

A CONTRIBUTION TO THE SYSTEMATICS OF *ARIUS*  
*TENUISPINIS* DAY, 1877 (PISCES : ARIIDAE)

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(With 1 Text-figure)

INTRODUCTION

The marine cat-fish, *Arius tenuispinis* Day contributes an important commercial fishery along the Maharashtra and Andhra coast of India. The nomenclatural status of this species is, however, in need of clarification and revision.

Day (1877) described *Arius tenuispinis* on a badly preserved specimen, 350 mm in length, from Bombay and remarked "*Arius layardi* Günther, from Ceylon, were it not that it has two pear-shaped patches of granular teeth placed far back, agrees with the above, but a series of examples is necessary to prove whether they are identical or not" *Arius layardi* was described by Günther (1866) on a 280 mm long specimen; the type was stated to have come from Ceylon and is still preserved in the British Museum (Natural History) (Dr. G. Palmer — personal communication).

Chandy (1954) also considered *Arius tenuispinis* Day as probably identical with *Arius layardi* Günther and gave a detailed description of *A. tenuispinis* based on topotypes and on specimens from Puri (Orissa) and remarked "Since Day's account has been based on a badly preserved specimen, there is no type specimen of *T. tenuispinis* in his collection in the Indian Museum and, therefore, the author's recent collection of *Tachysurus tenuispinis* has been registered in the Indian Museum"

Munro (1955) did not list either *Arius layardi* Günther or *Arius tenuispinis* Day from Ceylon but remarked "*Arius tenuispinis* Day has been doubtfully listed from Ceylon"

In the course of preparation recently of a catalogue of the fishes figured in Day's (1875-1878) *Fishes of India* and deposited in the Zoological Survey of India, the unique holotype of *Arius tenuispinis* Day, 1877, has been discovered. The type registered as *Hemipimelodus enuispinis* agrees exactly with Day's (1877) description and the data

on the specimen label and in the Registration register are consistent.

Examination of the holotype of *Arius tenuispinis* Day surprisingly revealed the species to have two distinct pear-shaped patches of teeth on the palate (Text-fig. 1). The type agrees very well with the original description and figure of *Arius layardi* Günther in all the salient characters and in the absence of any differentiating character, these two species are considered identical. It is unfortunate that though *Arius layardi* Günther is a senior synonym of *Arius tenuispinis* Day, the former specific name cannot be used under provisions of Article 23(b) of the *International Code of Zoological Nomenclature* (1961) and should be considered a *nomen oblitum*.

#### SYSTEMATIC ACCOUNT

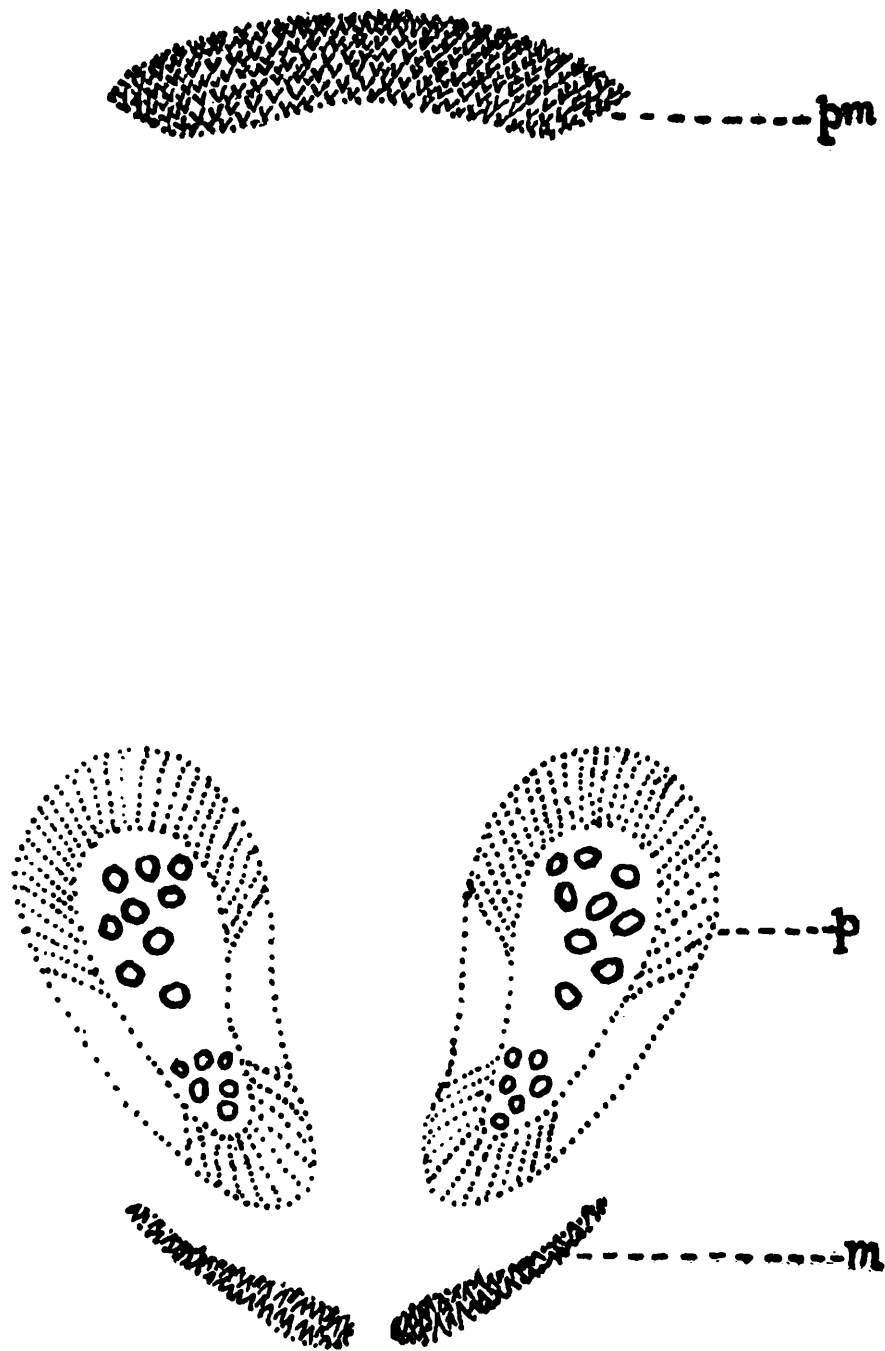
##### *Tachysurus tenuispinis* (Day, 1877)

