body elongate, ventrally flattened, its depth 5.4 in standard length. Mouth inferior. Teeth in two distinct patches on the upper jaw. Four pairs of barbels. Gill openings extending below to opposite base of pectoral fins. Caudal fin emarginate. Ventral surface of head behind mouth and sides of head minutely papillated.

Geographical Distribution : North Bengal and Meghalaya.

188. *Gagata sexualis* Tilak

1970. *Gagata sexualis* Tilak, *Zool. Med.*, 44(14) : 207, figs. 1-6 (type-locality : North Koel river at Daltonganj, Chotanagpur, Bihar).

1999. *Gagata sexualis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 238.

Distinguishing Characters : Body slender. Head compressed, its length 3.9 to 4.2 in standard length. Medium longitudinal groove on head extends to base of occipital process. Mouth small. Four pairs of barbels. Maxillary barbels with stiff base. Bases of mandibular barbels are in a transverse line behind lower jaw. Dorsal spine strong and smooth. Pelvic fins extends beyond anal opening.

Geographical Distribution : Yamuna river at Delhi, Ganga river system and Chotanagpur.

189. *Glyptothorax alaknandi* Tilak

1969. *Glyptothorax brevipinnis alaknandi* Tilak, *J. Inland Fish, Soc. India*, 1 : 42, figs. 8-12 (type-locality : Alaknanda river nr. Srinagar, Pauri Garhwal district, Uttar Pradesh).

1991. *Glyptothorax alaknandi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 647.

Distinguishing Characters : Body elongate. Head extremely depressed, as long as broad. Mouth inferior; lips papillated. Four pairs of barbels. Maxillary barbels with broad bases. Thoracic adhesive apparatus moderately developed, broader than long, without any central pit. Dorsal fin inserted equidistant between tip of snout and adipose fin. Dorsal spine weak and smooth. Paired fins plaited on ventral surface. Caudal fin forked. Skin on head and body smooth.

Geographical Distribution : Alaknanda river, near Srinagar, Pauri Garhwal, Uttar Pradesh.

190. *Glyptothorax anamalaiensis* Silas

(Fig. 137)

1951. *Glyptothorax anamalaiensis* Silas, *J. Bombay, nat. Hist. Soc.*, 50(2) 370 (type-locality : Anamalai Hills, Western Ghats).

1991. *Glyptothorax anamalaiensis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 648, fig. 209.

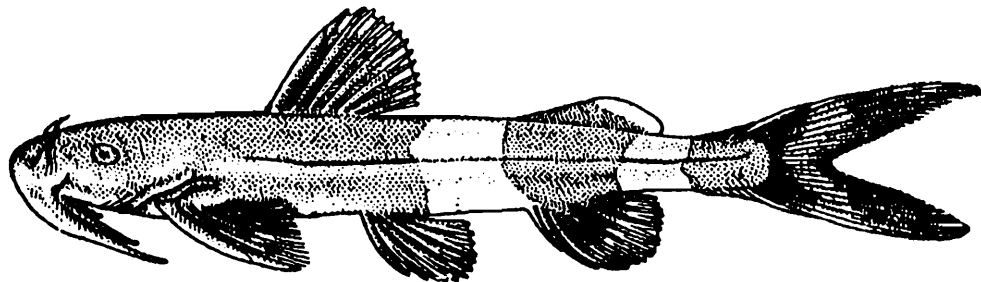


Fig. 137 : *Glyptothorax anamalaiensis* Silas

Distinguishing Characters : Body elongate. Head more or less depressed. Mouth inferior. lips papillated. Four pairs of barbels. Thoracic adhesive apparatus feebly developed, as long as broad, devoid of central pit. Dorsal fin inserted nearer to adipose fin than to snout-tip. Dorsal spine strong and smooth. Paired fins not plaited. Caudal fin deeply forked. Skin on the entire body coarsely tuberculated.

Geographical Distribution : Base of Anamalai Hills, Kerala.

191. *Glyptothorax brevipinnis* Hora

1923. *Glyptothorax brevipinnis* Hora, *Rec. India Mus.*, 25(1) : 16, pl. 1, fig. 4 (type-locality : India).

1991. *Glyptothorax brevipinnis* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 649.

Distinguishing Characters : Body elongate. Head extremely depressed, as long as broad, Mouth inferior, lips papillated. Four pairs of barbels. Maxillary barbels have broad bases. Thoracic adhesive apparatus moderately developed, broader than long, devoid of central pit. Dorsal fin inserted much nearer to snout tip than to adipose fin. Dorsal spine weak and smooth. Paired fins plaited on ventral side. Caudal fin forked. Skin on the entire body smooth.

Geographical Distribution : Exact locality not known.

192. *Glyptothorax coheni* Ganguly, Datta & Sen
(Fig. 138)

1972. *Glyptothorax coheni* Ganguly, Datta & Sen, *Copeia*, (2) : 432, figs 3, 4 (type-locality : Subarnarekha river, Chotanagpur Plateau, Bihar).

1991. *Glyptothorax coheni* : Talwar and Jhingran, *Inland Fisheries of India and Adjacent Countries*, 2 : 650.



Fig. 138 : *Glyptothorax coheni* Ganguly, Datta & Sen

Distinguishing Characters : Body elongate, its depth 5.0 to 5.4 times in standard length. Head depressed, its length 2.5 times in its width at its base. Mouth inferior, upper lip papillated. Barbels four pairs. Adhesive thoracic apparatus longer than broad, devoid of central pit. Dorsal fin with strong and smooth spine, the fin is higher than body depth. Anal fin originated opposite to adipose dorsal origin. Caudal fin forked. Skin with fine granulations.

Geographical Distribution : Subarnarekha river, Chotanagpur Plateau.

193. *Glyptothorax dakpathari* Tilak & Husain

1976. *Glyptothorax dakpathari*, Tilak & Husain, *Anns. Zool.*, 33(14) : 229, figs 1-6 (type-locality : Yamuna river nr. Dakpathar, Dehra Dun dist., Uttar Pradesh).

1991. *Glyptothorax dakpathari* : Talwar and Jhingran, *Inland Fisheries of India and Adjacent Countries*, 2 : 652.

Distinguishing Characters : Body elongate. Head more or less depressed anteriorly. Mouth inferior, lips fleshy and papillated. Four pairs of barbels. Adhesive thoracic apparatus well-developed, longer than broad, with distinct central pit. Dorsal spine strong and serrated

on its posterior edge. Paired fins not plaited below. Caudal fin deeply forked. Skin of head and body strongly granulated except ventral surface.

