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On a New Cyprinid Fish from Coorg,  
South India

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# On a New Cyprinid Fish from Coorg, South India

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(From the Laboratories of the Zoological Survey of India)

With 1 Text-figure

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In his "List of Fishes of the Mysore State and the neighbouring hill ranges of Nilgiris, Wynaad and Coorg", Hora in 1942 listed 121 species as occurring there. Since then a few additions have been made to this number by later workers. As still large areas in Coorg and the neighbouring hill ranges in the Western Ghats remain unexplored, our knowledge would be greatly augmented if a thorough survey of the fish fauna of this region is conducted. Hence, it would in no way seem surprising, when a small collection of fish received recently from Coorg was found to contain five specimens of a hitherto undescribed species of a Cyprinid fish of the genus *Chela*. As they specifically differ from all known species of the genus in their colouration and in other diagnostic features, I propose to describe them here as a new species and, designate it as *Chela horai*. The collection which was made from the head-waters of the river Cauvery in Coorg, contained (including the new species) representatives of the following 13 species:—

## Family CYPRINIDAE

### Subfamily ABRAMADINAE

1. *Chela horai*, sp. nov.

### Subfamily RASBORINAE

2. *Danio aequipinnatus* (McClelland).
3. *Rasbora daniconius* (Ham.).

### Subfamily CYPRININAE

4. *Barbus (Puntius) amphibius* (C. V.).
5. *Barbus (Puntius) sophore* Ham.
6. *Barbus (Puntius) ticto* Ham.

## Family HOMALOPTERIDAE

7. *Bhavana australis* (Jerdon).

## Family COBITIDAE

8. *Lepidocephalus thermalis* (C. V.).
9. *Nemachilus denisonii* Day.
10. *Nemachilus monilis* Hora.

## Family Sisoridae

11. *Glyptothorax lonah* (Sykes).

## Family SILURIDAE

12. *Ompok bimaculatus* (Bloch).

## Family OPHICEPHALIDAE

13. *Ophicephalus gachua* Ham.

Most of the species in the collection are fairly common and have a wide distribution. The present collection extends the distribution of *Glyptothorax lonah* further southwards. Below is appended a revised key to the Indian species of the genus *Chela*, as it is thought, it would help in bringing out the inter-relationships of the new species with the different members of the genus found in India. A detailed description of *Chela horai* is given at the end.

### Key to the identification of the Indian species of the genus *Chela* Ham.

#### I. Bones of the forearm support edge of thorax.

(A 15-16; L. 1. 140-160) ...

... *Chela gora* (Ham.).

## II. Bones of the forearm do not support edge of thorax.

## A. Anal with 13 to 15 rays.

1. Scales on lateral line 38 to 40; (P. 15; L. tr.  $6\frac{1}{2}/3$ ). *Chela boopis* Day.

2. Scales on lateral line 80 to 110.

(a) Lateral line 80 to 93; L. tr. 12-13/6 ... *Chela clupeoides* (Bloch).(b) Lateral line 80 to 110; L. tr. 17-19/6 ... *Chela bacaila* (Ham.).

## B. Anal with 16 to 21 rays.

1. Scales on lateral line 43 to 68.

(a) Anal with 17 to 19 rays.

i. Lateral line 55 to 65; sides of body silvery; devoid of lateral band ... *Chela untrahi* Day.ii. Lateral line 43 to 45; sides of body silvery; with a dark lateral band; caudal and anal edged with black ... *Chela argentea* (C. V.).

(b) Anal with 20 to 21 rays.

i. Lateral line 48; P. 13; L. tr.  $7\frac{1}{4}/4$  ... *Chela sardinella* (C. V.).ii. Lateral line 65 to 68; P. 11; L. tr. 10/8 ... *Chela sladoni* (Day).

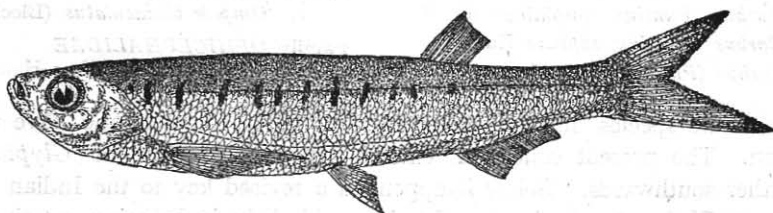
2. Scales on lateral line 76 to 110.

(a) Sides of body with 6 to 14 short vertical brownish markings; (P. 13; A. 18; L. 1.76 to 85) ... *Chela horai*, sp. nov.

(b) Sides of body devoid of vertical brownish markings.

i. Anal with 16 to 17 rays; (P. 11; L. 1.90 to 110) ... *Chela punjabensis* (Day).ii. Anal with 18 to 19 rays; (P. 13 L. 1.80 to 87) ... *Chela phulo* (Ham.).*Chela horai*, sp. nov.D. 10; A. 18; P. 13; V. 9; L.l. 76-85; L.tr. 11-12 $\frac{1}{2}$ .

