

PISCES

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INTRODUCTION

This report is based on the fish fauna collected from Namdapha National Park. The fish material comprises 255 examples belonging to 7 families, 19 genera under 28 species. Three species form the new record and four new species have been described. While identifying the species of this locality all the existing literature (Chaodhury, 1913 ; Jayaram and Majumdar, 1964 ; Srivastava, 1966 and Chaodhuri and Sen, 1977), on the fish fauna of Arunachal Pradesh (formerly NEFA) have been consulted. The species are detailed systematically citing important synonymies, number of examples examined with date of collection and its geographical distributions.

FISH FAUNA OF NAMDAPHA NATIONAL PARK, TIRAP DISTRICT, ARUNACHAL PRADESH, INDIA.

The material consists of 255 examples comprising 28 species belonging to 19 genera and 7 families as recorded below. The systematic account is arranged as per that of Greenwood, Rosen, Weitzman and Myers (1966).

Class	—	PISCES
Subclass	—	TELEOSTOMI
Order	—	CYPRINIFORMES
Family I	—	CYPRINIDAE
Genus (1)	—	Danio Hamilton

1. **Danio (Danio) aequipinnatus** (McClelland)

1839. *Perilampus aequipinnatus* McClelland, *Asiat. Res.*, 19(2) : 393 (type-locality : Assam).
1878. *Danio aequipinnatus*, Day, *Fish. India*, : 596, pl. 150, fig. 6.
1934. *Danio (Danio) aequipinnatus*, Hora and Mukerji, *Rec. Indian Mus.*, 36 : 134 (synoptic table to species of the subgenus *Danio*).

Material examined : 72 exs., 24.0 mm-85.0 mm S. L. ; 12.iv.81.

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

Remarks : This species is provided with a backwardly directed spinous process at the anterior rim of the orbit. The earlier Indian workers seem to have overlooked the presence of this bony structure derived from the lachrymal bone of the orbit. It was first pointed out by Vinciguerra (1889-90 : 304) and later confirmed by Myers (in Herre and Myers, 1937 : 57) that in this species there is a preorbital spinous process as in *Danio* (*Danio*) *regina* Fowler.

2. *Danio* (*Danio*) *dangila* (Hamilton)

1822. *Cyprinus dangila* Hamilton, *Fish. Ganges*, 321, 309 (type-locality : mountain streams of Monghyr, Bihar)

1878. *Danio dangila*, Day, *Fish. India*, : 596, pl. 150, fig. 3.

Material examined : 47 exs., 42.0 mm.-72.0 mm. S. L. ; 11.iv.81.

Distribution : INDIA : Assam, Meghalaya, Arunachal Pradesh, Nagaland, Manipur, West Bengal, Bihar, Madhya Pradesh, Uttar Pradesh, Bangladesh, Nepal, Burma.

Remarks : There is a gradual tendency towards the reduction of anal fin rays (14-15 vs. 17-18) and body depth comparatively shorter in these specimen of this locality.

3. *Danio* (*Brachydanio*) *horai* Barman

1983. *Danio* (*Brachydanio*) *horai* Barman, *Curr. Sci.*, 52(4) : 177-178 (type-locality : Namdapha river, Tirap dist., Arunachal Pradesh).

Material examined : 10 exs., 21.0 mm.-28.0 mm. S. L. ; 12.iv.81.

Distribution : INDIA : Arunachal Pradesh.

Remarks : This species attains to a length of 28.0 mm. in standard length.

4. *Danio* (*Danio*) *neilgherriensis* (Day)

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

1878. *Danio neilgherriensis* Day, *Fish. India*, : 597, pl. 150, fig. 2.

1934. *Danio* (*Danio*) *neilgherriensis*, Hora and Mukerji, *Rec. Indian Mus.*, 36(1) : 134 (synoptic table to species of the subgenus *Danio*).

