

ON A GIANT-SIZED CHHIRRUH, *SCHIZOTHORAICHTHYS ESCINUS*
(HECKEL) FROM KASHMIR VALLEY (SCHIZOTHORACINAE : CYPRINIFORMES)

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ABSTRACT

A record-size specimen of *Schizothoraichthys escinus* (Heckel), captured from Achhabal stream, Anantnag (J & K), has been described and interesting morphological and taxonomical features have been recorded. The various local names assigned to such specimens are given.

INTRODUCTION

The fishes of the subfamily Schizothoracinae (carps) are palaeartic in origin and they are endemic to Kashmir and the surrounding areas. In this region, they are of great commercial importance and are valued as food. In recent years, the schizothoracids have received a tremendous set-back due to the vast propagation of the Brown Trout (*Salmo trutta fario* Linnaeus) in almost all waters of the region and their population has considerably reduced. It is rather rare to find large-sized specimens of schizothoracids from natural waters during recent years. It was quite interesting to find a giant-sized specimen of a schizothoracid at the Department of Fisheries (Jammu and Kashmir), Harwan (total length 78.4 cms., weighing 9 Kgs.) and collected from Achhabal Stream, district Anantnag (J & K). The fish was electrocuted when a high-tension electric-wire broke and fell into the stream. The large size and the interesting morphometric and meristic characters of the specimen aroused my interest and hence it has been studied in detail and described here. It is important from the taxonomic point of view.

DESCRIPTION

Schizothoraichthys escinus (Heckel)

(Plate XIII)

B. III, D. II/8, P I/19, V. II/11, A. III/5, C. 17

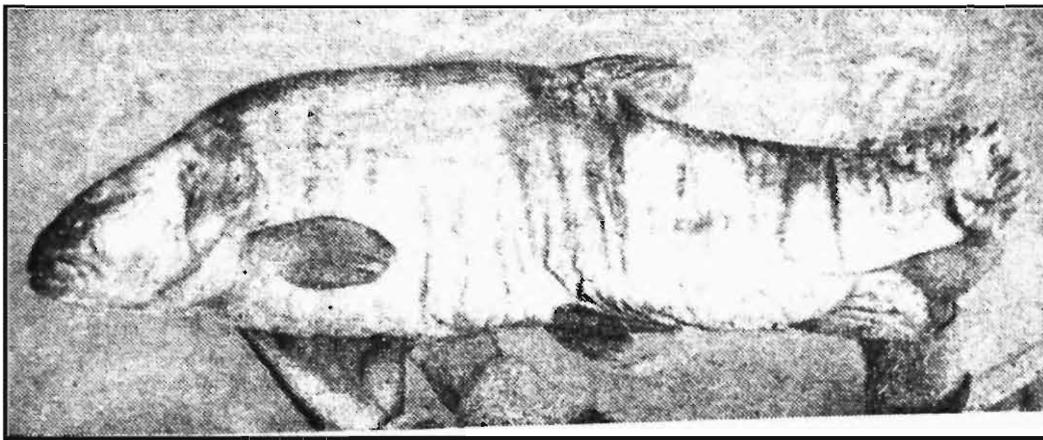
Lateral line scales : 104

Lateral transverse scales : 30/1/32

The dorsal profile rises from tip of snout upto the occiput and thereafter it suddenly rises upwards upto the base of the dorsal fin. The length of head is 4.48 times in the total length and 3.9 times in the standard length. The eye lies entirely in the front half of the head and its diameter is contained 7.6 times in the head length and 2.4 times in the snout. The nostrils lie much nearer the eye than the tip of the snout. The length of snout is contained 3.2 times in the head length. There are four barbels : the length of the rostral barbel is 1.6 times of the eye diameter. The interorbital space is flat. The mouth is anterior. The lower jaw is longer than the upper. There is a knob at the symphysis of the lower jaw. The lips are thick

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PLATE XIII



Photograph of the lateral view of a giant-sized specimen of *Schizothoracichthys esocinus* (Heckel).

