

## ICHTHYO-FAUNA OF KONDAKARLA LAKE, ANDHRA PRADESH

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### INTRODUCTION

A perusal of the lacustrine-Ichthyofauna of Andhra Pradesh shows that some significant endeavors have earlier been made by Burman (1993) on the fish fauna of the state Chacko *et al* (1952) Dutt & Murty (1971, 1976) Murty (1977) on Kolleru/Collair lake, Rao and Reddy (1984) on Hussain sagar lake. The available unpublished work on fish fauna of Kondakarla lake is that of Sankara Rao (1992) who recorded 25 species.

### MATERIAL AND METHODS

Kondakarla lake is located at about 50 km south-west of Visakhapatnam in Andhra Pradesh between latitudes 17°35'30" and 17°36'02" and longitudes 82°01'0" and covers an area of 6.5 sq. kms. The water body is surrounded by agricultural fields and about 4 km away from the Bay of Bengal. Since this is the major wetland in Visakhapatnam district, the author has collected its fish fauna while studying the limnological aspects of the ecosystem. The 299 fish specimens collected and examined by the author yielded 17 species belonging to 14 genera spread over 11 families in 5 orders. The material was deposited in the National Zoological Collections of Freshwater Biological Station, Zoological Survey of India, Hyderabad. The Registration numbers (FBS/ZSI), first reference, classification (Menon, 1993), material examined and distribution are given under systematic account. Standard Length (SL) of the specimens are given in millimeters.