Material examined : 4 exs., 40.0mm.-52.0mm. S. L. ; 11.iv.81.

Distribution : INDIA : Tamil Nadu, Arunachal Pradesh.

Remarks : Day (1867) described *Danio neilgherriensis* from the rivers of the Nilgiri Hills, Tamil Nadu. After Day, no record of this species is known from anywhere in India. This faunastic survey has emanates the presence of this species in that locality. This discontinuous distribution of this species in that locality is of great zoogeographical interest because its presence in that locality indicates its range of distribution to North-Eastern India. Moreover, the present record of this species is the second record subsequent to Day (1867) in India.

5. *Barilius bendelisis* (Hamilton)

1807. *Cyprinus bendelisis* Hamilton, *Journey Mysore*, 3 : 345, pl. 32 (type-locality : rivers of Mysore).

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

Material examined : 18 exs., 46.0 mm.---118.0 mm S.L., 18.iv.81.

Distribution : Throughout India, Nepal, Pakistan, Bangladesh, Sri Lanka.

6. *Barilius vagra* (Hamilton)

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

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

Material examined : 3 exs., 43.0 mm,-51.0 mm. S.L., 11.iv.81.

Distribution : INDIA : North India (Indus, Ganga, Yamuna and Brahmaputra river system). Nepal, Bangladesh, Sri Lanka, Pakistan.

7. *Semiplotus semiplotus* (McClelland)

1839. *Cyprinus semiplotus* McClelland, *Asiat. Res.*, 19 : 274 (type-locality : Brahmaputra at Upper Assam).

1881. *Semiplotus semiplotus*, Jayaram, *Freshwater Fishes of India*, : 96 (distribution and key to species).

Material examined : 4 exs., 90.0 mm.-250.0 mm. S.L. ; 18.iv.81.

Distribution : INDIA : Assam, Meghalaya, Arunachal Pradesh.

8. *Puntius hexastichus* (McClelland)

1839. *Barbus hexastichus* McClelland, *Asiat. Res.*, 19 : 269, 333 (type-locality : Assam).

1981. *Puntius hexastichus*, *Freshwater Fishes of India*, : 105 (key to the species).

Material examined : 2 exs., 112.0 mm.-130.0 mm. S. L. ; 18.iv.81.

Distribution : INDIA : Himalayan foot hill rivers, from Kashmir to Sikkim and Assam.

9. *Puntius stivensonii* (Day)

1870. *Barbus stivensonii* Day, *Proc. zool. Soc. Lond.*, : 100 (type-locality : Hills near Akyab, Burma).
 1981. *Puntius stivensonii*, Jayaram, *Freshwater Fishes of India*, : 106 (key to the species).

Material examined : 24 exs., 36.0 mm.—43.0 mm. S. L. ; 12.iv.81.

Distribution : INDIA : Arunachal Pradesh. Hills near Akyab, Burma.

Remarks : Recorded for the first time in Arunachal Pradesh.

10. *Labeo dero* (Hamilton)

1822. *Cyprinus dero* Hamilton, *Fish. Ganges*, : 277 (type-locality : the Brahmaputra).
 1981. *Labeo dero*, Jayaram, *Freshwater fishes of India*, : 119 (key to the species).

Material examined : 8 exs., 120.0 mm.—300.0 mm. S.L. ; 18.iv.81.

Distribution : INDIA : Assam, Darjeeling (West Bengal), Eastern Himalayas, Punjab, Uttar Pradesh, Western Himalayas, Pakistan, China.

11. *Labeo pangusia* (Hamilton)

1822. *Cyprinus pangusia* Hamilton, *Fish Ganges*, : 285, 386 (type-locality : River Kosi).
 1981. *Labeo pangusia*, Jayaram, *Freshwater Fishes of India*, : 119 (key to the species).

Material examined : 1 ex., 140 mm. S.L. ; 11.iv.81.

