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**On a Collection of fish from
Bastar District, Madhya Pradesh**

A. K. Karmakar and A. K. Datta

**Issued by the Director
Zoological Survey of India, Calcutta**

RECORDS
OF THE
ZOOLOGICAL SURVEY OF INDIA

MISCELLANEOUS PUBLICATION
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**ON A COLLECTION OF FISH FROM BASTAR DISTRICT,
MADHYA PRADESH**

A. K. KARMAKAR AND A. K. DATTA
Zoological Survey of India, Calcutta



सत्यमेव जयते

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INTRODUCTION

The natural history of the fishes occurring in Bastar district in Madhya Pradesh, India are being presented in this paper. Systematic account on fishes of Bastar is not much known except the reference of Hora (1938). During the period 1978-1980 field surveys in Bastar district were conducted and representative examples of fish from the localities detailed in the list of collecting stations were collected. The present paper deals on the aforesaid material which comprises 100 species belonging to 45 genera and 19 families. Of these, two species, viz., *Clupisomo bastari* and *Puntius saberi* have been established (Datta and Karmakar, 1980, 1981).

Dubey and Mehra (1959) worked on the fish and fisheries of Chambal river and listed 71 species of fishes. Hora (1938) reported 13 species of fishes from Bailadila range, Bastar district. Hora (1940) described 43 species of fishes from the headwaters of the Mahanadi river, Raipur district, Central Provinces. Hora and Nair (1941) reported 40 species of fishes from the Satpura range, Hoshangabad district, Central Provinces. Soni (1959, 60) found 35 species of fishes in Bhopal lower lake and 43 species of fishes in Bhopal upper lake respectively. Menon (1951) discussed on the role of Eastern Ghats in the distribution of Malayan fauna and flora to peninsular India. The present fish collections were made in the head waters of Godavari and Mahanadi River Systems, namely, Indravati river, Saberi river, Mahanadi, Dudhnadi and Kukri (Bhor) river. Collections were also made from lakes, tanks and other watermasses.

The general topography of the area is mainly mountainous intersected with rivers and rivulets. The valleys are undulating with dry, mixed, deciduous forests consisting mainly of Sal, Teak, Mahua, Tamarind, Tendu, Jamun, Mango, Peepal, Palm, Bamboo, Babbul and various kinds of creepers. The undercanopp consists of grasses (ghonar, kusad). The termite mounds are very common in the forest.

ABBREVIATION USED

A. K. K.—A. K. Karmakar

M. H. & Party—M. Hafeezullah & Party

T. K. C. & A. K. K.—T. K. Chatterjee & A. K. Karmakar

D. P. S. & Party—D. P. Sanyal & Party

LIST OF COLLECTING STATIONS

1. Mahanadi river at Charama.
2. Mahanadi river at Lakhanpur, 12 kms. south of Charama.
3. Dudhnadi river and tanks at Kanker.
4. Keskal, 30 kms. south of Kanker.
5. Korar, 29 kms. north-west of Kanker.
6. Tanks at Kondagaon.
7. Kukri (Bhor) river at Borgaon, 25 kms. north of Kondagaon.
8. Pharasgaon, 30 kms. north of Kondagaon.
9. Narainpur, 51 kms. west of Kondagaon.
10. Tanks at Bastar village, 18 kms. north of Jagdalpur.
11. Indravati river, Dalpatsagar and tanks at Jagdalpur.
12. Confluence of Indravati and Narangi river and tanks at Lohandiguda.
13. Indravati river at Chitrakot, 7 kms. west of Lohandiguda.
14. Tanks at Barsur.
15. Indravati river at Budhghat, 8 kms. north-west of Barsur.
16. Geedam, 22 kms. south of Barsur.
17. Bailadila, 53 kms. south-west of Geedam.
18. Chintapally, 46 kms. north-west of Bijapur.
19. Tanks at Bhopalpatnam.
20. Indravati river, 8 kms. west of Bhopalpatnam.
21. Saberi river at Sukma.
22. Tank at Pujaripal village, 23 kms. north-east of Sukma.
23. Saberi river at Konta.
24. Saberi river at Dondra, 3 kms. north of Konta.

* LIST OF FISHES FROM BASTER

Class	OSTEICHTHYES
Subclass	ACTINOPTERYGII

* (The general classification of fishes adopted in the list is that of Greenwood *et al* 1966).

DIVISION II

Superorder	OSTEOGLOSSOMORPHA
Order	OSTEOGLOSSIFORMES
Suborder	NOTOPTEROIDEI
Family	NOTOPTERIDAE

1. *Notopterus notopterus* (Pallas)

DIVISION III

Superorder	OSTARIOPHYSI
Order	CYPRINIFORMES
Suborder	CYPRINOIDEI
Family	CYPRINIDAE
Subfamily	ABRAMIDINAE

2. *Oxygaster bacaila* (Hamilton)
3. *O. clupeoides* (Bloch)
4. *Salmostoma phulo phulo* (Hamilton)

Subfamily	RASBORINAE
-----------	------------

5. *Barilius barila* (Hamilton)
6. *B. barna* (Hamilton)
7. *B. hendelisis* (Hamilton)
8. *B. evezardi* (Day)
9. *B. gatensis* (Valenciennes)
10. *Barilius vagra* (Hamilton)
11. *Danio (Danio) aequipinnatus* (McClelland)
12. *D. (D.) devario* (Hamilton)
13. *D. (D.) neilgherriensis* (Day)
14. *Esomus danrica* (Hamilton)

15. *Rasbora daniconius* (Hamilton)
Subfamily CYPRININAE
16. *Amblypharyngodon microlepis* (Bleeker)
17. *A. mola* (Hamilton)
18. *Aspidoparia morar* (Hamilton)
19. *Catla catla* (Hamilton)
20. *Cirrhinus fulungee* (Sykes)
21. *C. marigala* (Hamilton)
22. *C. reba* (Hamilton)
23. *Crossocheilus latius latius* (Hamilton)
24. *Garra gotyla gotyla* (Gray)
25. *G. mullya* (Sykes)
26. *Labeo angra* (Hamilton)
27. *L. boga* (Hamilton)
28. *L. boggut* (Sykes)
29. *L. calbasu* (Hamilton)
30. *L. dyocheilus* (McClelland)
31. *L. fimbriatus* (Bloch)
32. *L. goniis* (Hamilton)
33. *L. pangusia* (Hamilton)
34. *L. porcellus* (Heckel)
35. *L. rohita* (Hamilton)
36. *Osteobrama cotio peninsularis* (Silas)
37. *Osteobrama vigorsii* (Sykes)
38. *Parapsilorhynchus tentaculatus* (Annandale)
39. *Puntius amphibius* (Valenciennes)
40. *P. arenatus* (Day)

41. *P. arulius arulius* (Jerdon)
42. *P. chola* (Hamilton)
43. *P. conchoni* (Hamilton)
44. *P. curmuca* (Hamilton)
45. *P. dorsalis* (Jerdon)
46. *P. gelius* (Hamilton)
47. *P. kolus* (Sykes)
48. *P. melanostigma* (Day)
49. *P. phutunio* (Hamilton)
50. *P. pinnauratus* (Day)
51. *P. saberi* Datta & Karmakar
52. *P. sarana sarana* (Hamilton)
53. *P. sophore* (Hamilton)
54. *P. ticto* (Hamilton)
55. *P. vittatus* Day
56. *Tor khudree* (Sykes)
57. *T tor* (Hamilton)

Family COBITIDAE

58. *Lepidocephalus (Lepidocephalichthys) guntea* (Hamilton)
59. *L. (L.) thermalis* (Cuvier & Valenciennes)
60. *Noemacheilus botia* (Hamilton)
61. *N. dayi* Hora
62. *N. evezardi* Day
63. *N. denisonii* Day

Order SILURIFORMES

Family BAGRIDAE

64. *Mystus bleekeri* (Day)
65. *Mystus cavasius* (Hamilton)

66. *M. montanus* (Jerdon)
 67. *M. vittatus* (Bloch)
 68. *Aorichthys aor* (Hamilton)
 69. *A. seenghala* (Sykes)
 70. *Rita kuturnee* (Sykes)
 71. *R. rita* (Hamilton)
 Family SILURIDAE
 72. *Ompok bimaculatus* (Bloch)
 73. *Wallago attu* (Schneider)
 Family SCHILBEIDAE
 74. *Clupisom bastari* Datta & Karmakar
 75. *C. garua* (Hamilton)
 76. *C. montana* Hora
 77. *C. prateri* Hora
 78. *Pseudeutropius atherinoides* (Bloch)
 79. *Silonia childreni* (Sykes)
 Family SISORIDAE
 80. *Bagarius bagarius* (Hamilton)
 81. *Glyptothorax dekkanensis* (Gunther)
 Family CLARIDAE
 82. *Clarias batrachus* (Linnaeus)
 Family HETEROPNEUSTIDAE
 83. *Heteropneustes fossilis* (Bloch)
 Suborder EXOCOETOIDEI
 Family BELONIDAE
 84. *Xenentodon cancila* (Hamilton)
 Superorder ACANTHOPTERYGII
 Order CHANNIFORMES
 Family CHANNIDAE
 85. *Channa gachua* (Hamilton)

86. *C. marulius* (Hamilton)
87. *C. punctata* (Bloch)
- | | |
|----------|------------------|
| Order | SYNBRANCHIFORMES |
| Suborder | SYNBRANCHOIDEI |
| Family | SYNBRANCHIDAE |
88. *Monopterusuchia* (Hamilton)
- | | |
|----------|---------------|
| Order | PERCIFORMES |
| Suborder | PERCOIDEI |
| Family | CENTROPOMIDAE |
89. *Chanda nama* (Hamilton)
90. *C. ranga* (Hamilton)
- | | |
|--------|----------|
| Family | NANDIDAE |
|--------|----------|
91. *Badis badis* (Hamilton)
92. *Nandus nandus* (Hamilton)
- | | |
|--------|-----------|
| Family | CICHLIDAE |
|--------|-----------|
93. *Tilapia mossambica* (Peters)
- | | |
|----------|------------|
| Suborder | MUGILOIDEI |
| Family | MUGILIDAE |
94. *Rhinomugil corsula* (Hamilton)
- | | |
|----------|-----------|
| Suborder | GOBIOIDEI |
| Family | Gobiidae |
95. *Awaous stamineus* (Valenciennes)
96. *Glossogobius giuris* (Hamilton)
- | | |
|----------|--------------|
| Suborder | ANABANTOIDEI |
| Family | ANABANTIDAE |
97. *Anabas testudineus* (Bloch)
- | | |
|--------|--------------------|
| Order | MASTACEMBELIFORMES |
| Family | MASTACEMBELIDAE |
98. *Mastacembelus armatus* (Lecepede)
99. *M. pancalus* (Hamilton)
100. *Macrogathus aculeatum* (Bloch)

TABLE—1

Data on number of species in each family from following sources

Family	Total	Indravati River	Saberi River	Mahanadi River	Dudhnadi River	Lake	Tank
Notopteridae	1	—	—	—	—	1	1
Cyprinidae	57	23	30	21	15	7	26
Cobitidae	5	5	—	1	2	—	1
Bagridae	8	4	3	3	3	—	3
Siluridae	2	2	2	2	2	—	—
Schilbeidae	6	3	4	1	2	—	1
Sisoridae	2	2	1	—	—	—	—
Clariidae	1	—	—	—	—	—	1
Heteropneustidae	1	—	—	—	—	1	1
Belonidae	1	—	—	1	—	—	—
Channidae	3	2	—	—	—	3	2
Synbranchidae	1	—	—	—	—	—	1
Centropomidae	2	1	—	2	1	1	1
Nandidae	2	1	—	—	—	2	1
Cichlidae	1	—	—	—	—	—	1
Mugilidae	1	—	—	1	—	—	—
Gobiidae	2	1	2	1	—	1	1
Anabantidae	1	—	—	—	—	—	1
Mastacembelidae	3	1	1	1	1	—	2
TOTAL =	100	45	43	34	26	16	44

The fish fauna of Representative Rivers, Lakes and Tanks of Bastar.

