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Fish fauna of Tripura

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Abstract

The ichthyofauna collected from the sub Himalayan region of Tripura from 1976 to 1981 reveals the presence of 93 species of fish belonging to 26 families and 11 orders. Among these *Rasbora elanga* (Ham), *Labeo nandina* (Ham), *Lepidocephalus berdmorei* (Ham), *Somilepteus gongota* (Ham), *Glyptothorax cavia* (Ham), *Glyptothorax telchitta* (Ham), *Hara hara* (Ham) and *Apocryptes bato* (C and V) have been recorded for the first time. Common names of many fishes and location of collection with notes on new occurrences are given.

INTRODUCTION

Tripura, the North-eastern State of India (22° 56′ and 24° 22′ N and 91° 0′ and 92° 20′E latitude) is located in the sub Himalayan region (Anon, 1975). The principal hill ranges of the state are the Jumpai, Sakhan, Ilang, Longtarai, Atharomura and Baramura. These ranges increase in height towards south from the plains of Sylhet in Bangaladesh and towards North from the Chittagong District of Bangaldesh. In Tripura, they gain height from West to East. All ranges run almost parallel to one another in a northerly direction. The drainage from these hills pour down to the north by Khowai, Dhalai, Manu, Juri, Langai rivers, in the east by Gumti and Howda river and in the South-east the Fenny and Muhuri rivers (Fig. 1). The Fenny and Muhuri are tidal rivers.

Though the location of Tripura and its varying geographical features have contributed a diverse fish fauna, adequate attention has not been given so far to study comprehensively the fish faunal resources as seen from literature (Nair, 1971; Anon, 1975; Dutta, 1977 and Ghosh and Lipton in press). Further, the earlier collections made in the north eastern region of Assam by Day (1876) and northern Bengal by Shaw and Shebbeare (1937) also did not incldue the hill ' Tipperah ', the present day Tripura. Therefore there was a need to investigate the fish faunal resources and to consolidate the information gained. The work reported here deals with the various species collected from field surveys conducted from 1976 to 1981. The classification followed is as that of Greenwood *et al.*, (1966) and Menon (1974).

SYSTEMATIC ACCOUNT

Along with the scientific name, the common names of fishes and locality from where these were collected are given below:

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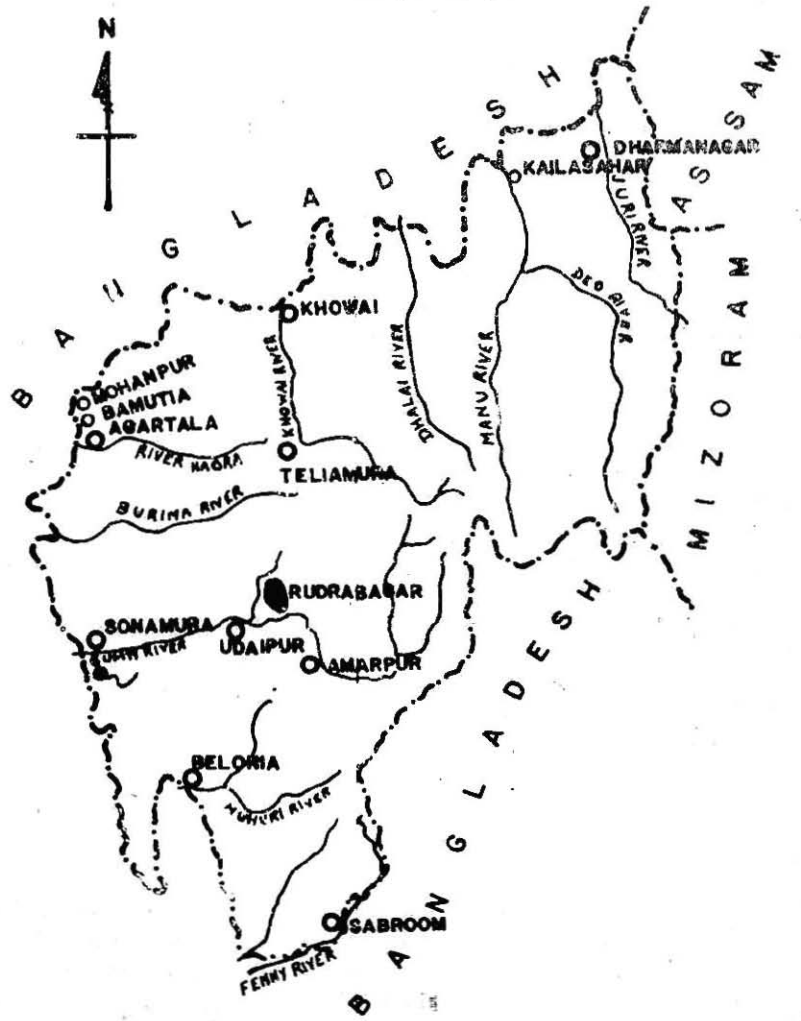
Class : Osteichthyes
Sub class : Actinopterigii
Order : Clupeiformes
Sub order : Clupeoidei
Family : Clupeidae