Distribution : INDIA : Hymalayan range and generally throughout Sind, the Deccan, N.W. Provinces to Bengal, Cachar and Assam (Day, 1878)

12. *Acrossocheilus hexagonolepis* (McClelland)

1839. *Barbus hexagonolepis* McClelland, *Asiat, Res.*, 19 : 270, 336 (type-locality : Upper Assam).
 1981. *Acrossocheilus hexagonolepis*, Jayaram, *Freshwater Fishes of India*, : 122 (diagnostic characters).

Material examined : 11 exs., 55.0 mm.—245.0 mm. S.L. ; 11.iv.81.

Distribution : INDIA : Assam, West Bengal, Eastern Himalayas, Bangladesh, Pakistan, Malaya, Burma, Nepal, Thailand.

13. **Tor khudree** (Sykes)

1841. *Barbus khudree* Sykes, *Trans. zool. Soc. London*, 2 : 357 (type-locality : Mutha Mula river, Poona).
 1981. *Tor khudree*, Jayaram, *Freshwater fishes of India*, : 126 (key to species).

Material examined : 1 ex., 210.0 mm. S.L. ; 18.iv.81.

Distribution : INDIA : Rivers of Western Ghat viz. Godavary, Krishna, Cauvery and their tributaries.

14. **Tor putitora** (Hamilton)

1822. *Cyprinus putitora* Hamilton, *Fish. Ganges*, : 303, 388 (type-locality : eastern parts of Bengal).
 1981. *Tor putitora*, Jayaram, *Freshwater fishes of India*, : 125 (key to the species).

Material examined : 1 ex., 252.0 mm. S.L. ; 18.iv.81.

Distribution : INDIA : Assam, Eastern Himalayas, West Bengal, Punjab, Uttar Pradesh, Western Himalayas, Pakistan, Bangladesh, Nepal, Burma, Thailand.

15. **Crossocheilus latius latius** (Hamilton)

1822. *Cyprinus latius* Hamilton, *Fish. Ganges*, : 345, 393 (type-locality : the Tista).
 1981. *Crossocheilus latius latius*, Jayaram, *Freshwater Fishes of India*, : 134 (key to the species).

Material examined : 25 exs., 62.0 mm. – 135.0 mm. S. L. ; 18.ix.81.

Distribution : INDIA : Bihar, West Bengal, Uttar Pradesh, Andhra, Pradesh, Maharashtra, Karnataka, Pakistan, Bangladesh.

16. **Garra nasuta** Datta and Barman

1838. *Platy cara nasuta* McClelland, *J. Asiat. Soc. Beng.*, 7(2) : 947 (type-locality : Khasi Hills, Assam).
 1964. *Garra nasuta*, Menon, *Mem. Indian Mus.*, 14 : 239 pl. 13, figs. 11-12 (Revision).

Material examined : 1 ex., 110.0 mm. S.l. ; 21.iv.81.

Distribution : INDIA : Assam, Burma, South China and Indo-China.

17. **Garra tirapensis** Datta and Barman

1984. *Garra tirapensis* Datta and Barman, *Bull. zool. Surv. India*, 6 (1-3) : 283-287 (type-locality : Namdapha wildlife sanctuary, Tirap district, Arunachal Pradesh).

Material examined : 11 exs., 55.0 mm.—135.0 mm. S. L. ; 18.iv.81.

Distribution : INDIA : Arunachal Pradesh.

Family II : COBITIDAE

Genus (10) **Aborichthys** Choudhuri

18. **Aborichthys elongatus** Hora

1821. *Aborichthys elongatus* Hora, *Rec. Indian Mus.*, 22(5) : 735 (type-locality : Reang River, Darjeeling, Alt, 20008).
 1981. *Aborichthys elongatus* Jayaram, *Freshwater Fishes of India*, : 146 (distribution).

Material examined : 1 ex., 65.0 mm. S. L. ; 18.iv.81.

Distribution : INDIA : Darjeeling Himalaya.