TABLE—2
Fish Families Represented in Tropical Freshwater

Name of families	South America	Africa	Asia
Notopteridae	(—)	(+)	(+)
Cyprinidae	(—)	(+)	(+)
Bagridae	(—)	(+)	(+)
Siluridae	(—)	(—)	(+)
Schilbeidae	(—)	(+)	(+)
Sisoridae	(—)	(—)	(+)
Clariidae	(—)	(+)	(+)
Heteropneustidae	(—)	(—)	(+)
Belonidae	(+)	(—)	(+)
Channidae	(—)	(+)	(+)
Synbranchidae	(+)	(+)	(+)
Centropomidae	(+)	(+)	(+)
Nandidae	(+)	(+)	(+)
Cichlidae	(+)	(+)	(+)
Mugilidae	(+)	(+)	(+)
Gobilidae	(+)	(+)	(+)
Anabantidae	(—)	(+)	(+)
Mastacembelidae	(—)	(+)	(+)

SYSTEMATIC ACCOUNT

Subclass ACTINOPTERYGII

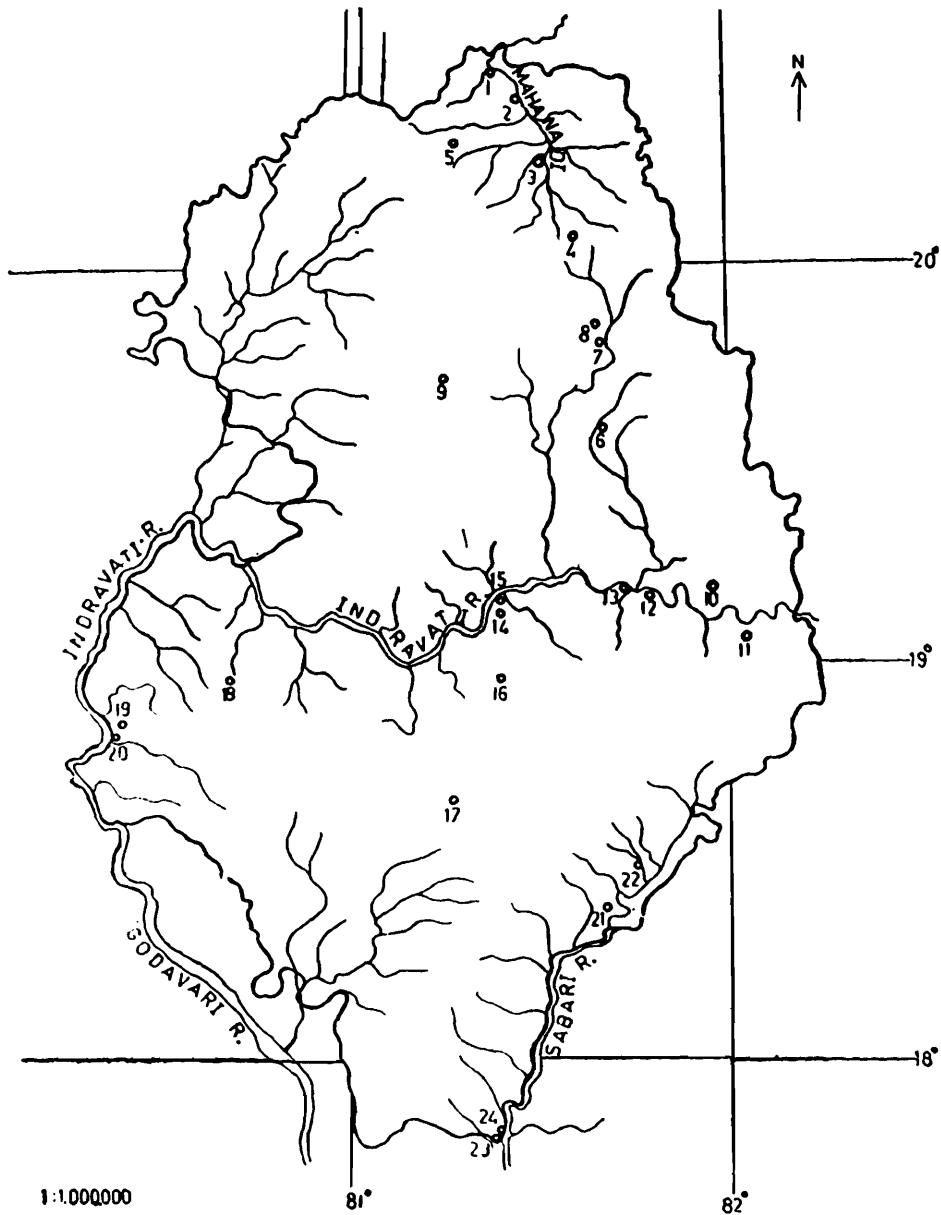
DIVISION II

Superorder OSTEOGLOSSOMORPHA
Order OSTEOGLOSSIFORMES
Suborder NOTOPTEROIDEI
Family NOTOPTERIDAE

***Notopterus notopterus* (Pallas)**

1769. *Gymnotus notopterus* Pallas *Specil Zool.*, 7 : 40, pl. 6, fig. 2,
(type-locality, ? Indian Ocean).

1800. *Notopterus kapirot*, Lacepede, *Hist. Nat. Poiss*, 2 : 190.



Map of Bastar District showing collecting stations and drainage pattern

Material : (i) 1 ex., 99 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78
(ii) 1 ex., 120 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (iii)
4 exs., 80 mm-170 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78.
(iv) 2 exs., 170 mm-206 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78.
(v) 2 exs., 125 mm & 150 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party,
2. iv. 79. (vi) 5 exs., 228 mm-280 mm, Tank at Barsur, Coll. M.H. & Party,

11. iv 79. (vii) 1 ex., 235 mm, Kapabera Dam, Kondagaon, Coll. T.K.C & A.K.K., 21. xi. 79. (viii) 1 ex., 110 mm, Bailadila, 53 km. South-west of Geedam, Coll. D.P.S. & Party, 4. vi. 80.

Distribution : India, Pakistan, Bangladesh, Burma, Thailand, Malaysia and Indonesia.

DIVISION III

Superorder	OSTARIOPHYSI
Order	CYPRINIFORMES
Suborder	CYPRINOIDEI
Family	CYPRINIDAE
Subfamily	ABRAMIDINAE

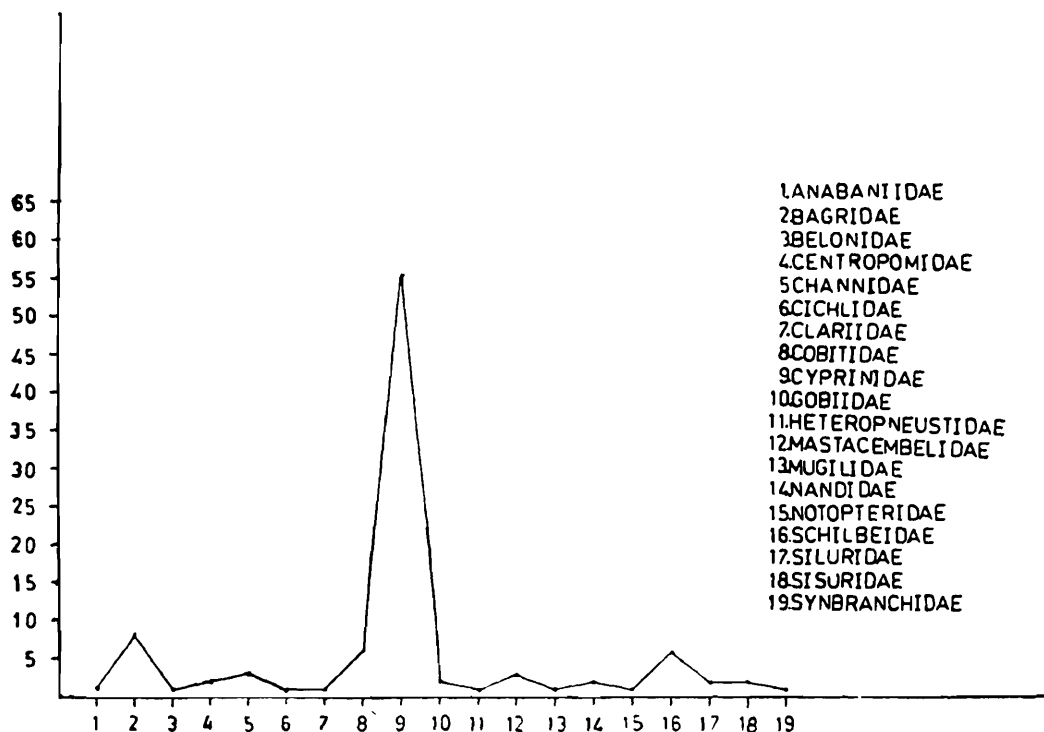
Oxygaster bacaila (Hamilton)

1822. *Cyprinus bacaila* Hamilton, *Fish Ganges*; 265, 384, pl. 8, fig. 76, (type-locality, freshwater rivers of all Gangetic provinces).

1958. *Oxygaster bacaila*, Silas, *J. Bombay nat. Hist Soc.* 55(1) : 61.

Material : (i) 4 exs., 101 mm-121 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 2 exs., 55 mm-108 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (iii) 2 exs., 83 mm & 116 mm, Kanker Market, Coll. A.K.K., 19. vii. 78. (iv) 2 exs., 95 mm & 97 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (v) 2 exs., 99 mm & 100 mm, Tank at Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79. (vi) 12 exs., 44 mm-81 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-16. xi. 79. (vii) 6 exs., 66 mm-106 mm, Tank at Kondagaon, Coll. T.K.C. & A.K.K., 20. xi. 79. (viii) 1 ex., 110 mm, Kapabera Dam, Kondagaon, Coll. T.K.C. & A.K.K., 26. xi. 79.

Distribution : North India (Ganges Brahmaputra and Indus), Orissa (Mahanadi), North of Krishna river system, Madhya Pradesh. Also Pakistan and Bangladesh.



GRAPH I. RELATIVE ABUNDANCE OF SPECIES IN DIFFERENT FAMILIES

***Oxygaster clupeioides* (Bloch)**

1795. *Cyrcinus clupeioides* Bloch, *Naturges Ausland Fische*, 12 : 49, pl. 408, fig. 2 (type-locality, Tranquebar).

1962. *Oxygaster clupeioides*, Misra, *Rec. Indian Mus.*, 57 : 140.

Material : (i) 1 ex., 98 mm., Indravati river at Jagdalpur, Coll. A.K.K., 9.vii.78. (ii) 8 exs., 87 mm—125 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8.vii.78. (iii) 3 exs., 95 mm—164 mm., Saberi river at Konta, Coll. A.K.K., 12.vii.78. (iv) 1 ex., 131 mm, Tank at Pujaripal village, Coll. A.K.K., 14.vii.78. (v) 1 ex., 121 mm, Dudhnadi at Kanker, Coll. A.K.K., 19.vii.78. (vi) 2 exs., 119 mm—124 mm, Charama Tank, Charama, Coll. A.K.K., 20.vii.78. (vii) 10 exs., 100 mm—126 mm, Dalpatsagar, Jagdalpur, 2-3.iv.19. (viii) 43 exs., 98 mm—116 mm, Jagdalpur Market, Coll. M.H. & Party, 4.iv.79. (ix) 2 exs., 127 mm & 155 mm, Confluence of River Indravati with Narangi river. Coll. T.K.C. & A.K.K. 8.xi.79. (x) 12 exs., 47 mm—96 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 14.xi.79. (xi) 5 exs., 81 mm—120 mm, Pharasgaon Market, Coll. T.K.C. & A.K.K., 19.xi.79. (xii) 1 ex. 120 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23.xi.79.

Distribution : Freshwaters of Cutch, Baroda, Madhya Pradesh, Southern India, Also Burma.

***Salmostoma phulo phulo* (Hamilton)**

1822. *Cyprinus phulo* Hamilton, *Fish Ganges*; 262, (type locality, rivers and ponds of north-eastern parts of Bengal).

1968. *Salmostoma phulo phulo*, Banarescu, *Rev. Roum. Biol. Zool.*, **13**, No. 1; 5.

Material : 1 ex., 97 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5.iv.79.

Distribution : West Bengal, Madhya Pradesh Assam. Also Bangladesh.

Remark : Lateral line Scales : 75.

Subfamily RASBORINAE

***Barilius barila* (Hamilton)**

1822. *Cyprinus barila* Hamilton, *Fish. Ganges*; 267, 384, (type-locality, northern Bengal).

1889. *Barilius barila* Day, *Fauna Br. India Fish*, **1** : 348.

Material : (i) 2 exs., 76 mm & 100 mm, Kanker Market, Coll. A.K.K., 16-19.vii.78. (ii) 2 exs., 66 mm & 77 mm, Lakhanpur Market, Coll. T.K.C. & A.K.K., 24.xi.79. (iii) 18 exs., 60 mm—94 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16.xi.79. (iv) 7 exs., 30 mm—36 mm, Dudh Nadi at Kanker, Coll. T.K.C. & A.K.K., 25.xi.79.

Distribution : Northern India, Madhya Pradesh. Also Bangladesh and Burma.

***Barilius barna* (Hamilton)**

1822. *Cyprinus barna* Hamilton, *Fish, Ganges*, 268, 384, (type-locality, Yamuna and Brahmaputra).

1899. *Barilus barna*, Day, *Fauna Br. India, Fish*, **1** : 350.

Material : (i) 1 ex, 77 mm, Bastar village Market, Coll. A.K.K., 6.vii.78. (ii) 105 exs., 48 mm—98 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-16.xi.79.

Distribution : Northern India, Madhya Pradesh. Also Burma.

Barilius bendelisis (Hamilton)

1807. *Cyprinus bendelisis* Hamilton, *Journey in Mysore*, 3 : 345, pl. 32, (type-locality, Vedawati Stream, headwaters of the Krishna near Heriuru, Mysore).

1889. *Barilius bendelisis*, Day, *Fauna Br. India Fish*, 1 : 347.

Material : (i) 1 ex., 102 mm, Korar Market, Coll. A.K.K., 17.vii.78. (ii) 1 ex., 60 mm, Saberi river at Sukma, Coll. A.K.K., 13.vii.78. (iii) 1 ex., 123 mm, Dudh Nadi at Kanker, Coll. A.K.K., 19.vii.78. (iv) 4 exs., 67 mm—86 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5.iv.79. (v) 7 exs., 57 mm—108 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10.iv.79. (vi) 4 exs., 70 mm—140 mm, Lakhanpur Market, Coll. T.K.C. & A.K.K., 24.xi.79. (vii) 25 exs., 68 mm—130 mm, Kanker Market, Coll. T.K.C. & A.K.K., 25-28.xi.79. (viii) 99 exs., 35 mm—71 mm, Dudh Nadi at Kanker, Coll. T.K.C. & A.K.K., 25.xi.79. (ix) 5 exs., 70 mm—105 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16.xi.79.

Distribution : Throughout India. Also Pakistan, Nepal and Bangladesh.