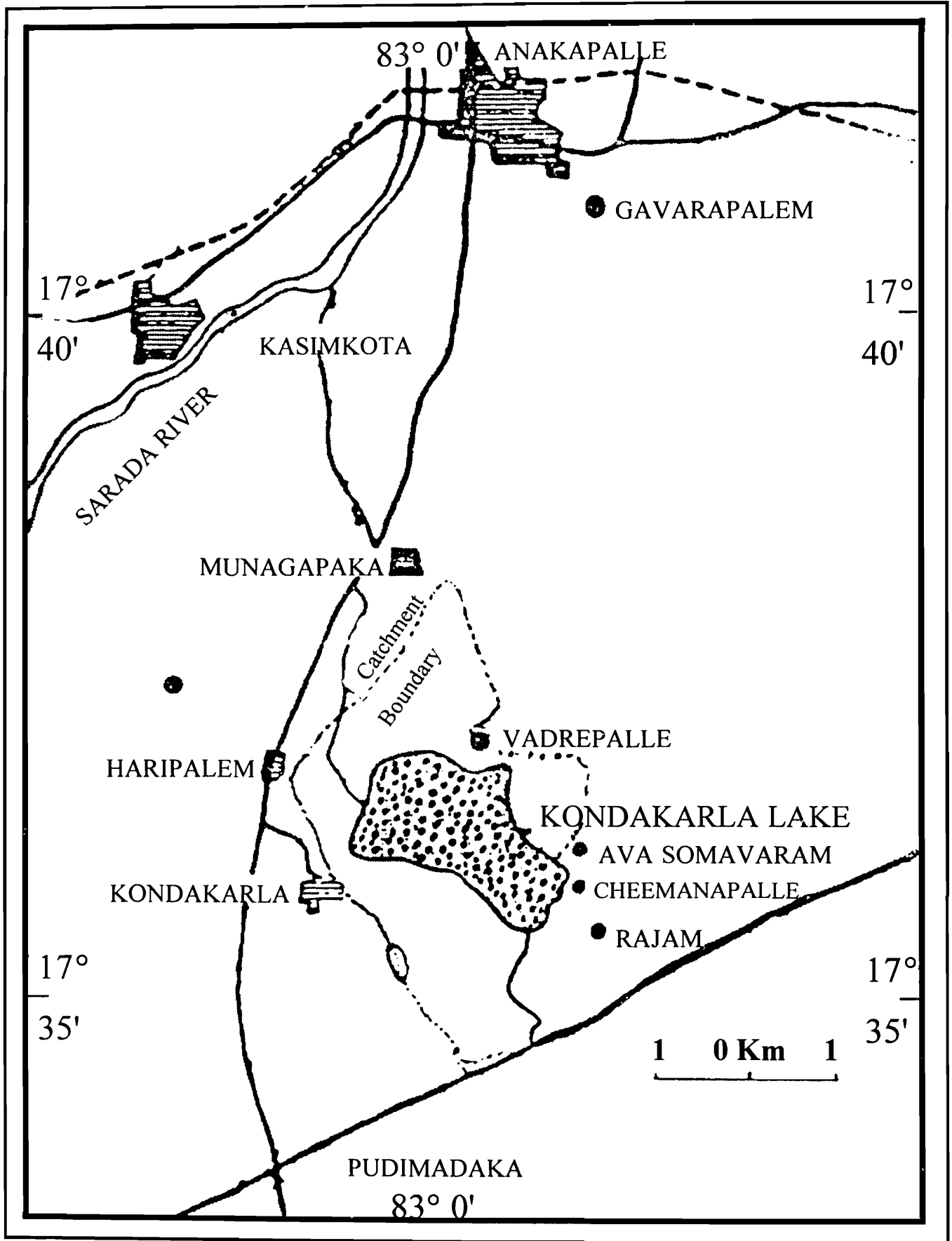
### SYSTEMATIC ACCOUNT

Order OSTEOGLOSSIFORMES

Family NOTOPTERIDAE

*Notopterus notopterus* (Pallas)

1769. *Gymnotus notopterus* Pallas, *Special Zool.*, 7: 40, pl. 6 fig. 2 (type locality : ponds and rivers of Bengal).  
1878. *Notopterus kapirat* Lacepede : Day, *Fishes of India* : 653, pl. 159, fig. 4; Day, 1889, *Fauna Br. India, Fishes*, 1 : 406.  
1936. *Notopterus osmani* Rahimullah and Das, *Bull. Soc. Port. Nat.*, 12(18) : 136, pl. 23 (type-locality : rivers of Hyderabad, Deccan).  
1976. *Notopterus notopterus* : Misra, *Fauna of India, Pisces* (2nd ed.), 2 : 278, fig. 77 and Pl. 7, fig. 3.



 MANDAL HEAD QUARTERS

 LAKE

 VILLAGES

*Material examined* : 1006, 1040, 1046, 1095 & 1102; 26.viii.1997, 28.xii.1997, 12.v.1997, 11.v.1997; SL : 150-232 mm; 11 exs.

*Distribution* : India, Nepal, Pakistan, Bangladesh, Burma, Malaya and Indonesia.

Order CYPRINIFORMES

Family CYPRINIDAE

Subfamily CULTRINAE

***Salmostoma bacaila*** (Hamilton)

1822. *Cyprinus bacaila* Ham. *Fish Ganges*, pp. 265, 384, pl. 8, fig. 76 (type locality : Gangetic provinces).

1878. *Chela bacaila* Day, *Fishes of India* : 603, Pl. 152, fig. 5; Day, 1889, *Fauna Br. India*, Fishes, 1 : 367; Shaw and Shebbeare, 1937, *J. Asiat. Soc. Beng.*, 3 : 19, fig. 11.

1968. *Salmostoma bacaila* : Banarescu, *Revue roum. Biol. (Zool)*, 13(1) : 4, fig. 1.

*Material examined* : 1058, 1078, 1079, 1089, 1097; 25.viii.1997, 11.v.1997, 24.viii.1997; SL : 66-126 mm; 10 exs.

*Distribution* : Northern India (Ganga-Brahmaputra drainages) to Mahanadi drainages (Orissa).

