

# ICHTHYO-FAUNA OF GARO HILLS, MEGHALAYA (INDIA)

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(With 1 Text-figure)

## INTRODUCTION

Apart from a few brief papers (Hora, 1924; 1925, Dey and Singh, 1967) and some scattered references by Day (1889) in the Fauna of British India which altogether constitute a small percentage of its fish fauna, there is as yet no faunistic work on the fishes of Garo Hills. Menon (1962) in his distributional list of fishes of Himalayas has indicated the pattern of fish distribution from the various drainage systems of the Himalayan regions. An assessment of the fish wealth of Garo Hills, however, is not possible from this account.

Garo Hills District, a small tract of land which forms the western district of the newly formed state of Meghalaya has a total area of 8163 Square Kilometres. The greater portion of the district consists of hills which are low in the north, gradually increasing in height to a range of mountains called the Tura Hills, the highest peak of which is about 1400 metres high. But the general elevation of the district varies from 400 metres upwards. Rainfall averages yearly from 250 to 350 cm. Sal and bamboo forests cover large tracts of the district.

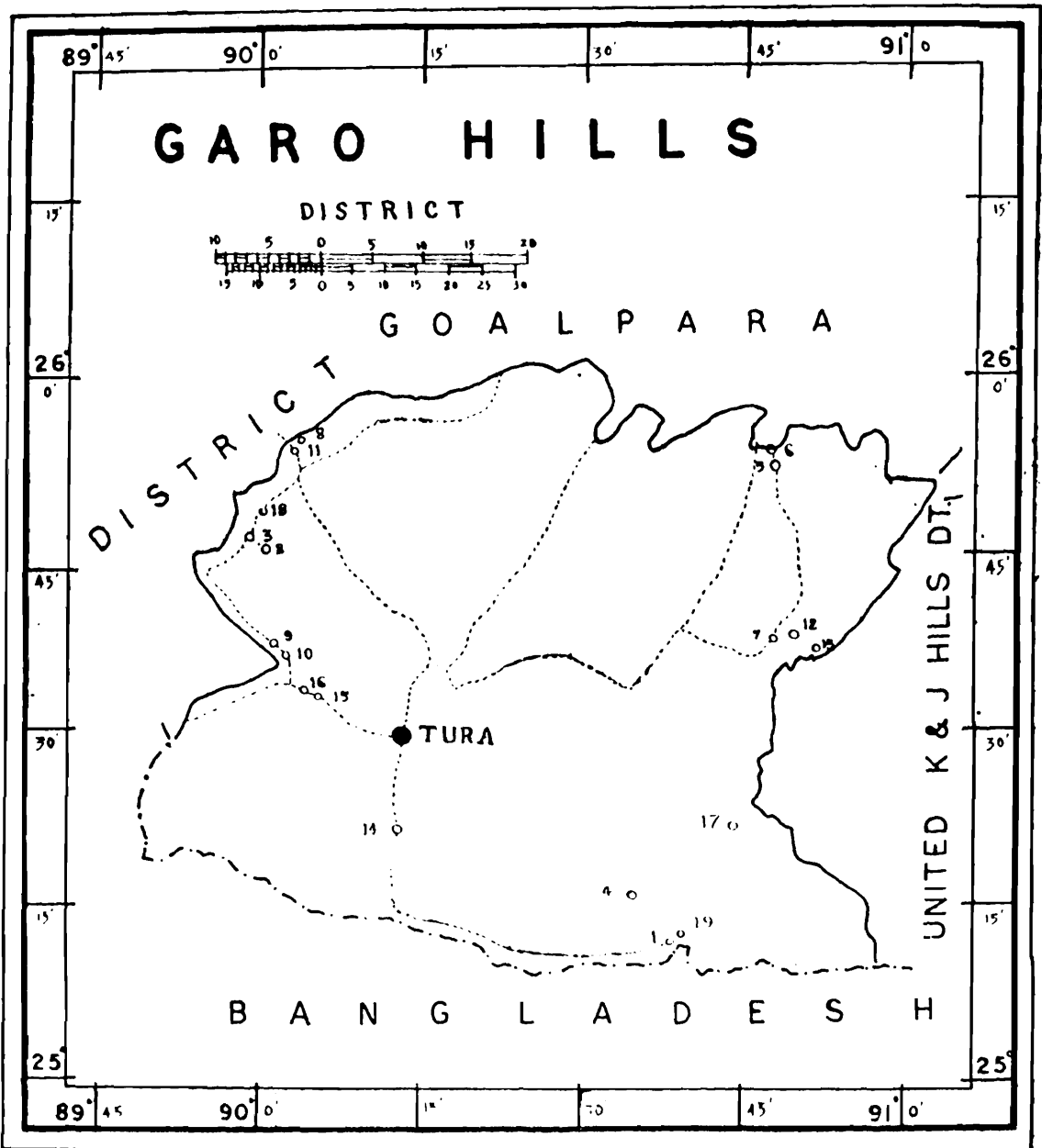
The material on which this report is based has been accumulating in the Eastern Regional Station of the Zoological Survey of India, Shillong for the past seven years and has been brought together by the three surveys indicated below :—

- (1) Garo Hills Survey, Feb.—March, 1965 by Shri A. S. Rajagopal.
- (2) Garo Hills Survey, Feb. 1971 by Dr. G. M. Yazdani.
- (3) Garo Hills Survey, April, 1971 by Dr. R. S. Pillai.

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The bulk of the material (roughly 95%) has been collected by the two later surveys. A total of 454 specimens, belonging to 59 species and 36 genera have been examined by us. The various localities which yielded these collections are listed below and indicated in the map (Text-fig. 1). Although more intensive surveys of the district are likely to increase the number of species further, we believe that more than 80% of the ichthyo-fauna of Garo Hills is represented in the present collections.