Barilius evezardi Day

1872. *Barilius evezardi* Day, *Journ. Asiat. Soc. Bengal*, Pt. II : 326, (type-locality, Poona).

Material : 11 exs., 67 mm—92 mm, Lakhanpur Market, Coll. T.K.C. & A.K.K., 24.11.79.

Distribution : Maharashtra and Madhya Pradesh.

Barilius gatensis (Valenciennes)

1844. *Leuciscus gatensis* Valenciennes, *Hist. nat. Poiss.*, 18 : 309, pl. 503. (type-locality, Western Ghats).

1889. *Barilius gatensis*, Day, *Fauna Br. India, Fish*, 1 : 349.

Material : 1 ex., 53 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16.xi.79.

Distribution : Freshwaters of Peninsular India, Coorg, Mysore, Western Ghats, Travancore Cochin, Malabar, Nilgiris and Madhya Pradesh.

Barilius vagra (Hamilton)

1822. *Cypripus vagra* Hamilton, *Fish. Ganges* : 269, 385, (type-locality, Ganges at Patna).

1889. *Barilius vagra*, Day, *Fauna Br. India Fish*, 1 : 345.

Material : (i) 4 exs., 52 mm—92 mm, Kanker Market, Coll. A.K.K. 16-19.vii.78. (ii) 7 exs., 52 mm—95 mm, Dudh Nadi at Kanker, Coll. A.K.K., 19.vii.78. (iii) 1 ex., 48 mm, Tank at Kanker, Coll. A.K.K., 20.vii.78.

Distribution : S'ind-Hills, all along the Himalayan and Sub-Himalayan rivers, Assam and Madhya Pradesh.

Danio (Danio) aequipinnatus (McClelland)

1839. *Perilampus aequipinnatus* McClelland, *Asiat. Res.*, 19(2) : 393, pl. 60, fig. 1, (type-locality, Assam).

1889. *Danio aequipinnatus*, Day, *Fauna Br. India Fish.*, 1 : 356, fig. 3.

1981. *Danio (Danio) aequipinnatus*, Jayaram, *The Freshwater Fishes of India*, A Handbook : 80-81.

Material : (i) 1 ex., 72 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10. iv. 79. (ii) 1 ex., 45 mm, 5 km. north-west of P.W.D. Rest House, Barsur, Coll. D.P.S. and party, 2. vi. 80.

Distribution : India, Sri Lanka, Bangladesh, Burma and Thailand.

Danio (Danio) devario (Hamilton)

1822. *Cyprinus devario* Hamilton, *Fish. Ganges* : 341, 393, pl. 6, fig. 94, (type-locality, rivers and ponds of Bengal).

1889. *Danio devario*, Day, *Fauna Br. India Fish.*, 1 : 354.

1981. *Danio (Danio) devario*, Jayaram, *The Freshwater Fishes of India* A Handbook : 80.

Material : (i) 1 ex., 57 mm, Pharasgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79. (ii) 1 ex., 65 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Northern India, Eastern India, Madhya Pradesh, Southern India. Also Nepal.

Danio (Danio) neilgherriensis (Day)

1867. *Paradanio neilgherriensis*, Day, *Proc. Zool. Soc. Lond.* : 296. (type-locality, Rivers on the Neilgherry Hills).

1858. *Danio neilgherriensis*, Gunther, *Catal.*, vii : 283.

1981. *Danio (Danio) neilgherriensis*, Jayaram, *The Freshwater Fishes of India*, A Handbook, 80-81.

Material : 1 ex., 56 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 14. iv. 79.

Distribution : Rivers on the Neilgherry and Madhya Pradesh.

Esomus danrica (Hamilton)

1822. *Cyprinus danrica* Hamilton, *Fish. Ganges* : 325, 390, pl. 16, fig. 88, (type-locality, ponds and ditches of Bengal).

1937. *Esomus danrica*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 29.

Material : (i) 16 exs., 49 mm-60 mm, Jagdalpur Fish Market, Coll. A.K.K., 5. vii. 78. (ii) 13 exs., 35 mm-67 mm, Tanks at Bastar village, Coll. A.K.K., 6. vii. 78. (iii) 32 exs., 46 mm-61 mm, Bastar village Market, Coll. A.K.K., 6. vii. 78. (iv) 1 ex., 47 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (v) 1 ex., 52 mm, Tank at Jagdalpur, Coll. A.K.K., 8. vii. 78. (vi) 1 ex., 50 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (vii) 19 exs. 42 mm—53 mm, Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (viii) 5 exs., 53 mm—54 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78. (ix) 7 exs., 42 mm—49 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (x) 2 exs., 57 mm & 58 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10. iv. 79. (xi) 35 exs., 25 mm—46 mm, Confluence of River Indravati with Narangi river, Coll. T.K.C. & A.K.K., 8. xi. 79. (xii) 105 exs., 31 mm—46 mm, Dudhnadi at Kanker, Coll. T.K.C. & A.K.K., 25. xi. 79.

Distribution : Freshwaters of Assam, W. Bengal, E. Punjab, Uttar Pradesh, Bihar, Madhya Pradesh, Orissa, Tamil Nadu, Ahmedabad. Also Pakistan, Bangladesh, Burma, Sri Lanka, Malaysia, and Thailand.

Rasbora daniconius (Hamilton)

1822. *Cyprinus daniconius* Hamilton. *Fish. Ganges* : 327, pl. 15. fig. 89, (type-locality, rivers of southern Bengal).

1889. *Rasbora daniconius*, Day. *Fauna Br. India Fish.*, 1 : 336.

Material : (i) 24 exs., Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 1 ex., 95 mm. Tank at Bastar village, Coll. A.K.K., 6. vii. 78. (iii) 7 exs., 48 mm—69 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (iv) 4 exs., 63 mm—78 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (v) 7 exs., 37 mm—83 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78. (vi) 3 exs., 60 mm—124 mm, Bhopalpatnam Talao, Bhopalpatnam, Coll. M.H. & party, 13. iv. 79. (vii) 6 exs., 71 mm—85 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & party, 2. iv. 79. (viii) 9 exs., 67 mm—113 mm, Pharasgaon

Market, Coll. T.K.C. & A.K.K., 19. xi. 79. (ix) 2 exs., 55 mm—60 mm, Saberi river at Kon'a, Coll. T.K.C. & A.K.K., 14. xi. 79. (x) 11 exs., 56 mm—108 mm, Banda Tank, Kondagaon, Coll. T.K.C. & A.K.K., 20. xi. 79. (xi) 1 ex., 94 mm, Bailadila, 53 km. south-west of Geedam, Coll. D.P.S. & party, 4. vi. 80.

Distribution : India, Pakistan, Sri Lanka, Bangladesh, Burma and Thailand.

Amblypharyngodon microlepis (Bleeker)

Leuciscus microlepis Bleeker, *Batav. Genootsch. Verhand.*, xxv, *Beng. en. Hind.* p. 141.

1889. *Amblypharyngodon microlepis* Day, *Fauna Br. India Fish.*, 1, p. 291.

Material : (i) 1 ex., 78 mm, tank at Bastar village, Coll. A.K.K., 6. vii. 78. (ii) 1 ex., 58 mm, Bastar Fish Market, Coll. A.K.K., 6. vii. 78. (ii) 6 exs., 63 mm—74 mm, tank at Kanker, Coll. A.K.K., 16. vii. 78.

Distribution : From Hooghly through Orissa and down the Coromandel coast to Madras, and Madhya Pradesh.

Amblypharyngodon mola (Hamilton)

1822. *Cyprinus mola* Hamilton, *Fish. Ganges* : 334, 392, pl. 38, fig. 92, (type-locality, ponds and freshwater in every part of the Gangetic provinces).

1889. *Amblypharyngodon mola*, Day, *Fauna Br. India Fish.*, 1 : 291, fig. 101.

Material : (i) 16 exs., 47 mm—69 mm, Jagdalpur Fish Market, Coll. A.K.K., 5. vii. 78. (ii) 4 exs., 69 mm—73 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (iii) 4 exs., 55 mm—70 mm, Tank at Jagdalpur, Coll. A.K.K., 8. vii. 78. (iv) 3 exs., 45 mm—54 mm, Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (v) 5 exs., 69 mm—80 mm, Dudh-nadi at Kanker, Coll. A.K.K., 19. vii. 78. (vi) 2 exs., 68 mm & 75 mm, tank at Kanker, Coll. A.K.K., 20. vii. 78. (vii) 6 exs., 73 mm—81 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (viii) 6 exs., 61 mm—80 mm, Dalpatsagar, 2 km. from Jagdalpur Circuit House, Coll. M.H. & Party, 2-3. iv. 79. (ix) 1 ex., 66 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (x) 85 exs., 25 mm—38 mm, confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 8. xi. 79. (xi) 10 exs., 45 mm—85 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (xii) 1 ex., 64 mm, Saberi

river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79. (xiii) 1 ex., 94 mm, Bailadila, 53 km. south-west of Geedam, Coll. D.P.S. & Party, 4. vi. 1980.

Distribution : India except Malabar. Also Pakistan, Bangladesh and Burma.

Aspidoparia morar (Hamilton)

1822. *Cyprinus morar* Hamilton, *Fish. Ganges* : 264, 384, pl. 31, fig. 5, (type-locality, Yamuna and Tista rivers).

1889. *Aspidoparia morar* Day, *Fauna Br. India Fish.* 1 : 338, fig. 108.

Material : (i) 1 ex., 95 mm, Saberi river at Konta, Coll. A.K.K., 12.vii.78 (ii) 2 exs., 63 mm & 73 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (iii) 3 exs., 55 mm—86 mm, Chotanalla (connected with Mahanadi river) at Charama. Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Freshwaters of all the Indian states except the western coast and localities south of the Kistna river. Also Nepal, Pakistan Bangladesh and Burma.

Catla catla (Hamilton)

1822. *Cyprinus catla* Hamilton, *Fish. Ganges* : 287, 318, 387, pl. 13, fig. 81, (type-locality, rivers and tanks of Bengal).

1937. *Catla catla*, Saw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 44, pl. 5, fig. 9, text-fig. 40.

Material : 1 ex., 290 mm, Geedam Market, Coll. M.H. & Party, 8. iv. 79.

Distribution : Northern and Eastern India, Madhya Pradesh. Also Pakistan, Bangladesh and Burma. (also introduced into the Cauvery in Peninsular India).

Cirrhinus fulungee (Sykes)

1841. *Chondrostoma fulungee* Sykes, *Trans. zool. Soc., Lond.*, 2 : 358, (type-locality, Poona waterways).

1889. *Cirrhina fulungee*, Day, *Fauna Br. India Fish.*, 1 : 280.

Material : 1 ex., 78 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78.

Distribution : Freshwaters of Poona, Southern India and Madhya Pradesh.

Remark : Lateral line scales 41 ; 2 barbels.

***Cirrhinus mrigala* (Hamilton)**

1822. *Cyprinus mrigala* Hamilton, *Fish. Ganges* : 279, 389, pl. 6, fig. 79, (type-locality, ponds and freshwater rivers of the Gangetic provinces).

1889. *Cirrhinus mrigala* Day, *Fauna Br. India Fish.*, 1 : 278.

Material : (i) 1 ex., 74 mm, Jagdalpur Market, coll. A.K.K., 5. vii. 78. (ii) 1 ex., 175 mm, Charama Tank, Charama, coll. A.K.K., 20. vii. 78. (iii) 1 ex., 102 mm, Tank at Kanker, coll. A.K.K., 20. vii. 78. (iv) 1 ex., 250 mm, Tank at Bhopalpatnam, coll. M.H. & Party, 13. iv. 79. (v) 1 ex., 120 mm, Saberi river at Konta, coll. T.K.C., & A.K.K., 14. xi. 79.

Distribution : Northern, Eastern and Southern India, Bombay. Also Pakistan, Bangladesh and Burma.

***Cirrhinus reba* (Hamilton)**

1822. *Cyprinus reba* Hamilton, *Fish. Ganges* : 280, 386, (type-locality, rivers and ponds of Bengal and Bihar).

1889. *Cirrhinus reba* Day, *Fauna Br. India Fish.*, 1 : 279, fig. 96.

Material : (i) 6 exs., 83 mm—156 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (ii) 1 ex., 96 mm, Korar Market, coll. A.K.K., 17. vii. 78. (iii) 5 exs., 96 mm—145 mm, Dudhnadi at Kanker, Coll. A.K.K., 19. vii. 78. (iv) 9 exs., 82 mm—108 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (v) 45 exs., 98 mm—248 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 13-14. iv. 79. (vi) 4 exs., 290 mm—370 mm, Tank at Barsur, Coll. M.H. & Party, 11-14. iv. 79, (xii) 2 exs., 230 mm & 240 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79. (viii) 20 exs., 66 mm—88 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 14. xi. 79. (ix) 7 exs., 95 mm—320 mm, Saberi river at Dondra, 3 km. from Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : Throughout India. Also Pakistan, Bangladesh, Burma and Thailand.

***Crossocheilus latius latius* (Hamilton)**

1822. *Cyprinus latius* Hamilton, *Fish. Ganges* : 345, 395, (type-locality, R. Tista).

1860. *Crossocheilus latius*, Bleeker, *Ichth. Arch. Ind. Prodr.*, 2 : 110.

Material : (i) 2 exs., 107 mm & 108 mm, Kanker Market, Coll. A.K.K., 19. vii. 78, (ii) 4 exs., 120 mm—202 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (iii) 1 ex., 45 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10. iv. 79. (iv) 16 exs. 53 mm—69 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 14-16. xi. 79.

