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DESCRIPTION OF A NEW SCHILBEID FISH, *PROEUTROPIICHTHYS TAAKREE BURMANICUS* FROM BURMA (SCHILBEIDAE : SILURIFORMES)

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It has been the opinion of earlier workers that the fish fauna of Burma is taxonomically different from that of India. In the case of *Proeutropiichthys taakree*, the differences between the Indian and the Burmese material indicate that all the differences are simple variations within the same species and not of much taxonomic significance. However, the trenchant differences between the Burmese and the Indian materials, studied here, are uniform and separate the two at a subspecific level. The species was originally described from Maharashtra by Sykes (1839) and hence the Indian form is the 'forma typica' and the Burmese material has been named here as *Proeutropiichthys taakree burmanicus, ssp. nov.*

INTRODUCTION

The genus *Proeutropiichthys* was created by Hora (1937a) who characterised it by the presence of vomerine and palatine teeth in four distinct patches which may be contiguous, slightly separated or widely apart from one another, and the swim-bladder not extensive, thin-walled but of moderate size and lying free in the abdominal cavity. The synonymy of the species, *P. taakree* (Sykes), was also given by Hora (1941). He put only one species under this genus. Blyth (1860) described a species, *Eutropius macrophthalmus* from Tenasserim but its characterisation is so insufficient that Gunther (1864) regarded it as a doubtful form of *Pseudeutropius*. Hora (1941), while agreeing that in the absence of sufficient description of *E. macrophthalmus*, a precise determination was difficult, included this species under the synonymy of *Proeutropiichthys taakree* only on the ground that Day (1877) recorded *P. taakree* from Burma. On a comparison of the description of *E. macrophthalmus* (Blyth, 1860) with the material of *P. taakree* from Burma, at hand here, it is found out that *E. macrophthalmus* is still a doubtful synonym of *P. taakree*.

According to Misra (1976) also this genus is represented by a single species. While examining in detail the characters of *Proeutropiichthys taakree*

(Sykes), the present author observed that the Indian material of this species shows trenchant differences with that from Burma. *P. taakree* was originally described from Beema river, near Pairgaon (Maharashtra) by Sykes (1839) and the local people, the Bheels, call this fish by the name "MOONEE".

The fish fauna of Burma has thus far been described along with that of India and the distribution of many species of fish has been shown both in India as well as in Burma by Day (1875-78) and some subsequent workers, although Hora and his associates realised that the fauna of Burma is zoogeographically as well as morphologically different from that of India. For instance, Hora (1937b) through a study of a large number of specimens of *Eutropiichthys vacha* (Ham.), was convinced that the Burmese and Siamese specimens represented a race distinct from that of Indian form. Similar observations have been made earlier by Mukerji (1934) and Hora (1936 & 1937b) in connection with detaild studies of the material of *Crossocheilus latius* (Ham.), *Labeo dero* (Ham.) and *Clupisoma garua* (Ham.) respectively where the Burmese forms separated at subspecific level.

In connection with *Proeutropiichthys taakree* (Sykes), Prashad & Mukerji (1929) stated 'the samples before us from Kamaing differ from Day's description mainly in their head being broader, the maxillary barbels shorter; the dorsal as well as the pectoral spines besides being denticulated posteriorly, are finely serrated anteriorly. Day "obtained in Burma, as high as Mandalay", specimens apparently belonging to this species but with a shorter pectoral spine. It is quite possible that the Burmese specimens of *P. taakree* are distinct from the Indian'.

Hora (1941) attributed the above mentioned differences in the material of this species from Burma to age and size but he was of the opinion that the Burmese race of the species may prove to be distinct in future. However, a recent study of the material of this species both from India as well as Burma, indicates that the shape of the interoperculum shows uniform difference between the Indian material on the one hand and the Burmese on the other (Figs. 1–6). This point has escaped the notice of earlier workers on the species. This trenchant point of difference, in addition to a few others, as mentioned below, separates the Burmese form from the Indian at a subspecific level and has been named here as *Proeutropiichthys taakree burmanicus, ssp. nov.*

Proeutropiichthys taakree burmanicus, ssp. nov. (Figs. 1,3 & 5)

1877 *Pseudeutropius taakree*, Day (partim), *Fish India*, p 471.

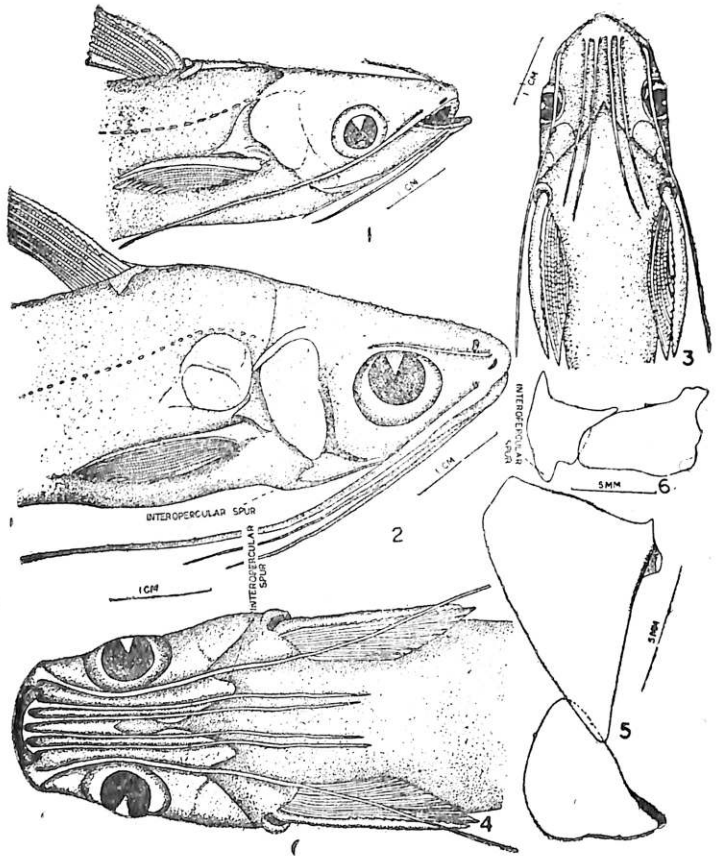
1880 *Pseudeutropius taakree*, Vinciguerra, *Ann. Mus Civ. Stor. Nat Genova*, (2) IX, p. 205.