Text-fig. 1.— Map of Garo Hills showing the 19 collecting stations. The serial numbers correspond to the localities listed under "List of Collecting Stations."

Three species of fishes recorded in literature as occurring in Garo Hills are not represented in our collection. They are *Aborichthys garoensis* (Hora, 1925), *Psilorhynchus sucatio* (Hora, 1925) and *Noemacheilus montanus* (Dey and Singh, 1967). These included, the total number of species known so far from Garo Hills stands at 62.

Barring a few species which are indicated under the systematic account all form new locality records for Garo Hills. All the species dealt with under 'Systematic Account' have been arranged systematically giving under each species important synonyms, number of examples examined, size range in total length, collecting localities, name of collector, date of collection and its geographical distribution.

We are grateful to the Director, Zoological Survey of India, for giving us the opportunity to work out the fish fauna of Garo Hills. Our thanks are due to Dr. A. G. K. Menon for his help.

#### LIST OF COLLECTING STATIONS

A total of 19 stations in Garo Hills from where fish collections were made are listed below. These serial numbers have been indicated in the map (Text-fig. 1).

1. Amuka village, 1 Km. from Baghmara.
2. Barabil River near Rajabola.
3. Bamandanga stream, 10 Km. W. of Phulbari.
4. Dabigiri, 5 Km. from Baghmara.
5. Dainadubi forest, 9 Km. S. of Dudhnai.
6. Damra, 6 Km. S. of Dudhnai.
7. Darugiri stream, 5 Km. S. of Forest Bungalow.
8. Gingiram River, 3 Km. from Phulbari.
9. Holaidanga nullah, 19 Km. W. of Phulbari.
10. Khamari village beel, 22 Km. W. of Phulbari.
11. Phulbari, River near Inspection Bungalow.
12. Rongugunt stream, 1 Km. E. of Darugiri Forest Inspection Bungalow.
13. Rongjeng, 10 Km. E. of Darugiri Forest Bungalow.
14. Rongnobak River, 9 Km. S. of Tura.
15. Rongram River, 15 Km. W. of Tura.
16. Rongsong River, 17 Km. W. of Tura.
17. Siju Cave, stream flowing out of the entrance.
18. Singhara River, 8 Km. W. of Phulbari.
19. Someswari River, at Baghmara.

#### LIST OF FISHES FROM GARO HILLS

The 59 species which have been examined by us are listed below. Three more species are known from Garo Hills in published literature (see Introduction). The general classification of fishes adopted here is that of Greenwood, Rosen, Weitzman and Myers (1966).

Class TELEOSTOMI

Order CLUPEIFORMES

Family CLUPEIDAE

Genus (1) *Gudusia* Fowler

1. *Gudusia chapra* (Ham.)

Order CYPRINIFORMES

Family CYPRINIDAE

Genus (2) *Oxygaster* Van Hasselt

2. *Oxygaster bacaila* (Ham.)

Genus (3) *Barilius* Hamilton

3. *Barilius barila* Ham.

4. *Barilius barna* (Ham.)

5. *Barilius bandelisis* (Ham.)

6. *Barilius bola* (Ham.)

Genus (4) *Danio* Hamilton

7. *Danio aequipinnatus* (McClelland)

8. *Danio dangila* (Ham.)

9. *Danio devario* (Ham.)

10. *Danio* (*Brachydanio*) *rerio* (Ham.)

Genus (5) *Esomus* Swainson

11. *Esomus danrica* (Ham.)

Genus (6) *Rasbora* Bleeker

12. *Rasbora daniconius* (Ham.)

Genus (7) *Acrossocheilus* Oshima

13. *Acrossocheilus hexagonolepis* (McClelland)

Genus (8) *Amblypharyngodon* Bleeker

14. *Amblypharyngodon mola* (Ham.)

Genus (9) *Crossocheilus* V Hass.

15. *Crossocheilus latius latius* (Ham.)

Genus (10) *Chagunius* H. M. Smith

16. *Chagunius chagunio* (Ham.)

Genus (11) *Labeo* Cuvier

17. *Labeo boga* (Ham.)

18. *Labeo calbasu* (Ham.)

19. *Labeo goniis* (Ham.)

20. *Labeo pangusia* (Ham.)  
Genus (12) *Puntius* Hamilton
21. *Puntius chola* (Ham.)
22. *Puntius sarana* (Ham.)
23. *Puntius sophore* (Ham.)
24. *Puntius ticto* (Ham.)  
Genus (13) *Tor* Gray
25. *Tor tor* (Ham.)  
Family COBITIDAE  
Genus (14) *Botia* Gray
26. *Botia dario* (Ham.)  
Genus (15) *Lepidocephalichthys* Bleeker
27. *Lepidocephalichthys annandalei* Chaudhuri
28. *Lepidocephalichthys guntea* (Ham.)
29. *Lepidocephalichthys menoni* Pillai & Yazdani.  
Genus (16) *Noemacheilus* Van Hass.
30. *Noemacheilus botia* (Ham.)
31. *Noemacheilus multifasciatus* Day
32. *Noemacheilus scaturigina* (McClelland)
33. *Noemacheilus sikmaiensis* Hora  
Genus (17) *Somileptes* Swainson
34. *Somileptes gangota* (Ham.)  
Order SILURIFORMES  
Family SILURIDAE  
Genus (18) *Ompok* Laeépède
35. *Ompok bimaculatus* (Bloch)  
Family BAGRIDAE  
Genus (19) *Mystus* Scopoli
36. *Mystus cavasius* (Ham.)
37. *Mystus vittatus* (Bloch)  
Family AMBLYCEPIDAE  
Genus (20) *Amblyceps* Blyth
38. *Amblyceps mangois* (Ham.)  
Family OLYRIDAE  
Genus (21) *Olyra* McClelland