Distribution : Bombay, portion of the western ghats, Kaimur hills, Gangetic Watershed of the Himalayas, Assam, Madhya Pradesh. Also Burma.

Garra gotyla gotyla (Gray)

1832. *Cyprinus gotyla* Gray, *III. Ind. Zool.*, 1, pl. 88, fig. 3, 3a.

1936. *Garra gotyla* Hora and Mukherjee, *Rec. Indian Mus.*, 38 : 144.

Material : (i) 1 ex., 100 mm, Bhopalpatnam talao, Bhopalpatnam, Coll. H.M. & party, 13. iv. 79. (ii) 1 ex., 98 mm. Bailadila, 53 km. South-west of Geedam, Coll. D.P.S. & party, 4. vi. 80.

Distribution : All along the Himalayas, Chota Nagpur and Vindhya Satpura mountains of the Indian Peninsula. Also upper Burma.

Garra mullya (Sykes)

1841. *Chondrostoma mullya* Sykes, *Trans. zool. Soc. Lond.*, 2 : 359, pl. 62, fig. 3. (type-locality, the Beema river at Dounde).

1921. *Garra Mullya* Hora, *Rec. Indian Mus.*, Calcutta, 22 : 658.

Material : (i) 22 exs., 75 mm—112 mm, Lakhanpur Market (Mahanadi Collection), Coll. T.K.C. & A.K.K., 24. xi. 79. (ii) 3 exs., 78 mm—112 mm, Pharasgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79. (iii) 2 exs., 123 mm—184 mm, Bastar Village Market, Coll. A.K.K., 6. vii. 78. (iv) 1 ex., 110 mm, Indravati river at Jagdalpur, Coll. M.H. & party, 5. iv. 79.

Distribution : Freshwaters of Uttar Pradesh, Bihar, Orissa, Madhya Pradesh, Kathiawar, Bombay, Poona, Deolali, Karnataka, Malabar, Travancore-Cochin.

Labeo angra (Hamilton)

1822. *Cyprinus angra* Hamilton, *Fish. Ganges* : 331, 391.

1878. *Labeo angra*, Day, *Fish. India* : 541-542, pl. 128, fig. 2.

Material : (i) 68 exs., 55 mm—100 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 14-16. xi. 79. (ii) 1 ex., 120 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Assam, West Bengal, Orissa and Madhya Pradesh.

Labeo boga (Hamilton)

1882. *Cyprinus boga* Hamilton, *Fish. Ganges* : 286, 386, pl. 28, fig. 80, (type-locality, R. Brahmaputra).

1889. *Labeo boga*, Day, *Fauna Br. India Fish.*, 1 : 269.

Material : (i) 1 ex., 224 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 1 ex., 268 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (iii) 85 exs., 60 mm—117 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : Orissa, Assam, Madhya Pradesh. Also Burma and Eastern Nepal.

Labeo boggut (Sykes)

1841. *Chondrostoma boggut* Sykes, *Trans. Zool. Soc. Lond.*, 2 : 359, (type-locality, Poona water-ways).

1889. *Labeo boggut*, Day, *Fauna Br. India Fish.*, 1 : 269.

Material : (i) 2 exs., 128 mm & 130 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (ii) 49 exs., 62 mm—90 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-16. xi. 79. (iii) 2 exs., 82 mm & 86 mm, Pharsgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79. (iv) 72 exs., 95 mm—120 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Freshwaters of E. Punjab, Uttar Pradesh, Bihar, West Bengal, Madhya Pradesh, Ahmedabad, Cutch, Bombay, Deccan, Poona, Deolali, Tamil Nadu. Also Pakistan, Bangladesh and Malaysia.

Remark : In the examples collected from Kanker Market the head is 5.3 & 5.5 respectively in total length. In one specimen of the same locality the lower half of the tail fin is shorter than the upper half.

Labeo calbasu (Hamilton)

1822. *Cyprinus calbasu* Hamilton, *Fish. Ganges* : 297, 389, pl. 2, fig. 33, (type-locality, Bengal).

1889. *Labeo calbasu*, Day, *Fauna Br. India Fish.*, 1 : 259, fig. 93.

Material : (i) 1 ex., 286 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (ii) 17 exs., 97 mm—300 mm, Saberi river at Dondra, 3 km. from Konta, Coll. T.K.C. & A.K.K., 16. xi. 79. (iii) 1 ex., 365 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79.

Distribution : India, Pakistan, Bangladesh, Burma, Thailand and also South-China.

Labeo dyocheilus (McClelland)

1839. *Cyprinus dyocheilus* McClelland, *Asiatic Res.*, **19** : 268, 330, pt. 37, fig. 1.

1878. *Labeo dyocheilus*, Day, *Fish. India* : 540-541, pl. 130, fig. 1.

Material : (i) 2 exs., 75 mm & 84 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79. (ii) 2 exs., 155 mm & 180 mm, Saberi river at Dondra, 3 km. from Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : Sind hills, along the Himalayas to Sikkim and Assam and Madhya Pradesh.

Labeo fimbriatus (Bloch)

1797. *Cyprinus fimbriatus* Bloch. *Ichth.*, **12** : 50, pl. 409, (type-locality, Madras).

1889. *Labeo fimbriatus*, Day, *Fauna Br. India, Fish.*, **1** : 258.

Material : (i) 3 exs., 122 mm—239 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79. (ii) 21 exs., 153 mm—305 mm, Saberi river at Dondra, 3 km. from Konta, Coll. T.K.C. & A.K.K., 15-16. xi. 79.

Distribution : Freshwaters of E. Punjab, Uttar Pradesh, Orissa, Madhya Pradesh, Southern India, Deolali, Poona, Ahmedabad. Also Pakistan.

Labeo gonius (Hamilton)

1822. *Cyprinus gonius* Hamilton, *Fish. Ganges* : 292, 387, (type locality, Bengal).

1889. *Labeo gonius* Day, *Fauna Br. India, Fish.* **1** : 261.

Material : (i) 1 ex., 275 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (ii) 3 exs., 101 mm—107 mm, Saberi at Dondra, 3 km from Konta, Coll. T.K.C. & A.K.K., 16. xi. 79. (iii) 1 ex., 110 mm, Mahanadi river at Charama, Coll. A.K.K. & T.K.C., 23. xi. 79.

Distribution : Northern India, Madhya Pradesh. Also Bangladesh and Burma.

Remark : In the specimen collected from Kanker Market : D 15, L1 74, Ltr. $12\frac{1}{2}/10\frac{1}{2}$, Barbels 1 pair, Rostral & Maxillary barbels absent.

In the specimens collected from Saberi river the L1 scales range from 61-65.

Labeo pangusia (Hamilton)

1822. *Cyprinus pangusia* Hamilton, *Fish. Ganges* : 285, 386, (type-locality, R. Kosi).

1889. *Labeo pangusia*, Day, *Fauna Br. India, Fish*, 1 : 266.

Material : 64 exs., 60 mm—89 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79.

Distribution : The Ganges and Brahmaputra drainage system of Himlayas, and Madhya Pradesh.

Labeo porcellus (Heckel)

1838. *Tylognathus porcellus* Heckel, in *Hugels Kashmir*, iv : 385.

1878. *Labeo porcellus*, Day, *Fish. India* : 539, pl. 128, fig. 1.

Material : 1 ex., 360 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79.

Distribution : Poona, Bombay and Madhya Pradesh.

Labeo rohita (Hamilton)

1822. *Cyprinus rohita* Hamilton, *Fish. Ganges* : 301, 388, pl. 36, fig. 85, (type-locality, Gangetic provinces).

1889. *Labeo rohita*, Day, *Fauna Br. India, Fish.*, 1 : 262.

Material : (i) 1 ex., 138 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 6 exs., 162 mm—193 mm, Geedam Market, Coll. M.H. & Party, 8. iv. 79.

Distribution : Throughout northern India, Madhya Pradesh. Also Pakistan, Bangladesh and Burma (Introduced into S. India for cultural purposes).

Osteobrama cotio peninsularis (Silas)

1822. *Cyprinus cotio*, Hamilton, *Fish. Ganges* : 339, p. 39, fig. 93, (type-locality, Bengal).

1952. *Osteobrama cotio peninsularis* Silas, *Proc. Nat. Inst. Sci. India*, 18 :

Material : (i) 1 ex., 49 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (ii) 3 exs., 59 mm—65 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (iii) 10 exs., 53 mm—71 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (iv) 10 exs., 58 mm—88 mm, Kanker Market, Coll. A.K.K., 16-19. vii. 78. (v) 4 exs., 65 mm—84 mm, Dudhnadi at Kanker,

Coll. A.K.K., 19. vii. 78. (vi) 1 ex., 68 mm, Tank at Kanker, Coll. A.K.K., 20. vii. 78. (vii) 2 exs., 76 mm—84 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (viii) 1 ex., 70 mm, Tank at Barsur, Coll. M.H. & Party, 11. iv. 79. (ix) 4 exs., 46 mm—52 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-14. xi. 79. (x) 1 ex., 60 mm, Chotanalla, 1 km. from P.W.D. Rest House, Charama, Coll. T.K.C. & A.K.K., 20. xi. 79. (xi) 3 exs., 57 mm—66 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Assam, West Bengal, Bihar, Madhya Pradesh, Punjab, Uttar Praaesh. Also Bangladesh and Pakistan.

Osteobrama vigorsii (Sykes)

1841. *Rohtes vigorsii* Sykes, *Trans. zool. Soc. Lond.*, **2** : 364, pl. 63, (type-locality, the Beema river at Pairgaon).

1889. *Osteobrama vigorsii*, Day, *Fauna Br. India, Fish.*, **1** : 341.

Material : (i) 1 ex., 161 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 2 exs., 182 mm & 191 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (iii) 1 ex., 76 mm, Tank at Kanker, Coll. A.K.K., 20. vii. 78. (iv) 5 exs., 58 mm—167 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (v) 19 exs., 110 mm—155 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 14. iv. 79. (vi) 83 exs., 55 mm—153 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Freshwaters of Orissa, Madhya Pradesh, Southern India, Poona, Deolali and the Kistna and the Kistna and Godavari rivers.

Puntius amphibius (Valenciennes)

1842. *Capoeta amphibia* Valenciennes, *Hist. nat. Poiss.*, **16** : 282, pl. 478, (type locality, Bombay)

1962. *Puntius amphibia*, Misra, *Rec. Indian Mus.*, **57** : 151.

Material : (i) 2 exs., 74 mm & 110 mm, Tank at Lohand'guda, Coll. A.K.K., 7. vii. 78. (ii) 2 exs., 60 mm & 84 mm, Kanker Market, Coll. A.K.K., 19. vii. 78. (iii) 1 ex., 60 mm, Tank at Kanker, Coll. A.K.K., 20. vii. 78. (iv) 2 exs., 90 mm & 106 mm, Charama Tank, Charama, Coll. A.K.K., 20. vii. 78. (v) 1 ex., 66 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (vi) 80 exs., 40 mm—52 mm, Lohandiguda Market, Coll. T.K.C. & A.K.K., 9. xi. 79. (vii) 21 exs., 49 mm—90 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (viii) 63 exs., 49 mm—72 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-16. xi. 79.

(ix) 16 exs., 60 mm—71 mm, Pharasgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79. (x) 21 exs., 55 mm—86 mm, Tank at Kondagaon, Coll. T.K.C. & A.K.K., 20. xi. 79. (xi) 4 exs., 68 mm—71 mm, Chotanalla (connecting Mahanadi river) at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Freshwaters of Uttar Pradesh, Orissa, Tam'il Nadu, Karnataka, Madhya Pradesh, Travancore Cochin, Bombay, Western Cost of India. Also Sri Lanka.

Puntius arenatus (Day)

1877. *Barbus arenatus* Day, *Fish. India* : 574, pl. 142, fig. 7, (type locality, Madras).

1981. *Puntius arenatus*, Jayaram, *The Freshwater Fishes of India, A Handbook* : 99.

Material : (i) 13 exs., 58 mm—122 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 3. iv. 79. (ii) 20 exs., 54 mm—74 mm, Kapabera Dam, Kondagaon, Coll. T.K.C. & A.K.K., 21. xi. 79.

Distribution : Tamil Nadu and Madhya Pradesh.

Puntius arulius (Jerdon)

1849. *Systomus arulius* and *rubrotinctus*, Jerdon, *M.J.L. and S.* : 317.

1867. *Puntius arulius*, Day, *Proc. Zool. Soc.* : 294.

Material 1 ex., 47 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78.

Distribution : Wynaad and Neilgherry range of hills and the rivers at their bases, and at least as far south as Cottayam in Travancore; also in the Cauvery and Madhya Pradesh.

Puntius chola (Hamilton)

1822. *Cyprinus chola* Hamilton, *Fish. Ganges* : 312, 389, (type locality, north-eastern parts of Bengal).

1974. *Puntius chola* Menon, *A. check-list of Fishes of the Himalayan and the Indo-Gangetic Plains* : 37-38.

Material : (i) 3 exs., 101 mm—115 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (ii) 1 ex., 123 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (iii) 3 exs., 122 mm—124 mm, Tank at Barsur, Coll. M.H. & Party, 11. iv. 79. (iv) 1 ex., 70 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79. (v) 34 exs., 47 mm—85 mm, Tank at Kondagaon, Coll. T.K.C. & A.K.K., 20. xi. 79. (vi) 1 ex., 55 mm, Maha-

nadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (vii) 1 ex., 105 mm, Chintapalli, 46 kms. north-west of Bijapur, Coll. D.P.S. & Party, 10. vi. 80.

