

ON A NEW SPECIES OF *NANGRA* DAY
(PISCES : SILURIFORMES : SISORIDAE)
FROM ASSAM, NORTH EAST INDIA WITH A NOTE ON
COMPARATIVE STUDIES OF OTHER KNOWN SPECIES

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INTRODUCTION

While studying some fishes collected from Assam, the authors came across a good number of *Nangra* specimens which on examination proved to be new to science. Three species of *Nangra* namely *N. itchkeea* (Sykes), *N. nangra* (Hamilton-Buchanan) and *N. viridescens* (Hamilton-Buchanan) have so far been reported from India (Talwar and Jhingran, 1991). Out of the three species, *N. nangra* and *N. viridescens* have been so far recorded from Assam.

Though the present specimens show some similarity with these three species in some respects but differences reveal its separate identity.

Material examined: 35 specimens including Holotype ranging from 73 mm to 112 mm TL.

Nangra assamensis Sp. nov.

(Fig. 1, Plate 1)

D. I. 6, P. I. 8-9, V. i. 5, A. iii. 9-10, C. 16-17.

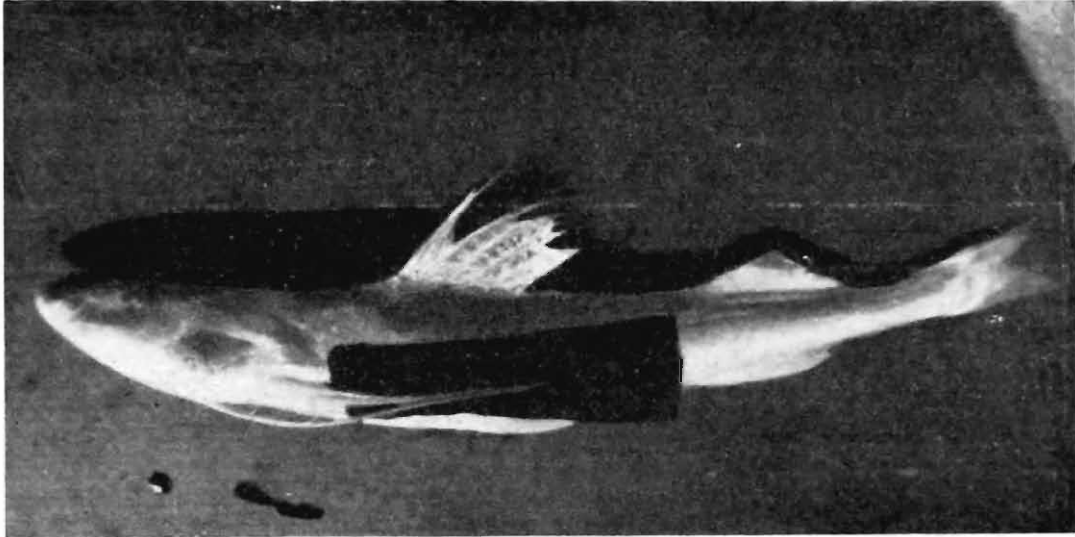
Description: Body elongate, subcylindrical, its depth 6.00-7.90 in standard length: head long, dorsoventrally depressed, its length 3.26-4.27 in standard length,

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PLATE I



Nangra assamensis sp. nov.

Eyes placed high, moderate, oblong, its diameter 5.66-8.40 in head length. Median longitudinal groove extends to almost end of occipital process. Mouth wide, inferior. Barbels four pairs, nasals reaching mostly to hind border of eyes, sometimes a little

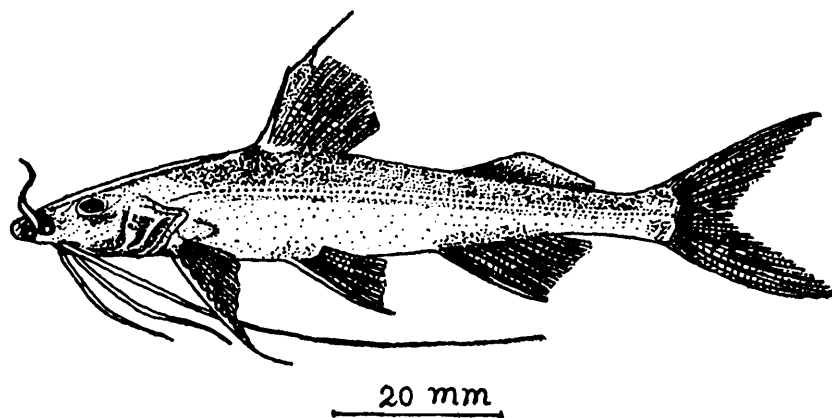


Fig. 1: Lateral view of *Nangra assamensis* sp. nov.

shorter. Outer mandibular generally up to middle of pectoral fin; inner mandibular up to base of pectoral fin or a little beyond; no fingerlike processes present between bases of inner mandibular barbels; maxillary up to middle of anal fin, sometimes a little shorter. Dorsal spine strong and smooth, pectoral spine strong and serrated on its inner edges with 13-16 dentitions. Dorsal and pectoral fins with a filamentous prolongation. The length of dorsal and pectoral fin 3.45-5.57 in standard length. Caudal fin deeply forked, lobes equal, occasionally lower lobe slightly longer than upper. Caudal peduncle narrow. Length of anal fin 5.54-7.15, caudal 4.33-6.27 and caudal peduncle 5.06-6.00 in standard length. Least height of caudal peduncle 18.00-24.00 in standard length.