39. *Olyra horae* ( Prasad & Mukerji )  
 Family SISORIDAE  
 Genus ( 22 ) *Glyptothorax* Blyth
40. *Glyptothorax cavia* ( Ham. )  
 Genus ( 23 ) *Hara* Blyth
41. *Hara hara* ( Ham. )  
 Family HETEROPNEUSTIDAE  
 Genus ( 24 ) *Heteropneustes* Müller
42. *Heteropneustes fossilis* ( Bloch )  
 Family CLARIIDAE  
 Genus ( 25 ) *Clarias* Gronov
43. *Clarias batrachus* ( Lin. )  
 Order ATHERINIFORMES  
 Family BELONIDAE  
 Genus ( 26 ) *Xenentodon* Regan
44. *Xenentodon cancila* ( Ham. )  
 Order CHANNIFORMES  
 Family CHANNIDAE  
 Genus ( 27 ) *Channa* Gronov
45. *Channa orientalis* Bl. & Schn.
46. *Channa punctata* ( Bloch )
47. *Channa stewartii* ( Playfair )  
 Order PERCIFORMES  
 Family CENTROPOMIDAE  
 Genus ( 28 ) *Ambassis* Cuvier
48. *Ambassis baculis* ( Ham. )
49. *Ambassis nama* ( Ham. )
50. *Ambassis ranga* ( Ham. )  
 Family NANDIDAE  
 Genus ( 29 ) *Badis* Bleeker
51. *Badis badis* ( Ham. )  
 Genus ( 30 ) *Nandus* Cuvier
52. *Nandus nandus* ( Ham. )  
 Family ANABANTIDAE  
 Genus ( 31 ) *Anabas* Cuvier

53. *Anabas testudineus* (Bloch)  
Genus (32) *Colisa* Cuvier and Valenciennes
54. *Colisa fasciata* (Bl. & Schn.)  
Family GOBIIDAE  
Genus (33) *Glossogobius* Gill
55. *Glossogobius giuris* (Ham.)  
Order MASTACEMBELIFORMES  
Suborder MASTACEMBELOIDEI  
\* Genus (34) *Pillaia* Yazdani
56. *Pillaia indica* Yazdani  
Family MASTACEMBELIDAE  
Genus (35) *Mastacembelus* Scopoli
57. *Mastacembelus armatus* (Lacép.)
58. *Mastacembelus pancalus* (Ham.)  
Order TETRAODONTIFORMES  
Family TETRAODONTIDAE  
Genus (36) *Tetraodon* L.
59. *Tetraodon cutcutia* Ham.

## SYSTEMATIC ACCOUNT

1. *Gudusia chapra* (Ham.)

1822. *Clupanodon chapra* Hamilton, *Fish Ganges* : 248, 383.

*Material* —2 exs., 80 mm & 86 mm, Barabil River, Coll. G. M. Yazdani (purchased), 13. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere : Throughout India except Kerala and Tamil Nadu. Bangladesh. Pakistan and Malaya Peninsula.

*Remarks* —Colouration in our material is similar to *G. variegata* (Day) known from Burma. But based on the depth of body, number of pre-and post-anal scutes we are referring the two examples to *chapra*; recorded from Garo Hills for the first time.

2. *Oxygaster bacaila* (Ham.)

1822. *Cyprinus bacaila* Hamilton, *Fish Ganges* : 265, 384.

*Material* —1 ex., 85.0 mm, Someswari River at Baghmara, coll. G. M. Yazdani, 19. ii. 71.

\* Family status yet to be assigned.

*Distribution* —Garo Hills : As above. Elsewhere : Throughout India except Kerala, Karnataka and Tamil Nadu. Bangladesh. Burma. Pakistan and Nepal.

### 3. *Barilius barila* ( Ham. )

1822. *Barilius barila* Hamilton, *Fish Ganges* : 267, 384.

*Material* —( i ) 3 exs., 12 to 30 mm, Singhara River, coll. G. M. Yazdani, 12. ii. 71. ( ii ) 1 ex., 73 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 19. ii. 71:

*Distribution*—Garo Hills: As above. Elsewhere : India : Manipur, Assam, West Bengal, Delhi, Rajasthan, U. P., Bihar, Orissa, M. P. and Karnataka. Bangladesh.

### 4. *Barilius barna* ( Ham. )

1822. *Cyprinus barna* Hamilton, *Fish Ganges* : 268, 384.

*Material* —( i ) 1 ex., 95 mm., Rongnabak River, coll. G. M. Yazdani, 15. ii. 71, ( ii ) 13 exs., 17 to 30 mm. Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71.

*Distribution* —Garo Hills: As above and Siju Cave ( Hora, 1924 ). Elsewhere: India: Assam, W Bengal, Bihar, U.P., Orissa and Rajasthan.

### 5. *Barilius bendelisis* ( Ham. )

1807. *Cyprinus bendelisis* Hamilton, *Journey Mysore*, 3 : 345. pl. 32.

*Material* —( i ) 1 ex., 62 mm. Rongnabak River, coll. G. M. Yazdani, 15. ii. 71, ( ii ) 10 exs., 23 to 40 mm, stream outside Siju Cave, coll. G. M. Yazdani, 22. ii. 71.

*Distribution* —Garo Hills: As above and Siju Cave ( Hora, 1924 ). Elsewhere : India : Assam, West Bengal, Bihar, U. P., Rajasthan, Punjab, Tamil Nadu, Karnataka and Orissa. Bangladesh. Pakistan and Sri Lanka.

### 6. *Barilius bola* ( Ham. )

1822. *Cyprinus bola* Hamilton, *Fish Ganges* : 274, 275.

*Material* —1 ex., 240 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 19. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere: India: Assam, W. Bengal, Bihar, U.P., Rajasthan, Punjab and Orissa. Bangladesh. Pakistan. and Burma.