Geographical Distribution : Yamuna river nr. Dehra Dun (Uttaranchal).

194. *Glyptothorax garhwali* Tilak

1969. *Glyptothorax garhwali*, Tilak *J. Inland Fish. Soc. India*, 1 : 37 figs. 1-7 (type-locality : Alaknanda river nr. Srinagar, Garhwal dist., Uttar Pradesh).

1991. *Glyptothorax garhwali* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 652.

Distinguishing Characters : Body elongate. Head depressed, longer than broad. Occipital process not reaching basal bone of dorsal fin. Mouth inferior, Upper lip slightly papillated. Four pairs of barbels. Thoracic adhesive apparatus longer than broad, with a deep central pit. Dorsal fin inserted nearer to adipose fin than to snout-tip. Dorsal spine strong and smooth. Caudal fin forked. Skin on entire body smooth.

Geographical Distribution : Himalaya Range West of Kosi river, Uttar Pradesh.

195. *Glyptothorax housei* Herre

(Fig. 139)

1942. *Glyptothorax housei* Herre, *Stanford Ichthyol. Bull.*, 2(4) : 117, fig. (type-locality : Anamalai Hills, Western Ghats).

1999. *Glyptothorax housei* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 244.

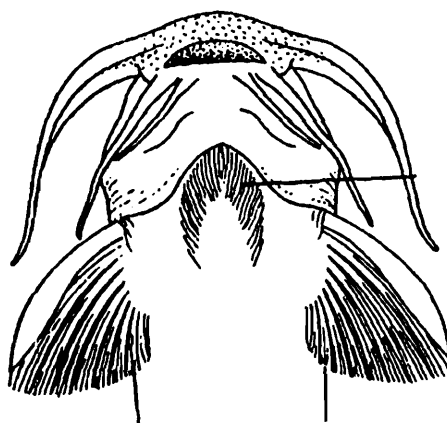


Fig. 139 : *Glyptothorax housei* Herre

Distinguishing Characters : Body elongate. Head depressed. Occipital process not reaching basal bone of dorsal fin. Mouth inferior, lips papillated. Four pairs of barbels. Thoracic adhesive apparatus well developed, longer than broad. Central pit absent. Dorsal fin inserted much nearer to snout-tip than to adipose fin base. Dorsal spine weak and smooth. Paired fins plaited ventrally. Caudal fin deeply forked. Skin on entire body smooth.

Geographical Distribution : Western Ghats-Anamalai Hills, Kerala.

196. *Glyptothorax lonah* (Sykes)

1838. *Bagrus lonah* Sykes, *Proc. Zool. Soc. Lond.* (pt. 6) : 164 (type-locality : Deccan).

1999. *Glyptothorax lonah* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 245.

Distinguishing Characters : Body elongate. Head depressed. Occipital process opposed to basal bone of dorsal fin. Mouth inferior. Four pairs of barbels. Thoracic adhesive apparatus well-developed, longer than broad. A central pit is absent. Dorsal fin inserted nearer to adipose fin than to snout tip. Dorsal spine more or less weak and smooth. Paired fins plaited below. Caudal fin forked. Skin moderately granulated on entire body.

Geographical Distribution : Deccan plateau, Godavari and Krishna river systems.

197. *Glyptothorax maderaspatanam* (Day)

(Fig. 140)

1873. *Glyptosternum maderaspatanam* Day, *J. Linn. Soc. Lond.* 11 : 526 (type-locality : Bhavani river at base of Nilgiri Hills).

1999. *Glyptothorax maderaspatanam* : Menon, *Rec. zool. Surv. India, Occ. Paper* No. 175 : 246.

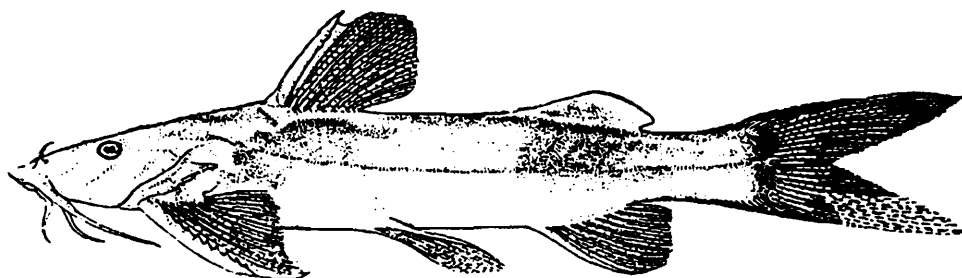


Fig. 140 : *Glyptothorax maderaspatanam* (Day)

Distinguishing Characters : Body elongate. Head depressed and broadly pointed anteriorly. Occipital process opposed to basal bone of dorsal fin. Mouth inferior. Lips papillated. Four pairs of barbels. Thoracic adhesive apparatus well developed, longer than broad. Central pit absent. Dorsal fin inserted nearer to adipose fin than to snout tip. Dorsal spine strong. Caudal fin deeply forked. Skin smooth on entire body.

Geographical Distribution : Western Ghats; Anamalai and Nilgiri Hills, Cauvery river.

198. *Glyptothorax nelsoni* Ganguly Datta & Sen

(Fig. 141)

1972. *Glyptothorax nelsoni* Ganguly, Datta & Sen, *Copeia*, (2) : 341, figs 1, 2 (type-locality : Subarnarekha river, Chotanagpur Plateau, Bihar).

1991. *Glyptothorax nelsoni* : Talwar and Jhingran, *Inlan Fisheries of India and Adjacent Countries*, 2 : 657.

Distinguishing Characters : Body elongate. Head depressed, its length less than three times of width at base. Mouth inferior, upper lip densely papillated. Four pairs of barbels.

Adhesive thoracic apparatus longer than broad, devoid of central pit. Dorsal fin height equal to body depth; dorsal spine not very strong and serrated on its inner edge. Anal fin inserted slightly behind origin of adipose dorsal. Paired fins plaited ventrally. Caudal fin forked. Skin on head and body finely granulated.