Distribution : India, Sri Lanka, Pakistan, Bangladesh and Burma.

***Puntius conchoni* (Hamilton)**

1822. *Cyprinus conchoni* Hamilton, *Fish. Ganges* : 317, 389, (type locality, north-east Bengal and rivers of Kosi and Ami).

1962. *Puntius conchoni*, Misra, *Rec. Indian Mus.*, **57** : 152.

Material : (i) 3 exs., 53 mm—65 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 5 exs., 35 mm—42 mm, Bastar village Market, Coll. A.K.K., 6. vii. 78. (iii) 10 exs., 54 mm—76 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (iv) 2 exs., 46 mm & 62 mm, Tank at Pujaripal village, Coll. A.K.K., 14. vii. 78. (v) 6 exs., 45 mm—67 mm, Tank at Kanker, Coll. A.K.K., 16 & 20. vii. 78. (vi) 1 ex., 54 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (vii) 20 exs., 58 mm—88 mm, Dalpatsagar, Jagdalpur, Coll. M. H. & Party, 2-3. iv. 79. (viii) 3 exs., 38 mm—52 mm, Tank at Barsur, Coll. M.H. & Party, 9. iv. 79. (ix) 7 exs., 40 mm—51 mm, Indravati river at Budhghat, Coll. M. H. & Party, 10. iv. 79. (x) 35 exs., 22 mm—65 mm, Confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 8-9. xi. 79. (xi) 3 exs., 45 mm—52 mm, Saberi at Konta, Coll. T.K.C. & A.K.K., 13-14. xi. 79. (xii) 46 exs., 23 mm—40 mm, Dudhnadi at Kanker, Coll. T.K.C. & A.K.K., 25. xi. 79. (xiii) 11 exs., 33 mm—53 mm, Mahanadi at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (xiv) 80 exs., 42 mm—60 mm, Lakhanpur Market, Coll. T.K.C. & A.K.K., 24. xi. 79. (xv) 12 exs., 33 mm—59 mm, Lohandiguda Market, Coll. T.K.C. & A.K.K., 9. xi. 79. (xvi) 2 exs., 46 mm—57 mm, Bailadila, 53 km. South-west of Geedam, Coll. D.P.S. & Party, 4. vi. 80.

Distribution : Assam, West Bengal, Orissa, Bihar, Uttar Pradesh, Punjab, Southern India. Also Bangladesh and Pakistan.

***Puntius curmuca* (Hamilton)**

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

1962. *Puntius curmuca*, Misra, *Rec. Indian Mus.*, **57** : 153.

Material : 9 exs., 67 mm—130 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10. iv. 79.

Distribution : Freshwaters of Travanhore—Cochin, Western Ghats and Madhya Pradesh.

Puntius dorsalis (Jerdon)

1849. *Systomus dorsalis* and ? *tristis*, Jerdon, *M. J. L. and Sc.* : 314, 316.

1981. *Puntius dorsalis*, Jayaram, *The Freshwater Fishes of India, A Handbook*, : 100.

Material : 2 exs., 118 mm & 124 mm, Kapabara Dam, Kondagaon, Coll. T.K.C. & A.K.K., 21. xi. 79.

Distribution : Kurnool, Karnataka, throughout Tamil Nadu as low as the Cauvery and Coleroon rivers, Madhya Pradesh. Also Sri Lanka.

Puntius gelius (Hamilton)

1822. *Cyprinus gelius* Hamilton, *Fish. Ganges* : 320, 390, pl. 145, fig. 3, (type locality, north-east parts of Bengal).

1974. *Puntius gelius*, Menon, *A Check-list of fishes of the Himalayan and the Indo-Gangetic Plains*, 39.

Material : (i) 2 exs., 35 mm & 38 mm, Indravati river at Jagdalpur, Coll. A.K.K., 9. vii. 78. (ii) 1 ex., 45 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78.

Distribution : Bihar, Orissa, West Bengal, Assam, Madhya Pradesh. Also Bangladesh.

Puntius kolus (Sykes)

1841. *Barbus kolus* Sykes, *Trans. zool. Soc. Lond.*, 2 : 357, pl. 62, fig. 1, (type locality, Mota mola river, 8 miles east of Poona).

1962. *Puntius kolus* Misra, *Rec. Indian Mus.*, 57 : 154-155.

Material : (i) 1 ex., 76 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 4 exs., 50 mm—77 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (iv) 1 ex., 217 mm, Confluence of river Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 9. xi. 79. (v) 9 exs., 72 mm—120 mm, Sobera river at Konta, Coll. T.K.C. & A.K.K., 13-16. xi. 79. (vi) 4 exs., 104 mm—290 mm, Saberi river at Dondra, 3 km. from Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : Freshwaters of Madhya Pradesh, Deolali, Southern India and throughout Kistna, Tungabhadra and Godavari rivers. Also Malaysia.

Puntius melanostigma (Day)

1849. *Systomus carnaticus*, Jerdon, *Madras. J. Lit. Science*, : 315.
 1878. *Barbus melanostigma* Day, *Fish. India* : 573-574, pl. 143, fig. 1.
 1981. *Puntius melanostigma*, Jayaram, *The Freshwater Fishes of India, A Handbook* : 101.

Material : (i) 1 ex., 79 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (ii) 2 exs., 93 mm & 96 mm, Dudhnadi at Kanker, Coll. A.K.K., 19. vii. 78. (iii) 12 exs., 55 mm—73 mm, Pharasgaon Market, Coll. T.K.C & A.K.K., 19. xi. 79.

Distribution : Wynaad hills in Malabar, Bowany river, Cauvery river and Madhya Pradesh.

Puntius phutunio (Hamilton)

1822. *Cyprinus phutunio* Hamilton, *Fish. Ganges* : 319, 390, (type-locality, north-eastern Bengal).
 1974. *Puntius phutunio*, Menon. *A check list of fishes of the Himalayan and the Indo-Gangetic Plains* : 39-40.

Material : 2 exs., 34 mm & 36 mm, Tank at Pujaripal village, Coll. A.K.K., 14. vii. 78.

Distribution : Orissa, West Bengal, Assam, Madhya Pradesh. Also Bangladesh and Burma.

Puntius saberi Datta & Karmakar

1981. *Puntius saberi* Datta & Karmakar, *Bull. Zool. Surv. India*, 3(3) : 179-183, (type-locality, Pujaripal village, Bastar District, M.P.).

Material : 13 exs., (Holotype & 12 Paratypes), 28 mm—45 mm, Cheroguru talao, Pujaripal village, 23 kms. from Sukna, Coll. A.K.K., 21. vii. 78.

Distribution : Bastar District, Madhya Pradesh.

Puntius sarana sarana (Hamilton)

1822. *Cyprinus sarana* Hamilton, *Fish. Ganges* : 307, 388, (type-locality, Gangetic system, Bengal).
 1974. *Puntius sarana sarana*, Menon, *A check-list of fishes of the Himalayan and the Indo-Gangetic Plains* : 41.

Material : (i) 1 ex., 158 mm, Bas'ar village Market, Coll. A.K.K., 6. vii. 78. (ii) 4 exs., 157 mm—271 mm, Kanker Market, Coll. A.K.K., 16 &

19. vii. 78. (iii) 6 exs., 147 mm—263 mm, Tank at Barsur, Coll. M.H. & Party, 11. iv. 79. (iv) 2 exs., 205 mm & 206 mm, Kapabera Dam, Kondagaon, Coll. T.K.C. & A.K.K., 21. xi. 79. (v) 1 ex., 190 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79. (vi) 4 exs., 97 mm—260 mm, confluence of River Indravati with Narangi river at Kondagaon, Coll. T.K.C. & A.K.K., 8-9. xi. 79. (vii) 20 exs., 65 mm—92 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79. (viii) 18 exs., 87 mm—107 mm, Pharasgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79. (ix) 7 exs., 73 mm—92 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : India except peninsular region, south of the Kistna. Also Pakistan, Nepal, Bhutan and Bangladesh.

Puntius sophore (Hamilton)

1822. *Cyprinus sophore* Hamilton, *Fish. Ganges* : 310, 389, pl. 19, fig. 86, (type-locality, ponds and rivers in Gangetic provinces).

1868. *Barbus stigma*, Day, *Proc. Zool. Soc. Lond.*, : 198.

1974. *Puntius sophore*, Menon, *A check-list of the fishes of the Himalayan and the Indo-Gangetic Plains* : 40.

Material : (i) 27 exs., 81 mm—86 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 6 exs., 73 mm—88 mm, Tank at Bastar village, Coll. A.K.K., 6. vii. 78. (iii) 4 exs., 62 mm—80 mm, Tank at Lohandiguda, Coll. A.K.K., 7. vii. 78. (iv) 1 ex., 90 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 6. vii. 78. (v) 6 exs., 73 mm—103 mm, Tanks at Jagdalpur, Coll. A.K.K., 8. vii. 78. (vi) 1 ex., 56 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (vii) 1 ex., 59 mm, Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (viii) 2 exs., 81 mm & 98 mm, Tank at Pujaripal village, Coll. A.K.K., 14. vii. 78. (ix) 8 exs., 81 mm—102 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78. (x) 9 exs., 68 mm—112 mm, Jagdalpur Market, Coll. M.H. & Party, 2-3. iv. 79. (xi) 20 exs., 94 mm—124 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 2-3. iv. 79. (xii) 3 exs., 58 mm—68 mm, Tank at Barsur, Coll. M.H. & Party, 8-9. iv. 79. (xiii) 21 exs., 64 mm—90 mm, Tanks at Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79. (xiv) 129 exs., 30 mm—56 mm, Duddnadi at Kanker Coll. T.K.C. & A.K.K., 25. xi. 79. (xv) 3 exs., 48 mm—54 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79. (xvi) 1 ex., 60 mm, Tank at Kondagaon, Coll. T.K.C. & A.K.K., 20. xi. 79. (xvii) 1 ex., 70 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : India, Pakistan, Nepal, Bangladesh, Burma and Yunnan.

Puntius ticto (Hamilton)

1822. *Cyprinus ticto* Hamilton, *Fish Ganges* : 314, 398, pl. 8, fig. 87, (type-locality, south east parts of Bengal).

1962. *Puntius ticto*, Misra, *Rec. Indian Mus.*, **57** : 156.

Material : (i) 35 exs., 48 mm—75 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 4 exs., 52 mm—54 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (iii) 2 exs., 50 mm & 51 mm, Tank at Jagdalpur, Coll. A.K.K., 8. vii. 78. (iv) 1 ex., 50 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (v) 2 exs., 47 mm & 48 mm, Kanker Market, Coll. A.K.K., 19. vii. 78. (vi) 62 exs., 46 mm—84 mm, Jagdalpur Market, Coll. M.H. & party, 2. iv. 79. (vii) 15 exs., 58 mm—72 mm, Indravati river at Jagdalpur, Coll. M.H. & party, 5. iv. 79. (viii) 4 exs., 58 mm—78 mm, Tank at Barsur, Coll. M.H. & party, 8-9. iv. 79. (ix) 6 exs., 21 mm—55 mm, Charama canal, Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : India, Sri Lanka, Pakistan, Bangladesh, Burma and Thailand.

Puntius vittatus Day

1865. *Puntius vittatus* Day, *Proc. zool. Soc.*, : 303, 1865, *Fish. Malabar*, : 215, pl. 13, fig. 1.

Material : 4 exs., 55 mm—58 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78.

Distribution : Karnataka, Tamil Nadu, Wynaad, Kerala, Madhya Pradesh, Cutch. Also Sri Lanka.

Tor khudree (Sykes)

1838. *Barbus khydree* Sykes, *Proc. Zool. Soc. Lond.*, : 159, (type-locality, Mota Mola river, 13 kms. east of Poona).

1962. *Tor khudree*, Misra, *Rec. Indian Mus.*, **57** : 149.

Material : 1 ex., 115 mm, Tank at Bursur, Coll. M.H. & party, 11. iv. 79.

Distribution : Freshwater of Uttar Pradesh, Orissa, Madhya Pradesh and Peninsular India.

Tor tor (Hamilton)

1822. *Cyprinus tor* Hamilton, *Fish. Ganges* : 305, 388, (type-locality, R. Mahananda).

1954. *Tor tor*, Menon, *Rec. Indian Mus.*, **52** : 22.

Material : (i) 2 exs., 240 mm & 345 mm, Indravati river at Jagdalpur, Coll. M.H. & party, 5. iv. 79. (ii) 16 exs., 54 mm—97 mm, Indravati river at Budhghat, Coll. M.H. & party, 10. iv. 79. (iii) 1 ex., 350 mm, Indravati river at Chitrakot, Coll. T.K.C. & A.K.K., 11. xi. 79.

Distribution : All along Himalayas ; Madhya Pradesh. Also Burma.

Family COBITIDAE

Lepidocephalus (Lepidocephalichthys) guntea (Hamilton)

1822. *Cobitis guntea* Hamilton, *Fish. Ganges* : 353, 394 (type-locality, ponds and freshwater of Bengal).

1889. *Lepidocephalichthys guntea*, Day, *Fauna Br. India, Fish.*, 1 : 220, fig. 80.

1981. *Lepidocephalus (Lepidocephalichthys) guntea*, Jayaram, *The Freshwater Fishes of India, A Handbook* : 181.