7. *Danio aequipinnatus* ( McClelland )

1839. *Perilampus aequipinnatus* McClelland, *Asiat. Res.*, 19: 393, pl. 60, fig. 1.

*Material* —(i) 8 exs., 47 to 60 mm., Rongram River, coll. G. M. Yazdani, 14. ii. 71 (ii) 1 ex., 45 mm., Darugiri Forest, coll. R. S. Pillai, 11. iv. 71.

*Distribution* —Garo Hills: As above and Siju Cave (Hora, 1924) Garo Hills (Day, 1889). Elsewhere: India: Sikkim, Assam, Manipur, W. Bengal, Rajasthan, Maharashtra, Karnataka, Tamil Nadu, Andhra Pradesh and Kerala. Sri Lanka. Burma. Thailand and Bangladesh.

8. *Danio dangila* ( Ham. )

1822. *Cyprinus dangila* Hamilton, *Fish Ganges* : 321, 390.

*Material* —1 ex., 35 mm., stream at Darugiri Forest, coll. R. S. Pillai, 11. iv. 71.

*Distribution* —Garo Hills: As above. Elsewhere: India: Manipur, Nagaland, Assam, Meghalaya ( Khasi Hills ), West Bengal, Bihar. Burma.

9. *Danio devario* ( Ham. )

1822. *Cyprinus devario* Hamilton, *Fish Ganges* : 341, 393.

*Material* —(i) 3 exs., 55 to 60 mm., Barabil River near Rajabola, coll. G. M. Yazdani ( Purchased ), 13. ii. 71. (ii) 1 ex., 64 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere: Throughout India except Peninsular part. Bangladesh. Pakistan and Burma.

10. *Danio ( Brachydanio ) rerio* ( Ham. )

1822. *Cyprinus rerio* Hamilton, *Fish Ganges* : 323, 390.

*Material* —(i) 2 exs., 18 and 19 mm., Bamandanga stream, coll. G. M. Yazdani, 12. ii. 71. (ii) 28 exs., 15 to 30 mm., Holaidanganallah, coll. G. M. Yazdani, 12. ii. 71. (iii) 5 exs., 12 to 30 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71. (iv) 19 exs., 15 to 20 mm., Dabigiri, coll. G. M. Yazdani, 19. ii. 71. (v) 15 exs., 20 to 27 mm., Stream at Dainadubi Forest. coll. R. S. Pillai, 9. iv. 71. (vi) 15 exs., 22 to 28 mm., market at Damra, coll. R. S. Pillai ( Purchased ), 10. iv. 71.

*Distribution* —Garo Hills: As above. Elsewhere: Throughout India. Burma.

11. *Esomus danrica* (Ham.)

1822. *Cyprinus danrica* Hamilton, *Fish Ganges* : 325, 390, pl. 16. fig. 88.

*Material* —(i) 15 exs., 30 to 50 mm., River near Phulbari I. B., coll. A. S. Rajagopal, 21. ii. 65. (ii) 2 exs., 32 & 38 mm., Holaidangannallah, coll. G. M. Yazdani, 12. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Burma. Malaya. Thailand. Pakistan and Sri Lanka.

12. *Rasbora daniconius* (Ham.)

1822. *Cyprinus daniconius* Hamilton, *Fish Ganges* : 327, 329, pl. 15, fig. 89.

*Material* —2 exs., 48 and 65 mm., Barabil River near Rajabola, coll. G. M. Yazdani, (Purchased), 13. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Pakistan. Malaya and Sri Lanka.

13. *Acrossocheilus hexagonolepis* (McClelland)

1839. *Barbus hexagonolepis* McClelland; *Asiat. Res.*, 19. : 270, 336 pl. 41, fig. 3.

*Material* —(i) 17 exs., 26 to 110 mm., Rongram River, coll. G. M. Yazdani, 14. ii. 71. (ii) 21 exs., 20 to 72 mm., Siju Cave. coll. G. M. Yazdani, 21. ii. 71, 22. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere: India: Assam, W Bengal, and Eastern Himalaya. Nepal. Bangladesh. Malaya. Malaya Archipelago. Burma and Thailand.

14. *Amblypharyngodon mola* (Ham.)

1822. *Cyprinus mola* Hamilton, *Fish Ganges* : 334, 392, pl. 38, fig. 92.

*Material* —1 ex., 72 mm., Barabil River near Rajabola, coll. G. M. Yazdani, (purchased), 13. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Burma and Pakistan.

15. *Crossocheilus latius latius* (Ham.)

1822. *Cyprinus latius* Hamilton, *Fish Ganges*: 345, 393.

*Material*—(i) 1 ex., 103 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71. (ii) 7 exs., 145 to 175 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71, 21. ii. 71.

**Distribution**—Garo Hills: As above. Elsewhere: India : Manipur, U. P., Bihar, W. Bengal, Karnataka. Bangladesh.

16. *Chagunius chagunio* ( Ham. )

1822. *Cyprinus chagunio* Hamilton, *Fish Ganges* : 295, 387.

**Material**—1 ex., 240 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71.

**Distribution**—Garo Hills : As above. Elsewhere : India: Assam, W. Bengal, Bihar, U. P., Orissa, Punjab. Bangladesh. Burma. Thailand and Pakistan.

17. *Labeo boga* ( Ham. )

1822. *Cyprinus boga* Hamilton, *Fish Ganges* : 286, 386, pl. 28 fig. 80.

**Material**—1 ex., 142 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 21. ii. 71.

**Distribution**—Garo Hills : As above. Elsewhere : India : Assam, W. Bengal, U. P., Bihar, Rajasthan, Orissa, Tamil Nadu. Bangladesh. Burma and Pakistan.

18. *Labeo calbasu* ( Ham. )

1822. *Cyprinus calbasu* Hamilton, *Fish Ganges* : 297, 387, pl. 2, fig. 83.

