

A NEW SPECIES OF THE GENUS *PUNTIUS* HAMILTON
FROM MANIPUR

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(With 2 Figures)

MATERIALS AND METHODS

The fishes were fixed and preserved in 10% Formaline. Morphometric study of the fishes were done following the method described by Jayaram (1981). The holotype is deposited in the Fisheries Section of Manipur University-Life Sciences Department (No. MU/LSD-F 21).

DESCRIPTION

Materials : 7 exs ;

Holotype : from Chakpi stream and Chakpikarong (24°18'N, 93°95'E), 80 kms. south of Imphal, 16.9.1981. Total length=97 mm.

Paratypes : 1-3 from Chakpi stream at Sherou (24°24'N, 93°95'E), 72 kms south of Imphal, 20.3.1982, Total length=78.4-81.1 mm ; 4-6

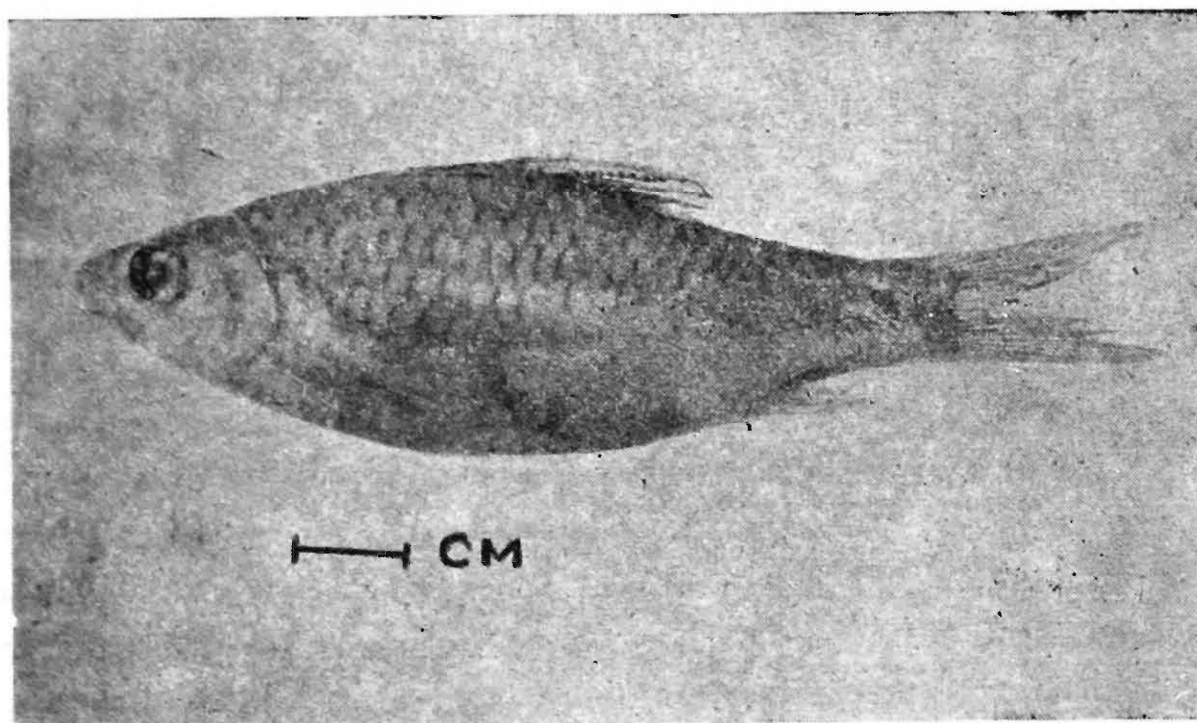


Fig. 1. *Puntius jayarami* sp. nov.

from Chakpi stream, Chakpikarong, 16.9.1981, Total length=92.0-132.0 mm.

Local Name : Heikak-nga or Naphet-nga.

Characters :

D.III, 8 ; P. 15 ; V. 9 ; A. ii, 6 ; C. 21 ; L. 1. 31-32 ; L. tr. $4\frac{1}{2}/3\frac{1}{2}$.