Material : (i) 52 exs., 58 mm—85 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 6 exs., 73 mm—83 mm, Tanks at Bastar village, Coll. A.K.K., 6. vii. 78. (iii) 2 exs., 65 mm & 74 mm, Tank at Pujaripal village, 23 kms. from Sukma, Coll. A.K.K., 14. vii. 78. (iv) 3 exs., 66 mm—100 mm, Tanks at Kanker, Coll. A.K.K., 16 & 20. vii. 78. (v) 3 exs., 56 mm—95 mm, Kanker Market, Coll. A.K.K., 16 & 19. vii. 78. (vi) 1 ex., 67 mm, Dudhnadi at Kanker, Coll. A.K.K., 19. vii. 78. (vii) 2 exs., 77 mm & 83 mm, Tank at Barsur, Coll. M.H. & Party, 8. iv. 79. (viii) 50 exs., 41 mm—58 mm, confluence of river Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 8-9. xi. 79. (ix) 6 exs., 45 mm—65 mm, Lohandiguda Market, Coll. T.K.C. & A.K.K., 9. xi. 79. (x) 2 exs., 49 mm—56 mm, Nalla beside Lohandiguda—Chitrakot Road at Lohandiguda, Coll. T.K.C. & A.K.K., 10. xi. 79. (xi) 2 exs., 36 mm & 59 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (xii) 2 exs., 69 mm—78 mm, 5 km. north-west of P.W.D. Rest House, Barsur, Coll. D.P.S. & Party, 2. vi. 80.

Distribution : Trought northern India, Madhya Pradesh. Also Nepal and Bangladesh.

Lepidocephalus (Lepidocephalichthys) thermalis (Cuvier & Valenciennes)

Cobitis thermalis, Cuv. and Val. *H. N. Poiss.* XVIII : 78.

1864. *Lepidocephalichthys thermalis*, Bleeker in *Verh. Holl. Maat Haar.* Cyprin. and Cobit. Ceylon : 6, t. i, f. 1.

1981. *Lepidocephalus (Lepidocephalichthys) thermalis*, Jayaram, *The Freshwater Fishes of India, A Handbook*, : 181.

Material : (i) 1 ex., 60 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 2 exs., 68 mm & 71 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (iii) 2 exs., 65 mm & 67 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79.

Distribution : Southern India, Malabar coast, Wynaad, Madhya Pradesh. Also Sri Lanka.

Noemacheilus botia (Hamilton)

1822. *Cobitis botia* Ham. Buch. Fish. Ganges, : 350, 394. (type locality, rivers of north-eastern parts of Bengal).

1878. *Nemacheilus botia*, Day, Fish. India : 614, pl. clvi, fig. 5.

Material : 1 ex., 53 mm, Bailadila, 53 km. south-west of Geedam, Coll. D.P.S. & Party, 4. vi. 80.

Distribution : Throughout India (except the Malabar coast and south of River Kistna). Also Sri Lanka and Pakistan.

Noemacheilus denisonii Day

1849. *Cobitis montanus* Jerdon M.J.L. and S, : 332.

1867. *Nemacheilus denisonii* Day, Proc. zool. Soc., : 287. Fish India : 617, cl iii, fig. 5, 1878.

Material : 1 ex., 52 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10. iv. 79.

Distribution : Nilgiri and Coorghills and rivers at their bases ; Mysore, Deccan and Madhya Pradesh.

Order SILURIFORMES

Family BAGRIDAE

Mystus bleekeri (Day)

1846. *Bagrus keletius* Bleeker (nec. Valenciennes), Nat. & Geneesk. Arch. Ned. Ind., 3(2) : 135, (type locality, Bengal).

1877. *Macrones bleekeri* Day, Fish India : 451, pl. 101, fig. 1.

1935. *Mystus bleekeri*, Hora and Mukerje, Rec. Indian Mus., 37 : 385.

Material : (i) 2 exs., 182 mm & 222 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 2 exs., 114 mm & 123 mm, Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (iii) 8 exs., 69 mm—90 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (iv) 1 ex., 69 mm, Dudhnadi at Kanker, Coll.

A.K.K., 19. vii. 78 (v) 7 exs., 67 mm—90 mm, Bhopalpatnam talao, Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79. (vi) 1 ex., 81 mm, Mahanadi at Charama, Coll. T.K.C., & A.K.K., 23. xi. 79.

Distribution : Northern India, Madhya Pradesh, Assam., Also Pakistan, Bangladesh and Burma.

***Mystus cavasius* (Hamilton)**

1822. *Pemilodus cavasius* Hamilton,, *Fish. Ganges* : 203, 379, pl. 11, fig. 67. (type locality, Gangetic provinces).

1948. *Mystus cavasius*, Hora, *Rec. Indian Mus.*, 46 : 65, 72.

Material : (i) 6 exs., 103 mm—122 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 7 exs., 92 mm—138 mm, Bastar village Market, Coll. A.K.K., 6. vi. 78. (iii) 1 ex., 188 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (iv) 1 ex., 91 mm, Indravati river at Jagda'pur, Coll. A.K.K., 9. vii. 78. (v) 1 ex., 96 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (vi) 2 exs., 158 mm & 165 mm, Nalla connecting Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (vii) 4 exs., 38 mm—142 mm, tank at Pujaripal village, Coll. A.K.K., 14. vii. 78. (viii) 7 exs., 41 mm—124 mm, Kanker Market, Coll. A.K.K., 16 & 19. vii. 78. (ix) 4 exs., 100 mm—173 mm, Dudhnadi at Kanker, Coll. A.K.K., 19. vii. 78. (x) 2 exs., 79 mm & 105 mm, tank at Kanker, Coll. A.K.K., 20. vii. 78. (xi) 1 ex., 122 mm, Mahanali river at Charama, Coll. A.K.K., 20. vii. 78. (xii) 6 exs., 97 mm—120 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (xiii) 23 exs., 80 mm—110 mm, Saberi river at Konta, Coll. T.K.C., & A.K.K., 13-16. vi. 79. (xiv) 1 ex., 150 mm, Kapabera dam, Kondagaon, Coll. T.K.C. & A.K.K., 21. xi. 79. (xv) 32 exs., 60 mm—115 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (xvi) 2 exs., 78 mm & 85 mm Pharasgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79.

Distribution : Throughout Northern Ind'a, Orissa, Tamil Nadu, Madhya Pradesh. Also Pakistan, Bangladesh and Burma.

***Mystus montanus* (Jerdon)**

1849. *Bagrus montanus* Jerdon, *J. Lit. Sci.*, 15(2) : 337. (type locality, Manantoddy, Wynaad).

1954. *Mystus (Mystus) montanus*, Jayaram, *Rec. Indian Mus.*, 51(4) : 542.

Material : 1 ex., 75 mm, Kanker Market, Coll. A.K.K., 19. vii. 78.

Distribution : Kerala, Wynaad range of hills, Madhya Pradesh, Assam.

Mystus vittatus (Bloch)

1897. *Silurus vittatus* Bloch, *Ichthyol. Hist. nat.*, **11** : 40, pl. 371, fig. 2. (type locality, Tranquebar, S. India).
 1940. *Mystus vittatus*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, **3** : 93, text fig. 93.

Material : (i) 2 exs., 111 mm & 147 mm, tank at Kanker, Coll. A.K.K., 16. vii. 78. (ii) 2 exs., 111 mm & 122 mm, Charama tank, Charama, Coll. A.K.K., 20. vii. 78.

Distribution : India, Sri Lanka, Nepal, Pakistan, Bangladesh, Burma and Thailand.

Aorichthys aor (Hamilton)

1822. *Pimelodus aor* Hamilton, *Fish. Ganges* : 205, 379, pl. 20, fig. 68, (type locality, Rivers of Bengal and upper parts of Gangetic estuaries).
 1971. *Aorichthys aor*, Jayaram, *Proc. zool. Soc. Calcutta*, **24** : 155.

Material : (i) 1 ex., 340 mm, Lohanliguda Market, Coll. A.K.K., 7. vii. 78. (ii) 2 exs., 69 mm—92 mm, Saberi river at Konta, Coll. A.K.K., 7. vii. 78. (iii) 2 exs., 69 mm—92 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (iii) 1 ex., 130 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : India : upto Krishna river system in the south. Also Pakistan, Bangladesh and Burma.

Aorichthys seenghala (Sykes)

1839. *Plakystoma seenghala* Sykes, *Trans. zool. Soc. Lond.*, **2** : 371, pl. 65, fig. 2, (type locality, Mota Mula river, Poona).

1971. *Aorichthys seenghala*, Jayaram, *Proc. zool. Soc. Calcutta*, **24** : 155.

A.K.K., 23. xi. 79. nadi river at Charama, T.K.C. &

Material : 1 ex., 215 mm, Maha

Distribution : Large rivers of India upto Krishna river system in the south. Also Pakistan and China.

Rita kuturnee (Sykes)

1839. *Phractocephalus kuturnee* Sykes, *Trans. zool. Soc. Lond.*, **2** : 372, pl. 65, fig. 3, (type locality, Beema river at Paigaoon).

1962. *Rita kuturnee*, Misra, *Rec. Indian Mus.*, **57** : 191-192.

Material : (i) 4 exs., 112 mm—144 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (ii) 12 exs., 59 mm—121 mm, Indravati river at Jag-

dalpur, Coll. M.H. & Party, 5. iv. 79. (iii) 11 exs., 116 mm—140 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 14. vii. 79.

Distribution : Freshwaters of Madhya Pradesh, Southern India, Poona, Tungabhadra and Kistna rivers. Also Burma.

Rita rita (Hamilton)

1822. *Pimelodus rita* Hamilton, *Fish. Ganges* : 165, 376, pl. 24 & 25, fig. 53, (type locality, estuaries of Bengal).

1937. *Rita rita*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3, : 95, text-fig. 95.

Material : (i) 2 exs., 145 mm—175 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (ii) 14 exs., 102 mm—285 mm, Confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 9. xi. 79.

Distribution : Jamuna, Ganges, and in Madhya Pradesh. Also Burma and Pakistan.

Family SILURIDAE

Ompok bimaculatus (Bloch)

1797. *Silurus bimaculatus* Bloch, *Ichthyol. Hist. Nat. d. Poiss.*, 11 : 17, pl. 364. (type locality, Malabar).

1962. *Ompok bimaculatus*, Mishra (in part), *Rec. Indian Mus.*, 57 : 178.

Material : (i) 2 exs., 181 mm & 198 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (ii) 3 exs., 225 mm—239 mm, Kanker Market, Coll. A.K.K., 18.vii. 78. (iii) 3 exs., 173 mm—250 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (iv) 6 exs., 158 mm—230 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 14. iv. 79. (v) 1 ex., 240 mm, Confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 9. xi. 79. (vi) 2 exs., 132 mm & 200 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79. (vii) 9 exs., 83 mm—170 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (viii) 1 ex., 143 mm, Lakhanpur Market (Mahanadi collection), Coll. T.K.C. & A.K.K., 24. xi. 79.

Distribution : India, Sri Lanka, Pakistan, Bangladesh, Burma, Indonesia and Thailand.

Wallago attu (Schneider)

1801. *Silurus attu* Schneider, *Syst. Ichth.*, : 378, pl. 75, (type locality, Malabar).

1889. *Wallago attu*, Day, *Fauna Br. India, Fish* ; 1 : 126.

Material : (i) 1 ex., 86 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (ii) 3 exs., 93 mm—96 mm, Kanker Market, Coll. A.K.K., 16. vii. 79. (iii) 1 ex., 71 mm, Korar Market, Coll. A.K.K., 17. vii. 79. (iv) 2 exs., 96 mm & 106 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (v) 1 ex., 370 mm, Confluence of River Indravati with Narang river at Lohandiguda, Coll. T.K.C. & A.K.K., 9. xi. 79. (vi) 1 ex., 315 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79. (vii) 1 ex., 310 mm, Saberi at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : India, Sri Lanka, Pakistan, Bangladesh, Burma, Thailand and Indonesia.

Family SCHILBEIDAE

Clupisoma bastari Datta & Karmakar

1980. *Clupisoma bastari* Datta & Karmakar, *Bull. Zool. Surv. India*, 2(2 & 3) : 193-196, (type locality, Indravati River at Lohandiguda, Bastar District, M.P.).

Material : (i) 2 exs., (Holotype & Paratype), 175 mm—180 mm, Indravati river at Lohandiguda, 33 kms west of Jagdalpur Coll. A.K.K., 7. vii. 78. (ii) 7 exs., 68 mm—86 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79. (iii) 1 ex., 225 mm, Indravati river at Lohandiguda, Coll. T.K.C. & A.K.K., 11. xi. 79. (iv) 1 ex., 230 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79.

Distribution : Bastar District, Madhya Pradesh.

Clupisoma garua (Hamilton)

1822. *Silurus garua* Hamilton, *Fish. Ganges*; 156, 375, pl. 21, fig. 50. (type locality, freshwater rivers of the Gangetic provinces).

1937. *Clupisoma garua*, Hora, *J. Bombay nat. Hist. Soc.*, 39(4) : 606.

Material : (i) 3 exs., 54 mm—78 mm, Kanker Market, Coll. A.K.K., 16. vii. 78. (ii) 28 exs., 62 mm—180 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79.

Distribution : Northern India, Madhya Pradesh. Also Pakistan and Bangladesh.

Clupisoma montana Hora

1937. *Clupisoma montana* Hora, *J. Bombay nat. Hist. Soc.*, 39(4) : 673, (type locality, Teesta river below Darjeeling).

Material : (i) 3 exs., 78 mm—80 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 22 exs., 45 mm—84 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13. xi. 79.

Distribution : Teesta river below Darjeeling, North Bengal, Jamuna and Sone rivers and Madhya Pradesh. Also Nepal.

Remark : In the examples collected from Korar Market, nasal barbels extend far beyond the eye.