The body is elongate and compressed, with the dorsal profile being more or less horizontal and the ventral profile slightly arched. The keeled abdominal edge starts from opposite the base of the pectoral fin.

TEXT-FIG. 1.—Lateral view of *Chela horai* sp. nov. (Female specimen)  $\times \frac{2}{3}$ 

Height of the body is contained 4.5 to 4.75 times and the head 4 to 4.5 times in the standard length. The height of head at occiput is 1.5 to 1.7; width of head 2.5 to 2.7 and snout about 4 times in its length. The eyes are large and prominent and are situated almost in the anterior half of the head. They are

provided with free orbital margins. The diameter of the eye is contained 4.5 to 4.75 times in the length of the head. It nearly equals the width of the inter-orbital space. The snout is more or less pointed and anteriorly notched. Its length is slightly greater than the diameter of the eye. The mouth is directed upwards. The mandibular symphysis is with a knob which fits into the emmargination of the symphysis of the upper jaw. Barbels are absent.

The body is covered with moderately large scales which are more clearly defined in the posterior half. The lateral line is complete and is slightly curved, with 76 to 85 scales on it. Predorsal scales are about 40 to 45 in number. There are 11-12 rows of scales between the commencement of the dorsal fin and the lateral line and 3 rows between the lateral line and the base of the pelvics. The base of the anal is covered with a scaly sheath. The axial scales are well developed.

The dorsal commences slightly anterior to the origin of the anal fin and extends to above it. The height of the dorsal is about half the length of the pectoral. Its free margin is faintly concave. The origin of the anal is closer to the commencement of the pelvics than to the base of the caudal fin. Its free border is markedly concave. The pectorals are long, pointed and extend to nearly the base of the pelvics. The pelvics are separated from the vent by a short distance. The caudal fin is about as long as the head. It is deeply forked and the lower lobe is slightly longer than the upper.

Colouration of the species is very characteristic. 6 to 13 short vertical brownish markings or bands are present on the sides of the body. In some of the specimens the bands are short and are in the form of large spots. The upper third of the body is light brownish while the lower  $\frac{2}{3}$  is silvery. There is also present a narrow dark line along the middle of the body, commencing from behind the upper angle of the opercle and extending to the base of the caudal. In some of the specimens this line is indistinguishable in the anterior half of the body. The caudal fin is edged with black.

*Locality.*—River Cauvery, Coorg, Mysore.

*Type-specimens.*—No. F 635/2. Preserved in the collection of the Zoological Survey of India, Indian Museum, Calcutta.

I have great pleasure in associating the name of this remarkable species with that of Dr. S. L. Hora, Director, Zoological Survey of India.

*Measurements in millimeters*

Total length ...	...	...	...	128	122	104
Length of Caudal ...	...	...	...	24.5	23.5	19
Length of Head ...	...	...	...	25.5	24	20
Height of Head ...	...	...	...	14	13	8
Width of Head ...	...	...	...	9.5	9	7.5
Depth of Body ...	...	...	...	23	21	17

Diameter of eye	...	...	6	5.75	4.5
Length of snout	...	...	6.2	6	5.1
Interorbital distance	...	...	5.75	5.75	5
Height of dorsal	...	...	13	13	12
Length of pectoral	...	...	29	27.5	25
Length of pelvic	...	...	14	13.5	13
Height of anal	...	...	13	13	11
Length of Caudal peduncle	...	...	15	13.5	12
Least height of Caudal peduncle	...	...	10	7	6.75

*General remarks.*—Among the Indian species *Chela horai* is unique in possessing vertical markings or spots on the sides of the body. *Chela phulo* (Ham.), which shows some affinity to *Chela horai*, is easily distinguished from the latter in the absence of the above-mentioned character. In its colouration *Chela horai* almost parallels a condition seen in the Siamese species *Chela caeruleostigmata* (Smith). But *Chela horai* is abundantly distinct from it in the following diagnostic characters:—

- (a) Sides of the body with 6 to 14 short vertical bands or spots (*versus* 4 in *C. caeruleostigmata*).
- (b) Depth of body 4.5 to 4.75 in standard length (*versus* 2.15 to 2.25 in *C. caeruleostigmata*).
- (c) Scales on lateral line 76 to 85 (*versus* 35 in *C. caeruleostigmata*).

For the relationship of *Chela horai* to the Indian species of the genus reference may be made to the key for the genus on page 6.

*Acknowledgement.*—I am indebted to Dr. S. L. Hora, Director, Zoological Survey of India, for his helpful suggestions and guidance in the preparation of this paper. My sincere thanks are also due to Mr. M. M. Bellipah for sending me the specimens.

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