Body compressed. Dorsal profile slightly convex before dorsal insertion and straight or slightly concave after it. Abdomen edge rounded. Head short and conical. Length of head 5.1-5.9, depth of body 3.63-4.04 ; length of caudal 4.26-5.0 in total length. Height of head 1.21-1.4, length of snout 2.80-3.16, diameter of eyes 4.22-4.71 and interorbital space 2.37-2.86 in the length of head. Diameter of eyes 1.33-1.66 in the length of snout. Mouth of inferior. Lips moderate

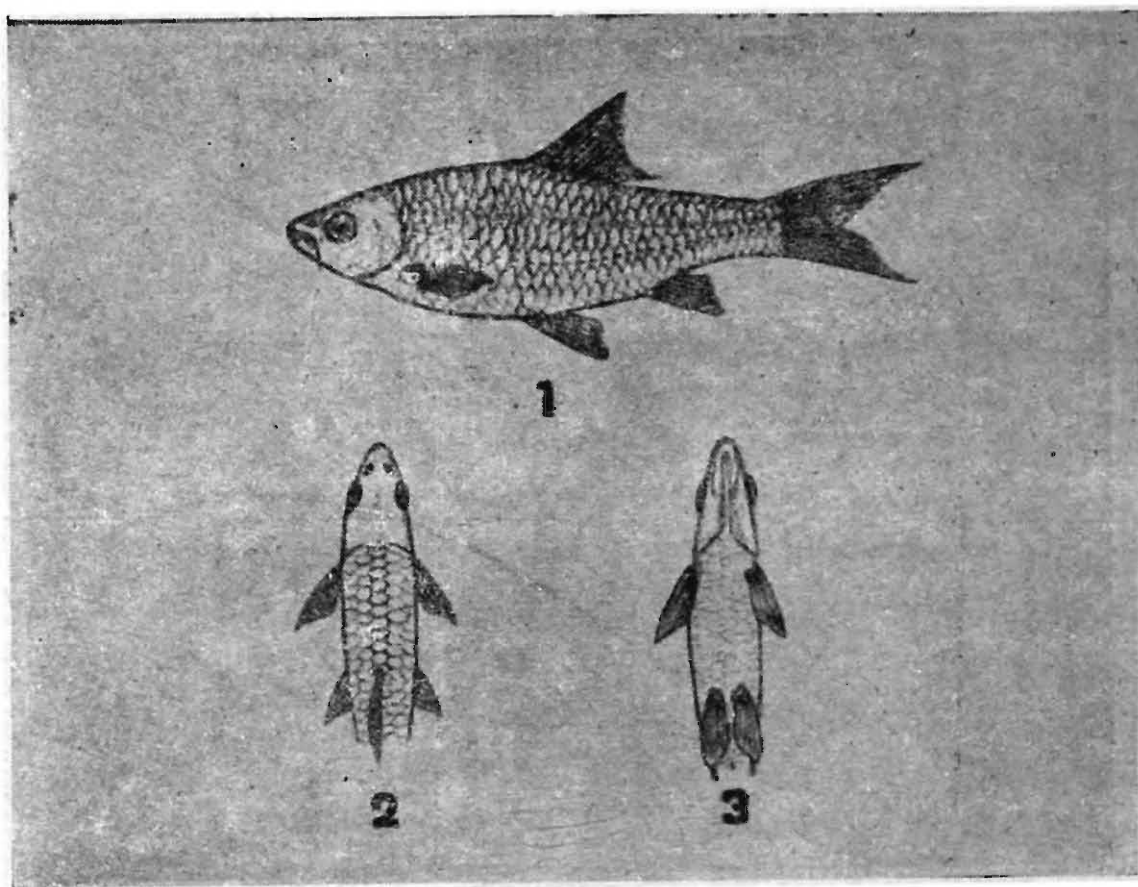


Fig. 2. 2.1. Diagrammatic representation of *P. jayarami* (side view), 2.2. Dorsal view and 2.3. Ventral view.

and continuous. *Barbels*-2 pairs, one rostral and one maxillary. Lengths of barbels approximately equals diameter of eyes. *Fins*—dorsal originates opposite 10th scale on the lateral line and is in the midway between tip of snout and base of caudal. Last osseous spine denticulated, posteriorly with antrorse teeth in a single row. Height of dorsal

