

**ON THE OCCURRENCE OF *THRYSSA KAMMALENSIS* (BLEEKER)  
AND *THRYSSA KAMMALENSOIDES* WONGRATANA  
(ENGRAULIDIDAE : PISCES) FROM INDIA**

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In this work we confirm the presence of *Thryssa kammalensis* (Bleeker, 1849) in Indian waters to set aside the view of Talwar and Jhingran (1991) that it does not occur in our area obviously following Whitehead *et al.* (1988), and to affirm the coastal marine existence of *Thryssa kammalensoides* Wongratana, 1983.

There is considerable confusion in the assignment of samples to these two Indian species of *Thryssa*. The first record of occurrence from the Orissa coast was by Day (1869) who described it as *Engraulis rhinorhynchus* Bleeker, 1852 which has been later on described by Day (1878, 1889) himself as *Engraulis kammalensis*. Additional references by Whitehead *et al.* (1988) spoke of *T. kammalensis* as "rather similar" species to *T. kammalensoides*. Further, it may be interesting to note that *T. kammalensoides* is known by two type specimens only (Whitehead *et al.* 1988). The third specimen of this species was reported by Krishnan & Mishra (1993) from Uppada of Andhra Pradesh on the east coast of India.

Both the species resemble *T. polybranchialis* Wongratana, 1983 on account of the length of maxilla and higher gillraker count but are distinguishable by less number of branched anal rays (30 to 33 Vs 35 to 39) and a minute oval first supramaxilla. Identification of *T. kammalensoides* is based on the presence of 24 to 26 gillrakers on the lower arm of the first gill arch; absence of first supramaxilla, a blunt snout less than eye diameter and 26 to 29 belly scutes. The nearest neighbour *T. kammalensis* possesses 26 to 32 gill rakers; first supramaxilla present; a longer snout and 23 to 25 belly scutes.

In order to highlight the differences, the specimens collected during a coastal survey in 1992 have been analysed and the results are presented here. The samples have been deposited with the Marine Biological Station, Zoological Survey of India, Chennai.

### 1. *Thryssa kammalensis* (Bleeker)

1849. *Engraulis kammalensis* Bleeker, *Verh. batav. Genoot. Kunst. Wet.*, 22 : 13 (Madura Strait near Kammal and Surabaya).
1869. *Engraulis rhinorhynchus* Bleeker : Day, *Proc. Zool. Soc. London* : 384.
1878. *Engraulis kammalensis* : Day, *Fishes of India* (4) : 626, pl.157, fig.1.
1976. *Thrissocles kammalensis* : Misra, *Fauna of India, Pisces* (2nd ed.), 2 : 135.
1988. *Thryssa kammalensis* : Whitehead *et al*, *FAO Fish. Synop.*, (125)7(2) : 433.

*Material examined* : 1 ex., 84 mm SL, J. T. Jothinayagam, Kashpal Muhano, 29.10.92, R. No. ZSI/MBS- 2329; 1 ex, 91mm SL, J. T. Jothinayagam, Digha, 31.10.92, R. No. ZSI/MBS- 2173; 4 ex, 83-91mm SL, J. T. Jothinayagam, Digha, 1.11.92, R. No. ZSI/MBS- 2259-62.

*Description* : Body compressed, belly with 15 or 16 plus 8, total 23 or 24 keeled scutes. Maxilla moderate, reaching just to gill opening or a little beyond, but short of pectoral fin base; first supramaxilla present, about half the size of the second. Lower gillrakers 29 to 32. Anal rays iii, 30 to 33. Snout acute, equal to eye diameter. A diffuse dark saddle on nape.

*Distribution* : Presently known from Penang and Islands of Indonesia.

*Remarks* : The present record extends the distributional boundary westward to the north eastern coast of India and reconfirms the report of Day (1869).

### 2. *Thryssa kammalensoides* Wongratana

1983. *Thryssa (Scutengraulis) kammalensoides* Wongratana, *Japan. J. Ichthyol.*, 29(4) : 401, fig. 20 (Godavary estuary, east coast of India).
1988. *Thryssa kammalensoides* : Whitehead *et al*, *FAO Fish. Synop.*, (125)7(2) : 434.

*Material examined* : 1ex, 93mm SL, J.T. Jothinayagam, Chandipur, 27.10.92, R. No. ZSI/MBS- 2404; 2 ex., 98-120mm SL, M. Srinivasan, off False Point, 1.12.92, R. No. ZSI/MBS- 2680-81.

*Description* : Body compressed, belly with 17 or 18 plus 9 to 11, total 27 to 29 keeled scutes. Maxilla moderately short, tip pointed and reaching just to edge of gill cover; first supramaxilla absent. Lower gillrakers 24 or 25. Anal fin rays iii, 31 or 32. Snout blunt, less than eye diameter. A dark saddle on nape, extending to areas behind upper part of gill opening.

*Distribution* : Godavary estuary, coastal Andhrapradesh north of Godavary estuary.

*Remarks* : Marine, coastal, entering estuaries like other species of *Thryssa*. Distribution extended to north eastern coast of India.

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