**Material**—1 ex., 170 mm. Someswari River at Baghmara, coll. G. M. Yazdani, 21. ii. 71.

**Distribution**—Garo Hills : As above. Elsewhere: Throughout India. Bangladesh. Burma. Thailand. S. China and Pakistan.

19. *Labeo gonius* ( Ham. )

1822. *Cyprinus gonius* Hamilton, *Fish Ganges* : 292, 387.

**Material**—1 ex., 170 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 21. ii. 71.

**Distribution**—Garo Hills : As above. Elsewhere : India: Assam, W. Bengal, Bihar, U. P., Orissa, Andhra Pradesh. Bangladesh and Burma.

20. *Labeo pangusia* ( Ham. )

1822. *Cyprinus pangusia* Hamilton, *Fish Ganges* : 285, 386.

**Material**—2 exs., 135 and 175 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 21. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere: India. Assam, W. Bengal, Karnataka. Pakistan.

### 21. *Puntius chola* (Ham.)

1822. *Cyprinus chola* Hamilton, *Fish Ganges* : 312, 389.

*Material*—1 ex., 74 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Throughout India. Bangladesh. Pakistan and Burma.

### 22. *Puntius sarana* (Ham.)

1822. *Cyprinus sarana* Hamilton, *Fish Ganges* : 307, 388.

*Material*—(i) 2 exs., 130 and 148 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71. (ii) 2 exs., 158 and 172 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71. (iii) 20 exs., 15 to 35 mm., Stream outside Siju Cave, coll. G. M. Yazdani, 22. ii. 71.

*Distribution* —Garo Hills: As above. Elsewhere : Throughout India. Bangladesh. Pakistan. Burma. Malaya. Sri Lanka. Thailand and China.

*Remarks*—Although fairly common in most of the rivers and streams of Garo Hills and collected by us from the stream flowing out of Siju Cave, Hora has failed to record it from around the Siju. The largest specimen collected from Siju was only 35 mm. in total length, although the species attains more than 300 mm. in length.

### 23. *Puntius sophore* (Ham.)

1822. *Cyprinus sophore* Hamilton, *Fish Ganges* : 307, 388.

*Material*—2 exs., 70 and 72 mm, beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Burma. China and Pakistan.

*Remarks*—Day (1889) records this species from Khasi Hills and Assam.

### 24. *Puntius ticto* (Ham.)

1822. *Cyprinus ticto* Hamilton, *Fish Ganges* : 314, 389.

*Material*—1 ex., 42 mm., Damra, coll. R. S. Pillai, (purchased), 10. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Throughout India. Bangladesh. Pakistan. Burma. Thailand and Sri Lanka.

### 25. *Tor tor* (Ham.)

1839. *Barbus hexastichus* McClelland, *Asiat. Res.* 19 : 269, 333.

*Material*—(i) 4 exs., 80 to 115 mm., Siju Cave, coll. A. S. Rajagopal, 6. ii. 65. (ii) 4 exs., 65 to 75 mm., Siju Cave, coll. A. S. Rajagopal, 7. ii. 65.

*Distribution*—Garo Hills : As above. Elsewhere: India: Kashmir, throughout the Himalayas, Sikkim and Assam.

*Remarks*—This species has been recorded by Hora (1924) from Siju Cave.

### 26. *Botia dario* (Ham.)

1822. *Cobitis dario* Hamilton, *Fish Ganges* : 354, 394,

*Material*—(i) 4 exs., 58 to 73 mm., Gingiram River, coll. G. M. Yazdani (purchased), 13. ii. 71. (ii) 1 ex., 82 mm., stream outside Siju Cave, coll. G. M. Yazdani, 22. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere: India: Assam, W. Bengal, Bihar, U. P., Bangladesh and Pakistan.

### 27. *Lepidocephalichthys annandalei* Chaudhuri

1912. *Lepidocephalichthys annandalei* Chaudhuri, *Rec. Indian Mus.*, 7 : 442.

*Material*—6 exs., 30 to 43 mm., stream at Dainadubi Forest, coll. R. S. Pillai, 9. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India: W. Bengal and “Eastern Himalayas.”

### 28. *Lepidocephalichthys guntea* (Ham.)

1822. *Cobitis guntea* Hamilton, *Fish Ganges* : 353, 394.

*Material*—(i) 8 exs., 22 to 76 mm., Holaidanga nallah, coll. G. M. Yazdani, 12. ii. 71. (ii) 4 exs., 50 to 75 mm., Bamandanga stream, coll. G. M. Yazdani, 12. ii. 71. (iii) 1 ex., 70 mm., Barabil River near Rajabola, coll. G. M. Yazdani (purchased), 13. ii. 71. (iv) 1 ex., 65 mm., Gingiram River, coll. G. M. Yazdani (purchased), 13. ii. 71. (v) 24 exs., 40 to 65 mm., Damra, coll. R. S. Pillai (purchased), 10. iv. 71. (vi) 15 exs., 46 to 75 mm., stream at Darugiri Forest, coll. R. S. Pillai, 11. iv. 71, 12. iv. 71 and 13. iv. 71. (vii) 3 exs., 60 to 65 mm., stream at Rongjeng, coll. R. S. Pillai, 12. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Throughout northern India. Bangladesh and Pakistan.

29. *Lepidocephalichthys menoni* ( Pillai and Yazdani )  
( New species under publication )

*Material*—( i ) 2 exs., 30 to 31 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71. ( ii ) 11 exs., 27 to 32 mm., Someswari River, Baghmara, coll. G. M. Yazdani, 18. ii. 71.

*Distribution*—Garo Hills : As above.

30. *Noemacheilus botia* ( Ham. )

1822. *Cobitis botia* Hamilton, *Fish Ganges* : 350, 394.