MAP OF TRIPURA SHOWING PRINCIPAL RIVERS AND FISH COLLECTION CENTRES

SCALE :- 16 MILES TO AN INCH

O CENTRES

— RIVERS

1.	*Hilsa ilisha* (Ham) 'Ilish'	Fenny river at Sabroom (rare occurrence)
2.	*Gudusia chapra* (Ham) 'Koira'	Gumti and Manu rivers
	Super order	Osteoglossomorpha
	Order	Osteoglossoformes
	Sub order	Notoperoidei
	Family	Notopteridae
	Order	Ooteoglossiformes
	Family	Notopteridae
3.	*Notopterus chitala* (Ham) 'Chithal'	Common in rivers and in lakes
4.	*Notopterus notopterus* (Ham) (Pallas) 'Phouli'	Common in rivers and in lakes
	Super order	Ostariophysi
	Order	Cypriniformes
	Sub order	Cyprinoidei
	Family	Cyprinidae
	Sub family	Cultrinae
5.	*Chela labuca* (Ham) 'Chapkhowari'	Small streams near Mohanpur and Kamalghat (West Tripura)
6.	*Salmostoma bacaila* (Ham) 'Chela'	Fenny river at Sabroom
	Sub Family	Rasborinae
7.	*Barilius barila* (Ham) 'Chedra'	Rudrasagar bheel, South Tripura
8.	*Barilius barna* (Ham) 'Joia' 'Bhola' and 'Ghol'	Gumti and Khowai rivers
9.	*Barilius bendelisis* (Ham) 'Joia'	Streams near Khowai
10.	*Barilius shacra* (Ham) 'Koksha'	Gumti and Manu rivers
11.	*Barilius tileo* (Ham) 'Boola'	Khowai and Dolai rivers
12.	*Danio (Danio) aequipinnatus* (McClelland) 'Chebli'	Unnukoti stream and Fenny river near sabroom
13.	*Danio (Brachydanio) rerio* (Ham) 'Anju'	Streams and water looged areas
14.	*Danio (Danio) dangila* (Ham) 'Nipati'	Fenny river at Sabroom
15.	*Danio (Danio) devario* (Ham) 'Nipati'	Common in rivers
16.	*Esomus danricus* (Ham)	Common in streams and water stagnant areas
17.	*Rasbora daniconius* (Ham) 'Darkina'	Common in West and South Tripura district a rivers and stagnant waters
18.	*Rasbora elanga* (Ham)*	'Bhagna'

1876 *Rasbora elanga,* Day *Fish. India,* p. 584, pl. 146, Fig. 1.

1937 *Rasbora elanga,* Shaw and Shebbeare, *J. Asiat. Soc Beng.* p. 3, 31 Text Fig. 26, pl. 2, Fig. 13.

22 examples, length 9.8 to 20.0 cm were collected from Howdah river near Agartala. D. II. 7, A. II. 5, P. 15, V. 8, C. 19, L. 1.40; length of head 5–5 3/4; height of body 4 1/4 to 5 in total length; barbels 1 pair (rostral) cleft of the mouth oblique, lower jaw having once central and two lateral prominences fitting into corresponding emerginations of the upper jaw, which gives the mouth a wavy opening when viewed from the front. Colour is silvery with lead coloured band along the upper portion of the side.

Distribution: Bihar, West Bengal, Bangladesh, Assam and Northern Burma (Menon, 1954).

