

A NEW SPECIES OF THE GENUS *HOMALOPTERA* FROM SILENT VALLEY, KERALA, S. INDIA

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ABSTRACT

A new species of the genus *Homaloptera* Van Hasselt which differs from the single known Indian species, *H. montana* Herre from Anamalai, is described.

INTRODUCTION

While studying the fish material of the little explored Silent Valley and New Amarambalam Reserve Forests, twenty-one examples of interesting Homalopterid fishes were noticed. Detailed study revealed that these were not conspecific with the single species so far known from India under the genus, viz. *Homaloptera montana* Herre.

Silent Valley and New Amarambalam are adjoining forests with separate drainages. 18 specimens were collected from the Kunthi River (Silent Valley) and 3 specimens from Cherupuza River (New Amarambalam). The material was collected by the Zoological Survey of India team during the course of a multi-disciplinary expedition organised by the Geological Survey of India, Kerala circle. The new species is being named after the collector *Dr. R. S. Pillai*.

Earlier workers who dealt with the classification, bionomics of the family Homalopteridae were Hora (1932, 1941) and Silas (1950). Herre (1945) described a solitary species, *H. montana* of the genus *Homaloptera* Van Hasselt from Anamalai Hills, Western Ghats (South of Palghat gap). The discovery of yet another species of the genus

from northern part of Palghat gap is of considerable importance.

Silent Valley (Ca. 530-816 m.) is situated in Palghat district of Kerala. It consists mostly of wet evergreen forest. The River Kunthi flows through the valley which has on either side a luxuriant riverine forest.

Homaloptera pillaii sp. nov.

(Pl. II. Figs. A & B)

Description :— D.1/7-9 ; A. 1-2/4-5 ; P. 7-9/11-13 ; V.2-3/8-9 ; L1.83-93. Depth of body 12.5-16.66 (M 14.33), Length of head 20.70-26.53 (M 24.51), length of caudal 16.0-23.92 (M 21.19) in % of standard length. Snout 44.44-57.14 (M 49.02), eye diameter 10.0-20.0 (M 15.02), length of pectoral 89.29-120.5 (M 104.9) in % of head length. Eye 19.05-40.00 (M 30.21) in % of snout, 25.0-60.24 (M 42.63) in % of interorbital distance. Gape of mouth 35.71-58.14 (M 46.93) in % of width of head. Distance between anus and anal fin 10.72-22.22 (M 15.31) in % of distance between anus and pelvic fin base. Height of caudal peduncle 53.76-92.59 (M 73.18) in % of length of caudal peduncle.

These are small loach-like fishes in which the head and anterior part of the body is

depressed and ventral profile flattened, posterior half being laterally compressed. Mouth inferior, transverse and slightly arched. rostral fold and rostral groove slightly developed. Lips full, plain and continuous. Two pairs of rostral and a pair of maxillary barbels present. All are of equal size and nearly twice the length of the diameter of eye. Gill opening oblique, extending to ventral surface for a short distance. Head and ventralsur face up to the base of pelvic fin scaleless. Dorsal origin just behind that of pelvic base, and behind the middle of length. Pectorals not reaching pelvics. Anus nearer to anal fin than to the pelvics. Pelvics with two simple rays except in one example were one side of the fin has three simple rays. Caudal fin emarginate. Lateral line complete with 83-93 small scales. Caudal peduncle 1.08-1.86 in its own length.

Colour in Alcohol: Body light to dark brown, mottled with numerous irregularly placed dark spots. Dorsal side of head with dark spots. Anal with poorly defined bean-shaped blotch at its base. All other fins are

dusky brown and without any markings. Abdomen yellowish to light brown in colour.

Distribution: River Kunthi, Silent Valley and Sayivala, New Amarambalam Reserve Forest, Kerala.

Holotype: River Kunthi, Silent Valley, Kerala, 19.1.1979 standard length 69 mm.; Collector *R. S. Pillai*.

Paratypes: Twenty specimens, out of which 17 standard length 33.0-53.0 mm.; have the same data as that of holotype. 3 specimens with standard length 50.0-75.0 mm.; were collected on 19.3.1979 from Sayivala, New Amarambalam Reserve Forest; Coll. *K. R. Rao*.

Type: All the type specimens are temporarily kept at this Regional Station and will be eventually deposited in the Zoological Survey of India, Calcutta.