Clupisoma prateri Hora

1937. *Clupisoma prateri* Hora, *J. Bombay. nat. Hist. Soc.*, **39** (4) : : 671, (type locality, Burma).

Material : (i) 2 exs., 120 mm—153 mm, Saberi river at Konta, Coll. A.K.K., 12. vii. 78. (ii) 11 exs., 113 mm—195 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party. (iii) 1 ex., 310 mm, Lohandiguda Market, Coll. T.K.C. & A.K.K., 9. xi. 79. (iv) 13 exs., 88 mm—185 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-16. xi. 79.

Distribution : Teesta river, North Bengal; Sone river, Bihar, Uttar Pradesh, Madhya Pradesh. Also Bangladesh and Burma.

Pseudeutropius atherinoides (Bloch)

1794. *Silurus atherinoides* Bloch, *Naturges ausland Fische*, **8** : 48, pl. 371. fig. 1. (type locality, Tranquebar).

1889. *Pseudeutropius atherinoides*, Day, *Fauna Br. India, Fish.*, **1** : 141.

Material : (i) 3 exs., 78 mm—86 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 5 exs., 64 mm—80 mm, Dudhnadi at Kanker, Coll. A.K.K., 19. vii. 78. (iii) 2 exs., 72 mm & 78 mm, Tank at Kanker, Coll. A.K.K., 20. vii. 78. (iv) 3 exs., 82 mm—84 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78

Distribution : Peninsular India, Eastern Himalayas. Also Bangladesh and Burma.

Remark : In the specimens collected from Kanker the maxillary barbels reach upto ventral fin, but in the specimens collected from Mahanadi river the maxillary barbels reach upto middle of anal.

Silonia childreni (Sykes)

1841. *Ageniosus childreni* Sykes, *Trans. zool. Soc. Lond.*, **2** : 375, (type locality, Deccan).

1952. *Silonia childreni*, Silas, *Proc. nat. Inst. Sci. India*, **18**(5) : 433.

Material : (i) 27 exs., 124 mm-150 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 14. iv. 79. (ii) 1 ex., 435 mm, Lohandiguda

Market, Coll. T.K.C. & A.K.K., 9. xi. 79. (iii) 1 ex., 340 mm, Indravati river at Chitrakot, Coll. T.K.C. & A.K.K., 11. xi. 79.

Distribution : Mostly Southern India, Deccan plateau and Madhya Pradesh.

Family SISORIDAE

Bagarius bagarius (Hamilton)

1822. *Pimelodus bagarius* Hamilton, *Fish. Ganges* : 186, 378, pl. 7, fig. 62, (type locality not given).

1939. *Bagarius bagarius*, Hora, *J. Bombay nat. Hist. Soc.*, 40(4) : 585.

Material : (i) 1 ex., 310 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (ii) 3 exs., 100 mm—370 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 16. xi. 79. (iii) 1 ex., 250 mm, Kukri (Bhor) river at Borgaon, Coll. T.K.C. & A.K.K., 19. xi. 79.

Distribution : India, Pakistan, Bangladesh, Burma, Thailand, Malaysia and Tonkin.

Family CLARIIDAE

Clarias batrachus (Linnaeus)

1758. *Silurus batrachus* Linnaeus, *Syst. Nat.*, 1, ed. 10 : 305, (type locality, Asia and Africa).

1937. *Clarias batrachus*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 80.

Material : (i) 1 ex., 195 mm, Bastar village Market, Coll. A.K.K., 6. vii. 76. (ii) 5 exs., 112 mm—125 mm, Narainpur Market, Coll. T.K.C. & A.K.K., 21. xi. 79.

Distribution : India, Sri Lanka, Pakistan, Bangladesh, Burma, Malaysia, Thailand, Indo-China, Philippines, Hongkong and S. China.

Family HETEROPNEUSTIDAE

Heteropneustes fossilis (Bloch)

1797. *Silurus fossilis* Bloch, *Ichth. Hist. nat. d. Poiss.*, 11 : 36, pl. 370, fig. 2, (type locality, Tranquebar).

1937. *Heteropneustes fossilis*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 81, fig. 77.

Material : (i) 5 exs., 109 mm—120 mm, Bastar village Market, Coll. A.K.K., 6. vii. 78. (ii) 4 exs., 102 mm—128 mm, Dalpatsagar, Jagdalpur,

Coll. A.K.K., 8. vii. 78. (iii) 1 ex., 153 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78.

Distribution : India, Sri Lanka, Pakistan, Nepal, Bangladesh, Burma, Thailand and Indo-China.

Suborder EXOCOETOIDEI

Family BELONIDAE

Xenentodon cancila (Hamilton)

1822. *Esox cancila* Hamilton, *Fish. Ganges* : 213, 380, pl. 27, fig. 70, (type locality, Gangetic provinces).

1937. *Xenentodon cancila*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 108, fig. 112.

Material : (i) 4 exs., 162 mm—260 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 1 ex., 190 mm. Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : India, Sri Lanka, Pakistan, Nepal, Bangladesh, Burma, Thailand and Malaysia.

Superorder ACANTHOPTERYGII

Order CHANNIFORMES

Family CHANNIDAE

Channa gachua (Hamilton)

1801. *Channa orientalis* Schneider, *Syst., Ichth. Bloch* : 496, pl. 90, fig. 2 (type locality, India).

1954. *Channa gachua*, Menon, *Rec. Indian. Mus.*, 52 : 22.

Material : (i) 5 exs., 47 mm—82 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 1 ex., 50 mm, Dalpatsagar, Coll. A.K.K., 8. vii. 78. (iii) 2 exs., 62 mm—81 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78. (iv) 17 exs., 47 mm—111 mm, Confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 8-9. xi. 79. (v) 2 exs., 70 mm & 71 mm, Lohandiguda market, Coll. T.K.C. & A.K.K., 9. xi. 79. (vi) 4 exs., 56 mm—105 mm, Nalla beside Lohandiguda-Chitrakot Road at Lohandiguda, Coll. T.K.C. & A.K.K. 10. xi. 79. (vii) 1 ex., 58 mm, Bailadila, 53 kms. south west of Geedam, Coll. D.P.S. & Party, 4i vi. 1980.

Distribution : India, Sri Lanka, Nepal, Pakistan, Bangladesh, Burma, Thailand, Indo-China, Yunan, Malaysia, Hainan and Taiwan.

Channa marulius (Hamilton)

1822. *Ophiocephalus marulius* Hamilton, *Fish. Ganges* : 65, 367, pl. 17, fig. 19, (type locality, R. Ganges).

1962. *Channa marulius*, Misra, *Rec. Indian Mus.*, 57 : 218-219.

Material : (i) 1 ex., 177 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (ii) 2 exs., 205 mm—212 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 2-3. iv. 79. (iii) 4 exs., 63 mm—78 mm, Indravati river at Budhghat, Coll. M.H. & Party, 10. iv. 79.

Distribution : India, Sri Lanka, Bangladesh, Burma, Thailand and China.

Channa punctata (Bloch)

1793. *Ophiocephalus punctatus* Bloch, *Naturges. ausland. Fische*, 7 : 139, pl. 358, (type locality, Coromandel coast).

1960. *Channa punctata*, De Witt, *Stanford Ichth. Bull.*, 7 (4) : 82.

Material : (i) 1 ex., 60 mm, Jagdalpur Market, Coll. A.K.K. 5. vii. 78. (ii) 6 exs., 102 mm—168 mm, Tanks at Bastar village, Coll. A.K.K., 6. vii. 78. (iii) 1 ex., 125 mm, Bastar Market, Coll. A.K.K., 6. vii. 78. (iv) 1 ex., 187 mm, Tank at Lohandiguda, Coll. A.K.K., 7. vii. 78. (v) 6 exs., 94 mm—131 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (vi) 1 ex., 116 mm, Nalla connecting Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (vii) 2 exs., 62 mm—184 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78. (viii) 2 exs., 108 mm—127 mm, Tank at Barsur, Coll. M.H. & Party, 9. iv. 79. (ix) 2 exs., 112 mm—230 mm, Tank at Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79. (x) 2 exs., 56 mm—81 mm, Lohandiguda Market, Coll. T.K.C. & A.K.K., 9. ix. 79. (xi) 1 ex., 65 mm, 5 km. north-west of P.W.D. Best House, Barsur. Coll. D.P.S. & Party, 2. vi. 80.

Distribution : India, Sri Lanka, Pakistan, Nepal, Bangladesh and Burma.

Remarks : 1 specimens collected from Dalpatsagar, Jagdalpur on 8. vii. 78, with 21 anal finrays.

Order SYMBRANCHIFORMES

Suborder SYMBRANCHOIDEI

Family SYMBRANCHIDAE

Monopterusuchia (Hamilton)

1822. *Unibranchapertura cuchia* Hamilton, *Fish. Ganges* : 16, 361. pl. 16, fig. 4, (type locality, rivers and ponds of S.E. parts of Berghal).

1981. *Monopterus albus*, Jayaram, *The Freshwater Fishes of India*, A Handbook : 310.

Material : 2 exs., 375 mm & 380 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78.

Distribution : India fresh and brackish waters of E. Punjab, Orissa, Darjeeling Dt., W. Bengal, Assam and Madhya Pradesh. Also Pakistan, Bangladesh, Burma, Chusan, Ningpo.

Order PERCIFORMES

Suborder PERCOIDEI

Family CENTROPOMIDAE

Chanda nama Hamilton

1922. *Chanda nama* Hamilton, *Fish. Ganges* : 109, 371, pl. 39, fig. 37, (type locality, Bengal).

Material : (i) 4 exs., 61 mm—79 mm, Mahanadi river at Charma, Coll. A.K.K., 20. vii. 78. (ii) 10 exs., 38 mm—56 mm, Tank at Barsur, Coll. M.H. & Party, 8. iv. 79. (iii) 3 exs., 55 mm—58 mm, Chotanalla (connected with Mahanadi river) at Charma, Coll. T.K.C. & A.K.K., 23. xi. 79. (iv) 2 exs., 52 mm & 53 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (v) 6 exs., 45 mm—75 mm, Lakhanpur Market, Coll. T.K.C. & A.K.K., 24. xi. 79.

Distribution : India, Nepal, Pakistan, Bangladesh and Burma.

Chanda ranga Hamilton

1822. *Chanda ranga* Hamilton, *Fish. Ganges* : 113, 371, pl. 16, fig. 38, (type locality, Gangetic provinces).

Material : (i) 27 exs., 44 mm—69 mm, Lohandiguda Market, Coll. A.K.K., 7. vii. 78. (ii) 16 exs., 56 mm—75 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (iii) 16 exs., 48 mm—72 mm, Mahanadi river at Charama, Coll. A.K.K., 20. vii. 78. (iv) 2 exs., 45 mm & 56 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (v) 4 exs., 53 mm—56 mm, Jagdalpur Market, Coll. A.K.K., 19. vii. 78. (vi) 1 ex., 58 mm, Kanker Market, Coll. A.K.K., 19. vii. 78. (vii) 39 exs., 56 mm—86 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 2-3. iv. 79. (viii) 4 exs., 78 mm—85 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79. (ix) 8 exs., 40 mm—54 mm, Mahanadi river at Charma, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : India, Pakistan, Bangladesh, Burma and Thailand.

Family NANDIDAE

Badis badis (Hamilton)

1822. *Labrus badis* Hamilton, *Fish. Ganges* : 70, 368, pl. 25, fig. 23, (type locality, Gangetic Provinces).

1937. *Badis badis*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 112, fig. 117.

Material : (i) 21 exs., 35 mm—67 mm, Jagdalpur Fish Market, Coll. A.K.K., 5. vii. 78. (ii) 4 exs., 46 mm—64 mm, Gol Bazar, Jagdalpur, Coll. A.K.K., 9. vii. 78. (iii) 8 exs., 38 mm—45 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (iv) 3 exs., 50 mm—55 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 2-3. iv. 79.

Distribution : India, Nepal, Pakistan, Bangladesh and Burma.

Nandus nandus (Hamilton)

1822. *Coius nandus* Hamilton, *Fish. Ganges* ; 96, 370, pl. 30, fig. 32, (type locality, Gangetic Provinces).

1937. *Nandus nandus*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 115, fig. 120.

Material : (i) 5 exs., 77 mm—108 mm, Jagdalpur Market, Coll. A.K.K., (ii) 4 exs., 87 mm—135 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (iii) 6 exs., 62 mm—130 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 2-3. iv. 79. (iv) 8 exs., 68 mm—119 mm, Jagdalpur Market, Coll. M.H. & Party, 2. iv. 79. (v) 1 ex., 149 mm, Tank at Barsur, Coll. M.H. & Party, 11. iv. 79. (vi) 2 exs., 43 mm & 68 mm, Confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 8. xi. 79. (vii) 1 ex., 100 mm, Chintapalli, 46 kms. north west of Bijapur, Coll. D.P.S. & Party, 10. vi. 80.

Distribution : India, Nepal, Pakistan, Bangladesh, Burma, Thailand and Malaysia.

Remarks : In the 5 examples, collected from Jagdalpur Market, the lateral line is interrupted at 36 scales, restarts 4 scales downwards, followed by 17-18 scales in the longitudinal series.

Family CICHLIDAE

Tilapia mossambica (Peters)

1852. *Chromis mossambica* Peters.

1962. *Tilapia mosambica*, Sterba, *Fresh water Fishes of the World*, Vista Books, London ; 743-744.

Material : (i) 6 exs., 98 mm—160 mm, Mandir Tank, Kondagaon, Coll. T.K.C. & A.K.K., 21. xi. 79.