Subfamily RASBORINAE

***Rasbora daniconius*** (Hamilton)

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

1878. *Rasbora daniconius* : Day, *Fishes of India* : 584, pl. 146, figs. 2, 3; Day, 1889, *Fauna Br. India*, Fishes, 1 : 336; Brittan, 1954, *Monogr. Inst. Sci. Techn. Manila*, (3) : 135.

*Material examined* : 1059, 1061, 1069, 1100; 25.viii.1997, 26.viii.1997, 13.v.1997, 24.viii.1997; SL : 33-60 mm; 32 exs.

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

Subfamily CYPRININAE

***Puntius*** sp. Hamilton

1822. *Puntius* Ham. *Fish Ganges*, pp. 310, 388.

*Material examined* : 1070, 1081; 13.v.1997, 11.v.1997; SL : 23-70 mm; 2 exs.

*Distribution* : Widely distributed in South Asia.

*Puntius sophore* (Hamilton)

1822. *Cyprinus sophore* Ham., *Fish Ganges* pp. 310, 389, pl. 19, fig. 86 (type locality : ponds and rivers in the Gangetic provinces).
1878. *Barbus chrysopterus* (McClelland) Day, *Fishes of India* : 579, pl. 143, fig. 6; Day, 1889, *Fauna Br. India, Fishes, 1* : 329; Mirza, 1971, *Biologia, 17*(1) : 49.
1878. ? *Barbus sophore* Day, *Fishes of India* : 566, pl. 143, fig. 4; Day, 1889, *Fauna Br. India, Fishes, 1* : 309; Murthy, 1977, *Proc. Indian Acad. Sci., 85*(B)(3) : 126.
1878. *Barbus stigma* (Valenciennes) Day, *Fishes of India* : 579, pl. 141, fig. 5; Day, 1889, *Fauna Br. India, Fishes, 1* : 329; Chaudhuri, 1916, *Mem. Indian Mus., 5* : 436.
1924. *Barbus annandalei* Fowler, *Proc. Acad. Nat. Sci. Philad., 76* d : 87, fig. 6 (type-locality : Sutlej river at Ludhiana); Chaudhuri, 1916, *Mem. Indian Mus., 5* : 436.
1924. *Barbus carletoni* Fowler, *Proc. Acad. Nat. Sci. Philad., 76* : 89, fig. 7 (type-locality : Dehra Dun, Uttar Pradesh).
1970. ? *Puntius carletoni* Tilak, *Sci. & Cult., 36* (11) : 613, fig. 1.

*Material examined* : 1057, 1062, 1072, 1075, 1088, 1093, 1098, 1099; 25.viii.1997, 26.viii.1997, 12.v.1997, 11.v.1997, 24.viii.1997; SL : 46-72 mm; 88 exs.

*Distribution* : Throughout India, Pakistan, Bangladesh, Burma, China.

*Puntius ticto* (Hamilton)

1822. *Cyprinus ticto* Ham. *Fish Ganges*, pp. 314, 398; pl. 8, fig. 87. (type-locality : Southern east part of Bengal). *Cyprinus ticto* Hamilton-Buchanan, 1822, *fishes of Ganges* : 314, 398, pl. 8, fig. 87 (type-locality : South-eastern parts of Bengal); Murthy, 1977, *Proc. Indian Acad. Sci., 85B*(3) : 130.
1865. *Puntius punctatus* Day, *Proc. zool. Soc. Lond., 302* (type-locality : Cohin); Hora, Misra and Malik, 1939, *Rec. Indian Mus., 41*(3) : 263.
1871. *Barbus (Puntius) stoliczkanus* Day, *J. Asiat. Soc. Beng., 40*(2) : 328 (type-locality : Moulmein, Eastern Burma); Hora, Misra and Malik, 1939, *Rec. Indian Mus., 41*(3) : 263.
1878. *Barbus ticto* Day, *Fishes of India* : 576, pl. 144, fig. 7, 1889, *Fauna Br. India, Fishes, 1* : 325; Hora and Misra, 1938, *J. Bombay nat. Hist. Soc., 40*(1) : 28, fig.
1878. *Barbus punctatus* Day, *Fishes of India* : 577, pl. 144, fig. 5; 1889, *Fauna Br. India, Fishes, 1* : 326.
1878. *Barbus stoliczkanus* Day, *Fishes of India* : 577, pl. 144, fig. 5; Day, 1889, *Fauna Br. India, Fishes, 1* : 326; Silas, 1952, *Proc. nat. Inst. Sci. India, 18*(5) : 431.

