

SILUROID FISHES OF INDIA, BURMA AND CEYLON. 19. A NOTE ON THE SYSTEMATIC POSITION OF *TACHYSURUS SERRATUS* (DAY) (ARIIDAE)

Day (1878) described *Arius serratus* from a single specimen 114 mm. in standard length and collected from "Sind". He differentiated it from *A. thalassinus* (Rüppel) by its much shorter pectoral fins and longer maxillary barbels. In regard to dentition, Day noted three distinct villiform patches on either side on the palate, the vomerine patch being round, small and with an interspace between the two and with another rather longer oval patch "externally". Chandy (1954) and Misra (1976) merely included the species without making any comment. Munro (1955) however doubted the status of *serratus* and thought it may represent the young of *thalassinus*.

In the course of our studies on the catfishes of the family Ariidae, the senior author collected 58 specimens of *T. thalassinus* from different localities both in the east and west coasts of India, representing different sizes ranging from 90 to 370 mm. in standard length. We have also examined Day's single specimen of *T. serratus* well preserved in the Zoological Survey of India, Calcutta under Regd. No. F. 467. A thorough search has also been made as to the possible availability of more specimens of *T. serratus* with negative result.

As stated previously *T. serratus* was differentiated from *T. thalassinus* principally by the teeth pattern. The dentition in siluroids as a whole, and in *Tachysurus* is

highly variable associated as it is with growth. In general the basic pattern of number and location of the teeth patches remain more or

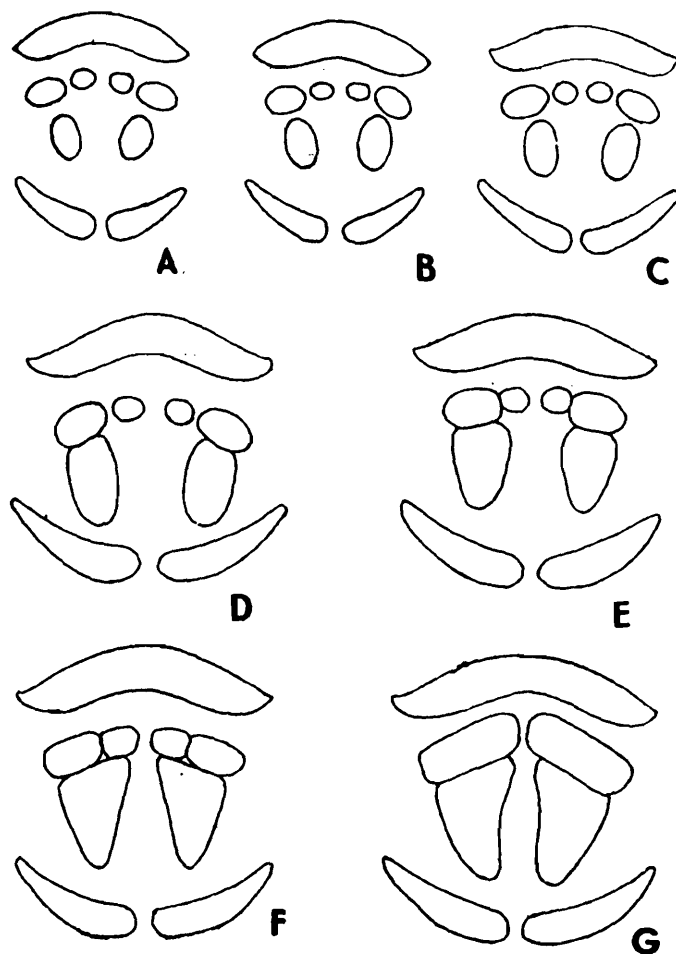


Fig. 1. Dentition in *Tachysurus* species. A and C to G. *T. thalassinus* different size ranges. B. *T. serratus* (See table, for details).

less stable, the extent of the patches, the number of teeth on each patch, the crowded

ZSI Regd. No.	Standard Length	No. of Examples	Teeth pattern on palate
F 1792/2 F 1823/2	90-100 mm.	8	Three distinct separate patches on either side (Fig. 1 A).
F 6413/1 F 3344/1 F 3350/1	101-110 mm.	5	Same as above but the interspace between patches slightly reduced.
F 3353/1 F 7370/2 F 536/2	111-120 mm.	5	Same as above.
F 7369/2	121-130 mm.	3	Same as above but the interspace between the patches, further reduced.
F 7370/2	131-140 mm.	3	Very little interspace between the patches.
F 5826/1 F 3550/1 F 7369/2	141-150 mm.	5	Same as above (Fig. 1 C.)
F 7369/2 F 7370/2	151-160 mm.	3	Anterior patches slightly fused. (Fig. 1 D.)
F 593/2 F 7369/2 F 7370/2	161-170 mm.	4	Same as above, but anterior inside patch not fused with posterior one.
F 13752/1 F 7369/2	171-180 mm.	3	Same as above (Fig. 1 E.)
F 536/2	181-190 mm.	2	Anterior inner and outer two patches completely fused but the posterior patch not fused completely. (Fig. 1 E.)
	191-200 mm.	3	All the three teeth patches completely fused, forming a single triangular patch.
	201-240 mm.	3	Same as above (Fig. 1 G.)
F 1307/1 F 569/2	241-250 mm.	3	Same as above.
	260-280 mm.	2	Same as above.
F 2236/1	290-300 mm.	2	Same as above.
F 2238/1 F 3351/1	311-330 mm.	2	Same as above.
	341-370 mm.	2	Same as above.

or sparse manner or the presence of teeth on each patch are highly variable, correlated with the size and age of the fish. Juveniles tend to have patches with some interspace and with growth the intervening areas in between the patches become crowded with

teeth and no interspace is seen. In our examination of 58 examples of *T. thalassinus* this is clearly demonstrated (Fig. 1). The above distribution of material examined in respect of size and position of the teeth patches illustrate the fact.

It would appear that *T. serratus* (Day) represents only the juvenile of *T. thalassinus*. It may be noted that Day's species has not been subsequently recorded. Further, the other characters such as the length of pectoral fin and maxillary barbels are much more variable even within the same size groups amongst individuals, and as such undependable.

In view of the above reasons, *T. serratus* (Day) is relegated to the synonymy of *T. thalassinus* (Rüppell).

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