1866. *Arius layardi* Günther, *Ann. Mag. nat. Hist.*, (3) 18 (108) : 473, pl. 15 (type loc. : Ceylon).  
 1877. *Arius tenuispinis* Day, *Fishes of India* : 466, pl. 107, fig. 5 (type loc. : Bombay).  
 1889. *Arius tenuispinis* : Day, *Fauna British India, Fish*, 1 : 187.  
 1954. *Tachysurus tenuispinis* : Chandy, *Rec. Indian Mus.*, 51 : 13, pl. 2, fig. 8.

*Diagnosis.*—*Tachysurus* with palatal teeth in two pear-shaped patches (Text-fig. 1), much convergent behind and placed far back almost at the posterior extremity of the buccal cavity; palatine teeth globular. Vomerine teeth absent. Premaxillary teeth villiform, band four and a half times as long as broad; distance between premaxillary band and palatine patches roughly equal to the distance between anterior nares and anterior border of eye.

Head depressed, broader than high. Snout much depressed, angular; upper jaw somewhat prominent. Eye diameter 7.0 in head length. Median fontanelle commences at the level of the posterior nares as a narrow, well marked groove, almost reaching to occipital crest. Occipital process prominent with crenulated keel, posteriorly it reaches narrow V-shaped basal bone of dorsal fin. Skin of head on either side of fontanelle and behind eyes with few granulations. Three pairs of barbels; maxillary barbels extend to pectoral base or slightly shorter, outer and inner mandibulars do not reach gill opening. Dorsal spine slender, nearly as long as head excluding snout. Pectoral spine as long as dorsal spine but slightly stronger. Gill rakers 4 + 1 + 8 — 9, lanceolate.

The fullest description of the species remains that of Chandy (1954).



Text-fig. 1. Diagrammatic representation of dentition in the holotype of *Arius tenuispinis* Day showing premaxillary band (pm), palatal patches (p) and mandibular band (m).

*Material examined.*—(i) 1 ex., 280 mm in standard length (SL); Bombay; Dr. F. Day; Holotype of *Arius tenuispinis* Day, original of pl. 107, fig. 5; Zoological Survey of India Regd. No. 482. (ii) 1 ex., 96 mm SL; Puri (Orissa); ZSI Regd. No. F 3356/1; determined *Tachysurus tenuispinis* (Day) by Chandy (1954). (iii) 1 ex., 99 mm SL; Puri; Dec. 1908; ZSI Regd. No. F 5825/1; determined *T. tenuispinis* (Day) by Chandy (1954).

*Distribution.*—Sri Lanka and India. Contributes an important fishery along the Andhra and Maharashtra coast of India.

## REMARKS

It is surprising how Day (1877), a very careful ichthyologist, failed to notice the two distinct pear-shaped patches of palatal teeth in his specimen from Bombay which compelled him, with much hesitation, to accommodate the badly preserved specimen in a new species. The present study of the type of *Arius tenuispinis* Day confirms Day's (1877) view that *Arius tenuispinis* is identical with *A. layardi* Günther. This study also confirms Chandy's (1954) contention of errors in the original description that the type of *Arius tenuispinis* has palatal teeth and hence does not belong to the genus *Hemipimelodus* Bleeker but to the genus *Tachysurus* Lacepede.

*Tachysurus tenuispinis* (Day) is a fairly large fish with the characteristic contours of the body of marine cat-fishes. The species is closely allied to *T. crossocheilus* (Bleeker) and *T. argylopleuron* (Valenciennes), both Malayan species, from which it differs in the absence of vomerine teeth and in possessing longer maxillary barbels. Among the Indian species it is most closely related to *T. satpuranus* (Chaudhuri, 1916) from which it may be distinguished in the absence of dorsal tubercles and weak (*vs.* strong) dorsal and pectoral spines.

## SUMMARY

*Arius tenuispinis* Day, 1877 has been shown to be conspecific with *Arius layardi* Günther, 1866 on study of the recently discovered holotype of the former species. The latter specific name, however, cannot be used for this important commercial cat-fish under provisions of Article 23(b) of the *International Code of Zoological Nomenclature* (1961) and Günther's *Arius layardi* should be considered a *nomen oblitum*.

## ACKNOWLEDGEMENTS

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