1929 *Pseudeutropius taakree*, Prashad & Mukerji, *Rec. Indian Mus.*, XXXI, p. 178.

B. vi D. I/6 P. I/12 V. I/5 A. III-IV/40-50 C. 17

Diagnosis

The interoperculum in the material of *Proeutropiichthys taakree taakree*, the 'forma typica', from Beema river, the Mulla Mutha river (Poona) and Godavari river (Aurangabad) shows two prominent spurs, separated by a notch on the



Figs. 1-6 1. *Proeutropiichthys taakree burmanicus, ssp. nov.*, lateral anterior part of body. 2. *Proeutropiichthys taakree taakree* (Sykes), anterior lateral part of body. 3. *Proeutropiichthys taakree burmanicus, ssp. nov.*, anterior ventral part of body. 4. *Proeutropiichthys taakree taakree* (Sykes), anterior ventral part of body. 5. *Proeutropiichthys taakree burmanicus, ssp. nov.*, the operculum and the interoperculum. 6. *Proeutropiichthys taakree taakree* (Sykes), the operculum and the interoperculum.

posterior side (Figs. 2, 4 & 6). The ventral spur is free and bigger than the dorsal which is mostly embedded in muscles. The upper and lower corners of the anterior side of the interoperculum are also produced into narrow processes which remain embedded in muscles and cannot be ordinarily seen without a dissection. The posterior spur of the lower side is prominently visible both from the lateral as well as the ventral sides. The interoperculum remains attached to the ventral side of the operculum and helps in the formation of the gill cover on either side of the head.

The material of *Proeutropiichthys taakree burmanicus, ssp. nov.* uniformly lacks the posterior spur of the interoperculum. The posterior edge of the interoperculum in this subspecies is almost rounded (Figs. 1, 3 & 5). The length of the dorsal spine is nearly equal to half the length of the dorsal spine is nearly equal to half the length of head in *P. taakree burmanicus* whereas in *P. taakree taakree* it is longer. The diameter of eye is contained 3.5-3.6 times in the length of head in *P. taakree burmanicus* while it is contained 2.75-3.00 times in *P. taakree taakree*. In *P. taakree taakree*, all the barbels are long; the nasal barbels extend beyond the middle of eye, the maxillary ones to the ventrals and the mand bular ones cross the base of the pectoral. In *P. taakree burmanicus* on the other hand, all the barbels are shorter; the nasal barbels extend only upto the middle of eye, the maxillary ones reach the end of pectoral fins and mandibular ones to the end of head. The dorsal spine is smooth anteriorly in *P.taakree burmanicus* while it is serrated in *P. taakree taakree*.

HOLOTYPE : 1 ex., Regd. No. ZSI/FF. 771, Burma, F. Day.

PARATYPES : (a) 1 ex., Regd. No. ZSI/FF. 772, Burma, F. Day.

(b) 1 ex., Regd. No. ZSI/FF. 773, Burma, F. Day.

(c) 2 exs., Regd. No. ZSI/FF. 774, Burma, F. Day,

(d) 2 exs., Regd. No. ZSI/FF. 775, Pegu, F. Day.

(e) 1 ex., Regd. No. ZSI/FF. 776, Mandalay, F. Day.

(f) 1 ex., Regd. No. ZSI/FF. 777, Kamaing, Myitkina district, south of Indawgyi river and along western shore near Lonton, B. N. Chopra.

REMARKS

As regards the differences of the Burmese and Indian material of *P. taakree* noted by Prashad & Mukerji (1929) and Hora (1941), the present author has studied the material of *P. taakree taakree* (Sykes) and *P. taakree*

burmanicus, ssp. nov. at the Z.S.I., Calcutta and Western Regional Station, Z.S.I., Poona and observed that many of them are simple variations of not much taxonomic significance.

The length of the pectoral spine is of variable length in the specimens from Deccan; in smaller examples, the pectoral spine is shorter than the head while in some it is equal to the length of head.

The absence of an adipose fin in some examples is a phenomenon which occurs in some other schilbeids also such as the adults of *Clupisoma garua* (Ham.); the adipose fin gets absorbed in larger examples (adults).

The dorsal and the pectoral spines, in addition to being denticulated posteriorly bear fine serrations anteriorly both in *P. taakree taakree* as well as *P. taakree burmanicus.*

Thus, the differences of the Burmese material with the Indian material of this species, so far enumerated by earlier workers are only variations within the same species. The differences noted in the present communication are important from taxonomic point of view.

Day (1877) mentioned that the occipital process scarcely reaches the basal bone of the dorsal fin. The specimen from Kurnool, figured by Day and the rest of the material of this species in Zoological Survey of India has been examined and it has been found that the basal bone of the dorsal fin reaches the occipital process in all cases. The basal bone of the dorsal fin runs anteriorly for a major part of the length and is visible at the surface, and its small anterior part is not visible at the surface; it goes down into the muscles to get itself inserted into the bifid posterior part of the occipital process. Day (1877), probably, viewed it only externally.

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