*Material examined* : 1067, 13.v.1997; SL : P 22-24 mm; 3 exs.

*Distribution* : India : except Kerala and South Tamil Nadu; Nepal; Pakistan; Bangladesh.

## Order SILURIFORMES

## Family BAGRIDAE

*Mystus bleekeri* (Day)

1846. *Bagrus keletius* (nec Valenciennes) Bleeker *Nat. Gen. Arch. Ned. India* 3(2) : 135 (type-locality : Bengal).
1877. *Macrones bleekeri* Day, *Fishes of India* : 451, pl. 101, fig. 1 (Replacement name for *Bagrus keletius* Bleeker, 1846); Day, 1889, *Fauna Br. India, Fishes*, 1 : 162.
1910. *Mystus bleekeri* var. *Burmanicus* Jenkins, *Rec. Indian Mus.*, 5(2) : 138 (type-locality : Bhamo, Burma).
1976. *Mystus (Mystus) bleekeri* Misra, *Fauna of India, Pisces* (2nd ed.), 3 : 85, fig. 17.
1977. *Mystus bleekeri* Jayaram, *Rec. zool. Surv. India Occ. Paper No. 8* : 29, Fig. 21B.

*Material examined* : 1049, 1051, 1060, 1076, 1083, 1085; 12.v.1997, 30.xii.1997, 31.xii.1997, 11.v.1997; SL : 36-112 mm; 75 exs.

*Distribution* : Northern India, Southern limit up to Mahanadi river, Pakistan, Nepal, Bangladesh and Burma.

*Mystus vittatus* (Bloch)

1797. *Silurus vittatus* Bloch, *Ichth. Hist. Nat.*, 11 : 40, pl. 371, fig. 2 (type-locality : Tranquebar, S. India).
1877. *Macrones vittatus* Day, *Fishes of India* : 448, pl. 98, fig. 3, and pl. 99, fig. 4; Day, 1889, *Fauna Br. India, Fishes*, 1 : 157.
1976. *Mystus (Mystus) vittatus vittatus* Misra, *Fauna of India, Pisces* (2nd ed.) 3 : 105, fig. 20.

*Material examined* : 1084; 11.v.1997; SL : 75-78 mm; 16 exs.

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

## Family CLARIIDAE

*Clarius batrachus* (Linnaeus)

1758. *Silurus batrachus* Linnaeus, *Syst. Nat.* 1st ed., 10 : 305 (type-locality : Assam and Africa).
1877. *Clarius magur* (Hamilton-Buchanan) Day, *Fishes of India* : 485, pl. 112, figs. 5, 5a; Day, 1889, *Fauna Br. India, Fishes*, 1 : 115, figs. 48, 49; Misra, 1976, *Fauna of India, Pisces* (2/e), 3 : 125, fig. 23.
1877. *Clarias jagur* (Hamilton-Buchanan) Day, *Fishes of India* : 484.
1877. *Clarius assamensis* Day, *Fishes of India* : 485 (type-locality : Goalpara and as high as Suddya, Assam); Day, 1889, *Fauna Br. India, Fishes*, 1 : 117; Hora, 1936, *Rec. Indian Mus.*, 38(3) : 350.

*Material examined* : 1041, 1045, 1053, 1054; 13.v.1997, 29.xii.1997, 30.xii.1997, 24.viii.1997;  
SL : 121-230 mm; 8 exs.