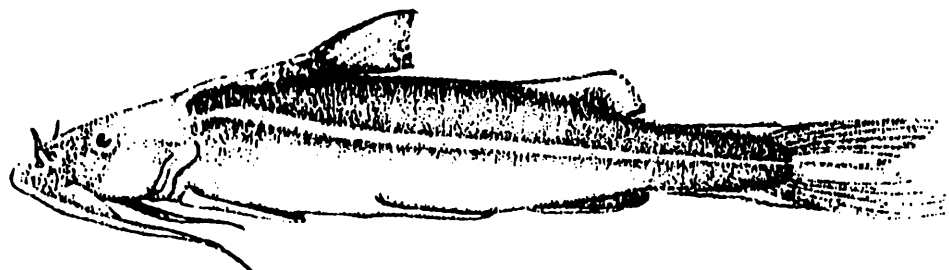


Fig. 141 : *Glyptothorax nelsoni* Ganguly, Datta & Sen

Geographical Distribution : Subarnarekha river, Chotanagpur Plateau (Jharkhand).

199. *Glyptothorax poonaensis* Hora

1938. *Glyptothorax conirostre poonaensis* Hora, *Rec. Indian Mus.*, 40(4) : 368, pl. figs. 5, 6 (type-locality : Mula Mutha river at Poona).

1999. *Glyptothorax poonaensis* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 247.

Distinguishing Characters : Body elongate. Head depressed, longer than broad. Occipital process distinctly separate from basal bone of dorsal fin. Mouth inferior, lips papillated. Four pairs of barbels. Thoracic adhesive apparatus ill-developed, longer than broad and without any central pit. Dorsal fin inserted much nearer to snout tip than to adipose fin base. Dorsal spine strong and smooth. Caudal fin forked. Skin of entire body smooth.

Geographical Distribution : Mula Mutha river at Poona, Maharashtra.

200. *Glyptothorax saisii* (Jenkins)

(Fig. 142)

1910. *Glyptosternum saisii* Jenkins, *Rec. Indian Mus.*, 5(2) : 128 text-fig. and pl. 6 fig. 6 (type-locality : Paresnath Hills, Bihar).

1999. *Glyptothorax saisii* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 248.

Distinguishing Characters : Body elongate. Head depressed. Occipital process opposed to basal bone of dorsal fin. Mouth inferior. Lips papillated. Four pairs of barbels. Thoracic adhesive apparatus well developed, longer than broad, devoid of a central pit. Dorsal fin inserted equidistant between snout-tip and adipose fin base. Dorsal spine weak and smooth. Paired fins plaited on ventral side. Caudal fin more or less forked. Skin on entire body granulated.

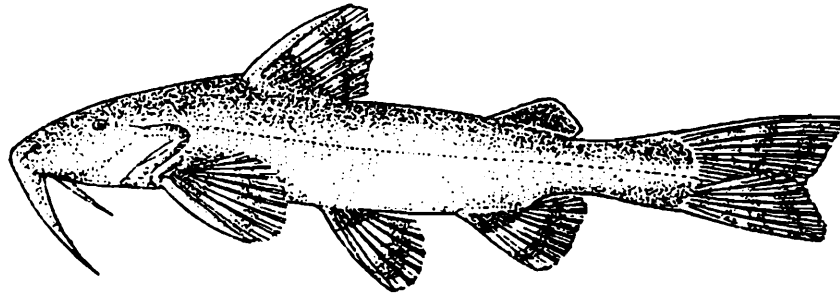


Fig. 142 : *Glyptothorax saisii* (Jenkins)

Geographical Distribution : Bihar : Chota-Nagpur (Streams of Parashnath hills and Subarnarekha river).

201. *Glyptothorax stoliczkae* Steindachner

1867. *Glyptosternum stoliczkae* Steindachner, *Sitzber. Acad. Wiss. Wien*, **55**(1) : 533, pl. 5, fig 1 and pl. 6, fig. 1 (type-locality : Simla).

1991. *Glyptothorax stoliczkae* : Talwar and Jhingran, *Inland Fisheries of India and Adjacent Countries*, **2** : 662.

Distinguishing Characters : Body elongate. Head depressed, as broad as long. Mouth inferior, lip not fringed. Four pairs of barbels. Adhesive thoracic apparatus well-developed, longer than broad, devoid of central pit. Dorsal fin inserted nearer to adipose fin than to snout tip. Dorsal spine more or less weak and smooth. Paired fins plaited on ventral surface. Caudal fin deeply forked. Skin on head and body smooth.

Geographical Distribution : Western Himalaya and probably in the Ganga watershed.

202. *Glyptothorax striatus* (McClelland)

(Fig. 143)

1842. *Glyptosternon striatus* McClelland, *Calcutta. J. nat. Hist.*, **2** 587, pl. 6, fig. 1 (type-locality : Kashya Hills, Meghalaya).

1999. *Glyptothorax striatus* : Menon, *Rec. zool. Surv. India, Occ. Paper No.* **175** : 250.

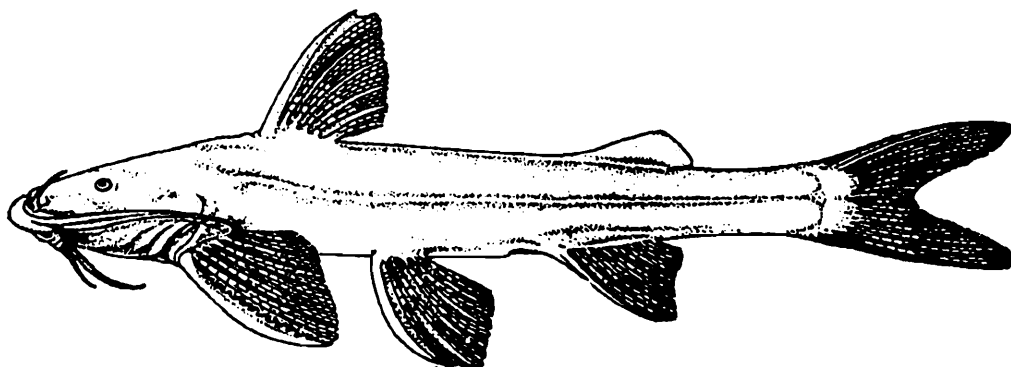


Fig. 143 : *Glyptothorax striatus* (McClelland)

Distinguishing Characters : Body elongate. Head depressed. Occipital process not reaching basal bone of dorsal fin. Mouth inferior. Lips non-papillated. Four pairs of barbels. Thoracic adhesive apparatus well-developed, as long as broad, without any central pit. Dorsal fin inserted nearer to adipose fin base than to snout tip. Dorsal spine weak and smooth. Paired fins plaited ventrally. Caudal fin forked. Skin on entire body tuberculated.

Geographical Distribution : Khasi and Garo Hills, Meghalaya and Sikkim.

203. *Glyptothorax trewavasae* Hora
(Fig. 144)

1938. *Glyptothorax trewavasae* Hora, *Rec. Indian Mus.*, 40(4) : 373, pl. 7 figs. 3 & 4 (type-locality : Yanna valley, Satara dist, Maharashtra).