	Sub family	Cyprininae
19.	*Ambharygodon mola* (Ham) ' Mowka '	Common in swampy paddy fields and ponds
20.	*Aspidoparia jaya* (Ham)	Common in rivers
21.	*Catla catla* (Ham) ' Catla ' ' Katal '	Commercially important fish. Widely used in stocking ponds
22.	*Chagunius chagunio* (Ham) ' Puti '	Gumti river
23.	*Cirrhinus reba* (Ham) ' Rewah '	Gumti river
24.	*Cirrhinus mrigala* (Ham) ' Mrigal '	Widely used in stocking ponds
25.	*Labeo bata* (Ham) ' Bhangna '	Gumti river, Manu river and Fenny river
26.	*Labeo boga* (Ham) ' Bangum batta '	Fenny river
27.	*Labeo calbasu* (Ham) ' Kalibaus '	Widely used in stocking ponds
28.	*Labeo gonius* (Ham) ' Gonya '	Manu, Gumti rivers
29.	*Labeo nandina** (Ham)	

1876 *Labeo nandina* Day, *Fish India*, p. 535, pl. 126, Fig. 1 and 2.

1937 *Labeo nandina* Shaw and Shebbeare *J. Asiat. Soc. Bengal*, **3**, p. 55, pl. 5, Fig. 12, Text Fig. 52.

20 examples—length 8 to 15 cm were collected from a lake near Agartala. D. II–III. 22–24, A. II. 5, p. 15, V. 9 C. 19 L. 1. 42–44. Length of head 4 ½ –5 of caudal 4 1/4–4 ½, height of body 3 1/2 in the total length, Barbels 2 pairs, Snout obtuse, slightly projecting beyond the jaws, a few fine pores present on the snout. Lips thick and fringed. Colour is dark greenish above, becoming lighter below.

Distribution: West Bengal, Bangladesh, Assam and Burma.

30.	*Labeo rohita* (Ham) ' Rui ', ' Rohu '	Throughout Tripura widely used in stocking ponds
31.	*Osteobrama cotio cotio* ' Gila Khani '	Collected from Gumti Khowai and Fenny river
32.	*Puntius chola* ' Titu puti '	Very common in all water logged areas. Collected from different parts of Tripura
33.	*Puntius clavatus* (McClelland) ' Puti '	Collected along with *P.chola* from water logged areas after rainy season
34.	*Puntius conchonius* (Ham) ' Kanchan Puti '	Water logged areas
35.	*Puntius sophore* (Ham) ' Puti ' ' Sar puti '	Streams, ponds and water logged areas
36.	*Puntius sarana sarana* (Ham) ' Sar puti '	Howda river near Agartala and in fish tanks
37.	*Puntius ticto* (Ham) ' Tituputi '	Ponds, tanks, beels
38.	*Semiplotus emiplotus* ' McClelland ' Bandangi '	Khowai river
39.	*Tor putitora* (Ham)	Upper reaches of Gumti in Raima rivulet (Gumti reservoir)
40.	*Tor tor* (Ham) ' Mahasol '	Upper reaches of Gumti in Raima rivulet (Gumti reservoir)
	Family	Psilorhynchidae
41.	*Psilorhynchus balitora* (Ham)	Upper reaches of Gumti river
	Family	Cobitidae
42.	*Botia dario* (Ham)	Stream near Khowai
43.	*Lepidocephalus berdmorei** (Blyth) ' Gunte ' ' Gutam '	

*New record

1876 *Lepidocephalichthys berdmorei* Day, *Fish. India,* p. 610, pl. 153, Fig. 3.

1921 *Lepidocephalichthys berdmorei* Hora *Rec. Indian Mus.,* **22,** p. 196.

25 examples. 8–10 cm length, were collected from Fenny river, Sabroom. D. II. 6, A. II 5–6, P. 10, V. 8, C. 17. length of head 6–6 ½, of caudal 6–6 ¼, height of body 5 ½–6 in the total length. Barbels 3 pairs. Mandibular flap also consists of 2 pairs of short barbels. Colour is yellowish brown. A dark line along the body composed of spots also present.