*Distribution* : India, Pakistan, Nepal, Bangladesh, Indonesia, Singapore, Borneo and the Philippines.

Family HETEROPNEUSTIDAE

*Heteropneustes fossilis* (Bloch)

1798. *Silurus fossilis* Bloch, *Ichth. Hist. Nat. Poiss.* 11 : 36, 370, fig. 2 (type-locality : Bengal).

1877. *Saccobranchus fossilis* Day, *Fishes of India* : 486, pl. 114, fig. 1 : Day, 1889, *Fauna Br. India, Fishes*, 1 : 125, fig. 53.

1976. *Heteropneustes fossilis* Misra, *Fauna of India, Pisces (2/e)*, 3 : 135, fig. 24.

*Material examined* : 1032, 1044, 1055, 1103; 25.viii.1997, 19.xii.1997, 24.viii.1997, 12.v.1997;  
SL : 136-275 mm; 4 exs.

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

Order CHANNIFORMES

Family CHANNIDAE

*Channa punctatus* (Bloch)

1793. *Ophiocephalus punctatus* Bloch, *Natur. Aus. Fische.* 7 : 139, pl. 358 (type-locality : Coramandel coast).

*Material examined* : 1033, 1034, 1035, 1038, 1042, 1056, 1073, 1074, 1092; 25.viii.1997, 24.viii.1997, 26.viii.1997, 13.v.1997, 11.v.1997, 12.v.1997; SL 87-135 mm; 18 exs.

*Distribution* : India, Afghanistan, Pakistan, Nepal, Sri Lanka, Bangladesh, Burma and Yunan (China).

Order PERCIFORMES

Sub-order PERCODEI

Family CENTROPOMIDAE

*Chanda nama* (Hamilton)

1822. *Chanda nama* Ham. *Fish Ganges*, pp. 109, 371, pl. 39, fig. 37 (type-locality : N. E. Bengal).

1875. *Ambassis nama* Ham. *Fishes of India* : 50, pl. 14, fig. 5; Day, 1889 *Fauna of Br. India*, 1876 *Fishes*, 1 : 484, fig. 149.

*Material examined* : 1104; 13.v.1997; SL : 27 mm; 1 ex.

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

***Pseudambasis ranga* (Hamilton)**

1822. *Chanda ranga* Ham., *Fish Ganges*, pp. 113, 371, pl. 6, fig. 38 (type-locality : Gangetic provinces).  
 1875. *Ambassis ranga* Day (*partim*) *Fishes of India* : 51, pl. 14, fig. 6; Day (*partim*), 1889, *Fauna Br. India, Fishes*, 1 : 485.

*Material examined* : 1066, 1073, 1082, 1096, 1101; 26.viii.1997, 13.v.1997, 11.v.1997, 24.viii.1997; SL : 20-66 mm; 14 exs.

*Distribution* : India, Ceylon, Pakistan, Bangladesh, Nepal, Burma, Malaya, Malay Archipelago, Thailand and Philippines.

## Family CICHLIDAE

***Oreochromis mossambica* (Peters)**

1852. *Chromis (Tilapia) mossambica* Peters, *Montab. Akad. Wiss.*, Berlin, pp. 681 (type-locality : Mozambique).  
 1852. *Chromis (Tilapia) mossambicus* Peters, *Montab. Akad. Wiss.*, Berlin : 681, (type-locality : Mozambique).  
 1952. *Tilapia mossambica* Jones and Sarojini, *J. Bombay nat. Hist. Soc.*, 50(3) : 606.  
 1983. *Oreochromis mossambica* Trewavas, 1983, *Tilapiine Fishes* : 292, fig. 100.

*Material examined* : 1080; 11.v.1997; SL : 21-23 mm; 4 exs.

*Distribution* : Introduced in India, Pakistan, Sri Lanka etc.