1999. *Glyptothorax trewavasae* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 252.

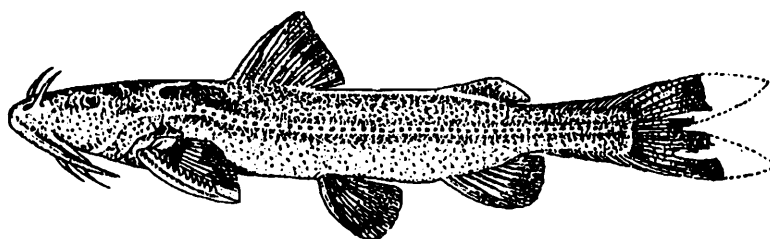


Fig. 144 : *Glyptothorax trewavasae* Hora

Distinguishing Characters : Body elongate. Head depressed. Occipital process not reaching basal bone of dorsal fin. Mouth inferior. Four pairs of barbels. Thoracic adhesive apparatus well developed, as long as broad, without a central pit. Dorsal fin inserted equidistant between snout-tip and adipose fin base. Dorsal spine moderate and entire. Paired fins not plaited. Caudal fin forked. Skin on entire body minutely tuberculated.

Geographical Distribution : Yanna and Koyna valley, Western Ghats, Maharashtra and Krishna river system.

204. *Hara horai* Misra
(Fig. 145)

1976. *Hara horai* Misra, *Fauna of India, Pisces* (2nd ed.) 3 : 245, pl. 9 fig. 1, 2 & 3 (type-locality : Terai and Duars, North Bengal).

1999. *Hara horai* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 258.

Distinguishing Characters : Body elongate. Ventral side greatly flattened. Mouth inferior. Occipital process not reaching basal bone of dorsal fin. Four pairs of barbels. Dorsal spine strong, serrated on posterior edge. Pectoral spine extends to base of pelvic fin. Caudal fin emerginate, its lower lobe longer than upper. Body finely granulated.

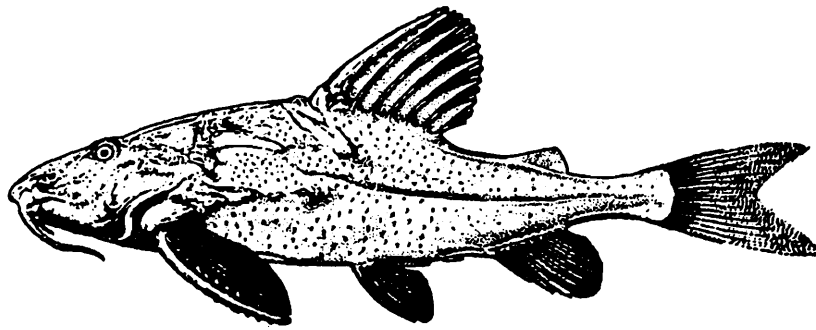


Fig. 145 : *Hara horai* Misra

Geographical Distribution : North Bengal (Terai and Duars).

205. *Laguvia kapuri* Tilak & Hussain

1974. *Laguvia ribeiroi kapuri* Tilak & Hussain, *J. Inland Fish. Soc. India*, 6 : 1, figs. 1-3 (type-locality : Padhoi river at Saharanpur, Uttar Pradesh).

1991. *Laguvia Kapuri* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 671.

Distinguishing Characters : Body subcylindrical, its depth 3.9 to 4.6 in standard length. Eyes small, situated in posterior half of head. Mouth inferior. Four pairs of barbels. Thoracic adhesive apparatus well-defined. Dorsal spine strong and serrated on both sides. Pectoral spine strong and denticulated on both sides. Pelvic finrays 10. Caudal fin forked. In female, the outer unbranched ray of upper lobe prolonged. Skin on entire body with small tubercles.

Geographical Distribution : Saharanpur, Uttar Pradesh.

206. *Laguvia shawi* Hora
(Fig. 146)

1921. *Laguvia shawi* Hora, *Red. Indian Mus.*, 22(5) : 740, pl. 29 fig. 2 (type-locality : Mahananda and Sivoke rivers, Darjeeling Himalaya).

1991. *Laguvia shawi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 672, fig. 214.

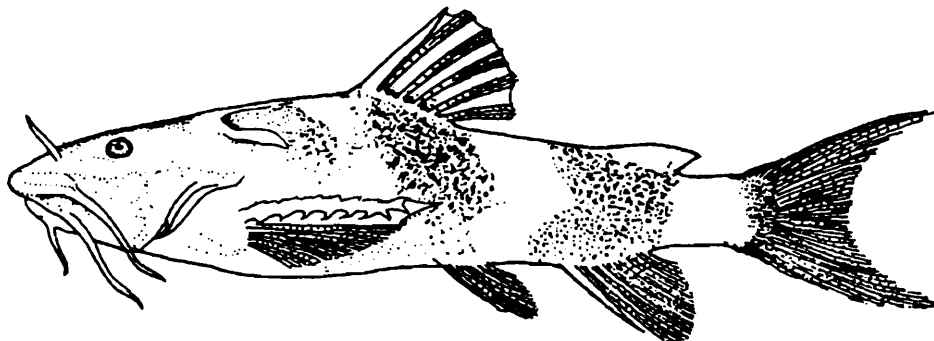


Fig. 146 : *Laguvia shawi* Hora

Distinguishing Characters : Body elongate, its depth 3.8 to 4.0 in standard length. Eyes

small, about 8.0 in head length. Mouth inferior. Four pairs of barbels. Thoracic adhesive apparatus faintly developed. Dorsal spine strong and smooth. Pectoral spine strong and denticulated internally. Pelvic fin distinctly nearer to caudal fin base than to snout tip. Pelvic fin rays 6. Caudal fin lunate. Skin tuberculated.

Geographical Distribution : Tista Drainage, Darjeeling Himalaya.

207. *Myerglanis jayarami* Viswanath & Kosygin
(Fig. 147)

1999. *Myerglanis jayarami* Viswanath & Kosygin, *J. Bombay nat. Hist. Soc.*, 96(2) : 291, figs. 1-3 (type-locality : Laniye river at Jessami, Manipur).