and the lower labial fold is interrupted. The labial folds of the two sides extend anteriorly and are separated by a very short interspace. The body is deep and the depth is 4 times in the total length and 3.49 times in the standard length. There is no horny covering on the jaws. The gape of the mouth is 2.2 times in the head length. The isthmus is very narrow and less than 1/5th of the gape of the mouth. The hinder edge of the maxilla reaches below the anterior 1/3rd of the orbit. The width of the operculum is 3.24 times in the head length and 2 times in the postorbital length of the head. The dorsal fin originates behind that of the ventral fin and lies nearer the base of the caudal fin than the tip of the snout. The height of the dorsal fin lies 2.3 times and base of the dorsal fin 2.2 times in the length of head. The dorsal spine is smaller than the postorbital part of the head. The dorsal spine is bony, strong and posteriorly serrated. The height of the dorsal fin is much smaller than the depth of the body below it and is contained 2.6 times in it. The pectoral fin does not reach the ventral fin. The length of the pectoral fin is 1.68 times in the distance between the bases of the pectoral and the ventral fins. The ventral fin reaches only half way to the anal and originates in advance of the dorsal fin. The anal fin, when laid flat, does not reach the base of the caudal fin. The height of the caudal peduncle is 1.5 times in its length. The scales along the lateral line are slightly larger than those of the rest of the body (except the anal sheath). The anal scale is almost equal to the eye diameter. There are 29 scales along the anal sheath of which 13 scales lie along the base of the anal fin and 16 scales anterior to the anal base. The anal sheath extends back upto the base of 4th divided ray of the anal fin.

REMARKS

Schizothoracichthys esocinus (Heckel) was described by Heckel (1838) who reported that it grows to a weight of 24 lbs. (10.88 kgs.). Subsequently, Day (1876) described *Schizothorax punctatus* from the Wulur Lake (J & K) but did not mention the maximum size attained by this species. However, the holotype of *S. punctatus* is 19.2 cms. in standard length. Mukerji (1936) recorded 41.0 cms standard length of this species as the largest specimen in his collection. During a study of the material of *Schizothoracinae*, collected by Yale North-India Expedition, Mukerji (1936) discussed the systematic position of *S. punctatus* Day and concluded that this species is an aberrant variation of *S. esocinus* (Heckel). Out of the 20 examples studied by Mukerji (1936), 5 examples showed typical *esocinus* characters, 2 examples indicated typical *punctatus* characters while 13 examples displayed mixed characters of both these species. These data indicate that there could be two possibilities; firstly, *S. punctatus* could be an aberrant variation of *S. esocinus* as suggested by Mukerji (1936). *S. esocinus*, being an earlier name, is valid and *S. punctatus* may be conspecific with it. Secondly, it could be possible that *S. punctatus* and *S. esocinus* are valid species and the specimens showing characters of both species are hybrids between them because *Schizothoracinae*, as a whole are notorious for hybridization. It has been observed that specimens presenting intermediate characters, acquired as a result of hybridization, create a problem in identification. Tilak and Sharma (1982) published only a figure of this specimen without making any comments.

Since the present specimen, apart from showing characters of *S. punctatus*, also

possesses a few aberrant characters, a thorough check up of the material of both the species has been carried out and it has been observed that *S. punctatus* is only an aberrant form of *S. esocinus* and hence conspecific with it.

It has been observed that the fish fauna of India in general is getting annihilated and large-sized specimens of fish are rare to find because of a large number of reasons, prominent among which are overfishing, fishing with a variety of illegal methods etc. The existence of such large-sized specimens of schizothoracids in nature is interesting and important from the fisheries point of view ; it provides an encouraging ground for propagation of the endemic schizothoracine fishes in Himalaya.

There is a lot of variation of local names of fishes in the Kashmir Valley. *S. esocinus* is called as 'Chirruh or Shiru' by the local fishermen. *S. punctatus* is not a common species in Kashmir and that is why Day (1876) did not mention the local name while describing these species. The Kashmiri fishermen call both these species by the same local name. However, there were some old fishermen who called the present giant-sized specimen by the name of 'Paikut Gaad' which they admit is a sister kind of 'Chhirruh,' The name 'Paikut' or 'Pehri' has also been used by Lawrence (1895) who described these fishes rather loosely from a layman's point of view. Heckel (1838) did not mention any local name as 'Paikut Gaad'. Since the present

specimen is taxonomically similar to *S. esocinus*, the mention of a separate local name for this specimen by some local fishermen does not form a sufficient ground to treat it as a kind different from *S. esocinus*.

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