(spine) 1.41-2.10 in its own length and 1.33-1.56 in the depth of body. Pectorals do not reach the origin of ventrals. Anal origin opposite 20th scale of lateral line. Caudal fin deeply forked. Fin rays brittle. Least height of caudal peduncle 1.15-1.30 in its own length. *Lateral line* complete with 31-32 longitudinally, $4\frac{1}{2}$ between it and dorsal insertion and $2\frac{1}{4}$ - $3\frac{1}{2}$ from it and the origin of ventrals. Predorsal scales 10. *Colour*—silvery, dark olivaceous dorsally. Fins orange. In 10% Formaline, the body is pale white and fins transparent. Tips of dorsal and caudals slightly black. *Swim bladder*—bilobed, smooth without caeca. Anterior chamber forms one third of the total length of the bladder. Posterior lobe is free. Anterior lobe and a little part of the posterior is attached to the vertebral column by a fibrous tissue. A bladder collected from a specimen of total length 132 mm. measures 23 mm. in length. Sexual dimorphism is not seen. A specimen measuring 92.0 mm. is found to contain eggs which are 0.6-0.7 mm. in diameter. *Habit*—The fish is found in Chakpi stream upto its confluent with the Imphal R. (also known as Manipur River that flows to the Burma and meets the Chindwin R.). It has a good taste. The fish is either caught by angling with the eggs of ants as baits or by cast net. The species forms a good part of game fishing with other associated fishes like *Mystus*, *Mastacembelus*, *Tor*, *Barilius* etc. The fish is found in the clear stream with rocky bed having moderate to swift current.

Differential diagnosis : The fish under study differs from the Borneo form *Puntius elongatus* (Seale) (= *Barbus elongatus* Seale, 1910 = *Puntius elongatus* Weber & Beaufort, 1916) in having slightly deeper body, presence of 2-4 more scales on the lateral line, shorter pectoral and

Body measurements in millimetres :

	Holotype		Paratypes				
	1	2	3	4	5	6	
Total Length	97.0	78.4	80.0	81.1	92.0	110.0	132.0
Depth of body	24.0	21.0	22.0	22.0	24.0	29.0	34.7
Length of head	19.0	13.2	14.0	15.0	17.0	21.0	24.3
Height of head	14.0	10.4	11.5	12.0	13.0	15.0	18.6
Length of snout	6.0	4.5	5.0	5.0	6.0	7.3	8.1
Diam. of eyes	4.5	2.8	3.0	3.5	4.9	4.9	5.7
Interorbital space	8.0	4.6	5.0	6.0	7.0	7.8	9.7
Length of dorsal fin	17.0	10.0	11.0	12.0	15.0	18.6	19.5
Height of dorsal fin	18.0	13.6	15.0	16.0	17.0	19.0	24.0
Length of caudal fin	22.0	16.5	18.0	19.0	20.0	22.0	28.6
Length of caud ped.	13.0	6.0	7.0	10.0	11.0	13.0	15.0
Least ht. caud ped.	10.0	5.2	6.0	8.0	9.0	11.0	13.0

ventral fins ; origin of anal 3-4 scales behind. Colour spots absent on the lateral.

SUMMARY

A freshwater fish of the genus *Puntius* Hamilton from Chakpi stream (a tributary of the Imphal River) is described as new species. *Puntius jayarani* sp. nov. differs from the Borneo form *P. elongatus* (Seale) in its deeper body, 2-4 more scales in the lateral line, shorter pectoral and ventral fins. It also differs from the Burmese form *P. clavatus burtoni* Mukherjee in its deeper body, longer snout, lesser lateral line and predorsal scale counts.

The available literature shows that fishes of only a few parts of the Manipur State have been studied. Chaudhuri (1912) described only two species from Ukhrul District. The collection of Hora (1921) did not include fishes from Churachandpur, Ukhrul and Chandel Districts. Further works of Hora and Mukherji (1935) and Hora (1936) are mostly confined to the fish fauna of Nagaland. The reports of Menon (1952) and Menon (1954) are based on small collections from the Central Valley and its surrounding hills. Fishes of the water bodies in the farther hill areas are yet to be studied.

Chakpi stream forms an important tributary of the Imphal River (also called Manipur R. southwards) which flows to Burma and joins the Cnindwin R.). It originates from Chandél District and joins the Imphal R. at Sherou (75 kms south of Imphal). Though the stream is very rich in fish fauna, there is no report so far on its fishes. Of the collection the authors have made from the Stream from September, 1981 to March, 1982, there are 7 specimens of the new species. Their descriptions are given here.

ACKNOWLEDGEMENTS

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