Fig. 147 : *Mayersglanis jayarami* Viswanath & Kosygin

Distinguishing Characters : Head and body depressed. Ventral surface flattened from snout tip to vent. Caudal peduncle laterally compressed. Head broad. Eye very small, subcutaneous, not visible from ventral surface. Eye diameter 8.4 to 10.0 in head length. Mouth inferior, transverse, surrounded by fleshy lips. Four pairs of barbels. Maxillary barbels with broad base. Rayed dorsal without strong spine. Adipose dorsal low, long and confluent with the caudal fin. Paired fins are broad and rounded. Caudal fin lunate. Lateral line distinct. Skin smooth.

Geographical Distribution : Laniye river at Jessami, Manipur (Chindwin drainage).

Family CLARIIDAE

208. *Clarias dayi* Hora

1936. *Clarias dayi* Hora. *Rec. Indian Mus.*, 38(3) : 350. fig. 4c (type-locality : Wynaad, Kerala).

1991. *Clarias davi* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 686.

Distinguishing Characters : Body much elongate. Head depressed. Snout rather pointed. Occipital process triangular. Mouth terminal. Vomerine teeth in a broad, continuous crescentic band. Four pairs of short barbels, not extending beyond eyes. Dorsal fin inserted behind tip of pectoral fins. Pectoral spine very strong, strongly serrated on its outer edge.

Geographical Distribution : Wynaad Hills, Western Ghats of Kerala.

209. *Clarias dussumieri* Valenciennes
(Fig. 148)

1840. *Clarias dussumieri* Valenciennes, *Hist. nat. Poiss.*, 15 : 382 (type-locality : Pondicherry; Malabar).

1991. *Clarias dussumieri* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 686.

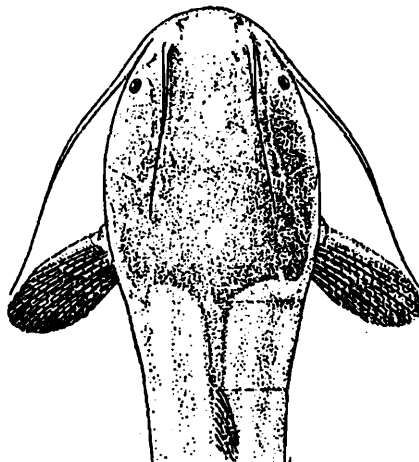


Fig. 148 : *Clarias dussumieri* Valenciennes

Distinguishing Characters : Body much elongate. Head depressed. Snout rather broad, Occipital process more or less rounded. Mouth terminal. Vomerine teeth in a broad continuous crescentic band. Four pairs of barbels. Maxillary barbels extend to beyond pectoral fin base and outer mandibular barbels reach pectoral fin. Dorsal fin inserted opposite to tip of pectoral fins. Pectoral spine very strong, conspicuously serrated on its outer edge.

Geographical Distribution : Goa, Karnataka, Kerala and Pondichery.

210. *Horaglanis kishnai* Menon
(Fig. 149)

1951. *Horaglanis kishnai* Menon, *Rec. Indian Mus.*, 48(1) : 64, figs. 2,3 and pl. 1 figs. 1-3 (type-locality : Well at Kottayam, Kerala).

1991. *Horaglanis kishnai* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 687.

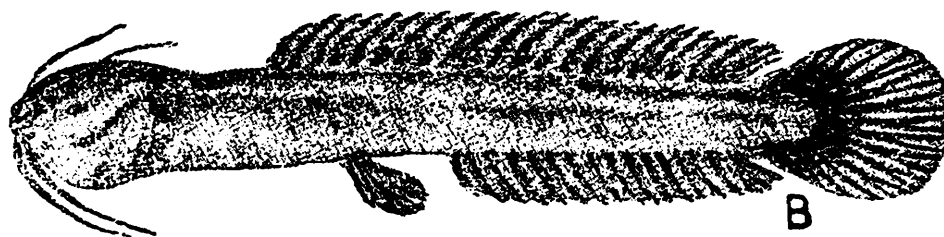


Fig. 149 : *Horaglanis kishnai* Menon

Distinguishing Characters : Body elongate and narrow. Head small and globular. Eyes absent. Mouth wide. Teeth in a broad deeply curved band on upper jaw and in two continuous patches in lower jaw. Four pairs of well developed barbels. Maxillary and

mandibular pairs extend beyond tip of pectoral fins. Dorsal fin inserted in advance of pectoral fins. Pectoral fins vestigial.

Geographical Distribution : Kerala.

Order CYPRINODONTIFORMES

Family HORAICHTHYIDAE

211. *Horaichthys setnai* Kulkarni
(Fig. 150)

1940. *Horaichthys setnai* Kulkarni, *Rec. Indian Mus.*, 42(2) : 385, fig. 2 (type-locality : Backwaters nr. Bombay).

1991. *Horaichthys setnai* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 746, fig. 240.

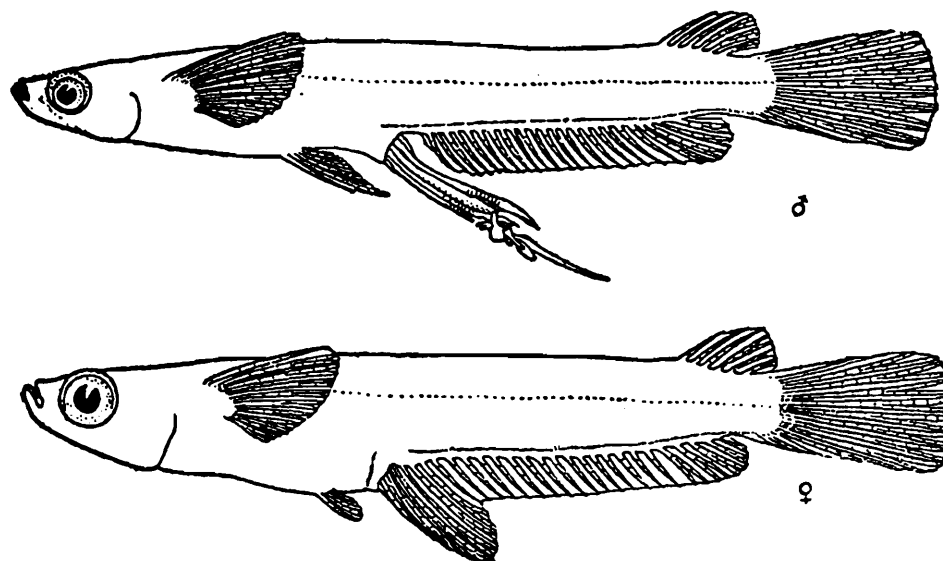


Fig. 150 : *Horaichthys setnai* Kulkarni

Distinguishing Characters : Body very small, elongate, slender and compressed. Snout broad and truncate. Eyes large. Mouth directed upwards. Dorsal fin inserted on posterior most part of body near caudal fin. Anal fin long. First six rays are more elongated in female. In male, first six rays separated off into an independent genopodium. Right pelvic fin absent in female. Caudal fin large and rounded.