## Suborder GOBIOIDAE

## Family GOBIIDAE

***Glossogobius giuris* (Hamilton)**

1794. *Gobius giuris* Ham. *Fish Ganges*, pp. 51, 366, pl. 33, fig. 15 (type-locality : Gangetic provinces).  
 Pethiyagoda 1991, *Freshwater Fish.*, Sri Lanka, p. 245.  
 1822. *Gobius giuris* Hamilton-Buchanan, *Fishes of Ganges* : 51, pl. 33, fig. 15 (type-locality : Gangetic provinces); Day, 1876, *Fishes of India* : 294, pl. 67, fig. 1; Day, 1889, *Fauna Br. India, Fishes*, 2 : 266.  
 1876. *Gobius gutum* (*nec* Hamilton-Buchanan) Day, *Fishes of India* : 294; Day, 1889, *Fauna Br. India, Fishes*, 2 : 265.  
 1941. *Glossogobius giuris* Koumans, *Mem. Indian Mus.*, 13(3) : 256.

*Material examined* : 1048, 1068, 1090; 12.v.1997, 13.v.1997, 11.v.1997; SL : 34-96 mm; 6 exs.

*Distribution* : India, East Coast of Africa, Ceylon, Pakistan, Bangladesh, Andamans, Malay Peninsula, Thailand, China, Japan, Phillipines, Australia, Indo-Australian Archipelago and South Pacific Islands.

## Family ANABANTIDAE

*Anabas testudineus* Bloch

1795. *Anthias testudineus* Bloch, *Nat. Aus. Fish.*, 7 : 121, pl. 322 (type-locality : ? Java).
1877. *Anabas scandens* (Daldoff) Day (*partim*) *Fishes of India*, 370, pl. 78, fig. 3 : Day (*partim*), 1889, *Fauna of Br. India, Fishes*, 2 : 367, fig. 120.
1964. *Anabas testudineus riveri* Das, 1964, *Ichthyologica*, 3(1/2) : 93 (type-locality : Rapti river at Basti, Uttar Pradesh).
1964. *Anabas testudineus lacustri* Das *Ichthyologica*, 3(1/2) : 93 (type-locality : Balarampur, Uttar Pradesh).
1964. *Anabas testudineus ricei* Das, *Ichthyologica*, 3(1/2) : 93 (type-locality : Balarampur, Uttar Pradesh).
1968. *Anabas testudineus* Thakur and Das, *Bull. Cent. Inland Fish. Res. Inst.*, (40) 1-47 (Biological data).

*Material examined* : 1047, 1050, 1071, 1077, 1080, 1086; 12.v.1997, 11.v.1997; SL : 70-106 mm; 23 exs.

*Distribution* : India, Pakistan, Bangladesh, Sri Lanka, Nepal, Burma, Thailand, Cambodia, Srutu China, Indo-China, Malay-Archipelago.

## Suborder MASTACEMBELOIDEI

## Family MASTACEMBELIDAE

*Macrognathus punctalus* Hamilton

1822. *Macrognathus punctalus* Ham. *Fish Ganges*, pp. 30, 364, pl. 22, Fig. 7 (type-locality : Bengal)
1876. *Mastacembelus pancalus* Day, *Fishes of India* : 340, pl. 72, Fig. 4; Day, 1889, *Fauna Br. India, Fishes*, 2 : 333, Sufi, 1956, *Bull. Raffles Mus.*, (27) : 120, pl. 22, Fig. 20.

*Material examined* : 1039, 1094; 26.viii.1997, 24.viii.1997; SL : 119-125 mm; 2 exs.

*Distribution* : India, Pakistan, Bangladesh.

## SUMMARY

Studies on the Ichthyo-fauna of Kondakarla lake in Visakhapatnam district of Andhra Pradesh were made covering three seasons during 1996 and 1997. 17 species belonging to 14 genera spread over 11 families in five orders have been identified from 299 examples collected from the water body.

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