

*Bull. zool. Surv. India*, 7 (2-3) : 325-326, 1985

AN INSTANCE OF ABNORMAL FINS IN A SPECIMEN OF NOEMACHEILINE  
LOACHES (COBITIDAE : CYPRINIFORMES)

While studying the morphological characters of Noemacheiline loaches of Meghalaya, the author has come across a very interesting specimen of *Physoschistura elongata* Sen and Nalbant (Singh *et al.* 1981 ; Plate I A) having extra anal fin and caudal fin rays.

Morphological abnormality in fishes has been reported on various characters (Sarkar and Kaushik, 1960 ; Tandon, 1965 ; Gopalan, 1971 and Sen, 1978), but the occurrence of such an abnormality is being recorded for the first time. Gopalan (*op. cit.*) has recorded in the double-headed shark (*Carcharias walbeehmi* (Bleeker) from Gujarat, an additional pair of dorsal fin as an abnormality.

The abnormal anal fin encountered here differ significantly from the normal one in respect of its disposition, fin ray counts and also being divided into three distinct finlets. It comprises of 22 total finrays *vs* 7 in normal anal fin. The anterior most finlet containing 5 rays is located 1 mm ahead of the two posterior finlets (Plate II C ; Fig. 1, ad.). The posterior finlets are displaced laterally at their proximal ends and converge posteriorly to join each other distally. As a result a prominent cavity is formed at the base (Plate I B, Fig. 1. cn.). The right side posterior finlet consists of 10 fin rays (Fig. 1. ex.) *vs* 7 in the left side (Fig. 1, n.).

Likewise, the caudal fin is also bifurcated

in two lateral finlets at its lower hypural end. However, dorsally and posteriorly the two finlets are jointed consequential of which a distinct cavity is formed at the ventral side of caudal fin (plate II D, Fig. 1, cv.).

The causes of deformities in fishes are numerous and no single factor is sufficient to explain it (Gemmil, '52.)

The author is thankful to Dr. B. K. Tikadar, Director, Zoological Survey of India, Calcutta, for his kind permission to undertake the present work. The author is also thankful to Officer-in-Charge, Eastern Regional Station, Zoological Survey of India, Shillong and Dr. J. R. Dhanze of the same station for kindly going through the manuscript and valuable suggestions.

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