NOTE ON A HORNED CYPRINOID FISH *SCHISMATORHYNCHOS* (*NUKTA*) *NUKTA* (SYKES) FROM THE KRISHNA DRAINAGE, WESTERN GHATS

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During the course of survey of freshwater fishes in and around Pune, an interesting fish with a horn-like projection on the head, measuring 210mm in SL, was collected from Nira River near Veer Dam. River Nira is a tributary of River Bhima, which ultimately is a part of the Krishna Drainage System. The fish was subsequently identified as *Schismatorhynchos* (*Nukta*) *nukta* (Sykes) using the keys given by Talwar and Jhingran (1991).

Schismatorhynchos nukta was originally described from river Indrayani near Poona (now Pune) (also part of Krishna Drainage), under the name *Cyprinus nukta* by Sykes, in 1841. The specific name *nukta* was based on native name by which the natives (fishermen?) recognized it. After considerable gap of time the fish was commented upon by Day and an excellent drawing was presented as well (Day, 1875, 1889). Later it was reported from Mysore (Hora, 1942b), Pune (Hora & Misra, 1942; Tilak & Tiwari, 1976), Kolhapur (Kalwar & Kelkar, 1956), Nasik (David, 1963) and Dhulia districts of Maharashtra (Singh, 1990). The fish is widely distributed in the river systems of Krishna, Godavary and Cauvery but the pattern appears discontinuous within its range of distribution, probably because it has not been collected or reported from other areas. Recently, Menon (1999) considered its status as rare. Its rarity in recent years warns us that it may be threatened.

Hora (1942a) clearly differentiated two subgenera: *Nukta* (Peninsular India) and *Heterorhynchus* (Indo-Australian region). *Nukta* is diagnosed on the basis of the presence of labial groove at the corners of the mouth, lack of rostral barbels, corners of mouth not prolonged like gutter and lower lip (which is studded with papillae) continuous with the upper lip. In the recent nomenclature these two subgenera are now recognized as *Nukta* and *Schismatorhynchos*, the former is found in various areas within India while the latter in Borneo (Jayaram, 1999).

Observations and Discussion

This rare fish, *Schismatorhynchos (Nukta) nukta* [formerly referred to *Schismatorhynchos (Nukta) nukta*] (coll. 12.vi.1992, Nira river, downstream of the Dam, Pune Dist., coll. V.M. Pawar) has some remarkable characters that are noteworthy.

It is a medium-sized (210 mm SL, 265 mm TL), silvery gray, deep bodied fish; snout projects over mouth, horizontally divided by a deep groove forming distinct horn-like, thick and fleshy projection and a prominent lower part. The fleshy projection is broad at the base, located between and before the orbits on the snout. The projected horn forms an acute angle with the prominent lower part. The tapering horn has small pores over its surface: ventral side having 10 pores and the tip and dorsal surface having 18 pores and a few papillae. The dorsal surface of the snout as a whole is rough in texture.

The lips are fleshy, lower lip continuous with the upper at the corners of the mouth, labial groove restricted to corners of mouth. A pair of small flap-like maxillary barbels is embedded in a groove at the corner of the mouth. Lateral line is complete with 37 scales. Lateral transverse scales, in series, 12 scale rows; between lateral line and origin of dorsal fin 6½, between lateral line and origin of pelvic fin 5½.

Dorsal fin inserted nearer to snout tip than to caudal fin base, its first three-branched rays longer than body depth. Fin ray counts: D: iii 9; A: ii 5; P: i 14; V: i 9 ; HL 4.5 times in SL; SL more than 3 times body depth.

It appears from previous surveys by Western Regional Station of ZSI (WRS/ZSI) parties that this species could not be detected from type locality (Indrayani River) (Yazdani & Mahabal ,1976). It is possible that this fish is becoming rare, at least in Krishna Drainage. Degradation of habitat due to water pollution may be one of the reasons why this fish has become rare. It is an urgent task to give protection to this and other rare fishes from Western Ghats.

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INSECT CONSERVATION - A REACTION TO NARENDRAN AND CHERIAN

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Narendran and Cherian (2002) have vividly brought out the great survival capacity of the group Insects. Man's "war" against harmful insects has led only to partial and often to doubtful success. I fully agree with these authors on that insect taxonomy cannot be learnt unless students themselves collect, preserve and identify insects. For higher studies on insect taxonomy, physiology etc. too insect collection is an absolute necessity. Collection of a small number of insect specimens for scientific study should not be a worth considering negative factor, when aiming at insect conservation.

But it has to be accepted that insect species are fast facing extinction. As E.O. Wilson has pointed out the present rate of extinction of invertebrates has become 1000 to 10,000 times greater due to human intervention. Narendran and Cherian have rightly pointed out that insect extinction is mostly due to habitat destruction. To become familiar with habits and habitat of insect species and preventing habitat destruction would be the effective way for insect conservation.

Much of insect fauna however remains to be discovered and described. Even for most of those insects, which have been described, classified and named, habitat and biology details are not known. To get acquainted with biology of most insect species will take a very long drawn out concerted effort by any country's entomologists. Meanwhile much of biodiversity through insects will be wiped out. A practical step to prevent this loss is that small patches of land with different habitats be set aside as reserves, which should be free from human activity. This step for invertebrate conservation have been suggested by Verma (1995) and Verma and Saxena (1996).

It may be emphasised again that ban on or discouraging insect collection for scientific study will not help insect conservation. On the other hand such steps may hamper conservation.

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