

**NOEMACHEILUS PAMBARENSIS, A NEW LOACH (CYPRINOIDEI :
BALITORIDAE : NOEMACHEILINAE), FROM WESTERN
GHATS, IDUKKI, KERALA, INDIA.**

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INTRODUCTION

A new hill-stream loach *Noemacheilus (Mesonoemacheilus) pambarensis* is described from Pambar River, Western Ghats, Idukki District, Kerala. This new species differs from all other known species of *Mesonoemacheilus* in its elongated form, colour pattern and in the number of branched dorsal rays. Seventynine noemacheiline species under 2 genera and 9 subgenera are known from India (Menon, 1987). The new species with 8-10 branched dorsal rays and the characteristic spot in the middle of the base of caudal fin can be included under the subgenus *Mesonoemacheilus* Banareseu and Nalbant, 1981. These loaches were found among the fish collections from Kerala deposited in the Southern Regional Station, Madras by Erik Ahlander and Suzanne Wejland of the Swedish Museum Natural History. The specimens were collected from Pambar river draining into the Cauvery river system at the border of Chinnar Sanctuary, Western Ghats in Idukki District, Kerala.

***Noemacheilus (Mesonoemacheilus) pambarensis* sp. nov.**

(Fig. 1)

***Holotype* :** ZSI/SRS F. 4095, 38.0 mm SL., India : Kerala : Western Ghats : Pambar River at border of Chinnar Sanctuary ; Erik Ahlander, Suzanne Wejland and Bert ; 9 Apr. 1990.

***Paratypes* :** ZSI/SRS F. 3496, 29 exs., 15.5-45.0 mm SL ; Same data as of holotype.

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PLATE

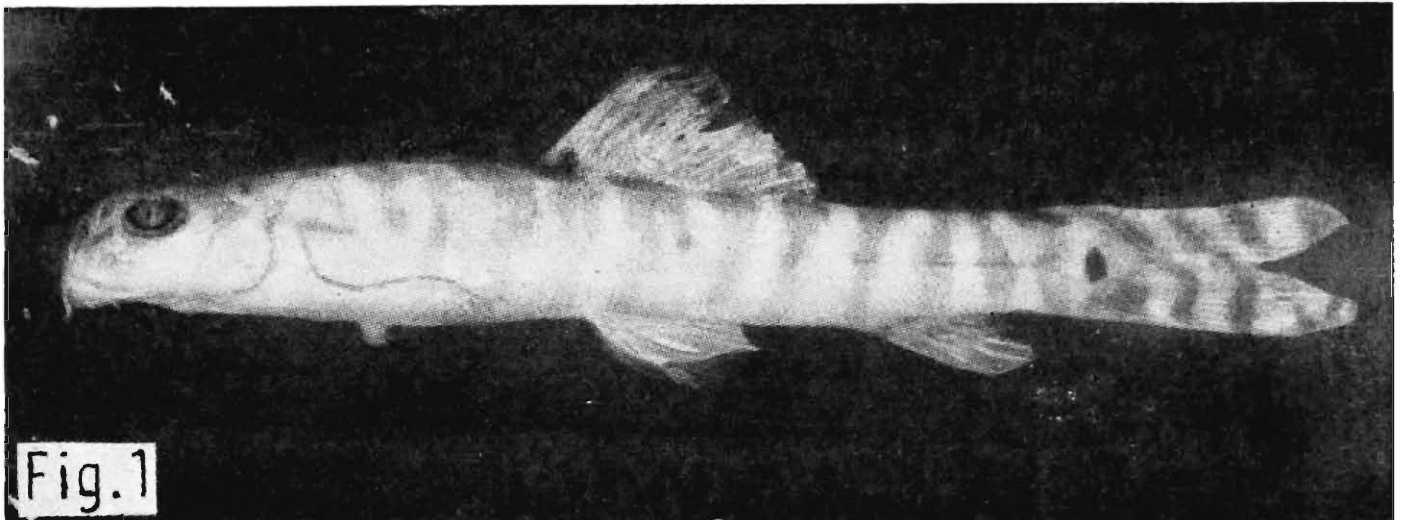


Fig. 1: Lateral view of *Noemacheilus pambarensis* sp. nov. 38.0 mm SL.

Diagnosis : A slender elongated species with usually 9 branched dorsal rays in specimens above 35.0 mm SL (8 branched rays in juveniles and rarely 10 in adults); with almost complete lateral line system; body with irregular vertical bands; dorsal with two rows of spots, caudal with 4-5 oblique bands and dark blotch at its base; males with suborbital flap.

