

**LARVA OF CALLIANASSA TYRRHENA (PETAGNA) (CRUSTACEA,
DECAPODA, CALLIANASSIDAE), A NEW RECORD FROM
THE GULF OF KUTCH**

ABSTRACT

The present note embodies the occurrence of the larva of *Callianassa tyrrhena* (Petagna) in Indian waters for the first time.

While examining surface plankton sample of date 22-8-'73, collected near Passenger Jetty (Lat. 22° 28' 16" N Long. 69° 04' 54" E) from Beyt channel, Port Okha (Lat. 22° 28' N Long, 69° 05' E), the authors came across the larval stage-I of the shrimp *Callianassa tyrrhena* (Petagna) which is known to be represented in Israel waters (Holthuis and Gottlieb 1958 ; Williamson 1967, 1970).

The larval stages of *Callianassa* sps. were first described by Menon (1933, 1940) from Madras Plankton. However, there appears to be no record on the occurrence of the larva as well as adult of this species from Indian waters. Therefore it is considered worthwhile recording.

Paracentropogon leucoprosopon M. Weber, *Siboga Exp. Fische*, 1913, p. 498.

? *Tetraroge albifrons* Duncker & Mohr. *Mit. Zool. Mus. Hamburg XLIV*, 1929, p. 70 (Proparte).

Vespicula leucogaster Herre, *Bull. Raffles Mus.* No. 16, 1940, p. 48.

Material examined: 28 specimens (32-53 mm S. L.) Porto Novo (INDIA) Coll. Ramanathan and Bhagyalakshmi, 28-9-'74 to 21-10-'74 BSRM Reg. No. Q 439/2.

Description: Based on 28 specimens (32-53 mm S. L.) 9 Male, 14 Female and 5 Juvenile from Porto Novo.

D. XIII 8 ; A III 6-III 7 ; P. I 14-I 15 ; V. I 5. In percentages of Standard length body depth 26. 3-38.2 (mean-33.99); head length-39.7-47.3 (mean-43.4), head depth 29.7-42.1 (mean-36.7), snout length-9.5-13.9 (mean-11.6), eye diameter 7.6-12.5 (mean-9.6), inter orbital space 7.6- 11.8 (mean-10.4), post orbital length 21.6-31.6 (mean-21.1), pectoral fin length 31.5-40.7 (mean-34.6), pelvic fin length-18.2-28.2 (mean-22.2), pre-dorsal distance 18.2-26.3 (mean-21.3), pre-pelvic distance 32.9-51.5 (mean-38.7), pre-anal distance 49.0-68.9 (mean-62.3).

Body short, and moderately compressed ; maxilla reaches behind eye ; villiform bands of teeth in jaws, on vomer and on palatines ; preorbital with two spines, anterior one short and directed downwards, posterior one directed backwards and larger, about two-thirds of eye ; hindborder of preopercle with a long spine and four shorter ones below it ; three diverging opercular spines present, superior spine poorly developed ; a deep groove on each side of dorsal, above posterior part of eye (Fig. 1).

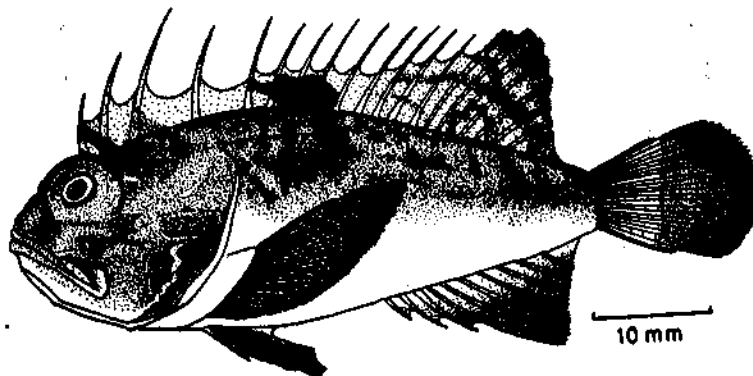


Fig. 1. *Richardsonichthys leucogaster* (Rich) (49 mm S. L.)

Origin of dorsal above or just behind eye ; first dorsal spine more or less half length of second, which is slightly less than third ; third spine about as long as snout and eye ; following spines slightly shorter than third one ; anal spines gradually increasing in length from first to third which is as long as snout ; pectorals almost as long as head ; Caudal slightly rounded.

Colour: Live specimens are pinkish red, brown to purplish above and marbled with darker brown ; thorax and belly white ; dorsals and pectorals mottled or banded

Some of the salient features, drawn from the specimen (Fig. 1) are given below :

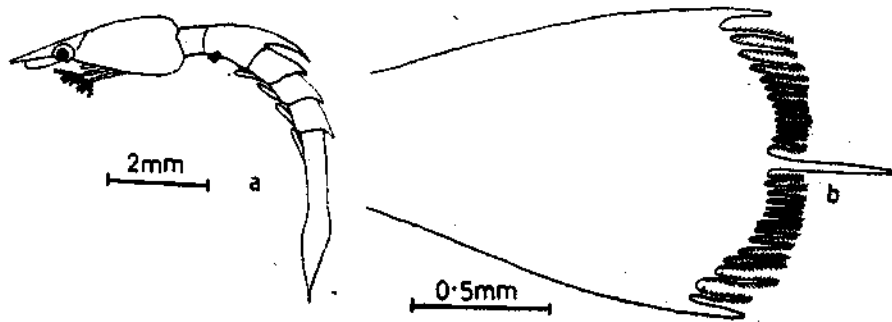


Fig. 1. *Callinassa tyrrhena* (Petagna)—a. lateral view of the larva and b. telson of larva.

Rostrum broad, dorsoventrally flattened and toothed along edges, projects anteriorly in between two eyes beyond extremity of antennules; eyes oval, stalked and pigmented; second abdominal segment with a large dorsal spine, hollowed at base, reaching up to end of third segment; a small spine present on dorsal side of third, fourth and fifth segment; first two segments are without pleopods, rest of segments, having paired pleopods, devoid of setae; telson (Fig. 2) broad and triangular its posterior margin is wavy, without central notch, with a large median spine and two medium-sized lateral spines; on either side of median spine are present thirteen smaller spines which gradually increase in size from centre to sides; telson formula being $1+13+1+13+1 = 29$ (Gurney, 1942), uropod absent; antennules, antenna and mouth-parts conforms to Petagna's description.

Measurements

1. Length from tip of rostrum to end of telson	..	9.15 mm
2. Length of carapace	..	3.40 mm
3. Length of the abdominal segment		
(a) 1st segment	..	0.44 mm
(b) 2nd segment	..	0.84 mm
(c) 3rd segment	..	0.63 mm
(d) 4th segment	..	0.60 mm
(e) 5th segment	..	0.68 mm
(f) 6th segment	..	1.09 mm
4. Length of telson	..	1.47 mm
5. Breadth of telson	..	0.98 mm

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