

ON A SMALL COLLECTION OF FISH FROM THEKKADY WILDLIFE RESERVE, WESTERN GHATS

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INTRODUCTION

Thekkady Wildlife Reserve, a part of Western Ghats was surveyed by Dr. R.S. Pillai and party during 1975 & 1981 and subsequently by Dr. Koshy Mathew and party during 1986. The following areas viz. Molayar River, Vazhathopu, Valliyathuruthy, Manakavala, Nellikkamparai, Dam site, Anguruli, Cheriya kaniyam, East of Boat landing, East and West Edapalayam, Periyar house and Periyar River lower camp were surveyed and 600 fish specimens were collected.

The specimens comprised 19 species belonging to 8 families. A systematic list of the species including length range, date and locality are given.

Day (1875 — 1878), Misra (1962), Jayaram (1981), Jayaram *et al.* (1982) were followed for the identification of species. Other revisionary works of importance viz. Menon (1964, 1987), Misra (1976), and Jayaram (1977, 1980) were referred to for the recent classification of the freshwater fishes. The present collection is an addition to our knowledge on the fish fauna of this part of Western Ghats. This is significant in that several important hill stream fishes like *Garra*, and *Noemacheilus* are encountered and commercially important *Puntius* spp. viz *P. Curmuca*, *P. dubius*, *P. lithopidos*, *Ompok*, *Heteropneustes* and *Channa* are recorded. Subsequent to Hora and Law (1941) the occurrence of *P. lithopidos* in the lower reaches of Western Ghats is of Ichthyological significance.

LIST OF FISHES OF THEKKADY

Order CYPRINIFORMES
Family CYPRINIDAE
Subfamily RASBORINAE

1. *Barilius gatensis* (Val.) 2 exs.
2. *Danio (D.) aequipinnatus* (Mc Clelland) 7 exs.
3. *Esomus barbatus* (Jerdon) 2 exs.
4. *Rasbora daniconius* (Ham.) 230 exs.

Subfamily CYPRININAE

5. *Puntius curmuca* (Ham.) 1 ex.
 6. *Puntius dubius* (Day)..... 1 ex.
 7. *Puntius lithopidos* (Day).....4 exs.
 8. *Puntius m. melanompyx* (Day)126 exs.
 9. *Tor khudree* (Skyles) 1 ex.

Subfamily GARRINAE

10. *Garra mullya* (Skyles).....3 exs.

Family HOMALOPTERIDAE

Subfamily NOEMACHEILINAE

11. *Noemacheilus denisoni denisoni* Day 1 ex.
 12. *N. triangularis triangularis* Day4 exs.

Family COBITIDAE

Subfamily COBITINAE

13. *Lepidocephalus thermalis* (Val.).....42 exc.

Order SILURIFORMES

Family SILURIDAE

14. *Ompok bimaculatus* (Bloch) 1 ex.

Family HETEROPNEUSTIDAE

15. *Heteropneustes fossilis* (Bloch)..... 1 ex.

Order ATHERINIFORMES

Family CYPRINODONTIDAE

16. *Aplocheilus lineatus* (Val.).....148 exs.

Order CHANNIFORMES

Family CHANNIDAE

17. *Channa orientalis* (Schneider)..... 31 exs.
 18. *Channa striatus* (Bloch).....9 exs.

Order PERCIFORMES

Family CICHLIDAE

19. *Oreochromis mossambica* (Peters).....8 exs.

1. *Barilius gatensis* (Valenciennes)

1842. *Leuciscus gatensis* Valenciennes, *Hist. Nat. Poiss.*, 17, p.309, Pl.503 (Type locality : Western Ghats of India).

Material : 2 exs., 37.0—42.0 mm. S.L., Periyar River lower camp, Alt. 540 m., 10.11.1986.

Remarks : Day (1886-87) recorded 15 vertical bars and Jayaram (1982) 13-14 in the specimens they had studied. But in the two specimens studied by us they numbered 10 and 12 and 11 and 12 on the right and left sides of the fish respectively.

Distribution : Freshwaters of Peninsular India.

2. *Danio (Danio) aequipinnatus* (Mc Clelland)

1839. *Perilampus aequipinnatus* Mc Clelland, *Asiat. Res.*, 19, p.393, Pl. 16, Fig. 1 (Type locality : Assam).