*Material*—( i ) 2 exs., 64 and 81 mm., Gingiram River, coll. G. M. Yazdani ( purchased ), 13. ii. 71. ( ii ) 2 exs., 65 and 72 mm., Barabil River, coll. G. M. Yazdani, ( purchased ), 13. ii. 71. ( iii ) 2 exs., 35 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India, Punjab, U. P., Bihar, Western Himalayas, W. Bengal, Eastern Himalayas, Assam. Bangladesh and Pakistan.

31. *Noemacheilus multifasciatus* Day

1878. *Nemachilus multifasciatus* Day, *Fish India*, : 617.

1924. *Nemachilus* sp., Hora, *Rec. Indian Mus.* 26 : 28-30.

*Material*—( i ) 3 exs., 25 to 26 mm., Ronsong River, coll. G. M. Yazdani, 14. ii. 71. ( ii ) 3 exs., 25 to 55 mm., Rongnabak River, coll. G. M. Yazdani, 15. ii. 71. ( iii ) 1 ex., 70 mm., from inside Siju Cave, coll. G. M. Yazdani, 21. ii. 71. ( iv ) 3 exs., 31 to 38 mm., from inside Siju Cave, coll. G. M. Yazdani, 22. ii. 71. ( v ) 1 ex., 45 mm., stream outside Siju Cave, coll. G. M. Yazdani, 22. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India: W Bengal ( Darjeeling ), Assam.

*Remarks*—Hora ( 1924 ) has refrained from giving a specific identity to the species of *Noemacheilus* collected from Siju Cave. On the basis of examination of material from Siju Cave and other localities in Garo Hills we have been able to refer Hora's material to the species *multifasciatus*. That this species shows considerable variability in respect of colour pattern, and body profile is illustrated by a comparison of examples collected from inside and outside the cave. The specimens collected from inside the cave from muddy water accumulated on either side, were more depressed while those collected from fast flowing water

outside the cave were not so and these agree with the description of *N. multifasciatus* except in the number of stripes on the dorsal and caudal fins and absence of dark radiating marks from the eye. Although different in colour pattern the juveniles collected from Rongsong River and Rongnabak River (taken along with adults) is referable to *N. multifasciatus* on comparison with juveniles collected from inside the Siju Cave. Juvenile specimens have dorsal bars and a lateral row of spots. Indication of coalescence of the dorsal bars with lateral row of spots is discernible in a few specimens. The base of dorsal fin has, however, three dark bands as in the adult.

### 32. *Noemacheilus scaturigina* (McClelland)

1839. *Cobitis scaturigina* McClelland, *Asiat Res.* 19 : 436.

*Material*—13 exs., 23 to 33 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Eastern Himalayas.

### 33. *Noemacheilus sikmaiensis* Hora

1921. *Nemachilus sikmaiensis* Hora, *Rec. Indian Mus.*, 22 : 201-202.

*Material*—1 ex., 27 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Manipur Burma.

### 34. *Somileptes gongota* (Ham.)

1822. *Cobitis gongota* Hamilton, *Fish Ganges* : 351-394.

*Material*—3 exs., 90 to 98 mm., Gingiram River, coll. G. M. Yazdani (Purchased), 13. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Assam, W. Bengal, Meghalaya (Khasi Hills).

### 35. *Ompok bimaculatus* (Bloch)

1797. *Silurus bimaculatus* Bloch. *Syst-Ichth.*, 11 : 17.

*Material*—1 ex., 120 mm., Beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Kashmir, Punjab, Rajasthan, U. P., Bihar, Manipur, Assam, W Bengal, Orissa,

M. P. Tamil Nadu, Maharashtra, Kerala, Karnataka. Sri Lanka. Pakistan  
Burma. Malaya. Malaya Archipelago. Thailand. Chusan and Yunan.

### 36. *Mystus cavasius* (Ham.)

1822. *Pimelodus cavasius* Hamilton, *Fish Ganges* : 203, 379.

*Material*—(i) 4 exs., 85 to 155 mm., Gingiram River, coll. G. M. Yazdani, 13. ii. 71 (ii) 1 ex., 105 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 19. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Punjab, U. P., Bihar, W Bengal, Assam, Orissa, M. P. Tamil Nadu, Karnataka, Gujarat, Maharashtra, Kerala and Rajasthan. Bangladesh. Pakistan. Burma. Thailand. Malaya Archipelago and China.

### 37. *Mystus vittatus* (Bl.)

1797. *Silurus vittatus* Bloch, *Ichth.* 371.

*Material*—(i) 2 exs., 85 and 92 mm., Beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71; (ii) 1 ex., 90 mm., Damra, coll. R. S. Pillai, (purchased), 10. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Punjab, U. P., Bihar, W. Bengal, Orissa, Assam, M. P., Tamil Nadu, Rajasthan, and Kerala. Pakistan. Bangladesh. Burma. Sri Lanka and Thailand.

### 38. *Amblyceps mangois* (Ham.)

1822. *Pimelodus mangois* Hamilton, *Fish Ganges* : 199, 379.

*Material*—(i) 3 exs., 35 to 37 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71; (ii) 4 exs., 40 to 50 mm., Damra coll. R. S. Pillai, (Purchased), 10. iv. 71.

*Distribution*—Gara Hills ; As above. Elsewhere : India : “The Himalayas, found in the Jumna for some considerable distance from the hills, also through Burma to Moulmein”

### 39. *Olyra horae* (Prashad and Mukerji)

1929. *Amblyceps horae* Prashad & Mukerji, *Rec. Indian Mus.*, 31: 173-174

1971. *Olyra horae*, Pillai & Yazdani, *J. zool Soc. India*, 23 : 135-136.

*Material*—(i) 1 ex., 76 mm., paddy field at Damra, coll. R. S. Pillai, 10. iv 71; (ii) 2 exes., 54 and 73 mm., stream at Darugir, Forest, coll. R. S. Pillai, 11 iv. 71 and 13. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Lake Indawgyi, Burma.