Geographical Distribution : From near Gulf of Kutch to Trivandrum.

Family APLOCHEILIDAE

212. *Aplocheilus lineatus* (Valenciennes)
(Fig. 151)

1846. *Panchax lineatum* Valenciennes, *Hist. Nat. Poiss.* 18 : 381 (type-locality : Peninsular India).

1999. *Aplocheilus lineatus* : Menon, *Rec. zool. Surv. India, Occ. Paper, No. 175* : 268.

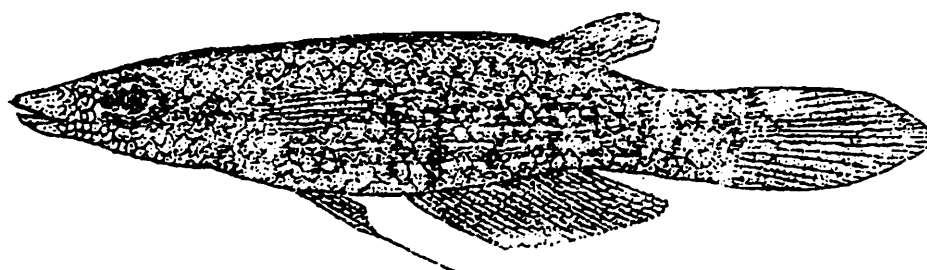


Fig. 151 : *Aplocheilus lineatus* (Valenciennes)

Distinguishing Characters : Body elongate, compressed posteriorly. Large eye, its diameter 3.25 to 3.50 in head. Mouth terminal. Anal fin variable. Second ray of pelvic fin elongate, reaching to about middle of anal fin. Caudal fin rounded.

Geographical Distribution : Western and South Eastern regions.

Order SYNGNATHIFORMES

Family SYNGNATHIDAE

213. *Microphis insularis* (Hora)

1925. *Doryichthys insularis* (in Annandale and Hora), *Rec. Indian Mus.*, 27(2) : 38, pl. 2, fig. 1 (type-locality : Stream at Birchgunge, S. Andaman Is.).

1991. *Microphis insularis* : Talwar and Jhingran, *Inland Fisheries of India and Adjacent Countries*, 2 : 772.

Distinguishing Characters : Longitudinal opercular ridge distinct, one to several supplemental ridges below longitudinal opercular ridge. Lateral snout ridge usually arched, somewhat dorsal. Head length 8.2 to 10.0 times in standard length. Snout depth 4.1 to 5.5 times in snout length. Superior trunk ridges distinctly elevated above intervening dorsum, the margin finely denticulate in adults.

Geographical Distribution : Andaman Islands. Inhabits rivers and streams.

Order SYNBRANCHIFORMES

Family SYNBRANCHIDAE

214. *Monopterus eapeni* Talwar

1963. *Monopterus indicus* (nec Silas & Dawson) Eapen, *Bull. Dept. mar. biol. Occanogr. Univ. Kerala* 1 : 30 (type-locality : Kottayam, Kerala State).

1999. *Monopterus eapeni* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 280.

Distinguishing Characters : Body eel-like and slender. Head small, in front of eyes, depressed. Head length 20 to 21 in total length. Teeth in single row in upper jaw. Mandibular teeth in two rows anteriorly but in single row posteriorly. Gill opening crescentic. Gills greatly reduced. Body without any scale. Dorsal and anal fin folds narrow.

Geographical Distribution : Kerala.

215. *Monopterus fossorius* (Nair)

1952. *Amphiphous fossorius* Nair, *Proc. Indian Acad. Sci.*, (B) 34(6) : 311, figs. 1, 7 (type-locality : Karamanai river nr. Trivandrum).

1999. *Monopterus fossorius* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 281.

Distinguishing Characters : Body eel like and robust. Head conspicuous from rest of body. Snout pointed. Eyes very small, covered with skin. Mandibular teeth in two rows. Gill opening crescentic. Gills greatly reduced. Skin of branchial region of ventral side of head drawn into deep longitudinal folds. No scale on the anterior half of body. Dorsal and anal fin folds very narrow.

Geographical Distribution : Coastal areas of Kerala.

216. *Monopterus indicus* (Silas & Dawson)

(Fig. 152)

1961. *Amphiphous indicus* Silas and Dawson, *J. Bombay. nat. Hist. Soc.*, 58(2) : 367. pl. 1 (type-locality : Robber cave, Mahabaleshwar, nr. Bombay).

1999. *Monopterus indicus* : Menon, *Rec. zool. Surv. India, Occ. Paper* No. 175 : 282.

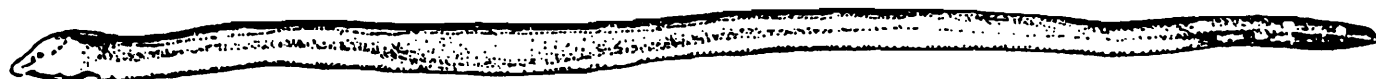


Fig. 152 : *Monopterus indicus* (Silas & Dawson)

Distinguishing Characters : Body eel like and robust. Head conspicuous from rest of body by dome shaped muscular occipital region. Snout rounded. Eyes very small, covered with skin. Mandibular teeth in 3 or 4 rows at symphysis. Gill opening crescentic. Gills greatly reduced to highly vascularised plate-like structures. Scales present in irregular rows as certain isolated patches. Dorsal and anal fin folds are more conspicuous in young.

Geographical Distribution : Maharashtra.

Order PERCIFORMES

Family AMBASSIDAE

217. *Parambassis dayi* (Bleeker)
(Fig. 153)

1874. *Ambassis dayi* Bleeker, *Natuurk. Verh. Holland. Matsch Wetensch. Haarlem*, 2(2) : 95 (type-locality : Malabar).

1999. *Parambassis dayi* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 286.