	Distribution	Manipur and Burma
44.	*Lepidocephalus guntea*	Water logged areas and slow stream
45.	*Neomacheilus botia* (Ham)	Streams near Manu, Manubazar
46.	*Neomacheilus spilopterus**	
47.	*Neomacheilus zonatus**	
48.	*Somileptes gongota*** (Ham)	

1876, *Somileptes gongota* Day, *Fish. India,* p. 605, pl. 155, Fig. 2.

1937 *Somileptes gongota,* Shaw and Shebbeare. *J. Asiat. Soc. Baengl,* **3,** p. 78, Text Fig. 75.

15 examples 7.2 to 10 cm in length were collected from Fenny river, Sabroom D. III. 8, A. II. 5, P.I. 10, V.II. 6¼, C. 16. Length of head 5 of caudal 6¼, height of body 7 in total length. The upper profile of the snout is slightly concave, rising abruptly to above the eye which are also close together near the top of the head. From this point, the body tapers gradually to the peduncle of the tail. Scales are minute. A large erectile suborbital spine is also present. Barbels 3 pairs of which a small erect pair is present above nostrils. Colour is light brown speckled with darker above, yellowish or whitish beneath. Fins yellowish.

	Distribution	North Bengal and Assam
	Order	Siluriformes
	Family	Bagridae
49.	*Aorichthys aor* (Ham)	Fenny river at Sabroom
50.	*Aorichthys seengala* (Sykes) ' Aoyeer '	Fenny river at Sabroom
51.	*Mystus bleekeri* (Day) ' Tengra '	Gumti river and a lake near Agartala
52.	*Mystus vittatus* (Bloch) ' Tengara '	North, south and west Tripura districts in ponds, lakes and rivers
53.	*Rita rita* (Ham) ' Reti '	Khowai river at Khowai
	Family	Siluridae
54.	*Ompok bimaculatus* (Bloch)	Fenny and Khowai rivers
55.	*Ompok pabda* (Ham)	Gumti river and Howda river near Agartala
56.	*Wallago attu* (Schneider) ' Boal '	Fenny river, Gumti river
	Family	Schilbeidae
57.	*Clupisoma garua* (Ham)	Gumti river, Rudrasagar lake
58.	*Eutropiichthys murius* (Ham) 'Muribacha'	Gumti and Manu rivers
59.	*Eutropiichthys vacha* (Ham)	Gumti river and Rudrasagar
60.	*Pseudotropius atherinoides*	Gumti river (rare species)

*Recorded by Dutta (1977)

**New Record

61. *Silonia silondia* (Ham) 'Shilong' 'Silon'. Rudrasagar lake and in Gumti river.
Family ... Sisoridae.
Family ... Amblycepitidae ...
62. *Amblyceps mangois* (Ham). Gumti river near Udaipur (rare species)
Family Sisoridae
63. *Bagarius bagarius* (Ham) 'Bhaghar' Manu river and Gumti river
64. *Batasio batasio* (Ham) 'Bojori' Manu river and Gumti river
65. *Glyptothorax cavia* (Ham)*

1876 *Euglyptosternum lineatum* Day, *Fish. India,* p. 500, pl. 116, Fig. 7.

1937 *Glyptothorax lineatus,* Shaw and Shebbeare, *J. Asiat. Soc. Beng.,* **3,** p. 102, Fig. 104.

1948 *Glyptothorax cavia* Hora and Menon, *Rec. Indian Mus.,* **46,** p. 60, pl. 2, Figs. 4, 5.

13 examples length 5.5 to 8.5 cm were collected from Khowai river, West District. D.I. 6, D_2. O, A. III. 10, P.I. 10, V. 6, C. 17. length of head $4\frac{1}{2}$, of caudal $5\frac{2}{3}$, height of body 7 in the total length. Head flattened. upper jaw is longer than the lower. Barbels 4 pairs. The adhesive apparatus on the chest has a smooth space in the middles. Colour is mottled dark brown. Fins are paler with darker bases and a darker band across each.

Distribution: Eastern Himalayas, Assam and Burma.

66. *Glyptothorax riberoi* (Hora) Manu river
67. *Glyptorhorax telchitta* (Ham)*

1876 *Glyptosternum telchitta* Day Fish. India p. 498, pl. 116, Fig. 2.

1937 *Glyptothorax telchitta* Shaw and Shebbeare, J. Asiat. Soc. Beng. 3. p. 103, Text Fig. 105.