Relationship: This new species differs from *H. montana* Herre in the following characters:—

| | <i>H. montana</i> Herre | <i>H. pillai</i> sp. nov |
|---|---|--|
| Dorsal Fin | 2/6 | 1/7-9 |
| Anal Ein | 1/5 | 1-2/4-5 |
| Pectoral fin | 4/8 | 7-9/11-13 |
| Pelvic fin | 2-3/6-7 | 2-3/8-9 |
| Lateral line scales | 72 | 83-93 |
| Length of caudal peduncle / Height of caudal peduncle | Twice | 1.08-1.86 |
| Shape of Caudal | Nearly truncate | Emarginate |
| Colour | 10 dark short bars across the body but not extending back to the lateral line | Dark spot irregularly scattered all over the body except on ventral side |
| | Poorly defined dark longitudinal stripe below the lat. line from the eye to the Caudal base | Absent |

| | | |
|----------|--|--|
| | A blackish brown spot on ventral fin base | Absent |
| | Caudal fin with black blotch at its tip | Absent |
| Locality | Puthutotam Estate, Anamalai Hills (South of Palghat gap) | Silent Valley, New Amarambalam Reserve Forest (North of Palghat gap) |

FREQUENCY DISTRIBUTION OF MERISTIC CHARACTERS

DORSAL FIN

| | | SIMPLE | | BRANCHED | | |
|------------|--|--------|--|----------|----|---|
| RANGE | | 1 | | 7 | 8 | 9 |
| No. of Ex. | | 21 | | 1 | 18 | 2 |

PELVIC FIN

| | | SIMPLE | | BRANCHED | |
|------------|--|--------|-----|----------|------|
| RANGE | | 2 | 3 | 8 | 9 |
| No. of Ex. | | 20.5 | 0.5 | 2.5 | 18.5 |

PECTORAL FIN

| | | SIMPLE | | | BRANCHED | | |
|------------|--|--------|------|-----|----------|------|-----|
| RANGE | | 7 | 8 | 9 | 11 | 12 | 13 |
| No. of Ex. | | 8 | 11.5 | 1.5 | 8 | 11.5 | 1.5 |

ANAL FIN

| | | SIMPLE | | BRANCHED | |
|------------|--|--------|----|----------|----|
| RANGE | | 1 | 2 | 4 | 5 |
| No. of Ex. | | 8 | 13 | 4 | 17 |

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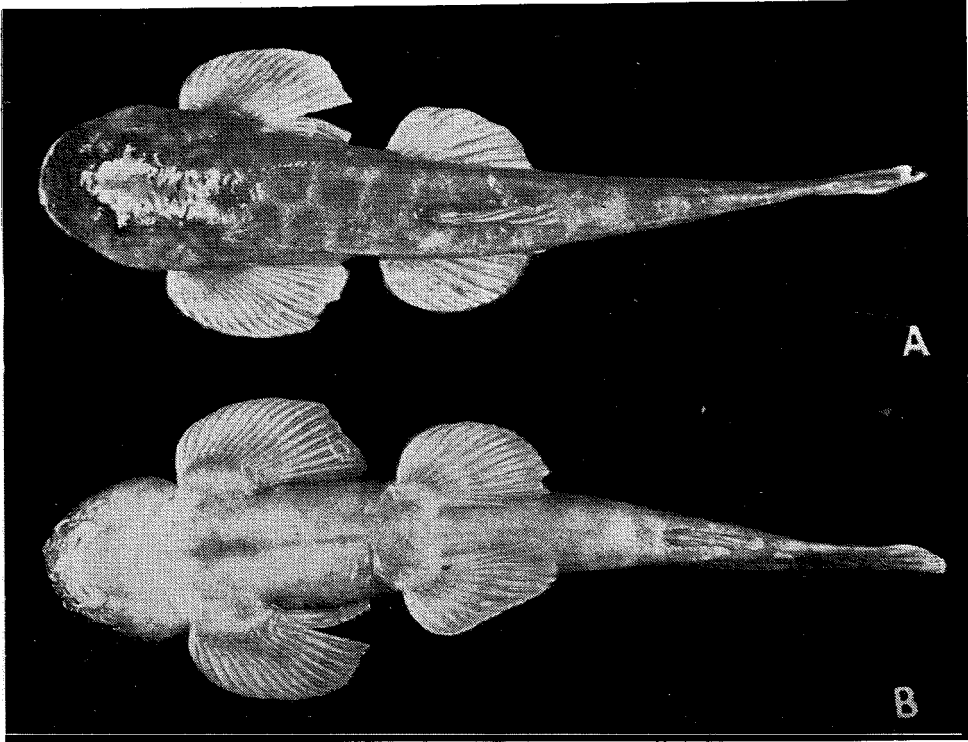
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A. Dorsal view of *Homaloptera pillaii* sp. nov.
B. Ventral view of *Homaloptera pillaii* sp. nov.