Muddy, with a faint band along lateral line. Colour above lateral line darker.

Type specimens :

Holotype — 112 mm. TL, locality : Brahmaputra river at Neematighat, 14 Kms from Jorhat, Assam; Collector : B. K. Biswas; date of collection 4.4.91; Reg. no. V/F/ERS/53.

Paratypes — 4 specimens, 78 mm-100 TL, locality : Neematighat, 14 Kms from Jorhat, Assam; collector : B. K. Biswas date of collection : 4.4.91; Reg. no. V/F/ERS/54.

Paratypes — 30 specimens, 73 mm-101 mm TL, locality : Brahmaputra river at Uzan Bazar ghat, Guwahati, Assam ; collector : B. K. Biswas ; date of collection : 26.3.92 ; Reg. no. V/F/ERS/55.

Affinities : In body shape and length of maxillary barbel it is more or less closer to *N. nangra*, but differs in length of nasal barbel (which is very long in *nangra*) and number of unbranched dorsal fin rays (9-10 Vs. 6). In fin formula it is closer to *viridescens* and *itchkeea*, but differs in body shape, colouration and length of barbels.

The species has been named *Nangra assamensis* after the name of the state from where the specimens were collected.

Remarks : Jayaram (1979) & Talwar and Jhingran (1991) described maxillary barbels in *N. nangra* as reaching pectoral fin or slightly beyond. The present authors agree with Hamilton (1822) that maxillary barbels reaching vent.

Key to the species of *Nangra* Day

1. Dorsal fin with 9 or 10 soft rays ; nasal barbels very long, as long as head or slightly beyond *N. nangra*
- Dorsal fin with 6 or 7 soft rays ; nasal barbels shorter than head or rudimentary ... 2.
2. Dorsal and pectoral fins with filamentous prolongation, nasal barbel extends to hind border of eye ; maxillary barbels reaches middle of anal fin ... *N. assamensis* sp. nov.
- Dorsal and pectoral fins without filamentous prolongation, nasal barbel almost as long as or considerably shorter than eye diameter ; maxillary barbels shorter or slightly longer than head 3.
3. A pair of fingerlike processes present between base of inner mandibular barbels ; head greatly depressed, maxillary barbel shorter than head ... *N. viridescens*
- No fingerlike processes present between bases of inner mandibular barbels ; head compressed ; maxillary barbel longer than head ... *N. itchkeea*

Comparative study of different species of *NANGRA*

| <i>N. nangra</i> | <i>N. viridescens</i> | <i>N. itchkeea</i> | <i>N. assamensis</i> sp. nov. |
|--|--|--|--|
| 1. Dorsal fin with 9-10 soft rays | Dorsal fin with 6 or 7 soft rays. | Dorsal fin with 6 or 7 soft rays. | Dorsal fin with 6 soft rays. |
| 2. Fin formula : D.I.9-10, P.I.9, V.i.5, A.iii.10, C.16-17 | D.I.6-7, P.I.8, V.i.5, A.iii-iv.8, C.18-21 | D.I.6-7, P.I.8, V.i.5, A.iii-iv.9-10, C.18-21 | D.I.6, P.I.8-9, V.i.5, A.iii.9-10, C.16-17 |
| 3. Nasal barbel as long as head or slightly longer. | Nasal barbel minute or rudimentary. | Nasal barbel small, shorter than eye diameter. | Nasal barbel reaching mostly to hind border of eye or slightly shorter. |
| 4. Maxillary barbel extends to end of anal fin. | Maxillary barbel much shorter than head | Maxillary barbel longer than head | Maxillary barbel extends to middle of anal fin, occasionally a little shorter. |
| 5. Outer mandibular barbel extends beyond pectoral fin and reaches pelvic fin. | Outer mandibular barbel do not extend beyond pectoral fin. | Outer mandibular barbel shorter than head | Outer mandibular barbel extends to middle of pectoral fin, sometimes crossing a little but never beyond. |

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| 6. Head long, oval. | Head large, broad, greatly depressed. | Head short, globular, rounded anteriorly compressed. | Head long, dorsoventrally depressed. |
| 7. Median longitudinal groove on head extends to almost end of occipital process with two fontanelle. | Median longitudinal groove on head extends to base of occipital process with single fontanelle. | Median longitudinal groove on head extends to base of occipital process with two fontanelle. | Median longitudinal groove on head extends to almost end of occipital process with single fontanelle. |
| 8. No fingerlike process between inner mandibular base. | A pair of fingerlike processes between inner mandibular base. | No fingerlike process between inner mandibular base. | No fingerlike process between mandibular base. |
| 9. Body colour muddy with three indistinct vertical greenish half bands. | Body colour coppery glossed with gold on sides, 3-4 black bands along back descending along sides up to lateral line. A black markings on caudal lobes. | Yellowish bronze, silvery on belly. Body with dark blotches along back descending halfway down side. Black blotches on caudal lobes and on dorsal. | Body colour muddy with a faint band along lateral line. Colour above lateral line darker. |

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