Material : 7 exs., 34 - 63 mm. SL., Periyar River lower camp, Alt. 540 m., 10.11.1986.

Distribution India : Eastern Himalaya, Meghalaya, Deccan; Nepal; Bangladesh; Burma; Thailand and Sri Lanka.

3. *Esomus barbatus* (Jerdon)

1849. *Leuciscus barbatus* Jerdon, *Madras J. Lit. Sci.*, 15, p.322 (Type locality : Rivers and tanks all over Mysore and Carnatic).

Material : 2 exs. 47.0 mm. SL., Periyar River lower camp., Alt. 540 m. 10.11.1986.

Distribution : India : Tamil Nadu, Karnataka.

4. *Rasbora daniconius* (Hamilton)

1822. *Cyprinus daniconius* Hamilton, *Fish Ganges*, p. 327, 391, pl. 15, Fig. 89 (Type locality : the rivers of Southern Bengal).

Material : (230 exs.; 14.0—90.0 mm. S.L., Alt. 820-980 m.) 26 exs., 14.10.75; Vazhathopu; 20 exs., 23.10.75, Manakavala : 11 exs., 11.2.81, Nellikkamparai, 870 m; 3 exs., 12.2.81, Dam, 870 m; 22 exs., 15.2.81, Cheriyaaniyam, 870 m; 13 exs., 16.1.81, East of boat landing, 860 m.; 12 exs. 17.2.81, Cheriyaaniyam, 870 m.; 1 ex. 19.2.81, East Edapalayam, 860 m.; 3 exs., 21.2.81, East of boat landing, 860 m.; 7 exs., 23.2.81, Molayar, 980.; 2 exs., 24.2.81, Periyar house, 860 m.; 64 exs., 27.2.81, East to Edapalayam T.B., 870 m.; 16 exs., 28.2.81, 2 Kms. East of Edapalayam, 880 m.; 10 exs., 1.3.81 3 Kms. West of Edapalayam, 840 m.; 7 exs. 6.3.81. 1 Km. South of Manakavala T.B., 820 m.; 8.3.81, Valiyathuruthy, 840 m.

Distribution : Throughout India, Pakistan, Bangladesh, Sri Lanka, Burma, Malaya.

5. *Puntius curmuca* (Hamilton)

1807 *Cyrinus curmuca* Hamilton, *Journey Mysore*, 3, p. 344, pl. 30 (Type locality : Western Ghats of India).

Material : 1 ex., 152.0 mm. SL., 14.2.1981, Anguruli, 880 m.

Distribution : Rivers of Western Ghats.

6. *Puntius dubius* (Day)

(Fig. 1)

1867. *Puntius (Barbodes) dubius* Day, *Proc. zool. Soc. Lond.* p.291. (Type locality : Bhanwani river at base of Nilgiri Hills).

Material : 1 ex., 155.0 mm. SL., 23.10.1975, Manakkavala.

Distribution : Cauvery river system in Southern India and Periyar in Thekkady, Kerala.

7. *Puntius lithopidos* (Day)

(Fig. 2)

1873. *Barbus (Barbodes) lithopidos* Day, *Proc. zool. Soc. Lond.*, p. 708 (Type locality : South Kanara).

Material : 4 exs., 155.0—170.0 mm. SL., 23.10.75, Manakkavala.

Distribution : Coorg. S. Kanara, Deccan, Travancore and Madhya Pradesh.

Remarks : Hora and Law (1941) extended the range of this species further down the Western Ghats, upto Travancore. The occurrence of this species in Thekkady is an additional knowledge to its distribution in the higher ranges of Kerala.

8. *Puntius melanampyx melanampyx* (Day)

1865. *Labeo melanampyx* Day, *Proc. zool. Soc. Lond.*, p 298. (Type locality : Wynaad).

Material : (126 exs., 13.0 mm.—56.0 mm. SL., 840 m.—880 m.) 35 exs., 22.10.75 & 23.10.75, Manakkavala; 14 exs., 11.2.81, Nellikamparai, 870 m; 17 exs., 12.2.81, Dam, 870 m.; 2 exs., 13.2.81, Anguruli, 880 m.; 28 exs., 15.2.81, 17.2.81 & 18.2.81, Cheriyaaniyam, 870 m., 3 exs. 21.2.81, East of boat landing, 860 m.; 7 exs. 27.2.81, 1.5 kms. of Edapalyam, 880 m.; 9 exs., 1.3.81, 3 kms., West of Edapajayam, 840 m.; 1 ex., 7.3.81, 2 kms. West of Manakavala, 840 m.; 10 exs., 8.3.81.; Valliathuruthy, 840 m.