Description : Based on 10 specimens 36.0-45.0 mm SL. D.3-4/8-10/1; P1/10-11; V 1/6/1, A2-3/5; C.1/16/1. Dorsal Profile slightly arched, ventral flattened, depth of body 13.55-16.61 (15.27), head broader than high, its length 20.49-24.43 (22.62) percent of SL; length of snout a little less than postorbital distance, it is 35.67-44.29 (41.25) of HL; eyes fairly large, situated nearer snout, not visible from ventral surface, its diameter 20.13-25.48 (23.64) of HL, equal to or a little greater than interorbital distance, 95.54-123.33 (106.42) of interorbital width; nostrils close to each other, situated closer to eye than to tip of snout, anterior nostrils somewhat tubular and flap like; mouth semicircular, lips fleshy, deeply furrowed, lower interrupted in the middle; barbels well developed, broad at base, thread like at the ends, inner rostral shorter, outer rostral shorter than maxillary, extending to margin of eye, when adpressed, maxillary reaching to perpendicular from middle of eye.

Scales : Small, imbricate, distinct posteriorly, absent on the whole of the flattened ventral surface before anal. Lateral line prominent, complete and extends up to middle of caudal peduncle.

Fins : Dorsal fin base long, height short, less than length of head, edge of dorsal straight, origin of dorsal fin equidistant between tip of snout and caudal base; origin of pelvic behind that of dorsal; pectoral almost equal to or slightly longer than head, extends to about two thirds the distance to pelvic; pelvic shorter than pectoral, separated from anal opening by a short distance; anal fin almost reaching caudal base; caudal fin a little longer than head, deeply forked, lobes pointed, of equal length.

Predorsal distance 99.44-112.09 (107.01) in postdorsal distance, 47.65-53.75 (49.96) of SL; prepelvic distance 48.72-58.10 (52.16), preanal distance 76.78-83.0 (79.16), pectoral to pelvic origin 28.82-34.85 (30.91) of SL. Height of dorsal 16.76-23.32 (19.40), length of pectoral 20.40-24.59 (22.25), length of pelvic 18.34-20.05 (19.17), length of anal 11.75-17.80 (15.59), base of dorsal 18.71-21.8 (20.18), base of anal 7.58-10.20 (9.0) of SL.

Caudal peduncle slender and long, its length 12.30-14.94 (13.92) of SL, 50.93-69.65 (59.87) of HL; its depth 9.5-10.8 (10.31) of SL, 41.37-50.25 (45.22) of HL; its depth is 68.90-87.80 (76.39) of its length.

A range in the number of branched dorsal rays is observed in the 12 juveniles

and 18 adults studied. In the juveniles the branched rays are 8 in number and in the larger specimens examined 83.3% have 9 branched rays and 16.7% have 10 branched rays. In one specimen 40.0 mm SL the pectoral fin formula is 2/9 for the right fin and 1/10 for the Left.

Sexual dimorphism : Males with suborbital flap ; the rays of pectoral thickened with breeding tubercles.

Colour : In the adults the body is marked with 4-5 broad bands on back and 9-13 irregular vertical bands on sides, two thirds the ground colour ; in some specimens adjacent bands are found to coalesce on the dorsal side—behind dorsal fin ; dorsal with a dark spot at origin, two rows of spots, along the fins, in larger specimens a third row of 2-3 spots near the tips ; an intensely black round to oval blotch at middle of base of caudal fin ; 4-5 dark V shaped to wavy bands on caudal.

Size : Largest specimen examined 45.00 mm SL.

Affinities : This species bears close resemblance to *N. pulchellus* Day in colour pattern in the caudal and dorsal fins and along the sides behind dorsal and the more number of branched rays in the dorsal. However, it differs from *pulchellus* in its slender body form, Depth of body 13.55-16.61 (15.27) vs. 21.53-23.75 (M=22.66) of SL in *pulchellus* ; elongated caudal peduncle, caudal peduncle 12.30-14.94 (13.62) vs. 10.0-14.13 (M=11.76) of SL in *N. pulchellus*. In addition sexual dimorphism is exhibited by this, whereas it is reported to be absent in *pulchellus*. In body colour pattern some specimens also resemble *N. petrubanarescui* Menon, but differ in body depth and dorsal fin.

Distribution : Western Ghats : Kerala : Idukki District : Pambar River.

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