

SILUROID FISHES OF INDIA BURMA AND CEYLON. 23. THE SPECIFIC STATUS OF *TACHYSURUS MALABARICUS* (DAY) (ARIIDAE : SILURIFORMES)

Day (1877) described *Tachysurus malabaricus* from a single specimen, 205 mm in standard length from Canara. Though Misra (1976) cited its distribution as India : "Canara, Mysore, Kerala", this species does not appear to have been recorded subsequent to Day, nor any material from Mysore, or Malabar are known. The type locality is also not pinpointed since "Canara" equals to the present day North and South Kanara of the Karnataka State which covers a wide area of 1,91,773 sq. km with a sea front of 320 km. long.

The Holotype is preserved in the National Zoological Collections of Z. S. I. and is registered as *Arius malabaricus* Day, Regd. No. 1305. The caudal and the anal fins are damaged though the total count of fin rays are discernible. The dentition is clearly seen as a single oval elongated patch on each side of the plate with granular teeth. The dentition pattern resembles very closely that of *T. maculatus* (Thunberg, 1792) also known from Kanara and other adjacent areas.

We have examined in the course of our studies on *Tachysurus*, 118 examples of *T. maculatus* collected from several localities of the west and eastern coast of India. The size range of the specimens examined by us is also wide (75—435 mm SL) which covers the size of the holotype (235 mm. SL) of *T. malabaricus*.

Chandy (1953) attempted to distinguish these two species by illustrating the arrangement and nature of teeth pattern on the palate but this character is not reliable since the teeth arrangement (dense or sparse) vary considerably with age and sex. In *T. maculatus*,

teeth patches on the palate are supposed to be densely packed but we have examined number of male adult specimens with sparsely arranged teeth on the palate. Misra (1976) differentiated *T. malabaricus* from *T. maculatus* by the width of the premaxillary teeth band on the upper jaw which according to him is "10 times" as long as broad in the former versus 4 times in the latter. We have examined single specimen of *T. malabaricus* known and available which Misra may also have examined. The premaxillary teeth band is only four times as long as wide and definitely not "10 times" as mentioned by Misra. It seems that Misra made an error in this respect. It may be mentioned here that Day (1877, 1889) correctly cited the width of the premaxillary teeth band as 4 times as long as broad. Further, *T. maculatus* has often the first dorsal fin ray prolonged as a filament which is supposed to be absent in *T. malabaricus*. This character also can not be relied since even in *T. maculatus* instances of the dorsal fin filament being absent is not rare and Day's specimen of *T. malabaricus* may be one such example.

The statistical comparison of 20 morphometric proportions in respect of 118 examples of *T. maculatus* vs. the holotype of *T. malabaricus* also reveals that the latter species is merely a morpho-variant of the former (Table 1,).

In the light of above it is concluded that *T. malabaricus* (Day) is a junior synonym of *T. maculatus* (Thunberg).

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TABLE - 1. Comparison of various morphometric proportions as percentage in the type specimen of *T. malabaricus* (Day) from Kanara with the sample means for these same proportions of 118, specimens of *T. maculatus* (Thunberg) from east and west coast of India.

	118 specimens of <i>T. maculatus</i> (Thunberg)			Type specimen of <i>T. malabaricus</i> (Day)			
	Range	\bar{X}	S	X	$\bar{X}-x$	t	p
Head length/ Total length	18.55-27.25	21.2137	1.8231	—	—	—	—
Body depth/ Total length	14.95-21.67	18.4356	1.9624	—	—	—	—
Head length/ Standard length	23.36-30.72	26.7319	2.2194	26.8290	-0.0971	-0.0435	More than 90%
Body depth/ Standard length	18.29-27.13	22.9831	2.1358	21.9512	1.0319	0.4819	60-70%
Predorsal length/ Standard length	31.95-39.73	36.8193	1.8902	35.1219	1.6974	0.8941	30-40%
Precanal length/ Standard length	65.93-76.15	68.9213	2.4284	69.1312	-0.2099	-0.0860	More than 90%
Pre-pectoral length/ Standard length	20.26-31.35	26.2956	2.8359	26.3143	-0.0187	-0.0065	More than 90%
Width of dorsal fin base/width of anal fin base	50.78-72.45	59.9319	4.3188	60.1953	-0.8763	-0.0432	More than 90%
Head width/ Head length	63.21-84.79	73.1948	4.9361	75.6842	-2.4894	-0.5021	60%
Height of Head/ Head length	55.28-77.15	66.3189	4.3184	65.4545	0.8644	0.1993	80-90%
Snout length/ Head length	28.26-37.68	32.4581	2.3120	30.9090	1.5491	0.6671	50%
Eyediameter/ Head length	14.52-23.45	18.4963	1.4210	16.8636	2.1327	1.4943	10-20%
Inter-nostril width/ Head length	18.14-24.78	21.4569	1.7231	20.00	1.4569	0.8274	40%
Inter-orbital width/ Head length	43.95-68.19	56.235	4.6312	52.7272	3.5043	0.7534	40-50%
Eye diameter/ Snout length	39.63-67.14	57.4361	6.3219	52.9411	4.4950	0.7080	40-50%
Internostril width/ Snout length	54.55-77.89	66.2319	6.1326	64.7058	1.5261	0.2477	80%
Internostril width/ Width of snout	43.14-58.31	49.7391	3.3162	50.00	-0.2609	-0.0783	More than 90%
Eye diameter/ Interorbital	26.19-47.35	33.4314	4.1531	31.0344	2.3970	0.5746	60%
Width of pre-maxillary band of teeth/length of pre- maxillary band of teeth	14.66-22.79	19.2956	2.1050	21.4285	-2.1329	-1.0088	30%
Height of caudal peduncle length of caudal peduncle	47.31-64.14	53.9604	4.3210	50.00	3.9504	0.9108	30-40%

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