40. *Glyptothorax cavia* ( Ham. )

1822. *Pimelodus cavia* Hamilton, *Fish Ganges* : 188, 378.

*Material*—2 exs., 43 and 50 mm., Near Siju Cave, coll. G. M. Yazdani, 23. ii 71.

*Distribution*—Garo Hills: As above. Elsewhere : India: U. P., Bihar, Assam. Burma.

41. *Hara hara* ( Ham. )

1822. *Pimelodus hara* Hamilton, *Fish Ganges* : 190, 378.

*Material*—2 exs., 58 and 60 mm., Barabil River near Rajabola, coll. G. M. Yazdani ( purchased ), 13. ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere : India: U. P., Orissa, W. Bengal, Assam, Nagaland. Burma. Bangladesh.

42. *Heteropneustes fossilis* ( Bloch )

1794. *Silurus fossilis* Bloch. *Naturg. Ausland. Fische*, 8 : 46

*Material*—( i ) 1 ex., 120 mm., stream at Darugiri Forest I. B. coll. R. S. Pillai, 10. iv. 71 ( purchased ); ( ii ) 1 ex., 160 mm., Beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Burma. Pakistan. Sri Lanka. Thailand and Indo-China.

43. *Clarias batrachus* ( Lin. )

1758. *Silurus batrachus* Linnaeus, *Syst. Nat.*, 1, ed. 10 : 305.

*Material*—( i ) 2 exs., 130 and 150 mm., stream at Darugiri Forest, coll. R. S. Pillai, ( purchased ), 10. iv. 71; ( ii ) 1 ex., 172 mm., beel near Khamari village, coll. G. M. Yazdani, 12 ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere: India, fresh and brackish waters of the plains of India. Bangladesh. Pakistan. Burma. Sri Lanka. Malaya. Malaya Archipelago. Thailand. Indo-China. Philippines. Hongkong and China.

44. *Xenentodon cancila* ( Ham. )

1822. *Esox cancila* Hamilton, *Fish Ganges* : 213, 380.

*Material*—1 ex., 120 mm., Barabil River near Rajabola, coll. G. M. Yazdani, ( purchased ), 13. ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere : India: Gujarat, Maharashtra, Punjab, Rajasthan, U. P., Bihar, W. Bengal, Assam, Z. S. .2

Orissa, M. P., Tamil Nadu, Karnataka, Kerala. Bangladesh. Pakistan. Burma. Sri Lanka. Malaya and Thailand.

#### 45. *Channa orientalis* Bl. and Schn.

1801. *Channa orientalis*, Bloch & Schneider, *Syst. Ichth.* : 496.

*Material*—( i ) 5 exs., 70 to 100 mm., Damra, coll. R. S. Pillai, ( purchased ), 10. iv. 71. ( ii ) 1 ex., 73 mm., Dabigiri, coll. G. M. Yazdani, 19. ii. 71.

*Distribution*—Garo Hills: As above and Siju Cave ( Hora, 1924 ). Elsewhere: Throughout India. Bangladesh. Pakistan. Sri Lanka. Burma. Afghanistan. Malaya. Malaya Archipelago. Thailand. Indo-China and China.

#### 46. *Channa punctatus* ( Bloch )

1793. *Ophicephalus punctatus* Bloch, *Naturg. Ausland. Fische* : 139.

*Material*—( i ) 2 exs., 125 and 126 mm., beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71; ( ii ) 6 exs., 90 to 130 mm.; stream at Darugiri Forest, coll. R. S. Pillai, ( purchased ), 10. iv. 71, ( iii ) 1 ex., 115 mm., stream at Darugiri, coll. R. S. Pillai, 11. iv. 71.

*Distribution*—Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Pakistan. Burma. Sri Lanka. Malaya. China. Tahiti and Polynesia.

#### 47. *Channa stewartii* ( Playfair )

1867. *Ophiocephalus stewartii* Playfair, *Proc. zool. Soc. Lond.*, : 14.

*Material*—( i ) 3 exs., 35 to 65 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71. ( ii ) 1 ex., 70 mm., Dainadubi forest, coll. R. S. Pillai, 9. iv. 71. ( iii ) 1 ex., 123 mm., stream at Darugiri, coll. R. S. Pillai, 11. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India: Bihar, W. Bengal, Assam, Meghalaya ( Khasi Hills ).

#### 48. *Ambassis baculis* ( Ham. )

1822. *Chanda baculis* Hamilton, *Fish Ganges* : 112, 371.

*Material*—2 exs., 45 and 46 mm., stream outside Siju Cave, coll. G. M. Yazdani, 22. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India: Punjab, Rajasthan, U. P., Bihar, W Bengal, Orissa, M. P., Maharashtra. Bangladesh. Pakistan. Burma and Thailand.

49. *Ambassis nama* (Ham.)

1822. *Chanda nama* Hamilton, *Fish Ganges* : 109, 371.

*Material*—1 ex., 75 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills : As above and Siju Cave (Hora, 1924). Elsewhere: India : Punjab, U. P., Bihar, W. Bengal, Rajasthan, Orissa, M. P., Maharashtra. Bangladesh and Burma.

50. *Ambassis ranga* (Ham.)

1822. *Chanda ranga* Hamilton, *Fish Ganges* : 113, 371.

*Material*—5 exs., 55 to 67 mm., Singhara River, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Throughout India. Bangladesh. Pakistan. Burma. Malaya and Thailand.

51. *Badis badis* (Ham.)

1822. *Labrus badis* Hamilton. *Fish Ganges* : 70, 368.