Distribution : India : Wynaad, Nilgiris, Travancore range of Hills, Cauvery River.

Remarks : Colour pattern varied from three bright bands to completely dark specimens in which the bands were very faint.

FIG 1

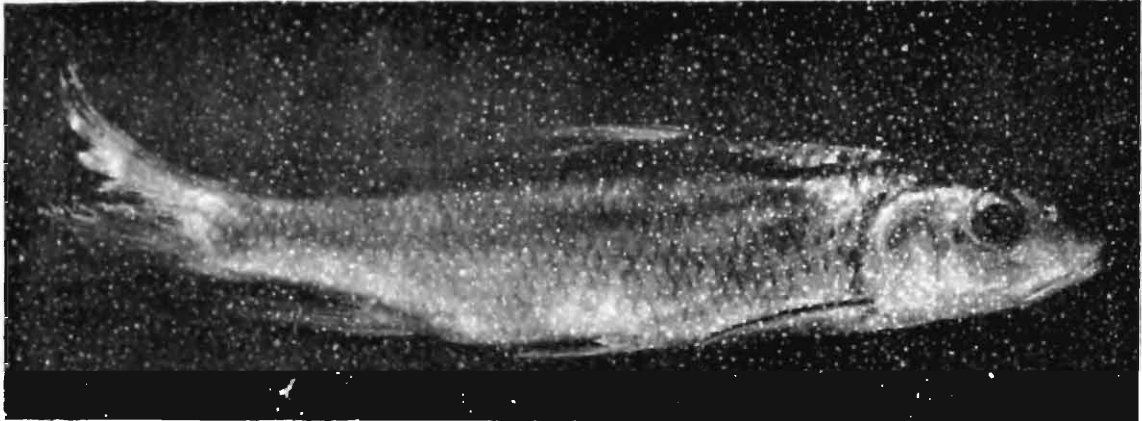


FIG. 2

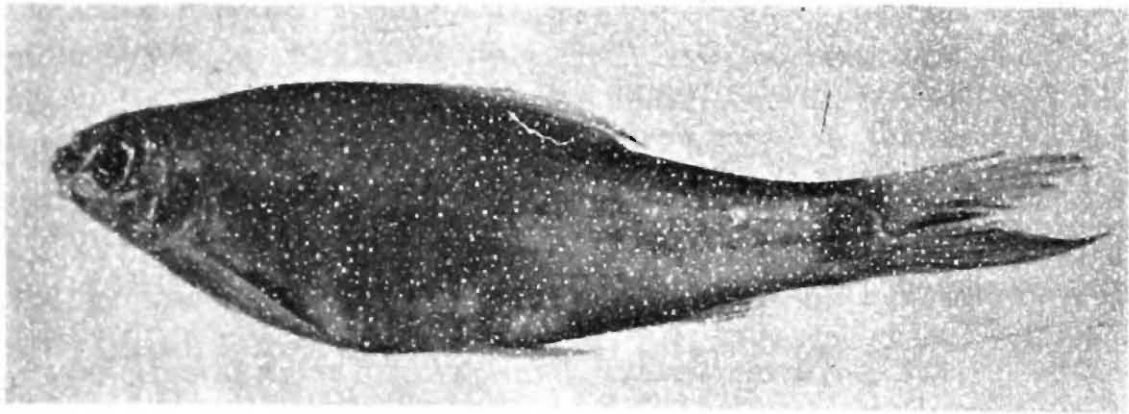


FIG.3

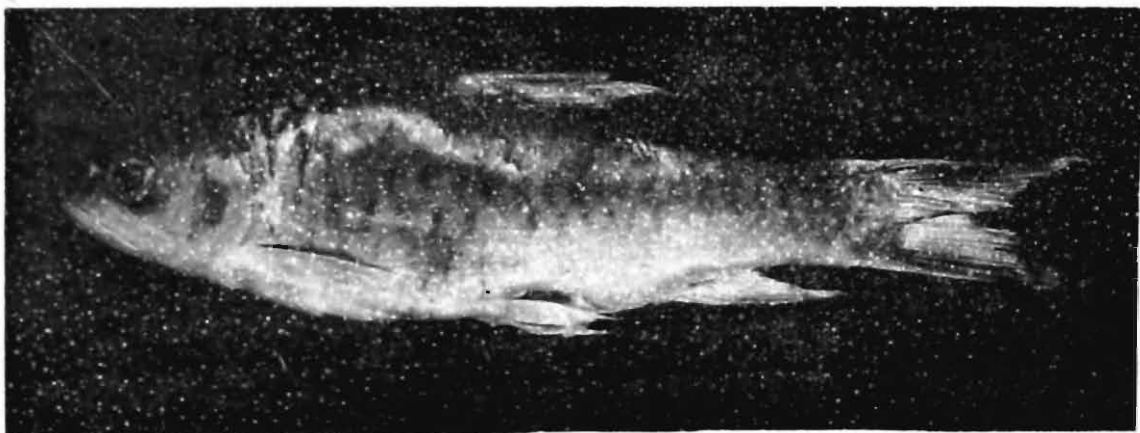


Fig. 1 *Puntius dubius* Day (Lateral view)

Fig. 2. *Puntius lithopidos* Day (Lateral view)

Fig. 3. *Tor khudree* (Sykes)

9. *Tor khudree* (Skyles)
(Fig. 3)

1841 *Barbus khudree* Sykes, *Trans. zool. Soc. Lond.*, p. 35 (Type locality : Mutha mula river, Poona).

Material : 1 ex., 145.0 mm. SL., 23.10.1975, Manakkavala.

Distribution : Rivers of Western Ghats.

10. *Garra mullya* (Sykes)

1841 *Chondrostoma mullya* Sykes, *Trans. zool. Soc. Lond.*, 2, p. 359, pl. 62, Fig. 3 (Type locality : Poona water ways).

Material : (3 exs., 30.0—86.0 mm. SL., 540 m. - 880 m.) 1 ex., 27.2.81, West of Edapalayam T.B., 880 m.; 1 ex., 7.3.81, 2 Kms. West of Manakkavala T.B., 840 m.; 1 ex., 10.11.86., Periyar River lower camp, 540 m.

Distribution : Throughout India, except Assam and the Himalaya.

11. *Noemacheilus denisoni denisoni* Day

1867. *Nemachilus denisoni* Day, *Proc. zool. Soc. Lond.*, p. 287 (Type locality : Bhawani River, base of Nilgiris).