Genus (11) **Noemacheilus** van Hasselt

19. **Noemacheilus arunachalensis** Datta and Barman

1984. *Noemacheilus arunachalensis* Datta and Barman, *Bull. zool. Surv. India*, 6 (1-3) : 275-277 (type-locality : Namdapha wildlife sanctuary, Tirap district, Arunachal Pradesh).

Material examined : 3 exs., 34.0 mm.—55.0 mm. S. L. ; 11.iv.81.

Distribution : INDIA : Namdapha River, Tirap dist., Arunachal Pradesh.

20. **Noemacheilus botia** (Hamilton)

1822. *Cobitis botia* Hamilton, *Fish. Ganges*, : 350, 394 (type-locality : rivers of north-eastern parts of Bengal).
 1878. *Noemacheilus botia*, Day, *Fish. India*, : 614, pl. 156, fig. 5.

Material examined : 3 exs., 20.0 mm.—55.0 mm. S. L. ; 18.iv.81.

Distribution : INDIA : Throughout northern India. Bangladesh, Pakistan, Burma, Sri Lanka.

Genus (12) **Somileptis** Swinson

21. **somileptis gongota** (Hamilton)

1822. *Cobitis gongota* Hamilton, *Fish. Ganges*, : 351, 394 (type locality : rivers of northern Bengal towards the mountains).
 1878. *Somileptis gongota*, Day, *Fish. India*, : 608, pl. 155, fig. 2.

Material examined : 2 exs., 82.0 mm.—104.0 mm. S. L. ; 11.iv.81.

Distribution : INDIA : Assam, Bihar, West Bengal, Bangladesh.

Genus (13) *Lepidocephalus* Bleeker

22. *Lepidocephalus (Lepidocephalichthys) guntea* (Hamilton)

1822. *Cobitis guntea* Hamilton, *Fish. Ganges*, 353, 394 (type-locality : ponds and rivers of Bengal).
 1981. *Lepidocephalus (Lepidocephalichthys) guntea*, Tilak and Husain, *Rec. zool. Surv. India, Oce. Paper no. 32* : 7 (Revision).

Material examined : 6 exs., 56.0 mm.—67.0 mm. S. L. ; 11.iv.81.

Distribution : North India, Pakistan, Nepal, Bangladesh.

Genus (14) *Acanthopsis* van Hasselt

23. *Acanthopsis choirorhynchus* (Bleeker)

1854. *Cobitis choirorhynchus* Bleeker, *Nat. Tijdschr. Ned. Indie*, 7 : 95 (type-locality : Palembang, Sumatra)
 1878. *Acanthopsis choirorhynchus*, Day, *Fish. India*, : 608 (Redescription).

Material examined : 1 ex., 192.0 mm. S. L. ; 12.iv.81.

Distribution : INDIA : Arunachal Pradesh, Burma, Malayasia, Sumatra, Borneo, Java, Vietnam and Thailand.

Remarks : The monotypic cobitid genus *Acanthopsis* van Hasselt with its type species *A. choirorhynchus* (Bleeker) is known hitherto only from Burma, Malayasia, Sumatra, Borneo, Java, French Indo-China (Vietnam), Thailand (Smith, 1945). This faunistic survey of fish fauna of Arunachal Pradesh has revealed a female specimen of *A. choirorhynchus*. The existing literature on the fish fauna of Arunachal Pradesh also indicate that this species is not so far known from Arunachal Pradesh and from rest of the other states of India also. The present record of this species from Namdapha Wildlife Sanctuary. Tirap district, Arunachal Pradesh, therefore, extends its distributional range west-ward to the Indian mianland.

Order : SILURIFORMES

Family III : BAGRIDAE

Genus (15) *Batasio* Blyth

24. *Batasio tengana* (Hamilton)

1822. *Pimelodus tengana* Hamilton, *Fish. Ganges*, : 176, 377 (type-locality : R. Brahmaputra).
 1941. *Batasio tengana*, Hora and Law, *Rec. Indian Mus.*, 43 : 36 (Revision).