*Material*—(i) 2 exs., 20 and 28 mm., Holaidanga nallah, coll. G. M. Yazdani, 12. ii. 71. (ii) 1 ex., 50 mm., Barabil River near Rajabola, coll. G. M. Yazdani, (purchased), 13. ii. 71. (iii) 2 exs., 35 and 36 mm., stream near Amuka village, coll. G. M. Yazdani, 14. ii. 71. (iv) 34 exs., 11 to 21 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71. (v) 1 ex., 58 mm., stream outside Siju Cave, coll. G. M. Yazdani, 22. ii. 71. (vi) 4 exs., 30 to 35 mm., Damra, coll. R. S. Pillai, (purchased), 10. iv. 71. (vii) 1 ex., 45 mm., stream at Darugiri, coll. R. S. Pillai, 11. iv. 71. (viii) 9 exs., 30 to 46 mm., stream at Darugiri, coll. R. S. Pillai, 12. iv. 71 and 13. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India: Assam, Nagaland, W. Bengal, Bihar, U. P. Burma.

52. *Nandus nandus* (Ham.)

1822. *Coius nandus* Hamilton, *Fish Ganges* : 96.

*Material*—2 exs., 102 and 112 mm., beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Throughout India. Burma. Thailand and Malaya.

53. *Anabas testudineus* (Bl.)

1792. *Anthias testudineus* Bloch. *Naturg. Ausland. Fische*, 6 : 121.

*Material*—3 exs., 95 to 105 mm., stream at Darugiri forest; coll. R. S. Pillai, ( purchased ), 10. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : Throughout India. Sri Lanka. Burma. Malaya. Malaya Archipelago. Philippines. Thailand. Indo-China. China and Polynesia.

#### 54. *Colisa fasciatus* ( Bl. and Schn. )

1801. *Trichogaster fasciatus* Bloch & Schneider, *Ichthyologia* : 164.

*Material*—( i ) 1 ex., 34 mm., Holiadanga nallah, coll. G. M. Yazdani, 12. ii. 71. ( ii ) 2 exs., 32 to 70 mm., Barabil River near Rajabola, coll. G. M. Yazdani, ( purchased ), 13. ii. 71. ( iii ) 1 ex., 44 mm., Damra, coll. R. S. Pillai ( purchased ), 10. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India: Orissa, Andhra Pradesh, Tamil Nadu, Assam, Bihar, Punjab and Uttar Pradesh. Bangladesh. Pakistan and Burma.

#### 55. *Glossogobius giuris* ( Ham. )

1822. *Gobius giuris* Hamilton, *Fish Ganges*: 51, 366.

*Material*—( i ) 2 exs., 103 and 110 mm., beel near Khamari village, coll. G. M. Yazdani, 12. ii. 71 ( ii ) 3 exs., 110 and 150 mm., Gingiram River, coll. G. M. Yazdani, 13. ii. 71

*Distribution*—Garo Hills: As above. Elsewhere : Throughout India. Burma. Sri Lanka. East and South Coasts of Africa. Mauritius. Malaya. Malaya Archipelago. Thailand. China. Japan. Philippines. Melanesia. Polynesia and Australia.

#### 56. *Pillaia indica* Yazdani

1972. *Pillaia indica* Yazdani, *J. Bombay nat. Hist. Soc.*, 69 (1) : 134-135.

*Material*—( i ) 1 ex., 45 mm., stream ca. 4 km. north of Rongjeng, coll. R. S. Pillai, 12. iv. 71. ( ii ) 4 exs., 40 to 45 mm., stream at Darugiri,, coll. R. S. Pillai, 12. iv. 71. ( iii ) 4 exs., 33 to 67 mm., stream at Darugiri forest, coll. R. S. Pillai, 13. iv. 71.

*Distribution*—Garo Hills : As above. Elsewhere : India : Khasi Hills ( Meghalaya ).

*Remarks*—The nine examples resemble this species ( which was described on the basis of specimens from Khasi Hills ( Yazdani, 1972 ) in all respects except the shape and number of caudal rays. The caudal tip in specimens from Khasi Hills is rounded and the fin rays range from 8-10. In the present specimens the median caudal rays

are prolonged with the result that the caudal fin is drawn to almost a point in a lanceolate fashion. The number of rays is also higher, varying from 10 to 11.

This recently created genus could not be accommodated in either Mastacembelidae or Chaudhuridae although it comes closer to the latter. Only further work will establish its correct relation in the suborder Mastacembeloidae (Greenwood *et al*, 1966.)

Our material which was collected from shallow forest streams with plenty of decomposing leaves and mud extends the range of distribution of this hill stream Spiny eel to Garo Hills and to a place of lesser altitude.

#### 57. *Mastacembelus armatus* (Lacép.)

1800. *Macrogathus armatus* Lacépède, *Hist. nat. Poiss.* 283: 286.

*Material*—(i) 1 ex., 240 mm., Gingiram River, coll. G. M. Yazdani (purchased), 13. ii. 71. (ii) 1 ex., 535 mm., Someswari River at Baghmara, coll. G. M. Yazdani (purchased), 18. ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Pakistan. Sri Lanka. Malaya. Burma. Thailand and Hainan.

#### 58. *Mastacembelus pancalus* (Ham.)

1822 *Macrogathus pancalus* Hamilton, *Fish Ganges*, 30: 364.

*Material*—2 exs., 90 and 100 mm., Damra, coll. R. S. Pillai, (purchased), 10. iv. 71.

*Distribution*—Garo Hills: As above. Elsewhere: Throughout India. Bangladesh. Pakistan.

#### 59. *Tetraodon cutcutia* Ham.

1822. *Tetraodon cutcutia* Hamilton, *Fish Ganges*, 8, 362.

*Material*—(i) 2 exs., 30 and 31 mm., Barabil River near Rajabola, coll. G. M. Yazdani, (purchased), 13. ii. 71; (ii) 1 ex., 45 mm., Someswari River at Baghmara, coll. G. M. Yazdani, 18. ii. 71.

*Distribution*—Garo Hills: As above. Elsewhere: India: Orissa, W. Bengal, Assam. Bangladesh.

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