24 examples, length 5.0 to 8.2 cm were collected from Khowai river, West District. D.I. 6, D 2. O, A. II. 9, P.I. 8, Vol. 6, C. 17. Length of head $5\frac{1}{2}$ to $5\frac{3}{4}$, of caudal $5\frac{3}{4}$, height of body $7\frac{1}{2}$ to 8 in the total length. Upperjaw is longer than the lower. Barbels 4 pairs; the outer mandibular pair reach the gill opening. There is a pectoral adhesive apparatus. Skin with small longitudinal elevations. Colour is blackish-brown yellow fins with black bands.

General Distribution: Uttar Pradesh, North Bihar, North Bengal and Nepal.

68. *Hara hara* (Ham) 'Gagot'*

1876 *Erethistes hara, Day Fish.* India, p. 452, pl. 102, Fig. 1 and 2.

1937 *Erethistes hara* Shaw and Shebbeare. *J. Asiat. Soc. Bengal.* 3. p. 99, pl. 3, Fig. 13 Text Fig. 100 and 101.

1974 *Hara hara.* Menon. *Check list of fishes,* I.F.S.I., p. 82.

23 examples—length 3.5 to 7.0 cm were collected from Fenny river in South District. Length of head 4–$4\frac{1}{2}$ of caudal 5 height of body $4\frac{1}{2}$–5 in total length. Head flattened in a horizontal plane and body in the vertical plane. The skin is rough with elevated spots or blunt. Bony spines. Barbels four pairs. Colour is olive brown with darker bands.

Distribution: Gangetic provinces, Assam, Burma and Orissa.

*New record

	Family	Claridae
69.	*Clarius batrachus* (Linn) 'Jagur', 'magur'	Marshy areas and paddy fields
	Family	Heteropneustidae
70.	*Heteropneustes fossilis* (Bloch) ' Singhi '	Abundant during rainy season. Available in marshy areas
	Family	Chacidae
71.	*Chaca chaca* (vam) ' Kutkutya '	Found in small rivers and rivulets throughout Tripura
	Family	Olyridae
72.	*Olyra longicaudata* (McClell) 'Bhotsinghi'	Manu river. This is a rare species
	Super order	Atherinomorpha
	Order	Atheriniformes
	Sub order	Cypressodosstoidei
	Family	Cypinodontidae
73.	*Aplocheilus panchax* (Ham)	Water logged areas near Mohanpur. Distributed widely and abundant during September and October months
	Sub order	Exocoetoidei
	Family	Belonidae
74.	*Xenentodon cancila* (Ham) ' Kakiya '	Lakes near Agartala also from a pond near Udaipur
	Super order	Acanthopterygii
	Order	Channiformes
	Family	Channidae
75.	*Channa marulius* (Ham) ' Gajar '	Widely distributed in ponds and rivers
76.	*Channa orientalis* (Schneider) ' Cheng '	Widely distributed in ponds and rivers
77.	*Channa punctata* (Bloch) ' lati ' or 'taki'	Widely distributed in ponds and rivers
78.	*Channa striatus* (Bloch) ' Shoal '	Low lying marshy areas where vegetation was abundant
	Order	Symbranchiformes
	Sub order	Symbranchoidei
	Family	Symbranchidae
79.	*Amphinous cuchia* (Ham) ' Kuchiya '	Paddy fields and in marshes
	Order	Perciformes
	Sub order	Percoidei
	Family	Centropomidae
80.	*Chanda baculis* (Ham) ' Chanda '	Rivers and streams collected near Bamutia (West) Tripura.
81.	*Chanda nama* (Ham) ' Chanda '	In streams and rivers
82.	*Chanda ranga* (Ham) ' Chanda or ronga '	Streams and rivers near Mohanpur
	Family	Nandidae
83.	*Badis badis* (Ham) ' Bot koi .'	Water logged areas
84.	*Nandus nandus* (Ham) ' Nanda or Meni '	Water logged areas and in beels
	Sub order	Gobioideii
	Family	Gobiidae
85.	*Aprocryptus bato* (C and V)* ' Cheeng '	

*New Record

1876 *Apocryptus bato* Day, *Fish. India,* p. 302, p.l 114, Fig. 6.