Material examined : 2 exs., 80.0 mm.—95.0 mm. S. L. ; 18.iv,81,

Distribution : INDIA : E. Himalayas, Assam, North Bengal, Bangladesh, Burma, Malayasia, Thailand.

Family IV : SILURIDAE

Genus (16) **Kryptopterus** Bleeker

25. **Kryptopterus indicus** sp. nov.

The new species is being described in *Bull. zool. Surv. India*.

Material examined : 1 ex., 190.0 mm. S. L. ; 11.iv.81.

Distribution : INDIA : Namdapha river, Tirap dist., Arunachal Pradesh.

Family V : SISORIDAE

Genus (17) **Pseudecheneis** Blyth

26. **Pseudecheneis sulcatus** (McClelland)

1842. *Glptosternon sulcatus* McClelland, *J. Nat. Hist. Calcutta*, 2 : 587 (type-locality : Khasi Hills)

1889. *Pseudechensis sulcatus*, Day, *Fauna Brit. Ind. Fish*, 1 : 107.

Material examined : 4 exs., 50.0 mm.—140.0 mm. S. L. ; 18.iv.81.

Distribution : INDIA : Assam, West Bengal, Meghalaya, Nepal.

Order : CHANNIFORMES

Family VI : CHANNIDAE

Genus (18) **Channa** Scopoli

27 **Channa stewarti** (Playfair)

1867. *Ophiocephalus stewarti* Playfair, *Proc. zool. Soc.* : 14, pl. 3 (type-locality : Cachar, Assam).

1889. *Channa stewarti*, Day, *Fauna Brit. Ind. Fish*, 2 : 363.

Material examined : 10 exs., 55.0 mm.—110.0 mm. S. L. ; 11.iv.81.

Distribution : INDIA : Assam, Bihar, Meghalaya, West Bengal.

Order : PERCIFORMES

Family VII : NANDIDAE

Genus (19) **Badis** Bleeker

28. **Badis badis** (Hamilton)

1822. *Labrus badis* Hamilton, *Fish Ganges*, : 70, 368 (type-locality : Gangetic Provinces).

1954. *Badis badis*, Menon, *Rec. Indian Mus.*, 52 : 22 (Nepal).

Material examined : 8 exs., 30.0 mm.—46.0 mm. S. L. ; 12.iv.81.

Distribution : INDIA : Assam, Nagaland, Meghalaya, Bihar, West Bengal, Uttar Pradesh, Bangladesh, Pakistan, Burma, Nepal.

SUMMARY

The study of the fish fauna of Namdapha National Park, in Tirap district, Arunachal Pradesh is very interesting because it shows that the fishes of this area is a combination of the fish fauna of the Eastern Himalayas, Burma, Nagaland, Manipur and Assam. The present study has recorded 28 species belonging to 19 genera and 7 families. Out of the 28 species, 17 species fall under the family Cyprinidae, 6 species of the family Cobitidae and families Bagridae, Siluridae, Sisoridae, Channidae and Nandidae 1 species each.

This work has unfolded many interesting results which enable to describe four new species, viz., *Danio (Brachydanio) horai* Barman and *Garra tirapensis* Datta and Barman under the family Cyprinidae; *Noemacheilus arunachalensis* Datta and Barman of the family Cobitidae and *Kryptopterus indicus* sp. nov. belonging to family Siluridae. Three species are new record from this area, viz., *Danio (Danio) neilgherriensis* (Day) which was described and so far known only from the Nilgiri Hills, S. India by Day (1867); *Puntius stevensonii* Day was so far known only from Burma; *Acanthopsis choirorhynchus* (Bleeker) was known so far from Burma, Malaysia, Sumatra, Borneo, Java, Vietnam and Thailand.

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