1987. *Noemacheilus denisoni denisoni* Menon, *The Fauna of India and Adjacent Countries*, Pisces IV, Part I, Homalopteridae : 93-99, figs. 3 & 4. pl. 10.

Material : 1 ex., 30.0 mm., SL., 10.11.86., Periyar River lower camp., 540 m.

Distribution : India : Nilgiris, Coorg Hills, Kerala and Karnataka.

12. *Noemacheilus triangularis triangularis* Day

1865. *Nemachilus triangularis* Day, *Proc. zool. Soc. Lond.*, p. 295 (Type locality : Mundikyum, Travancore).

1987 *Noemacheilus triangularis triangularis*, Menon, Pisces IV, Part I. Homalopteridae, p. 168-171, pl. 11, Fig. 4, 5 & 8.

Material : (4 exs., 36-40 mm. SL., 860 m—880 m.) 1 ex., 14.2.81, Anguruli, 880 m.; 3 exs., 17.2.81, Cheriyananiyam, 860 m.

Distribution : Peninsular India : Western Ghats, Kallar, Pamba, Periyar and Bharathapuzha drainages in Kerala.

13. *Lepidocephalus thermalis* (Valenciennes)

1846. *Cobitis thermalis* Valenciennes, *Hist. nat. Poiss.*, 17, p. 78 (Type locality : Ceylon).

Material : (42 exs., 22-40 mm. S.L., 540m-980 m.) 6 exs., 14.10.75, Vazhathopu; 16 exs., 22.10.75 & 23.10.75, Manakkavala; 4 exs., 15.2.81, and 17.2.81, Cheriyananiyam, 870 m; 1 ex., 16.2.81, East of boat landing, 860 m.; 9 exs., 23.2.81, Molayar, 980 m; 3 exs., 24.2.81, Periyar House, 860 m.; 3 exs., 10.11.86, Periyar river camp, 540 m.