D V 21–22, A. 23, V.I. 5, p. 23, C. 13 Length of head 6–6$\frac{1}{2}$ of caudal 4$\frac{2}{3}$ height of body 7 in the total length. Body elongated. Eyes are high up and set very closely. The ventral fins united forming a disc attached at their bases. Colour is light greenish yellow with ill defined narrow vertical yellow bands descending from the back to the abdomen.

Distribution: Orissa and lower Bengal within tidal reach.

86.	*Glossogobius gutum* (Ham) 'Bhalia' or 'belay'	Common in all water-logged areas and in streams
	Sub order	Anabantoidei
	Family	Anabantidae
87.	*Anabas testudineus* (Bloch) 'Koi'	Abundant immediately after the rainy season caught from beels and marshes
88.	*Colisa sota* (Ham)	Beels and other water-logged areas
	Order	Mastacembeliformes
	Family	Mastacembelidae
89.	*Colisa fasciata* (Schneider) 'Kholisha'	Ponds and tanks and beels
90.	*Mastacembelus armatus* 'Baim' Lacepede	Streams, ponds water-logged areas
91.	*Mastacembelus pancalus* (Ham) 'Baim'	Streams, ponds water-logged areas
92.	*Macrognathus aculeatus* (Bloch) 'Goichi'	Rivers and adjoining water-logged areas
93.	*Tetradon cutcutia* (Ham)	Beels, water-logged areas and in streams (Bamutia beel, West Tripura)

Discussion

The systematic account indicates the occurrence of 93 species belonging to 11 orders, 26 families and 55 genera. Majority of the genera are found to be common to that of the Indo-Gangetic drainage and south-east Asian fauna. Fifteen genera are comparable to that of the South West Asian fish fauna as listed by Menon (1973). Five genera are represented elsewhere only in the Eastern Himalayas. One species (that of *Batasio batasio* (Ham)) is of exclusively Burmese origin and represented elsewhere in the North east India, only in the Manipur state.

Among the new records reported here, the two genera *Somileptes* and *Hara* are considered to be endemic to India (Menon, 1955). The species *Apocryptes bato* (C and V) has been recorded for the first time from Tripura and from the North-eastern region as well. While describing the distribution of this species, Day (1876) observed that the species is present only in the tidal reaches of the river. The river Fenny, from where collections were made is connected to the Bay of Bengal through Bangladesh. The collections were made approximately 92 kilometers from the sea mouth and therefore confirms its natural habitat.

The occurrence of these fish species in Tripura and their distribution in different ecosystems provides additional information on the existing knowledge of the fish genetic resources of the North-eastern Himalayan region and may be of interest to those involved in fish geography of the Assam-eastern Himalayas and that of Indo-Malayan Archipelago.

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Literature Cited

Anon, P. V., 1975 Tripura District Gazeteer (ed. Menon) ,p. 504.

Day, F., 1876. Fishes of India Reprinted by Today and Tommorrow's Book Agecy, New Delhi (1978), pp. 778.

Dutta, A. K., 1977. O an collection of fishes from Tripura State. *News Letter. Zool. Sur. India,* **3(1):** 24-26.

Ghosh, S. K. and Lipton, A. P., 1982. Ichthyofauna of the NEH region and evaluations of economic importance of the fish species (in press)

Greenwood, P H., Rosen, D. E., Weitzman, S. H. and Myers, G. S., 1966. Phyletic studies of teleostean fishes with a provisional classification of the living forms. *Bull. Amer. Mus. Nat. Hist.,* New York, **131** (Article-4): 341-455.

Menon, A. G. K., 1955. The external. relations of the Indian freshwater fishes, with special reference to the countries bordering on the Indian Ocean. *J. Asiat. Soc. Besyls,* **21(1):** 31-38.

————1973 Origin of the freshwater fauna of India. *Curr. Sci.,* **42(16):** 553-556.

————1974. A checklist of fishes of the Himalayan and Indo-Gangetic plains— *Special publication* No. **1:** *the Inland Fish. Soc. India,* pp. 136.

Nair, P. V., 1958. A preliminary list of the fishes of Tripura. *Proc. 45th Indian Sci. Cong.,* pt **3:** 367.

Shaw, G. E. and Shebbeare, E. B., 1937. The fishes of Northern Bengal. *J. Asiat. Soc. Bengal,* Calcutta, **3:** pp. 137.