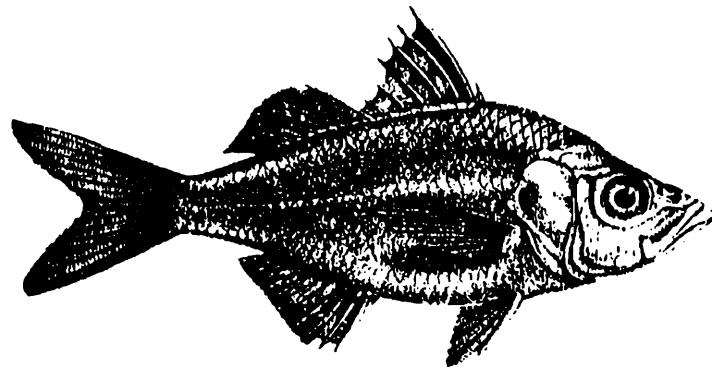


Fig. 153 : *Parambassis dayi* (Bleeker)

Distinguishing Characters : Body more or less elongate and compressed. Head with moderately pointed snout. Mouth large, teeth on jaws villiform. Outer row of teeth slightly enlarged. Scales large in size. Lateral line scales 30. Predorsal scales 15.6 transverse rows of scales in check.

Geographical Distribution : Western Ghats of Kerala.

218. *Parambassis thomassi* (Day)
(Fig. 154)

1870. *Ambassis thomassi* Day, *Proc. Zool. Soc. Lond* : 1369 (type-locality : Calicut and Mangalore).

1999. *Parambassis thomassi* : Menon, *Rec. zool. Surv. India, Occ. Paper No. 175* : 287.

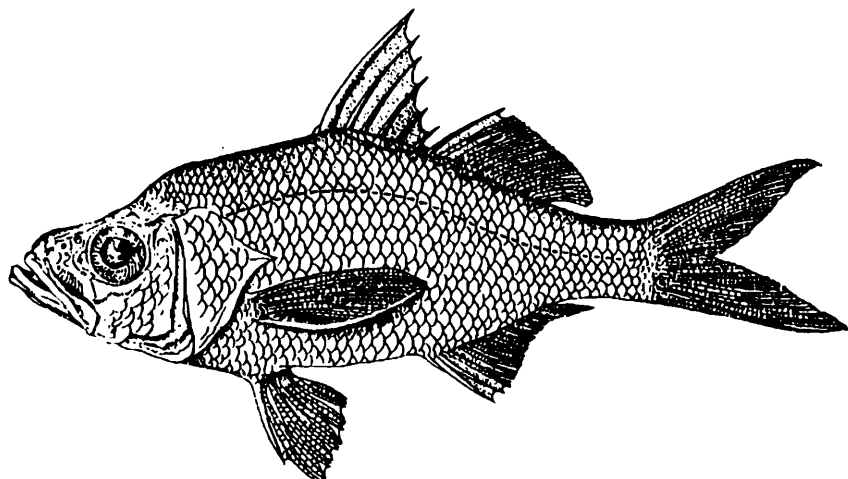


Fig. 154 : *Parambassis thomassi* (Day)

Distinguishing Characters : Body stout, deep and compressed. Head large, snout rather elongate with pronounced elevated tip. Mouth large. Teeth on jaws villiform. Outer row slightly enlarged particularly anteriorly. Lateral line scales 35 to 43. Predorsal scales 15 to 19.4 transverse rows of scales on cheek.

Geographical Distribution : Western Ghats of Kerala and Karnataka.

219. *Pseudambassis lala* (Hamilton-Buchanan)

1822. *Chanda lala* Hamilton, *Fishes of Ganges* : 114, pl. 21, fig. 39 (type-locality : Gangetic Provinces).

1991. *Pseudambassis lala* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 804.

Distinguishing Characters : Body more or less rounded. Mouth oblique. Second spine of dorsal fin very elongate. Scales very small in size. Lateral line scales about 90. 7 transverse rows of scales on cheek.

Geographical Distribution : West Bengal and Orissa.

Family NANDIDAE

220. *Pristolepis marginata* Jerdon

1848. *Pristolepis marginata* Jerdon, *Madras J. Litt. & Sci.*, 15 : 141 (type-locality : Manantoddy river, North Malabar).

1991. *Pristolepis marginata* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 881.

Distinguishing Characters : Body oblong and compressed. Mouth moderate; teeth villiform on jaws, outer row of teeth somewhat enlarged. Villiform teeth on vomer. Dorsal spines rather stout, second anal spine strongest. Lateral line interrupted on 21st scale, with 25 to 27 scales.

Geographical Distribution : Western Ghats of Kerala. Inhabit clear and rapid.

Family CICHLIDAE

221. *Etroplus canarensis* Day (Fig. 155)

1877. *Etroplus canarensis* Day, *Fishes of India* : 414, pl. 89, fig. 5 (type-locality : South Canara).

1999. *Etroplus canarensis* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 291.

Distinguishing Characters : Body deep and compressed. Eye large, its diameter 3.0 to 3.5 in head length. Mouth very small. Teeth villiform, present in 2 to 3 rows on jaws. Lateral line interrupted after 15 to 25 scales. 30 to 31 scales present on longitudinal series.

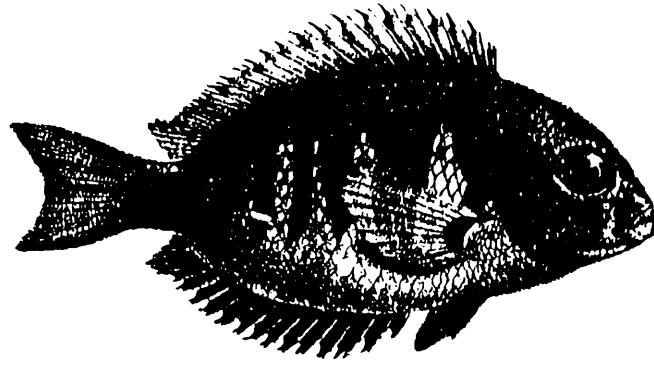


Fig. 155 : *Etroplus canarensis* Day

Geographical Distribution : South Karnataka.

Order MASTACEMBELIFORMES

Family MASTACEMBELIDAE

222. *Macrognaathus guentheri* (Day)

(Fig. 156)

1865. *Mastacembelus guentheri* Day. *Proc. Zool. Soc. Lond.* : 37 (type-locality : Trichoor, Kerala).

1991. *Macrognaathus guentheri* : Talwar and Jhingran, *Inland Fishes of India and Adjacent Countries*, 2 : 1027.