Distribution : Southern India : South of Krishna river, Karnataka, Kerala, Sri Lanka.

14. *Ompok bimaculatus* (Bloch)

1797. *Silurus bimaculatus* Bloch, *Syst. Ichth.*, 11, p. 17, pl. 369 (Type locality : Malabar).

Material : 1 ex., 285.0 mm., SL., 14.2.81, Anguruli, 880 m.

Distribution : Throughout India, Pakistan, Nepal, Bangladesh, Sri Lanka, Thailand, Malaya, Viet-Nam, East Indies, Yunnan.

15. *Heteropneustes fossilis* (Bloch)

1794. *Silurus fossilis* Bloch, *Naturg. Ausland. Fische.*, 8, p. 46, pl. 370, Fig. 2 (Type locality : Tranquebar).

Material : 1 ex., 64.0 mm. SL., 15.2.81, Cheriyaikkanam, 870 m.

Distribution : India, Pakistan, Nepal, Sri Lanka, Bangladesh, Thailand, Laos.

16. *Aplocheilichthys lineatus* (Valenciennes)

1846. *Panchax lineatum* Valenciennes, *Hist. nat. Poiss.*, 18, p. 381 (Type locality : Bombay).

Material : (148 exs., 14.0 mm - 48.0 mm. SL., 820-880 m.) 4 exs., 14.10.74, Vazhathopu; 5 exs., 22.10.75 & 23.10.75, Manakkavala; 6 ex., 11.2.81, Nellikamparai, 870 m.; 31 exs., 12.2.81, Dam, 870 m.; 9 exs., 13.2.81 and 14.2.81 Anguruli, 880 m.; 60 exs., 15.2.81 and 17.2.81, Cheriyaikkanam, 870 m.; 6 exs., 16.2.81, East of boat landing, 860 m; 11 exs., 19.2.81, East of Edapalayam, 860 m.; 6 exs., 24.2.81, Periyar House, 860 m.; 8 exs., 27.2.81., 1.5 kms., West of Edapalayam, 880 m.; 6.3.81, 1 km. South of Manakkavala T.B. 820 m.

Distribution : India : Coorg, Wynad, Nilgiri, Sri Lanka.

17. *Channa orientalis* (Schneider)

1810. *Channa orientalis* Schneider, *Syst. Ichth.*, p. 496, pl. 90, fig. 2. (Type - locality : Not given).

Material : (31 exs., 32-95 mm. SL., 860 m.—880 m.) 4 exs., 11.2.81., Nellikamparai, 870 m.; 8 exs., 12.2.81, Dam, 870 m.; 3 exs., 14.2.81, Anguruli, 880 m.; 10 exs., 15.2.81 and 17.2.81, Cheriyaikkanam, 870 m.; 1 ex., 16.2.81, East of boat landing, 860 m.; 4 exs., 19.2.81, East of Edapalayam, 860 m.; 1 ex., 27.2.81, 1.5 kms. West of Edapalayam, 880 m.

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

18. *Channa striatus* (Bloch)

1793. *Ophiocephalus striatus* Bloch, *Naturg. Ausland, Fische.*, 2, p. 141, pl. 359 (Type locality : Malabar).

Material : (9 exs., 41-53 mm. SL.) 2 exs., 14.10.75, Vazhathopu; 3 exs., 23.10.75, Manakkavala; 4 exs., 12.2.81, Dam, 870 m.

Distribution : Throughout India, Sri Lanka, Bangladesh, Pakistan, Burma, China, Philippines, Malaya, Malay Archipelago, Thailand.

19. *Oreochromis mossambica* (Peters)

1852. *Chromis mossambica* Peters, *Monatsb. Akad. Wiss.*, Berlin, p. 681 (Type locality : Zambesi river, S. Africa).

Material : (4 exs., 42-47 mm. SL.) 2 exs., 15.10.75, Vazhathopu; 2 exs., 15.2.81, Cheriayakanam, 870 m.

Distribution : East Africa to Natal. Widely introduced in India, Pakistan.

SUMMARY

The Ichthyofauna of Thekkady Wildlife Reserve is reported upon. The study has yielded 19 species belonging to 8 families.

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