Distribution : Africa, East London and the Glen Gray Area, Natal, Transvaal, Ngamiband, Rhodesia, Mozambique, East Africa to Abyssinia. The world wide distribution of *T. mossambica*, includes, Java introduced by the Dutch; Indochina, Malaya and Formosa by the Japanese, the Antilles, and the United States. Introduced in India in the year 1953.

Suborder MUGILOIDEI

Family MUGILIDAE

Rhinomugil corsula (Hamilton)

1822. *Mugil corsula* Hamilton, *Fish. Ganges*; 221, 381, pl. 9, fig. 97. (type locality, Gangetic provinces).

1960. *Rhinomugil corsula*, De Witt, *Stanford, Ichth. Bull.*, 7(4), p. 84.

Material : 49 exs., 53 mm—92 mm, Mahanadi river at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : Nepal, through Gangetic provinces in India, to Burma.

Suborder GOBIOIDEI

Family GOBIIDAE

Awaous stamineus (Valenciennes)

1842. *Gobius stamineus* Valenciennes, *Zool. Voy. Bonite*, : 179, pl. v, fig. 5. (type locality, backwaters of Madras).

1941. *Awaous stamineus*, Koumans, *Mem. Indian Mus.*, 13 : 252 & 253.

Material : 7 exs., 94 mm—120 mm, Saberi river at Konta, Coll. T.K.C. & A.K.K., 13-16. xi. 79.

Distribution : Tamil Nadu, Maharashtra, Orissa, Madhya Pradesh, Ratnagiri dist., Mahanadi. Also Philippines, Indo-Australian Archipelago, Hawaiian Is., and Bangladesh.

Glossogobius giuris (Hamilton)

1822. *Gobius gutum*, Hamilton, *Fish. Ganges*; 50, 366, (type locality, lower parts of Padma river).

1937. *Glossogobius giuris*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 114, fig. 119.

Material : (i) 39 exs., 45 mm—142 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 6 exs., 67 mm—181 mm, Tanks at Bastar village,

Coll. A.K.K., 6. vii. 78. (iii) 8 exs., 98 mm—171 mm, Dalpatsagar, Jagdalpur, Coll. A.K.K., 8. vii. 78. (iv) 1 ex., 60 mm, Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (v) 3 exs., 57 mm—110 mm, Tank at Kanker, Coll. A.K.K., 16. vii. 78. (vi) 2 exs., 112 mm—157 mm, Charama Tank, Charama, Coll. A.K.K., 20. vii. 78. (vii) 9 exs., 110 mm—140 mm, Dalpatsagar, Jagdalpur, Coll. M.H. & Party, 2-3. iv. 79. (viii) 4 exs., 73 mm—96 mm, Tank at Barsur, Coll. H.H. & Party, 9. vi. 79. (ix) 3 exs., 133 mm—168 mm, Tank at Bhopalpatnam, Coll. M.H. & Party, 13. iv. 79. (x) 2 exs., 77 mm—112 mm, Indravati river at Bhopalpatnam, Coll. M.H. & Party, 14. iv. 79. (xi) 17 exs., 29 mm—96 mm, Confluence of River Indravati with Narangi river at Lohandiguda, Coll. T.K.C. & A.K.K., 8. ix. 79. (xii) 14 exs., 36 mm—92 mm, Mahanadi river at Charama, Coll. T.K.C. & A. K.K., 23. ix. 79 (xiii) 4 exs., 63 mm—83 mm, Chotanalla (connected with Mahanadi) at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79. (xiv) 1 ex., 112 mm, Bailadila, 53 kms. South-west of Geedam, Coll. D.P.S. & Party, 4. vi. 80. (xv) 1 ex., 60 mm. 5 kms north-west of P.W.D. Rest House, Barsur, Coll. D.P.S. & Party, 2. vi. 80.

Distribution : India, Sri Lanka, Pakistan, Bangladesh, Malaysia, Thailand, China, Japan, Phillippines, Australia, Indo-Australian Archeipelago, South Pacific Islands and East Coast of Africa.

Suborder ANABANTOIDEI

Family ANABANTIDAE

Anabas testudineus (Bloch)

1792. *Anthias testudineus* Bloch, *Naturges Ausland Fische*. 6 : 121, pl. 322, (type locality, Japan, which is an error as the fish does not occur in Japan (Menon, p. 98, 1974).

1937. *Anabas testudineus*, Shaw and Shebbeare, *J. Asiat. Soc. Beng.*, 3 : 112.

Material : (i) 4 exs., 105 mm—116 mm, Keskal Market, Coll. A.K.K., 18. vii. 78. (ii) 6 exs., 90 mm—98 mm, Pharasgaon Market, Coll. T.K.C. & A.K.K., 19. xi. 79.

Distribution : India, Sri Lanka, Nepal, Pakistan, Bangladesh, Burma, Thailand, Cambodia, S. China Indo-China, Malaysia.

Order MASTACEMBELIFORMES

Family MASTACEMBELIDAE

Mastacembelus armatus (Lacepede)

1800. *Macrognathus armatus*. Lacepede, *Hist. Nat. Poiss.*, 2 : 286, (type locality, not given).

1889. *Mastacembelus armatus*, Day, *Fauna Br. India, Fish.*, 2 : 334.

Material : (i) 1 ex., 358 mm, Korar Market, Coll. A.K.K., 17. vii. 78. (ii) 1 ex., 149 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (iii) 1 ex., 196 mm, Saberi river at Sukma, Coll. A.K.K., 13. vii. 78. (iv) 2 exs., 275 mm—284 mm, Jagdalpur Market, Coll. M.H. & Party, 2. iv. 79. (v) 1 ex., 380 mm, Indravati river at Jagdalpur, Coll. M.H. & Party, 5. iv. 79.

Distribution : India, Pakistan, Sri Lanka, Bangladesh, Nepal, Burma, Thailand, Cambodia, Tonkin, Hainan Island, S. China, Malaysia, Sumatra and Java.

Remark : In the specimen collected from Korar Market, the anal fin with 2 spines, 1st dorsal spine starts much behind the origin of pectoral, Head length 6 in total length.

***Mastacembelus pancalus* (Hamilton)**

1822. *Macrognathus pancalus* Hamilton, *Fish. Ganges*; 30 and 364, pl. 22, fig. 7, (type locality, Bengal).

1889. *Mastacembelus pancalus*, Day, *Fauna Br. India, Fish.*, 2 : 333.

Material : (i) 5 exs., 81 mm—151 mm, tank at Kanker, Coll. A.K.K., 16. vii. 78. (ii) 1 ex., 86 mm, Kanker Market, Coll. A.K.K., 19. vii. 78. (iii) 1 ex., 92 mm, Bailadila, 53 kms. South-west of Geedam, Coll. D.P.S. & Party, 4. vi. 80.

Distribution : India, Pakistan, and Bangladesh.

***Macrognathus aculeatum* (Bloch)**

1887. *Ophidium aculeatum* Bloch, *Naturges ausland, Fische*, 11 : 72, pl. 159, fig. 2, (type locality; East Indies).

1822. *Macrognathus aculeatus* Hamilton, *Fish. Ganges*; 29.

1929. *Macrognathus aculeatus*, Hora, *Mem. Indian Mus.* 9, pl. 14, fig. 4 (from Hamilton's MS. drawings).

Material : (i) 6 exs., 158 mm—187 mm, Jagdalpur Market, Coll. A.K.K., 5. vii. 78. (ii) 8 exs., 125 mm—206 mm, Tanks at Bastar village, Coll. A.K.K., 6. vii. 78. (iii) 4 exs., 129 mm—142 mm, Tank at Lohandiguda, Coll. A.K.K., 7. vii. 78. (iv) 1 ex., 179 mm, Dudhnadi at Kanker, Coll. A.K.K., 19. vii. 79. (v) 3 exs., 136 mm—185 mm, Mahanadi at Charama, Coll. T.K.C. & A.K.K., 23. xi. 79.

Distribution : India, Sri Lanka, Pakistan, Bangladesh, Burma, Thailand, Malaysia, Java, Sumatra, Borneo and Moluccas.

Remark : In examples, collected from Lohandiguda, there are 3-6 spots on dorsal near tail.

DISCUSSION ON ZOO-GEOGRAPHICAL DISTRIBUTION

Out of 19 families represented in Bastar 14 are represented in Africa, 7 in South America and 19 in Asia. The assemblages recapitulate the events occurring after the break up of the Geologic Gondwana land. The pattern of distribution in India, South China eastward beyond the range of Shan State and Malaya Peninsula agrees with the view expressed by Hora (1949). The affinity of the Malaysian Ichthyofauna with India has been emphasised by Hora (1944) and Menon (1953, 1955). It was held that Indian Ostariophysii originated in South China and dispersed along the Himalaya and Burma—Malayan Arch. Briggs (1979) asserted that the cyprinoids had their origin in the oriental region in South-East Asia. These hypotheses lack firm ground in respect to evidences based on phylogenetic relationship. The idea of ancestral lineages of the present day Ostariophysean group from the evolutionary centres (Briggs 1979) suffer on the basis of palaeogeography in relation to divergent views concerning the Gondwanic position of the south-east Asian block and its likely connection with India. Burton (1970) and Ridds (1971) held on the juxtaposition of the Malaya peninsula with India, where as Stauffer (1974) considered the Malayan block having African connections in the past Geologic ages. Therefore, accounting for a Gondwanic distribution stopped by the narrower geographical gap separating the Indian and African species in two continents.

The Ethiopian elements are indicated by the genus *Barilius*. *Rasbora*, *Garra*, *Labeo*, *Puntius*, *Tor*, *Mystus*, *Rita* and *Clarias*. Species under the genus *Clarias* are found in Africa, Syria, and South-east Asia upto East Indies. *Clarias batrachus* is found throughout the Indian Sub-continent and extends upto Malaysia. Genus *Garra*, *Labeo*, *Puntius* and *Barilius* are widely scattered in Africa, Iran, Pakistan, Afganistan. Fishes under the genus *Tor* are found throughout Asia, Africa and are also distributed in Europe, but the number of species are diminished in Malaysia. The genus *Rasbora* is also represented in Africa, Sri Lanka and extend to Burma and Malaysia,

The common Palearctic, Oriental and some Ethiopian genera represented in the fish fauna of Bastar, are *Oxygaster*, *Salmostoma*, *Barilius*, *Danio*, *Esomus*, *Rasbora*, *Amblypharyngodon*, *Aspidoparia*, *Catla*, *Crossocheilus*, *Garra*, *Labeo*, *Puntius*, *Tor*, *Lepidocephalus*, *Noemacheilus*, *Mystus*, *Rita*, *Bagarius*, *Glyptothorax*, *Clarias* and *Channa*.

The genera common to Indian and Indo-Chinese sub-regions including Malaysia are *Cirrhinus*, *Osteobrama*, *Ompok*, *Wallago*, *Clupisoma*, *Pseudotropius*, *Silonia* and *Heteropneustes*. The majority of the genus common in the above sub-regions fall under Siluriformes. These are bottom

dweller generally occur in sluggish streams. The genus *Ompok* extends upto East Indies and Malaysia. It may be noted that nineteen species, endemic to Deccan, also found in Bastar. The genus *Osteobrama* which extends from Burma, Eastern Himalayas and Gangetic Plain is represented in Bastar. The pattern of distribution reflects the intrusive drive of the mode of dispersal.

The South-Chinese elements are represented by the genera *Oxygaster*, *Esomus*, *Croossocheilus*, *Lepidocephalus*, *Bagarius* and *Glyptothorax*. There exists considerable element of the Malayan fauna (15 species) in Bastar region. The existence of the Malayan element in the fauna of Deccan region is well known. The theories explaining the distribution of the Malayan element have been mentioned by the Himalayan Glaciation Theory of Mandicot and Blanford (1879) and Satpura Hypothesis of Hora (1949). Mandicot and Blanford considered that the glacial epoch led to the distribution of the species towards equator where the temperature was greater. Hora explained that there existed land connection between Deccan and far east although no direct geological evidence is available. Hora (1949) believed that Vindya-Satpura Range had continuity with Assam Himalaya in the east and western Ghat in the west. The present day elevation of these group of mountains lies between 1525—1830 metres. The ecological parameters of these mountains with annual rainfall are also in the same range. The tropical evergreen forest covering the above group of mountains are also similar. The biological evidences support Hora's views, but geological evidences do not fit to support this concept. The distribution of the fishes suggests possibilities of its migration from far east which might have been initiated in the past. In the present state of our knowledge, the access to the supporting geological evidences may not be properly understood. However, the fish fauna of Bastar agree with the views made by Hora.

Out of 100 species, 23 species are endemic to Indian region in which 19 species are distributed below 24° South in the Deccan region. The remaining are distributed in the Indian region; 23 species to Long 80°W—82°E./Lat. 6°S.—10°N (Sri Lanka); 47 species to Long. 56°N—80°E/Lat. 24°S—36°N (Pakistan); 54 species to Long 88°W—92°E/Lat. 22°S—28°N (Bangladesh); 16 species to Long 80°W—88°E/Lat. 27°S—32°N (Nepal); 50 species to Burma, 22 species simultaneously occurring upto Thailand, 15 species to South China (Long. 92°W—110°E/Lat. 0°S—28°N).

From this analysis, it may be noted that the number of common species decreases with the radial distribution when approaching south-east; as evidenced by the species composition. 82 species are occurring in more than one country in the Indian region.

SUMMARY

100 species belonging to 45 genera and 19 families have been recorded. The presence of the endemic Deccan fish fauna in Bastar district has been indicated. The extent of distribution of the fishes in adjoining countries are also discussed.

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