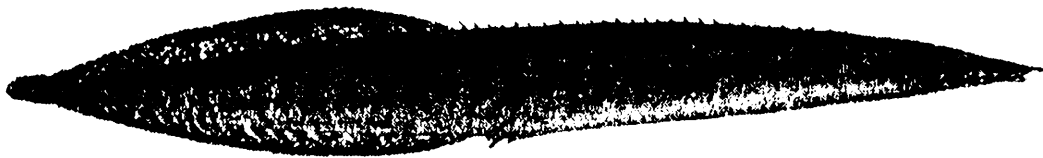


Fig. 156 : *Macrognaathus guentheri* (Day)

Distinguishing Characters : Body eel-like and more or less compressed. Preopercle with 2 to 3 spines. Presence of preorbital spine. Mouth narrow. Dorsal fin inserted just behind the tip of pectoral fins. Both dorsal and anal fin confluent with the caudal fin.

Geographical Distribution : Kerala.

Family CHAUDHURIIDAE

223. *Chaudhuria indica* (Yazdani)

(Fig. 157)

1972. *Pillaia indica* Yazdani, *J. Bombay nat. Hist. Soc.*, 69(1) : 134 fig. (type-locality : nr. Shillong, Khasi Hills, Meghalaya).

1984. *Chaudhuria indica* : Travers, *Bull. Br. Mus. nat. Hist. (Zool.)*, 46(1) : 43-49.

Distinguishing Characters : Body eel-like with long anteriorly depressed head. Mouth

wide and horizontal. Teeth small, in narrow bands. Dorsal and anal fins confluent with caudal fin. Pectoral fin small. Caudal fin short. Presence of six branchiostegal rays. Body naked.

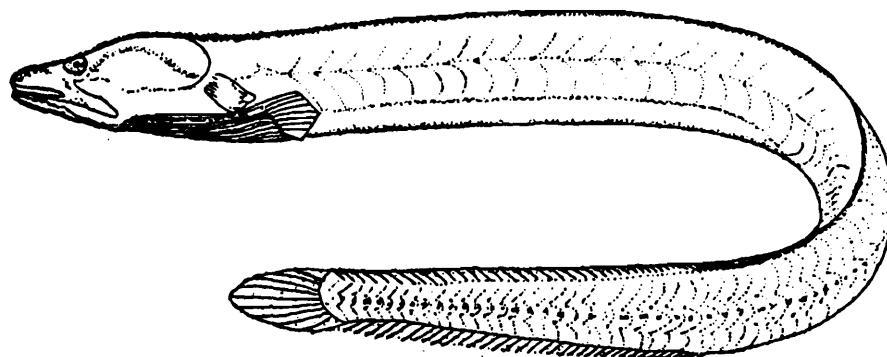


Fig. 157 : *Chaudhuria indica* (Yazdani)

Geographical Distribution : Khasi and Garo Hills, Meghalaya.

224. *Chaudhuria khajuriae* (Talwar, Yazdani & Kundu)
(Fig. 158)

1977. *Pillaia khajuriae* Talwar, Yazdani & Kundu, *Proc. Indian Acad. Sci.*, **85**(2) 53, fig. 1 (type-locality : Rongrengiri, Garo Hills Meghalaya).

1984. *Chaudhuria khajuriae* : Travers, *Bull. Br. Mus. nat. Hist. (Zool.)*, **47**(2) : 143 (Generic relationship).

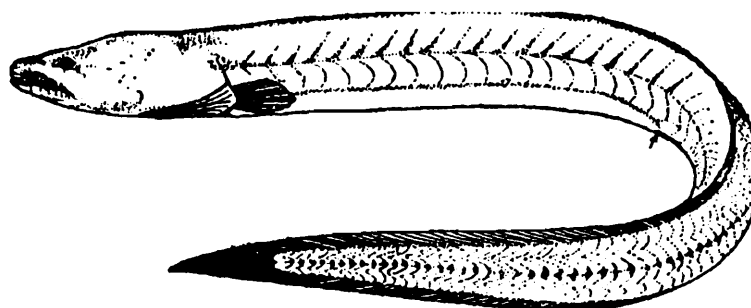


Fig. 158 : *Chaudhuria khajuriae* (Talwar, Yazdani & Kundu)

Distinguishing Characters : Body eel-like and subcylindrical with laterally compressed tail. Head more or less elongate. Snout conical. Mouth terminal and wide, its gape extending to below anterior margin of eye. Teeth conical, in three rows at tip and in two rows along sides. Dorsal and anal fin moderate and confluent with caudal fin. Caudal fin tapering. Body naked.

Geographical Distribution : Garo Hills, Meghalaya and Upper Assam.

Order TETRODONTIFORMES

Family TETRAODONTIDAE

225. *Tetraodon travancoricus* Hora & Nair
(Fig. 159)

1941. *Tetraodon (Monotretus) travancoricus* Hora and Nair. *Rec. Indian Mus.* 43(3) : 391. figs. 3 & 4 (type-locality : Pamba river at Travancore).

1999. *Tetraodon travancoricus* : Menon, *Rec. zool. Surv. India, Occ. Paper*, No. 175 : 305.

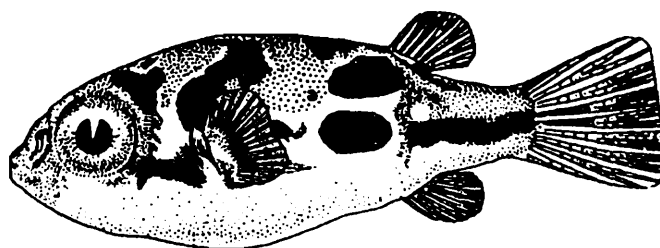


Fig. 159 : *Tetraodon travancoricus* Hora & Nair

Distinguishing Characters : Body oblong and laterally compressed. Dorsal profile arched. Eyes large. Interorbital space flat. Mouth small, terminal and directed forward. Nostrils tubular, nearly as high as wide. Inconspicuous body spinules present. Dorsal fin opposite to anal fin. Caudal fin well developed and truncate.

Geographical Distribution : Pamba river, Kerala.

SUMMARY

An attempt has been made in the present study to provide an up to date account of Endemic Freshwater Fishes of India. The present contribution deals with 225 species comprising 74 genera under 21 families and 9 orders. It includes a systematic list, synonyms (original and present), distinguishing characters and geographical distribution of the endemic species. During the preparation of this manuscripts, we have made use of all earlier informations available in the literature up to the year 2002.

During the course of our study we have seen that the peninsular India is the richest source of Endemic Freshwater Fishes comprising 135 species followed by North-East India comprising 46 species.

A good number of species dealt here have further not been collected since the time of Hamilton-Buchanan, McClelland and Sykes (early 19th century).

Extreame pressure from the human population on the environment and consequent changes in the river course and water quality, have adversely affected the fluviate fish fauna.

As a results many of the endemic large cyprinids of the peninsular India have become rare and critically endangered.

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